



PRICE LIST SINGAPORE 2021

Low-voltage Electrical Products

SIEMENS

APPROVED PARTNER
FENGSHENG ELECTRIC CO. PTE LTD



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MINIATURE CIRCUIT BREAKERS

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Miniature Circuit Breakers

MCB type : 5SL6

IEC/EN 60898-1 : 6 kA

1

Tripping Characteristic : C

Rated Voltage : Un 230/400 VAC

Pole	Rated Current In (A)	Order Number	Price List SGD
1 Pole	0.5	5SL6105-7CC	73.74
	1	5SL6101-7CC	73.74
	2	5SL6102-7CC	73.74
	3	5SL6103-7CC	73.74
	4	5SL6104-7CC	73.74
	6	5SL6106-7CC	26.00
	10	5SL6110-7CC	26.00
	16	5SL6116-7CC	26.00
	20	5SL6120-7CC	26.00
	25	5SL6125-7CC	26.00
	32	5SL6132-7CC	56.00
	40	5SL6140-7CC	68.00
	63	5SL6163-7CC	93.00
	2 Pole	0.5	5SL6205-7CC
1		5SL6201-7CC	204.65
2		5SL6202-7CC	204.65
3		5SL6203-7CC	204.65
4		5SL6204-7CC	204.65
6		5SL6206-7CC	98.00
10		5SL6210-7CC	98.00
16		5SL6216-7CC	98.00
20		5SL6220-7CC	98.00
25		5SL6225-7CC	98.00
32		5SL6232-7CC	157.00
40		5SL6240-7CC	197.00
63		5SL6263-7CC	252.00
3 Pole		0.5	5SL6305-7CC
	1	5SL6301-7CC	293.88
	2	5SL6302-7CC	293.88
	3	5SL6303-7CC	293.88
	4	5SL6304-7CC	293.88
	6	5SL6306-7CC	162.00
	10	5SL6310-7CC	162.00
	16	5SL6316-7CC	162.00
	20	5SL6320-7CC	162.00
	25	5SL6325-7CC	162.00
	32	5SL6332-7CC	237.00
	40	5SL6340-7CC	287.00
	63	5SL6363-7CC	382.00
	4 Pole	0.5	5SL6405-7CC
1		5SL6401-7CC	411.44
2		5SL6402-7CC	411.44
3		5SL6403-7CC	411.44
4		5SL6404-7CC	411.44



Miniature Circuit Breakers

MCB type : 5SL6

IEC/EN 60898-1 : 6 kA

1

Tripping Characteristic : C

Rated Voltage : Un 230/400 VAC

Pole	Rated Current In (A)	Order Number	Price List SGD
1 Pole	0.5	5SL6105-7CC	73.74
	1	5SL6101-7CC	73.74
	2	5SL6102-7CC	73.74
	3	5SL6103-7CC	73.74
	4	5SL6104-7CC	73.74
	6	5SL6106-7CC	26.00
	6	5SL6406-7CC	411.44
	10	5SL6410-7CC	341.98
	16	5SL6416-7CC	341.98
	20	5SL6420-7CC	341.98
	25	5SL6425-7CC	341.98
	32	5SL6432-7CC	411.44
	40	5SL6440-7CC	510.29
	63	5SL6463-7CC	716.01

Miniature Circuit Breakers

MCB type : 5SL4

IEC/EN 60898-1 : 10 kA

1

Tripping Characteristic : C

Rated Voltage : Un 230/400 VAC

Pole	Rated Current In (A)	Order Number	Price List SGD
1 Pole	0.5	5SL4105-7CC	89.37
	1	5SL4101-7CC	89.37
	2	5SL4102-7CC	104.00
	3	5SL4103-7CC	104.00
	4	5SL4104-7CC	104.00
	6	5SL4106-7CC	64.00
	10	5SL4110-7CC	64.00
	16	5SL4116-7CC	64.00
	20	5SL4120-7CC	64.00
	25	5SL4125-7CC	64.00
	32	5SL4132-7CC	67.00
	40	5SL4140-7CC	96.00
	63	5SL4163-7CC	119.00
2 Pole	0.5	5SL4205-7CC	250.48
	1	5SL4201-7CC	250.48
	2	5SL4202-7CC	254.00
	3	5SL4203-7CC	254.00
	4	5SL4204-7CC	254.00
	6	5SL4206-7CC	201.00
	10	5SL4210-7CC	201.00
	16	5SL4216-7CC	201.00
	20	5SL4220-7CC	201.00
	25	5SL4225-7CC	201.00
	32	5SL4232-7CC	215.00
	40	5SL4240-7CC	234.00
	63	5SL4263-7CC	329.00
3 Pole	0.5	5SL4305-7CC	358.66
	1	5SL4301-7CC	358.66
	2	5SL4302-7CC	415.00
	3	5SL4303-7CC	415.00
	4	5SL4304-7CC	415.00
	6	5SL4306-7CC	290.00
	10	5SL4310-7CC	290.00
	16	5SL4316-7CC	290.00
	20	5SL4320-7CC	290.00
	25	5SL4325-7CC	290.00
	32	5SL4332-7CC	305.00
	40	5SL4340-7CC	361.00
	63	5SL4363-7CC	479.00
4 Pole	0.5	5SL4405-7CC	499.78
	1	5SL4401-7CC	499.78
	2	5SL4402-7CC	677.00
	3	5SL4403-7CC	683.00
	4	5SL4404-7CC	683.00



Miniature Circuit Breakers

MCB type : 5SL4

IEC/EN 60898-1 : 10 kA

1

Tripping Characteristic : C

Rated Voltage : Un 230/400 VAC

Pole	Rated Current In (A)	Order Number	Price List SGD
1 Pole	0.5	5SL4105-7CC	89.37
	1	5SL4101-7CC	89.37
	2	5SL4102-7CC	104.00
	3	5SL4103-7CC	104.00
	4	5SL4104-7CC	104.00
	6	5SL4106-7CC	64.00
	6	5SL4406-7CC	425.00
	10	5SL4410-7CC	425.00
	16	5SL4416-7CC	425.00
	20	5SL4420-7CC	425.00
	25	5SL4425-7CC	425.00
	32	5SL4432-7CC	436.00
	40	5SL4440-7CC	481.00
	63	5SL4463-7CC	860.00

Miniature Circuit Breakers

MCB type : 5SY6

IEC/EN 60898-1 : 6 kA
IEC/EN 60947-2 = (*)

1

Tripping Characteristic : C

Rated Voltage : Un 230/400 VAC, Max. 250/440VAC, 72VDC Per Pole

Pole	Rated Current I _n (A)	Order Number	Price List SGD
1 Pole	0.5	5SY6105-7	143.01
	1	5SY6101-7	128.00
	2	5SY6102-7	125.00
	3	5SY6103-7	125.00
	4	5SY6104-7	125.00
	6	5SY6106-7	106.00
	10	5SY6110-7	106.00
	16	5SY6116-7	106.00
	20	5SY6120-7	106.00
	25	5SY6125-7	106.00
	32	5SY6132-7	111.00
	40	5SY6140-7	134.00
	50	5SY6150-7	185.00
	63	5SY6163-7	185.00
2 Pole	0.5	5SY6205-7	399.43
	1	5SY6201-7	304.00
	2	5SY6202-7	304.00
	3	5SY6203-7	304.00
	4	5SY6204-7	304.00
	6	5SY6206-7	279.00
	10	5SY6210-7	279.00
	16	5SY6216-7	279.00
	20	5SY6220-7	279.00
	25	5SY6225-7	279.00
	32	5SY6232-7	299.00
	40	5SY6240-7	389.00
	50	5SY6250-7	505.00
	63	5SY6263-7	505.00
3 Pole	0.5	5SY6305-7	571.21
	1	5SY6301-7	498.00
	2	5SY6302-7	498.00
	3	5SY6303-7	498.00
	4	5SY6304-7	498.00
	6	5SY6306-7	399.00
	10	5SY6310-7	399.00
	16	5SY6316-7	399.00
	20	5SY6320-7	399.00
	25	5SY6325-7	399.00
	32	5SY6332-7	419.00
	40	5SY6340-7	562.00
	50	5SY6350-7	738.00
	63	5SY6363-7	738.00
4 Pole	0.5	5SY6105-7	143.01

Miniature Circuit Breakers

MCB type : 5SY6

IEC/EN 60898-1 : 6 kA
IEC/EN 60947-2 = (*)

1

Tripping Characteristic : C

Rated Voltage : Un 230/400 VAC, Max. 250/440VAC, 72VDC Per Pole

Pole	Rated Current I _n (A)	Order Number	Price List SGD
	1	5SY6101-7	128.00
	2	5SY6102-7	125.00
	3	5SY6103-7	125.00
	4	5SY6104-7	125.00
	6	5SY6106-7	106.00
	10	5SY6110-7	106.00
	16	5SY6116-7	106.00
	20	5SY6120-7	106.00
	25	5SY6125-7	106.00
	32	5SY6132-7	111.00
	40	5SY6140-7	134.00
	50	5SY6150-7	185.00
	63	5SY6163-7	185.00

* Note: Rating current IEC/EN 60898-1 IEC/EN 60947-2

Rating current in (A)	IEC/EN 60898-1 (kA)	IEC/EN 60947-2 (kA)
0.5	6	30
1	6	30
2	6	30
3	6	30
4	6	30
6	6	30
10	6	15

Rating current IEC/EN 60898-1 IEC/EN 60947-2

Rating current in (A)	IEC/EN 60898-1 (kA)	IEC/EN 60947-2 (kA)
16	6	15
20	6	15
25	6	15
32	6	15
40	6	10
50	6	10
63	6	10

Miniature Circuit Breakers

MCB type : 5SY4

IEC/EN 60898-1 : 10 kA
IEC/EN 60947-2 = (*)

1

Tripping Characteristic : C

Rated Voltage : Un 230/400 VAC, Max. 250/440VAC, 72VDC Per Pole

Pole	Rated Current I _n (A)	Order Number	Price List SGD
1 Pole	0.5	5SY4105-7	174.86
	1	5SY4101-7	115.00
	2	5SY4102-7	136.00
	3	5SY4103-7	144.00
	4	5SY4104-7	115.00
	6	5SY4106-7	122.00
	10	5SY4110-7	122.00
	16	5SY4116-7	122.00
	20	5SY4120-7	122.00
	25	5SY4125-7	122.00
	32	5SY4132-7	122.00
	40	5SY4140-7	144.00
	50	5SY4150-7	196.00
	63	5SY4163-7	196.00
2 Pole	0.5	5SY4205-7	486.25
	1	5SY4201-7	326.00
	2	5SY4202-7	326.00
	3	5SY4203-7	326.00
	4	5SY4204-7	326.00
	6	5SY4206-7	320.00
	10	5SY4210-7	320.00
	16	5SY4216-7	320.00
	20	5SY4220-7	320.00
	25	5SY4225-7	320.00
	32	5SY4232-7	320.00
	40	5SY4240-7	396.00
	50	5SY4250-7	558.00
	63	5SY4263-7	558.00
3 Pole	0.5	5SY4305-7	654.56
	1	5SY4301-7	508.00
	2	5SY4302-7	508.00
	3	5SY4303-7	508.00
	4	5SY4304-7	508.00
	6	5SY4306-7	503.00
	10	5SY4310-7	503.00
	16	5SY4316-7	503.00
	20	5SY4320-7	503.00
	25	5SY4325-7	503.00
	32	5SY4332-7	503.00
	40	5SY4340-7	568.00
	50	5SY4350-7	770.00
	63	5SY4363-7	770.00
4 Pole	0.5	5SY4105-7	174.86

Miniature Circuit Breakers

MCB type : 5SY4

IEC/EN 60898-1 : 10 kA
IEC/EN 60947-2 = (*)

1

Tripping Characteristic : C

Rated Voltage : Un 230/400 VAC, Max. 250/440VAC, 72VDC Per Pole

Pole	Rated Current I _n (A)	Order Number	Price List SGD
	1	5SY4101-7	115.00
	2	5SY4102-7	136.00
	3	5SY4103-7	144.00
	4	5SY4104-7	115.00
	6	5SY4106-7	122.00
	10	5SY4110-7	122.00
	16	5SY4116-7	122.00
	20	5SY4120-7	122.00
	25	5SY4125-7	122.00
	32	5SY4132-7	122.00
	40	5SY4140-7	144.00
	50	5SY4150-7	196.00
	63	5SY4163-7	196.00

* Note: Rating current IEC/EN 60898-1 IEC/EN 60947-2

Rating current in (A)	IEC/EN 60898-1 (kA)	IEC/EN 60947-2 (kA)
0.5	10	35
1	10	35
2	10	35
3	10	35
4	10	35
6	10	35
10	10	20

Rating current IEC/EN 60898-1 IEC/EN 60947-2

Rating current in (A)	IEC/EN 60898-1 (kA)	IEC/EN 60947-2 (kA)
16	10	20
20	10	20
25	10	20
32	10	20
40	10	15
50	10	15
63	10	15

Miniature Circuit Breakers

MCB type : 5SY7

IEC/EN 60898-1 : 15 kA
IEC/EN 60947-2 = (*)

Tripping Characteristic : C

Rated Voltage : Un 230/400 VAC, Max. 250/440VAC, 72VDC Per Pole

1

Pole	Rated Current I _n (A)	Order Number	Price List SGD
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1 Pole



2	5SY7102-7	147.63
3	5SY7103-7	147.63
4	5SY7104-7	147.63
6	5SY7106-7	147.63
10	5SY7110-7	123.97
13	5SY7113-7	123.97
16	5SY7116-7	123.97
20	5SY7120-7	123.97
25	5SY7125-7	123.97
32	5SY7132-7	147.63
40	5SY7140-7	185.78
50	5SY7150-7	222.86
63	5SY7163-7	259.95

2 Pole



2	5SY7202-7	416.76
3	5SY7203-7	416.76
4	5SY7204-7	416.76
6	5SY7206-7	416.76
10	5SY7210-7	346.12
13	5SY7213-7	346.12
16	5SY7216-7	346.12
20	5SY7220-7	346.12
25	5SY7225-7	346.12
32	5SY7232-7	416.76
40	5SY7240-7	522.72
50	5SY7250-7	632.21
63	5SY7263-7	741.69

3 Pole



2	5SY7302-7	593.36
3	5SY7303-7	593.36
4	5SY7304-7	593.36
6	5SY7306-7	593.36
10	5SY7310-7	487.40
13	5SY7313-7	487.40
16	5SY7316-7	487.40
20	5SY7320-7	487.40
25	5SY7325-7	487.40
32	5SY7332-7	593.36
40	5SY7340-7	752.29
50	5SY7350-7	893.57
63	5SY7363-7	1,034.84

Miniature Circuit Breakers

MCB type : 5SY7

IEC/EN 60898-1 : 15 kA
IEC/EN 60947-2 = (*)

Tripping Characteristic : C

Rated Voltage : Un 230/400 VAC, Max. 250/440VAC, 72VDC Per Pole

1

Pole	Rated Current I _n (A)	Order Number	Price List SGD
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4 Pole



2	5SY7402-7	829.99
3	5SY7403-7	829.99
4	5SY7404-7	829.99
6	5SY7406-7	829.99
10	5SY7410-7	688.72
13	5SY7413-7	688.72
16	5SY7416-7	688.72
20	5SY7420-7	688.72
25	5SY7425-7	688.72
32	5SY7432-7	829.99
40	5SY7440-7	1,034.84
50	5SY7450-7	1,250.29
63	5SY7463-7	1,458.67

* Note:

Rating current in (A)	IEC/EN 60898-1 (kA)	IEC/EN 60947-2 (kA)
2	15	50
3	15	40
4	15	40
6	15	40
10	15	30
13	15	25
16	15	25

Rating current in (A)	IEC/EN 60898-1 (kA)	IEC/EN 60947-2 (kA)
20	15	25
25	15	25
32	15	25
30	15	20
40	15	15
50	15	15
63	15	15

Miniature Circuit Breakers

MCB type : 5SY8

IEC/EN 60947-2 : 25 kA(*)

Tripping Characteristic : C

Rated Voltage : Un 230/400 VAC, Max. 250/440VAC, 72VDC Per Pole

1

Pole	Rated Current I _n (A)	Order Number	Price List SGD
------	-------------------------------------	--------------	-------------------

1 Pole



2	5SY8102-7	168.82
3	5SY8103-7	168.82
4	5SY8104-7	168.82
6	5SY8106-7	168.82
10	5SY8110-7	140.22
13	5SY8113-7	140.22
16	5SY8116-7	140.22
20	5SY8120-7	140.22
25	5SY8125-7	140.22
32	5SY8132-7	168.82
40	5SY8140-7	210.50
50	5SY8150-7	252.18
63	5SY8163-7	294.21

2 Pole



2	5SY8202-7	466.21
3	5SY8203-7	466.21
4	5SY8204-7	466.21
6	5SY8206-7	466.21
10	5SY8210-7	395.57
13	5SY8213-7	395.57
16	5SY8216-7	395.57
20	5SY8220-7	395.57
25	5SY8225-7	395.57
32	5SY8232-7	466.21
40	5SY8240-7	586.29
50	5SY8250-7	699.31
63	5SY8263-7	815.86

3 Pole



2	5SY8302-7	674.59
3	5SY8303-7	674.59
4	5SY8304-7	674.59
6	5SY8306-7	674.59
10	5SY8310-7	561.57
13	5SY8313-7	561.57
16	5SY8316-7	561.57
20	5SY8320-7	561.57
25	5SY8325-7	561.57
32	5SY8332-7	674.59
40	5SY8340-7	840.59
50	5SY8350-7	1,013.65
63	5SY8363-7	1,172.58

* Note:

Rating current in (A)	IEC/EN 60898-1 (kA)	IEC/EN 60947-2 (kA)	Rating current in (A)	IEC/EN 60898-1 (kA)	IEC/EN 60947-2 (kA)
2	25	70	20	25	30
3	25	50	25	25	30
4	25	50	32	25	30
6	25	50	30	25	25
10	25	40	50	25	20
13	25	30	63	25	20
16	25	30			

Miniature Circuit Breakers

MCB type : 5SY8

IEC/EN 60947-2 : 25 kA(*)

Tripping Characteristic : C

Rated Voltage : Un 230/400 VAC, Max. 250/440VAC, 72VDC Per Pole

1

Pole	Rated Current In (A)	Order Number	Price List SGD
4 Pole	2	5SY8402-7	932.42
	3	5SY8403-7	932.42
	4	5SY8404-7	932.42
	6	5SY8406-7	932.42
	10	5SY8410-7	787.61
	13	5SY8413-7	787.61
	16	5SY8416-7	787.61
	20	5SY8420-7	787.61
	25	5SY8425-7	787.61
	32	5SY8432-7	932.42
	40	5SY8440-7	1,172.58
	50	5SY8450-7	1,416.28
	63	5SY8463-7	1,645.86



* Note:

Rating current in (A)	IEC/EN 60898-1 (kA)	IEC/EN 60947-2 (kA)	Rating current in (A)	IEC/EN 60898-1 (kA)	IEC/EN 60947-2 (kA)
2	25	70	20	25	30
3	25	50	25	25	30
4	25	50	32	25	30
6	25	50	50	25	20
10	25	40	63	25	20
13	25	30			
16	25	30			

Miniature Circuit Breakers





MCB type : 5SP4

IEC/EN 60898-1 : 10 kA

Tripping Characteristic : C

Rated Voltage : Un 230/400 VAC, Max. 250/440VAC, 72VDC Per Pole

1

Pole	Rated Current I _n (A)	Order Number	Price List SGD
1 Pole 	80	5SP4180-7	366.75
	100	5SP4191-7	310.98
	125	5SP4192-7	371.61
	<hr/>		
2 Pole 	80	5SP4280-7	1,032.16
	100	5SP4291-7	1,146.37
	125	5SP4292-7	1,277.51
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3 Pole 	80	5SP4380-7	1,395.95
	100	5SP4391-7	932.36
	125	5SP4392-7	1,000.67
	<hr/>		
4 Pole 	80	5SP4480-7	2,043.17
	100	5SP4491-7	2,305.44
	125	5SP4492-7	2,555.02
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Miniature Circuit Breakers

MCB type : 5SY5

IEC/EN 60898-2 : 10 kA

Tripping Characteristic : C
DC Application

1

Pole	Rated Current I_n (A)	Order Number	Price List SGD
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1 Pole, 230/400 VAC, 220 VDC



2	5SY5102-7CC	310.92
3	5SY5103-7CC	310.92
4	5SY5104-7CC	310.92
6	5SY5106-7CC	310.92
10	5SY5110-7CC	259.49
13	5SY5113-7CC	259.49
16	5SY5116-7CC	259.49
20	5SY5120-7CC	259.49
25	5SY5125-7CC	259.49
32	5SY5132-7CC	310.92
40	5SY5140-7CC	389.93
50	5SY5150-7CC	466.61
63	5SY5163-7CC	551.70

2 Pole, 400 VAC, 440 VDC



2	5SY5202-7CC	869.63
3	5SY5203-7CC	869.63
4	5SY5204-7CC	869.63
6	5SY5206-7CC	869.63
10	5SY5210-7CC	729.37
13	5SY5213-7CC	729.37
16	5SY5216-7CC	729.37
20	5SY5220-7CC	729.37
25	5SY5225-7CC	729.37
32	5SY5232-7CC	869.63
40	5SY5240-7CC	1,089.38
50	5SY5250-7CC	1,313.80
63	5SY5263-7CC	1,528.87

4 Pole, 400 VAC, 880 VDC



2	5SY5402-7CC	1,743.94
3	5SY5403-7CC	1,743.94
4	5SY5404-7CC	1,743.94
6	5SY5406-7CC	1,743.94
10	5SY5410-7CC	1,458.74
13	5SY5413-7CC	1,458.74
16	5SY5416-7CC	1,458.74
20	5SY5420-7CC	1,458.74
25	5SY5425-7CC	1,458.74
32	5SY5432-7CC	1,743.94
40	5SY5440-7CC	2,174.08
50	5SY5450-7CC	2,608.90
63	5SY5463-7CC	3,048.39

Miniature Circuit Breakers

Accessories for MCB type 5SL4 and 5SY

1

Description	Order Number	Price List SGD
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Auxiliary switches (AS)

1 NO + 1 NC	5ST3010-0CC	139.00
2 NO	5ST3011-0CC	216.00
2 NC	5ST3012-0CC	216.00

For 5SL, 5SY, 5SP miniature circuit breakers
For 5SV4, 5SV3 residual current protective devices switches



Fault signal contacts (FC)

1 NO + 1 NC	5ST3020-0CC	165.00
2 NO	5ST3021-0CC	216.00
2 NC	5ST3022-0CC	216.00

For 5SL, 5SY, 5SP miniature circuit breakers
For 5SV4, 5SV3 residual current protective devices



Undervoltage releases (UR)

230 VAC	5ST3040	705.00
110 VDC	5ST3041	747.00
24 VDC	5ST3042	747.00

For 5SL4, 5SY, 5SP miniature circuit breakers
For 5SV4, 5SV3 residual current protective devices
With integrated auxiliary switch



Shunt trips (ST)

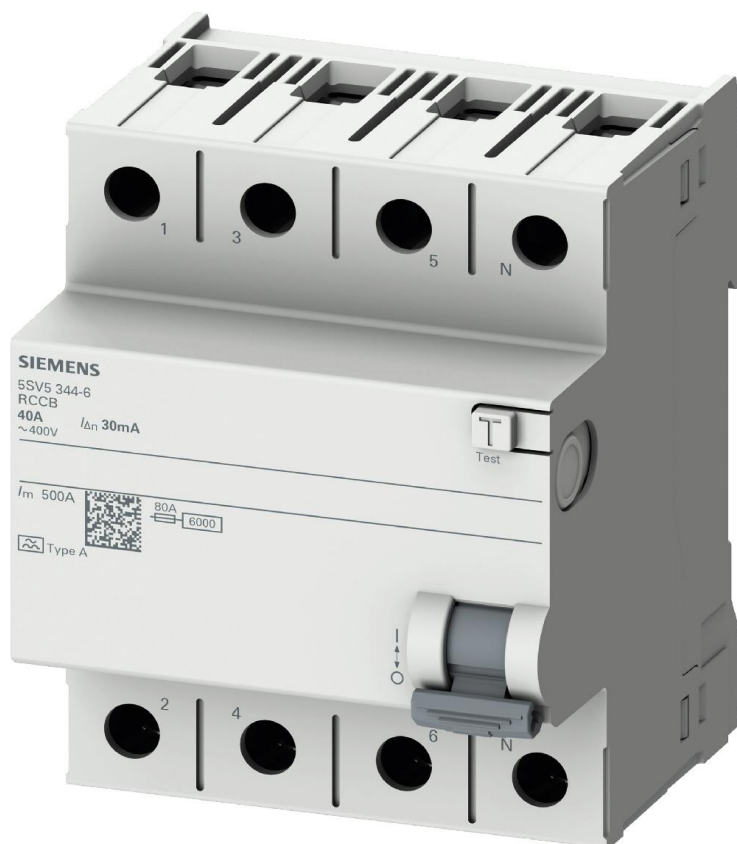
110 ... 415 VAC	5ST3030	330.00
24 ... 48 VAC / VDC	5ST3031	339.00

For 5SL4, 5SY, 5SP miniature circuit breakers
For 5SV4, 5SV3 residual current protective devices

RESIDUAL CURRENT PROTECTIVE DEVICES

RCCB/ELCB TYPE AC, 5SV5 UP TO 63A	2-2
RCCB/ELCB TYPE AC, 5SV4 UP TO 80A	2-3
RCCB/ELCB TYPE A, 5SV3	2-4
RCBO TYPE AC, 5SU9	2-5

FOR MORE INFORMATION SCAN THE QR CODE
& SEARCH FOR RCCB



Residual Current Protective Devices

RCCB / ELCB type : 5SV5

IEC/EN: 61008-1
IEC/EN: 61008-2-1

Type AC instantaneous

2

Pole	Rated residual current $I_{\Delta n}$ (mA)	Rated current I_n (A)	Order Number	Price List SGD
------	---	----------------------------	--------------	-------------------

1P+N; 230 V AC ; 50 Hz
N connection, right



10	16	5SV5111-0	238.00
30	25	5SV5312-0	276.00
	40	5SV5314-0	238.00
	63	5SV5316-0	276.00
100	25	5SV5412-0	231.00
	40	5SV5414-0	154.00
	63	5SV5416-0	212.00
300	25	5SV5612-0	331.00
	40	5SV5614-0	320.00
	63	5SV5616-0	389.00

3P+N; 400 V AC ; 50 Hz
N connection, right



30	40	5SV5344-0	462.00
	63	5SV5346-0	694.00
100	40	5SV5444-0	302.00
	63	5SV5446-0	393.00
300	40	5SV5644-0	273.00
	63	5SV5646-0	340.00

Residual Current Protective Devices

RCCB / ELCB type : 5SV4

IEC/EN: 61008-1

IEC/EN: 61008-2-1

Type AC instantaneous

2

Pole	Rated residual current $I_{\Delta n}$ (mA)	Rated current I_n (A)	Order Number	Price List SGD
------	---	----------------------------	--------------	-------------------

1P+N; 230 V AC ; 50 Hz

N connection, right



10		16	5SV4111-0	604.63
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30		25	5SV4312-0	299.89
----	--	----	-----------	--------

		40	5SV4314-0	319.81
--	--	----	-----------	--------

		63	5SV4316-0	768.75
--	--	----	-----------	--------

		80	5SV4317-0	752.50
--	--	----	-----------	--------

100		25	5SV4412-0	638.07
-----	--	----	-----------	--------

		40	5SV4414-0	613.89
--	--	----	-----------	--------

		63	5SV4416-0	918.08
--	--	----	-----------	--------

		80	5SV4417-0	893.78
--	--	----	-----------	--------

300		25	5SV4612-0	526.59
-----	--	----	-----------	--------

		40	5SV4614-0	560.69
--	--	----	-----------	--------

		63	5SV4616-0	763.22
--	--	----	-----------	--------

		80	5SV4617-0	743.28
--	--	----	-----------	--------

3P+N; 400 V AC ; 50 Hz

N connection, right

30		25	5SV4342-0	323.50
----	--	----	-----------	--------

		40	5SV4344-0	343.05
--	--	----	-----------	--------

		63	5SV4346-0	824.06
--	--	----	-----------	--------

		80	5SV4347-0	807.78
--	--	----	-----------	--------

100		25	5SV4442-0	441.00
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		40	5SV4444-0	666.84
--	--	----	-----------	--------

		63	5SV4446-0	1,047.37
--	--	----	-----------	----------

		80	5SV4447-0	1,139.50
--	--	----	-----------	----------

300		25	5SV4642-0	547.57
-----	--	----	-----------	--------

		40	5SV4644-0	568.66
--	--	----	-----------	--------

		63	5SV4646-0	905.92
--	--	----	-----------	--------

		80	5SV4647-0	774.00
--	--	----	-----------	--------

500		25	5SV4742-0	554.13
-----	--	----	-----------	--------

		40	5SV4744-0	589.54
--	--	----	-----------	--------

		63	5SV4746-0	944.32
--	--	----	-----------	--------

		80	5SV4747-0	783.21
--	--	----	-----------	--------

Note: 5SV4 is compatible with 5ST accessories

Residual Current Protective Devices

RCCB / ELCB type : 5SV3

IEC/EN: 61008-1

IEC/EN: 61008-2-1

Type A instantaneous

2

Pole	Rated residual current $I_{\Delta n}$ (mA)	Rated current I_n (A)	Order Number	Price List SGD
------	---	----------------------------	--------------	-------------------

1P+N; 230 V AC ; 50 Hz

N connection, right



10		16	5SV3111-6	909.16
30		25	5SV3312-6	720.00
		40	5SV3314-6	730.26
		63	5SV3316-6	1,986.96
		80	5SV3317-6	4,069.23
100		25	5SV3412-6	953.15
		40	5SV3414-6	1,114.45
		63	5SV3416-6	1,627.69
		80	5SV3417-6	3,409.35
300		25	5SV3612-6	712.66
		40	5SV3614-6	720.00
		63	5SV3616-6	1,063.13
		80	5SV3617-6	3,042.76

3P+N; 400 V AC ; 50 Hz

N connection, right



30		25	5SV3342-6	755.19
		40	5SV3344-6	791.85
		63	5SV3346-6	2,397.54
		80	5SV3347-6	6,041.52
100		25	5SV3442-6	1,165.78
		40	5SV3444-6	1,224.43
		63	5SV3446-6	1,649.69
		80	5SV3447-6	5,227.67
300		25	5SV3642-6	730.26
		40	5SV3644-6	740.53
		63	5SV3646-6	1,121.79
		80	5SV3647-6	4,567.80
500		25	5SV3742-6	740.53
		40	5SV3744-6	747.86
		63	5SV3746-6	1,063.13
		80	5SV3747-6	4,567.80

Note: 5SV3 is compatible with 5ST accessories

Residual Current Protective Devices

RCBO type : 5SU9

IEC/EN : 61009

Type AC instantaneous

2

Pole	Rated residual current $I_{\Delta n}$ (mA)	Rated current I_n (A)	Order Number	Price List SGD
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1P+N; 230 V AC; 6 kA

With Integral overcurrent protection



10	16	5SU9156-7KK16	332.00
	20	5SU9156-7KK20	332.00
	25	5SU9156-7KK25	277.00
	32	5SU9156-7KK32	299.00
30	6	5SU9356-1KK06	611.00
	10	5SU9356-1KK10	611.00
	16	5SU9356-1KK16	600.00
	20	5SU9356-1KK20	611.00
	25	5SU9356-1KK25	648.00
	32	5SU9356-1KK32	648.00
	40	5SU9356-1KK40	611.00
	50	5SU9356-1KK50	733.00
300	10	5SU9654-7KK10	494.00
	16	5SU9654-7KK16	490.00
	20	5SU9654-7KK20	503.00
	32	5SU9654-7KK32	503.00

MOLDED CASE CIRCUIT BREAKERS

MCCB TYPE 3VJ	3-2
3VJ ACCESSORIES	3-10
MCCB TYPE 3VM	3-12
3VM ACCESSORIES	3-16
MCCB TYPE 3VA	3-19
3VA ACCESSORIES	3-28
MCCB SWITCH DISCONNECTORS	3-36

FOR MORE INFORMATION SCAN THE QR CODE
& SEARCH FOR MCCB



3VJ

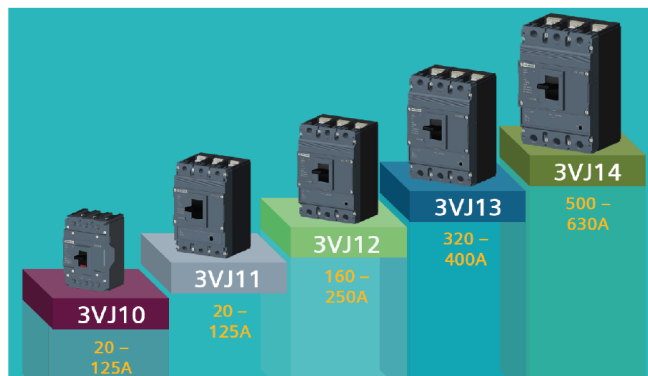
Molded Case Circuit Breakers

KEY FEATURES

- The new 3VJ molded case circuit breakers reliably perform all the tasks required for line and motor protection.
- The key features of the 3VJ series are:
 - Compact design;
 - Depending on size: 1-pole to 4-pole versions
 - Depending on size: breaking capacities of 10kA, 18kA, 25kA, 36kA, 55kA.
 - Fixed-mounted,
 - Thermal-magnetic trip units; FTFM, ATFM
 - AC applications up to 415V
 - Modular and easy-to-fit internal accessories with diverse functions
 - Flexible Neutral configuration (N-RYB or RYB-N) best suited for your application.
 - Global and regional comprehensive Service & Support

FRAME SIZES

Thanks to compact dimensions, the 3VJ molded case circuit breakers are predestined for protecting cables, lines and motors in the plant area, especially for the electrical installation area.



TRIP UNIT

3VJ offers both FTFM and ATFM trip units for all ranges of components. It offers you N-conductor protection with 100% setting as all 4 pole products.

Molded Case Circuit Breakers



MCCB (Fixed Type)

Type 3VJ : TM - Thermal Magnetic Trip Unit
 Rated Current In : 16 - 400 A
 Rated Operational Voltage : Ue Max AC 415 V
 Rated Frequency : 50 Hz

IEC/EN : 60947-2

Type	Overload Protection I _r (A)	Short Circuit Protection I _n (A)	1P		2P	
			Order Number	Price List SGD	Order Number	Price List SGD

Icu : 10 kA, 415 VAC / Ics=10 kA

3VJ10	20	500	3VJ1002-0DA12-0AA0	226.10	3VJ1002-0DA22-0AA0	363.10
	25	500	3VJ1092-0DA12-0AA0	226.10	3VJ1092-0DA22-0AA0	363.10
	32	550	3VJ1003-0DA12-0AA0	226.10	3VJ1003-0DA22-0AA0	363.10
	40	550	3VJ1004-0DA12-0AA0	226.10	3VJ1004-0DA22-0AA0	363.10
	50	600	3VJ1005-0DA12-0AA0	226.10	3VJ1005-0DA22-0AA0	363.10
	63	850	3VJ1006-0DA12-0AA0	226.10	3VJ1006-0DA22-0AA0	363.10
	80	850	3VJ1008-0DA12-0AA0	226.10	3VJ1008-0DA22-0AA0	363.10
	100	1,250	3VJ1010-0DA12-0AA0	226.10	3VJ1010-0DA22-0AA0	363.10
	125	1,250	3VJ1012-0DA12-0AA0	339.15	3VJ1012-0DA22-0AA0	617.30

Type	Overload Protection I _r (A)	Short Circuit Protection I _n (A)	1P		2P	
			Order Number	Price List SGD	Order Number	Price List SGD

Icu : 18 kA, 415 VAC / Ics=13 kA

3VJ10	20	500	3VJ1002-1DA12-0AA0	226.10	3VJ1002-1DA22-0AA0	363.10
	25	500	3VJ1092-1DA12-0AA0	226.10	3VJ1092-1DA22-0AA0	363.10
	32	550	3VJ1003-1DA12-0AA0	226.10	3VJ1003-1DA22-0AA0	363.10
	40	550	3VJ1004-1DA12-0AA0	226.10	3VJ1004-1DA22-0AA0	363.10
	50	600	3VJ1005-1DA12-0AA0	226.10	3VJ1005-1DA22-0AA0	363.10
	63	850	3VJ1006-1DA12-0AA0	226.10	3VJ1006-1DA22-0AA0	363.10
	80	850	3VJ1008-1DA12-0AA0	226.10	3VJ1008-1DA22-0AA0	363.10
	100	1,250	3VJ1010-1DA12-0AA0	226.10	3VJ1010-1DA22-0AA0	363.10
	125	1,250	3VJ1012-1DA12-0AA0	339.20	3VJ1012-1DA22-0AA0	617.30
	3VJ12	160	1,600	-	-	3VJ1216-1DA22-0AA0
200		2,000	-	-	3VJ1220-1DA22-0AA0	962.80
250		2,500	-	-	3VJ1225-1DA22-0AA0	962.80

Type	Overload Protection I _r (A)	Short Circuit Protection I _n (A)	1P		2P	
			Order Number	Price List SGD	Order Number	Price List SGD

Icu : 25 kA, 415 VAC / Ics=18 kA

3VJ10	20	500	3VJ1002-3DA12-0AA0	226.10	3VJ1002-3DA22-0AA0	363.10
	25	500	3VJ1092-3DA12-0AA0	226.10	3VJ1092-3DA22-0AA0	363.10
	32	550	3VJ1003-3DA12-0AA0	226.10	3VJ1003-3DA22-0AA0	363.10
	40	550	3VJ1004-3DA12-0AA0	226.10	3VJ1004-3DA22-0AA0	363.10
	50	600	3VJ1005-3DA12-0AA0	226.10	3VJ1005-3DA22-0AA0	363.10
	63	850	3VJ1006-3DA12-0AA0	226.10	3VJ1006-3DA22-0AA0	363.10
	80	850	3VJ1008-3DA12-0AA0	226.10	3VJ1008-3DA22-0AA0	363.10
	100	1,250	3VJ1010-3DA12-0AA0	226.10	3VJ1010-3DA22-0AA0	363.10
	125	1,250	3VJ1012-3DA12-0AA0	339.20	3VJ1012-3DA22-0AA0	617.30
	3VJ12	160	1,600	-	-	3VJ1216-3DA22-0AA0
200		2,000	-	-	3VJ1220-3DA22-0AA0	962.80
250		2,500	-	-	3VJ1225-3DA22-0AA0	962.80

Note: 3VJ10 is not available for Undervoltage releases accessories

Molded Case Circuit Breakers



MCCB (Fixed Type)

Type 3VJ : TM - Thermal Magnetic Trip Unit
 Rated Current In : 16 - 400 A
 Rated Operational Voltage : Ue Max AC 415 V
 Rated Frequency : 50 Hz

IEC/EN : 60947-2

3

Type	Overload Protection I _r (A)	Short Circuit Protection I _s (A)	1P		2P	
			Order Number	Price List SGD	Order Number	Price List SGD

Icu : 36 kA, 415 VAC / Ics=27 kA

3VJ11	25	500	-	-	3VJ1192-5DA22-0AA0	382.20
	32	550	-	-	3VJ1103-5DA22-0AA0	382.20
	40	550	-	-	3VJ1104-5DA22-0AA0	382.20
	50	600	-	-	3VJ1105-5DA22-0AA0	382.20
	63	850	-	-	3VJ1106-5DA22-0AA0	382.20
	80	850	-	-	3VJ1108-5DA22-0AA0	382.20
	100	1,250	-	-	3VJ1110-5DA22-0AA0	382.20
3VJ12	125	1,250	-	-	3VJ1112-5DA22-0AA0	649.70
	160	1,600	-	-	3VJ1216-5DA22-0AA0	855.60
	200	2,000	-	-	3VJ1220-5DA22-0AA0	1,013.50
	250	2,500	-	-	3VJ1225-5DA22-0AA0	1,013.50

Type	Overload Protection I _r (A)	Short Circuit Protection I _s (A)	1P		2P	
			Order Number	Price List SGD	Order Number	Price List SGD

Icu : 55 kA, 415 VAC / Ics=41 kA

3VJ11	25	500	-	-	3VJ1192-7DA22-0AA0	496.90
	32	550	-	-	3VJ1103-7DA22-0AA0	496.90
	40	550	-	-	3VJ1104-7DA22-0AA0	496.90
	50	600	-	-	3VJ1105-7DA22-0AA0	496.90
	63	850	-	-	3VJ1106-7DA22-0AA0	496.90
	80	850	-	-	3VJ1108-7DA22-0AA0	496.90
	100	1,250	-	-	3VJ1110-7DA22-0AA0	900.60
3VJ12	125	1,250	-	-	3VJ1112-7DA22-0AA0	900.60
	160	1,600	-	-	3VJ1216-7DA22-0AA0	900.60
	200	2,000	-	-	3VJ1220-7DA22-0AA0	1,066.90
	250	2,500	-	-	3VJ1225-7DA22-0AA0	1,066.90

Note: 3VJ10 is not available for Undervoltage releases accessories

Molded Case Circuit Breakers



MCCB (Fixed Type)

Type 3VJ : TM - Thermal Magnetic Trip Unit
 Rated Current In : 16 - 400 A
 Rated Operational Voltage : Ue Max AC 415 V
 Rated Frequency : 50 Hz

IEC/EN : 60947-2

Type	Overload Protection I _n (A)	Short Circuit Protection I _n (A)	3P		4P	
			Order Number	Price List SGD	Order Number	Price List SGD
Icu : 10 kA, 415 VAC / Ics=10 kA						
3VJ10	20	500	3VJ1002-0DA32-0AA0	263.20	3VJ1002-0EA42-0AA0	560.50
	25	500	3VJ1092-0DA32-0AA0	263.20	3VJ1092-0EA42-0AA0	560.50
	32	550	3VJ1003-0DA32-0AA0	263.20	3VJ1003-0EA42-0AA0	560.50
	40	550	3VJ1004-0DA32-0AA0	263.20	3VJ1004-0EA42-0AA0	560.50
	50	600	3VJ1005-0DA32-0AA0	263.20	3VJ1005-0EA42-0AA0	560.50
	63	850	3VJ1006-0DA32-0AA0	263.20	3VJ1006-0EA42-0AA0	560.50
	80	850	3VJ1008-0DA32-0AA0	263.20	3VJ1008-0EA42-0AA0	560.50
	100	1,250	3VJ1010-0DA32-0AA0	263.20	3VJ1010-0EA42-0AA0	560.50
	125	1,250	3VJ1012-0DA32-0AA0	647.00	3VJ1012-0EA42-0AA0	950.00

Type	Overload Protection I _n (A)	Short Circuit Protection I _n (A)	3P		4P	
			Order Number	Price List SGD	Order Number	Price List SGD
Icu : 18 kA, 415 VAC / Ics=13 kA						
3VJ10	20	500	3VJ1002-1DA32-0AA0	390.50	3VJ1002-1EA42-0AA0	560.50
	25	500	3VJ1092-1DA32-0AA0	390.50	3VJ1092-1EA42-0AA0	560.50
	32	550	3VJ1003-1DA32-0AA0	390.50	3VJ1003-1EA42-0AA0	560.50
	40	550	3VJ1004-1DA32-0AA0	390.50	3VJ1004-1EA42-0AA0	560.50
	50	600	3VJ1005-1DA32-0AA0	390.50	3VJ1005-1EA42-0AA0	560.50
	63	850	3VJ1006-1DA32-0AA0	390.50	3VJ1006-1EA42-0AA0	560.50
	80	850	3VJ1008-1DA32-0AA0	390.50	3VJ1008-1EA42-0AA0	560.50
	100	1,250	3VJ1010-1DA32-0AA0	390.50	3VJ1010-1EA42-0AA0	560.50
	125	1,250	3VJ1012-1DA32-0AA0	647.00	3VJ1012-1EA42-0AA0	950.00
	3VJ12	160	1,600	3VJ1216-1DA32-0AA0	647.00	3VJ1216-1EA42-0AA0
200		2,000	3VJ1220-1DA32-0AA0	828.40	3VJ1220-1EA42-0AA0	1,881.00
250		2,250	3VJ1225-1DA32-0AA0	828.40	3VJ1225-1EA42-0AA0	1,881.00

Type	Overload Protection I _n (A)	Short Circuit Protection I _n (A)	3P		4P	
			Order Number	Price List SGD	Order Number	Price List SGD
Icu : 25 kA, 415 VAC / Ics=18 kA						
3VJ10	20	500	3VJ1002-3DA32-0AA0	409.00	3VJ1002-3EA42-0AA0	697.30
	25	500	3VJ1092-3DA32-0AA0	409.00	3VJ1092-3EA42-0AA0	697.30
	32	550	3VJ1003-3DA32-0AA0	409.00	3VJ1003-3EA42-0AA0	697.30
	40	550	3VJ1004-3DA32-0AA0	409.00	3VJ1004-3EA42-0AA0	697.30
	50	600	3VJ1005-3DA32-0AA0	409.00	3VJ1005-3EA42-0AA0	697.30
	63	850	3VJ1006-3DA32-0AA0	409.00	3VJ1006-3EA42-0AA0	697.30
	80	850	3VJ1008-3DA32-0AA0	409.00	3VJ1008-3EA42-0AA0	697.30
	100	1250	3VJ1010-3DA32-0AA0	409.00	3VJ1010-3EA42-0AA0	697.30
	125	1250	3VJ1012-3DA32-0AA0	754.30	3VJ1012-3EA42-0AA0	1,020.00
	3VJ12	160	1600	3VJ1216-3DA32-0AA0	754.30	3VJ1216-3EA42-0AA0
200		2000	3VJ1220-3DA32-0AA0	1,000.40	3VJ1220-3EA42-0AA0	2,090.00
250		2250	3VJ1225-3DA32-0AA0	1,000.40	3VJ1225-3EA42-0AA0	2,090.00
3VJ13	320	3200	3VJ1332-3DA32-0AA0	1,889.80	3VJ1332-3EA42-0AA0	3,159.20
	400	4000	3VJ1340-3DA32-0AA0	1,889.80	3VJ1340-3EA42-0AA0	3,159.20

Note: 3VJ10 is not available for Undervoltage releases accessories

Molded Case Circuit Breakers



MCCB (Fixed Type)

Type 3VJ : TM - Thermal Magnetic Trip Unit
 Rated Current In : 16 - 400 A
 Rated Operational Voltage : Ue Max AC 415 V
 Rated Frequency : 50 Hz

IEC/EN : 60947-2

Type	Overload Protection I _n (A)	Short Circuit Protection I _c (A)	3P		4P	
			Order Number	Price List SGD	Order Number	Price List SGD
Icu : 36 kA, 415 VAC / Ics = 27 kA						
3VJ11	25	550	3VJ1192-5DA32-0AA0	429.50	3VJ1192-5EA42-0AA0	843.70
	32	550	3VJ1103-5DA32-0AA0	429.50	3VJ1103-5EA42-0AA0	843.70
	40	550	3VJ1104-5DA32-0AA0	429.50	3VJ1104-5EA42-0AA0	843.70
	50	600	3VJ1105-5DA32-0AA0	429.50	3VJ1105-5EA42-0AA0	843.70
	63	850	3VJ1106-5DA32-0AA0	429.50	3VJ1106-5EA42-0AA0	844.00
	80	850	3VJ1108-5DA32-0AA0	429.50	3VJ1108-5EA42-0AA0	844.00
	100	1250	3VJ1110-5DA32-0AA0	429.50	3VJ1110-5EA42-0AA0	844.00
3VJ12	125	1250	3VJ1112-5DA32-0AA0	832.20	3VJ1112-5EA42-0AA0	1,148.00
	160	1600	3VJ1216-5DA32-0AA0	832.20	3VJ1216-5EA42-0AA0	1,148.00
	200	2000	3VJ1220-5DA32-0AA0	1,082.10	3VJ1220-5EA42-0AA0	2,559.30
3VJ13	250	2250	3VJ1225-5DA32-0AA0	1,082.10	3VJ1225-5EA42-0AA0	2,559.30
	320	3200	3VJ1332-5DA32-0AA0	1,989.30	3VJ1332-5EA42-0AA0	3,510.30
3VJ14	400	4000	3VJ1340-5DA32-0AA0	1,989.30	3VJ1340-5EA42-0AA0	3,510.30
	500	5000	3VJ1450-5DA32-0AA0	*coming soon*	3VJ1450-5EA42-0AA0	*coming soon*
	630	6300	3VJ1463-5DA32-0AA0	*coming soon*	3VJ1463-5EA42-0AA0	*coming soon*

Type	Overload Protection I _n (A)	Short Circuit Protection I _c (A)	3P		4P	
			Order Number	Price List SGD	Order Number	Price List SGD
Icu : 55 kA, 415 VAC / Ics = 36 kA						
3VJ11	25	600	3VJ1192-7DA32-0AA0	472.40	3VJ1192-7EA42-0AA0	928.10
	32	850	3VJ1103-7DA32-0AA0	472.40	3VJ1103-7EA42-0AA0	928.10
	40	550	3VJ1104-7DA32-0AA0	472.40	3VJ1104-7EA42-0AA0	928.10
	50	600	3VJ1105-7DA32-0AA0	472.40	3VJ1105-7EA42-0AA0	928.10
	63	850	3VJ1106-7DA32-0AA0	472.40	3VJ1106-7EA42-0AA0	928.40
	80	850	3VJ1108-7DA32-0AA0	472.40	3VJ1108-7EA42-0AA0	928.40
	100	1250	3VJ1110-7DA32-0AA0	472.40	3VJ1110-7EA42-0AA0	928.40
3VJ12	125	1250	3VJ1112-7DA32-0AA0	915.40	3VJ1112-7EA42-0AA0	1,262.80
	160	1600	3VJ1216-7DA32-0AA0	915.40	3VJ1216-7EA42-0AA0	1,262.80
	200	2000	3VJ1220-7DA32-0AA0	1,190.30	3VJ1220-7EA42-0AA0	2,815.20
3VJ13	250	2250	3VJ1225-7DA32-0AA0	1,190.30	3VJ1225-7EA42-0AA0	2,815.20
	320	3200	3VJ1332-7DA32-0AA0	2,254.20	3VJ1332-7EA42-0AA0	3,987.90
3VJ14	400	4000	3VJ1340-7DA32-0AA0	2,254.20	3VJ1340-7EA42-0AA0	3,987.90
	500	5000	3VJ1450-7DA32-0AA0	*coming soon*	3VJ1450-7EA42-0AA0	*coming soon*
	630	6300	3VJ1463-7DA32-0AA0	*coming soon*	3VJ1463-7EA42-0AA0	*coming soon*

Note: 3VJ10 is not available for Undervoltage releases accessories

Molded Case Circuit Breakers



MCCB (Fixed Type)

Type 3VJ : TM - Thermal Magnetic Trip Unit
 Rated Current In : 16 - 400 A
 Rated Operational Voltage : Ue Max AC 415 V
 Rated Frequency : 50 Hz

IEC/EN : 60947-2

Type	Overload Protection I _n (A)	Short Circuit Protection I _c (A)	3P		4P	
			Order Number	Price List SGD	Order Number	Price List SGD
Icu : 36 kA, 415 VAC / Ics = 27 kA						
3VJ11	25	550	3VJ1192-5DA32-0AA0	429.50	3VJ1192-5EA42-0AA0	843.70
	32	550	3VJ1103-5DA32-0AA0	429.50	3VJ1103-5EA42-0AA0	843.70
	40	550	3VJ1104-5DA32-0AA0	429.50	3VJ1104-5EA42-0AA0	843.70
	50	600	3VJ1105-5DA32-0AA0	429.50	3VJ1105-5EA42-0AA0	843.70
	63	850	3VJ1106-5DA32-0AA0	429.50	3VJ1106-5EA42-0AA0	844.00
	80	850	3VJ1108-5DA32-0AA0	429.50	3VJ1108-5EA42-0AA0	844.00
	100	1250	3VJ1110-5DA32-0AA0	429.50	3VJ1110-5EA42-0AA0	844.00
	125	1250	3VJ1112-5DA32-0AA0	832.20	3VJ1112-5EA42-0AA0	1,148.00
3VJ12	160	1600	3VJ1216-5DA32-0AA0	832.20	3VJ1216-5EA42-0AA0	1,148.00
	200	2000	3VJ1220-5DA32-0AA0	1,082.10	3VJ1220-5EA42-0AA0	2,559.30
	250	2250	3VJ1225-5DA32-0AA0	1,082.10	3VJ1225-5EA42-0AA0	2,559.30
3VJ13	320	3200	3VJ1332-5DA32-0AA0	1,989.30	3VJ1332-5EA42-0AA0	3,510.30
	400	4000	3VJ1340-5DA32-0AA0	1,989.30	3VJ1340-5EA42-0AA0	3,510.30
3VJ14	500	5000	3VJ1450-5DA32-0AA0	*coming soon*	3VJ1450-5EA42-0AA0	*coming soon*
	630	6300	3VJ1463-5DA32-0AA0	*coming soon*	3VJ1463-5EA42-0AA0	*coming soon*

Type	Overload Protection I _n (A)	Short Circuit Protection I _c (A)	3P		4P	
			Order Number	Price List SGD	Order Number	Price List SGD
Icu : 55 kA, 415 VAC / Ics = 36 kA						
3VJ11	25	600	3VJ1192-7DA32-0AA0	472.40	3VJ1192-7EA42-0AA0	928.10
	32	850	3VJ1103-7DA32-0AA0	472.40	3VJ1103-7EA42-0AA0	928.10
	40	550	3VJ1104-7DA32-0AA0	472.40	3VJ1104-7EA42-0AA0	928.10
	50	600	3VJ1105-7DA32-0AA0	472.40	3VJ1105-7EA42-0AA0	928.10
	63	850	3VJ1106-7DA32-0AA0	472.40	3VJ1106-7EA42-0AA0	928.40
	80	850	3VJ1108-7DA32-0AA0	472.40	3VJ1108-7EA42-0AA0	928.40
	100	1250	3VJ1110-7DA32-0AA0	472.40	3VJ1110-7EA42-0AA0	928.40
	125	1250	3VJ1112-7DA32-0AA0	915.40	3VJ1112-7EA42-0AA0	1,262.80
3VJ12	160	1600	3VJ1216-7DA32-0AA0	915.40	3VJ1216-7EA42-0AA0	1,262.80
	200	2000	3VJ1220-7DA32-0AA0	1,190.30	3VJ1220-7EA42-0AA0	2,815.20
	250	2250	3VJ1225-7DA32-0AA0	1,190.30	3VJ1225-7EA42-0AA0	2,815.20
3VJ13	320	3200	3VJ1332-7DA32-0AA0	2,254.20	3VJ1332-7EA42-0AA0	3,987.90
	400	4000	3VJ1340-7DA32-0AA0	2,254.20	3VJ1340-7EA42-0AA0	3,987.90
3VJ14	500	5000	3VJ1450-7DA32-0AA0	*coming soon*	3VJ1450-7EA42-0AA0	*coming soon*
	630	6300	3VJ1463-7DA32-0AA0	*coming soon*	3VJ1463-7EA42-0AA0	*coming soon*

Note: 3VJ10 is not available for Undervoltage releases accessories

Molded Case Circuit Breakers



MCCB (Adjustable type)

Type 3VJ : TM - Thermal Magnetic Trip Unit
 Rated Current I_n : 16 - 400 A
 Rated Operational Voltage : U_e Max AC 415 V
 Rated Frequency : 50 Hz

IEC/EN : 60947-2

3

Type	Overload Protection I_r (A)	Short Circuit Protection I_s (A)	3P		4P	
			Order Number	Price List SGD	Order Number	Price List SGD

Icu : 10 kA, 415 VAC / Ics=10 kA

3VJ10	16 ... 20	500	3VJ1002-0DB32-0AA0	416.80	3VJ1002-0EB42-0AA0	710.00
	20 ... 25	500	3VJ1092-0DB32-0AA0	416.80	3VJ1092-0EB42-0AA0	710.00
	25,6 ... 32	550	3VJ1003-0DB32-0AA0	416.80	3VJ1003-0EB42-0AA0	710.00
	32 ... 40	550	3VJ1004-0DB32-0AA0	416.80	3VJ1004-0EB42-0AA0	710.00
	40 ... 50	600	3VJ1005-0DB32-0AA0	416.80	3VJ1005-0EB42-0AA0	710.00
	50,4 ... 63	850	3VJ1006-0DB32-0AA0	416.80	3VJ1006-0EB42-0AA0	710.00
	66,4 ... 80	850	3VJ1008-0DB32-0AA0	416.80	3VJ1008-0EB42-0AA0	710.00
	80 ... 100	1,250	3VJ1010-0DB32-0AA0	416.80	3VJ1010-0EB42-0AA0	710.00
	100 ... 125	1,250	3VJ1012-0DB32-0AA0	667.20	3VJ1012-0EB42-0AA0	969.00

Type	Overload Protection I_r (A)	Short Circuit Protection I_s (A)	3P		4P	
			Order Number	Price List SGD	Order Number	Price List SGD

Icu : 18 kA, 415 VAC / Ics=13 kA

3VJ10	16 ... 20	500	3VJ1002-1DB32-0AA0	438.80	3VJ1002-1EB42-0AA0	748.20
	20 ... 25	500	3VJ1092-1DB32-0AA0	438.80	3VJ1092-1EB42-0AA0	748.20
	25,6 ... 32	550	3VJ1003-1DB32-0AA0	438.80	3VJ1003-1EB42-0AA0	748.20
	32 ... 40	550	3VJ1004-1DB32-0AA0	438.80	3VJ1004-1EB42-0AA0	748.20
	40 ... 50	600	3VJ1005-1DB32-0AA0	438.80	3VJ1005-1EB42-0AA0	748.20
	50,4 ... 63	850	3VJ1006-1DB32-0AA0	438.80	3VJ1006-1EB42-0AA0	748.20
	66,4 ... 80	850	3VJ1008-1DB32-0AA0	438.80	3VJ1008-1EB42-0AA0	748.20
	80 ... 100	1250	3VJ1010-1DB32-0AA0	438.80	3VJ1010-1EB42-0AA0	748.20
	100 ... 125	1250	3VJ1012-1DB32-0AA0	702.30	3VJ1012-1EB42-0AA0	969.00
3VJ12	128 ... 160	1600	3VJ1216-1DB32-0AA0	702.30	3VJ1216-1EB42-0AA0	969.00
	160 ... 200	2000	3VJ1220-1DB32-0AA0	997.10	3VJ1220-1EB42-0AA0	2,107.40
	200 ... 250	2500	3VJ1225-1DB32-0AA0	997.10	3VJ1225-1EB42-0AA0	2,107.40

Type	Overload Protection I_r (A)	Short Circuit Protection I_s (A)	3P		4P	
			Order Number	Price List SGD	Order Number	Price List SGD

Icu : 25 kA, 415 VAC / Ics=18 kA

3VJ10	16 ... 20	500	3VJ1002-3DB32-0AA0	476.90	3VJ1002-3EB42-0AA0	813.20
	20 ... 25	500	3VJ1092-3DB32-0AA0	476.90	3VJ1092-3EB42-0AA0	813.20
	25,6 ... 32	550	3VJ1003-3DB32-0AA0	476.90	3VJ1003-3EB42-0AA0	813.20
	32 ... 40	550	3VJ1004-3DB32-0AA0	476.90	3VJ1004-3EB42-0AA0	813.20
	40 ... 50	600	3VJ1005-3DB32-0AA0	476.90	3VJ1005-3EB42-0AA0	813.20
	50,4 ... 63	850	3VJ1006-3DB32-0AA0	476.90	3VJ1006-3EB42-0AA0	813.20
	66,4 ... 80	850	3VJ1008-3DB32-0AA0	476.90	3VJ1008-3EB42-0AA0	813.20
	80 ... 100	1250	3VJ1010-3DB32-0AA0	476.90	3VJ1010-3EB42-0AA0	813.20
	100 ... 125	1250	3VJ1012-3DB32-0AA0	763.40	3VJ1012-3EB42-0AA0	1,040.40
3VJ12	128 ... 160	1600	3VJ1216-3DB32-0AA0	763.40	3VJ1216-3EB42-0AA0	1,040.40
	160 ... 200	2000	3VJ1220-3DB32-0AA0	1,083.90	3VJ1220-3EB42-0AA0	2,290.70
	200 ... 250	2500	3VJ1225-3DB32-0AA0	1,083.90	3VJ1225-3EB42-0AA0	2,290.70
3VJ13	256 ... 320	3200	3VJ1332-3DB32-0AA0	1,927.60	3VJ1332-3EB42-0AA0	3,222.40
	320 ... 400	4000	3VJ1340-3DB32-0AA0	1,927.60	3VJ1340-3EB42-0AA0	3,222.40

Note: 3VJ10 is not available for Undervoltage releases accessories

Molded Case Circuit Breakers



MCCB (Adjustable type)

Type 3VJ : TM - Thermal Magnetic Trip Unit
 Rated Current I_n : 16 - 400 A
 Rated Operational Voltage : U_e Max AC 415 V
 Rated Frequency : 50 Hz

IEC/EN : 60947-2

3

Type	Overload Protection I _r (A)	Short Circuit Protection I _r (A)	3P		4P	
			Order Number	Price List SGD	Order Number	Price List SGD
Icu : 36 kA, 415 VAC / Ics = 27 kA						
3VJ11	20 ... 25	500	3VJ1192-5DB32-0AA0	518.40	3VJ1192-5EB42-0AA0	903.60
	25,6 ... 32	550	3VJ1103-5DB32-0AA0	518.40	3VJ1103-5EB42-0AA0	903.60
	32 ... 40	550	3VJ1104-5DB32-0AA0	518.40	3VJ1104-5EB42-0AA0	903.60
	40 ... 50	600	3VJ1105-5DB32-0AA0	518.40	3VJ1105-5EB42-0AA0	903.60
	50,4 ... 63	850	3VJ1106-5DB32-0AA0	518.40	3VJ1106-5EB42-0AA0	903.60
	66,4 ... 80	850	3VJ1108-5DB32-0AA0	518.40	3VJ1108-5EB42-0AA0	903.60
	80 ... 100	1250	3VJ1110-5DB32-0AA0	518.40	3VJ1110-5EB42-0AA0	903.60
3VJ12	100 ... 125	1250	3VJ1112-5DB32-0AA0	848.80	3VJ1112-5EB42-0AA0	1,171.00
	128 ... 160	1600	3VJ1216-5DB32-0AA0	848.80	3VJ1216-5EB42-0AA0	1,171.00
	160 ... 200	2000	3VJ1220-5DB32-0AA0	1,178.10	3VJ1220-5EB42-0AA0	2,610.50
3VJ13	200 ... 250	2500	3VJ1225-5DB32-0AA0	1,178.10	3VJ1225-5EB42-0AA0	2,610.50
	256 ... 320	3200	3VJ1332-5DB32-0AA0	2,029.10	3VJ1332-5EB42-0AA0	3,580.50
3VJ14	320 ... 400	4000	3VJ1340-5DB32-0AA0	2,029.10	3VJ1340-5EB42-0AA0	3,580.50
	400 ... 500	5000	3VJ1450-5DB32-0AA0	*coming soon*	3VJ1450-5EB42-0AA0	*coming soon*
	504 ... 630	6300	3VJ1463-5DB32-0AA0	*coming soon*	3VJ1463-5EB42-0AA0	*coming soon*

Type	Overload Protection I _r (A)	Short Circuit Protection I _r (A)	3P		4P	
			Order Number	Price List SGD	Order Number	Price List SGD
Icu : 55 kA, 415 VAC / Ics = 36 kA						
3VJ11	20 ... 25	500	3VJ1192-7DB32-0AA0	558.70	3VJ1192-7EB42-0AA0	973.90
	25,6 ... 32	550	3VJ1103-7DB32-0AA0	558.70	3VJ1103-7EB42-0AA0	973.90
	32 ... 40	550	3VJ1104-7DB32-0AA0	558.70	3VJ1104-7EB42-0AA0	973.90
	40 ... 50	600	3VJ1105-7DB32-0AA0	558.70	3VJ1105-7EB42-0AA0	973.90
	50,4 ... 63	850	3VJ1106-7DB32-0AA0	558.70	3VJ1106-7EB42-0AA0	973.90
	66,4 ... 80	850	3VJ1108-7DB32-0AA0	558.70	3VJ1108-7EB42-0AA0	973.90
	80 ... 100	1250	3VJ1110-7DB32-0AA0	558.70	3VJ1110-7EB42-0AA0	973.90
3VJ12	100 ... 125	1250	3VJ1112-7DB32-0AA0	993.70	3VJ1112-7EB42-0AA0	1,288.10
	128 ... 160	1600	3VJ1216-7DB32-0AA0	993.70	3VJ1216-7EB42-0AA0	1,288.10
	160 ... 200	2000	3VJ1220-7DB32-0AA0	1,269.70	3VJ1220-7EB42-0AA0	2,871.50
3VJ13	180 ... 225	2250	3VJ1225-7DB32-0AA0	1,269.70	3VJ1225-7EB42-0AA0	2,871.50
	256 ... 320	3200	3VJ1332-7DB32-0AA0	2,299.30	3VJ1332-7EB42-0AA0	4,067.70
3VJ14	320 ... 400	4000	3VJ1340-7DB32-0AA0	2,299.30	3VJ1340-7EB42-0AA0	4,067.70
	400 ... 500	5000	3VJ1450-7DB32-0AA0	*coming soon*	3VJ1450-7EB42-0AA0	*coming soon*
	504 ... 630	6300	3VJ1463-7DB32-0AA0	*coming soon*	3VJ1463-7EB42-0AA0	*coming soon*

Note: 3VJ10 is not available for Undervoltage releases accessories

Molded Case Circuit Breakers Accessories

Accessories for MCCB type 3VJ

Description	Sub-type	Order Number	Price List SGD	
AUX Auxiliary switch (1NO + 1NC)				
	Left	3VJ10; 16A-125A 3VJ11; 3VJ12; 16A-250A	3VJ9018-0AN11 125.40 3VJ9218-0AN11 134.90	
	Right	3VJ11, 3VJ12; 16A-250A	3VJ9218-0AN21 134.90	
AL Alarm switch(1NO + 1NC)				
	Left	3VJ10; 16A-125A 3VJ11; 16A-125A 3VJ12; 160A-250A	3VJ9018-0AA11 134.90 3VJ9118-0AA11 134.90 3VJ9218-0AA11 124.50	
	Right	3VJ11; 16A-125A 3VJ12; 160A-250A	3VJ9118-0AA21 134.90 3VJ9218-0AA21 124.50	
Auxiliary and Alarm switch (2NO + 2NC)				
	Left	3VJ10; 16A-125A 3VJ11; 16A-125A 3VJ12; 160A-250A 3VJ13, 3VJ14; 320A-630A	3VJ9018-0AD11 287.90 3VJ9118-0AD11 287.90 3VJ9218-0AD11 324.90 3VJ9417-0AD11 281.20	
	Right	3VJ11 - 16A-125A 3VJ12; 160A-250A 3VJ13, 3VJ14; 320A-630A	3VJ9118-0AD21 287.90 3VJ9218-0AD21 324.90 3VJ9417-0AD21 281.20	
STL Shunt trip (fits right/ left pocket)				
	24 Vdc	3VJ10, 3VJ11, 3VJ12; 16A-250A 3VJ13, 3VJ14; 320A-630A	3VJ9218-0ST11 271.90 3VJ9417-0ST21 330.60	
	48 Vdc	3VJ10, 3VJ11, 3VJ12; 16A-250A 3VJ13, 3VJ14; 320A-630A	3VJ9218-0ST12 271.90 3VJ9417-0ST22 330.60	
	110 Vdc	3VJ10, 3VJ11, 3VJ12; 16A-250A 3VJ13, 3VJ14; 320A-630A	3VJ9218-0ST15 271.90 3VJ9417-0ST25 330.60	
	110 Vac	3VJ10, 3VJ11, 3VJ12; 16A-250A 3VJ13, 3VJ14; 320A-630A	3VJ9218-0ST35 271.90 3VJ9417-0ST25 330.60	
	220 Vac	3VJ10, 3VJ11, 3VJ12; 16A-250A 3VJ13, 3VJ14; 320A-630A	3VJ9218-0ST36 271.90 3VJ9417-0ST36 330.60	
	415 Vac	3VJ10, 3VJ11, 3VJ12; 16A-250A 3VJ13, 3VJ14; 320A-630A	3VJ9218-0ST37 271.90 3VJ9417-0ST37 330.60	
	UVR Undervoltage Release (fits right/ left pocket)			
		24 Vdc	3VJ11, 3VJ12; 16A-250A	3VJ9218-0UV11 427.40
		48 Vdc	3VJ11, 3VJ12; 16A-250A	3VJ9218-0UV12 427.40
		220 Vac	3VJ11, 3VJ12; 16A-250A 3VJ13, 3VJ14; 320A-630A	3VJ9218-0UV36 427.40 3VJ9417-0UV36 464.60
3VJ11, 3VJ12; 16A-250A			3VJ9218-0UV37 427.40	
415 Vac		3VJ13, 3VJ14; 320A-630A	3VJ9417-0UV37 464.60	
Extended Door Mounted Rotary Operator (including 8UC handle) 1)				
	Standrad, grey	3VJ10; 16A-125A 3VJ11; 16A-125A	3VJ9018-0HD11 306.80 3VJ9118-0HD11 306.80	
		3VJ12; 160A-250A 3VJ13, 3VJ14; 320A-630A	3VJ9218-0HD11 330.20 3VJ9417-0HD11 547.80	
Spreader Terminals 2)				
	2 Pieces	3VJ10; 16A-125A 3VJ11; 16A-125A 3VJ12; 160A-250A	3VJ9012-0ED00 117.80 3VJ9112-0ED00 117.80 3VJ9212-0ED00 130.70	
		3VJ10; 16A-125A 3VJ11; 16A-125A 3VJ12; 160A-250A 3VJ13; 320A-400A 3VJ14; 500A-630A	3VJ9013-0ED00 176.70 3VJ9113-0ED00 176.70 3VJ9213-0ED00 195.70 3VJ9313-0ED00 314.80 3VJ9413-0ED00 <i>*coming soon*</i>	
	3 Pieces	3VJ10; 16A-125A 3VJ11; 16A-125A 3VJ12; 160A-250A	3VJ9014-0ED00 229.90 3VJ9114-0ED00 229.90 3VJ9214-0ED00 255.00	
		3VJ13; 320A-400A 3VJ14; 500A-630A	3VJ9314-0ED00 410.80 3VJ9414-0ED00 <i>*coming soon*</i>	
	4 Pieces	3VJ10; 16A-125A 3VJ11; 16A-125A 3VJ12; 160A-250A	3VJ9014-0ED00 229.90 3VJ9114-0ED00 229.90 3VJ9214-0ED00 255.00	
		3VJ13; 320A-400A 3VJ14; 500A-630A	3VJ9314-0ED00 410.80 3VJ9414-0ED00 <i>*coming soon*</i>	


Note:

- 1) 1 set contains rotary mechanism, coupler, shaft and 8UC handle.
- 2) Spreader Terminal: 1 set = 3 pieces for 3-pole and 4pieces in case of 4-pole.

Molded Case Circuit Breakers Accessories

Accessories for MCCB type 3VJ

3

Description	Sub-type	Order Number	Price List SGD
Straight terminals ³⁾			
 Straight Terminals	3VJ10; 16A-125A	3VJ9011-0EC00	62.80
Phase barriers ⁴⁾			
	3VJ10; 16A-125A	3VJ9018-0CA00	37.10
1package = 2pcs	3VJ11, 3VJ12; 16A-250A	3VJ9218-0CA00	43.70
	3VJ13, 3VJ14; 320A-630A	3VJ9417-0CA00	40.90
Terminal Covers (1package = 2pcs) ⁵⁾			
1 Pole	3VJ10; 16A-125A	3VJ9011-0CJ10	36.60
	3VJ10; 16A-125A	3VJ9016-0CJ30	111.20
3 Pole	3VJ11; 16A-125A	3VJ9116-0CJ30	134.90
	3VJ12; 160A-250A	3VJ9216-0CJ30	121.60
	3VJ13; 320A-400A	3VJ9413-0CJ30	121.60
4 Pole	3VJ10; 16A-125A	3VJ9014-0CJ40	113.60
	3VJ11; 16A-125A	3VJ9114-0CJ40	140.70
	3VJ12; 160A-250A	3VJ9214-0CJ40	173.90
	3VJ13; 320A-400A	3VJ9414-0CJ40	141.60
Locking device			
Padlock	3VJ11; 16A-125A	3VJ9118-0LM10	<i>*coming soon*</i>
	3VJ12; 160A-250A	3VJ9218-0LM10	<i>*coming soon*</i>
	3VJ13, 3VJ14; 320A-630A	3VJ9317-0LM10	<i>*coming soon*</i>
Mechanical Interlock (2 pieces)			
3 Pole	3VJ11; 16A-125A	3VJ9116-0VM10	<i>*coming soon*</i>
	3VJ12; 160A-250A	3VJ9216-0VM10	<i>*coming soon*</i>
	3VJ13, 3VJ14; 320A-630A	3VJ9313-0VM10	<i>*coming soon*</i>
4 Pole	3VJ11; 16A-125A	3VJ9114-0VM10	<i>*coming soon*</i>
	3VJ12; 160A-250A	3VJ9214-0VM10	<i>*coming soon*</i>
	3VJ13, 3VJ14; 320A-630A	3VJ9314-0VM10	<i>*coming soon*</i>
Toggle handle extension			
Toggle handle extension	3VJ13, 3VJ14; 320A-630A	3VJ9417-0DH10	112.30

Note:

3) Straight Terminals: 1 set = 2 pieces.-

4) Available as a standard: 1 set contains 2 phase barriers.

5) Available as a standard: 1 set contains 2 terminal covers (top & bottom).

3VM

Molded Case Circuit Breakers

KEY FEATURES

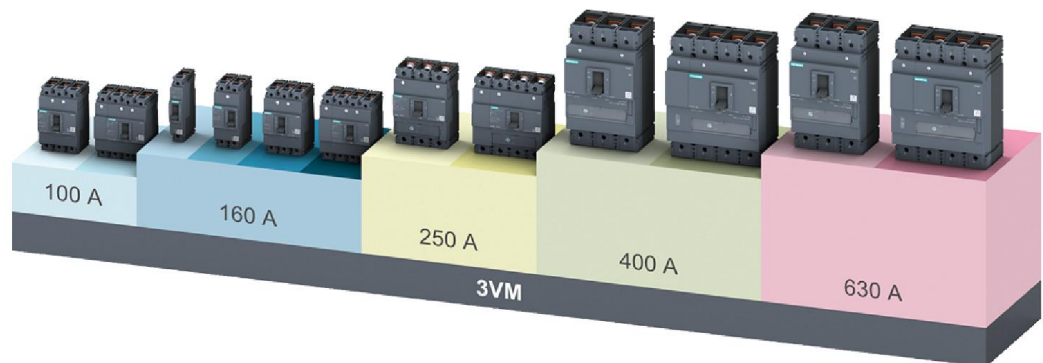
The 3VM molded case circuit breakers reliably perform all the tasks required for line and motor protection.

The key features of the 3VM series are:

- Compact design; smallest in the world
- Depending on size: 1-pole to 4-pole versions
- Depending on size: breaking capacities of 16 kA to 55 kA at 415 V, 3 or 4-pole breakers and 36 kA at 240 V, 1-pole breakers
- Fixed-mounted, plug-in version
- Thermal-magnetic trip units
- AC/DC applications
- No derating up to +50 °C
- Modular and easy-to-fit internal accessories with diverse functions
- Universal platform of accessories across all sizes
- Global and regional comprehensive Service & Support

FRAME SIZES

Thanks to compact dimensions, the 3VM molded case circuit breakers are predestined for protecting cables, lines and motors in the plant area, especially for the electrical installation area.



TRIP UNIT

A thermal-magnetic principle trip unit is the basic trip unit for providing overload and short-circuit protection. This has been developed for implementing economical, cost-efficient installations.

It is suitable for Line and motor protection for use in single and three phase networks, AC networks, 400 Hz applications and with DC currents.

Molded Case Circuit Breakers



MCCB (Fixed Type)

Type 3VM : TM - Thermal Magnetic Trip Unit
 Rated Current In : 16 - 160 A
 Rated Operational : Ue Max AC 415 V (1P & 2P),
 Ue Max AC 500 V (3P & 4P),
 Rated Frequency : 50/60Hz

IEC/EN : 60947-2

Type	Overload Protection I _r (A)	Short Circuit Protection I _i (A)	1P		2P	
			Order Number	Price List	Order Number	Price List
			SGD		SGD	
3VM TM210			3VM11 Icu : 36kA, 240VAC / Ics=27kA		3VM11 Icu : 25kA, 240VAC / Ics=18kA	
	16	320	3VM1196-3ED12-0AA0	290.00	3VM1196-3ED22-0AA0	394.00
	20	320	3VM1120-3ED12-0AA0	290.00	3VM1120-3ED22-0AA0	394.00
	25	320	3VM1125-3ED12-0AA0	290.00	3VM1125-3ED22-0AA0	394.00
	32	320	3VM1132-3ED12-0AA0	290.00	3VM1132-3ED22-0AA0	394.00
	40	400	3VM1140-3ED12-0AA0	290.00	3VM1140-3ED22-0AA0	394.00
	50	500	3VM1150-3ED12-0AA0	290.00	3VM1150-3ED22-0AA0	394.00
	63	630	3VM1163-3ED12-0AA0	290.00	3VM1163-3ED22-0AA0	394.00
	80	800	3VM1180-3ED12-0AA0	290.00	3VM1180-3ED22-0AA0	502.00
	100	1000	3VM1110-3ED12-0AA0	290.00	3VM1110-3ED22-0AA0	502.00
	125	1250	3VM1112-3ED12-0AA0	521.00	3VM1112-3ED22-0AA0	940.00
	160	1600	3VM1116-3ED12-0AA0	521.00	3VM1116-3ED22-0AA0	940.00

Type	Overload Protection I _r (A)	Short Circuit Protection I _i (A)	1P		2P	
			Order Number	Price List	Order Number	Price List
			SGD		SGD	
3VM TM210			3VM11 Icu : 36 kA, 240 VAC / Ics=27kA		3VM11 Icu : 55kA, 240VAC / Ics=41kA	
	16	320	3VM1196-4ED12-0AA0	318.00	3VM1196-4ED22-0AA0	430.00
	20	320	3VM1120-4ED12-0AA0	318.00	3VM1120-4ED22-0AA0	430.00
	25	320	3VM1125-4ED12-0AA0	318.00	3VM1125-4ED22-0AA0	430.00
	32	320	3VM1132-4ED12-0AA0	318.00	3VM1132-4ED22-0AA0	430.00
	40	400	3VM1140-4ED12-0AA0	318.00	3VM1140-4ED22-0AA0	430.00
	50	500	3VM1150-4ED12-0AA0	318.00	3VM1150-4ED22-0AA0	430.00
	63	630	3VM1163-4ED12-0AA0	318.00	3VM1163-4ED22-0AA0	430.00
	80	800	3VM1180-4ED12-0AA0	318.00	3VM1180-4ED22-0AA0	542.00
	100	1000	3VM1110-4ED12-0AA0	318.00	3VM1110-4ED22-0AA0	542.00
	125	1250	3VM1112-4ED12-0AA0	573.00	3VM1112-4ED22-0AA0	1,022.00
	160	1600	3VM1116-4ED12-0AA0	573.00	3VM1116-4ED22-0AA0	1,022.00

Type	Overload Protection I _r (A)	Short Circuit Protection I _i (A)	3P		4P	
			Order Number	Price List	Order Number	Price List
			SGD		SGD	
3VM TM210			3VM10 Icu : 16kA, 415VAC / Ics=8kA			
	16	320	3VM1096-2ED32-0AA0	414.00	3VM1096-2ED42-0AA0	606.00
	20	320	3VM1020-2ED32-0AA0	414.00	3VM1020-2ED42-0AA0	606.00
	25	320	3VM1025-2ED32-0AA0	414.00	3VM1025-2ED42-0AA0	606.00
	32	320	3VM1032-2ED32-0AA0	414.00	3VM1032-2ED42-0AA0	606.00
	40	400	3VM1040-2ED32-0AA0	414.00	3VM1040-2ED42-0AA0	606.00
	50	500	3VM1050-2ED32-0AA0	414.00	3VM1050-2ED42-0AA0	606.00
	63	630	3VM1063-2ED32-0AA0	414.00	3VM1063-2ED42-0AA0	606.00
	80	800	3VM1080-2ED32-0AA0	518.00	3VM1080-2ED42-0AA0	681.00
	100	1000	3VM1010-2ED32-0AA0	518.00	3VM1010-2ED42-0AA0	681.00

Type	Overload Protection I _r (A)	Short Circuit Protection I _i (A)	3P		4P	
			Order Number	Price List	Order Number	Price List
			SGD		SGD	
3VM TM210			3VM10 Icu : 25kA, 415VAC / Ics=12kA		3VM11 Icu : 25kA, 415VAC / Ics=18kA	
	16	320	3VM1096-3ED32-0AA0	424.00	3VM1196-3ED42-0AA0	945.40
	20	320	3VM1020-3ED32-0AA0	424.00	3VM1120-3ED42-0AA0	945.40
	25	320	3VM1025-3ED32-0AA0	424.00	3VM1125-3ED42-0AA0	945.40
	32	320	3VM1032-3ED32-0AA0	424.00	3VM1132-3ED42-0AA0	945.40
	40	400	3VM1040-3ED32-0AA0	424.00	3VM1140-3ED42-0AA0	945.40
	50	500	3VM1050-3ED32-0AA0	424.00	3VM1150-3ED42-0AA0	945.40
	63	630	3VM1063-3ED32-0AA0	424.00	3VM1163-3ED42-0AA0	945.40
	80	800	3VM1080-3ED32-0AA0	532.00	3VM1180-3ED42-0AA0	1,028.17
	100	1000	3VM1010-3ED32-0AA0	532.00	3VM1110-3ED42-0AA0	1,193.72
	125	1250	3VM1112-3ED32-0AA0	1,043.00	3VM1112-3ED42-0AA0	1,269.00
	160	1600	3VM1116-3ED32-0AA0	1,043.00	3VM1116-3ED42-0AA0	1,368.00

Molded Case Circuit Breakers



MCCB (Fixed Type)

Type 3VM : TM - Thermal Magnetic Trip Unit
 Rated Current I_n : 16 - 630 A
 Rated Operational Voltage : U_e Max AC 500 V
 Rated Frequency : 50/60Hz

IEC/EN : 60947-2

3

Type	Overload Protection I _r (A)	Short Circuit Protection I _i (A)	3P		4P	
			Order Number	Price List SGD	Order Number	Price List SGD
3VM10 Icu : 36kA, 415VAC / Ics=12kA						
3VM11 / 3VM12 / 3VM13 / 3VM14 Icu : 36kA, 415VAC / Ics=27kA						
3VM TM210	16	320	3VM1096-4ED32-0AA0	509.00	3VM1196-4ED42-0AA0	904.00
	20	320	3VM1020-4ED32-0AA0	509.00	3VM1120-4ED42-0AA0	904.00
	25	320	3VM1025-4ED32-0AA0	509.00	3VM1125-4ED42-0AA0	904.00
	32	320	3VM1032-4ED32-0AA0	509.00	3VM1132-4ED42-0AA0	904.00
	40	400	3VM1040-4ED32-0AA0	509.00	3VM1140-4ED42-0AA0	904.00
	50	500	3VM1050-4ED32-0AA0	509.00	3VM1150-4ED42-0AA0	904.00
	63	630	3VM1063-4ED32-0AA0	509.00	3VM1163-4ED42-0AA0	976.00
	80	800	3VM1080-4ED32-0AA0	639.00	3VM1180-4ED42-0AA0	976.00
	100	1000	3VM1010-4ED32-0AA0	766.00	3VM1110-4ED42-0AA0	976.00
	125	1250	3VM1112-4ED32-0AA0	1134.00	3VM1112-4ED42-0AA0	1463.00
	160	1600	3VM1116-4ED32-0AA0	1134.00	3VM1116-4ED42-0AA0	1463.00
	200	2000	3VM1220-4ED32-0AA0	1580.00	3VM1220-4ED42-0AA0	2763.00
	250	2500	3VM1225-4ED32-0AA0	1580.00	3VM1225-4ED42-0AA0	2763.00
	320	3200	3VM1332-4ED32-0AA0	2194.00	3VM1332-4ED42-0AA0	3800.00
	400	4000	3VM1340-4ED32-0AA0	2194.00	3VM1340-4ED42-0AA0	3800.00
	500	5000	3VM1450-4ED32-0AA0	3149.00	3VM1450-4ED42-0AA0	4170.00
630	5040	3VM1463-4ED32-0AA0	3149.00	3VM1463-4ED42-0AA0	4170.00	

Type	Overload Protection I _r (A)	Short Circuit Protection I _i (A)	3P		4P	
			Order Number	Price List SGD	Order Number	Price List SGD
3VM13 / 3VM14 Icu : 55kA, 415VAC / Ics=41kA						
3VM TM210	320	3200	3VM1332-5ED32-0AA0	2468.00	3VM1332-5ED42-0AA0	4550.00
	400	4000	3VM1340-5ED32-0AA0	2468.00	3VM1340-5ED42-0AA0	4550.00
	500	5000	3VM1450-5ED32-0AA0	3449.00	3VM1450-5ED42-0AA0	5227.00
	630	5040	3VM1463-5ED32-0AA0	3449.00	3VM1463-5ED42-0AA0	5227.00

Molded Case Circuit Breakers



MCCB (Adjustable type)

Type 3VM : TM - Thermal Magnetic Trip Unit
 Rated Current In : 11 - 630 A
 Rated Operational Voltage : Ue Max AC 500 V
 Rated Frequency : 50/60Hz

IEC/EN : 60947-2

3

Type	Overload Protection I _n (A)	Short Circuit Protection I _s (A)	3P		4P	
			Order Number	Price List SGD	Order Number	Price List SGD

3VM11 Icu : 25kA, 415VAC / Ics=18kA

3VM TM220	11 ... 16	320	3VM1196-3EE32-0AA0	574.00	3VM1196-3EE42-0AA0	962.82
	14 ... 20	320	3VM1120-3EE32-0AA0	574.00	3VM1120-3EE42-0AA0	962.82
	18 ... 25	320	3VM1125-3EE32-0AA0	574.00	3VM1125-3EE42-0AA0	962.82
	22 ... 32	320	3VM1132-3EE32-0AA0	574.00	3VM1132-3EE42-0AA0	962.82
	28 ... 40	400	3VM1140-3EE32-0AA0	574.00	3VM1140-3EE42-0AA0	962.82
	35 ... 50	500	3VM1150-3EE32-0AA0	574.00	3VM1150-3EE42-0AA0	962.82
	44 ... 63	630	3VM1163-3EE32-0AA0	574.00	3VM1163-3EE42-0AA0	962.82
	56 ... 80	800	3VM1180-3EE32-0AA0	574.00	3VM1180-3EE42-0AA0	1,054.31
	70 ... 100	1000	3VM1110-3EE32-0AA0	574.00	3VM1110-3EE42-0AA0	1,219.86
	88 ... 125	1250	3VM1112-3EE32-0AA0	1,069.00	3VM1112-3EE42-0AA0	1,969.21
	112 ... 160	1600	3VM1116-3EE32-0AA0	1,069.00	3VM1116-3EE42-0AA0	2,295.96

Type	Overload Protection I _n (A)	Short Circuit Protection I _s (A)	3P		4P	
			Order Number	Price List SGD	Order Number	Price List SGD

3VM11 / 3VM12 / 3VM13 / 3VM14 Icu : 36kA, 415VAC / Ics=27kA

3VM TM220	11 ... 16	320	3VM1196-4EE32-0AA0	609.00	3VM1196-4EE42-0AA0	1,045.60
	14 ... 20	320	3VM1120-4EE32-0AA0	609.00	3VM1120-4EE42-0AA0	1,045.60
	18 ... 25	320	3VM1125-4EE32-0AA0	609.00	3VM1125-4EE42-0AA0	1,045.60
	22 ... 32	320	3VM1132-4EE32-0AA0	609.00	3VM1132-4EE42-0AA0	1,045.60
	28 ... 40	400	3VM1140-4EE32-0AA0	609.00	3VM1140-4EE42-0AA0	1,045.60
	35 ... 50	500	3VM1150-4EE32-0AA0	609.00	3VM1150-4EE42-0AA0	1,045.60
	44 ... 63	630	3VM1163-4EE32-0AA0	609.00	3VM1163-4EE42-0AA0	1,045.60
	56 ... 80	800	3VM1180-4EE32-0AA0	609.00	3VM1180-4EE42-0AA0	1,145.80
	70 ... 100	1000	3VM1110-4EE32-0AA0	609.00	3VM1110-4EE42-0AA0	1,324.42
	88 ... 125	1250	3VM1112-4EE32-0AA0	1,155.00	3VM1112-4EE42-0AA0	2,147.83
	112 ... 160	1600	3VM1116-4EE32-0AA0	1,155.00	3VM1116-4EE42-0AA0	2,496.37
	140 ... 200	2000	3VM1220-4EE32-0AA0	1,640.00	3VM1220-4EE42-0AA0	3,136.80
	175 ... 250	2500	3VM1225-4EE32-0AA0	1,640.00	3VM1225-4EE42-0AA0	3,515.82
	224 ... 320	3200	3VM1332-4EE32-0AA0	2,304.00	3VM1332-4EE42-0AA0	4,879.46
	280 ... 400	4000	3VM1340-4EE32-0AA0	2,417.00	3VM1340-4EE42-0AA0	4,879.46
	350 ... 500	5000	3VM1450-4EE32-0AA0	3,066.00	3VM1450-4EE42-0AA0	6,404.29
441 ... 630	5040	3VM1463-4EE32-0AA0	3,216.00	3VM1463-4EE42-0AA0	6,839.96	

Type	Overload Protection I _n (A)	Short Circuit Protection I _s (A)	3P		4P	
			Order Number	Price List SGD	Order Number	Price List SGD

3VM11 / 3VM12 / 3VM13 / 3VM14 Icu : 55kA, 415VAC / Ics=41kA

3VM TM220	11 ... 16	320	3VM1196-5EE32-0AA0	749.00	3VM1196-5EE42-0AA0	1,145.80
	14 ... 20	320	3VM1120-5EE32-0AA0	749.00	3VM1120-5EE42-0AA0	1,145.80
	18 ... 25	320	3VM1125-5EE32-0AA0	749.00	3VM1125-5EE42-0AA0	1,145.80
	22 ... 32	320	3VM1132-5EE32-0AA0	749.00	3VM1132-5EE42-0AA0	1,145.80
	28 ... 40	400	3VM1140-5EE32-0AA0	749.00	3VM1140-5EE42-0AA0	1,145.80
	35 ... 50	500	3VM1150-5EE32-0AA0	749.00	3VM1150-5EE42-0AA0	1,145.80
	44 ... 63	630	3VM1163-5EE32-0AA0	749.00	3VM1163-5EE42-0AA0	1,145.80
	56 ... 80	800	3VM1180-5EE32-0AA0	749.00	3VM1180-5EE42-0AA0	1,263.43
	70 ... 100	1000	3VM1110-5EE32-0AA0	749.00	3VM1110-5EE42-0AA0	1,459.48
	88 ... 125	1250	3VM1112-5EE32-0AA0	1,264.00	3VM1112-5EE42-0AA0	2,356.95
	112 ... 160	1600	3VM1116-5EE32-0AA0	1,264.00	3VM1116-5EE42-0AA0	2,753.41
	140 ... 200	2000	3VM1220-5EE32-0AA0	1,810.00	3VM1220-5EE42-0AA0	3,446.12
	175 ... 250	2500	3VM1225-5EE32-0AA0	1,810.00	3VM1225-5EE42-0AA0	3,864.36
	224 ... 320	3200	3VM1332-5EE32-0AA0	2,469.00	3VM1332-5EE42-0AA0	5,315.13
	280 ... 400	4000	3VM1340-5EE32-0AA0	2,711.00	3VM1340-5EE42-0AA0	5,315.13
	350 ... 500	5000	3VM1450-5EE32-0AA0	3,185.00	3VM1450-5EE42-0AA0	6,970.66
441 ... 630	5040	3VM1463-5EE32-0AA0	3,497.00	3VM1463-5EE42-0AA0	7,624.16	

Molded Case Circuit Breakers

Accessories for MCCB type 3VM

Description	Order Number	Price List SGD
Auxiliary switch AUX		
HQ/Compact Size/1 slot	3VM9988-0AA12	139.00
Trip Alarm switch for signalling the tripping of the circuit breaker by an overcurrent release		
HQ/Compact Size/1 slot	3VM9988-0AB12	149.00
Shunt Trip Left STL		
12 VDC	3VM9908-0BL10	469.24
24 VAC, 24 ... 30 VDC	3VM9908-0BL30	277.00
48 ... 60 VAC, 48 ... 60 VDC	3VM9908-0BL31	277.00
110 ... 127 VAC, 110 ... 127 VDC	3VM9908-0BL32	277.00
208 ... 277 VAC, 220 ... 250 VDC	3VM9908-0BL33	277.00
380 ... 600 VAC	3VM9908-0BL20	277.00
Undervoltage release UVR		
12 VDC	3VM9908-0BB10	612.06
24 VDC	3VM9908-0BB11	435.00
48 VDC	3VM9908-0BB12	435.00
60 VDC	3VM9908-0BB13	612.06
125 ... 127 VDC	3VM9908-0BB14	435.00
220 ... 230 VDC	3VM9908-0BB15	612.06
250 VDC	3VM9908-0BB16	612.06
24 VAC	3VM9908-0BB20	612.06
48 VAC	3VM9908-0BB21	612.06
60 VAC	3VM9908-0BB22	612.06
110 VAC	3VM9908-0BB23	435.00
120 ... 127 VAC	3VM9908-0BB24	612.06
208 ... 230 VAC	3VM9908-0BB25	435.00
380 ... 400 VAC	3VM9908-0BB26	435.00
440 ... 480 VAC	3VM9908-0BB27	435.00
Manual operators		
Front mounted rotary operator		
Note: Rotary operator, handle, for IEC, degree of protection IP30		
Standard, gray for 3VM10, 3VM11	3VM9117-0EK11	248.00
Standard, gray for 3VM12	3VM9217-0EK11	262.00
Standard, gray for 3VM13, 3VM14	3VM9417-0EK11	340.00
EMERGENCY-STOP, yellow-red for 3VM10, 3VM11	3VM9117-0EK15	317.25
EMERGENCY-STOP, yellow-red for 3VM12	3VM9217-0EK15	357.03
EMERGENCY-STOP, yellow-red for 3VM13, 3VM14	3VM9417-0EK15	476.89
Standard, gray, with door interlock for 3VM10, 3VM11	3VM9117-0EK21	469.24
Standard, gray, with door interlock for 3VM12	3VM9217-0EK21	530.45
Standard, gray, with door interlock for 3VM13, 3VM14	3VM9417-0EK21	703.87
EMERGENCY-STOP, yellow-red, with door interlock for 3VM10, 3VM11	3VM9117-0EK25	540.65
EMERGENCY-STOP, yellow-red, with door interlock for 3VM12	3VM9217-0EK25	612.06
EMERGENCY-STOP, yellow-red, with door interlock for 3VM13, 3VM14	3VM9417-0EK25	805.88
Door mounted rotary operator		
Note: Rotary operator, shaft 300mm, Mounting tolerance compensation, Handle with masking plate 75x75 mm, degree of protection IP65		
Standard, gray for 3VM10, 3VM11	3VM9117-0FK21	335.00
Standard, gray for 3VM12	3VM9217-0FK21	349.00
Standard, gray for 3VM13, 3VM14	3VM9417-0FK21	454.00
EMERGENCY-STOP, yellow-red for 3VM10, 3VM11	3VM9117-0FK25	555.95
EMERGENCY-STOP, yellow-red for 3VM12	3VM9217-0FK25	627.36
EMERGENCY-STOP, yellow-red for 3VM13, 3VM14	3VM9417-0FK25	918.09
Handles		
Note: with masking plate		
Standard, gray w/o tolerance compensation for 3VM10, 3VM11, 3VM12	8UD1721-0AB11	265.07
Standard, gray w/o tolerance compensation for 3VM13, 3VM14	8UD1731-0AB11	372.79
Standard, gray with tolerance compensation for 3VM10, 3VM11, 3VM12	8UD1721-0AB21	353.92
Standard, gray with tolerance compensation for 3VM13, 3VM14	8UD1731-0AB21	458.16
EMERGENCY-STOP, yellow-red, w/o tolerance compensation for 3VM10, 3VM11, 3VM12	8UD1721-0AB15	306.77
EMERGENCY-STOP, yellow-red, w/o tolerance compensation for 3VM13, 3VM14	8UD1731-0AB15	428.88
EMERGENCY-STOP, yellow-red, with tolerance compensation for 3VM10, 3VM11, 3VM12	8UD1721-0AB25	406.54
EMERGENCY-STOP, yellow-red, with tolerance compensation for 3VM13, 3VM14	8UD1731-0AB25	526.17

Molded Case Circuit Breakers

Accessories for MCCB type 3VM

Description	Order Number	Price List
		SGD

3

Molded Case Circuit Breakers

Accessories for MCCB type 3VM

Description	Order Number	Price List SGD
Accessories for locking		
Locking devices for handles for 3VM10, 3VM11, 3VM12	3VM9188-0LB10	235.64
Locking devices for handles for 3VM13, 3VM14	3VM9388-0LB10	310.62
Adapter for DIN rails for 3VM MCCB		
1-pole for 3VM11	3VM9181-0SH10	110.17
2-pole for 3VM11	3VM9182-0SH10	218.81
3 and 4-pole for 3VM10, 3VM11	3VM9187-0SH10	243.80
4-pole in conjunction with RCD110 or RCD210 for 3VM11	3VM9187-0SH20	274.41
Adapter for 60mm busbar system (8US)		
3-pole for 3VM10, 3VM11	8US1213-4AU01	986.28
3-pole for 3VM12	8US1213-4AP03	1138.78
Transparent TMTU cover		
<i>Note: for covering and sealing the trip unit for the TM120M and TM220ATFM trip unit types</i>		
3 and 4-pole for 3VM11	3VM9157-0SA10	14.79
3 and 4-pole for 3VM12	3VM9257-0SA10	14.79
3 and 4-pole for 3VM13, 3VM14	3VM9457-0SA10	21.17
Box terminals (suitable for all installation types)		
3 pole		
<i>Note: connection for CU cables, included in scope of supply 3 single terminals</i>		
1.5 mm ² -70 mm ² for 3VM10, 3VM11	3VM9153-0JA11	117.31
6 mm ² -120 mm ² for 3VM12	3VM9253-0JA11	128.02
50 mm ² -185 mm ² for 3VM12	3VM9253-0JA12	131.08
35 mm ² -300 mm ² for 3VM13, 3VM14	3VM9483-0JA13	581.45
4 pole		
<i>Note: connection for CU cables, included in scope of supply 4 single terminals</i>		
1.5 mm ² -70 mm ² for 3VM10, 3VM11	3VM9154-0JA11	157.09
6 mm ² -120 mm ² for 3VM12	3VM9254-0JA11	170.36
50 mm ² -185 mm ² for 3VM12	3VM9254-0JA12	174.44
35 mm ² -300 mm ² for 3VM13, 3VM14	3VM9484-0JA13	770.17
Phase Barriers (suitable for all types of installations)		
<i>Note: 2 phase barriers are included in the scope of supply</i>		
for 3VM10, 3VM11	3VM9152-0WA00	50.39
for 3VM12	3VM9252-0WA00	52.02
for 3VM13, 3VM14	3VM9482-0WA00	70.39
Terminal covers for fixed mounting		
<i>Note: standard</i>		
3 Pole breaker		
for 3VM10, 3VM11	3VM9111-0WD30	80.08
for 3VM12	3VM9211-0WD30	99.97
for 3VM13, 3VM14	3VM9481-0WD30	154.54
4 Pole breaker		
for 3VM10, 3VM11	3VM9111-0WD40	99.97
for 3VM12	3VM9211-0WD40	131.08
for 3VM13, 3VM14	3VM9481-0WD40	201.98

Molded Case Circuit Breakers

Accessories for MCCB type 3VM

Description	Order Number	Price List SGD
Plug-in unit, complete kit		
Comprising:		
- Plug-in socket		
- Conversion kit		
- Mounting screw kit		
3 pole for 3VM11	3VM9113-0KP00	1,188.41
3 pole for 3VM12	3VM9213-0KP00	1,290.42
3 pole for 3VM13, 3VM14	3VM9313-0KP00	3,498.93
4 pole for 3VM11	3VM9114-0KP00	1,596.45
4 pole for 3VM12	3VM9214-0KP00	1,713.76
4 pole for 3VM13, 3VM14	3VM9314-0KP00	4,661.84

Plug-in unit, conversion kit

Comprising:

- Screw-fastened terminal covers for molded case circuit breakers
- Plug-in contacts
- Cable cage
- Autotrip plunger

3 pole for 3VM11	3VM9113-0KP10	510.05
3 pole for 3VM12	3VM9213-0KP10	555.95
3 pole for 3VM13, 3VM14	3VM9313-0KP10	1,494.44
4 pole for 3VM11	3VM9114-0KP10	683.46
4 pole for 3VM12	3VM9214-0KP10	734.47
4 pole for 3VM13, 3VM14	3VM9314-0KP10	1,999.39

Side mounted residual current devices RCD for 3VM

Type A (pulse current sensitive)

- Mounted on the side (left)
- Trip element (RCR) included in the scope of delivery
- Can be mounted on molded case circuit breakers and switch disconnectors
- $U_e = 127 - 480 \text{ V AC}, 50/60 \text{ Hz}$

Note

- 1 set of box terminals (4 pieces) is included in the delivery package of the RCD110 or RCD210

RCD110 for 3VM11	3VM9114-0RS10	3,606.04
- 4-pole		
- Rated residual response current, adjustable: $I_{\Delta n} = 0.03 - 0.05 - 0.1 - 0.3 - 0.5 - 1 - 3 - 5 \text{ A}$; default: 30 mA		
- Delay time, permanently set: $\Delta t = \text{instantaneous (INS)}$		
RCD210 for 3VM11	3VM9114-0RS20	5,916.56
RCD210 for 3VM12	3VM9214-0RS20	6,375.60
- 4-pole		
- Rated residual response current, adjustable: $I_{\Delta n} = 0.03 - 0.05 - 0.1 - 0.3 - 0.5 - 1 - 3 - 5 \text{ A}$; default: 30 mA		
- Delay time, adjustable: $\Delta t = \text{instantaneous (INS)} - 0.06 - 0.15 - 0.3 - 0.5 - 1 - 2 - 3 \text{ s}$; default: instantaneous (INS)		

3VA1

Molded Case Circuit Breakers

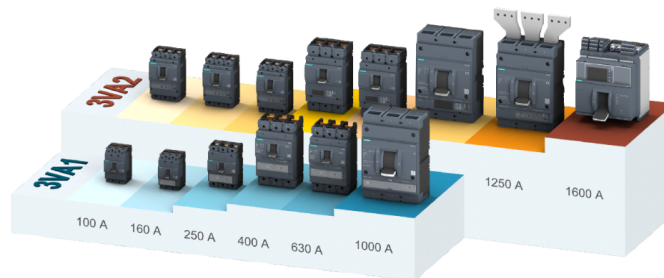
KEY FEATURES

The 3VA1 molded case circuit breakers reliably perform all the tasks required for line protection. The key features of the 3VA1 range are:

- Compact design
- Depending on size: 1-pole to 4-pole versions
- Depending on size: Breaking capacity of 16 kA to 110 kA.
- Fixed-mounted, plug-in version (depending on size)
- Thermal-magnetic trip units
- AC/DC applications
- No derating up to +50 °C
- Modular and easy-to-fit internal accessories with diverse functions
- Uniform accessories platform across all 3VA molded case circuit breakers
- $I_{cs} = 100\% I_{cu}$

FRAME SIZES

Compact dimensions; Thanks to a mounting depth of 70 mm and a cover size of 45 mm, the 3VA molded case circuit breakers are predestined for protecting cables and lines in the plant area, especially for the electrical installation area. For these applications, there is also a wide range of accessories available such as adapters for installation on DIN rails, as well as laterally mountable residual current devices (RCD310 (up to 160A) and RCD510) and laterally mountable motor operators (MO310).



TRIP UNIT

A thermal-magnetic principle trip unit is the basic trip unit for providing overload and short-circuit protection.

This has been developed for implementing economical, cost-efficient installations up to 1000 A. It is suitable for use in three-phase networks, AC networks, 400 Hz applications, and with DC currents.

3VA2

Molded Case Circuit Breakers

KEY FEATURES

- Compact dimensions
- 3 and 4-pole versions
- 7 sizes (up to 1600 A)
- Five breaking capacity classes from 55 kA to 200 kA (depending on size)
- Fixed-mounting, plug-in technology, draw-out technology
- Depending on size: Selective protection response in rated operational current interval 1 : 2.5
- Electronic Trip Units.
- Communication capability for ETUs of the 5-series and 8-series
- Depending on the ETU: integrated metering function for ETUs of the 8-series
- AC applications
- Modular and easy-to-fit internal accessories with diverse functions
- Uniform accessories platform across all 3VA molded case circuit.
- $I_{cs} = 100\% I_{cu}$

ELECTRONIC TRIP UNITS (ETUs)

The current sensor of the 3VA2 comprises an iron-cored transformer for the internal power supply and a Rogowski coil for precise current measurement. Each transformer can be optimized accordingly for its specific task. Thanks to the high accuracy of current measurement, the 3VA2 molded case circuit breaker is suitable for power/energy measurement. In addition, finer adjustment of ground fault current monitoring is possible. The Electronic Trip Units (ETUs) provide the following protection functions:

- Overload protection L ("L" = Long-time delay)
- Short-time delayed short-circuit protection S ("S" = Shorttime delay) for time-selective response in case of a short circuit
- Instantaneous short-circuit protection I ("I" = Instantaneous)
- Protection of the neutral conductor N against overload and short circuit ("N" = Neutral)
- Protection against residual currents to ground G ("G" = Ground fault)
- ELISA: Improved selective grading of downstream LV HRC fuses and upstream molded case circuit breakers

ELECTRONIC TRIP UNITS 5,8

Communication and metering function

- Communication via the COM800/COM100 breaker data server.
- The EFB300 external function box is linked directly to the ETU of the 3VA2 molded case circuit breaker by a cable.
- TD300 and TD500 test devices (with powerconfig)
- The TD300 activation and trip box is a mobile, battery operated local test device.

Molded Case Circuit Breakers



MCCB (Adjustable type)

IEC/EN : 60947-2

Type 3VA1 : TM - Thermal Magnetic Trip Unit
 Rated Current In : 11 - 630 A
 Rated Operational Voltage : Ue Max AC 690 V
 Rated Frequency : 50/60Hz

3

Type	Overload Protection I _r (A)	Short Circuit Protection I _s (A)	3P		4P	
			Order Number	Price List SGD	Order Number	Price List SGD
Icu : 25 kA, 415 VAC / Ics = 25kA						
3VA TM220	11 ... 16	320	3VA1196-3EE36-0AA0	760.00	3VA1196-3GE46-0AA0	1,119.00
	14 ... 20	320	3VA1120-3EE36-0AA0	760.00	3VA1120-3GE46-0AA0	1,119.00
	18 ... 25	320	3VA1125-3EE36-0AA0	760.00	3VA1125-3GE46-0AA0	1,119.00
	22 ... 32	320	3VA1132-3EE36-0AA0	760.00	3VA1132-3GE46-0AA0	1,119.00
	28 ... 40	400	3VA1140-3EE36-0AA0	760.00	3VA1140-3GE46-0AA0	1,119.00
	35 ... 50	500	3VA1150-3EE36-0AA0	760.00	3VA1150-3GE46-0AA0	1,119.00
	44 ... 63	630	3VA1163-3EE36-0AA0	760.00	3VA1163-3GE46-0AA0	1,119.00
	56 ... 80	800	3VA1180-3EE36-0AA0	760.00	3VA1180-3GE46-0AA0	1,119.00
	70 ... 100	1000	3VA1110-3EE36-0AA0	760.00	3VA1110-3GE46-0AA0	1,119.00
	88 ... 125	1250	3VA1112-3EE36-0AA0	1,448.00	3VA1112-3GE46-0AA0	1,890.00
	112 ... 160	1600	3VA1116-3EE36-0AA0	1,448.00	3VA1116-3GE46-0AA0	1,890.00

Type	Overload Protection I _r (A)	Short Circuit Protection I _s (A)	3P		4P	
			Order Number	Price List SGD	Order Number	Price List SGD
Icu : 36 kA, 415 VAC / Ics = 36kA						
3VA TM220, TM240	11 ... 16	320	3VA1196-4EE36-0AA0	822.00	3VA1196-4GE46-0AA0	1,458.00
	14 ... 20	320	3VA1120-4EE36-0AA0	822.00	3VA1120-4GE46-0AA0	1,458.00
	18 ... 25	320	3VA1125-4EE36-0AA0	822.00	3VA1125-4GE46-0AA0	1,458.00
	22 ... 32	320	3VA1132-4EE36-0AA0	822.00	3VA1132-4GE46-0AA0	1,458.00
	28 ... 40	400	3VA1140-4EE36-0AA0	822.00	3VA1140-4GE46-0AA0	1,458.00
	35 ... 50	500	3VA1150-4EE36-0AA0	822.00	3VA1150-4GE46-0AA0	1,458.00
	44 ... 63	630	3VA1163-4EE36-0AA0	822.00	3VA1163-4GE46-0AA0	1,458.00
	56 ... 80	800	3VA1180-4EE36-0AA0	822.00	3VA1180-4GE46-0AA0	1,458.00
	70 ... 100	1000	3VA1110-4EE36-0AA0	822.00	3VA1110-4GE46-0AA0	1,458.00
	88 ... 125	1250	3VA1112-4EE36-0AA0	1,592.00	3VA1112-4GE46-0AA0	2,044.00
	112 ... 160	1600	3VA1116-4EE36-0AA0	1,592.00	3VA1116-4GE46-0AA0	2,044.00
	140 ... 200	5 ... 10 x In	3VA1220-4EF32-0AA0	2,208.00	3VA1220-4GF42-0AA0	3,040.00
	175 ... 250	5 ... 10 x In	3VA1225-4EF32-0AA0	2,208.00	3VA1225-4GF42-0AA0	3,040.00
	224 ... 320	5 ... 10 x In	3VA1332-4EF32-0AA0	3,091.00	3VA1332-4GF42-0AA0	5,032.00
	280 ... 400	5 ... 10 x In	3VA1340-4EF32-0AA0	3,091.00	3VA1340-4GF42-0AA0	5,032.00
	350 ... 500	5 ... 10 x In	3VA1450-4EF32-0AA0	4,334.00	3VA1450-4GF42-0AA0	7,107.00
	441 ... 630	4 ... 8 x In	3VA1463-4EF32-0AA0	4,334.00	3VA1463-4GF42-0AA0	7,107.00

Type	Overload Protection I _r (A)	Short Circuit Protection I _s (A)	3P		4P	
			Order Number	Price List SGD	Order Number	Price List SGD
Icu : 55 kA, 415 VAC / Ics = 55kA						
3VA TM220, TM240	11 ... 16	320	3VA1196-5EE36-0AA0	976.00	3VA1196-5GE46-0AA0	1,520.00
	14 ... 20	320	3VA1120-5EE36-0AA0	976.00	3VA1120-5GE46-0AA0	1,520.00
	18 ... 25	320	3VA1125-5EE36-0AA0	976.00	3VA1125-5GE46-0AA0	1,520.00
	22 ... 32	320	3VA1132-5EE36-0AA0	976.00	3VA1132-5GE46-0AA0	1,520.00
	28 ... 40	400	3VA1140-5EE36-0AA0	976.00	3VA1140-5GE46-0AA0	1,520.00
	35 ... 50	500	3VA1150-5EE36-0AA0	976.00	3VA1150-5GE46-0AA0	1,520.00
	44 ... 63	630	3VA1163-5EE36-0AA0	976.00	3VA1163-5GE46-0AA0	1,520.00
	56 ... 80	800	3VA1180-5EE36-0AA0	976.00	3VA1180-5GE46-0AA0	1,520.00
	70 ... 100	1000	3VA1110-5EE36-0AA0	976.00	3VA1110-5GE46-0AA0	1,520.00
	88 ... 125	1250	3VA1112-5EE36-0AA0	1,756.00	3VA1112-5GE46-0AA0	2,239.00
	112 ... 160	1600	3VA1116-5EE36-0AA0	1,756.00	3VA1116-5GE46-0AA0	2,239.00
	140 ... 200	5 ... 10 x In	3VA1220-5EF32-0AA0	2,434.00	3VA1220-5GF42-0AA0	3,276.00
	175 ... 250	5 ... 10 x In	3VA1225-5EF32-0AA0	2,434.00	3VA1225-5GF42-0AA0	3,276.00
	224 ... 320	5 ... 10 x In	3VA1332-5EF32-0AA0	3,358.00	3VA1332-5GF42-0AA0	5,690.00
	280 ... 400	5 ... 10 x In	3VA1340-5EF32-0AA0	3,358.00	3VA1340-5GF42-0AA0	5,690.00
	350 ... 500	5 ... 10 x In	3VA1450-5EF32-0AA0	4,817.00	3VA1450-5GF42-0AA0	8,308.00
	441 ... 630	4 ... 8 x In	3VA1463-5EF32-0AA0	4,817.00	3VA1463-5GF42-0AA0	8,308.00
	440 ... 630	5 ... 10 x In	3VA1563-5EF32-0AA0	7,975.57	3VA1563-5GF42-0AA0	10,334.54
	560 ... 800	5 ... 10 x In	3VA1580-5EF32-0AA0	7,066.00	3VA1580-5GF42-0AA0	10,804.00
	700 ... 1000	5 ... 10 x In	3VA1510-5EF32-0AA0	9,685.00	3VA1510-5GF42-0AA0	14,542.00

Molded Case Circuit Breakers



MCCB (Adjustable type)

IEC/EN : 60947-2

Type 3VA1 : TM - Thermal Magnetic Trip Unit
 Rated Current I_n : 11 - 1000 A
 Rated Operational Voltage : U_e Max AC 690 V
 Rated Frequency : 50/60Hz

Type	Overload Protection I _r (A)	Short Circuit Protection I _r (A)	3P		4P	
			Order Number	Price List SGD	Order Number	Price List SGD

Icu : 70 kA, 415 VAC / Ics = 70kA

3VA TM220, TM240	11 ... 16	320	3VA1196-6EE36-0AA0	1,130.00	3VA1196-6GE46-0AA0	1,705.00
	14 ... 20	320	3VA1120-6EE36-0AA0	1,130.00	3VA1120-6GE46-0AA0	1,705.00
	18 ... 25	320	3VA1125-6EE36-0AA0	1,130.00	3VA1125-6GE46-0AA0	1,705.00
	22 ... 32	320	3VA1132-6EE36-0AA0	1,130.00	3VA1132-6GE46-0AA0	1,705.00
	28 ... 40	400	3VA1140-6EE36-0AA0	1,130.00	3VA1140-6GE46-0AA0	1,705.00
	35 ... 50	500	3VA1150-6EE36-0AA0	1,130.00	3VA1150-6GE46-0AA0	1,705.00
	44 ... 63	630	3VA1163-6EE36-0AA0	1,130.00	3VA1163-6GE46-0AA0	1,705.00
	56 ... 80	800	3VA1180-6EE36-0AA0	1,130.00	3VA1180-6GE46-0AA0	1,705.00
	70 ... 100	1000	3VA1110-6EE36-0AA0	1,130.00	3VA1110-6GE46-0AA0	1,705.00
	88 ... 125	1250	3VA1112-6EE36-0AA0	1,931.00	3VA1112-6GE46-0AA0	2,485.00
	112 ... 160	1600	3VA1116-6EE36-0AA0	1,931.00	3VA1116-6GE46-0AA0	2,485.00
	140 ... 200	5 ... 10 x I _n	3VA1220-6EF32-0AA0	2,804.00	3VA1220-6GF42-0AA0	3,615.00
	175 ... 250	5 ... 10 x I _n	3VA1225-6EF32-0AA0	2,804.00	3VA1225-6GF42-0AA0	3,615.00
	224 ... 320	5 ... 10 x I _n	3VA1332-6EF32-0AA0	3,800.00	3VA1332-6GF42-0AA0	6,511.00
	280 ... 400	5 ... 10 x I _n	3VA1340-6EF32-0AA0	3,800.00	3VA1340-6GF42-0AA0	6,511.00
	350 ... 500	5 ... 10 x I _n	3VA1450-6EF32-0AA0	5,474.00	3VA1450-6GF42-0AA0	10,178.00
	441 ... 630	4 ... 8 x I _n	3VA1463-6EF32-0AA0	5,474.00	3VA1463-6GF42-0AA0	10,178.00
	440 ... 630	5 ... 10 x I _n	3VA1563-6EF32-0AA0	8,649.56	3VA1563-6GF42-0AA0	11,308.09
	560 ... 800	5 ... 10 x I _n	3VA1580-6EF32-0AA0	8,072.00	3VA1580-6GF42-0AA0	11,882.00
	700 ... 1000	5 ... 10 x I _n	3VA1510-6EF32-0AA0	10,917.00	3VA1510-6GF42-0AA0	16,966.00

Type	Overload Protection I _r (A)	Short Circuit Protection I _r (A)	3P		4P	
			Order Number	Price List SGD	Order Number	Price List SGD

Icu : 110 kA, 415 VAC / Ics = 110kA

3VA TM240	440 ... 630	5 ... 10 x I _n	3VA1563-7EF32-0AA0	9,510.78	3VA1563-7GF42-0AA0	12,356.52
	560 ... 800	5 ... 10 x I _n	3VA1580-7EF32-0AA0	12,656.07	3VA1580-7GF42-0AA0	16,475.36
	700 ... 1000	5 ... 10 x I _n	3VA1510-7EF32-0AA0	17,711.01	3VA1510-7GF42-0AA0	23,028.06

Molded Case Circuit Breakers



MCCB (Adjustable type)

IEC/EN : 60947-2

Type 3VA2 : ETU - Electronic Trip Unit
 Rated Current In : 25 - 1000 A
 Rated Operational Voltage : Ue Max AC 690 V
 Rated Frequency : 50/60Hz

3

Type	Overload Protection I _r (A)	Short Circuit Protection I _r (A)	3P		4P	
			Order Number	Price List SGD	Order Number	Price List SGD
Icu : 55 kA, 415 VAC / Ics = 55kA						
3VA ETU320	10 ... 25	1,5 ... 12 X In	3VA2125-5HL36-0AA0	3,819.29	3VA2125-5HL46-0AA0	4,838.63
	16 ... 40	1,5 ... 12 X In	3VA2140-5HL36-0AA0	3,819.29	3VA2140-5HL46-0AA0	4,838.63
	25 ... 63	1,5 ... 12 X In	3VA2163-5HL36-0AA0	3,819.29	3VA2163-5HL46-0AA0	4,838.63
	40 ... 100	1,5 ... 12 X In	3VA2110-5HL36-0AA0	4,103.15	3VA2110-5HL46-0AA0	5,219.26
	63 ... 160	1,5 ... 10 X In	3VA2116-5HL36-0AA0	6,070.86	3VA2116-5HL46-0AA0	7,870.83
	100 ... 250	1,5 ... 10 X In	3VA2225-5HL32-0AA0	7,741.80	3VA2225-5HL42-0AA0	10,128.86
	160 ... 400	1,5 ... 10 X In	3VA2340-5HL32-0AA0	10,128.86	3VA2340-5HL42-0AA0	13,290.09
	250 ... 630	1,5 ... 9 X In	3VA2463-5HL32-0AA0	13,870.73	3VA2463-5HL42-0AA0	18,257.75
	320 ... 800	1,5 ... 12 X In	3VA2580-5HL32-0AA0	19,289.99	3VA2580-5HL42-0AA0	25,612.46
	400 ... 1000	1,5 ... 10 X In	3VA2510-5HL32-0AA0	26,515.67	3VA2510-5HL42-0AA0	35,418.74

Type	Overload I _r (A)	Short Circuit Protection I _r (A)	3P		4P	
			Order Number	Price List SGD	Order Number	Price List SGD
Icu : 85 kA, 415 VAC / Ics = 85kA						
3VA ETU320	10 ... 25	1.5 ... 12 x In	3VA2125-6HL36-0AA0	4,219.28	3VA2125-6HL46-0AA0	5,387.00
	16 ... 40	1.5 ... 12 x In	3VA2140-6HL36-0AA0	4,219.28	3VA2140-6HL46-0AA0	5,387.00
	25 ... 63	1.5 ... 12 x In	3VA2163-6HL36-0AA0	4,219.28	3VA2163-6HL46-0AA0	5,387.00
	40 ... 100	1.5 ... 12 x In	3VA2110-6HL36-0AA0	4,561.21	3VA2110-6HL46-0AA0	5,832.16
	63 ... 160	1.5 ... 10 x In	3VA2116-6HL36-0AA0	6,838.59	3VA2116-6HL46-0AA0	8,838.56
	100 ... 250	1.5 ... 10 x In	3VA2225-6HL32-0AA0	8,709.53	3VA2225-6HL42-0AA0	11,483.67
	160 ... 400	1.5 ... 10 x In	3VA2340-6HL32-0AA0	11,612.70	3VA2340-6HL42-0AA0	15,161.03
	250 ... 630	1.5 ... 9 x In	3VA2463-6HL32-0AA0	15,741.66	3VA2463-6HL42-0AA0	20,773.83
	320 ... 800	1.5 ... 12 x In	3VA2580-6HL32-0AA0	21,999.62	3VA2580-6HL42-0AA0	29,289.81
	400 ... 1000	1.5 ... 10 x In	3VA2510-6HL32-0AA0	30,322.05	3VA2510-6HL42-0AA0	40,450.91

Type	Overload I _r (A)	Short Circuit Protection I _r (A)	3P		4P	
			Order Number	Price List SGD	Order Number	Price List SGD
Icu : 110 kA, 415 VAC / Ics = 110kA						
3VA ETU320	10 ... 25	1.5 ... 12 x In	3VA2125-7HL36-0AA0	4,496.70	3VA2125-7HL46-0AA0	5,761.19
	16 ... 40	1.5 ... 12 x In	3VA2140-7HL36-0AA0	4,496.70	3VA2140-7HL46-0AA0	5,761.19
	25 ... 63	1.5 ... 12 x In	3VA2163-7HL36-0AA0	4,496.70	3VA2163-7HL46-0AA0	5,761.19
	40 ... 100	1.5 ... 12 x In	3VA2110-7HL36-0AA0	4,857.98	3VA2110-7HL46-0AA0	6,238.60
	63 ... 160	1.5 ... 10 x In	3VA2116-7HL36-0AA0	7,354.71	3VA2116-7HL46-0AA0	9,677.25
	100 ... 250	1.5 ... 10 x In	3VA2225-7HL32-0AA0	9,483.71	3VA2225-7HL42-0AA0	12,451.40
	160 ... 400	1.5 ... 10 x In	3VA2340-7HL32-0AA0	12,451.40	3VA2340-7HL42-0AA0	16,386.81
	250 ... 630	1.5 ... 9 x In	3VA2463-7HL32-0AA0	16,902.93	3VA2463-7HL42-0AA0	22,580.25
	320 ... 800	1.5 ... 12 x In	3VA2580-7HL32-0AA0	23,806.04	3VA2580-7HL42-0AA0	31,805.90
	400 ... 1000	1.5 ... 10 x In	3VA2510-7HL32-0AA0	32,838.14	3VA2510-7HL42-0AA0	43,999.23

Type	Overload I _r (A)	Short Circuit Protection I _r (A)	3P		4P	
			Order Number	Price List SGD	Order Number	Price List SGD
Icu : 150 kA, 415 VAC / Ics = 150kA						
3VA ETU320	10 ... 25	1.5 ... 12 x In	3VA2125-8HL36-0AA0	5,038.62	3VA2125-8HL46-0AA0	6,516.02
	16 ... 40	1.5 ... 12 x In	3VA2140-8HL36-0AA0	5,038.62	3VA2140-8HL46-0AA0	6,516.02
	25 ... 63	1.5 ... 12 x In	3VA2163-8HL36-0AA0	5,038.62	3VA2163-8HL46-0AA0	6,516.02
	40 ... 100	1.5 ... 12 x In	3VA2110-8HL36-0AA0	5,457.97	3VA2110-8HL46-0AA0	7,096.65
	63 ... 160	1.5 ... 10 x In	3VA2116-8HL36-0AA0	8,322.44	3VA2116-8HL46-0AA0	10,903.04
	100 ... 250	1.5 ... 10 x In	3VA2225-8HL32-0AA0	10,774.01	3VA2225-8HL42-0AA0	14,257.82

Molded Case Circuit Breakers



MCCB (Adjustable type)

Type 3VA2 : ETU - Electronic Trip Unit
 Rated Current In : 500 - 1600 A
 Rated Operational Voltage : Ue Max AC 690 V
 Rated Frequency : 50/60Hz

IEC/EN : 60947-2

Standard breaker and accessories selection:

1. Fixed-mounted versions with toggle
2. With auxiliary switch (4 CO)
3. With Tripped signaling switch (1 NO)
4. Front terminal for main circuit connection

3

Type	Overload Protection I _r (A)	Short Circuit Protection I _n (A)	3P		4P	
			Order Number	Price List SGD	Order Number	Price List SGD

Icu : 55 kA, 415 VAC / Ics = 55kA

3VA* ETU320 LI	500 ... 1250	1,5 ... 15 x In	3VA2712-5AB03-0AA0	33,225.23	3VA2712-5AB13-0AA0	44,644.38
	640 ... 1600	1,5 ... 15 x In	3VA2716-5AB03-0AA0	45,999.20	3VA2716-5AB13-0AA0	61,805.37
3VA* ETU350 LSI	500 ... 1250	1,5 ... 15 x In	3VA2712-5AC03-0AA0	34,192.95	3VA2712-5AC13-0AA0	45,612.11
	640 ... 1600	1,5 ... 15 x In	3VA2716-5AC03-0AA0	46,837.89	3VA2716-5AC13-0AA0	62,773.10
3VA* ETU360 LSIG	500 ... 1250	1,5 ... 15 x In	3VA2712-5AD03-0AA0	35,934.86	3VA2712-5AD13-0AA0	47,289.50
	640 ... 1600	1,5 ... 15 x In	3VA2716-5AD03-0AA0	48,644.31	3VA2716-5AD13-0AA0	64,450.49

Type	Overload Protection I _r (A)	Short Circuit Protection I _n (A)	3P		4P	
			Order Number	Price List SGD	Order Number	Price List SGD

Icu : 85 kA, 415 VAC / Ics = 85kA

3VA* ETU320 LI	500 ... 1250	1,5 ... 15 x In	3VA2712-6AB03-0AA0	36,515.49	3VA2712-6AB13-0AA0	49,095.92
	640 ... 1600	1,5 ... 15 x In	3VA2716-6AB03-0AA0	50,450.73	3VA2716-6AB13-0AA0	68,385.90
3VA* ETU350 LSI	500 ... 1250	1,5 ... 15 x In	3VA2712-6AC03-0AA0	37,418.70	3VA2712-6AC13-0AA0	49,999.13
	640 ... 1600	1,5 ... 15 x In	3VA2716-6AC03-0AA0	51,353.94	3VA2716-6AC13-0AA0	69,031.05
3VA* ETU360 LSIG	500 ... 1250	1,5 ... 15 x In	3VA2712-6AD03-0AA0	39,160.61	3VA2712-6AD13-0AA0	51,805.55
	640 ... 1600	1,5 ... 15 x In	3VA2716-6AD03-0AA0	53,160.36	3VA2716-6AD13-0AA0	70,966.50

Type	Overload Protection I _r (A)	Short Circuit Protection I _n (A)	3P		4P	
			Order Number	Price List SGD	Order Number	Price List SGD

Icu : 110 kA, 415 VAC / Ics = 110kA

3VA* ETU320 LI	500 ... 1250	1,5 ... 15 x In	3VA2712-7AB03-0AA0	39,805.76	3VA2712-7AB13-0AA0	53,547.45
	640 ... 1600	1,5 ... 15 x In	3VA2716-7AB03-0AA0	54,966.78	3VA2716-7AB13-0AA0	74,192.25
3VA* ETU350 LSI	500 ... 1250	1,5 ... 15 x In	3VA2712-7AC03-0AA0	40,708.97	3VA2712-7AC13-0AA0	54,386.15
	640 ... 1600	1,5 ... 15 x In	3VA2716-7AC03-0AA0	55,999.02	3VA2716-7AC13-0AA0	74,837.40
3VA* ETU360 LSIG	500 ... 1250	1,5 ... 15 x In	3VA2712-7AD03-0AA0	42,450.87	3VA2712-7AD13-0AA0	56,192.57
	640 ... 1600	1,5 ... 15 x In	3VA2716-7AD03-0AA0	57,805.44	3VA2716-7AD13-0AA0	76,772.85

Noted :

(*) ETU 3-Series - Communication link and metering function not possible with ETU320 (LI)
 with ETU350 (LSI)
 with ETU360 (LSIG)

* ETU 6-Series - Expandable with communication link and metering function (please contact us) with ETU650 (LSI)
 with ETU660 (LSIG)

For Rear vertical connection, Rear horizontal connection, Straight bus connectors extended, and Broadened bus connectors (please contact us)
 For Withdrawable versions (please contact us)

Molded Case Circuit Breakers



MCCB (Adjustable type) + Motor operator

IEC/EN : 60947-2

Type 3VA2 : ETU - Electronic Trip Unit
 Rated Current In : 320 - 1600 A
 Rated Operational Voltage : Ue Max AC 690 V
 Rated Frequency : 50/60Hz

Standard breaker and accessories selection:

1. Fixed-mounted versions with stored-energy operating mechanism
2. Motor operator (220...250 V AC/DC)
3. With auxiliary switch (4 CO)
4. With Tripped signaling switch (1 NO)
5. Shunt release & Undervoltage release (220-240 V AC/DC)
6. Front terminal for main circuit connection

3

Type	Overload Protection I _r (A)	Short Circuit Protection I _r (A)	3P		4P	
			Order Number	Price List SGD	Order Number	Price List SGD
Icu : 55 kA, 415 VAC / Ics = 55kA						
3VA* ETU320 LI	320 ... 800	1,5 ... 15 x In	3VA2780-1AB03-4HH7	35,218.74	3VA2780-1AB13-4HH7	42,250.87
	400 ... 1000	1,5 ... 15 x In	3VA2710-1AB03-4HH7	43,218.60	3VA2710-1AB13-4HH7	53,089.39
	500 ... 1250	1,5 ... 15 x In	3VA2712-1AB03-4HH7	47,734.65	3VA2712-1AB13-4HH7	59,153.80
	640 ... 1600	1,5 ... 15 x In	3VA2716-1AB03-4HH7	60,379.59	3VA2716-1AB13-4HH7	76,314.79
3VA* ETU350 LSI	320 ... 800	1,5 ... 15 x In	3VA2780-1AC03-4HH7	36,121.95	3VA2780-1AC13-4HH7	43,218.60
	400 ... 1000	1,5 ... 15 x In	3VA2710-1AC03-4HH7	44,057.29	3VA2710-1AC13-4HH7	53,928.09
	500 ... 1250	1,5 ... 15 x In	3VA2712-1AC03-4HH7	48,573.34	3VA2712-1AC13-4HH7	60,057.01
	640 ... 1600	1,5 ... 15 x In	3VA2716-1AC03-4HH7	61,282.80	3VA2716-1AC13-4HH7	77,218.00
3VA* ETU360 LSIG	320 ... 800	1,5 ... 15 x In	3VA2780-1AD03-4HH7	37,863.85	3VA2780-1AD13-4HH7	44,960.50
	400 ... 1000	1,5 ... 15 x In	3VA2710-1AD03-4HH7	45,863.71	3VA2710-1AD13-4HH7	55,734.51
	500 ... 1250	1,5 ... 15 x In	3VA2712-1AD03-4HH7	50,379.76	3VA2712-1AD13-4HH7	61,863.43
	640 ... 1600	1,5 ... 15 x In	3VA2716-1AD03-4HH7	63,089.22	3VA2716-1AD13-4HH7	78,637.33

Type	Overload I _r (A)	Short Circuit Protection I _r (A)	3P		4P	
			Order Number	Price List SGD	Order Number	Price List SGD
Icu : 85 kA, 415 VAC / Ics = 85kA						
3VA* ETU320 LI	320 ... 800	1,5 ... 15 x In	3VA2780-2AB03-4HH7	37,283.22	3VA2780-2AB13-4HH7	45,025.02
	400 ... 1000	1,5 ... 15 x In	3VA2710-2AB03-4HH7	45,992.74	3VA2710-2AB13-4HH7	56,766.75
	500 ... 1250	1,5 ... 15 x In	3VA2712-2AB03-4HH7	50,960.40	3VA2712-2AB13-4HH7	63,476.31
	640 ... 1600	1,5 ... 15 x In	3VA2716-2AB03-4HH7	64,960.15	3VA2716-2AB13-4HH7	82,508.23
3VA* ETU350 LSI	320 ... 800	1,5 ... 15 x In	3VA2780-2AC03-4HH7	38,121.91	3VA2780-2AC13-4HH7	45,928.23
	400 ... 1000	1,5 ... 15 x In	3VA2710-2AC03-4HH7	46,960.47	3VA2710-2AC13-4HH7	57,734.47
	500 ... 1250	1,5 ... 15 x In	3VA2712-2AC03-4HH7	51,863.61	3VA2712-2AC13-4HH7	64,444.03
	640 ... 1600	1,5 ... 15 x In	3VA2716-2AC03-4HH7	65,798.85	3VA2716-2AC13-4HH7	83,153.38
3VA* ETU360 LSIG	320 ... 800	1,5 ... 15 x In	3VA2780-2AD03-4HH7	39,928.33	3VA2780-2AD13-4HH7	47,734.65
	400 ... 1000	1,5 ... 15 x In	3VA2710-2AD03-4HH7	48,637.86	3VA2710-2AD13-4HH7	59,540.89
	500 ... 1250	1,5 ... 15 x In	3VA2712-2AD03-4HH7	53,605.51	3VA2712-2AD13-4HH7	66,121.42
	640 ... 1600	1,5 ... 15 x In	3VA2716-2AD03-4HH7	67,605.27	3VA2716-2AD13-4HH7	85,088.83

Type	Overload I _r (A)	Short Circuit Protection I _r (A)	3P		4P	
			Order Number	Price List SGD	Order Number	Price List SGD
Icu : 110 kA, 415 VAC / Ics = 110kA						
3VA* ETU320 LI	320 ... 800	1,5 ... 15 x In	3VA2780-3AB03-4HH7	39,283.18	3VA2780-3AB13-4HH7	47,734.65
	400 ... 1000	1,5 ... 15 x In	3VA2710-3AB03-4HH7	48,831.40	3VA2710-3AB13-4HH7	60,573.13
	500 ... 1250	1,5 ... 15 x In	3VA2712-3AB03-4HH7	54,250.66	3VA2712-3AB13-4HH7	67,927.84
	640 ... 1600	1,5 ... 15 x In	3VA2716-3AB03-4HH7	69,540.72	3VA2716-3AB13-4HH7	88,314.58
3VA* ETU350 LSI	320 ... 800	1,5 ... 15 x In	3VA2780-3AC03-4HH7	40,121.88	3VA2780-3AC13-4HH7	48,573.34
	400 ... 1000	1,5 ... 15 x In	3VA2710-3AC03-4HH7	49,734.61	3VA2710-3AC13-4HH7	61,540.86
	500 ... 1250	1,5 ... 15 x In	3VA2712-3AC03-4HH7	55,218.39	3VA2712-3AC13-4HH7	68,895.57
	640 ... 1600	1,5 ... 15 x In	3VA2716-3AC03-4HH7	70,379.41	3VA2716-3AC13-4HH7	89,604.88
3VA* ETU360 LSIG	320 ... 800	1,5 ... 15 x In	3VA2780-3AD03-4HH7	41,928.30	3VA2780-3AD13-4HH7	50,379.76
	400 ... 1000	1,5 ... 15 x In	3VA2710-3AD03-4HH7	51,476.52	3VA2710-3AD13-4HH7	63,282.76
	500 ... 1250	1,5 ... 15 x In	3VA2712-3AD03-4HH7	57,024.81	3VA2712-3AD13-4HH7	70,572.96
	640 ... 1600	1,5 ... 15 x In	3VA2716-3AD03-4HH7	72,185.83	3VA2716-3AD13-4HH7	90,895.18

Noted :

(*) ETU 3-Series - Communication link and metering function **not possible**
 with ETU320 (LI)
 with ETU350 (LSI)
 with ETU360 (LSIG)

Please contact us for the following items:

1. ETU 6-Series - Expandable with communication link and metering function
 with ETU650 (LSI)
 with ETU660 (LSIG)
2. For Rear vertical connection, Rear horizontal connection, Straight bus connectors extended & Broadened bus connectors
3. For Withdrawable versions
4. Other Voltage for Motor operator, Shunt release & Undervoltage release

Molded Case Circuit Breakers



MCCB (Adjustable type)

IEC/EN : 60947-2

Type 3VA2 : ETU - Electronic Trip Unit
ETU 550 LSI - Communication capable
 Rated Current In : 25 - 1000 A
 Rated Operational Voltage : Ue Max AC 690 V
 Rated Frequency : 50/60Hz

3

Type	Overload I _r (A)	Short Circuit Protection I _r (A)	3P		4P	
			Order Number	Price List SGD	Order Number	Price List SGD
Icu : 55 kA, 415 VAC / Ics = 55kA						
3VA ETU550 LSI	10 ... 25	1,5 ... 12 X In	3VA2125-5JP36-0AA0	7,483.74	3VA2125-5JP46-0AA0	8,451.47
	16 ... 40	1,5 ... 12 X In	3VA2140-5JP36-0AA0	7,483.74	3VA2140-5JP46-0AA0	8,451.47
	25 ... 63	1,5 ... 12 X In	3VA2163-5JP36-0AA0	7,483.74	3VA2163-5JP46-0AA0	8,451.47
	40 ... 100	1,5 ... 12 X In	3VA2110-5JP36-0AA0	7,741.80	3VA2110-5JP46-0AA0	8,838.56
	63 ... 160	1,5 ... 10 X In	3VA2116-5JP36-0AA0	9,741.77	3VA2116-5JP46-0AA0	11,483.67
	100 ... 250	1,5 ... 10 X In	3VA2225-5JP32-0AA0	11,354.64	3VA2225-5JP42-0AA0	13,806.21
	160 ... 400	1,5 ... 10 X In	3VA2340-5JP32-0AA0	14,128.79	3VA2340-5JP42-0AA0	17,225.51
	250 ... 630	1,5 ... 9 X In	3VA2463-5JP32-0AA0	17,806.14	3VA2463-5JP42-0AA0	22,128.65
	320 ... 800	1,5 ... 12 X In	3VA2580-5JP32-0AA0	23,096.37	3VA2580-5JP42-0AA0	29,547.87
	400 ... 1000	1,5 ... 10 X In	3VA2510-5JP32-0AA0	30,386.57	3VA2510-5JP42-0AA0	39,289.64

Type	Overload I _r (A)	Short Circuit Protection I _r (A)	3P		4P	
			Order Number	Price List SGD	Order Number	Price List SGD
Icu : 85 kA, 415 VAC / Ics = 85kA						
3VA ETU550 LSI	10 ... 25	1.5 ... 12 x In	3VA2125-6JP36-0AA0	7,870.83	3VA2125-6JP46-0AA0	8,967.59
	16 ... 40	1.5 ... 12 x In	3VA2140-6JP36-0AA0	7,870.83	3VA2140-6JP46-0AA0	8,967.59
	25 ... 63	1.5 ... 12 x In	3VA2163-6JP36-0AA0	7,870.83	3VA2163-6JP46-0AA0	8,967.59
	40 ... 100	1.5 ... 12 x In	3VA2110-6JP36-0AA0	8,128.89	3VA2110-6JP46-0AA0	9,483.71
	63 ... 160	1.5 ... 10 x In	3VA2116-6JP36-0AA0	10,451.43	3VA2116-6JP46-0AA0	12,515.91
	100 ... 250	1.5 ... 10 x In	3VA2225-6JP32-0AA0	12,386.88	3VA2225-6JP42-0AA0	15,161.03
	160 ... 400	1.5 ... 10 x In	3VA2340-6JP32-0AA0	15,419.09	3VA2340-6JP42-0AA0	19,031.93
	250 ... 630	1.5 ... 9 x In	3VA2463-6JP32-0AA0	19,612.56	3VA2463-6JP42-0AA0	24,644.73
	320 ... 800	1.5 ... 12 x In	3VA2580-6JP32-0AA0	25,870.52	3VA2580-6JP42-0AA0	33,225.23
	400 ... 1000	1.5 ... 10 x In	3VA2510-6JP32-0AA0	34,257.47	3VA2510-6JP42-0AA0	44,450.84

Type	Overload I _r (A)	Short Circuit Protection I _r (A)	3P		4P	
			Order Number	Price List SGD	Order Number	Price List SGD
Icu : 110 kA, 415 VAC / Ics = 110kA						
3VA ETU550 LSI	10 ... 25	1.5 ... 12 x In	3VA2125-7JP36-0AA0	8,128.89	3VA2125-7JP46-0AA0	9,354.68
	16 ... 40	1.5 ... 12 x In	3VA2140-7JP36-0AA0	8,128.89	3VA2140-7JP46-0AA0	9,354.68
	25 ... 63	1.5 ... 12 x In	3VA2163-7JP36-0AA0	8,128.89	3VA2163-7JP46-0AA0	9,354.68
	40 ... 100	1.5 ... 12 x In	3VA2110-7JP36-0AA0	8,451.47	3VA2110-7JP46-0AA0	9,935.31
	63 ... 160	1.5 ... 10 x In	3VA2116-7JP36-0AA0	10,903.04	3VA2116-7JP46-0AA0	13,161.06
	100 ... 250	1.5 ... 10 x In	3VA2225-7JP32-0AA0	13,032.03	3VA2225-7JP42-0AA0	16,064.24
	160 ... 400	1.5 ... 10 x In	3VA2340-7JP32-0AA0	16,322.30	3VA2340-7JP42-0AA0	20,386.74
	250 ... 630	1.5 ... 9 x In	3VA2463-7JP32-0AA0	20,902.86	3VA2463-7JP42-0AA0	26,451.15
	320 ... 800	1.5 ... 12 x In	3VA2580-7JP32-0AA0	27,676.94	3VA2580-7JP42-0AA0	35,676.80
	400 ... 1000	1.5 ... 10 x In	3VA2510-7JP32-0AA0	36,773.55	3VA2510-7JP42-0AA0	47,934.65

Type	Overload I _r (A)	Short Circuit Protection I _r (A)	3P		4P	
			Order Number	Price List SGD	Order Number	Price List SGD
Icu : 150 kA, 415 VAC / Ics = 150kA						
3VA ETU550 LSI	10 ... 25	1.5 ... 12 x In	3VA2125-8JP36-0AA0	8,645.01	3VA2125-8JP46-0AA0	10,128.86
	16 ... 40	1.5 ... 12 x In	3VA2140-8JP36-0AA0	8,645.01	3VA2140-8JP46-0AA0	10,128.86
	25 ... 63	1.5 ... 12 x In	3VA2163-8JP36-0AA0	8,645.01	3VA2163-8JP46-0AA0	10,128.86
	40 ... 100	1.5 ... 12 x In	3VA2110-8JP36-0AA0	9,032.10	3VA2110-8JP46-0AA0	10,709.49
	63 ... 160	1.5 ... 10 x In	3VA2116-8JP36-0AA0	11,935.28	3VA2116-8JP46-0AA0	14,451.36
	100 ... 250	1.5 ... 10 x In	3VA2225-8JP32-0AA0	14,386.85	3VA2225-8JP42-0AA0	17,999.69

Noted :
 for ETU 5-Series - Communication function with ETU 560 LSI (please contact us)
 for ETU 8-Series - Communication link and metering function (please contact us)

Molded Case Circuit Breakers

Special Application for Motor Protection

MCCB for Motor Protection

IEC/EN : 60947-2



Type 3VA2
 Rated Current In
 Rated Operational Voltage
 Rated Frequency

: ETU - Electronic Trip Unit
 : 10A - 500A
 : Ue Max AC 690 V
 : 50/60 Hz

3

Type	Overload Protection I _r (A)	Short Circuit Protection I _r (A)	3P	
			Order Number	Price List SGD
Icu 55kA, 415VAC / Ics = 55kA				
3VA2	10 ... 25	375	3VA2125-5MN36-0AA0	4,174.12
	16 ... 40	600	3VA2140-5MN36-0AA0	4,174.12
	25 ... 63	945	3VA2163-5MN36-0AA0	4,174.12
	40 ... 100	1,500	3VA2110-5MN36-0AA0	4,354.76
	63 ... 160	2,400	3VA2216-5MN32-0AA0	6,838.59
	80 ... 200	3,000	3VA2220-5MN32-0AA0	7,935.35
	100 ... 250	3,750	3VA2325-5MN32-0AA0	11,290.13
	160 ... 400	6,000	3VA2440-5MN32-0AA0	15,483.60
	200 ... 500	7,500	3VA2450-5MN32-0AA0	17,677.11

Molded Case Circuit Breakers Accessories

Accessories for MCCB type 3VA

3

Description	Order Number	Price List SGD
Auxiliary switch AUX HQ/Compact Size/1 slot - 240VAC/250VDC	3VA9988-0AA12	169.00
LCS - Leading Change over switch HQ/Compact size/1slot - 240VAC/250VDC	3VA9988-0AA22	169.00
TAS - Trip alarm switch HQ/Compact size/1slot - 240VAC/250VDC	3VA9988-0AB12	169.00
SAS - Short circuit alarm switch For 3VA10, 3VA11 HQ/Compact size/1slot - 240VAC/250VDC	3VA9988-0AB32	169.00
For 3VA1 250A HQ/Compact size/1slot - 240VAC/250VDC	3VA9988-0AB34	169.00
EAS - Electrical alarm switch (3VA2 only) HQ/Compact size/1slot - 240VAC/250VDC	3VA9988-0AB22	169.00
STL - Shunt trip left 110...127 VAC (50/60 HZ)	3VA9988-0BL32	346.00
208...277 VAC/220...250 VDC	3VA9988-0BL33	346.00
STF - Shunt trip flexible 110...127 VAC (50/60 HZ)	3VA9988-0BA22	469.24
208...277 VAC	3VA9988-0BA23	469.24
380...500 VAC	3VA9988-0BA24	469.24
Undervoltage Release UVR 120...127 VAC	3VA9908-0BB24	612.06
208...230 VAC	3VA9908-0BB25	612.06
380...400 VAC	3VA9908-0BB27	612.06
Universal release UNI 12 VDC	3VA9908-0BD11	1,081.30
24 VDC	3VA9908-0BD12	1,081.30
48 VDC	3VA9908-0BD13	1,081.30
Time-delay device for undervoltage releases 110 V AC/DC	3VA9988-0BF21	963.99
230 V AC/DC	3VA9988-0BF22	963.99
24 VDC	3VA9988-0BF23	963.99
Manual operators Standard, w/o illumination/gray for 3VA10, 3VA11	3VA9157-0EK11	318.00
Standard, w/o illumination/gray for 3VA12	3VA9257-0EK11	318.00
Standard, w/o illumination/gray for 3VA20, 3VA21, 3VA2	3VA9267-0EK11	318.00
Standard, w/o illumination/gray for 3VA13, 3VA14, 3VA2	3VA9467-0EK11	327.00
Standard, w/o illumination/gray for 3VA15, 3VA25	3VA9687-0EK11	697.00

Molded Case Circuit Breakers Accessories

Accessories for MCCB type 3VA

Description	Order Number	Price List SGD
Residual Current Protection Devices		
RCD for 3VA1 type A (side mounted - left)		
RCD 510 for 3VA11 3 Pole, 30mA	3VA9113-ORS20	5,304.50
RCD 510 for 3VA11 4 Pole, 30mA	3VA9114-ORS20	5,763.54
RCD 510 for 3VA12 3 Pole, 30mA	3VA9213-ORS20	5,865.55
RCD 510 for 3VA12 4 Pole, 30mA	3VA9214-ORS20	6,375.60
RCD 310 for 3VA11 4 Pole, 30mA (instantaneous)	3VA9114-ORS10	3,447.92
RCD for 3VA1 type A (mounted below - under trip unit)		
RCD 520 for 3VA11 3 pole, 30mA	3VA9113-ORL20	5,304.50
RCD 520 for 3VA11 4 pole, 30mA	3VA9114-ORL20	5,763.54
RCD 520 for 3VA12 3 pole, 30mA	3VA9213-ORL20	5,763.54
RCD 520 for 3VA12 4 pole, 30mA	3VA9214-ORL20	6,222.59
RCD 320 for 3VA11 4 pole, 30mA (instantaneous)	3VA9114-ORL10	3,447.92
RCD for 3VA2 type A (mounted below - under trip unit)		
RCD 820 for 3VA21 3 pole, 30mA	3VA9123-ORL30	6,069.57
RCD 820 for 3VA21 4 pole, 30mA	3VA9124-ORL30	6,579.62
RCD 820 for 3VA22 3 pole, 30mA	3VA9223-ORL30	6,069.57
RCD 820 for 3VA22 4 pole, 30mA	3VA9224-ORL30	6,579.62
RCD 820 for 3VA23 3 pole, 30mA	3VA9323-ORL30	7,293.69
RCD 820 for 3VA23 4 pole, 30mA	3VA9324-ORL30	7,905.74
RCD 820 for 3VA24 3 pole, 30mA	3VA9423-ORL30	7,293.69
RCD 820 for 3VA24 4 pole, 30mA	3VA9424-ORL30	7,905.74
Motor operators		
Side mounted motor operator (MO310) for 3VA11		
24 ... 60V DC	3VA9117-0HB10	2,560.44
42 ... 60 V AC		
110 ... 230V AC	3VA9117-0HB20	2,560.44
110 ... 250 V DC		
Motor operator w/o stored energy feature (MO320)		
24 ... 60V DC for 3VA11	3VA9157-0HA10	3,003.00
24 ... 60V DC for 3VA12	3VA9257-0HA10	3,743.00
24 ... 60V DC for 3VA20, 3VA21, 3VA22	3VA9267-0HA10	3,743.00
24 ... 60V DC for 3VA13, 3VA14, 3VA23, 3VA24	3VA9467-0HA10	7,138.00
110 ... 230V AC for 3VA11	3VA9157-0HA20	3,003.00
110 ... 250V DC		
110 ... 230V AC for 3VA12	3VA9257-0HA20	3,743.00
110 ... 250V DC		
110 ... 230V AC for 3VA20, 3VA21, 3VA22	3VA9267-0HA20	3,743.00
110 ... 250V DC		
110 ... 230V AC for 3VA13, 3VA14, 3VA23, 3VA24	3VA9467-0HA20	7,138.00
110 ... 250V DC		

Molded Case Circuit Breakers Accessories

Accessories for MCCB type 3VA

Description	Order Number	Price List SGD
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Door mounted rotor operators

Standard, w/o illumination/gray for 3VA10, 3VA11	3VA9157-0FK21	395.00
Standard, w/o illumination/gray for 3VA12	3VA9257-0FK21	395.00
Standard, w/o illumination/gray for 3VA20, 3VA21, 3VA22	3VA9267-0FK21	395.00
Standard, w/o illumination/gray for 3VA13, 3VA14, 3VA23, 3VA24	3VA9467-0FK21	650.00
Standard, w/o illumination/gray for 3VA15, 3VA25	3VA9687-0FK21	975.00
EMERGENCY-OFF, yellow-red, for 3VA10, 3VA11	3VA9157-0FK25	555.95
EMERGENCY-OFF, yellow-red, for 3VA12	3VA9257-0FK25	627.36
EMERGENCY-OFF, yellow-red, for 3VA20, 3VA21, 3VA22	3VA9267-0FK25	627.36
EMERGENCY-OFF, yellow-red, for 3VA13, 3VA14, 3VA23, 3VA24	3VA9467-0FK25	918.09
EMERGENCY-OFF, yellow-red, for 3VA15, 3VA25	3VA9687-0FK25	1,489.34

Accessories for locking

Locking devices for handles, for 3VA10, 3VA11	3VA9088-0LB10	235.13
Locking devices for handles, for 3VA12		
Locking devices for handles, for 3VA20, 3VA21, 3VA22	3VA9388-0LB10	310.62
Locking devices for handles, for 3VA13, 3VA14, 3VA23, 3VA24		

Accessories for locking, blocking and interlocking

Sliding bar (complete kit for interlocking of 2 CB's)

Note: The article no. must be ordered 2x to implement an interlock between 3 breakers of the same size

Sliding bar for 3VA11	3VA9158-0VF30	775.27
Sliding bar for 3VA12	3VA9258-0VF30	826.28
Sliding bar for 3VA20, 3VA21, 3VA22	3VA9168-0VF30	826.28
Sliding bar for 3VA13, 3VA14, 3VA23, 3VA24	3VA9368-0VF30	938.49

Rear interlock with rod

Note: If plug-in or draw-out technology is used together with the rear interlock with rod, the mounting plates and profile rails cannot be used

Rear interlock with rod for 3VA11	3VA9088-0VM30	1,887.18
Rear interlock with rod for 3VA12		
Rear interlock with rod for 3VA20, 3VA21, 3VA22		
Rear interlock with rod for 3VA13, 3VA14, 3VA23, 3VA24		

Module for handle interlock using a Bowden cable

Note: A separate handle interlock module is required for each 3VA, The Bowden cable must be ordered separately

Module for handle interlock using a Bowden cable for 3VA11	3VA9157-0VF10	289.20
Module for handle interlock using a Bowden cable for 3VA12	3VA9257-0VF10	324.39
Module for handle interlock using a Bowden cable for 3VA20, 3VA21, 3VA22	3VA9167-0VF10	324.90
Module for handle interlock using a Bowden cable for 3VA13, 3VA14, 3VA23, 3VA24	3VA9367-0VF10	463.12

Module for handle interlock using a Bowden cable

Versions:

Length 0.6 m	3VA9980-0VC10	241.76
Length 1.0 m	3VA9980-0VC20	379.99
Length 1.5 m	3VA9980-0VC30	520.25

Terminal covers for fixed mounting

Note: extended, including insulating plate

3 Pole breaker

For 3VA10, 3VA11	3VA9111-0WF30	108.13
For 3VA12	3VA9211-0WF30	131.59
For 3VA20, 3VA21, 3VA22	3VA9221-0WF30	131.59
For 3VA13, 3VA14, 3VA23, 3VA24	3VA9481-0WF30	188.21

4 Pole breaker

For 3VA10, 3VA11	3VA9111-0WF40	141.28
For 3VA12	3VA9211-0WF40	172.91
For 3VA20, 3VA21, 3VA22	3VA9221-0WF40	172.91
For 3VA13, 3VA14, 3VA23, 3VA24	3VA9481-0WF40	248.90

Molded Case Circuit Breakers Accessories

Accessories for MCCB type 3VA

Description	Order Number	Price List SGD
Cover frame for front mounted rotary operator		
For 3VA10, 3VA11	3VA9053-0SB10	123.94
For 3VA12	3VA9253-0SB10	151.99
For 3VA20, 3VA21, 3VA22	3VA9163-0SB10	166.28
For 3VA13, 3VA14, 3VA23, 3VA24	3VA9383-0SB10	198.41
For 3VA15, 3VA25	3VA9503-0SB10	300.42
Box terminals (suitable for all installation types)		
3 pole		
<i>Note: connection for CU cables, included in scope of supply 3 single terminals</i>		
1.5 mm ² -70 mm ² for 3VA10, 3VA11	3VA9153-0JA11	117.31
6 mm ² -120 mm ² for 3VA12	3VA9253-0JA11	131.08
50 mm ² -185 mm ² for 3VA12	3VA9253-0JA12	131.59
6 mm ² -120 mm ² for 3VA20, 3VA21, 3VA23	3VA9163-0JA12	131.08
25 mm ² -185 mm ² for 3VA20, 3VA21, 3VA22	3VA9263-0JA12	131.08
35 mm ² -300 mm ² for 3VA13, 3VA14, 3VA23, 3VA24	3VA9483-0JA13	581.45
4 pole		
<i>Note: connection for CU cables, included in scope of supply 4 single terminals</i>		
1.5 mm ² -70 mm ² for 3VA10, 3VA11	3VA9154-0JA11	157.09
6 mm ² -120 mm ² for 3VA12	3VA9254-0JA11	174.44
50 mm ² -185 mm ² for 3VA12	3VA9254-0JA12	174.95
6 mm ² -120 mm ² for 3VA20, 3VA21, 3VA23	3VA9164-0JA12	174.44
25 mm ² -185 mm ² for 3VA20, 3VA21, 3VA22	3VA9264-0JA12	174.44
35 mm ² -300 mm ² for 3VA13, 3VA14, 3VA23, 3VA24	3VA9484-0JA13	770.17
Phase Barriers (suitable for all types of installations)		
<i>Note: 2 phase barriers are included in the scope of supply</i>		
For 3VA10, 3VA11	3VA9152-0WA00	50.39
For 3VA12	3VA9252-0WA00	52.02
For 3VA20, 3VA21, 3VA22	3VA9262-0WA00	52.02
For 3VA13, 3VA14, 3VA23, 3VA24	3VA9482-0WA00	70.39
For 3VA15, 3VA25	3VA9602-0WA00	117.82
Terminal covers for fixed mounting		
<i>Note: standard</i>		
3 Pole breaker		
For 3VA10, 3VA11	3VA9111-0WD30	80.08
For 3VA12	3VA9211-0WD30	99.97
For 3VA20, 3VA21, 3VA22	3VA9221-0WD30	99.97
For 3VA13, 3VA14, 3VA23, 3VA24	3VA9481-0WD30	154.54
4 Pole breaker		
For 3VA10, 3VA11	3VA9111-0WD40	108.13
For 3VA12	3VA9211-0WD40	131.59
For 3VA20, 3VA21, 3VA22	3VA9221-0WD40	131.59
For 3VA13, 3VA14, 3VA23, 3VA24	3VA9481-0WD40	201.98

Molded Case Circuit Breakers Accessories

Accessories for MCCB type 3VA

Description	Order Number	Price List SGD
Cover frame for door cut-out		
3 pole door cut-out w/o trip unit for 3VA10, 3VA11	3VA9053-0SB10	123.94
3 pole door cut-out w/o trip unit for 3VA12	3VA9253-0SB10	151.99
3 pole door cut-out w/o trip unit for 3VA20, 3VA21, 3VA22	3VA9163-0SB10	166.28
3 pole door cut-out w/o trip unit for 3VA13, 3VA14, 3VA23, 3VA24	3VA9383-0SB10	198.41
3 pole door cut-out w/o trip unit for 3VA15, 3VA25	3VA9503-0SB10	300.42
3 pole door cut-out with trip unit for 3VA10, 3VA11	3VA9053-0SB20	137.20
3 pole door cut-out with trip unit for 3VA12	3VA9253-0SB20	173.42
3 pole door cut-out with trip unit for 3VA20, 3VA21, 3VA22	3VA9163-0SB20	182.09
3 pole door cut-out with trip unit for 3VA13, 3VA14, 3VA23, 3VA24	3VA9363-0SB20	227.99
3 pole door cut-out with trip unit for 3VA15, 3VA25	3VA9503-0SB20	326.43
4 pole door cut-out w/o trip unit for 3VA10, 3VA11	3VA9054-0SB10	148.93
4 pole door cut-out w/o trip unit for 3VA12	3VA9254-0SB10	187.70
4 pole door cut-out w/o trip unit for 3VA20, 3VA21, 3VA22	3VA9164-0SB10	201.47
4 pole door cut-out w/o trip unit for 3VA13, 3VA14, 3VA23, 3VA24	3VA9384-0SB10	244.82
4 pole door cut-out w/o trip unit for 3VA15, 3VA25	3VA9504-0SB10	369.78
4 pole door cut-out with trip unit for 3VA10, 3VA11	3VA9054-0SB20	163.22
4 pole door cut-out with trip unit for 3VA12	3VA9254-0SB20	209.12
4 pole door cut-out with trip unit for 3VA20, 3VA21, 3VA22	3VA9164-0SB20	217.28
4 pole door cut-out with trip unit for 3VA13, 3VA14, 3VA23, 3VA24	3VA9364-0SB20	274.41
4 pole door cut-out with trip unit for 3VA15, 3VA25	3VA9504-0SB20	394.78
Cover frame for MO320 motor operators for 3VA10, 3VA11	3VA9053-0SB20	137.20
Cover frame for MO320 motor operators for 3VA12	3VA9257-0SB30	168.83
Cover frame for MO320 motor operators for 3VA20, 3VA21, 3VA22	3VA9257-0SB30	168.83
Cover frame for MO320 motor operators for 3VA13, 3VA14, 3VA23, 3VA24	3VA9387-0SB30	211.16
Cover frame for RCD320, RCD520 residual current device		
3 pole for 3VA10, 3VA11	3VA9053-0SB10	123.94
3 pole for 3VA12	3VA9253-0SB10	151.99
3 pole for 3VA20, 3VA21, 3VA22	3VA9253-0SB10	151.99
3 pole for 3VA23, 3VA24	3VA9303-0SB40	186.17
4 pole for 3VA10, 3VA11	3VA9054-0SB10	148.93
4 pole for 3VA12	3VA9254-0SB10	187.70
4 pole for 3VA20, 3VA21, 3VA22	3VA9254-0SB10	187.70
4 pole for 3VA13, 3VA14, 3VA23, 3VA24	3VA9304-0SB40	231.56

Molded Case Circuit Breakers Accessories

Accessories for MCCB type 3VA

Description	Order Number	Price List SGD
Plug-in unit, complete kit		
Comprising:		
- Plug-in socket		
- Conversion kit		
- Mounting screw kit		
3 Pole breaker		
For 3VA11	3VA9113-0KP00	1,188.41
For 3VA12	3VA9213-0KP00	1,290.42
For 3VA20, 3VA21, 3VA22	3VA9123-0KP00	1,290.42
For 3VA13, 3VA14, 3VA23, 3VA24	3VA9323-0KP00	3,498.93
4 Pole breaker		
For 3VA11	3VA9114-0KP00	1,596.45
For 3VA12	3VA9214-0KP00	1,713.76
For 3VA20, 3VA21, 3VA22	3VA9124-0KP00	1,713.76
For 3VA13, 3VA14, 3VA23, 3VA24	3VA9324-0KP00	4,661.84
Plug-in unit, conversion kit		
Comprising:		
- Screw-fastened terminal covers for molded case circuit breakers		
- Plug-in contacts		
- Cable cages		
- Autotrip plunger		
3 Pole breaker		
For 3VA11	3VA9113-0KP10	510.05
For 3VA12	3VA9213-0KP10	555.95
For 3VA20, 3VA21, 3VA22	3VA9123-0KP10	555.95
For 3VA13, 3VA14, 3VA23, 3VA24	3VA9323-0KP10	1,494.44
4 Pole breaker		
For 3VA11	3VA9114-0KP10	683.46
For 3VA12	3VA9214-0KP10	739.57
For 3VA20, 3VA21, 3VA22	3VA9124-0KP10	739.57
For 3VA13, 3VA14, 3VA23, 3VA24	3VA9324-0KP10	1,999.39
Draw-out unit, complete kit		
Comprising:		
- Draw-out socket		
- Conversion kit		
- Mounting screw kit		
3 Pole breaker		
For 3VA12	3VA9213-0KD00	1,984.09
For 3VA20, 3VA21, 3VA22	3VA9123-0KD00	1,984.09
For 3VA13, 3VA14, 3VA23, 3VA24	3VA9323-0KD00	5,406.51
4 Pole breaker		
For 3VA12	3VA9214-0KD00	2,652.25
For 3VA20, 3VA21, 3VA22	3VA9124-0KD00	2,652.25
For 3VA13, 3VA14, 3VA23, 3VA24	3VA9324-0KD00	7,140.67
Draw-out unit, conversion kit		
Comprising:		
- Screw-fastened terminal covers for molded case circuit breakers		
- Side walls		
- Plug-in contacts		
- Cable cages		
- Autotrip plungers		
3 Pole breaker		
For 3VA12	3VA9213-0KD10	663.06
For 3VA20, 3VA21, 3VA22	3VA9123-0KD10	663.06
For 3VA13, 3VA14, 3VA23, 3VA24	3VA9323-0KD10	1,800.47
4 Pole breaker		
For 3VA12	3VA9214-0KD10	887.48
For 3VA20, 3VA21, 3VA22	3VA9124-0KD10	887.48
For 3VA13, 3VA14, 3VA23, 3VA24	3VA9324-0KD10	2,387.02
Crank handle for draw-out unit Insulated, incl. crank holder	3VA9987-0KD81	331.53

Molded Case Circuit Breakers Accessories

Accessories for MCCB type 3VA

Description	Order Number	Price List SGD
Communication devices		
24 V module		
<ul style="list-style-type: none"> - 24 V DC - For mounting in the right-hand accessories compartment of the 3VA2 - Optional energy supply for the ETU, also includes continuous operation of the ETU display and the metering function of the ETU 8-series 		
For 3VA20, 3VA21, 3VA22	3VA9187-0TB50	525.35
For 3VA24, 3VA24, 3VA25	3VA9387-0TB50	525.35
Communication accessories in the molded case circuit breaker		
COM060 communication module		
<ul style="list-style-type: none"> - For mounting in the right-hand accessories compartment of the 3VA2 molded case circuit breaker (including ETU power supply) - Communication with the COM800/COM100 breaker data server via the 3VA-line - Including a T-Connector 		
For 3VA20, 3VA21, 3VA22	3VA9187-0TB10	1,887.18
For 3VA24, 3VA24, 3VA25	3VA9387-0TB10	1,887.18
Breaker data server		
COM800 breaker data server		
<ul style="list-style-type: none"> - 2 terminating resistors - Central communication module for connecting up to eight 3VA2 molded case circuit breakers via the 3VA-line - Ethernet 10/100 Mbps interface - Module slot for plugging on an optional PROFIBUS DP or PROFINET module 		
	3VA9987-0TA10	6,171.58
COM100 breaker data server		
<ul style="list-style-type: none"> - 2 terminating resistors - Optimized, central communication module for connecting a 3VA2 molded case circuit breaker via the 3VA-line - Ethernet 10/100 Mbps interface - Module slot for plugging on an optional PROFIBUS DP or PROFINET module 		
	3VA9987-0TA20	3,177.60
Accessories for communication		
T-Connector		
<ul style="list-style-type: none"> - Spare part - Provides spur line feeder to COM060 and loops through to the next circuit breaker 		
	3VA9987-0TG10	218.81
DIN rail adapter		
For snapping the T-Connector onto a DIN rail		
	3VA9987-0TG11	221.36

Molded Case Circuit Breakers Accessories

Accessories for MCCB type 3VA

3

Description	Order Number	Price List SGD
Preassembled T-Connector-to-T-Connector or T-Connector-to-COM800/COM100 connecting cable		
- 0,4 m long	3VA9987-0TC10	125.47
- 1 m long	3VA9987-0TC20	144.34
- 2 m long	3VA9987-0TC30	188.21
- 4 m long	3VA9987-0TC40	251.45
Preassembled connecting cable for extending the COM060-to-T-Connector spur line connection		
- 0,4 m long	3VA9987-0TF20	125.47
- 0,8 m long	3VA9987-0TF10	144.34
Additional bus terminating resistors		
	3VA9987-0TE10	76.00
Voltage tap to external N conductor		
	3VA9987-0UC10	263.69
Cable for connecting the neutral point for the metering function of the 8-series ETU, length 1.5 m		
Display		
DSP800 display		
	3VA9987-0TD10	3,922.27
<ul style="list-style-type: none"> • For displaying the status, measured values and parameters of up to 8 3VA2 molded case circuit breakers and for up to 3 devices of 3WL1 size 0 and/or 3VA27 size 1600 A. • Connection to the COM800/COM100 via Ethernet for displaying information of the COM800/COM100 and the connected 3VA2 molded case circuit breakers and for up to 3 devices of 3WL1 size 0 and/or 3VA27 size 1600 A. 		
External function box		
	3VA9987-0UA10	2,259.51
EFB300 - External function box for connection to the ETU of the 3VA2 molded case circuit breakers - 4 digital outputs for information output - 1 digital input - ZSI functionality - S0 interface - Including cable 1.5 m in length		
Connecting cable for EFB300		
Spare part		
- Length 1.5 m	3VA9987-0UB10	188.21
- Length 3.0 m	3VA9987-0UB20	282.06
- Length 3.0 m for 3VA2 with EFB and RCD820	3VA9987-0UB30	274.41

Molded Case Circuit Breakers Switch Disconnectors



Switch Disconnectors

IEC/EN : 60947-3

Type 3VM1

Type 3VA1

Rated Current I_n

: 63A - 600A

Rated Operational Voltage

: U_e Max AC 690 V

Rated Frequency

: 50/60 Hz

3

Type	Rated Current I _n (A)	3P		4P	
		Order Number	Price List SGD	Order Number	Price List SGD
3VM1	63	3VM1163-1AA32-0AA0	640.43	3VM1163-1AA42-0AA0	827.77
	100	3VM1110-1AA32-0AA0	805.98	3VM1110-1AA42-0AA0	1,045.60
	125	3VM1112-1AA32-0AA0	1,041.24	3VM1112-1AA42-0AA0	1,359.28
	160	3VM1116-1AA32-0AA0	1,119.66	3VM1116-1AA42-0AA0	1,450.77
	250	3VM1225-1AA32-0AA0	1,855.94	3VM1225-1AA42-0AA0	2,413.59
	400	3VM1340-1AA32-0AA0	2,744.70	3VM1340-1AA42-0AA0	3,568.10
	500	--	--	3VM1450-1AA42-0AA0	4,705.19
	630	3VM1463-1AA32-0AA0	3,629.10	--	--
3VA1	63	3VA1163-1AA36-0AA0	879.93	3VA1163-1AA46-0AA0	1,145.79
	100	3VA1110-1AA36-0AA0	1,085.88	3VA1110-1AA46-0AA0	1,415.38
	125	3VA1112-1AA36-0AA0	1,377.94	3VA1112-1AA46-0AA0	1,793.57
	160	3VA1116-1AA36-0AA0	1,467.80	3VA1116-1AA46-0AA0	1,909.64
	250	3VA1225-1AA32-0AA0	2,276.60	3VA1225-1AA42-0AA0	2,958.08
	400	3VA1340-1AA32-0AA0	3,373.70	3VA1340-1AA42-0AA0	4,380.95
	500	--	--	3VA1450-1AA42-0AA0	5,766.38
	630	3VA1463-1AA32-0AA0	4,455.84	--	--

SWITCH DISCONNECTORS

3KD SWITCH DISCONNECTORS UP TO 1600 A

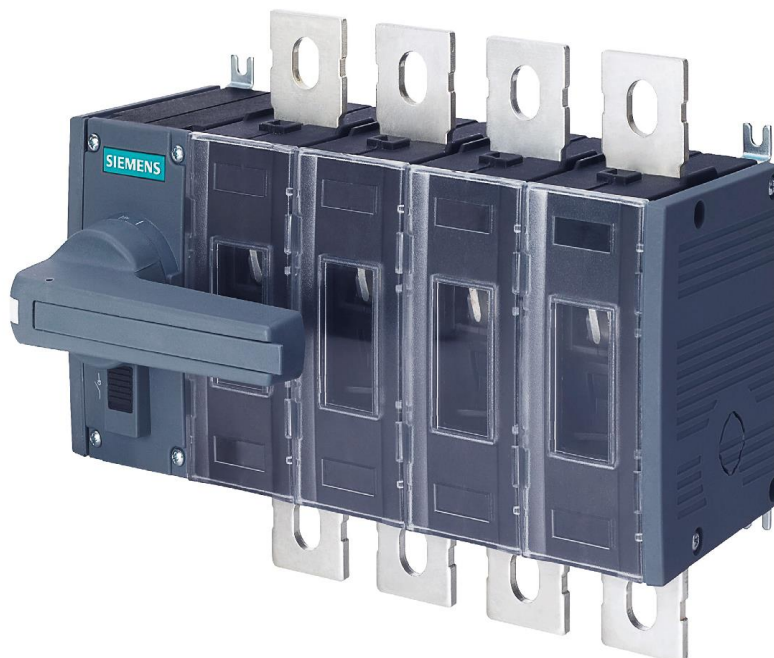
4-2

3KF SWITCH DISCONNECTORS WITH FUSES

UP TO 800 A

4-3

**FOR MORE INFORMATION SCAN THE QR CODE
& SEARCH FOR SWITCH DISCONNECTORS**



Switch Disconnectors - 3KD

IEC 60947-3 and VDE 0660-107

Rated uninterrupted current I_u (A)	Order Number	Price List SGD
--	--------------	-------------------

Complete assemblies with direct operating mechanism, gray, front operating mechanism

- The switch disconnectors are designed for floor mounting; sizes 1 and 2 can optionally be mounted on standard mounting rails.
- The complete assemblies are not suitable for conversion to door-coupling rotary operating mechanisms; the basic units are to be used for this purpose.

3-pole

Flat terminals

Cable connection covers must be provided for switch disconnectors with flat terminals and direct operating mechanisms



80	3KD2832-0NE10-0	983.18
100	3KD3032-0NE10-0	1,236.65
125	3KD3232-0NE10-0	1,444.04
160	3KD3432-0NE10-0	1,474.77
200	3KD3632-0PE10-0	2,181.43
250	3KD3832-0PE10-0	2,719.10
315	3KD4032-0PE10-0	3,072.43
400	3KD4232-0PE10-0	3,610.11
500	3KD4432-0QE10-0	5,130.96
630	3KD4632-0QE10-0	6,352.25
800	3KD4832-0QE10-0	8,065.13
1000	3KD5032-0RE10-0	14,056.38
1250	3KD5232-0RE10-0	19,894.00
1600	3KD5432-0RE10-0	24,349.02

4-pole

Flat terminals

Cable connection covers must be provided for switch disconnectors with flat terminals and direct operating mechanisms



80	3KD2842-0NE10-0	1,129.12
100	3KD3042-0NE10-0	1,467.09
125	3KD3242-0NE10-0	1,743.61
160	3KD3442-0NE10-0	1,774.33
200	3KD3642-0PE10-0	2,634.61
250	3KD3842-0PE10-0	3,302.86
315	3KD4042-0PE10-0	3,748.37
400	3KD4242-0PE10-0	4,424.30
500	3KD4442-0QE10-0	6,321.53
630	3KD4642-0QE10-0	7,834.70
800	3KD4842-0QE10-0	9,985.40
1000	3KD5042-0RE10-0	17,436.05
1250	3KD5242-0RE10-0	24,733.08
1600	3KD5442-0RE10-0	30,340.27

Switch Disconnectors With Fuses - 3KF

IEC 60947-3 and VDE 0660-107

Rated uninterrupted current I_u (A)	For LV HRC fuse	Order Number	Price List SGD
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Complete assemblies with direct operating mechanism, gray, front operating mechanism, for LV HRC fuses

The switch disconnectors are designed for floor mounting; size 1 can optionally be mounted on standard mounting rails

**3-pole
Flat terminals (exclude Fuse)**



125	00/000	3KF2312-2LF11	2,204.47
160	00/000	3KF2316-2LF11	2,388.82
250	1	3KF3325-2LF11	3,656.19
400	2/1	3KF4340-2LF11	5,676.32
630	3/2	3KF5363-2LF11	10,599.89
800	3/2	3KF5380-2LF11	12,443.35

**4-pole
Flat terminals (exclude Fuse)**



125	00/000	3KF2412-2LF11	2,649.97
160	00/000	3KF2416-2LF11	2,880.41
250	1	3KF3425-2LF11	4,462.71
400	2/1	3KF4440-2LF11	6,982.10
630	3/2	3KF5463-2LF11	12,981.03
800	3/2	3KF5480-2LF11	15,515.78

Rated uninterrupted current I_u (A)	LV HRC fuse sizes	Order Number	Price List SGD
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Applicable LV HRC fuses for switch disconnector with fuses: NH000 to NH4, characteristic Gg



16	000	3NA3805	52.79
20	000	3NA3807	52.79
25	000	3NA3810	52.79
32	000	3NA3812	52.79
40	000	3NA3817	46.07
63	000	3NA3822	46.07
80	000	3NA3824	46.07
100	000	3NA3830	46.07
125	000	3NA3832	57.59
160	00	3NA3836	61.82
200	1	3NA3140	136.30
250	1	3NA3144	136.30
300	2	3NA3250	167.02
350	2	3NA3254	167.02
400	2	3NA3260	167.02
500	3	3NA3365	324.44
630	3	3NA3372	324.44
800	4	3NA3475	2,889.24

AIR CIRCUIT BREAKERS

STANDARD APPLICATIONS

ACB TYPE 3WT	5-2
3WT ACCESSORIES	5-5

HIGH-END APPLICATION

ACB TYPE 3WL	5-6
3WL ACCESSORIES	5-11



FOR MORE INFORMATION SCAN THE QR CODE
& SEARCH FOR ACB



3WT

Air Circuit Breakers

KEY FEATURES

- The complete ACB family from 400 A to 4,000 A
- One series – 2 frame sizes, 3-pole and 4-pole
- Fixed-mounted and withdrawable design
- 2 x making / breaking capacity classes
- 4 x electronic trip units and non-automatic CB
- Distribution and motor protection
- Communication and metering
- Operating Voltages up to 690 V
- $I_{cs} = I_{cu} = I_{cw} = 66kA$ for 1 sec @ 500V, frame size II.
- Ready-to-close indicator.
- Automatic reset after tripping
- Designed in Germany
- For IEC market according to IEC 60947-2



COM16WT, communication module to communicate between ETU and software using Modbus RTU



Metering module to measure electric parameters as well as status values and complete operation statistics



Function test of ETU for testing of the individual protection functions with tripping operation and air circuit breaker mechanic



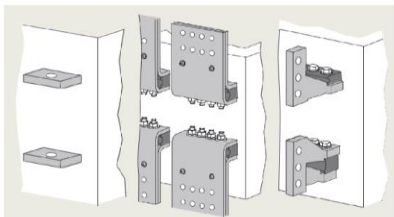
Retrofitting from fixed mounted to withdrawable technology is possible anytime using withdraw frame and conversion kit



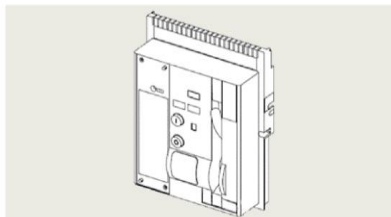
Current sensor is a Rogowski coil. Rogowski coil is not saturated compared to iron core current converters and has exact measurement!



powerconfig, free of charge Siemens software to set and read communication or metering parameters from the device



Horizontal and vertical busbar connections



Same width for fixed mounted and withdrawable circuit breakers (change based on frame size)



Complete ranges of ETU for line and motor protection

Air Circuit Breakers Standard Applications



ACB type : 3WT Fixed-mounted Version, *Horizontal* main circuit connection

Breaking capacity : 55/66 kA at 500 V
 Rated current : from 630 A to 4000 A
 Rated operating voltage : up to AC 500 V

IEC : 60947-2
GB : 14048.2
CCC Approval

Standard breaker & accessories selection :

1. main breaker
2. standard accessories :
 - manual operating mechanism, with mechanical closing
 - ready to closed indicator with signaling switch
 - with auxiliary switch 4NO + 4NC
 - with tripped signaling trip (1NO)
 - with shunt trip 220-240VAC/VDC
 - with door sealing frame
3. With ETU (Electronic Trip Unit) protection :
 - ETU35WT : LSI Protection functions, LCD Display
4. Non Automatic

ETU	Size	Breaking Capacity I _{cu} (kA)	Rated Current I _n (A)	3P		4P	
				Order Number	Price List SGD	Order Number	Price List SGD
ETU35WT	I	55	630	3WT8060-5AA30-0AA2	13,361.00	3WT8064-5AA30-0AA2	15,251.00
			800	3WT8080-5AA30-0AA2	13,754.00	3WT8084-5AA30-0AA2	15,703.00
			1000	3WT8100-5AA30-0AA2	14,170.00	3WT8104-5AA30-0AA2	15,867.00
			1250	3WT8120-5AA30-0AA2	14,765.00	3WT8124-5AA30-0AA2	17,705.00
			1600	3WT8160-5AA30-0AA2	15,722.00	3WT8164-5AA30-0AA2	18,773.00
	I	66	630	3WT8061-5AA30-0AA2	15,394.00	3WT8065-5AA30-0AA2	17,613.00
			800	3WT8081-5AA30-0AA2	15,844.00	3WT8085-5AA30-0AA2	18,137.00
			1000	3WT8101-5AA30-0AA2	16,107.00	3WT8105-5AA30-0AA2	18,332.00
			1250	3WT8121-5AA30-0AA2	17,528.00	3WT8125-5AA30-0AA2	20,488.00
			1600	3WT8161-5AA30-0AA2	18,687.00	3WT8165-5AA30-0AA2	21,741.00
	II	66	2000	3WT8202-5AA30-0AA2	24,025.00	3WT8206-5AA30-0AA2	28,704.00
			2500	3WT8252-5AA30-0AA2	29,430.00	3WT8256-5AA30-0AA2	34,322.00
			3200	3WT8322-5AA30-0AA2	37,680.00	3WT8326-5AA30-0AA2	42,908.00
			4000 ¹⁾	3WT8402-5AA31-0AA2	45,112.00	3WT8406-5AA31-0AA2	49,470.00
	Non Automatic	I	55	800	3WT8080-4AA30-0AA2	12,613.00	3WT8084-4AA30-0AA2
1250				3WT8120-4AA30-0AA2	13,624.00	3WT8124-4AA30-0AA2	16,564.00
I		66	1600	3WT8161-4AA30-0AA2	17,546.00	3WT8165-4AA30-0AA2	20,600.00
			II	66	2000	3WT8202-4AA30-0AA2	22,884.00
2500		3WT8252-4AA30-0AA2			28,289.00	3WT8256-4AA30-0AA2	33,181.00
3200		3WT8322-4AA30-0AA2			36,539.00	3WT8326-4AA30-0AA2	41,767.00
4000 ¹⁾		3WT8402-4AA31-0AA2			50,571.03	3WT8406-4AA31-0AA2	66,544.94

¹⁾ ACB 4000 A : Fixed-mounted Version, Vertical main circuit connection

Optional Features (on request):

Version with ground fault protection	ETU37WT	(- 6AA0x -)
Version with ground fault protection and additional features	ETU47WT	(- 8AA0x -)

Communication capable for 3WT8 only for ETU45WT / ETU47WT with Z-option:

F05 : Measurement function MF MODBUS-RTU including and internal Voltage tap on the lower main contacts

F12 : Communication interface MODBUS-RTU including COM16WT and breaker status sensor (BSSWT)
 MODBUS-RTU including and internal Voltage tap on the lower main contacts

Air Circuit Breakers Standard Applications



ACB type : 3WT Withdrawable Version, *Horizontal* main circuit connection

Breaking capacity : 55/66 kA at 500 V
 Rated current : from 630 A to 3200 A
 Rated operating voltag : up to AC 500 V

IEC : 60947-2
 GB : 14048.2
 CCC Approval

Standard breaker & accessories selection :

1. main breaker
2. standard accessories :
 - manual operating mechanism, with mechanical closing
 - ready to closed indicator with signaling switch
 - with auxiliary switch 4NO + 4NC
 - with tripped signaling trip (1NO)
 - shunt trip 220-240VAC/VDC
 - with door sealing frame
3. With ETU (Electronic Trip Unit) protection :
 - ETU35WT : LSI Protection functions, LCD Display
4. Non Automatic

5

ETU	Size	Breaking Capacity I_{cu} (kA)	Rated Current I_n (A)	3P		4P	
				Order Number	Price List SGD	Order Number	Price List SGD
ETU35WT	I	55	630	3WT8060-5AA34-5AA2	15,394.00	3WT8064-5AA34-5AA2	17,613.00
			800	3WT8080-5AA34-5AA2	15,844.00	3WT8084-5AA34-5AA2	18,137.00
			1000	3WT8100-5AA34-5AA2	16,329.00	3WT8104-5AA34-5AA2	19,605.00
			1250	3WT8120-5AA34-5AA2	17,035.00	3WT8124-5AA34-5AA2	20,488.00
			1600	3WT8160-5AA34-5AA2	18,160.00	3WT8164-5AA34-5AA2	21,741.00
	66	630	3WT8061-5AA34-5AA2	17,777.00	3WT8065-5AA34-5AA2	20,406.00	
		800	3WT8081-5AA34-5AA2	18,303.00	3WT8085-5AA34-5AA2	21,012.00	
		1000	3WT8101-5AA34-5AA2	18,870.00	3WT8105-5AA34-5AA2	22,727.00	
		1250	3WT8121-5AA34-5AA2	20,280.00	3WT8125-5AA34-5AA2	23,765.00	
		1600	3WT8161-5AA34-5AA2	21,644.00	3WT8165-5AA34-5AA2	25,243.00	
	II	66	2000	3WT8202-5AA34-5AA2	27,930.00	3WT8206-5AA34-5AA2	33,439.00
			2500	3WT8252-5AA34-5AA2	34,289.00	3WT8256-5AA34-5AA2	40,042.00
			3200	3WT8322-5AA34-5AA2	43,987.00	3WT8326-5AA34-5AA2	50,138.00
			4000 ¹⁾	3WT8402-5AA35-5AA2	52,732.00	3WT8406-5AA35-5AA2	57,871.00
	Non Automatic	I	55	800	3WT8080-4AA34-5AA2	14,703.00	3WT8084-4AA34-5AA2
1250				3WT8120-4AA34-5AA2	15,894.00	3WT8124-4AA34-5AA2	19,347.00
66		1600	3WT8161-4AA34-5AA2	20,503.00	3WT8165-4AA34-5AA2	24,102.00	
		II	66	2000	3WT8202-4AA34-5AA2	26,789.00	3WT8206-4AA34-5AA2
2500				3WT8252-4AA34-5AA2	33,148.00	3WT8256-4AA34-5AA2	38,901.00
3200				3WT8322-4AA34-5AA2	42,846.00	3WT8326-4AA34-5AA2	48,997.00
4000 ¹⁾				3WT8402-4AA35-5AA2	57,148.52	3WT8406-4AA35-5AA2	74,688.50

¹⁾ ACB 4000 A : Withdrawable Version, Vertical main circuit connection

Optional Features (On request):

Version with ground fault protection	ETU37WT	(- 6AA0x -)
Version with ground fault protection and additional features	ETU47WT	(- 8AA0x -)




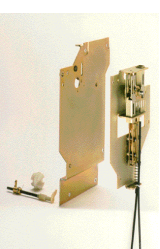
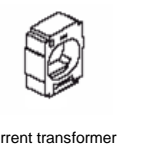
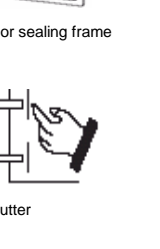






Communication capable for 3WT8 only for ETU45WT / ETU47WT with Z-option:

F05 : Measurement function MF MODBUS-RTU including and internal Voltage tap on the lower main contacts

F12 : Communication interface MODBUS-RTU including COM16WT and breaker status sensor (BSSWT)
 MODBUS-RTU including and internal Voltage tap on the lower main contacts

Air Circuit Breakers Accessories

Accessories ACB type 3WT

	Description	Order Number	Price List SGD
	Auxiliary switches 2 CO	3WT9816-1CE00	786.00
	2 NC and 2 NO	3WT9816-1CD00	786.00
Aux switch	Shunt release / Closing coil		
	24DC	3WT9851-1JB00	770.00
	110-125V DC/110-127 V AC	3WT9851-1JH00	770.00
	220-250 V DC/220-240 V AC	3WT9851-1JK00	770.00
Shunt release UVT	Undervoltage release, instantaneous 0 ms, short delay 200 ms		
	24DC	3WT9853-1JB00	770.00
	220-250 V DC/220-240 V AC	3WT9853-1JK00	770.00
	380-415 V AC	3WT9853-1JM00	770.00
Closing coil	Undervoltage release, delayed 0,2 3,2 s		
	220-240 V AC	3WT9854-1JK00	1,903.00
	380-415 V AC	3WT9854-1JM00	1,903.00
	Motorized operating mechanism		
	24 V DC	3WT9832-1JB00	5,365.00
	110-127 V AC/110-125 V DC	3WT9832-1JH00	5,365.00
	220-250 V DC/220-240 V AC	3WT9832-1JK00	5,365.00
	Additional Connector for Motorized		
	Fixed Version	3WT9825-1JC00	287.00
	Withdrawable Version	3WT9827-1JA00	287.00
	Mutual mechanical interlock		
	Interlock module with a Bowden wire (2m)		
	For fixed mounted design	3WT9866-3JA00	11,604.96
	For withdrawable design	3WT9866-4JA00	11,604.96
	Interlocking for 3 breakers add. Bowden wire required for each circuit breaker		
	Bowden wire (2 m)	3WT9866-8JA00	2,806.43
	Bowden wire (3 m)	3WT9866-8JA01	3,610.43
Bowden wire (4,5 m)	3WT9866-8JA02	4,990.89	
5 digits operating cycles counter	3WT9864-0CA00	8,980.57	
Mutual Interlocking	Locking device consisting of safety lock or padlock		
	To prevent unauthorized closing of the breaker	3WT9863-1JA00	1,289.44
	Safety lock (3SB1) instead of the OFF button		
	CES normal lock		
	Current transformer for neutral conductor, overload protection and ground fault protection		
	Current transformer for 3P and 4P, internal neutral conductor	ETU37WT 3WT9843-1RE00 ETU47WT 3WT9843-2RE00	16,383.47 20,631.04
	Current transformer for 3P and 4P, external neutral conductor with copper busbar	ETU37WT 3WL9111-0AA31-0AA0 ETU47WT 3WL9111-0AA32-0AA0	2,630.95 3,325.62
	Current transformer for 3P and 4P, external neutral conductor without copper busbar	ETU37WT 3WL9111-0AA21-0AA0 ETU47WT 3WL9111-0AA22-0AA0	2,183.81 2,531.14
Door sealing frame	Door sealing frame IP40	3WT9886-0JA00	#REF!
	Shutters		
	3P, Frame size 1	3WT9884-3CA00	1,729.37
	3P, Frame size 2	3WT9884-3DA00	2,942.96
	4P, Frame size 1	3WT9884-3CB00	2,093.44
	4P, Frame size 2	3WT9884-3DB00	3,610.43
	Position indicator switch		
Shutter	Connection + Test + Disconnect (3NC+3NO)+(2NC+2NO)+(1NC+1NO)	3WT9884-1JC10	8,282.75

3WL

Air Circuit Breakers

KEY FEATURES

- Rated currents: 630 A to 6300 A
- One series – 4 frame sizes, 3-pole and 4-pole
- Fixed-mounted and withdrawable design
- AC & DC applications
- 5 x short circuit breaking capacity B / N / S / H / C from $I_{cu} = 42kA - 150kA$
- 5 + 2 electronic trip units Rated current module
- Distribution and motor protection
- Communication and metering
- Rated operational voltage up to 690 V AC and 1000 V DC. Special versions up to 1000 V AC and 1150 V AC available.
- $I_{cs} = I_{cu} = I_{cw}$ for 1 sec @ 500V. For frame size III, $I_{cs} = I_{cu} = I_{cw}$ for 3 sec @ 500V
- Ready-to-close indicator.
- Automatic reset after tripping
- Designed in Germany
- For IEC market according to IEC 60947-2



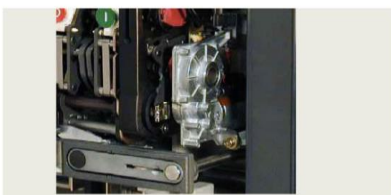
COM15/ COM 16/ COM 35, communication module. Collect and prepare data for the field bus interface.



Metering function PLUS. Additional metering values. U, P, S, Q, f, etc. Integrated voltage tap, extended protection functions, threshold values.



Function test of ETU for testing of the individual protection functions with tripping operation and air circuit breaker mechanic



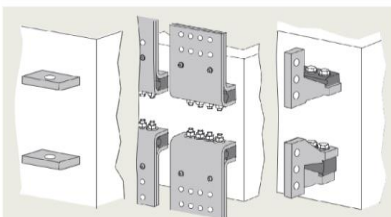
Ready - to - close indicator facilitates easy start-up, safe switching on and faster fault tracking.



Current sensor is a Rogowski coil. Rogowski coil is not saturated compared to iron core current converters and has exact measurement!



powerconfig, free of charge Siemens software to set and read communication or metering parameters from the device



Horizontal and vertical busbar connections



Erosion contact indicator. Main contacts condition can be visually monitored from the top.



Complete ranges of ETU for 5 lines and motor protection

Air Circuit Breakers High-end Applications

ACB type : 3WL Fixed-mounted Version, *Horizontal* main circuit connection



Breaking capacity : 55/66 kA at 500 V
 Rated current : from 630 A to 4000 A
 Rated operational voltage : up to AC 690 V

- IEC/EN : 60947-2
- Climate-proof according to IEC 60068-2-30.

Standard breaker & accessories selection :

1. Main breaker
2. Standard accessories :
 - manual operating mechanism, with mechanical closing
 - with auxiliary switch 2NO + 2NC
 - ready to closed indicator
 - with shunt trip 220-240VAC/VDC
 - with door sealing frame
3. With ETU (Electronic Trip Unit) protection
 - ETU15B : LI Protection functions (with tripped signaling)
4. Non Automatic (without tripped signaling)

5

ETU	Size	Breaking Capacity I _{cu} (kA)	Rated Current I _n (A)	3P		4P	
				Order Number	Price List SGD	Order Number	Price List SGD
ETU15B	I	55	630	3WL1106-2BB62-1GA2-Z K07+T40	22,900.09	3WL1106-2BB72-1GA2-Z K07+T40	25,827.09
			800	3WL1108-2BB62-1GA2-Z K07+T40	23,537.09	3WL1108-2BB72-1GA2-Z K07+T40	26,556.09
			1000	3WL1110-2BB62-1GA2-Z K07+T40	24,194.09	3WL1110-2BB72-1GA2-Z K07+T40	26,782.09
			1250	3WL1112-2BB62-1GA2-Z K07+T40	25,642.09	3WL1112-2BB72-1GA2-Z K07+T40	29,637.09
			1600	3WL1116-2BB62-1GA2-Z K07+T40	26,669.09	3WL1116-2BB72-1GA2-Z K07+T40	30,798.09
			2000	3WL1120-2BB62-1GA2-Z K07+T40	35,902.09	3WL1120-2BB72-1GA2-Z K07+T40	40,462.09
	II	66	630	3WL1106-3BB62-1GA2-Z K07+T40	23,989.09	3WL1106-3BB72-1GA2-Z K07+T40	27,060.09
			800	3WL1108-3BB62-1GA2-Z K07+T40	24,657.09	3WL1108-3BB72-1GA2-Z K07+T40	27,830.09
			1000	3WL1110-3BB62-1GA2-Z K07+T40	25,345.09	3WL1110-3BB72-1GA2-Z K07+T40	28,066.09
			1250	3WL1112-3BB62-1GA2-Z K07+T40	26,875.09	3WL1112-3BB72-1GA2-Z K07+T40	31,075.09
			1600	3WL1116-3BB62-1GA2-Z K07+T40	27,953.09	3WL1116-3BB72-1GA2-Z K07+T40	32,297.09
			2000	3WL1120-3BB62-1GA2-Z K07+T40	35,764.90	3WL1120-3BB72-1GA2-Z K07+T40	46,224.83
Non-Automatic	I	55	630	3WL1106-2AA62-1GA2-Z T40	17,672.70	3WL1106-2AA72-1GA2-Z T40	20,698.45
			800	3WL1108-2AA62-1GA2-Z T40	17,672.70	3WL1108-2AA72-1GA2-Z T40	20,698.45
			1000	3WL1110-2AA62-1GA2-Z T40	18,327.25	3WL1110-2AA72-1GA2-Z T40	20,932.15
			1250	3WL1112-2AA62-1GA2-Z T40	19,790.25	3WL1112-2AA72-1GA2-Z T40	23,799.25
			1600	3WL1116-2AA62-1GA2-Z T40	20,819.10	3WL1116-2AA72-1GA2-Z T40	24,975.35
			2000	3WL1120-2AA62-1GA2-Z T40	31,654.35	3WL1120-2AA72-1GA2-Z T40	36,478.35
	II	66	630	3WL1106-3AA62-1GA2-Z T40	18,502.35	3WL1106-3AA72-1GA2-Z T40	21,687.35
			800	3WL1108-3AA62-1GA2-Z T40	18,502.35	3WL1108-3AA72-1GA2-Z T40	21,687.35
			1000	3WL1110-3AA62-1GA2-Z T40	19,191.35	3WL1110-3AA72-1GA2-Z T40	21,933.35
			1250	3WL1112-3AA62-1GA2-Z T40	20,731.35	3WL1112-3AA72-1GA2-Z T40	24,951.35
			1600	3WL1116-3AA62-1GA2-Z T40	21,814.35	3WL1116-3AA72-1GA2-Z T40	26,189.35
			2000	3WL1120-3AA62-1GA2-Z T40	35,365.16	3WL1120-3AA72-1GA2-Z T40	45,825.09
III	100	2500	3WL1225-2AA62-1GA2-Z T40	37,411.35	3WL1225-2AA72-1GA2-Z T40	42,950.35	
		3200	3WL1232-2AA62-1GA2-Z T40	45,638.35	3WL1232-2AA72-1GA2-Z T40	52,306.35	
		4000 ¹⁾	3WL1240-2AA61-1GA2-Z T40	51,153.35	3WL1240-2AA71-1GA2-Z T40	65,300.35	
		5000 ¹⁾	3WL1350-4AA61-1GA2-Z T40	163,199.89	3WL1350-4AA71-1GA2-Z T40	203,921.75	
		6300 ¹⁾	3WL1363-4AA61-1GA2-Z T40	176,172.35	3WL1363-4AA71-1GA2-Z T40	209,379.35	

¹⁾ Vertical connection

²⁾ Current transformers for protection of the N conductor and current transformers for detection of the ground-fault current in the grounded neutral point of the transformer are to be ordered separately, see 3WL accessories

Optional Features (On request):

Special packaging for extended technical requirements	Option	Z-A61
Version with ground fault protection	ETU 27B LSING ²⁾	DG
Version with ground fault protection and 4-line display	ETU 45B LSING ²⁾	FG
Version with neutral protection and 4-line display	ETU 45B LSIN ²⁾	FB

Air Circuit Breakers High-end Applications



ACB type : 3WL Fixed-mounted Version, *Horizontal* main circuit connection

Breaking capacity : 80/85/100/150 kA at 500 V
 Rated current : from 630 A to 6300 A
 Rated operational voltage : up to AC 690 V

- IEC/EN : 60947-2
- Climate-proof according to IEC 60068-2-30.

Standard breaker & accessories selection :

1. Main breaker
2. Standard accessories :
 - manual operating mechanism, with mechanical closing
 - with auxiliary switch 2NO + 2NC
 - ready to closed indicator
 - with shunt trip 220-240VAC/VDC
 - with door sealing frame
3. With ETU (Electronic Trip Unit) protection
 - ETU15B : LI Protection functions (with tripped signaling)
4. Non Automatic (without tripped signaling)

5

ETU	Size	Breaking Capacity I_{cu} (kA)	Rated Current I_n (A)	3P		4P	
				Order Number	Price List SGD	Order Number	Price List SGD
ETU15B	I	85	630	3WL1106-4BB62-1GA2-Z K07+T40	16,521.82	3WL1106-4BB72-1GA2-Z K07+T40	25,584.43
			800	3WL1108-4BB62-1GA2-Z K07+T40	16,601.67	3WL1108-4BB72-1GA2-Z K07+T40	25,903.82
			1000	3WL1110-4BB62-1GA2-Z K07+T40	17,479.98	3WL1110-4BB72-1GA2-Z K07+T40	28,019.76
			1250	3WL1112-4BB62-1GA2-Z K07+T40	21,232.78	3WL1112-4BB72-1GA2-Z K07+T40	29,736.47
			1600	3WL1116-4BB62-1GA2-Z K07+T40	34,048.19	3WL1116-4BB72-1GA2-Z K07+T40	43,829.43
			2000	3WL1120-4BB62-1GA2-Z K07+T40	37,800.99	3WL1120-4BB72-1GA2-Z K07+T40	49,019.47
	II	85	2500	3WL1225-3BB62-1GA2-Z K07+T40	55,007.98	3WL1225-3BB72-1GA2-Z K07+T40	72,175.04
			3200	3WL1232-3BB62-1GA2-Z K07+T40	61,395.72	3WL1232-3BB72-1GA2-Z K07+T40	82,555.12
			4000	3WL1240-3BB61-1GA2-Z K07+T40	76,965.85	3WL1240-3BB71-1GA2-Z K07+T40	102,916.06
			800	3WL1208-4BB62-1GA2-Z K07+T40	18,797.45	3WL1208-4BB72-1GA2-Z K07+T40	27,460.83
			1000	3WL1210-4BB62-1GA2-Z K07+T40	20,474.24	3WL1210-4BB72-1GA2-Z K07+T40	29,736.47
			1250	3WL1212-4BB62-1GA2-Z K07+T40	23,308.80	3WL1212-4BB72-1GA2-Z K07+T40	31,453.17
	II	100	1600	3WL1216-4BB62-1GA2-Z K07+T40	35,724.98	3WL1216-4BB72-1GA2-Z K07+T40	45,426.36
			2000	3WL1220-4BB62-1GA2-Z K07+T40	41,873.18	3WL1220-4BB72-1GA2-Z K07+T40	53,411.04
			2500	3WL1225-4BB62-1GA2-Z K07+T40	57,802.62	3WL1225-4BB72-1GA2-Z K07+T40	73,372.74
			3200	3WL1232-4BB62-1GA2-Z K07+T40	66,985.00	3WL1232-4BB72-1GA2-Z K07+T40	90,539.80
			4000	3WL1340-4CB61-1GA2-Z K07+T40	106,437.82	3WL1340-4CB71-1GA2-Z K07+T40	133,186.49
			5000	3WL1350-4CB61-1GA2-Z K07+T40	170,315.26	3WL1350-4CB71-1GA2-Z K07+T40	211,037.12
ETU25B	III	100	6300	3WL1363-4CB61-1GA2-Z K07+T40	189,920.72	3WL1363-4CB71-1GA2-Z K07+T40	223,359.72

¹⁾ Vertical connection

²⁾ Current transformers for protection of the N conductor and current transformers for detection of the ground-fault current in the grounded neutral point of the transformer are to be ordered separately, see 3WL accessories

³⁾ I_{cu} - 130kA for 4P Circuit Breakers

Optional Features (On request):

Special packaging for extended technical requirements	Option	Z-A61
Version with ground fault protection	ETU 27B LSING ²⁾	DG
Version with ground fault protection and 4-line display	ETU 45B LSING ²⁾	FG
Version with neutral protection and 4-line display	ETU 45B LSIN ²⁾	FB

Air Circuit Breakers High-end Applications



ACB type : 3WL Withdrawable Version, *Horizontal* main circuit connection

Breaking capacity : 55/66 kA at 500 V
 Rated current : from 630 A to 4000 A
 Rated operational voltage : up to AC 690 V

Standard breaker & accessories selection :

1. Main breaker
2. Standard accessories :
 - manual operating mechanism, with mechanical closing
 - with auxiliary switch 2NO + 2NC
 - ready to closed indicator
 - with shunt trip 220-240VAC/VDC
 - with door sealing frame
3. With ETU (Electronic Trip Unit) protection
 - ETU15B : LI Protection functions (with tripped signaling)
4. Non Automatic (without tripped signaling)

- IEC/EN : 60947-2
- Climate-proof according to IEC 60068-2-30.

5

ETU	Size	Breaking Capacity I _{cu} (kA)	Rated Current I _n (A)	3P		4P	
				Order Number	Price List SGD	Order Number	Price List SGD
ETU15B	I	55	630	3WL1106-2BB66-1GA2-Z K07+T40	26,546.09	3WL1106-2BB76-1GA2-Z K07+T40	29,966.09
			800	3WL1108-2BB66-1GA2-Z K07+T40	27,296.09	3WL1108-2BB76-1GA2-Z K07+T40	30,829.09
			1000	3WL1110-2BB66-1GA2-Z K07+T40	28,056.09	3WL1110-2BB76-1GA2-Z K07+T40	31,096.09
			1250	3WL1112-2BB66-1GA2-Z K07+T40	29,761.09	3WL1112-2BB76-1GA2-Z K07+T40	34,454.09
			1600	3WL1116-2BB66-1GA2-Z K07+T40	30,973.09	3WL1116-2BB76-1GA2-Z K07+T40	35,830.09
			2000	3WL1120-2BB66-1GA2-Z K07+T40	41,900.09	3WL1120-2BB76-1GA2-Z K07+T40	47,261.09
	II	66	630	3WL1106-3BB66-1GA2-Z K07+T40	27,820.09	3WL1106-3BB76-1GA2-Z K07+T40	31,424.09
			800	3WL1108-3BB66-1GA2-Z K07+T40	28,610.09	3WL1108-3BB76-1GA2-Z K07+T40	32,328.09
			1000	3WL1110-3BB66-1GA2-Z K07+T40	29,412.09	3WL1110-3BB76-1GA2-Z K07+T40	32,616.09
			1250	3WL1112-3BB66-1GA2-Z K07+T40	31,209.09	3WL1112-3BB76-1GA2-Z K07+T40	36,149.09
			1600	3WL1116-3BB66-1GA2-Z K07+T40	32,482.09	3WL1116-3BB76-1GA2-Z K07+T40	37,597.09
			2000	3WL1120-3BB66-1GA2-Z K07+T40	45,426.36	3WL1120-3BB76-1GA2-Z K07+T40	57,403.38
Non Automatic	I	55	630	3WL1106-2AA66-1GA2-Z T40	20,453.35	3WL1106-2AA76-1GA2-Z T40	24,595.35
			800	3WL1108-2AA66-1GA2-Z T40	20,453.35	3WL1108-2AA76-1GA2-Z T40	24,595.35
			1000	3WL1110-2AA66-1GA2-Z T40	21,224.75	3WL1110-2AA76-1GA2-Z T40	25,238.50
			1250	3WL1112-2AA66-1GA2-Z T40	22,944.25	3WL1112-2AA76-1GA2-Z T40	28,314.60
			1600	3WL1116-2AA66-1GA2-Z T40	24,153.60	3WL1116-2AA76-1GA2-Z T40	30,001.80
			2000	3WL1120-2AA66-1GA2-Z T40	37,981.35	3WL1120-2AA76-1GA2-Z T40	40,792.06
	II	66	630	3WL1106-3AA66-1GA2-Z T40	21,429.35	3WL1106-3AA76-1GA2-Z T40	25,789.35
			800	3WL1108-3AA66-1GA2-Z T40	21,429.35	3WL1108-3AA76-1GA2-Z T40	25,789.35
			1000	3WL1110-3AA66-1GA2-Z T40	22,241.35	3WL1110-3AA76-1GA2-Z T40	26,466.35
			1250	3WL1112-3AA66-1GA2-Z T40	24,051.35	3WL1112-3AA76-1GA2-Z T40	29,704.35
			1600	3WL1116-3AA66-1GA2-Z T40	25,324.35	3WL1116-3AA76-1GA2-Z T40	31,480.35
			2000	3WL1120-3AA66-1GA2-Z T40	45,026.62	3WL1120-3AA76-1GA2-Z T40	57,003.64
	III	100	2500	3WL1225-2AA66-1GA2-Z T40	44,813.35	3WL1225-2AA76-1GA2-Z T40	51,414.35
			3200	3WL1232-2AA66-1GA2-Z T40	53,461.35	3WL1232-2AA76-1GA2-Z T40	58,569.35
			4000 ¹⁾	3WL1240-2AA67-1GA2-Z T40	59,842.35	3WL1240-2AA77-1GA2-Z T40	76,488.35
			5000 ¹⁾	3WL1340-4AA67-1GA2-Z T40	130,063.46	3WL1340-4AA77-1GA2-Z T40	184,359.29
			6300 ¹⁾	3WL1350-4AA67-1GA2-Z T40	193,940.90	3WL1350-4AA77-1GA2-Z T40	246,639.79

¹⁾ Vertical connection

²⁾ Current transformers for protection of the N conductor and current transformers for detection of the ground-fault current in the grounded neutral point of the transformer are to be ordered separately, see 3WL accessories

Optional Features (On Request):

Special packaging for extended technical requirements	Option	Z-A61
Version with ground fault protection	ETU 27B LSING ²⁾	DG
Version with ground fault protection and 4-line display	ETU 45B LSING ²⁾	FG
Version with neutral protection and 4-line display	ETU 45B LSIN ²⁾	FB

Air Circuit Breakers High-end Applications



ACB type : 3WL

Withdrawable Version, Horizontal main circuit connection

Breaking capacity : 80/85/100/150 kA at 500 V
 Rated current : from 800 A to 6300 A
 Rated operational voltage : up to AC 690 V

- IEC/EN : 60947-2
- Climate-proof according to IEC 60068-2-30.

Standard breaker & accessories selection :

1. Main breaker
2. Standard accessories :
 - manual operating mechanism, with mechanical closing
 - with auxiliary switch 2NO + 2NC
 - ready to closed indicator
 - with shunt trip 220-240VAC/VDC
 - with door sealing frame
3. With ETU (Electronic Trip Unit) protection
 - ETU15B : LI Protection functions (with tripped signaling)
4. Non Automatic (without tripped signaling)

5

ETU	Size	Breaking Capacity I _{cu} (kA)	Rated Current I _n (A)	3P		4P	
				Order Number	Price List SGD	Order Number	Price List SGD
ETU15B	I	85	800	3WL1108-4BB66-1GA2-Z K07+T40	23,867.73	3WL1108-4BB76-1GA2-Z K07+T40	38,200.23
			1000	3WL1110-4BB66-1GA2-Z K07+T40	24,706.12	3WL1110-4BB76-1GA2-Z K07+T40	40,076.63
			1250	3WL1112-4BB66-1GA2-Z K07+T40	27,939.91	3WL1112-4BB76-1GA2-Z K07+T40	41,553.79
			1600	3WL1116-4BB66-1GA2-Z K07+T40	43,030.96	3WL1116-4BB76-1GA2-Z K07+T40	54,608.74
			2000	3WL1120-4BB66-1GA2-Z K07+T40	48,221.00	3WL1120-4BB76-1GA2-Z K07+T40	61,395.72
	II	85	2500	3WL1225-3BB66-1GA2-Z K07+T40	66,186.53	3WL1225-3BB76-1GA2-Z K07+T40	87,345.93
			3200	3WL1232-3BB66-1GA2-Z K07+T40	80,159.72	3WL1232-3BB76-1GA2-Z K07+T40	105,710.70
			4000 ¹⁾	3WL1240-3BB67-1GA2-Z K07+T40	105,311.46	3WL1240-3BB77-1GA2-Z K07+T40	143,637.93
			800	3WL1208-4BB66-1GA2-Z K07+T40	27,939.91	3WL1208-4BB76-1GA2-Z K07+T40	38,958.77
	II	100	1000	3WL1210-4BB66-1GA2-Z K07+T40	29,417.08	3WL1210-4BB76-1GA2-Z K07+T40	41,154.56
			1250	3WL1212-4BB66-1GA2-Z K07+T40	32,251.64	3WL1212-4BB76-1GA2-Z K07+T40	43,030.96
			1600	3WL1216-4BB66-1GA2-Z K07+T40	45,426.36	3WL1216-4BB76-1GA2-Z K07+T40	56,604.91
			2000	3WL1220-4BB66-1GA2-Z K07+T40	52,612.57	3WL1220-4BB76-1GA2-Z K07+T40	68,182.70
			2500	3WL1225-4BB66-1GA2-Z K07+T40	68,981.17	3WL1225-4BB76-1GA2-Z K07+T40	88,942.87
3200			3WL1232-4BB66-1GA2-Z K07+T40	82,555.12	3WL1232-4BB76-1GA2-Z K07+T40	109,703.04	
4000 ¹⁾			3WL1240-4BB67-1GA2-Z K07+T40	111,699.21	3WL1240-4BB77-1GA2-Z K07+T40	152,820.31	
ETU25B	III	100	4000 ¹⁾	3WL1340-4CB67-1GA2-Z K07+T40	137,178.83	3WL1340-4CB77-1GA2-Z K07+T40	191,474.66
		5000 ¹⁾	3WL1350-4CB67-1GA2-Z K07+T40	201,056.27	3WL1350-4CB77-1GA2-Z K07+T40	253,755.16	
		6300 ¹⁾	3WL1363-4CB67-1GA2-Z K07+T40	221,849.72	3WL1363-4CB77-1GA2-Z K07+T40	261,183.72	

¹⁾ Vertical connection

²⁾ Current transformers for protection of the N conductor and current transformers for detection of the ground-fault current in the grounded neutral point of the transformer are to be ordered separately, see 3WL accessories

³⁾ I_{cu} - 130kA for 4P Circuit Breakers

Optional Features (On request):

Special packaging for extended technical requirements	Option	Z-A61
Version with ground fault protection	ETU 27B LSING ²⁾	DG
Version with ground fault protection and 4-line display	ETU 45B LSING ²⁾	FG
Version with neutral protection and 4-line display	ETU 45B LSIN ²⁾	FB

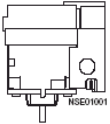
Air Circuit Breakers Accessories

Accessories ACB type 3WL

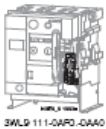
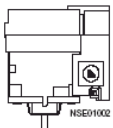
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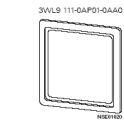


Description	Order Number	Price List SGD
Closing coil / Shunt release		
24 V DC	3WL9111-0AD01-0AA0	914.00
48 V DC	3WL9111-0AD03-0AA0	914.00
110 ... 125 V DC/110 ... 127 V AC	3WL9111-0AD05-0AA0	914.00
220 ... 250 V DC/208 ... 240 V AC	3WL9111-0AD06-0AA0	914.00
Under Voltage release (UVT)		
24 V DC	3WL9111-0AE01-0AA0	986.00
48 V DC	3WL9111-0AE03-0AA0	986.00
110 ... 125 V DC/110 ... 127 V AC	3WL9111-0AE04-0AA0	986.00
220 ... 250 V DC/208 ... 240 V AC	3WL9111-0AE05-0AA0	986.00
380 ... 415 V AC	3WL9111-0AE06-0AA0	986.00
Under voltage release (delayed)		
48 V DC	3WL9111-0AE11-0AA0	4,072.19
110 ... 125 V DC/110 ... 127 V AC	3WL9111-0AE12-0AA0	3,672.95
220 ... 250 V DC/208 ... 240 V AC	3WL9111-0AE13-0AA0	3,672.95
380 ... 415 V AC	3WL9111-0AE14-0AA0	4,072.19
Motorized Operating mechanisms		
24 ... 30 V DC	3WL9111-0AF01-0AA0	5,269.00
48 ... 60 V DC	3WL9111-0AF02-0AA0	5,269.00
110 ... 125 V DC / 110 ... 127 V AC	3WL9111-0AF03-0AA0	5,269.00
220 ... 250 V DC / 208 ... 240 V AC	3WL9111-0AF04-0AA0	5,269.00
Additional Connector for Motorized		
Fixed Version	3WL9111-0AB01-0AA0 + 3WL9111-0AB03-0AA0 + 3WL9111-0AB07-0AA0	1,089.11
Withdrawable Version	3WL9111-0AB01-0AA0 + 3WL9111-0AB18-0AA0	1,141.81
Auxiliary Switch Block		
2 NO + 2 NC	3WL9111-0AG01-0AA0	1,263.00
2 NO	3WL9111-0AG02-0AA0	662.73
1 NO + 1 NC	3WL9111-0AG03-0AA0	662.73
Trip Signaling Switch (1CO)	3WL9111-0AH14-0AA0	606.00
Capacitor storage devices	3WL9111-0BA14-0AA0	3,860.59
for shunt releases, storage time 5 minute 220 ... 240 VAC / 220 ... 250 VDC <i>rated control supply voltage must match the rated control supply voltage of the shunt release</i>		

Air Circuit Breakers Accessories

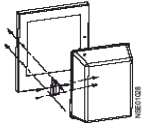
Accessories ACB type 3WL

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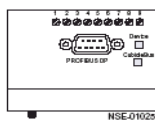
Door sealing frame IP40

3WL9 111-0AP02-0AA0



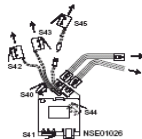
Protective cover IP55

3WL9 111-0AT15-0AA0

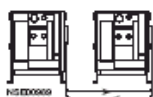


Description	Order Number	Price List SGD
Door sealing frame IP40	3WL9111-0AP01-0AA0	1,081.92
Protective cover IP55 cannot be used in conjunction with door sealing frame, cover removable and can be opened on both sides	3WL9111-0AP02-0AA0	2,275.63
3WL Breaker Data Adapter (BDA) Parameterization, operation, monitoring, and diagnostics of 3WL	3WL9111-0AT33-0AA0	13,134.80
PROFIBUS retrofit kits Retrofit kit for PROFIBUS communications including COM15, BSS and set of cables for all 3WL air circuit breakers with ETU45B and ETU76B Electronic Trip Units	3WL9111-0AT12-0AA0	7,465.88
COM15 PROFIBUS modules For ETU45B and ETU76B Electronic Trip Units	3WL9111-0AT15-0AA0	4,790.81
COM16 MODBUS modules For ETU45B and ETU76B Electronic Trip Units	3WL9111-0AT17-0AA0	4,790.81
MODBUS IEC retrofit kits Retrofit kit for MODBUS communications including COM16, BSS and set of cables for all 3WL air circuit breakers with ETU45B and ETU76B Electronic Trip Unit	3WL9111-0AT18-0AA0	7,465.68
Additional parts for retrofitting the COM15/COM16 communication modules		
In withdrawable version 3WL circuit breakers with Z options:		
• A05 (1000 V AC) or		
• A15 (1150 V AC) or		
• A16 (690 V + 20%)		
Size I	3WL9111-0AT62-0AA0	327.77
Size II / III	3WL9111-0AT63-0AA0	393.25
Breaker status sensor (BSS) For ETU45B and ETU76B Electronic Trip Units	3WL9111-0AT16-0AA0	2,762.70
Voltage Transformer 3 pole for SENTRON WL with measuring function & measuring function plus 230V/100V, class 0.5	3WL9111-0BB68-0AA0	2,016.13
Mutual Mechanical Interlocking c/w 2000mm bowden wire (one require for each breaker)		
Fixed Mounted circuit breaker	3WL9111-0BB21-0AA0	3,533.22
Module for withdrawable circuit breaker with frame when ordered separately	3WL9111-0BB24-0AA0	3,533.22
Bowden wire :		
2000mm	3WL9111-0BB25-0AA0	718.62
3000mm	3WL9111-0BB26-0AA0	930.22
4500mm	3WL9111-0BB27-0AA0	1,297.51

3WL9 111-0AT16-0AA0



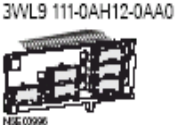
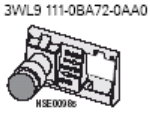
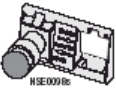





3WL9 111-0BB21-0AA0



Air Circuit Breakers Accessories

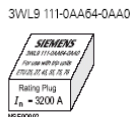
Accessories ACB type 3WL

	Description	Order Number	Price List SGD
 3WL9 111-0AH01-0AA0 HSE00943	Ready to Close Ready to close indicator switch Not possible for connection communication option F02 X7 manual connector for circuit breaker or guide frame If this is not available, please order additionally. Note: Ordering Part number for option Z" with order code of "C22"	3WL9111-0AH01-0AA0	722.61
 HSE00943	Released Signalling switch Not possible for connection communication option F02 X7 manual connector for circuit breaker or guide frame If this is not available, please order additionally. Note: Ordering Part number for option Z" with order code of "K07"	3WL9111-0AH04-0AA0	443.15
Tripped Signalling switch  3WL9 111-0AH12-0AA0 HSE00996	Signalling switch Not possible for connection communication option F02 X7 manual connector for circuit breaker or guide frame If this is not available, please order additionally. Note: Ordering Part number for option Z" with order code of "C26" for first auxiliary release & "C27" for second auxiliary release	3WL9111-0AH02-0AA0	291.44
Position Indicator for Guide Frame  3WL9 111-0BA72-0AA0 HSE00986	Store energy status signalling switch Not possible for connection communication option F02 X7 manual connector for circuit breaker or guide frame If this is not available, please order additionally. Note: Ordering Part number for option Z" with order code of "C02"	3WL9111-0AH08-0AA0	503.03
EMERGENCY Stop Button  HSE00986	Position Indicator for Guide frame 1st block (3 microswitches) 2nd block (6 microswitches)	3WL9111-0AH11-0AA0 3WL9111-0AH12-0AA0	1,010.06 1,748.64
 HSE00986	EMERGENCY Stop Button Mushroom head push button instead of mechanical OFF button	3WL9111-0BA72-0AA0	1,565.00
 HSE00986	Locking device against unauthorized closing, in the operating operator panels Made by CES Mounting set for padlock (pad lock is not included)	3WL9111-0BA36-0AA0 3WL9111-0BA41-0AA0	1,157.78 534.97
Locking device  HSE00986	Protective cover for mechanical ON/OFF Made by IKON without safety lock	3WL9111-0BA24-0AA0 3WL9111-0BA21-0AA0	1,708.72 818.43
	To prevent opening of the cabinet door in On position (Fixed type) To prevent opening of the cabinet door (guide frames)	3WL9111-0BB12-0AA0 3WL9111-0BB13-0AA0	998.09 998.09

Air Circuit Breakers Accessories

Accessories ACB type 3WL

Accessories	Order Number	Price List SGD
Rate current		
	250	3WL9111-0AA51-0AA0 1,345.42
	315	3WL9111-0AA52-0AA0 1,345.42
	400	3WL9111-0AA53-0AA0 1,345.42
	500	3WL9111-0AA54-0AA0 1,345.42
	630	3WL9111-0AA55-0AA0 1,345.42
	800	3WL9111-0AA56-0AA0 1,345.42
	1000	3WL9111-0AA57-0AA0 1,345.42
	1250	3WL9111-0AA58-0AA0 1,345.42
	1600	3WL9111-0AA61-0AA0 1,345.42
	2000	3WL9111-0AA62-0AA0 1,345.42
	2500	3WL9111-0AA63-0AA0 1,345.42
	3200	3WL9111-0AA64-0AA0 1,345.42
	4000	3WL9111-0AA65-0AA0 1,345.42
	5000	3WL9111-0AA66-0AA0 1,345.42
	6300	3WL9111-0AA67-0AA0 1,345.42



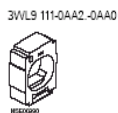
Rating plug



Ground fault module

GFM AT 45B (Only ETU45B) Alarm & release 3WL9111-0AT53-0AA0 4,671.04

4-display for ETU 45B 3WL9111-0AT81-0AA0 1,449.22



Internal Transformers for neutral conductor

Size 1	3WL9111-0AA11-0AA0	722.61
Size 2	3WL9111-0AA12-0AA0	878.31
Size 3	3WL9111-0AA13-0AA0	1,313.48

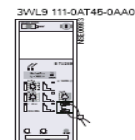
Note: Ordering Part number for option Z" with order code of "F23"



External Transformers for neutral conductor

Size 1	with copper connection pieces	3WL9111-0AA31-0AA0	2,630.95
Size 2	(for T5, "Measurement Method" function see Technical	3WL9111-0AA32-0AA0	3,325.62
Size 3	Information at www.siemens.com/industrialcontrols/	3WL9111-0AA33-0AA0	4,231.88

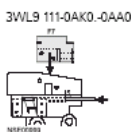
support.



Sealable cover

For ETU15B to ETU55B 3WL9111-0AT45-0AA0 218.38

Automatic reset of the lockout devices 3WL9111-0AK01-0AA0 423.19



Remote reset solenoid

24 V DC	3WL9111-0AK03-0AA0	1,600.93
120 V AC/125 V DC	3WL9111-0AK05-0AA0	1,600.93
208-240 V AC/220-250 V DC	3WL9111-0AK06-0AA0	1,600.93

- 1) With the rated current module selected, the maximum rated current I_n max of the circuit breaker must not be exceeded. The following applies $I_n \leq I_n$ max.
- 2) For direct measurement of the ground-fault current, e.g. in the neutral point of the transformer, a 1200 A/1 A current transformer, class 1, is required. The internal load of the SENTRON 3WL is 0.11 m. If the ground-fault current is to be determined using the vectorial sum of the phases, a transformer must be installed in the neutral conductor.
- 3) Padlock not included in the scope of supply

MEASURING DEVICES & POWER MONITORING

MULTIFUNCTION METER SMART 7KT	6-2
MULTICHANNEL CURRENT MEASURING SYSTEM 7KT PAC 1200	6-3
DIN RAIL MEASURING DEVICES 7KT PAC 1600 7KM PAC 2200	6-4
MEASURING DEVICES 7KM PAC 3120 7KM PAC 3220 7KM PAC 4200 7KM PAC 5200	6-5 6-5 6-6 6-6
EXPANSION MODULES 7KM PAC	6-7
SENTRON POWERCONFIG	6-8
POWERMANGER V3	6-9

FOR MORE INFORMATION SCAN THE QR CODE
& SEARCH FOR PRODUCT NAME



SMART 7KT Multifunction Meter

With the increasing awareness of Energy conservation, more and more electrical installations, be it industrial, residential or commercial buildings, require precise and reliable energy monitoring.

Multifunction Meters have evolved from simple measuring devices to a critical component of Energy Management Systems.

The SMART 7KT can be deployed in each and every load feeder and can measure all the electrical parameters accurately.

Thanks to its integrated communication capability it can be easily and cost effectively integrated into Energy Management Systems thereby increasing the transparency of energy consumption across the entire plant.



- Graphical LCD Screen
- Suitable for standard 96x96 panel mounting
- Accuracy Class1 for Active Energy as per IEC62053-21
- Basic measurements like Active, Reactive and Apparent Energy and Power parameters
- Total Harmonics Distortion - %THD - Voltage & Current
- Neutral Current
- 1 DI- Digital Input for Status Monitoring
- CT Secondary - 1A or 5A
- ON Hours Counter
- Integrated MODBUS RTU communication capability

6

Version	Order Number	Price List SGD
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SMART 7KT Multi Function Meter	7KT0310	1,593.90
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7KT0310 LCD 96 x 96 mm
 Control panel instrument for
 electrical values protocol:
 Modbus RTU with graphics display
 screw connections

UAUX:
 95 - 240 V AC ±10 %, 45-65 Hz

Measuring inputs
 Ue: max. 480/276V
 Ie: /1A or /5A

7KT PAC 1200

Multichannel Current Measuring System



Measurement of individual feeders – thus direct comparison of consumers
 Detection of current peaks – thus avoidance of high energy costs
 Web interface and app representation – thus plug-and-play visualization of measured values and consumption values

- 96 sensor points per data Manager
- Accuracy Class 1
- 1G Internal memory
- Integrated WebServer
- Historical data availability
- Record, current peaks, voltage, power Factor of individual phases, Active Power etc.

Version	Order Number	Price List SGD
 <p>7KT PAC1200 multichannel current measuring system Multichannel current measuring system for locating high consumption values and cost center allocation 1 x 18 bundle, containing:</p> <ul style="list-style-type: none"> • 2 x 9-sensor bar 7KT1238 • 1 x data manager 7KT1260 • 18 x sensors 40 A, 7KT1254 	7KT1222	15,690.05
 <p>7KT PAC1200 multichannel current measuring system Multichannel current measuring system for locating high consumption values and cost center allocation 1 x 24 bundle, containing:</p> <ul style="list-style-type: none"> • 2 x 12-sensor bar 7KT1242 • 1 x data manager 7KT1260 • 24 x sensors 40 A, 7KT1254 	7KT1223	18,631.93
 <p>7KT PAC1200 data manager Fully integrated smart meter, containing</p> <ul style="list-style-type: none"> • 3-phase active power and reactive power energy measurement • Measurement of energy as balancing counter • Direct connection up to 63 A • Optional use with external measuring transformer for extending the measuring range (e.g. 100 ... 600 A) • Standard rail mounting (4 MW) • Operator input/configuration: Web interface • Support of up to 96 sensors for single-phase measurement 	7KT1260	6,030.86
<p>7KT PAC1200 sensor bars</p>  <ul style="list-style-type: none"> • 3-sensor bar  <ul style="list-style-type: none"> • 6-sensor bar  <ul style="list-style-type: none"> • 9-sensor bar  <ul style="list-style-type: none"> • 12-sensor bar 	7KT1233	1,823.97
<p>Sensors</p>  <ul style="list-style-type: none"> • Sensor 40 A 	7KT1254	364.79
<ul style="list-style-type: none"> • Sensor 63 A 	7KT1255	364.79

DIN Rail Measuring Devices

7KT PAC1600 (1-Phase Devices)	Order Number	Price List SGD
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7KT PAC1600 measuring device

Accuracy Class 1, self-supplied, screw terminal
65 A, standard mounting rail device, 1-phase, apparent / active / reactive energy, SENTRON, measuring instrument, 7KT PAC1600, LCD, L-N: 230 V

- | | | |
|-----------------------------------|---------|----------|
| • With Modbus RTU/ASCII interface | 7KT1651 | 1,908.00 |
|-----------------------------------|---------|----------|

7KT PAC1600 (3-Phase Devices)	Order Number	Price List SGD
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7KT PAC1600 measuring device

Accuracy Class 0.5S, Modbus RTU, LCD Screen
5 A, standard mounting rail device, 3-phase, apparent / active / reactive energy, SENTRON, measuring instrument, 7KT PAC1600, LCD, L-L: 400 V, L-N: 230 V, Import & Export recording of Active Energy self-supplied, screw terminal

5A CT version

- | | | |
|-----------------------------------|---------|----------|
| • With Modbus RTU/ASCII interface | 7KT1661 | 3,067.00 |
|-----------------------------------|---------|----------|

Direct measurement 80 A

- | | | |
|-----------------------------------|---------|----------|
| • With Modbus RTU/ASCII interface | 7KT1665 | 3,505.00 |
|-----------------------------------|---------|----------|

7KT PAC1600 measuring device

7KT PAC1600, LCD, L-L: 400 V, L-N: 230 V, 5 A, standard mounting rail device, 3-phase, multi-function measurement incl. THD, SENTRON, measuring instrument, screw terminal

- | | | |
|-----------------------------------|---------|----------|
| • With S0 Interface | 7KT1681 | 2,437.34 |
| • With Modbus RTU/ASCII interface | 7KT1682 | 3,142.89 |

7KM PAC2200	Order Number	Price List SGD
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7KM PAC2200 measuring device

Accuracy Class 1, Modbus RTU or Modbus TCP version
Screw connections for current and voltage connection
Measuring inputs
Standard rail instrument 6 MW
Ue: max. 480/277 V 3 AC, 50/60 Hz

**7KM PAC2200 measuring device,
x/1 A or x/5 A transformer measurement**

- | | | |
|-----------------------------|--------------------|----------|
| • With Modbus RTU interface | 7KM2200-2EA30-1DA1 | 2,636.00 |
|-----------------------------|--------------------|----------|

**7KM PAC2200 measuring device,
direct measurement 65 A**

- | | | |
|-----------------------------|--------------------|----------|
| • With Modbus RTU interface | 7KM2200-2EA40-1DA1 | 2,140.38 |
|-----------------------------|--------------------|----------|

* For PAC2200 with Modbus TCP, Please contact sales office

7KM PAC 3120 Measuring Devices



- Accuracy Class as per IEC61557-12:Class 0.5S (Active Energy)
- Metering Voltage up to L-L = 690V
- Neutral Conductor Current Calculation
- Total Harmonic Distortion
- 2DI / 2DO
- CT Secondary Currents: 1A or 5A
- Color LED for status indication
- 6 Limit Values for threshold monitoring
- Voltage and Current Unbalance
- Aggregation Levels: 10-seconds/15-minute averages
- Integrated Modbus RS-485 port

6

Version	Order Number	Price List SGD
7KM PAC3120 measuring device SENTRON PAC3120 LCD 96X96 mm Control panel instrument for electrical values protocol: Modbus RTU with graphics display, screw connections AC/DC wide-voltage power supply unit UAUX: 100... 250 V +-10 %, 45-65 Hz Measuring inputs: Ue: max. 690/400V, Ie: /1A or /5A	7KM3120-0BA01-1DA0	3,637.00
7KM PAC3120 measuring device SENTRON PAC3120 LCD 96X96 mm Control panel instrument forelectrical values protocol: Modbus RTU with graphics display, screw connections DC wide-voltage power supply unit UAUX: 24 ... 60 V +-10 %, 45-65 Hz Measuring inputs: Ue: max. 690/400V, Ie: /1A or /5A	7KM3120-1BA01-1EA0	3,637.00

7KM PAC 3220 Measuring Devices



- Accuracy Class: Class 0.5 as per IEC 61557-12 and Class 0.5S as per IEC62053-22 (Active Energy)
- Panel Mounted
- Aggregation Levels: 10-seconds-/15-Minute Averages
- Neutral Conductor Current calculation with optional module
- Optional module available- DI/DO module I(N), I(Diff)
- Total Harmonic Distortion (THD with 51 harmonics)
- 2DI/2DO
- CT Secondary Currents: 1A/5A
- Color LED for status indication
- 6 Limit Values for threshold monitoring
- Voltage and Current Unbalance
- Integrated Ethernet ports (2nos)
- Optional communication module: Modbus RTU: RS485, PROFIBUS, PROFINET
- Integrated Web Server

Version	Order Number	Price List SGD
7KM PAC3220 measuring device Control panel instrument, 96 x 96 mm Screw connections for current and voltage connection AC/DC wide-voltage power supply unit UAUX: 100 ... 250 V ± 10%, 45/65 Hz Measuring inputs: Ue: max. 690/400 V 3 AC, 45/65 Hz, Ie: /1 A or /5 A	7KM3220-0BA01-1DA0	4,387.00
7KM PAC3220 measuring device Control panel instrument, 96 x 96 mm Screw connections for current and voltage connection DC power supply unit with extra-low voltage UAUX: 24 ... 60 V -20/ ± 10% DC Measuring inputs: Ue: max. 690/400 V 3 AC, 45/65 Hz, Ie: /1 A or /5 A	7KM3220-1BA01-1EA0	4,387.00

7KM PAC 4200 Measuring Devices



- Accuracy Class 0.2S
- Integrated Modbus TCP communication
- THD up to 63rd harmonics
- Individual harmonics up to 63rd harmonics
- Integrated 2DI/2DO
- Integrated Web Server
- IP65 protection
- Optional Expansion module for Modbus RTU/ PROFIBUS/ PROFINET/ DIDO/ Analog Measurement/ Residual Current Measurement

Version	Order Number	Price List SGD
7KM PAC4200 measuring device Screw connection Control panel instrument, 96 x 96 mm Screw connections for current and voltage connection AC/DC wide-voltage power supply unit UAUX: 95 ... 240 V AC ± 10%, 50/60 Hz, 110 ... 340 V DC ± 10% Measuring inputs: Ue: max. 690/400 V 3 AC, 50/60 Hz, Ie: /1 A or /5 A	7KM4212-0BA00-3AA0	10,126.90
7KM PAC4200 measuring device Screw connection Control panel instrument, 96 x 96 mm Screw connections for current and voltage connection DC power supply unit with extra-low voltage UAUX: 22 ... 65 V DC ± 10% Measuring inputs: Ue: max. 500/289 V 3 AC, 50/60 Hz, Ie: /1 A or /5 A	7KM4211-1BA00-3AA0	Price on Request

7KM PAC 5200 Measuring Devices



- Accuracy Class 0.5S
- Integrated Web Server
- Power Quality parameters:- Voltage Sag/Voltage Swell/ Flicker/ Harmonics etc.
- Versatile system integration
- Integrated Ethernet interface
- Multifunctional digital outputs
- Limit monitoring
- Directly connected to power supply networks up to 690 V AC (UL-L), CATIII without voltage transformer

- Basic information for evaluating the power supply quality
- Logging of plant history in the form of operation, control and system-related events
 - Flicker acc. to IEC 61000-4-15
 - Energy counters for apparent energy, active energy, reactive energy, as well as import, supply, inductive and capacitive
 - Comprehensive user-friendly indicators, such as user-defined displays, bar and status indicators
 - Measurement up to the 40th individual harmonic of current and voltage
 - Integrated 2 GB SD card for recorder functions
 - Flexible recorder: Measured Value recorder, Trend recorder, Event recorder, Fault recorder
 - Integrated PQ recording and reporting in accordance with EN 50160
 - Data export: COMTRADE, PQDif
 - Classification of events
 - ITIC /CBEMA evaluation in the device

Version	Order Number	Price List SGD
7KM PAC5200 measuring device Control panel instrument, 96 x 96 mm Screw connections for current and voltage connection AC/DC wide-voltage power supply unit UAUX: 110 ... 230 V AC ± 10%, 50/60 Hz, 24 ... 250 V DC ± 10% Measuring inputs: Ue: max. 690/400 V 3 AC, 50/60 Hz, Ie: /1 A or /5 A	7KM5412-6BA00-1EA2	35,652.00
7KM PAC5200 measuring device Standard rail instrument without display Screw connections for current and voltage connection AC/DC wide-voltage power supply unit UAUX: 110 ... 230 V AC ± 10%, 50/60 Hz, 24 ... 250 V DC ± 10% Measuring inputs: Ue: max. 690/400 V 3 AC, 50/60 Hz, Ie: /1 A or /5 A	7KM5412-6CA00-1EA8	27,500.29

7KM PAC expansion modules



The following expansion modules are available (shown from left to right in the figure on the left):

- 7KM PAC Switched Ethernet PROFINET expansion module
- 7KM PAC PROFIBUS DP expansion module
- 7KM PAC RS 485 expansion module
- 7KM PAC 4DI/2DO expansion module
- 7KM PAC I(N), I(Diff), analog expansion module

The following expansion modules can also be mounted on the front of the COM800/COM100 breaker data servers of the 3VA molded case circuit breaker:

- 7KM PAC Switched Ethernet PROFINET and
- 7KM PAC PROFIBUS DP
- 7KM PAC RS 485

6

Expansion modules are used as communication interfaces and for expanding the digital inputs/outputs and analog measuring inputs for the 7KM PAC3200/4200 measuring devices and partly for 3VA COM100/COM800.

The expansion modules are mounted on the front of the devices.

The device identifies the module automatically and presents the relevant parameters for this module for selection in the parameterization menu.

Version	Order Number	Price List SGD
 <p>7KM PAC Switched Ethernet PROFINET expansion module Ethernet PROFINET V3, plug-in, for 7KM PAC32x0 / 4200 / 3VA COM100/ 800</p>	7KM9300-0AE02-0AA0	3,274.00
 <p>7KM PAC PROFIBUS DP expansion module Expansion module for 7KM PAC3200 and 7KM PAC4200 (PROFIBUS DPV1) and COM100/800 (3VA) breaker data server</p>	7KM9300-0AB01-0AA0	1,873.00
 <p>7KM PAC RS 485 expansion module Expansion module for 7KM PAC3200 and 7KM PAC4200 (Modbus RTU) and COM100/800 (3VA) breaker data server</p>	7KM9300-0AM00-0AA0	1,270.00
 <p>7KM PAC 4DI/2DO expansion module Expansion module for 7KM PAC4200</p>	7KM9200-0AB00-0AA0	1,701.00
 <p>7KM PAC I(N), I(Diff), analog expansion module Expansion module for 7KM PAC3200 and 7KM PAC4200 to add the following functions to the measuring inputs:</p> <ul style="list-style-type: none"> • N-conductor measurement • Two analog inputs, also for measuring non-electrical quantities such as temperature, water or air pressure • Residual current measurement via Type A or Type B summation current transformers, see chapter "Monitoring Devices" 	7KM9200-0AD00-0AA0	2,373.00

SENTRON Powerconfig

Configuration software for commissioning and maintenance

SENTRON powerconfig is available free of charge at www.siemens.com/powerconfig
 You can find more information on the Internet at www.siemens.com/sentron

Free download SENTRON powerconfig mobile via:



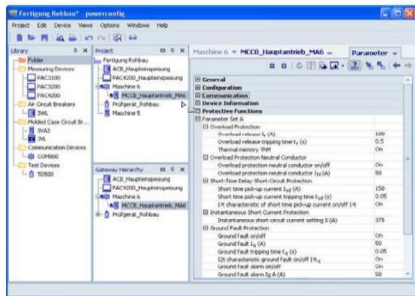
App Store



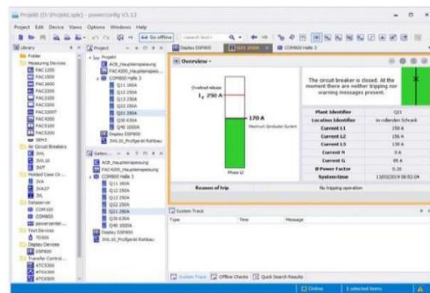
Play Store

- **Software tool for efficient commissioning and diagnostics** of communication-capable SENTRON components
- **Supports all PAC measuring devices incl. expansion modules,** 3WL/3VA circuit breakers and further communication-capable components, e.g. ATC6300
- **Service functions:**
 - Firmware updates
 - Switching of language packs for 7KM PAC measuring devices

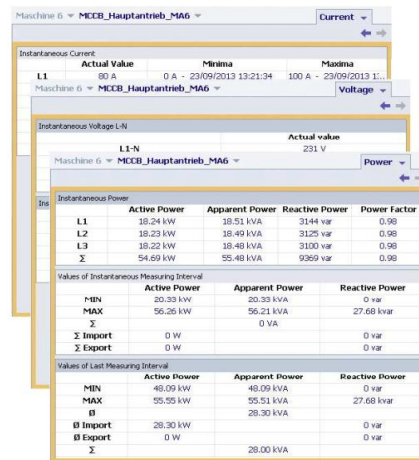
- **General range of functions:**
 - Facilitates the parameterization of the devices
 - Saving and printing of device settings
 - Monitoring, saving and printing of instantaneous measured quantities
 - Execution of specific device functions, such as resetting of devices and setting of energy counters
- **Additional functional scope with 7KM PAC4200 and 3VA:**
 - Readout of data stored in the device (events, load profile, history, daily energy counters)
 - Saving in CVS format



Setting of parameter values



Display of the circuit breaker state



Display of actual measured quantities

Powermanager V3

PC-based power monitoring software

New in powermanager 3.5

- Optimized devices – support for:
 1. PAC1600
 2. PAC4200 with firmware V2.1
 3. SEM3 – support Modbus RTU
- Extension of the scope of service:
 1. Integrated MindSphere interface tuned to SENTRON MindApps
 2. OPC UA Server support (fee-based option)



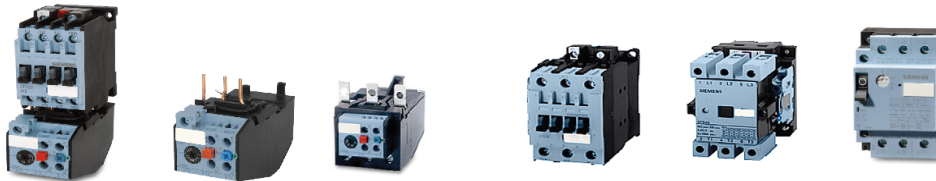
6

Version	Description	Order Number	Price List SGD
Powermanager V3.5 Basic Package	Full product license for up to 10 devices, installation for client/server, web access	3ZS2711-0CC30-0YA0	Price On Request
Trial license	Trial license limited to 60 days for up to 10 devices, incl. "Expert" and "Web" option packs.		
V3.x device expansions			
Device Pack (20)	Device expansion license for up to 20 devices	3ZS2711-0CC30-0YD0	Price On Request
Device Pack (50)	Device expansion license for up to 50 devices	3ZS2712-0CC30-0YD0	Price On Request
Device Pack (100)	Device expansion license for up to 100 devices	3ZS2713-0CC30-0YD0	Price On Request
Device Pack (200)	Device expansion license for up to 200 devices	3ZS2714-0CC30-0YD0	Price On Request
Device Pack (500)	Device expansion license for up to 500 devices	3ZS2715-0CC30-0YD0	Price On Request
Device Pack (1000)	Device expansion license for up to 1000 devices	3ZS2716-0CC30-0YD0	Price On Request
Option packs			
Expert option pack	Option for creating/presenting any number of freely configured images	3ZS2716-0CC30-0YD0	Price On Request

MOTOR PROTECTION DEVICES

3TS	
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FOR MORE INFORMATION SCAN THE QR CODE
& SEARCH FOR ITEM NUMBER



3TS

Contactors For Switching Motors



DESCRIPTION

3TS Contactors are 3-pole contactors for switching motors in many industrial applications. It consists of small sizes covering broad power ranges. Main applications is switching and protecting standards motors from 2.2 kW up to 200 kW.

The series products are suitable for frequency of 50/60Hz, rated insulation voltage up to 690 ~ 1000V, rated operational current up to 380V under the utilization category AC-3.

They comply with IEC947, VDE0660, GB14048.

FEATURES

- Cost-effective solution for motor applications
- Auxiliary contact blocks can be mounted easily
- Easy mounting on DIN Rail
- High insulation voltage and impulse withstand voltage capacity
- SIGUT - Siemens patent terminal, ensures easy and reliable connection, strog shock

OPERATING CONDITIONS

- The altitude of the site of installation does not exceed 2000 meters above sea levels
- The ambient air temperature: -25 ~ +55°C
- Relative humidity does not exceed 50% at +40°C and 90% at +25 ° C

3TS Contactors for Switching Motors

Standard Application Contactors 3-pole, 2.2...200kW AC Coil



7

Rated data AC-3 Operational current le up to	Rating of introduction motors at 50 Hz and	AC-1 Operational current le up to	Auxiliary contacts		Rated Control Supply voltage Us at 50/60 Hz	Order Number	Price List (SGD)
			Ident. No.	Version			
400 V A	400V kW	690V A		NO NC	VAC		

Size 0								
6	2.2	25	00	-	-	230	3TS2900-0AL2	61.35
			10	1	-	230	3TS2910-0AL2	68.40
			01	-	1	230	3TS2901-0AL2	68.40
9	4	25	00	-	-	230	3TS3000-0AL2	61.49
			10	1	-	230	3TS3010-0AL2	68.40
			01	-	1	230	3TS3001-0AL2	68.40
12	5.5	25	00	-	-	230	3TS3100-0AL2	84.82
			10	1	-	230	3TS3110-0AL2	92.15
			01	-	1	230	3TS3101-0AL2	92.15
18	7.5	25	00	-	-	230	3TS3200-0AL2	90.49
			10	1	-	230	3TS3210-0AL2	108.30
			01	-	1	230	3TS3201-0AL2	108.30
Size 1								
25	11	42	00	-	-	230	3TS3300-0AL2	110.85
			11	1	1	230	3TS3311-0AL2	138.70
32	15	42	00	-	-	230	3TS3400-0AL2	147.13
			11	1	1	230	3TS3411-0AL2	172.71
Size 2								
40	18.5	65	00	-	-	230	3TS3500-0AL2	337.34
			11	1	1	230	3TS3511-0AL2	353.46
45	22	85	00	-	-	230	3TS3600-0AL2	392.16
			11	1	1	230	3TS3611-0AL2	405.65

VAC, 50/60Hz.

Rated Control Voltage	24Vac	42Vac	110Vac	230Vac	240Vac
Order No. suffix	C2	D2	G2	L2	P2

for contactors with mounted auxiliary switch block please see accessories

Note: For further voltages, contact a sales representative.

3TS Contactors for Switching Motors

Standard Application Contactors 3-pole, 2.2...200kW AC Coil



7

Rated data AC-3 Operational current le up to	Rating of introduction motors at 50 Hz and	AC-1 Operational current le up to	Auxiliary contacts			Rated Control Supply voltage Us at 50/60 Hz	Order Number	Price List (SGD)
			Ident. No.	Version				
400 V A	400V kW	690V A		 	L 	VAC		
				NO	NC			

Size 3								
65	30	90	11	1	1	230	3TS4711-0AL2	463.60
			22	2	2	230	3TS4722-0AL2	491.14
75	37	95	11	1	1	230	3TS4811-0AL2	628.90
			22	2	2	230	3TS4822-0AL2	660.21
Size 4								
85	45	120	11	1	1	230	3TS4911-0AL2	919.60
			22	2	2	230	3TS4922-0AL2	949.95
105	55	120	11	1	1	230	3TS5011-0AL2	1,182.75
			22	2	2	230	3TS5022-0AL2	1,208.78
Size 6								
140	75	160	22	2	2	230	3TS5122-0AL2	1,528.66
Size 8								
170	90	210	22	2	2	230	3TS5222-0AL2	2,427.44
205	110	220	22	2	2	230	3TS5322-0AL2	3,034.30
Size 10								
250	132	300	22	2	2	230	3TS5422-0AL2	3,577.32
300	160	320	22	2	2	230	3TS5522-0AL2	4,570.45
Size 12								
400	200	500	22	2	2	230	3TS5622-0AL2	6,043.90

VAC, 50/60Hz.

Rated Control Voltage	24Vac	42Vac	110Vac	230Vac	240Vac
Order No. suffix	C2	D2	G2	L2	P2

for contactors with mounted auxiliary switch block please see accessories

Note: For further voltages, contact a sales representative.

3TS Contactors for Switching Motors

ACCESSORIES

For Contactors	Auxiliary contact Version		Order Number	Price List (SGD)
	NO	NC		



Auxiliary contacts blocks

3TS 29-36	1	-	Aux contact front	3TX3010-8A	9.50
	-	1	Aux contact front	3TX3001-8A	9.50



3TS 33-34	1	1	Aux contact lateral	3TY7601-1A	24.05
3TS 35-56	1	1	Aux contact lateral	3TY7591-1A	24.05



Mechanical Interlock

3TS 29-36				3TX4091-1A	41.91
-----------	--	--	--	------------	-------



3TS 47-55				3TX7466-1XA1	103.97
3TS56 with 3TS52-54				3TX7566-1XB1	115.42

For Contactors	Version	Rated control supply voltage Us		Order Number	Price List (SGD)
		VAC	VDC		



Surge suppressor RC Element

3TS29 to 3TS36	Mounting on coil terminal	24...48	24...70	3TX7402-3R	82.15
		48...127	70...150	3TX7402-3S	79.66
		127...240	150...250	3TX7402-3T	62.23
		240...400	--	3TX7402-3U	79.66



3TS47 to 3TS51	Mounting at side of auxiliary contacts or on 35mm DIN rail	24...48	--	3TX7462-3R	121.98
		--	24...70	3TX7522-3R	272.83
		48...127	--	3TX7462-3S	109.53
		--	70...150	3TX7522-3S	151.35
		127...240	--	3TX7462-3T	97.58
		--	150...250	3TX7522-3T	151.35

3TS52 to 3TS56	Mounting at side of auxiliary contacts or on 35mm DIN rail	24...48	--	3TX7522-3R	272.83
		48...127	--	3TX7522-3S	151.35
		127...240	--	3TX7522-3T	151.35
		240...400	--	3TX7522-3U	151.35
		400...600	--	3TX7522-3V	151.35

3US

Thermal Overload Relays



DESCRIPTION

3US Series Overload Relays are 3-pole adjustable bi-metal overload relays mainly suitable for normal starting applications.

The relays are suitable for use in any climate. They are finger-safe according to EN 50274.

The relays comply with IEC947-4, VDE0660 and GB14048.

FEATURES

- 3US series are bimetal thermal relays with release class 10A.
- Phase failure sensitivity acc. To DIN VDE 0660 Part 104 by differential phase shift
- With temperature compensation
- With RESET button / Manual/Automatic (blue) button
- With switch position indicator
- With TEST(OFF) button (red)
- With Auxiliary contacts 1 NO +1 NC insulated each other
- Terminal for contactor coil
- SIGUT - Siemens patent terminal, ensures easy and reliable connection, strong shock resistance and perfect safety protection.
- Device identifying marker
- Overlapping setting ranges

3US Thermal Overload Relays

For Standard Application

For Contactors	Current setting range A	Order Number	Price List (SGD)
	3TS29 to 3TS32	0.1 ... 0.16	3US5000-0A 95.00
		0.16 ... 0.25	3US5000-0C 95.00
		0.25 ... 0.4	3US5000-0E 95.00
		0.4 ... 0.63	3US5000-0G 95.00
		0.63 ... 1	3US5000-0J 95.00
		1 ... 1.6	3US5000-1A 95.00
		1.6 ... 2.5	3US5000-1C 95.00
		2.5 ... 4	3US5000-1E 95.00
		4 ... 6.3	3US5000-1G 95.00
		6.3 ... 10	3US5000-1J 95.00
		8 ... 12.5	3US5000-1K 95.00
	12.5 ... 18	3US5000-2L 101.65	
	3TS33,3TS 34	6.3 ... 10	3US5500-1J 114.00
		10 ... 16	3US5500-2A 114.00
		16 ... 25	3US5500-2C 129.96
		25 ... 32	3US5500-2N 135.85
	3TS35, 3TS36	16 ... 25	3US5600-2C 236.55
		25 ... 36	3US5600-2Q 236.55
		36 ... 45	3US5600-8M 260.30
	3TS47 to 3TS50	40 ... 57	3US5800-2T 266.95
		57 ... 70	3US5800-2V 355.30
		70 ... 88	3US5800-8W 355.30
		88 ... 105	3US5800-8X 456.95
	3TS51	90...120	3US6100-3H 676.40
		110...135	3US6100-3J 676.40
		120...150	3US6100-3K 763.80
	3TS52, 3TS53	120...150	3US6200-3K 763.80
		135...160	3US6200-3L 763.80
		150...180	3US6200-3M 763.80
		170...200	3US6200-3C 763.80
	3TS54 to 3TS56	160...250	3US6600-3C 596.91
		250...400	3US6600-3E 995.00

3US Thermal Overload Relays

For Standard Application

For Overload Relay (size 0 to 1)	Current setting range A	Order Number	Price List (SGD)
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3US50		3US1950-8	21.63
3US55		3US1955-8	26.06
3US56		3US1956-8	34.14
3US58		3US1958-8	43.52

3VS

Motor Starter Protectors



DESCRIPTION

The 3VS13, 3VS16 motor starter protectors are compact motor starter protectors for currents up to 52 A which operate according to the current limiting principle.

The devices are used for switching and protecting motors or other loads.

They fitted with instantaneous overcurrent releases and inverse-time delayed overload relay. Motor starter protectors and contactors can be combined to form fuseless starter combinations.

The 3VS, 3VS16 motor starter protectors are suitable for use in any climate.

FEATURES

- Compact range from 0.4 A to 52 A
- Matched with 3TS contactors (direct mounting)
- No derating up to 55 °C with side-by-side assembly
- Consistent design
- Resistance and perfect safety protection.

FOR MOTOR PROTECTION

- 3VS13: 0.4 -25A
- 3VS16: 6 - 52A

3VS Motor Starter Protector

3VS13 & 3VS16 Motor Starter Protector up to 52A For Standard Application

Rated current A	Suitable for 3 Ph induction motors with P kW	Setting range for thermal overload release A	Instantaneous electronic trip unit A	Order Number	Price List (SGD)
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3VS13 Motor Starter Protectors, up to 25A



0.6	0.12/0.18	0.4...0.6	7.2	3VS1300-0ME00	185.53
1	0.25	0.6...1	12	3VS1300-0MF00	185.51
1.6	0.37/0.55	1...1.6	19	3VS1300-0MG00	185.51
2.4	0.75	1.6...2.4	29	3VS1300-0MH00	185.46
3.2	1.1	2...3.2	38	3VS1300-0NH00	185.46
4	1.1/1.5	2.4...4	48	3VS1300-0MJ00	185.46
5	1.5/2.2	3.2...5	60	3VS1300-0NJ00	185.46
6	2.2	4...6	72	3VS1300-0MK00	234.33
8	3	5...8	96	3VS1300-0NK00	234.33
10	3/4	6...10	120	3VS1300-0ML00	234.32
13	4/5.5	8...13	156	3VS1300-0NL00	243.01
16	7.5	10...16	190	3VS1300-0MM00	243.01
20	7.5	14...20	240	3VS1300-0MN00	278.36
25	11	18...25	300	3VS1300-0MP00	315.67

*No auxiliary contact.

*For MSP with integrated 1NO + 1NC, please contact nearest Sales Office.

3VS16 Motor Starter Protectors, up to 52A



10	3/4	6...10		3VS1600-0ML00	293.81
16	5.5/7.5	10...16		3VS1600-0MM00	304.62
25	11	16...25		3VS1600-0MN00	379.82
32	15	22...32		3VS1600-0MP00	398.14
40	18.5	28...40		3VS1600-0MQ00	477.76
52	22	36...52		3VS1600-0MR00	525.54

*No auxiliary contact.

*For MSP with integrated 1NO + 1NC, please contact nearest Sales Office.

3RT6/5

Contactors for Switching Motors



DESCRIPTION

3RT6/5 contactors are climate-proof and are suitable and tested for use worldwide.

If the devices are used in ambient conditions which deviate from common industrial conditions (EN 60721-3-3). "Stationary use Weather-Protected", information must be obtained about possible restrictions with regard to the reliability and endurance of the device and possible protective measures. The 3RT6/3RT5 contactors are also finger-safe according to EN50274.

The quoted ratings of three-phase motors (in kW) refers to the output power on the motor shaft (according to the nameplate).

STANDARDS

- IEC 60947-1
- IEC 60947-4-1
- IEC 60947-5-1 (auxiliary switches)

CONNECTION METHODS

3RT6/3RT5 contactors are available with screw terminals.

3RT6/5 Contactors for Switching Motors

High-Features Application Contactors,
3-pole, 3...250kW AC Coil



7

Rated data AC-2 and AC-3 Operational current le up to	Rating of introduction motors at 50 Hz and	AC-1 Operational current le up to	Auxiliary contacts Ident. No.	Version	Rated Control Supply voltage Us at 50/60 Hz	Order Number	Price List SGD
400 V A	400V kW	690V A		NO NC	VAC		

Size S00

7	3	18	10 01	1 -	- 1	230 230	3RT6015-1AP01 3RT6015-1AP02	99.38 99.38
9	4	22	10 01	1 -	- 1	230 230	3RT6016-1AP01 3RT6016-1AP02	104.06 104.06
12	5.5	22	10 01	1 -	- 1	230 230	3RT6017-1AP01 3RT6017-1AP02	144.75 144.75
16	7.5	22	10 01	1 -	- 1	230 230	3RT6018-1AP01 3RT6018-1AP02	187.08 187.08

Size S0

9	4	40	11	1	1	230	3RT6023-1AL2	115.62
12	5.5	40	11	1	1	230	3RT6024-1AL20	160.83
17	7.5	40	11	1	1	230	3RT6025-1AL20	207.87
25	11	40	11	1	1	230	3RT6026-1AL20	275.31
32	15	40	11	1	1	230	3RT6027-1AL20	345.92
38	18.5	40	11	1	1	230	3RT6028-1AL20	506.35

Size S2

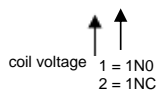
50	22	60	-	-	-	230	3RT5036-1AL20	696.97
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Size S3

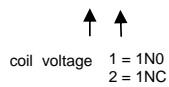
65	30	100	-	-	-	230	3RT5044-1AL20	791.21
80	37	120	-	-	-	230	3RT5045-1AL20	1,048.86
95	45	120	-	-	-	230	3RT5046-1AL20	1,553.81

Remarks

Selection of Coil Voltage
3RT6023 - 1AXXX-1/2



Selection of Coil Voltage
3RT5045 - 1AXXX-1/2



Rated control supply voltages (the 10th and 11th position of the order number must be changed)

Contactor	3RT60 1	3RT60 2, 3RT50
Magnetic coils for 50 and 60 Hz		
24 V AC	B0	C2
48 V AC	H0	C2
110 V AC	F0	G2
220 V AC	N2	N2
230 V AC	P0	L2

Note: For further voltages, contact a sales representative.

3RT6/5 Contactors for Switching Motors

High-Features Application Contactors,
3-pole, 3...250kW AC Coil



7

Rated data AC-2 and AC-3 Operational current le up to	Rating of introduction motors at 50 Hz and	AC-1 Operational current le up to	Auxiliary contacts Ident. No.	Version		Rated Control Supply voltage Us at 50/60 Hz	Order Number	Price List SGD
				NO	NC			
400 V A	400V kW	690V A				VDC		

Size 00

7	3	18	10	1	-	24	3RT6015-1BB41	147.09
			01	-	1	24	3RT6015-1BB42	147.09
9	4	22	10	1	-	24	3RT6016-1BB41	287.19
			01	-	1	24	3RT6016-1BB42	287.19
12	5.5	22	10	1	-	24	3RT6017-1BB41	374.45
			01	-	1	24	3RT6017-1BB42	374.45
16	7.5	22	10	1	-	24	3RT6018-1BB41	500.28
			01	-	1	24	3RT6018-1BB42	500.28

Size 0

25	11	40	11	1	1	24	3RT6026-1BB40	644.46
32	15	40	11	1	1	24	3RT6027-1BB40	859.34
38	18.5	40	11E	1	1	24	3RT6028-1BB40	902.53

Size S2

50	22	60	-	-	-	24	3RT5036-1BB40	1,150.16
----	----	----	---	---	---	----	---------------	----------

Size S3

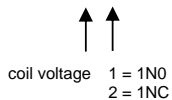
65	30	100	-	-	-	24	3RT5044-1BB40	1,446.20
80	37	120	-	-	-	24	3RT5045-1BB40	1,708.31
95	45	120	-	-	-	24	3RT5046-1BB40	2,129.96

Rated control supply voltages (the 10th and 11th position of the order number must be changed)

Remarks

Selection of Coil Voltage

3RT5045 - 1BXXX-1/2



Contactor	3RT60 1	3RT60 2,
Magnetic coils for 50 and 60 Hz		
24V DC	B4	B4
48V DC	W4	W4
110V DC	F4	F4
230 VDC	P4	P4

Note: For further voltages, contact a sales representative.

3RT6/5 Contactors for Switching Motors

High-Features Application Contactors,
3-pole, 15...250kW AC DC Coil



7

Rated data AC-2 and AC-3 Operational current le up to	Rating of introduction motors at 50 Hz and	AC-1 Operational current le up to	Auxiliary contacts Ident. No.	Version NO NC	Rated Control Supply voltage Us at 50/60 Hz VAC	Order Number	Price List SGD
400 V A	400V kW	690V A					

Size S6

115	55	160		2	2	110 ... 127 220 ... 240	3RT5054-1AF36 3RT5054-1AP36	1,977.29 1,977.29
150	75	165		2	2	110 ... 127 220 ... 240	3RT5055-6AF36 3RT5055-6AP36	2,429.79 2,429.79
185	90	215		2	2	110 ... 127 220 ... 240	3RT5056-6AF36 3RT5056-6AP36	3,947.40 3,947.40

Size S10

225	110	275		2	2	110 ... 127 220 ... 240	3RT5064-6AF36 3RT5064-6AP36	5,248.74 5,248.74
265	132	330		2	2	110 ... 127 220 ... 240	3RT5065-6AF36 3RT5065-6AP36	6,467.49 6,467.49
300	160	330		2	2	110 ... 127 220 ... 240	3RT5066-6AF36 3RT5066-6AP36	7,205.39 7,205.39

Size S12

400	200	430		2	2	110 ... 127 220 ... 240	3RT5075-6AF36 3RT5075-6AP36	9,089.48 9,089.48
500	250	610		2	2	110 ... 127 220 ... 240	3RT5076-6AF36 3RT5076-6AP36	11,218.13 11,218.13

Remarks

Selection of Coil Voltage
3RT5055 - 6AX36



Rated control supply voltages (the 10th position of the order number must be changed)

Voltage Table

Us min Us max	
AC/DC 23...26V	B3
AC/DC 42...48V	D3
AC/DC 110...127V	F3
AC/DC 200...220V	M3
AC/DC 220...240V	P3
AC/DC 240...277V	U3
AC/DC 380...420V	V3
AC/DC 440...480V	R3

Note: For further voltages, contact a sales representative.

3RT6/5 Contactors for Switching Motors

Accessories

For Contactors	Version	Rated control supply voltage Us AC operation		Order Number	Price List SGD
Type		V			

Surge suppressors without LED (also for spring-type terminals)

Size S00



For plugging onto the front side of the contactors with and without auxiliary switch block

3RT6.1,	Varistors	24...48	24...70	3RT6916-1BB00	31.36
3RH6.		48...127	70...150	3RT6916-1BC00	31.36
		127...240	150...250	3RT6916-1BD00	31.36
		240...400	--	3RT6916-1BE00	31.36
		400...600	--	3RT6916-1BF00	31.36
3RT6.1,	RC Elements	24...48	24...70	3RT6916-1CB00	31.36
3RH6.		48...127	70...150	3RT6916-1CC00	31.36
		127...240	150...250	3RT6916-1CD00	31.36
		240...400	--	3RT6916-1CE00	31.36
		400...600	--	3RT6916-1CF00	31.36
3RT6.1,	Noise suppression		12...250	3RT6916-1DG00	31.36
3RH6.	diodes				

Size S0



For plugging onto the front side of the contactors (prior to mounting of the auxiliary switch block)

3RT6.2	Varistors	24...48	24...70	3RT6926-1BB00	38.33
		48...127	70...150	3RT6926-1BC00	38.33
		127...240	150...250	3RT6926-1BD00	38.33
		240...400	--	3RT6926-1BE00	38.33
		400...600	--	3RT6926-1BF00	38.33
3RT6.2	RC Elements	24...48	24...70	3RT6926-1CB00	48.55
		48...127	70...150	3RT6926-1CC00	48.55
		127...240	150...250	3RT6926-1CD00	48.55
		240...400	--	3RT6926-1CE00	48.55
		400...600	--	3RT6926-1CF00	48.55

Size S2 and S3

For fitting onto the coil terminals at top or bottom

3RT5.3,	Varistors	24...48	24...70	3RT5926-1BB00	38.65
3RT5.4		48...127	70...150	3RT5926-1BC00	39.92
		127...240	150...250	3RT5926-1BD00	41.52
		240...400	--	3RT5926-1BE00	53.02
		400...600	--	3RT5926-1BF00	54.30
3RT5.3,	RC Elements	24...48	24...70	3RT5936-1CB00	49.51
3RT5.4		48...127	70...150	3RT5936-1CC00	62.60
		127...240	150...250	3RT5936-1CD00	53.66
		240...400	--	3RT5936-1CE00	65.79
		400...600	--	3RT5936-1CF00	65.79



Size S6 to S12

For connecting to withdrawable coil for contactors with conventional operating mechanism 3RT5...-A...
solid-state operating mechanism 3RT5...-A...

3RT5.5,	RC Elements	24...48	24...70	3RT5956-1CB00	116.26
3RT5.6,		48...127	70...150	3RT5956-1CC00	116.26
3RT5.7,		127...240	150...250	3RT5956-1CD00	116.26
		240...400	--	3RT5956-1CE00	116.26
		400...600	--	3RT5956-1CF00	116.26

3RH6

Contactors Relays



DESCRIPTION

The 3RH6 contactor relays are suitable for use in any climate. They are finger-safe according to EN50274 and have screw terminals.

The contactor is reliable with a high contact stability at low voltages and currents, suitable for solid-state circuits with currents $\geq 5\text{mA}$ at a voltage of $\geq 17\text{V}$.

The accessories for the 3RT6 contactors in size S00 can also be used for 3RH6 contactor relays.

The 3RH61 contactor relays can be expanded by up to four contacts by the addition of snap-on auxiliary switch blocks.

The auxiliary switch block can be easily be snapped onto the front of the contactor relays. The auxiliary switch block has a centrally positioned release lever for disassembly.

STANDARDS

- IEC 60947-1
- IEC 60947-4-1
- IEC 60947-5-1

KEY FEATURES



- DC operation
- Low power consumption
- Extended operating range of the coil
- Integrated coil circuit

3RH6 Contactor Relays

3RH6 contactor relays 4-pole



7

Rated data AC-15 Operational current le up to 230 V A	Contacts Ident. No.	Version   NO NC	Rated Control Supply voltage Us at 50/60 Hz V	Order Number	Price List SGD
---	-------------------------------	---	---	--------------	-------------------

Size S00

AC operation - 50/60 Hz

10	40E	4	--	24	3RH6140-1AB00	121.31
				110	3RH6140-1AF00	121.31
				220	3RH6140-1AN20	121.31
	31E	3	1	24	3RH6131-1AB00	121.31
				110	3RH6131-1AF00	121.31
				220	3RH6131-1AN20	121.31
	22E	2	2	24	3RH6122-1AB00	121.31
				110	3RH6122-1AF00	121.31
				220	3RH6122-1AN20	121.31

DC operation

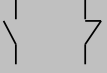
10	40E	4	--	24	3RH6140-1BB40	140.52
				220	3RH6140-1BM40	140.52
	31E	3	1	24	3RH6131-1BB40	140.52
				220	3RH6131-1BM40	140.52
	22E	2	2	24	3RH6122-1BB40	140.52
				220	3RH6122-1BM40	140.52

3RH6 Contactor Relays

3RH61 coupling contactor for switching auxiliary circuits
4- pole



7

Rated data AC-15 Operational current I _e up to	Contacts Ident. No. acc.to EN5011	Version	Rated Control Supply voltage U _s at 50/60 Hz	Order Number	Price List SGD
230 V A		 NO NC	V		

Size S00

With integrated surge suppressor (suppressor diode)

(auxiliary switch block cannot be mounted)

Rated control supply voltage U_s = 24 V DC,

Operating range **0.7 to 1.25 x U_s**

Power consumption of the solenoid coils **2.8 W** at 24 V

10	40E	4	--	24	3RH6140-1KB40	157.80
				110	3RH6140-1KF40	157.80
	31E	3	1	24	3RH6131-1KB40	157.80
				110	3RH6131-1KF40	157.80
	22E	2	2	24	3RH6122-1KB40	157.80
				110	3RH6122-1KF40	157.80

3RU6/5

Thermal Overload Relays



DESCRIPTION

The 3RU61 and 3RU51 thermal overload relays are suitable for customers from all industries who want to guarantee optimum inverse-time delayed protection of their electrical loads (e.g. motors) under normal rating conditions (CLASS 10).

STANDARDS

- IEC 60947-4-1
- IEC 60947-5-1
- EN50581

KEY FEATURES

- Screw terminals
- Overload and phase failure protection
- Auxiliary contacts 1 NO + 1 NC
- Manual and automatic RESET
- Switch position indicators
- TEST function
- STOP button
- Integrated sealable cover

3RU6/5 Thermal Overload Relays

3RU61 thermal overload relays for mounting onto contactor, CLASS 10
For High Features Application



7

Size	Current setting value of the inverse-time delayed overload release	Short-circuit protection with fuse, type of coordination "2" operational class gG	Order Number	Price List SGD
Contactor				
A				

Size S00

0.11...0.16	0.5	3RU6116-0AB0	152.13
0.14...0.2	1	3RU6116-0BB0	152.13
0.18...0.25	1	3RU6116-0CB0	152.13
0.22...0.32	1.6	3RU6116-0DB0	152.13
0.28...0.4	2	3RU6116-0EB0	152.13
0.35...0.5	2	3RU6116-0FB0	152.13
0.45...0.63	2	3RU6116-0GB0	152.13
0.55...0.8	4	3RU6116-0HB0	152.13
0.7...1	4	3RU6116-0JB0	152.13
0.9...1.25	4	3RU6116-0KB0	152.13
1.1...1.6	6	3RU6116-1AB0	152.13
1.4...2	6	3RU6116-1BB0	152.13
1.8...2.5	10	3RU6116-1CB0	152.13
2.2...3.2	10	3RU6116-1DB0	152.13
2.8...4	16	3RU6116-1EB0	152.13
3.5...5	20	3RU6116-1FB0	152.13
4.5...6.3	20	3RU6116-1GB0	152.13
5.5...8	25	3RU6116-1HB0	152.13
7...10	35	3RU6116-1JB0	152.13
9...12.5	35	3RU6116-1KB0	152.13
11...16	40	3RU6116-4AB0	183.34

Size S0

1.8...2.5	10	3RU6126-1CB0	215.85
2.2...3.2	10	3RU6126-1DB0	215.85
2.8...4	16	3RU6126-1EB0	215.85
3.5...5	20	3RU6126-1FB0	215.85
4.5...6.3	20	3RU6126-1GB0	215.85
5.5...8	25	3RU6126-1HB0	215.85
7...10	35	3RU6126-1JB0	215.85
9...12.5	35	3RU6126-1KB0	215.85
11...16	40	3RU6126-4AB0	215.85
14...20	50	3RU6126-4BB0	232.24
17...22	63	3RU6126-4CB0	232.24
20...25	63	3RU6126-4DB0	303.46
23...28	63	3RU6126-4NB0	303.42
27...32	80	3RU6126-4EB0	303.42
30...26	80	3RU6126-4PB0	303.42
34...40	80	3RU6126-4FB0	473.19

3RU6/5 Thermal Overload Relays

**3RU51 thermal overload relays for mounting onto contactor, CLASS 10
For High Features Application**



7

Size Contactor	Current setting value of the inverse- time delayed overload release	Short-circuit protection with fuse, type of coordination "2" operational class gG	Order Number	Price List SGD
A				
Size S2				
	5....8	25	3RU5136-1HB0	253.11
	7....10	35	3RU5136-1JB0	253.11
	9....12.5	35	3RU5136-1KB0	253.11
	11....16	40	3RU5136-4AB0	253.11
	14....20	50	3RU5136-4BB0	253.11
	18....25	63	3RU5136-4DB0	253.11
	22....32	80	3RU5136-4EB0	355.84
	28....40	80	3RU5136-4FB0	474.20
	36....45	100	3RU5136-4GB0	488.13
	40....50	100	3RU5136-4HB0	489.45
Size S3				
	18....25	63	3RU5146-4DB0	392.76
	22....32	80	3RU5146-4EB0	392.76
	28....40	80	3RU5146-4FB0	392.76
	36....50	125	3RU5146-4HB0	486.76
	45....63	125	3RU5146-4JB0	489.45
	57....75	160	3RU5146-4KB0	503.10
	70....90	160	3RU5146-4LB0	692.47
	80....100	200	3RU5146-4MB0	691.06

3RU6/5 Thermal Overload Relays

3RU61 thermal overload relays for stand-alone installation, CLASS 10
For High Features Application



7

Size Contactor	Current setting value of the inverse- time delayed overload release	Short-circuit protection with fuse, type of coordination "2" operational class gG	Order Number	Price List SGD
A				
Size S00				
	0.11...0.16	0.5	3RU6116-0AB1	194.23
	0.14...0.2	1	3RU6116-0BB1	194.23
	0.18...0.25	1	3RU6116-0CB1	194.23
	0.22...0.32	1.6	3RU6116-0DB1	194.23
	0.28...0.4	2	3RU6116-0EB1	194.23
	0.35...0.5	2	3RU6116-0FB1	194.23
	0.45...0.63	2	3RU6116-0GB1	194.23
	0.55...0.8	4	3RU6116-0HB1	194.23
	0.7...1	4	3RU6116-0JB1	194.23
	0.9...1.25	4	3RU6116-0KB1	194.23
	1.1...1.6	6	3RU6116-1AB1	194.23
	1.4...2	6	3RU6116-1BB1	194.23
	1.8...2.5	10	3RU6116-1CB1	194.23
	2.2...3.2	10	3RU6116-1DB1	194.23
	2.8...4	16	3RU6116-1EB1	194.23
	3.5...5	20	3RU6116-1FB1	194.23
	4.5...6.3	20	3RU6116-1GB1	194.23
	5.5...8	25	3RU6116-1HB1	194.23
	7...10	35	3RU6116-1JB1	194.23
	9...12.5	35	3RU6116-1KB1	194.23
	11...16	40	3RU6116-4AB1	234.08
Size S0				
	14...20	50	3RU6126-4BB1	295.09
	17...22	63	3RU6126-4CB1	295.09
	20...25	63	3RU6126-4DB1	385.58
	23...28	63	3RU6126-4NB1	361.65
	27...32	80	3RU6126-4EB1	361.65
	30...26	80	3RU6126-4PB1	361.65
	34...40	80	3RU6126-4FB1	564.00

3RU6/5 Thermal Overload Relays

3RU51 thermal overload relays with screw terminals on the auxiliary current side for stand-alone For High Features Application



7

Size Contactor	Current setting value of the inverse- time delayed overload release	Short-circuit protection with fuse, type of coordination "2" operational class gG	Order Number	Price List SGD
A				

Size S6

90...120	224	3RU5156-3HB2	1,324.62
110...135	224	3RU5156-3JB2	1,455.50
120...150	250	3RU5156-3KB2	1,455.50
135...160	250	3RU5156-3LB2	1,499.21
150...180	250	3RU5156-3MB2	1,544.12
170...205	250	3RU5156-3NB2	1,590.47

Size S10

140...200	400	3RU5166-5EB1	1,671.92
180...250	400	3RU5166-5FB1	1,722.04
220...320	400	3RU5166-5GB1	1,773.71
280...400	500	3RU5176-5HB1	1,828.81
350...500	500	3RU5176-5JB1	1,883.61

3RU6/5 Thermal Overload Relays

Accessories

Version	Size	Order Number	Price List SGD
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Terminal brackets for stand-alone installation



3RU6926-3AA01

For separate mounting of the overload relays; screw and snap-on mounting onto TH35 standard mounting rail; size S3 also for TH75 standard mounting rail

S00	3RU6916-3AA01	40.28
S0	3RU6926-3AA01	48.68
S2	3RU5936-3AA01	65.80
S3	3RU5946-3AA01	85.60

Mechanical RESET



3RU6900-1A

Resetting pluggers, holders and formers

S00, S0, S6, S10, S12	3RU6900-1A	16.92
S2, S3	3RU5900-1A	17.36

Pushbuttons with extended stroke (12mm), IP65, Ø 22 mm

S00, S0, S2, S3 S6, S10, S12	3SU1200-0FB10-0AA0	155.01
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Extension plungers
For distance between the pushbutton and the unlatching button of the relay

S00, S0, S2, S3 S6, S10, S12	3SU1900-0KG10-0AA0	13.07
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Cable releases with holder for RESET



For Ø 6.5 mm hole in the control panel; max. control panel thickness 8 mm

• Length 400 mm	S00, S0, S6, S10, S12	3RU6900-1B	165.50
	S2, S3	3RU5900-1B	169.53
• Length 600 mm	S00, S0, S6, S10, S12	3RU6900-1C	165.50
	S2, S3	3RU5900-1C	169.53

3RV6/5

Motor Starter Protectors



DESCRIPTION

SIRIUS 3RV6/5 motor starter protectors are compact, current limiting motor starter protectors which are optimized for load feeders. The motor starter protectors are used for switching and protecting three-phase motors of up to 45 kW at 400V AC and other loads with rated currents of up to 100A.

The 3RV6/5 motor starter protectors are usually approved according to IEC and UL/CSA. 3RV motor starter protector are approved according to UL 508 as:

- Manual Motor Controllers,
- Manual Motor Controllers for "Group Installations",
- Manual Motor Controllers Suitable for Tab Conductor Protection in Group Installations,
- Self-Protected Combination Motor Controllers (Type E).

TYPE OF CONSTRUCTION

The 3RV6/3RV5 motor starter protectors are available in two sizes:

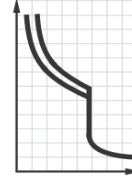
- Size S00 - width 45 mm, max. rated current 16 A,
at 400 V AC suitable for three-phase motors up to 7.5 kW
- Size S0 - width 45 mm, max. rated current 40 A,
at 400 V AC suitable for three-phase motors up to 18.5 kW

The 3RV5 motor starter protectors are available in two framesizes:

- Size S2 - width 55 mm, max. rated current 50 A,
at 400 V AC suitable for three-phase motors up to 22 kW
- Size S3 - width 70 mm, max. rated current 100 A,
at 400 V AC suitable for three-phase motors up to 45 kW

3RV5/6 Motor Starter Protector

For motor protection up to 100A
Class 10, without auxiliary switches



7

Size	Rated current A	Suitable for 3 Phase induction motors with P kW	Setting range for thermal overload release A	Instantaneous overcurrent release A	Short circuit breaking capacity at 400 V AC kA	Order Number	Price List SGD
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Size S00



0.16	0.04	0.11...0.16	2.1	100	3RV6011-0AA10	275.10
0.2	0.06	0.14...0.20	2.6	100	3RV6011-0BA10	275.10
0.25	0.06	0.18...0.25	3.3	100	3RV6011-0CA10	275.10
0.32	0.09	0.22...0.32	4.2	100	3RV6011-0DA10	275.07
0.4	0.09	0.28...0.40	5.2	100	3RV6011-0EA10	275.07
0.5	0.12	0.35...0.50	6.5	100	3RV6011-0FA10	275.07
0.63	0.18	0.45...0.63	8.2	100	3RV6011-0GA10	274.96
0.8	0.18	0.55...0.80	10	100	3RV6011-0HA10	274.93
1	0.25	0.7...1	13	100	3RV6011-0JA10	274.93
1.25	0.37	0.9...1.25	16	100	3RV6011-0KA10	274.92
1.6	0.55	1.1...1.6	21	100	3RV6011-1AA10	274.92
2	0.75	1.4...2	26	100	3RV6011-1BA10	274.99
2.5	0.75	1.8...2.5	33	100	3RV6011-1CA10	274.99
3.2	1.1	2.2...3.2	42	100	3RV6011-1DA10	274.99
4	1.5	2.8...4	52	100	3RV6011-1EA10	274.99
5	1.5	3.5...5	65	100	3RV6011-1FA10	274.99
6.3	2.2	4.5...6.3	82	100	3RV6011-1GA10	274.99
8	3	5.5...8	104	100	3RV6011-1HA10	346.88
10	4	7...10	130	100	3RV6011-1JA10	346.70
12.5	5.5	9...12.5	163	100	3RV6011-1KA10	363.22
16	7.5	11...16	208	55	3RV6011-4AA10	363.28

Size S0



20	7.5	14...20	260	55	3RV6021-4BA10	363.27
22	11	17...22	286	55	3RV6021-4CA10	412.03
25	11	20...25	325	55	3RV6021-4DA10	468.51
28	15	23...28	364	55	3RV6021-4NA10	536.38
32	15	27...32	400	55	3RV6021-4EA10	536.38
36	18.5	30...36	432	55	3RV6021-4PA10	911.75
40	18.5	34...60	480	55	3RV6021-4FA10	915.03

Size S2



45	22	36.....45	585	50	3RV5031-4GA10	1,079.96
50	22	40.....50	650	50	3RV5031-4HA10	1,079.37

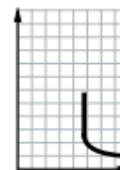
Size S3



63	30	45.....63	819	50	3RV5041-4JA10	1,228.37
75	37	57.....75	975	50	3RV5041-4KA10	1,290.63
90	45	70.....90	1170	50	3RV5041-4LA10	1,357.13
100	45	80.....100	1235	50	3RV5041-4MA10	1,421.11

3RV6/5 Motor Starter Protector

For starter combinations up to 100A
Class 10, without auxiliary switches



7

Size	Rated current A	Suitable for 3 Phase induction motors with P kW	Setting range for thermal overload release A	Instantaneous overcurrent release A	Short circuit breaking capacity at 400 V AC kA	Order Number	Price List SGD
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Size S00



0.16	0.04	without	2.1	100	3RV6311-0AC10	310.01
0.2	0.06	without	2.6	100	3RV6311-0BC10	310.01
0.25	0.06	without	3.3	100	3RV6311-0CC10	310.01
0.32	0.09	without	4.2	100	3RV6311-0DC10	310.01
0.4	0.09	without	5.2	100	3RV6311-0EC10	310.01
0.5	0.12	without	6.5	100	3RV6311-0FC10	310.01
0.63	0.18	without	8.2	100	3RV6311-0GC10	310.01
0.8	0.18	without	10	100	3RV6311-0HC10	310.01
1	0.25	without	13	100	3RV6311-0JC10	310.01
1.25	0.37	without	16	100	3RV6311-0KC10	310.01
1.6	0.55	without	21	100	3RV6311-1AC10	310.01
2	0.75	without	26	100	3RV6311-1BC10	310.01
2.5	0.75	without	33	100	3RV6311-1CC10	310.01
3.2	1.1	without	42	100	3RV6311-1DC10	387.14
4	1.5	without	52	100	3RV6311-1EC10	387.14
5	1.5	without	65	100	3RV6311-1FC10	387.14
6.3	2.2	without	82	100	3RV6311-1GC10	387.14
8	3	without	104	100	3RV6311-1HC10	387.14
10	4	without	130	100	3RV6311-1JC10	387.14
12.5	5.5	without	163	100	3RV6311-1KC10	387.14
16	7.5	without	208	55	3RV6311-4AC10	387.14

Size S0



20	7.5	without	260	55	3RV6321-4BC10	387.14
22	11	without	286	55	3RV6321-4CC10	387.14
25	11	without	325	55	3RV6321-4DC10	387.14
28	15	without	364	55	3RV6321-4NC10	498.88
32	15	without	400	55	3RV6321-4EC10	498.88
36	18.5	without	432	20	3RV6321-4PC10	903.32
40	18.5	without	450	20	3RV6321-4FC10	903.32

Size S2



45	22	without	585	50	3RV5331-4GC10	970.67
50	22	without	650	50	3RV5331-4HC10	970.67

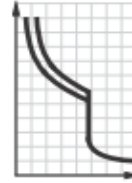
Size S3



63	30	without	819	50	3RV5341-4JC10	1,144.29
75	37	without	975	50	3RV5341-4KC10	1,373.15
90	45	without	1170	50	3RV5341-4LC10	1,647.78
100	45	without	1235	50	3RV5341-4MC10	1,977.34

3RV6/5 Motor Starter Protector

Motor starter protectors for the protection of transformers
with high inrush current up to 100A
Class 10, without auxiliary switches



Size	Rated current	Setting range for thermal overload release	Instantaneous overcurrent release	Short circuit breaking capacity at 400 V AC	Order Number	Price List SGD
	A	A	A	kA		

Size S00



0.16	0.11...0.16	3.3	100	3RV6411-0AA10	399.84
0.2	0.14...0.20	4.2	100	3RV6411-0BA10	399.84
0.25	0.18...0.25	5.2	100	3RV6411-0CA10	399.84
0.32	0.22...0.32	6.5	100	3RV6411-0DA10	399.84
0.4	0.28...0.40	8.2	100	3RV6411-0EA10	399.84
0.5	0.35...0.50	10	100	3RV6411-0FA10	399.84
0.63	0.45...0.63	13	100	3RV6411-0GA10	399.84
0.8	0.55...0.80	16	100	3RV6411-0HA10	399.84
1	0.7...1	21	100	3RV6411-0JA10	424.07
1.25	0.9...1.25	26	100	3RV6411-0KA10	424.07
1.6	1.1...1.6	33	100	3RV6411-1AA10	424.07
2	1.4...2	42	100	3RV6411-1BA10	424.07
2.5	1.8...2.5	52	100	3RV6411-1CA10	424.07
3.2	2.2...3.2	65	100	3RV6411-1DA10	424.07
4	2.8...4	82	100	3RV6411-1EA10	424.07
5	3.5...5	104	100	3RV6411-1FA10	424.07
6.3	4.5...6.3	130	100	3RV6411-1GA10	424.07
8	5.5...8	163	100	3RV6411-1HA10	424.07
10	7...10	208	100	3RV6411-1JA10	468.49
12.5	9...12.5	260	100	3RV6411-1KA10	468.49
16	11...16	286	55	3RV6411-4AA10	468.49

Size S0



16	11...16	286	55	3RV6421-4AA10	468.49
20	14...20	325	55	3RV6421-4BA10	491.72
22	17...22	364	55	3RV6421-4CA10	525.04
25	20...25	400	55	3RV6421-4DA10	600.76






Size S2



16	11.....16	325	50	3RV5431-4AA10	858.23
20	14.....20	416	50	3RV5431-4BA10	923.86
25	18.....25	520	50	3RV5431-4DA10	979.40
32	22.....32	660	50	3RV5431-4EA10	1,186.38
40	28.....40	836	50	3RV5431-4FA10	1,347.93

3RV6/5 Motor Starter Protector

Accessories Up to 100A

Version	Contact	For motor starter protectors		Order Number	Price List SGD
		Size			
	Transverse auxiliary switches	1 CO	S00, S0	3RV6901-1D	42.57
		1 NO + 1 NC		3RV6901-1E	48.51
		2 NO		3RV6901-1F	48.51
		1 CO	S2, S3	3RV5901-1D	42.57
		1 NO + 1 NC		3RV5901-1E	48.51
		2 NO		3RV5901-1F	48.51
	Lateral auxiliary switches with screw terminals mountable on the left	1NO + 1NC	S00, S0	3RV6901-1A	61.22
		2NO		3RV6901-1B	61.22
		2NC		3RV2901-1C	70.69
		2NC	S2, S3	3RV5901-1A	62.81
		2NO + 2NC		3RV5901-1B	62.81
	Signaling Switches	1NO + 1NC	S00, S0	3RV6921-1M	118.23
	One signal switch can be mounted on the left per motor starter protector Separated tripped and short-circuit alarms 1NO+ 1NC		S2, S3	3RV5921-1M	121.39
	Undervoltage trip units				
	Rated control supply voltage V AC 50 Hz				
	230	S00, S0		3RV6902-1AP0	168.30
	400	S00, S0		3RV6902-1AV0	168.30
	230	S2, S3		3RV5902-1AP0	168.30
400	S2, S3		3RV5902-1AV0	168.30	
	Shunt trip units				
	Rated control supply voltage V AC 50 Hz, 100% on period				
	20...24	S00, S0		3RV6902-1DB0	175.69
	210...240	S00, S0		3RV6902-1DP0	175.69
	350...415	S00, S0		3RV6902-1DV0	175.69
	20...24	S2, S3		3RV5902-1DB0	180.73
	210...240	S2, S3		3RV5902-1DP0	180.73
350...415	S2, S3		3RV5902-1DV0	180.73	

3RV6/5 Motor Starter Protector

Accessories Up to 100A

Version	Colour of handle	Version of extension shaft (mm)	For motor starter protector Size	Order Number	Price List SGD
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7



Door-coupling rotary operating mechanisms

Black	130	S00, S0, S2, S3	3RV6926-0B	255.96
	330	S00, S0, S2, S3	3RV6926-0K	300.89



Plug-in lugs

For screwing the motor starter protector onto mounting plates

S00, S0	3RV6928-0B	200.42
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For each motor starter protector
2 units are required

3RT 2/1

Contactors for Switching Motors



DESCRIPTION

3RT2/1 contactors are climate-proof and are suitable and tested for use worldwide.

If the devices are used in ambient conditions which deviate from common industrial conditions (EN 60721-3-3 "Stationary use Weather-Protected"), information must be obtained about possible restrictions with regard to the reliability and endurance of the device and possible protective measures.

3RT2/1 contactors are finger-safe according to EN50274. The devices with ring terminal lug connection comply with degree of protection (IP 20) when fitted with the related terminal cover.

STANDARDS

- IEC 60947-1, EN 60947-1
- IEC 60947-4-1, EN 60947-4-1
- IEC 60947-5-1, EN 60947-5-1 (auxiliary switches)

POWER RANGE

Contactors for switching motors:


- Size S00: 3RT201 up to 7.5kW
- Size S0: 3RT202 up to 18.5kW
- Size S2: 3RT203 up to 37kW
- Size S3: 3RT203 up to 55kW
- Size S6 to S12: 3RT10 up to 250kW

3RT2/1 Contactors for Switching Motors

High-Features Application Contactors
3-pole, 3...250kW AC Coil



7

Rated data AC-2 and AC-3 Operational current le up to	Rating of introduction motors at 50 Hz and	AC-1 Operational current le up to	Auxiliary contacts Ident. No.	Version	Rated Control Supply voltage Us at 50/60 Hz	Order Number	Price List SGD
400 V A	400V kW	690V A		 NO NC	VAC		

Size S00

7	3	18	10	1	-	230	3RT2015-1AP01	126.25
			01	-	1	230	3RT2015-1AP02	126.25
9	4	22	10	1	-	230	3RT2016-1AP01	141.30
			01	-	1	230	3RT2016-1AP02	141.30
12	5.5	22	10	1	-	230	3RT2017-1AP01	196.56
			01	-	1	230	3RT2017-1AP02	196.56
16	7.5	22	10	1	-	230	3RT2018-1AP01	254.07
			01	-	1	230	3RT2018-1AP02	254.07

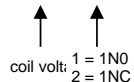
Size S0

25	11	40	11	1	1	230	3RT2026-1AL20	336.51
32	15	40	11	1	1	230	3RT2027-1AL20	422.78
38	18.5	40	11	1	1	230	3RT2028-1AL20	587.95

Remarks

Selection of Coil Voltage

3RT1045 - 1AXX-1/2



Rated control supply voltages (the 10th and 11th position of the order number must be changed)

Contactor Type Rated control supply Voltage Us	3RT20 1	3RT20 2
Magnetic coils for 50 and 60 Hz		
24 V AC	B0	C2
42 V AC	D0	D2
48 V AC	H0	H2
110 V AC	F0	G2
220 V AC	P0	N2
230 V AC	V0	L2

Note: For further voltages, contact a sales representative.

3RT2/1 Contactors for Switching Motors

High-Features Application Contactors
3-pole, 3...250kW AC Coil



7

Rated data AC-2 and AC-3 Operational current le up to	Rating of introduction motors at 50 Hz and	AC-1 Operational current le up to	Auxiliary contacts Ident. No.	Version		Rated Control Supply voltage Us at 50/60 Hz	Order Number	Price List SGD
				NO	NC			
400 V A	400V kW	690V A				VAC		

Size S2

50	22	70	11	1	1	230	3RT2036-1AL20	851.44
65	30	80	11	1	1	230	3RT2037-1AL20	966.65
80	37	90	11	1	1	230	3RT2038-1AL20	1,284.08

Size S3

95	45	130	11	1	1	230	3RT2046-1AL20	1,898.81
110	55	130	11	1	1	230	3RT2047-1AL20	2,410.40

Remarks

Selection of Coil Voltage
3RT1045 - 1AXX-1/2

↑ ↑
coil 1 = 1NO
voltage 2 = 1NC

Rated control supply voltages (the 10th and 11th position of the order number must be changed)

Contactor Type Rated control supply Voltage Us	3RT20 3, 3RT20 4
Magnetic coils for 50 and 60 Hz	
24 V AC	C2
42 V AC	D2
48 V AC	H2
110 V AC	G2
220 V AC	N2
230 V AC	L2

Note: For further voltages, contact a sales representative.

3RT2/1 Contactors for Switching Motors

High-Features Application Contactors
3-pole, 3...250kW DC Coil



7

Rated data AC-2 and AC-3 Operational current le up to	Rating of introduction motors at 50 Hz and	AC-1 Operational current le up to	Auxiliary contacts Ident. No.	Version		Rated Control Supply voltage Us at 50/60 Hz	Order Number	Price List SGD
				NO	NC			
400 V A	400V kW	690V A				VDC		

Size 00

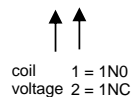
7	3	18	10	1	-	24	3RT2015-1BB41	191.92
			01	-	1	24	3RT2015-1BB42	191.92
9	4	22	10	1	-	24	3RT2016-1BB41	351.02
			01	-	1	24	3RT2016-1BB42	351.02
12	5.5	22	10	1	-	24	3RT2017-1BB41	457.68
			01	-	1	24	3RT2017-1BB42	457.68
16	7.5	22	10	1	-	24	3RT2018-1BB41	611.46
			01	-	1	24	3RT2018-1BB42	611.46

Size 0

25	11	40	11	1	1	24	3RT2026-1BB40	787.67
32	15	40	11	1	1	24	3RT2027-1BB40	1,050.30
38	18.5	40	11	1	1	24	3RT2028-1BB40	1,218.16

Remarks

Selection of Coil Voltage
3RT1045 - 1AXX-1/2



Rated control supply voltages (the 10th and 11th position of the order number must be changed)

Contactor Type Rated control supply Voltage Us	3RT20 1	3RT20 2,
12V DC	A4	--
24V DC	B4	B4
42V DC	D4	D4
48V DC	W4	W4
60V DC	E4	E4
110V DC	F4	F4
125V DC	G4	G4
220V DC	M4	M4
230V DC	P4	P4



Note: For further voltages, contact a sales representative.

3RT2/1 Contactors for Switching Motors

High-Features Application Contactors
3-pole, 3...250kW DC Coil



7

Rated data AC-2 and AC-3 Operational current le up to	Rating of introduction motors at 50 Hz and	AC-1 Operational current le up to	Auxiliary contacts Ident. No.	Version  	Rated Control Supply voltage Us at 50/60 Hz	Order Number	Price List SGD
400 V A	400V kW	690V A		NO NC	VDC		

Size S2

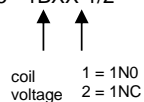
50	22	70	11	1	1	24	3RT2036-1KB40	1,409.96
65	30	80	11	1	1	24	3RT2037-1KB40	1,766.52
80	37	90	11	1	1	24	3RT2038-1KB40	2,086.39

Size S3

95	45	130	11	1	1	24	3RT2046-1KB40	2,600.05
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Remarks

Selection of Coil Voltage
3RT1045 - 1BXX-1/2



Rated control supply voltages (the 10th and 11th position of the order number must be changed)

Contactor Type Rated control supply Voltage Us	3RT20 3, 3RT20 4
12 V DC	-
24 V DC	B4
42 V DC	D4
48 V DC	W4
60 V DC	E4
110 V DC	F4
125 V DC	G4
220 V DC	M4
230 V DC	P4


Note: For further voltages, contact a sales representative.

3RT2/1 Contactors for Switching Motors

High-Features Application Contactors
3-pole, 3...250kW AC/DC Coil



7

Rated data AC-2 and AC-3 Operational current le up to	Rating of introduction motors at 50 Hz and	AC-1 Operational current le up to	Auxiliary contacts Ident. No.	Version 	Rated Control Supply voltage Us at 50/60 Hz	Order Number	Price List SGD
400 V A	400V kW	690V A		NO NC	VAC		

Size S0

12	5.5	40	11	1	1	200...280	3RT2024-1NP30	528.60
17	7.5	40	11	1	1	200...280	3RT2025-1NP30	628.61
25	11	40	11	1	1	200...280	3RT2026-1NP30	752.42
32	15	50	11	1	1	200...280	3RT2027-1NP30	1,023.87
38	18.5	50	11	1	1	200...280	3RT2028-1NP30	1,123.88

Size S2

50	22	70	11	1	1	175...280	3RT2036-1NP30	1,366.75
65	30	80	11	1	1	175...280	3RT2037-1NP30	1,866.78
80	37	90	11	1	1	175...280	3RT2038-1NP30	1,962.02

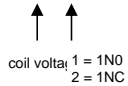
Size S3

95	45	130	11	1	1	175...280	3RT2046-1NP30	2,414.43
110	55	130	11	1	1	175...280	3RT2047-1NP30	2,504.91

Remarks

Selection of Coil Voltage

3RT1045 - 1BXX-1/2



Rated control supply voltages (the 10th and 11th position of the order number must be changed)

Us min Us max	3RT20 2
21..28 V AC/DC	B3
95..130 V AC/DC	F3
200..280 V AC/DC	P3

Us min Us max	3RT 20 3, 3RT 20 4
20..33 V AC/DC	B3
48..80 V AC/DC	E3
83..155 V AC/DC	F3
175..280 V AC/DC	P3

Note: For further voltages, contact a sales representative.

3RT2/1 Contactors for Switching Motors

High-Features Application Contactors
3-pole, 3...250kW AC/DC Coil



7

Rated data AC-2 and AC-3 Operational current le up to	Rating of introduction motors at 50 Hz and	AC-1 Operational current le up to	Auxiliary contacts		Version		Rated Control Supply voltage Us at 50/60 Hz	Order Number	Price List SGD
			Ident. No.		NO	NC			
400 V A	400V kW	690V A			NO	NC	VAC		

Size S6

115	55	160	2	2	110 ... 127 220 ... 240	3RT1054-6AF36 3RT1054-6AP36	3,589.38 3,589.38
150	75	185	2	2	110 ... 127 220 ... 240	3RT1055-6AF36 3RT1055-6AP36	3,885.89 3,885.89
185	90	215	2	2	110 ... 127 220 ... 240	3RT1056-6AF36 3RT1056-6AP36	4,824.55 4,824.55

Size S10

225	110	275	2	2	110 ... 127 220 ... 240	3RT1064-6AF36 3RT1064-6AP36	6,415.33 6,415.33
265	132	330	2	2	110 ... 127 220 ... 240	3RT1065-6AF36 3RT1065-6AP36	7,904.12 7,904.12
300	160	330	2	2	110 ... 127 220 ... 240	3RT1066-6AF36 3RT1066-6AP36	8,806.94 8,806.94

Size S12

400	200	430	2	2	110 ... 127 220 ... 240	3RT1075-6AF36 3RT1075-6AP36	11,109.70 11,109.70
500	250	610	2	2	110 ... 127 220 ... 240	3RT1076-6AF36 3RT1076-6AP36	13,711.21 13,711.21

Voltage Table

Us min Us max	3RT10 5, 3RT10 6, 3RT10 7
AC/DC 23...26V	B3
AC/DC 42...48V	D3
AC/DC 110...127V	F3
AC/DC 200...220V	M3
AC/DC 220...240V	P3
AC/DC 240...277V	U3
AC/DC 380...420V	V3
AC/DC 440...480V	R3
AC/DC 500...550V	S3
AC/DC 575...600V	T3





Note: For further voltages, contact a sales representative.

3RT2/1 Contactors for Switching Motors

Accessories



7

For Contactors	Auxiliary contact Version	Order Number	Price List SGD
	   		

Auxiliary switch blocks for snapping onto the front according to EN50012
(also compliant with the requirements according to EN 50005)

Size S00 to S3, For assembling contactors with 2, 3, 4 or 5 auxiliary contacts

3RT20 1	--	1	3RH2911-1HA01	83.65
3RT20 2	--	2	3RH2911-1HA02	62.15
3RT20 3	--	3	3RH2911-1HA03	68.26
3RT20 4	1	--	3RH2911-1HA10	83.65
3RH21	1	1	3RH2911-1HA11	62.15
3RH24	1	2	3RH2911-1HA12	68.26
	1	3	3RH2911-1HA13	102.58
	2	--	3RH2911-1HA20	62.15
	2	1	3RH2911-1HA21	68.26
	2	2	3RH2911-1HA22	102.58
	3	--	3RH2911-1HA30	68.26
	3	1	3RH2911-1HA31	102.58

Auxiliary switch blocks for snapping onto the front according to EN5005

Size S00 to S3

2 or 4-pole auxiliary switch blocks for assembling contactors with
3, 5 or 6 auxiliary contacts

3RT2.1,	4	--	--	--	3RH2911-1FA40	102.58
3RT2. 2..	2	2	--	--	3RH2911-1FA22	102.58
3RT2. 3..	--	4	--	--	3RH2911-1FA04	102.58
3RT2. 4..	--	--	1	1	3RH2911-1FB11	98.08
3RH21, 3RH24	1	1	1	1	3RH2911-1FB22	147.37
	--	--	2	2	3RH2911-1FC22	131.44

Snap-on auxiliary switch blocks according to EN50011

For assembling contactors with 2, 3, 4 or 5 auxiliary contacts

For 3RH21 40	4	--			3RH2911-1GA40	82.15
For 3RH24 40	3	1			3RH2911-1GA31	82.15
	2	2			3RH2911-1GA22	82.15
	1	3			3RH2911-1GA13	82.15
	--	4			3RH2911-1GA04	82.15

Laterally mounted auxiliary switch blocks according to EN5005

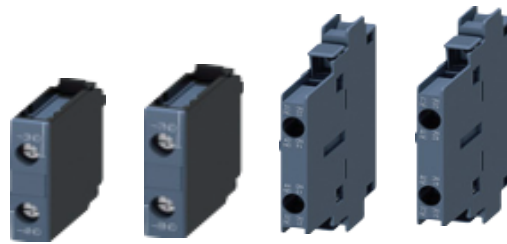
on the right and/or on the left

Size S00 to S3

3RT20 1	--	2			3RH2911-1DA02	66.70
3RT20 2	1	1			3RH2911-1DA11	66.70
3RT20 3	2	--			3RH2911-1DA20	66.70
3RT20 4						
	--	2			3RH2921-1DA02	66.70
	1	1			3RH2921-1DA11	66.70
	2	--			3RH2921-1DA20	66.70

3RT2/1 Contactors for Switching Motors

Accessories



7

For Contactors	Auxiliary Contacts				Order Number	Price List SGD
Ident. No.	Version					
	NO	NC	NO	NC		

Auxiliary switch blocks for snapping onto the front according to EN50012

Size S6 to S12,

4-pole auxiliary switch blocks

3RT1..5...	22	2	2	--	--	3RH1921-1XA22-0MA0	91.11
3RT1..7							

1-pole auxiliary switch blocks

	10	1	-	--	--	3RH1921-1CA10	26.64
	01	-	1	--	--	3RH1921-1CA01	26.64
	10	-	-	1	--	3RH1921-1CD10	44.56
	01	-	-	--	1	3RH1921-1CA01	26.64

Laterally mounted auxiliary switch blocks according to EN50012

Size S6 to S12

First laterally mountable auxiliary switch block (right or left), 2-pole

3RT1..5,...		1	1			3RH1921-1DA11	66.81
3RT1..7,							

Second laterally mountable auxiliary switch block (right or left), 2-pole

		1	1			3RH1921-1JA11	66.81
		1	1				

Laterally mounted auxiliary switch blocks according to EN50005

Size S6 to S12

First laterally mountable auxiliary switch block (right or left), 2-pole

3RT1..5,...		2	-			3RH1921-1EA20	66.81
3RT1..7,		1	1			3RH1921-1EA11	66.81
		-	2			3RH1921-1EA02	66.81

Second laterally mountable auxiliary switch block (right or left), 2-pole

		2	-			3RH1921-1KA20	69.70
		1	1			3RH1921-1KA11	69.70
		-	2			3RH1921-1KA02	69.70

3RT2/1 Contactors for Switching Motors

Accessories

For Contactors	Version	Rated control supply voltage Us AC operation		Power consumption P of the LED at Us mW	Order Number	Price List SGD
Type		V				

Surge suppressors with LED (also for spring-type terminals)



Size S00

For plugging onto the front side of the contactors with and without auxiliary switch block

3RT2.1,	Varistors	24...48	12...24	10...120	3RT2916-1JJ00	64.72
3RH2.		48...127	24...70	20...470	3RT2916-1JK00	64.72
		127...240	70...150	50...700	3RT2916-1JL00	64.72
			150...250	160...950	3RT2916-1JP00	64.72
3RT2.1,	Noise suppression	24...70		20...470	3RT2916-1LM00	64.72
3RH2	diodes	50...150		50...700	3RT2916-1LN00	64.72
		150...250		160...950	3RT2916-1LP00	64.72



Size S0

For plugging onto the front side of the contactors (prior to mounting of the auxiliary switch block)

3RT2.2	Varistors	24...48	12...24	10...120	3RT2926-1JJ00	77.67
		48...127	24...70	20...470	3RT2926-1JK00	77.67
		127...240	70...150	50...700	3RT2926-1JL00	77.67

Size S2 and S3

For plugging onto the front side of the contactors (prior to mounting of the auxiliary switch block)

3RT2.3	Varistors	24...48	12...24	10...120	3RT2936-1JJ00	73.34
3RT2.4		48...127	24...70	20...470	3RT2936-1JK00	75.24
		127...240	70...150	50...700	3RT2936-1JL00	76.67

3RT2/1 Contactors for Switching Motors

Accessories



7

For Contactors	Rated control supply voltage Us	Size	Time setting range t, s	Output/auxiliary contacts	Order Number	Price List SGD
Type	V		s			

Solid-state time-delay auxiliary switch blocks for snapping onto the front, terminal designations according to DIN 46199-5

Size S00 and S3

The electrical connection between the solid-state time delay auxiliary switch and the contactor underneath is established automatically when it is snapped on and locked

With ON-delay

3RT2..	24...240 AC / DC	0.05...100	1 CO	3RA2813-1AW10	330.30
3RH21		(1, 10, 100, selectable)	1NO + 1NC	3RA2813-1FW10	412.86
3RH24					

OFF-delay with auxiliary voltage

3RT2..	24...240 AC / DC	0.05...100	1 CO	3RA2814-1AW10	571.46
3RH21		(1, 10, 100, selectable)	1NO + 1NC	3RA2814-1FW10	628.61
3RH24					

OFF-delay without auxiliary voltage

3RT2..	24...240 AC / DC	0.05...100	1 CO	3RA2815-1AW10	342.34
3RH21		(1, 10, 100, selectable)	1NO + 1NC	3RA2815-1FW10	412.77
3RH24					

Size S6 and S12

ON-delay

3RT10, 3RT14	24 AC/DC	0.05 ...1	1NO + 1NC	3RT1926-2EJ11	496.84
		0.5...10		3RT1926-2EJ21	496.84
		5...1000		3RT1926-2EJ31	548.43
	100 ...127 AC	0.05 ...1	1NO + 1NC	3RT1926-2EC11	496.84
		0.5...10		3RT1926-2EC21	496.84
		5...1000		3RT1926-2EC31	548.43
	200 ...240 AC	0.05 ...1	1NO + 1NC	3RT1926-2ED11	496.84
		0.5...10		3RT1926-2ED21	496.84
		5...1000		3RT1926-2ED31	548.43

OFF-delay without control signal

3RT10, 3RT14	24 AC/DC	0.05 ...1	1NO + 1NC	3RT1926-2FJ11	544.13
		0.5...10		3RT1926-2FJ21	544.13
		5...1000		3RT1926-2FJ31	597.56
	100 ...127 AC	0.05 ...1	1NO + 1NC	3RT1926-2FK11	544.13
		0.5...10		3RT1926-2FK21	544.13
		5...1000		3RT1926-2FK31	597.56
	200 ...240 AC	0.05 ...1	1NO + 1NC	3RT1926-2FL11	544.13
		0.5...10		3RT1926-2FL21	544.13
		5...1000		3RT1926-2FL31	597.56

Star-delta (wye-delta) starting (varistor integrator)

3RT10,	24 AC/DC	1.5 ...30	1NO delayed + 1NO	3RT1926-2GJ51	540.44
3RT14	100 ...127 AC	1.5 ...30	instantaneous,	3RT1926-2GC51	540.44
	200 ...240 AC	1.5 ...30	dead time 50ms	3RT1926-2GD51	540.44

3RT2/1 Contactors for Switching Motors

Accessories

For Contactors	Version	Rated control supply voltage Us		Order Number	Price List SGD
		AC operation	DC operation		
Type		V	V		

Surge suppressors without LED (also for spring-type terminals)



Size S00

For plugging onto the front side of the contactors with and without auxiliary switch block

3RT2.1, 3RH2.	Varistors	24...48	24...70	3RT2916-1BB00	48.89
		48...127	70...150	3RT2916-1BC00	48.89
		127...240	150...250	3RT2916-1BD00	48.89
		240...400	--	3RT2916-1BE00	48.89
		400...600	--	3RT2916-1BF00	48.89
3RT2.1, 3RH2.	RC Elements	24...48	24...70	3RT2916-1CB00	48.89
		48...127	70...150	3RT2916-1CC00	48.89
		127...240	150...250	3RT2916-1CD00	48.89
		240...400	--	3RT2916-1CE00	48.89
		400...600	--	3RT2916-1CF00	48.89
3RT2.1, 3RH2.	Noise suppression diodes		12...250	3RT2916-1DG00	48.89

Size S0

For plugging onto the front side of the contactors (prior to mounting of the auxiliary switch block)



3RT2.2	Varistors	24...48	24...70	3RT2926-1BB00	59.74
		48...127	70...150	3RT2926-1BC00	59.74
		127...240	150...250	3RT2926-1BD00	59.74
		240...400	--	3RT2926-1BE00	59.74
		400...600	--	3RT2926-1BF00	59.74
3RT2.2	RC Elements	24...48	24...70	3RT2926-1CB00	75.68
		48...127	70...150	3RT2926-1CC00	75.68
		127...240	150...250	3RT2926-1CD00	75.68
		240...400	--	3RT2926-1CE00	75.68
		400...600	--	3RT2926-1CF00	75.68

Size S2 and S3

For plugging onto the front side of the contactors with and without auxiliary switch block



3RT2.3, 3RT2.4,	Varistors	24...48	--	3RT2936-1BB00	57.62
		48...127	--	3RT2936-1BC00	59.53
		127...240	--	3RT2936-1BD00	61.91
		240...400	--	3RT2936-1BE00	79.05
		400...600	--	3RT2936-1BF00	80.96
3RT2.3,	RC Elements	24...48	24...70	3RT2936-1CB00	73.81
		48...127	70...150	3RT2936-1CC00	93.34
		127...240	150...250	3RT2936-1CD00	80.00
		240...400	--	3RT2936-1CE00	98.10
		400...600	--	3RT2936-1CF00	98.10
3RT2.4,	RC Elements	24...48	24...70	3RT2946-1CB00	75.68
		48...127	70...150	3RT2946-1CC00	95.59
		127...240	150...250	3RT2946-1CD00	81.15
		240...400	--	3RT2946-1CE00	100.07
		400...600	--	3RT2946-1CF00	100.07

Size S6 to S12

For connecting to withdrawable coil for contactors



3RT1.5 3RT1.7	RC Elements			3RT1956-1CB00	181.22
		24...48	24...70	3RT1956-1CC00	181.22
		48...127	70...150	3RT1956-1CD00	181.22
		127...240	150...250	3RT1956-1CE00	181.22
		240...400	--	3RT1956-1CF00	181.22
		400...600	--		

3RT2/1 Contactors for Switching Motors

Accessories



For Contactors	Rated control supply voltage Us	Size	Time setting range t, s	Order Number	Price List SGD
Type	V		s		

OFF-delay devices for contactors with AC/DC and DC Operation

Size S00 and S3

Non-adjustable delay time

3RT2. 1.-1BF4..	110 AC/DC		S00: >0.1	3RT2916-2BK01	590.51
3RT2. 2.-1BF4.			S0: >0.08		
3RT2. 3.-1NF3..			S2: >0.25		
3RH2...1BF40					
3RT2. 1.-1BM4../1BP4.	220/230 AC/DC		S00: >0.1	3RT2916-2BL01	590.51
3RT2. 2.-1BM4./1BP4.			S0: >0.08		
3RT2. 3.-1NP3..			S2: >0.25		
3RH2...1BM40/1BP40					
3RT2. 1.-1NB3..	24 DC		S00: >0.2	3RT2916-2BE01	590.51
3RT2. 2.-1NB3..			S0: >0.1		
3RT2. 3.-1NB3..			S2: >0.1		
3RT2. 4.-1NB3..			S3: >0.05		
3RT244.-1NB3..					
3RH2...1BB40					

Delay blocks - For snapping onto the front of contactors

Solid-state timing relays with semiconductor output

Sizes S00 and S0

ON-delay

Two-wire design, varistor integrated		0.05...100			
3RT20 1.., 3RT20 2..	24...240 AC/DC	(1, 10, 100, selectable)		3RA2811-1CW10	314.30
3RH21, 3RH24					
Sizes S2 and S3	24...90	0.05...100		3RA2831-1DG10	345.26
3RT20 3..,	90...240 AC/DC	(1, 10, 100, selectable)		3RA2831-1DH10	345.26
3RT20 4..,					

Sizes S2 and S0

OFF-delay with control signal

3RT20 1.., 3RT20 2..	24...240 AC/DC	0.05...100		3RA2812-1DW10	414.31
3RH21, 3RH24		(1, 10, 100, selectable)			
Sizes S2 and S3	24...90	0.05...100		3RA2832-1DG10	450.03
3RT20 3..,	90...240 AC/DC	(1, 10, 100, selectable)		3RA2832-1DH10	450.03
3RT20 4..,					

Mechanical latching blocks

Size S0

For snapping onto the front of contactors

The contactor remains in the energized state even after a voltage failure

3RT202.	24 AC / DC	--		3RT2926-3AB31	511.72
3RT232.	110 AC/ DC	--		3RT2926-3AF31	511.72
3RT252.	230 AC/ DC	--		3RT2926-3AP31	511.72

3RT2/1 Contactors for Switching Motors

Accessories



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For Contactors	Time setting range t	Auxiliary Contact		Order Number	Price List SGD
Type	s	NO	NC		

Pneumatic time-delay auxiliary switch blocks for mounting on 3RT2 contactors

Size S0

ON-delay

3RT20 2	0.1...30	1	1	3RT2926-2PA01	596.43
	1...60	1	1	3RT2926-2PA11	596.43

OFF-delay

3RT20 2	0.1...30	1	1	3RT2926-2PR01	635.82
	1...60	1	1	3RT2926-2PR11	635.82

3RU2/1

Thermal Overload Relays



DESCRIPTION

The 3RU21 thermal overload relays up to 40A have been designed for inverse-time delayed protection of load with normal starting against excessive temperature rises due to overload or phase failure.

The 3RU11 thermal overload relays up to 100A have been designed for inverse-time delayed protection of load with normal starting against excessive temperature rises due to overload or phase failure.

STANDARDS

- IEC60947-4-1
- IEC60947-1

IMPORTANT FEATURES

- Overload and phase failure protection
- Auxiliary contacts 1 NO + 1 NC
- Manual and automatic RESET
- Switch position indicators
- TEST function
- STOP button
- Screw or spring-type terminals
- Sealable covers (optional accessory)

3RU2/1 Thermal Overload Relays

For Standard Application

3RU21 thermal overload relays for mounting onto contactor, CLASS 10



7

Size	Rating for three-phase motor, rated value	Current setting value of the inverse-time delayed overload release	Short-circuit protection with fuse, type of coordination "2" operational class gG	Order Number	Price List SGD
Contactor	kW	A			
Size S00					
	0.04	0.11...0.16	0.5	3RU2116-0AB0	194.35
	0.06	0.14...0.2	1	3RU2116-0BB0	194.35
	0.06	0.18...0.25	1	3RU2116-0CB0	194.35
	0.09	0.22...0.32	1.6	3RU2116-0DB0	194.35
	0.09	0.28...0.4	2	3RU2116-0EB0	194.35
	0.12	0.35...0.5	2	3RU2116-0FB0	194.35
	0.18	0.45...0.63	2	3RU2116-0GB0	194.35
	0.18	0.55...0.8	4	3RU2116-0HB0	194.35
	0.25	0.7...1	4	3RU2116-0JB0	194.35
	0.37	0.9...1.25	4	3RU2116-0KB0	194.35
	0.55	1.1...1.6	6	3RU2116-1AB0	194.35
	0.75	1.4...2	6	3RU2116-1BB0	194.35
	0.75	1.8...2.5	10	3RU2116-1CB0	194.35
	1.1	2.2...3.2	10	3RU2116-1DB0	194.35
	1.5	2.8...4	16	3RU2116-1EB0	194.35
	1.5	3.5...5	20	3RU2116-1FB0	194.35
	2.2	4.5...6.3	20	3RU2116-1GB0	194.35
	3	5.5...8	25	3RU2116-1HB0	194.35
	4	7...10	35	3RU2116-1JB0	194.35
	5.5	9...12.5	35	3RU2116-1KB0	194.35
	7.5	11...16	40	3RU2116-4AB0	234.20
Size S0					
	7.5	14...20	50	3RU2126-4BB0	265.48
	11	17...22	63	3RU2126-4CB0	268.91
	11	20...25	63	3RU2126-4DB0	351.39
	15	23...28	63	3RU2126-4NB0	351.31
	15	27...32	80	3RU2126-4EB0	351.31
	18.5	30...26	80	3RU2126-4PB0	351.31
	18.5	34...40	80	3RU2126-4FB0	547.88

3RU2/1 Thermal Overload Relays

For Standard Application

3RU21 thermal overload relays for mounting onto contactor, CLASS 10



7

Size	Rating for three-phase motor, rated value	Current setting value of the inverse-time delayed overload release	Short-circuit protection with fuse, type of coordination "2" operational class gG	Order Number	Price List SGD
Contactor	kW	A			
Size S2					
	18.5	28 ... 40	80	3RU2136-4FB0	569.74
	22	36 ... 45	100	3RU2136-4GB0	588.79
	22	40 ... 50	100	3RU2136-4HB0	586.25
	30	47 ... 57	100	3RU2136-4QB0	602.65
	30	54 ... 65	125	3RU2136-4JB0	602.65
	37	62 ... 73	160	3RU2136-4KB0	726.67
	37	70 ... 80	160	3RU2136-4RB0	743.55
Size S3					
	45	70 ... 90	160	3RU2146-4LB0	801.82
	45	80 ... 100	200	3RU2146-4MB0	1,362.42

3RU2/1 Thermal Overload Relays

For Standard Application

3RU21 thermal overload relays for stand-alone installation, CLASS 10



7

Size	Rating for three-phase motor, rated value	Current setting value of the inverse-time delayed overload release	Short-circuit protection with fuse, type of coordination "2" operational class gG	Order Number	Price List SGD
	kW	A			
Size S00					
	0.04	0.11....0.16	0.5	3RU2116-0AB1	395.48
	0.06	0.14....0.2	1	3RU2116-0BB1	395.48
	0.06	0.18....0.25	1	3RU2116-0CB1	395.48
	0.09	0.22....0.32	1.6	3RU2116-0DB1	395.48
	0.09	0.28....0.4	2	3RU2116-0EB1	395.48
	0.12	0.35....0.5	2	3RU2116-0FB1	395.48
	0.18	0.45....0.63	2	3RU2116-0GB1	395.48
	0.18	0.55....0.8	4	3RU2116-0HB1	395.48
	0.25	0.7....1	4	3RU2116-0JB1	395.48
	0.37	0.9....1.25	4	3RU2116-0KB1	395.48
	0.55	1.1....1.6	6	3RU2116-1AB1	395.48
	0.75	1.4....2	6	3RU2116-1BB1	395.48
	0.75	1.8....2.5	10	3RU2116-1CB1	395.48
	1.1	2.2....3.2	10	3RU2116-1DB1	395.48
	1.5	2.8....4	16	3RU2116-1EB1	395.48
	1.5	3.5....5	20	3RU2116-1FB1	395.48
	2.2	4.5....6.3	20	3RU2116-1GB1	395.48
	3	5.5....8	25	3RU2116-1HB1	395.48
	4	7....10	35	3RU2116-1JB1	395.48
	5.5	9....12.5	35	3RU2116-1KB1	395.48
	7.5	11....16	40	3RU2116-4AB1	395.48
Size S0					
	7.5	14....20	50	3RU2126-4BB1	422.91
	11	17....22	63	3RU2126-4CB1	422.91
	11	20....25	63	3RU2126-4DB1	422.91
	15	23....28	63	3RU2126-4NB1	610.81
	15	27...32	80	3RU2126-4EB1	610.81
	18.5	30...26	80	3RU2126-4PB1	610.81
	18.5	34...40	80	3RU2126-4FB1	610.81

3RU2/1 Thermal Overload Relays

For Standard Application

3RU21 thermal overload relays for stand-alone installation, CLASS 10 Or 10A



7



Size Contactor	Rating for three-phase motor, rated value kW	Current setting value of the inverse- time delayed overload release A	Short-circuit protection with fuse, type of coordination "2" operational class gG	Order Number	Price List SGD
Size S2					
	22	36 ... 45	100	3RU2136-4GB1	760.93
	22	40 ... 50	100	3RU2136-4HB1	905.87
	30	47 ... 57	100	3RU2136-4QB1	905.87
	30	54 ... 65	125	3RU2136-4JB1	936.92
	37	62 ... 73	160	3RU2136-4KB1	936.92
	37	70 ... 80	160	3RU2136-4RB1	1,050.81
Size S3					
	45	70 ... 90	160	3RU2146-4LB1	1,045.63
	45	80 ... 100	200	3RU2146-4MB1	1,319.98

3RU2/1 Thermal Overload Relays


For Standard Application Accessories

Version	Size	Order Number	Price List SGD
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Terminal brackets for stand-alone installation

 3RU2916-3AA01	For separate mounting of the overload relays; screw and snap-on mounting onto TH35 standard mounting rail	S00	3RU2916-3AA01	67.23
		S0	3RU2926-3AA01	81.23
		S2	3RU2936-3AA01	109.80
		S3	3RU2946-3AA01	142.86
 3RU2926-3AA01				


Mechanical RESET

 3RU2900-1A with pushbutton and extension plunger	Resetting plungers, holders and formers	S00... S3	3RU2900-1A	26.10
	Pushbuttons with extended stroke (12mm), IP65, Ø 22 mm	S00... S3	3SU1200-0FB10-0AA0	155.01
	Extension plungers For distance between the pushbutton and the	S00... S3	3SU1900-0KG10-0AA0	13.07

Cable releases with holder for RESET

	For Ø 6.5 mm hole in the control panel; max. control panel thickness 8 mm			
	• Length 400 mm	S00... S3	3RU2900-1B	255.30
	• Length 600 mm	S00... S3	3RU2900-1C	255.30

Modules for remote RESET, electrical

	Operating range 0.85 ... 1.1 x Us, power consumption AC 80 VA, DC 70 W, ON period 0.2 ... 4 s, switching frequency 60/h			
	• 24 ... 30 V AC/DC	S00... S3	3RU1900-2AB71	237.18
	• 110 ... 127 V AC/DC	S00... S3	3RU1900-2AF71	237.18
	• 220 ... 250 V AC/DC	S00... S3	3RU1900-2AM71	237.18

3RV2/1

Motor Starter Protectors



DESCRIPTION

3RV2 motor starter protectors are compact, current limiting motor starter protectors which are optimized for load feeders. The motor starter protectors are used for switching and protecting three-phase motors of up to 55/45 kW at 400V AC and other loads with rated currents of up to 100A.

The 3RV2 motor starter protectors are available in four sizes:

- Size S00 - width 45 mm, max. rate current 16A at 400 VAC suitable for three-phase motors up to 7.5kW
- Size S0 - width 45 mm, max. rate current 40A at 400 VAC suitable for three-phase motors up to 18.5kW
- Size S2 - width 55 mm, max. rate current 80A at 400 VAC suitable for three-phase motors up to 37kW
- Size S3 - width 70 mm, max. rate current 100A at 400 VAC suitable for three-phase motors up to 45/55kW

3RV2 motor starter protectors can be supplied with screw terminals and spring-type terminals.

STANDARDS

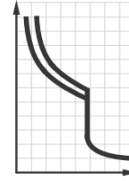
- IEC60947-4-1
- IEC60947-2
- EN50581

KEY USES

- For short-circuit protection, system protection, transformer protection and distance protection
- For motor protection (also with overload relay function)
- As main and EMERGENCY STOP switches
- For operation in IT systems (IT networks) and for fuse monitoring
- For switching of DC currents
- In areas subject to explosion hazard (ATEX)
- As circuit breakers according to UL 489 (3RV27 and 3RV28)

3RV2/1 Motor Starter Protectors

3RV2 Motor Starter Protectors, Class 10, without auxiliary switches
For motor protection



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Size	Rated current A	Suitable for 3 Ph induction motors with P kW	Setting range for thermal overload release A	Instantaneous overcurrent release A	Short circuit breaking capacity at 400 V AC kA	Order Number	Price List SGD
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Size S00



0.16	0.04	0.11...0.16	2.1	100	3RV2011-0AA10	319.88
0.2	0.06	0.14...0.20	2.6	100	3RV2011-0BA10	319.88
0.25	0.06	0.18...0.25	3.3	100	3RV2011-0CA10	319.88
0.32	0.09	0.22...0.32	4.2	100	3RV2011-0DA10	319.84
0.4	0.09	0.28...0.40	5.2	100	3RV2011-0EA10	319.84
0.5	0.12	0.35...0.50	6.5	100	3RV2011-0FA10	319.84
0.63	0.18	0.45...0.63	8.2	100	3RV2011-0GA10	319.74
0.8	0.18	0.55...0.80	10	100	3RV2011-0HA10	319.71
1	0.25	0.7...1	13	100	3RV2011-0JA10	319.71
1.25	0.37	0.9...1.25	16	100	3RV2011-0KA10	319.67
1.6	0.55	1.1...1.6	21	100	3RV2011-1AA10	319.67
2	0.75	1.4...2	26	100	3RV2011-1BA10	319.76
2.5	0.75	1.8...2.5	33	100	3RV2011-1CA10	319.76
3.2	1.1	2.2...3.2	42	100	3RV2011-1DA10	319.76
4	1.5	2.8...4	52	100	3RV2011-1EA10	319.76
5	1.5	3.5...5	65	100	3RV2011-1FA10	319.76
6.3	2.2	4.5...6.3	82	100	3RV2011-1GA10	319.76
8	3	5.5...8	104	100	3RV2011-1HA10	403.34
10	4	7...10	130	100	3RV2011-1JA10	403.17
12.5	5.5	9...12.5	163	100	3RV2011-1KA10	422.35
16	7.5	10...16	208	55	3RV2011-4AA10	422.42

Size S0



20	7.5	14...20		55	3RV2021-4BA10	466.12
22	11	17...22		55	3RV2021-4CA10	480.39
25	11	20...25		55	3RV2021-4DA10	544.79
28	15	23...28		55	3RV2021-4NA10	623.68
32	15	27...32		55	3RV2021-4EA10	623.68
36	18.5	30...36		20	3RV2021-4PA10	1,060.20
40	18.5	34...60		20	3RV2021-4FA10	1,063.99

Size S2



45	22	35...45	650	65	3RV2031-4VA10	1,255.73
52	22	42...52	741	65	3RV2031-4WA10	1,255.09
59	30	49...59	845	65	3RV2031-4XA10	1,430.06
65	30	54...65	845	65	3RV2031-4JA10	1,430.06
73	37	62...73	949	65	3RV2031-4KA10	1,503.08
80	37	70...80	1040	65	3RV2031-4RA10	1,800.69

Size S3



84	45	65...84	1170	65	3RV2041-4RA10	1,826.43
93	45	75...93	1300	65	3RV2041-4YA10	1,881.20
100	45, 55	80...100	1300	65	3RV2041-4MA10	1,937.89

3RV2/1 Motor Starter Protectors

3RV2 Motor Starter Protectors, Class 10, with overload relay function (automatic RESET), without auxiliary switches
For motor protection with overload relay function



Size	Rated current A	Suitable for 3 Ph induction motors with P kW	Setting range for thermal overload release A	Instantaneous overcurrent release A	Short circuit breaking capacity at 400 V AC kA	Order Number	Price List SGD
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Size S00



0.16	0.04	0.11...0.16	2.1	100	3RV2111-0AA10	508.31
0.2	0.06	0.14...0.20	2.6	100	3RV2111-0BA10	508.31
0.25	0.06	0.18...0.25	3.3	100	3RV2111-0CA10	508.31
0.32	0.09	0.22...0.32	4.2	100	3RV2111-0DA10	508.31
0.4	0.09	0.28...0.40	5.2	100	3RV2111-0EA10	508.31
0.5	0.12	0.35...0.50	6.5	100	3RV2111-0FA10	508.31
0.63	0.18	0.45...0.63	8.2	100	3RV2111-0GA10	508.31
0.8	0.18	0.55...0.80	10	100	3RV2111-0HA10	508.31
1	0.25	0.7...1	13	100	3RV2111-0JA10	507.87
1.25	0.37	0.9...1.25	16	100	3RV2111-0KA10	507.87
1.6	0.55	1.1...1.6	21	100	3RV2111-1AA10	507.87
2	0.75	1.4...2	26	100	3RV2111-1BA10	507.45
2.5	0.75	1.8...2.5	33	100	3RV2111-1CA10	507.45
3.2	1.1	2.2...3.2	42	100	3RV2111-1DA10	507.45
4	1.5	2.8...4	52	100	3RV2111-1EA10	507.45
5	1.5	3.5...5	65	100	3RV2111-1FA10	507.45
6.3	2.2	4.5...6.3	82	100	3RV2111-1GA10	507.45
8	3	5.5...8	104	100	3RV2111-1HA10	640.09
10	4	7...10	130	100	3RV2111-1JA10	643.52
12.5	5.5	9...12.5	163	100	3RV2111-1KA10	674.16
16	7.5	11...16	208	55	3RV2111-4AA10	674.16

Size S0



16	7.5	11...16	208	55	3RV2121-4AA10	741.55
20	7.5	14...20	260	55	3RV2121-4BA10	673.36
22	11	17...22	286	55	3RV2121-4CA10	762.23
25	11	20...25	325	55	3RV2121-4DA10	864.32
28	15	23...28	364	55	3RV2121-4NA10	992.10
32	15	27...32	400	55	3RV2121-4EA10	992.10

Size S2



14	5.5	9.5...14	208	65	3RV2131-4SA10	808.96
17	7.5	12...17	260	65	3RV2131-4TA10	808.96
20	7.5	14...20	260	65	3RV2131-4BA10	808.96
25	11	18...25	325	65	3RV2131-4DA10	1,042.57
32	15	22...32	416	65	3RV2131-4EA10	1,715.62
36	18.5	28...36	520	65	3RV2131-4PA10	1,689.51
40	18.5	32...40	585	65	3RV2131-4UA10	1,693.33
45	22	35...45	650	65	3RV2131-4VA10	1,993.17
52	22	42...52	741	65	3RV2131-4WA10	1,992.15
59	30	49...59	845	65	3RV2131-4XA10	2,275.63
65	30	54...65	845	65	3RV2131-4JA10	2,275.63
73	37	62...73	949	65	3RV2131-4KA10	2,391.86
80	37	70...80	1040	65	3RV2131-4RA10	2,867.99

Size S3, with increased switching capacity



40	18.5	28...40	520	100	3RV2142-4FA10	2,751.34
50	22	36...50	650	100	3RV2142-4HA10	2,751.34
63	30	45...63	819	100	3RV2142-4JA10	2,891.24
75	37	57...75	975	100	3RV2142-4KA10	3,031.14
84	45	65...84	1170	100	3RV2142-4RA10	3,009.07
93	45	75...93	1300	100	3RV2142-4YA10	2,735.52
100	45	80...100	1300	100	3RV2142-4MA10	3,162.55

3RV2/1 Motor Starter Protectors

3RV2 Motor Starter Protectors, Class 10, without auxiliary switches
For starter combinations



7

Size	Rated current A	Suitable for 3 Ph induction motors with P kW	Setting range for thermal overload release A	Instantaneous overcurrent release A	Short circuit breaking capacity at 400 V AC kA	Order Number	Price List SGD
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Size S00 *Class 10, without auxiliary switches*



0.16	0.04	without	2.1	100	3RV2311-0AC10	339.54
0.2	0.06	without	2.6	100	3RV2311-0BC10	339.54
0.25	0.06	without	3.3	100	3RV2311-0CC10	339.54
0.32	0.09	without	4.2	100	3RV2311-0DC10	339.54
0.4	0.09	without	5.2	100	3RV2311-0EC10	339.54
0.5	0.12	without	6.5	100	3RV2311-0FC10	339.54
0.63	0.18	without	8.2	100	3RV2311-0GC10	339.54
0.8	0.18	without	10	100	3RV2311-0HC10	339.54
1	0.25	without	13	100	3RV2311-0JC10	339.54
1.25	0.37	without	16	100	3RV2311-0KC10	339.54
1.6	0.55	without	21	100	3RV2311-1AC10	339.54
2	0.75	without	26	100	3RV2311-1BC10	339.54
2.5	0.75	without	33	100	3RV2311-1CC10	339.54
3.2	1.1	without	42	100	3RV2311-1DC10	424.01
4	1.5	without	52	100	3RV2311-1EC10	424.01
5	1.5	without	65	100	3RV2311-1FC10	424.01
6.3	2.2	without	82	100	3RV2311-1GC10	424.01
8	3	without	104	100	3RV2311-1HC10	424.01
10	4	without	130	100	3RV2311-1JC10	424.01
12.5	5.5	without	163	100	3RV2311-1KC10	424.01
16	7.5	without	208	55	3RV2311-4AC10	424.01

Size S0 *Class 10, without auxiliary switches*



20	7.5	without	260	55	3RV2321-4BC10	424.01
22	11	without	286	55	3RV2321-4CC10	424.01
25	11	without	325	55	3RV2321-4DC10	424.01
28	15	without	364	55	3RV2321-4NC10	546.39
32	15	without	400	55	3RV2321-4EC10	989.35
36	18.5	without	432	20	3RV2321-4PC10	989.35
40	18.5	without	480	20	3RV2321-4FC10	989.35

Size S2



45	22	without	650	65	3RV2331-4VC10	1,063.11
52	22	without	741	65	3RV2331-4WC10	1,063.11
59	30	without	845	65	3RV2331-4XC10	1,139.34
65	30	without	845	65	3RV2331-4JC10	1,139.34
73	37	without	949	65	3RV2331-4KC10	1,225.87
80	37	without	1040	65	3RV2331-4RC10	1,225.87

Size S3

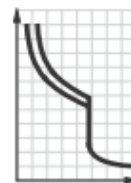


84	45	without	1170	65	3RV2341-4RC10	1,250.60
93	45	without	1300	65	3RV2341-4YC10	1,429.63
100	45, 55	without	1300	65	3RV2341-4MC10	1,573.06

3RV2/1 Motor Starter Protectors

**3RV2 Motor Starter Protectors, Class 10, without auxiliary switches
For transformer protection**

Motor starter protectors for the protection of transformers with high inrush current



Size	Rated current A	Setting range for thermal overload release A	Instantaneous overcurrent release A	Short circuit breaking capacity at 400 V AC kA	Order Number	Price List SGD
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Size S00



0.16	0.11...0.16	3.2	100	3RV2411-0AA10	524.62
0.2	0.14...0.20	4.2	100	3RV2411-0BA10	524.62
0.25	0.18...0.25	5.2	100	3RV2411-0CA10	524.62
0.32	0.22...0.32	6.5	100	3RV2411-0DA10	524.62
0.4	0.28...0.40	8.2	100	3RV2411-0EA10	524.62
0.5	0.35...0.50	10	100	3RV2411-0FA10	524.62
0.63	0.45...0.63	13	100	3RV2411-0GA10	524.62
0.8	0.55...0.80	16	100	3RV2411-0HA10	524.62
1	0.7...1	21	100	3RV2411-0JA10	556.42
1.25	0.9...1.25	26	100	3RV2411-0KA10	556.42
1.6	1.1...1.6	33	100	3RV2411-1AA10	556.42
2	1.4...2	42	100	3RV2411-1BA10	556.42
2.5	1.8...2.5	52	100	3RV2411-1CA10	556.42
3.2	2.2...3.2	65	100	3RV2411-1DA10	489.65
4	2.8...4	82	100	3RV2411-1EA10	489.65
5	3.5...5	104	100	3RV2411-1FA10	489.65
6.3	4.5...6.3	130	100	3RV2411-1GA10	489.65
8	5.5...8	163	100	3RV2411-1HA10	489.65
10	7...10	208	100	3RV2411-1JA10	540.94
12.5	9...12.5	260	100	3RV2411-1KA10	540.94
16	10...16	286	55	3RV2411-4AA10	540.94

Size S0



20	13...20	325	55	3RV2421-4BA10	567.76
22	16...22	364	55	3RV2421-4CA10	606.23
25	18...25	400	55	3RV2421-4DA10	693.67

Size S2



32	22...32	656	65	3RV2431-4EA10	1,369.84
36	28...36	820	65	3RV2431-4PA10	1,468.94
40	32...40	820	65	3RV2431-4UA10	1,556.38
45	35...45	922	65	3RV2431-4VA10	1,788.48
52	42...52	1025	65	3RV2431-4WA10	1,841.47
59	49...59	1040	65	3RV2431-4XA10	1,848.10
65	54...65	1040	65	3RV2431-4JA10	1,626.32

3RV2/1 Motor Starter Protectors

Accessories

Version	Contact	For motor starter protectir/circuit breakers Size	Order Number	Price List SGD
 Transverse auxiliary switches	1 CO	S00...S3	3RV2901-1D	49.45
	1 NO + 1 NC		3RV2901-1E	56.35
	2 NO		3RV2901-1F	56.35
 Solid-state compatible transverse auxiliary switches	1 CO	S00...S3	3RV2901-1G	219.39
 Cover for transverse auxiliary switches		S00...S3	3RV2901-0H	31.01
 Lateral auxiliary switches with screw terminals mountable on the left	1NO + 1NC	S00...S3	3RV2901-1A	70.69
	2NO		3RV2901-1B	70.69
	2NC		3RV2901-1C	70.69
	2NO + 2NC		3RV2901-1J	159.66
 Signaling Switches One signal switch can be mounted on the left per motor starter protector Separated tripped and short- circuit alarms 1NO+ 1NC	1NO + 1NC	S00...S3	3RV2921-1M	136.51
 Isolator Modules Visible isolating distance for isolating individual motor starter protectors from the network, lockable in disconnected position		S00, S0	3RV2928-1A	291.30
		S2	3RV2938-1A	490.57

3RV2/1 Motor Starter Protectors

Accessories

Version	Contact	For motor starter protectir/circuit breakers Size	Order Number	Price List SGD
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Undervoltage trip units

Rated control supply voltage V AC 50 Hz

24		S00....S3	3RV2902-1AB0	195.50
110		S00....S3	3RV2902-1AF0	195.50
230		S00....S3	3RV2902-1AP0	195.50
400		S00....S3	3RV2902-1AV0	195.50
415		S00....S3	3RV2902-1AV1	195.50
500		S00....S3	3RV2902-1AS0	202.85

Rated control supply voltage V DC

24		S00....S3	3RV2902-1AB4	588.74
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Undervoltage trip units with leading auxiliary contacts 2NO

Rated control supply voltage V AC 50 Hz

230		S00....S3	3RV2922-1CP0	285.63
400		S00....S3	3RV2922-1CV0	285.63
415		S00....S3	3RV2922-1CV1	285.63

Rated control supply voltage V DC

24		S00....S3	3RV2922-1CB0	285.63
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Shunt trip units

Rated control supply voltage V AC 50 Hz, 100% on period

20...24		S00....S3	3RV2902-1DB0	202.85
90...110		S00....S3	3RV2902-1DF0	202.85
210...240		S00....S3	3RV2902-1DP0	202.85
350...415		S00....S3	3RV2902-1DV0	202.85
500		S00....S3	3RV2902-1DS0	202.85

3RV2/1 Motor Starter Protectors

Accessories

Version	Colour of handle	Version of extension shaft (mm)	For motor starter protector/circuit breakers Size	Order Number	Price List SGD
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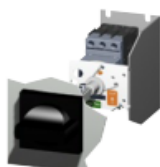
Door-coupling rotary operating mechanisms

Black	130	S00...S3	3RV2926-0B	299.62
	330	S00...S3	3RV2926-0K	352.66

EMERGENCY-STOP door-coupling rotary operating mechanisms

Red /	130	S00...S3	3RV2926-0C	347.42
Yellow	330	S00...S3	3RV2926-0L	402.79

Door-coupling rotary operating mechanisms for arduous conditions



3RV2926-2B

Door	Grey	330	S00, S0	3RV2926-2B	577.67
coupling rotary			S2	3RV2936-2B	629.54
operating			S3	3RV2946-2B	670.35
mechanisms					

Emergency	Red /	330	S00, S0	3RV2926-2C	629.54
STOP	Yellow		S2	3RV2936-2C	687.84
door-coupling			S3	3RV2946-2C	711.15
operating					
mechanisms					



Plug-in lugs			S00, S0	3RV2928-0B	231.42
For screwing the motor starter protector onto mounting plates					

For each motor starter protector
2 units are required




3RV2/1 Motor Starter Protectors

Accessories

Modular Spacing mm	Number of motor starter protectors that can be connected			Rated Current at 690V A	For motor starter protectir/circuit breakers Size	Order Number	Price List SGD
	Without lateral accessories	With lateral auxiliary switch	incl. auxiliary release				

Three-phase busbars

For feeding several motor starter protectors with screw terminals, mounted side by side on standard mounting rails, insulated, with touch protection

	45	2	--	--	63	S00, S0	3RV1915-1AB	76.84
		3	--	--	63	S00, S0	3RV1915-1BB	94.72
		4	--	--	63	S00, S0	3RV1915-1CB	103.33
		5	--	--	63	S00, S0	3RV1915-1DB	117.24
	55	--	2	--	63	S00, S0	3RV1915-2AB	75.51
		--	3	--	63	S00, S0	3RV1915-2BB	90.75
		--	4	--	63	S00, S0	3RV1915-2CB	102.67
		--	5	--	63	S00, S0	3RV1915-2DB	112.61
		2	--	--	108	S2	3RV1935-1A	145.73
		3	--	--	108	S2	3RV1935-1B	179.51
	63	--	--	2	63	S00, S0	3RV1915-3AB	79.49
		--	--	4	63	S00, S0	3RV1915-3CB	105.32
		2	--	--	108	S2	3RV1935-3A	174.21
	75	--	3	3	108	S2	3RV1935-3B	206.67
		--	4	4	108	S2	3RV1935-3C	240.45

Version	Modular Spacing mm	For motor starter protectir/circuit breakers Size	Order Number	Price List SGD
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For connecting three-phase busbars for motor starter protectors of size S0 (left) to size S00 (right)



	45	S00, S0	3RV1915-5DB	80.15
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Solid or stranded mm ²	Conductor cross-section		Tightening Torque	For motor starter protectir/circuit breakers Size	Order Number	Price List SGD
	Finely stranded with end sleeve mm ²	AWG cables solid or stranded AWG				

Connection from top

	2.5...25	4...16	10...4	4	S00	3RV1915-5A	73.15
	2.5...25	2.5...16	10...4	3...4	S00, S0	3RV2925-5AB	75.67
	2 X (2.5...50)	2 X (2.5...35)	2 X (10...1/0)	4...6	S2	3RV2935-5A	137.47
	1 X (2.5...70)	2 X (2.5...50)	1 X (10...2/0)				

Connection from below

Terminal is connected in place of a switch, take space requirement into account

	2.5...25	2.5...16	10...4	Input:4, Output: 2...2.5	S00, S0	3RV2915-5B	104.68
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3RH2

Contactor Relays



DESCRIPTION

3RH2 contactor relays have screw, ring terminal lug or spring-type terminals. The basic unit contains four contacts with terminal designations according to EN 50011.

The 3RH2 contactor relays are suitable for use in any climate. They are finger-safe according to EN50274.

The devices with ring terminal lug connection comply with degree of protection IP20 when fitted the related terminal cover.

STANDARDS

- IEC 60947-1, EN 60947-1
- IEC 60947-4-1, EN 60947-4-1
- IEC 60947-5-1, EN 60947-5-1

3RH2 Contactors Relays

3RH2 Contactor Relays, 4- and 8- pole



7

Rated data AC-15 Operational current le up to 230 V A	Contacts Ident. No.	Version		Rated Control Supply voltage Us at 50/60 Hz VAC	Order Number	Price List SGD
		NO	NC			

AC operation - 50/60 Hz

10	40E	4	--	24	3RH2140-1AB00	180.49
				110	3RH2140-1AF00	180.49
				230	3RH2140-1AP00	180.49
	31E	3	1	24	3RH2131-1AB00	180.49
				110	3RH2131-1AF00	180.49
				230	3RH2131-1AP00	180.49
	22E	2	2	24	3RH2122-1AB00	180.49
				110	3RH2122-1AF00	180.49
				230	3RH2122-1AP00	180.49

• with permanently mounted auxiliary switch block

10	44E	4	4	230	3RH2244-1AP00	295.26
	62E	6	2	230	3RH2262-1AP00	295.26

DC operation - DC solenoid system

10	40E	4	--	24	3RH2140-1BB40	209.06
				220	3RH2140-1BM40	209.06
	31E	3	1	24	3RH2131-1BB40	209.06
				220	3RH2131-1BM40	209.06
	22E	2	2	24	3RH2122-1BB40	209.06
				220	3RH2122-1BM40	209.06

• with permanently mounted auxiliary switch block



10	44E	4	4	24	3RH2244-1BB40	320.49
	62E	6	2	24	3RH2262-1BB40	320.49

3RH2 Contactors Relays

3RH24 latched contactor relays, 4-pole



7

Rated data AC-15 Operational current le up to	Contacts Ident. No.	Version		Rated Control Supply voltage Us at 50/60 Hz	Order Number	Price List SGD
		NO	NC			
230 V A				VAC		

AC operation - 50/60 Hz

10	40E	4	--	24	3RH2440-1AB00	619.08
				110	3RH2440-1AF00	619.08
				230	3RH2440-1AP00	619.08
	31E	3	1	24	3RH2431-1AB00	619.08
				110	3RH2431-1AF00	619.08
				230	3RH2431-1AP00	619.08
	22E	2	2	24	3RH2422-1AB00	619.08
				110	3RH2422-1AF00	619.08
				230	3RH2422-1AP00	619.08

DC operation - DC solenoid system

10	40E	4	--	24	3RH2440-1BB40	652.42
				110	3RH2440-1BF40	652.42
				220	3RH2440-1BM40	652.42
	31E	3	1	24	3RH2431-1BB40	652.42
				110	3RH2431-1BF40	652.42
				220	3RH2431-1BM40	652.42
	22E	2	2	24	3RH2422-1BB40	652.42
				110	3RH2422-1BF40	652.42
				220	3RH2422-1BM40	652.42

3RA23/13

Reversing Contactor Assemblies



DESCRIPTION

3RA23 contactor assemblies have screw or spring-type terminals (main and control current) and are suitable for screwing or snapping onto TH35 standard mounting rails.

The fully wired reversing contactor assemblies are suitable for use in any climate. They are finger-safe according to EN50274.

The contactor assemblies size S00 and S0 each consist of two contactors with the same power, with one NC contact (S00) or one NO contact and one NC contact (S0) in the basic unit.

The contactors are mechanically and electrically interlocked (NC contact interlock).

For motor protection, either 3RU2 or 3RB3 overload relays for direct mounting or stand-alone installation, or 3RN1 thermistor motor protection releases must be ordered separately.

The reversing contactor assemblies with communication interface are required for mounting the function modules for connection to the control system

STANDARDS

- IEC60947-4-1
- IEC60947-5-1, EN50581:2012

3RA23/13 Reversing Contactor Assemblies



7

Size	Rated data AC-2 and AC-3 Operational current le up to	Rating of introduction motors at 50 Hz and	Rated Control Supply voltage Us at 50/60 Hz	Order Number	Price List SGD
	400 V A	400V kW	V		

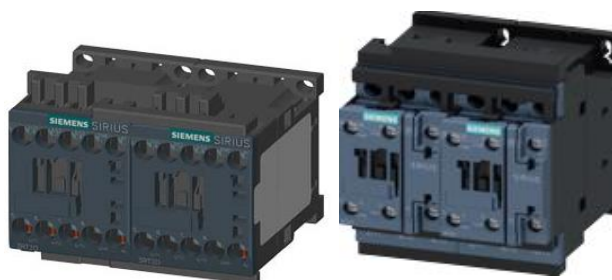
AC operation, 50/60 Hz

S00	7	3	110	3RA2315-8XB30-1AF0	528.60
			230	3RA2315-8XB30-1AP0	528.60
	9	4	110	3RA2316-8XB30-1AF0	557.18
			230	3RA2316-8XB30-1AP0	557.18
	12	5.5	110	3RA2317-8XB30-1AF0	642.89
			230	3RA2317-8XB30-1AP0	642.89
	16	7.5	110	3RA2318-8XB30-1AF0	747.66
			230	3RA2318-8XB30-1AP0	747.66
S0	12	5.5	110	3RA2324-8XB30-1AG2	747.66
			230	3RA2324-8XB30-1AL2	747.66
	17	7.5	110	3RA2325-8XB30-1AG2	900.05
			230	3RA2325-8XB30-1AL2	900.05
	25	11	110	3RA2326-8XB30-1AG2	1,104.83
			230	3RA2326-8XB30-1AL2	1,104.83
	32	18.5	110	3RA2327-8XB30-1AG2	1,466.75
			230	3RA2327-8XB30-1AL2	1,466.75
	38	18.5	110	3RA2328-8XB30-1AG2	1,609.62
			230	3RA2328-8XB30-1AL2	1,609.62
S2	40	18.5	110	3RA2335-8XB30-1AG2	1,733.43
			230	3RA2335-8XB30-1AL2	1,733.43
	50	22	110	3RA2336-8XB30-1AG2	2,104.88
			230	3RA2336-8XB30-1AL2	2,104.88
	65	30	110	3RA2337-8XB30-1AG2	2,823.97
			230	3RA2337-8XB30-1AL2	2,823.97
	80	37	110	3RA2338-8XB30-1AG2	3,104.94
			230	3RA2338-8XB30-1AL2	3,104.94
S3	80	37	110	3RA2345-8XB30-1AG2	3,476.39
			230	3RA2345-8XB30-1AL2	3,476.39
	95	45	110	3RA2346-8XB30-1AG2	4,224.06
			230	3RA2346-8XB30-1AL2	4,224.06
	110	55	110	3RA2347-8XB30-1AG2	4,824.09
			230	3RA2347-8XB30-1AL2	4,824.09

Note:

* For further voltages, contact a sales representative

3RA23/13 Reversing Contactor Assemblies



7

Size	Rated data AC-2 and AC-3 Operational current I _e up to	Rating of introduction motors at 50 Hz and	Rated Control Supply voltage U _s at 50/60 Hz	Order Number	Price List SGD
	400 V A	400V kW	V		

DC operation

S00	7	3	24	3RA2315-8XB30-1BB4	585.75
	9	4	24	3RA2316-8XB30-1BB4	619.08
	12	5.5	24	3RA2317-8XB30-1BB4	704.80
	16	7.5	24	3RA2318-8XB30-1BB4	1,090.54
S0	12	5.5	24	3RA2324-8XB30-1BB4	1,204.83
	17	7.5	24	3RA2325-8XB30-1BB4	1,385.80
	25	11	24	3RA2326-8XB30-1BB4	1,590.57
	32	15	24	3RA2327-8XB30-1BB4	2,057.26
	38	18.5	24	3RA2328-8XB30-1BB4	2,233.46

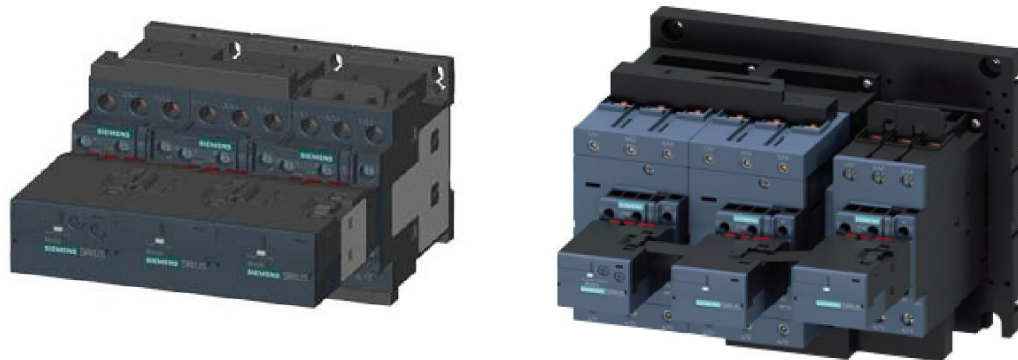
AC/DC operation

S2	40	18.5	20...33 AC/DC	3RA2335-8XB30-1NB3	2,457.29
	50	22	20...33 AC/DC	3RA2336-8XB30-1NB3	3,085.89
	65	30	20...33 AC/DC	3RA2337-8XB30-1NB3	4,081.19
	80	37	20...33 AC/DC	3RA2338-8XB30-1NB3	4,276.44
S3	80	37	20...33 AC/DC	3RA2345-8XB30-1NB3	4,662.18
	95	45	20...33 AC/DC	3RA2346-8XB30-1NB3	5,381.27
	110	55	20...33 AC/DC	3RA2347-8XB30-1NB3	5,528.89

Note: For further voltages, contact a sales representative.

3RA24/14

Reversing Contactor Assemblies



DESCRIPTION

These 3RA24 contactor assemblies for star-delta starting are designed for standard applications.

The 3RA24 contactor assemblies for star-delta starting can be ordered as follows:

Sizes S00 and S0:

- Full wired and tested, with electrical and mechanical interlock
- As individual parts for customer assembly

A dead interval of 50ms on reversing is already integrate in the function module for star-delta starting.

The 3RA24 contactor assemblies have screw or spring-type TH 35 standard mounting rails.

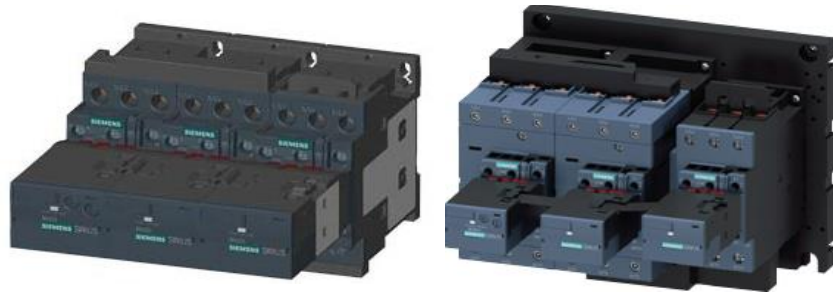
With the fully wired and tested 3RA24 contactor assemblies, the auxiliary contacts included in the basic devices are unassigned.

There is also a range of accessories (lateral auxiliary switch blocks, etc.) that must be ordered separately.

STANDARDS

- IEC60947-4-1
- IEC60947-5-1
- EN50581:2012

3RA24/14 Reversing Contactor Assemblies



7

Size	Rated data AC-2 and AC-3 Operational current le up to	Rating of introduction motors at 50 Hz and	Rated Control Supply voltage Us at 50/60 Hz	Order Number	Price List SGD
	400 V A	400V kW	V		

AC operation, 50/60 Hz

S00,S00,S00	12	5.5	110	3RA2415-8XF31-1AF0	1,662.00
			230	3RA2415-8XF31-1AP0	1,662.00
	16	7.5	110	3RA2416-8XF31-1AF0	1,776.29
			230	3RA2416-8XF31-1AP0	1,776.29
	25	11	110	3RA2417-8XF31-1AF0	1,904.87
			230	3RA2417-8XF31-1AF0	1,904.87
S0,S0,S0	25	11	110	3RA2423-8XF32-1AG2	2,038.21
			230	3RA2423-8XF32-1AL2	2,038.21
	32 / 40	15 / 18.5	110	3RA2425-8XF32-1AG2	2,390.62
			230	3RA2425-8XF32-1AL2	2,390.62
	50	22	110	3RA2426-8XF32-1AG2	2,928.74
			230	3RA2426-8XF32-1AL2	2,928.74
S2,S2,S0	50 / 65	22 / 30	110	3RA2434-8XF32-1AG2	3,595.45
			230	3RA2434-8XF32-1AL2	3,595.45
	80	37	110	3RA2435-8XF32-1AG2	3,781.17
			230	3RA2435-8XF32-1AL2	3,781.17
	86	45	110	3RA2436-8XF32-1AG2	3,852.61
			230	3RA2436-8XF32-1AL2	3,852.61
	115	55	110	3RA2437-8XF32-1AG2	4,581.22
			230	3RA2437-8XF32-1AL2	4,581.22
S3,S3,S2	115	55	110	3RA2444-8XF32-1AG2	5,171.73
			230	3RA2444-8XF32-1AL2	5,171.73
	150	75	110	3RA2445-8XF32-1AG2	5,366.98
			230	3RA2445-8XF32-1AL2	5,366.98
	160	90	110	3RA2446-8XF32-1AG2	7,128.99
			230	3RA2446-8XF32-1AL2	7,128.99

Note: For further voltages, contact a sales representative.

3RA24/14 Reversing Contactor Assemblies



7

Size	Rated data AC-2 and AC-3 Operational current le up to	Rating of introduction motors at 50 Hz and	Rated Control Supply voltage Us at 50/60 Hz	Order Number	Price List SGD
	400 V A	400V kW	V		

DC operation

S00,S00,S00	12	5.5	24	3RA2415-8XF31-1BB4	1,757.25
	16	7.5	24	3RA2416-8XF31-1BB4	1,871.54
	25	11	24	3RA2417-8XF31-1BB4	2,271.56
S0,S0,S0	25	11	24	3RA2423-8XF32-1BB4	2,709.68
	32/40	15 /18.5	24	3RA2425-8XF32-1BB4	3,090.66
	50	22	24	3RA2426-8XF32-1BB4	3,757.36

AC/DC operation

S2,S2,S0	50/65	22/30	24...33 AC/DC	3RA2434-8XF32-1NB3	4,800.28
	80	37	24...33 AC/DC	3RA2435-8XF32-1NB3	5,062.20
	86	45	24...33 AC/DC	3RA2436-8XF32-1NB3	5,119.35
	115	55	24...33 AC/DC	3RA2437-8XF32-1NB3	6,233.70
S3,S3,S2	115	55	24...33 AC/DC	3RA2444-8XF32-1NB3	6,152.74
	150	75	24...33 AC/DC	3RA2445-8XF32-1NB3	7,033.74
	160	90	24...33 AC/DC	3RA2446-8XF32-1NB3	8,448.11

Note: For further voltages, contact a sales representative.

3RF34

Solid-state contactors



DESCRIPTION

The solid-state contactors for switching motors are intended for frequent switching on and off three-phase current operating mechanisms up to 7.5 kW and reversing up to 3.0 kW. The devices are constructed with complete insulation and can be mounted directly on SIRIUS motor starter protectors, overload relays and current monitoring relays, resulting in a very simple integration into motor feeders. These three-phase solid-state contactors are equipped with a two-phase control which is particularly suitable for typical motor current circuits without connecting to the neutral conductor.

STANDARDS

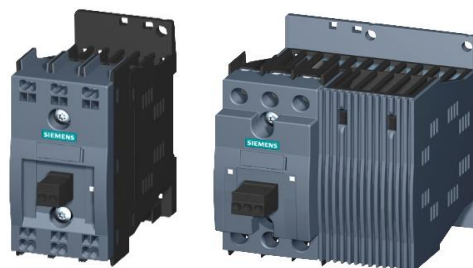
- IEC60947-4-1
- IEC60947-4-2

IMPORTANT FEATURES

- Insulated enclosure with integrated heat sink
- Degree of protection IP20
- Integrated mounting foot to snap on a standard mounting rail or for assembly onto a support plate
- Variety of connection methods
- Plug-in control connection
- Display via LEDs
- Wide voltage range for AC control supply voltage

3RF34 Solid-State Contactors

Solid-state contactors, three -phase



7

Rated Operational current I_e	Rated Power at I_e and U_e	Rated Control Supply voltage U_s at 50/60 Hz	Order Number	Price List SGD
A	400V kW	V		

Motor contactors Instantaneous switching - Two-phase Controlled

Rated operational voltage U_s

48...480 V AC

5.2	2.2	24 DC	3RF3405-1BB04	1,781.79
9.2	4.0		3RF3410-1BB04	1,984.50
12.5	5.5		3RF3412-1BB04	2,187.22
16	7.5		3RF3416-1BB04	2,389.94
5.2	2.2	110... 230 AC	3RF3405-1BB24	1,856.47
9.2	4.0		3RF3410-1BB24	2,016.51
12.5	5.5		3RF3412-1BB24	2,272.58
16	7.5		3RF3416-1BB24	2,432.62

Rated operational voltage U_s

48...600 V AC, blocking voltage 1600V

5.2	2.2	24 DC	3RF3405-1BB06	2,069.86
9.2	4.0		3RF3410-1BB06	2,325.92
12.5	5.5		3RF3412-1BB06	2,560.65
16	7.5		3RF3416-1BB06	2,806.04
5.2	2.2	110... 230 AC	3RF3405-1BB26	2,123.20
9.2	4.0		3RF3410-1BB26	2,357.93
12.5	5.5		3RF3412-1BB26	2,624.67
16	7.5		3RF3416-1BB26	2,848.72

3RT26 Contactors for Capacitive Loads

3RT26 contactors for capacitive loads (AC-6b) , 3-Pole
AC Coil



7

Utilization category AC-6b Switching AC capacitors at an ambient temperature of 60°C				Auxiliary contacts		Rated Control Supply voltage Us		Order Number	Price List SGD
Capacitor rating at operation voltage 50/60 Hz				NO	NC	50 Hz AC			
at 230 V kvar	at 400V kvar	at 500V kvar	at 600V kvar					V	

Size S2

10...29	17...50	21...63	29...86	1	1	24	3RT2636-1AB03	1,623.90
						110	3RT2636-1AF03	1,623.90
						230	3RT2636-1AP03	1,623.90
10...29	17...50	21...63	29...86	0	2	24	3RT2636-1AB05	1,623.90
						110	3RT2636-1AF05	1,623.90
						230	3RT2636-1AP05	1,623.90
14...43	25...75	31...94	43...129	1	1	24	3RT2637-1AB03	2,176.32
						110	3RT2637-1AF03	2,176.32
						230	3RT2637-1AP03	2,176.32
14...43	25...75	31...94	43...129	0	2	24	3RT2637-1AB05	2,176.32
						110	3RT2637-1AF05	2,176.32
						230	3RT2637-1AP05	2,176.32

Size S3

14...43	25...75	31...94	43...129	1	1	24	3RT2645-1AB03	2,309.66
						110	3RT2645-1AF03	2,309.66
						230	3RT2645-1AP03	2,309.66
14...43	25...75	31...94	43...129	0	2	24	3RT2645-1AB05	2,309.66
						110	3RT2645-1AF05	2,309.66
						230	3RT2645-1AP05	2,309.66
19...57	33...100	41...125	57...172	1	1	24	3RT2646-1AB03	3,214.47
						110	3RT2646-1AF03	3,214.47
						230	3RT2646-1AP03	3,214.47
19...57	33...100	41...125	57...172	0	2	24	3RT2646-1AB05	3,214.47
						110	3RT2646-1AF05	3,214.47
						230	3RT2646-1AP05	3,214.47

Remarks

Selection of Coil Voltage
3RT26 - 1AXXX

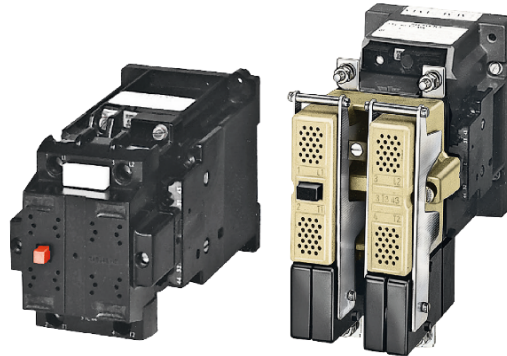
↑
coil voltage

Rated control supply voltages (the 10th and 11th position of the order number must be changed)

Contactor Type	3RT26 1, 3RT26 2,	
Rated control supply Voltage Us	3RT26 3, 3RT26 4	
Magnetic coils for 50 and 60 Hz		
24 V AC	B0	C2
220 V AC	P0	N2
230 V AC	V0	L2

3TC

Special Application Contactors



DESCRIPTION

The 3TC contactors are suitable for use in any climate. They are suitable for switching and controlling DC motors as well as all other DC circuits.

The solenoid excitation is configured for a particularly large operating range. It is between 0.7 or 0.8 and 1.2 x U_s .

The contactors are finger-safe according to IEC 60529. Terminal covers may have to be fitted onto the connecting bars depending on the configuration with other devices.

The DC motor ratings given in the tables are applicable to the DC-3 and DC-5 utilization categories with 2-pole switching of the load or with the two conducting paths of the contactor connected in series.

STANDARDS

- IEC/EN 60947-1
- IEC/EN 60947-4-1
- IEC/EN 60947-5-1 (auxiliary switches)

IMPORTANT FEATURES



- The contactors are suitable for switching and controlling DC motors as well as all other DC circuits.
- For operation in installations which are subject both to considerable variations in the control voltage and to high ambient temperatures, e.g. in railway applications.
- The permissible ambient temperature for operation of the contactors (across the full coil operating range) is -50 to +70 °C.
- The solenoid coils of the contactors have an extended coil operating range from 0.7 to 1.25 x U_s and are fitted as standard with varistors to provide protection against overvoltage.

3TC Contactors for Special Application

Contactors for Switching DC voltage



7

Size	Rated data DC-3 and DC-51 Operational current I _e at	Rating of DC motors at					Auxiliary Contact Version		Rated DC Supply voltage U _s V	Order Number	Price List SGD
		400 V A	110V kW	220V kW	440V kW	600V kW	750V kW	 			

3TC44 to 3TC56 two-pole contactors DC operation

Screw and snap-on mounting onto TH35 standard mounting rail											
2	32	2.5	5	9	9	4	2	2	24 DC	3TC4417-0AB4	1,366.75
									110 DC	3TC4417-0AF4	1,366.75
									220DC	3TC4417-0AM4	1,366.75
Screw fixing											
4	75	6.5	13	27	38	45	2	2	24 DC	3TC4817-0AB4	4,905.05
									110 DC	3TC4817-0AF4	4,905.05
									220DC	3TC4817-0AM4	4,905.05
8	220	20	41	82	110	110	2	2	24 DC	3TC5217-0AB4	7,571.87
									110 DC	3TC5217-0AF4	7,571.87
									220DC	3TC5217-0AM4	7,571.87
12	400	35	70	140	200	200	2	2	24 DC	3TC5617-0AB4	24,144.27
									110 DC	3TC5617-0AF4	24,144.27
									220DC	3TC5617-0AM4	24,144.27

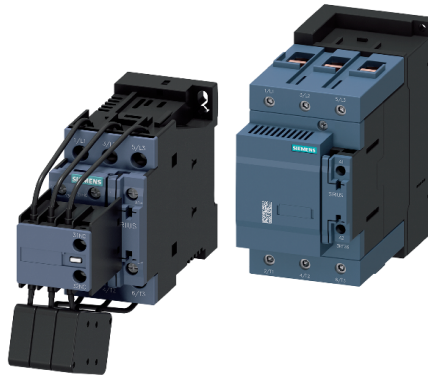
AC operation, 50 Hz

Screw and snap-on mounting onto TH35 standard mounting rail											
2	32	2.5	5	9	9	4	2	2	220/230 AC	3TC4417-0BP0	957.20
									110/110 AC	3TC4417-0BF0	957.20
Screw fixing											
4	75	6.5	13	27	38	45	2	2	220/230 AC	3TC4817-0BP0	3,852.61
									110/110 AC	3TC4817-0BF0	3,852.61
8	220	20	41	82	110	110	2	2	220/230 AC	3TC5217-0BP0	6,428.95
									110/110 AC	3TC5217-0BF0	6,428.95
12	400	35	70	140	200	200	2	2	220/230 AC	3TC5617-0BP0	19,048.73
									110/110 AC	3TC5617-0BF0	19,048.73

Note: For further voltages, contact a sales representative.

3RT26

Capacity Contactors



DESCRIPTION

The 3RT26 contactors are suitable for use in any climate and they are finger-safe according to IEC 60529.

The 3RT26 contactors for capacitive loads (AC-6b) are special versions of the 3RT20 contactors in sizes S00 to S3 that are configured for switching banks of capacitors.

They are designed to convey the inrush current in such applications and are weld-resistant in compliance with the technical specifications.

The 3RT26 contactors are suitable for choked and unchoked capacitors. Besides switching power capacitors in reactive-current compensation systems, they are also used for switch converters

In the case of 3RT26 contactors, the precharging resistors are an integral component of the contactor. The precharging resistors are activated via leading auxiliary contacts before the main contact close. During switching, after attenuation of the peak current, they are decoupled again. Attenuation of the inrush current peaks also reduces interfering harmonics in the supply.

STANDARDS

- IEC 60947-1, EN 60947-1
- IEC 60947-4-1, EN 60947-4-1
- IEC 60947-5-1, EN 60947-5-1
- IEC 60831-1, EN 60831-1
- IEC 61921, EN 61921

3RT26 Contactors for Capacitive Loads

3RT26 contactors for capacitive loads (AC-6b) , 3-Pole AC Coil



Utilization category AC-6b Switching AC capacitors at an ambient temperature of 60°C				Auxiliary contacts		Rated Control Supply voltage Us		Order Number	Price List SGD
Capacitor rating at operation voltage 50/60 Hz				NO	NC	50 Hz AC	50/60 Hz AC		
at 230 V kvar	at 400V kvar	at 500V kvar	at 600V kvar			V	V		

Size S00

0...7.2	0...12.5	0...15	0...21	1	1	--	24	3RT2617-1AB03	504.79
						--	110	3RT2617-1AF03	504.79
						--	230	3RT2617-1AP03	504.79
0...7.2	0...12.5	0...15	0...21	0	2	--	24	3RT2617-1AB05	504.79
						--	110	3RT2617-1AF05	504.79
						--	230	3RT2617-1AP05	504.79

Size S0

3...9.6	6...16.7	7...21	10...29	1	2	24	--	3RT2625-1AB05	571.46
						110	--	3RT2625-1AF05	571.46
						230	--	3RT2625-1AP05	571.46
4...11.5	7...20	8...25	11...34	1	2	24	--	3RT2626-1AB05	628.61
						110	--	3RT2626-1AF05	628.61
						230	--	3RT2626-1AP05	628.61
5...14	8...25	10...31	14...43	1	2	24	--	3RT2627-1AB05	771.47
						110	--	3RT2627-1AF05	771.47
						230	--	3RT2627-1AP05	771.47
6...19	11...33	14...41	19...57	1	2	24	--	3RT2628-1AB05	1,014.34
						110	--	3RT2628-1AF05	1,014.34
						230	--	3RT2628-1AP05	1,014.34

Remarks

Selection of Coil Voltage

3RT26 - 1AXXX



Rated control supply voltages (the 10th and 11th position of the order number must be changed)

Contactors Type	3RT26 1, 3RT26 2, 3RT26 3, 3RT26 4	
Rated control supply Voltage Us		
Magnetic coils for 50 and 60 Hz		
24 V AC	B0	C2
220 V AC	P0	N2
230 V AC	V0	L2

3RT26 Contactors for Capacitive Loads

3RT26 contactors for capacitive loads (AC-6b) , 3-Pole
DC Coil



7

Utilization category AC-6b Switching AC capacitors at an ambient temperature of 60°C				Auxiliary contacts		Rated Control Supply voltage Us		Order Number	Price List SGD
Capacitor rating at operation voltage 50/60 Hz				NO	NC	50 Hz AC			
at 230 V kvar	at 400V kvar	at 500V kvar	at 600V kvar			V			

Size S00

0...7.2	0...12.5	0...15	0...21	1	1	24	3RT2617-1BB43	752.42
						110	3RT2617-1BF43	752.42
0...7.2	0...12.5	0...15	0...21	0	2	24	3RT2617-1BB45	752.42
						110	3RT2617-1BF45	752.42
3...9.6	6...16.7	7...21	10...29	1	2	24	3RT2625-1BB45	857.19
						110	3RT2625-1BF45	857.19
14...43	25...75	31...94	43...129	0	2	24	3RT2626-1BB45	942.91
						110	3RT2626-1BF45	942.91

Size S0

3...9.6	6...16.7	7...21	10...29	1	2	24	3RT2625-1BB45	857.19
						110	3RT2625-1BF45	857.19
4...11.5	7...20	8...25	11...34	1	2	24	3RT2626-1BB45	942.91
						110	3RT2626-1BF45	942.91
5...14	8...25	10...31	14...43	1	2	24	3RT2627-1BB45	1,166.73
						110	3RT2627-1BF45	1,166.73
6...19	11...33	14...41	19...57	0	2	24	3RT2628-1BB45	1,509.61
						110	3RT2628-1BF45	1,509.61

Remarks

Selection of Coil Voltage

3RT26 - 1AXXX



Rated control supply voltages (the 10th and 11th position of the order number must be changed)

Contactor Type	3RT26 1, 3RT26 2, 3RT26 3, 3RT26 4
Rated control supply Voltage Us	
DC Operation	
24 V AC	B4
110 V AC	F4

3RT26 Contactors for Capacitive Loads

3RT26 contactors for capacitive loads (AC-6b) , 3-Pole
AC / DC Coil



7

Utilization category AC-6b Switching AC capacitors at an ambient temperature of 60°C				Auxiliary contacts		Rated Control Supply voltage Us		Order Number	Price List SGD
Capacitor rating at operation voltage 50/60 Hz				NO	NC	50 Hz AC or DC			
at 230 V kvar	at 400V kvar	at 500V kvar	at 600V kvar			V			

Size S0

3...9.6	6...16.7	7...21	10...29	1	2	21...28	3RT2625-1NB35	1,023.87
						95...130	3RT2625-1NF35	1,023.87
						200...280	3RT2625-1NP35	1,023.87
4...11.5	7...20	8...25	11...34	1	2	21...28	3RT2626-1NB35	1,142.92
						95...130	3RT2626-1NF35	1,142.92
						200...280	3RT2626-1NP35	1,142.92
5...14	8...25	10...31	14...43	1	2	21...28	3RT2627-1NB35	1,395.32
						95...130	3RT2627-1NF35	1,395.32
						200...280	3RT2627-1NP35	1,395.32
6...19	11...33	14...41	19...57	1	2	21...28	3RT2628-1NB35	1,809.63
						95...130	3RT2628-1NF35	1,809.63
						200...280	3RT2628-1NP35	1,809.63

Size S2

10...29	17...50	21...63	29...86	0	2	20...33	3RT2636-1NB35	2,433.48
						83...155	3RT2636-1NF35	2,433.48
						175...280	3RT2636-1NP35	2,433.48
14...43	25...75	31...94	43...129	0	2	20...33	3RT2637-1NB35	3,262.10
						83...155	3RT2637-1NF35	3,262.10
						175...280	3RT2637-1NP35	3,262.10

Size S3

14...43	25...75	31...94	43...129	0	2	20...33	3RT2645-1NB35	3,462.11
						83...155	3RT2645-1NF35	3,462.11
						175...280	3RT2645-1NP35	3,462.11
19...57	33...100	41...125	57...172	0	2	20...33	3RT2637-1NB35	3,262.10
						83...155	3RT2637-1NF35	3,262.10
						175...280	3RT2637-1NP35	3,262.10

3RT23

4-pole Contactors



DESCRIPTION

In sizes S0 to S3, the 3RT23 contactors have two auxiliary contacts with 1 NO + 1 NC

The contactors are suitable:

- For switching resistive loads.
- For disconnecting from power systems (with neutral conducted to be switched)
- For system transfers when alternative AC power supplies are used.
- 'For use as contactors which only carry current and do not have to switch in case of inductive loads e.g. upstream of frequency converters for variable speed drives.
- 'For switching mixed loads in distribution systems (e.g. for supplying heaters, lamps, motors, PC power supply units) with $p.f > 0.8$ according to IEC 60947-4-1 test conditions for utilization category AC-1.

STANDARDS

- IEC 60947-1, EN 60947-1
- IEC 60947-4-1, EN 60947-4-1
- IEC 60947-5-1, EN 60947-5-1

3RT23 Contactors for Special Applications

3RT23 Contactors , 4-pole AC Coil



7

Rated data AC-1 tu: 40 / 60 °C Operational current le up to 690V A	Auxiliary contacts Ident. No.	Version		Rated Control Supply voltage Us at 50/60 Hz		Order Number	Price List SGD
		NO	NC	VAC	VAC		

Size S00

18 / 16	-	-	-	-	24	3RT2316-1AB00	208.58
				-	110	3RT2316-1AF00	208.58
				-	230	3RT2316-1AP00	208.58
22 / 20	-	-	-	-	24	3RT2317-1AB00	219.54
				-	110	3RT2317-1AF00	219.54
				-	230	3RT2317-1AP00	219.54

Size S0

35 / 30	11	1	1	-	24	3RT2325-1AB00	341.45
				-	110	3RT2325-1AF00	341.45
				-	230	3RT2325-1AP00	341.45
40 / 35	11	1	1	-	24	3RT2326-1AB00	495.27
				-	110	3RT2326-1AF00	495.27
				-	230	3RT2326-1AP00	495.27
50 / 42	11	1	1	-	24	3RT2327-1AB00	704.80
				-	110	3RT2327-1AF00	704.80
				-	230	3RT2327-1AP00	704.80

Size S2

60 / 55	11	1	1	-	24	3RT2336-1AB00	919.10
				-	110	3RT2336-1AF00	919.10
				-	230	3RT2336-1AP00	919.10
110 / 95	11	1	1	-	24	3RT2337-1AB00	1,457.23
				-	110	3RT2337-1AF00	1,457.23
				-	230	3RT2337-1AP00	1,457.23

Size S3

110 / 100	11	1	1	-	24	3RT2344-1AB00	1,685.81
				-	110	3RT2344-1AF00	1,685.81
				-	230	3RT2344-1AP00	1,685.81
140 / 130	11	1	1	-	24	3RT2346-1AB00	2,166.79
				-	110	3RT2346-1AF00	2,166.79
				-	230	3RT2346-1AP00	2,166.79
160 / 140	11	1	1	-	24	3RT2348-1AB00	2,547.77
				-	110	3RT2348-1AF00	2,547.77
				-	230	3RT2348-1AP00	2,547.77

Remarks

Selection of Coil Voltage
3RT2316 - 1AXXX

↑
coil
voltage

Rated control supply voltages

(the 10th and 11th position of the order number must be changed)

Contactor Type Rated control supply Voltage Us	3RT23 1	3RT23 2, 3RT23 3, 3RT23 4
Magnetic coils for 50 and 60 Hz		
24 V AC	B0	C2
42 V AC	D0	D2
48 V AC	H0	H2
110 V AC	F0	G2
220 V AC	N2	N2
230 V AC	P0	L2

3RT23 Contactors for Special Applications

3RT23 Contactors , 4-pole
AC Coil , Version for AC-3 motor loads



7

Rated data AC-2 / AC-3 tu: 60 °C Operational current le up to 4000V A	Rated data AC-1 tu: 40 / 60 °C Operational current le up to 690V A	Auxiliary contacts Ident. No.	Version	Rated Control Supply voltage Us at 50 Hz	Order Number	Price List SGD
			 NO NC	VAC		

Size S0

32	40 / 35	11	1	1	230	3RT2326-1AP00-4AA0	495.27
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Size S2

50	60 / 55	11	1	1	230	3RT2336-1AP00-4AA0	919.10
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Size S3

95	110 / 100	11	1	1	230	3RT2346-1AP00-4AA0	2,166.79
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Remarks

Selection of Coil Voltage
3RT2316 - 1AXXX



Rated control supply voltages (the 10th and 11th position of the order number must be changed)

Contactor Type	3RT23 1	3RT23 2, 3RT23 3, 3RT23 4
Rated control supply Voltage Us		
Magnetic coils for 50 and 60 Hz		
24 V AC	B0	C2
42 V AC	D0	D2
48 V AC	H0	H2
110 V AC	F0	G2
220 V AC	N2	N2
230 V AC	P0	L2

Note: For further voltages, contact a sales representative.

3RT23 Contactors for Special Applications

3RT23 Contactors , 4-pole DC Coil



7

Rated data AC-1 tu: 40 / 60 °C Operational current le up to 690V A	Auxiliary contacts	Version	Rated Control Supply voltage Us		Order Number	Price List SGD
	Ident. No.	NO	NC	VDC		

Size S00

18 / 16	-	-	-	24	3RT2316-1BB40	209.54
				220	3RT2316-1BM40	209.54
22 / 20	-	-	-	24	3RT2317-1BB40	248.59
				220	3RT2317-1BM40	248.59

Size S0

35 / 30	11	1	1	24	3RT2325-1BB40	619.08
				220	3RT2325-1BM40	619.08
40 / 35	11	1	1	24	3RT2326-1BB40	747.66
				220	3RT2326-1BM40	747.66
50 / 42	11	1	1	24	3RT2327-1BB40	957.20
				220	3RT2327-1BM40	957.20

Remarks

Selection of Coil Voltage

3RT2316 - 1AXXX

↑
coil
voltage

Rated control supply voltages (the 10th and 11th position of the order number must be changed)

Contactor Type	3RT23 1	3RT23 2, 3RT23 3, 3RT23 4
Rated control supply Voltage Us		
Magnetic coils for 50 and 60 Hz		
24 V AC	B0	C2
42 V AC	D0	D2
48 V AC	H0	H2
110 V AC	F0	G2
220 V AC	N2	N2
230 V AC	P0	L2

3RT23 Contactors for Special Applications

3RT23 Contactors , 4-pole
AC / DC Coil



7

Rated data AC-1 tu: 40 / 60 °C Operational current le up to 690V A	Auxiliary contacts	Version	Rated Control Supply voltage Us		Order Number	Price List SGD
	Ident. No.		NO	NC		

Size S2

60 / 55	11	1	1	20...33	3RT2336-1NB30	1,385.80
				175...280	3RT2336-1NP30	1,385.80
110 / 95	11	1	1	20...33	3RT2337-1NB30	2,181.08
				175...280	3RT2337-1NP30	2,181.08

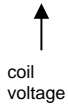
Size S3

110 / 100	11	1	1	20...33	3RT2344-1NB30	2,328.71
				175...280	3RT2344-1NP30	2,328.71
140 / 130	11	1	1	20...33	3RT2346-1NB30	2,852.55
				175...280	3RT2346-1NP30	2,852.55
160 / 140	11	1	1	20...33	3RT2348-1NB30	3,066.85
				175...280	3RT2348-1NP30	3,066.85

Remarks

Selection of Coil Voltage

3RT2316 - 1AXXX



Rated control supply voltages (the 10th and 11th position of the order number must be changed)

Contactor Type	3RT23 1	3RT23 2, 3RT23 3, 3RT23 4
Rated control supply Voltage Us		
Magnetic coils for 50 and 60 Hz		
24 V AC	B0	C2
42 V AC	D0	D2
48 V AC	H0	H2
110 V AC	F0	G2
220 V AC	N2	N2
230 V AC	P0	L2

3RT23 Contactors for Special Applications

3RT23 Contactors , 4-pole
AC / DC Coil , Version for AC-3 motor loads



7

Rated data AC-2 / AC-3 tu: 60 °C Operational current le up to 4000V A	Rated data AC-1 tu: 40 / 60 °C Operational current le up to 690V A	Auxiliary contacts Ident. No.	Version NO NC	Rated Control Supply voltage Us at 50/60 Hz AC or DC V	Order Number	Price List SGD
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Size S2

50	60 / 55	11	1	1	20...33	3RT2336-1NB30-4AA0	1,385.80
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Size S3

95	110 / 100	11	1	1	20...33	3RT2346-1NB30-4AA0	2,871.60
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Remarks

Selection of Coil Voltage

3RT2316 - 1AXXX



Rated control supply voltages (the 10th and 11th position of the order number must be changed)

Contactor Type	3RT23 1	3RT23 2, 3RT23 3, 3RT23 4
Rated control supply Voltage Us		
Magnetic coils for 50 and 60 Hz		
24 V AC	B0	C2
42 V AC	D0	D2
48 V AC	H0	H2
110 V AC	F0	G2
220 V AC	N2	N2
230 V AC	P0	L2

3RT25

4-pole Contactors



DESCRIPTION

The contactors are suitable for use in any climate and they are finger-safe according to IEC 60529

In sizes S0 to S3, the 3RT23 contactors have two auxiliary contacts with 1 NO + 1 NC integrated in the basic version.

The contactors are suitable:

- For changing the polarity of hoisting gear motors
- For switching two separate loads

STANDARDS


- IEC 60947-1, EN 60947-1
- IEC 60947-4-1, EN 60947-4-1
- IEC 60947-5-1, EN 60947-5-1

3RT25 Contactors for Special Applications

3RT25 Contactors , 4-pole, 2NO + 2NC
AC Coil



7

Rated data AC-2 / AC-3 tu: up to 60 °C		Rated data AC-1 tu: 40 / 60 °C		Auxiliary contacts	Version	Rated Control Supply voltage Us		Order Number	Price List SGD
Operational current le up to 400V A	Rating of three- phase motors at 50 Hz 400V kW	Operational current le up to 690V A	Ident. No.			at 50/60 Hz	50Hz		
					 NO NC	VAC	VAC		

Size S00

9	4	18 / 16	-	-	-	24	-	3RT2516-1AB00	184.77
						110	-	3RT2516-1AF00	184.77
						230	-	3RT2516-1AP00	184.77
12 / 9	5.5/4	22 / 20	-	-	-	24	-	3RT2517-1AB00	228.58
						110	-	3RT2517-1AF00	228.58
						230	-	3RT2517-1AP00	228.58
16 / 9	7.5/4	22 / 20	-	-	-	24	-	3RT2518-1AB00	289.54
						110	-	3RT2518-1AF00	289.54
						230	-	3RT2518-1AP00	289.54

Size S0

25	11	40 / 35	11	1	1	-	24	3RT2526-1AB00	547.65
						-	110	3RT2526-1AF00	547.65
						-	230	3RT2526-1AP00	547.65

Size S2

35	18.5	60 / 55	11	1	1	-	24	3RT2535-1AB00	890.53
						-	110	3RT2535-1AF00	890.53
						-	230	3RT2535-1AP00	890.53
41	22	70 / 60	11	1	1	-	24	3RT2536-1AB00	1,147.69
						-	110	3RT2536-1AF00	1,147.69
						-	230	3RT2536-1AP00	1,147.69

Size S3

65	30	100 / 90	11	1	1	-	24	3RT2544-1AB00	1,304.84
						-	110	3RT2544-1AF00	1,304.84
						-	230	3RT2544-1AP00	1,304.84
80	37	125 / 105	11	1	1	-	24	3RT2545-1AB00	1,947.73
						-	110	3RT2545-1AF00	1,947.73
						-	230	3RT2545-1AP00	1,947.73

Remarks

Selection of Coil Voltage

3RT2316 - 1AXXX



Rated control supply voltages (the 10th and 11th position of the order number must be changed)



Contactor Type	3RT25 1	3RT25 2, 3RT25 3, 3RT25 4
Rated control supply Voltage Us		
Magnetic coils for 50 and 60 Hz		
24 V AC	B0	C2
42 V AC	D0	D2
48 V AC	H0	H2
110 V AC	F0	G2
220 V AC	N2	N2
230 V AC	P0	L2

3RT25 Contactors for Special Applications

3RT25 Contactors , 4-pole, 2NO + 2NC
AC Coil



7

Rated data AC-2 / AC-3 tu: up to 60 °C		Rated data AC-1 tu: 40 / 60 °C		Auxiliary contacts	Version	Rated Control Supply voltage Us	Order Number	Price List SGD
Operational current le up to 400V A	Rating of three- phase motors at 50 Hz 400V kW	Operational current le up to 690V A	Ident. No.			VDC		
					 			
					NO NC			

Size S00

9	4	18 / 16	-	-	-	24	3RT2516-1BB40	213.82
						220	3RT2516-1BM40	213.82
12 / 9	5.5/4	22 / 20	-	-	-	24	3RT2517-1BB40	258.11
						220	3RT2517-1BM40	258.11
16 / 9	7.5/4	22 / 20	-	-	-	24	3RT2518-1BB40	326.69
						220	3RT2518-1BM40	326.69

Size S0

25 (20)	11 (7.5)	40 / 35	11	1	1	24	3RT2526-1BB40	800.05
						220	3RT2526-1BM40	800.05

Remarks

Selection of Coil Voltage

3RT2316 - 1AXXX



coil voltage

Rated control supply voltages (the 10th and 11th position of the order number must be changed)

Contactor Type	3RT25 1	3RT25 2, 3RT25 3, 3RT25 4
Rated control supply Voltage Us		
Magnetic coils for 50 and 60 Hz		
24 V AC	B0	C2
42 V AC	D0	D2
48 V AC	H0	H2
110 V AC	F0	G2
220 V AC	N2	N2
230 V AC	P0	L2

3RT25 Contactors for Special Applications

3RT25 Contactors , 4-pole, 2NO + 2NC
AC / DC Coil



7

Rated data AC-2 / AC-3 tu: up to 60 °C		Rated data AC-1 tu: 40 / 60 °C		Auxiliary contacts	Version	Rated Control Supply voltage Us at 50/60 Hz AC or DC		Order Number	Price List SGD
Operational current le up to 400V A	Rating of three- phase motors at 50 Hz 400V kW	Operational current le up to 690V A	Operational current le up to 690V A	Ident. No.	NO	NC	V		

Size S2

35	18.5	60 / 55	11	1	1	20...33	3RT2535-1NB30	1,161.97
						83...155	3RT2535-1NF30	1,161.97
						175...280	3RT2535-1NP30	1,161.97
41	22	70 / 60	11	1	1	20...33	3RT2536-1NB30	1,500.09
						83...155	3RT2536-1NF30	1,500.09
						175...280	3RT2536-1NP30	1,500.09

Size S3

65	30	100 / 90	11	1	1	20...33	3RT2544-1NB30	1,923.92
						175...280	3RT2544-1NP30	1,923.92
80	37	125 / 105	11	1	1	20...33	3RT2545-1NB30	2,566.82
						175...280	3RT2545-1NP30	2,566.82

Remarks

Selection of Coil Voltage

3RT2316 - 1AXXX

↑
coil voltage

Rated control supply voltages (the 10th and 11th position of the order number must be changed)

Contacteur Type	3RT25 1	3RT25 2, 3RT25 3, 3RT25 4
Rated control supply Voltage Us		
Magnetic coils for 50 and 60 Hz		
24 V AC	B0	C2
42 V AC	D0	D2
48 V AC	H0	H2
110 V AC	F0	G2
220 V AC	N2	N2
230 V AC	P0	L2

3RB

Solid-State Overload Relays



DESCRIPTION

The 3RB30/3RB31 solid-state overload relays up to 40 A with internal power supply have been designed for inverse-time delayed protection of loads with normal and heavy starting against excessive temperature rises due to overload, phase unbalance or phase failure result in an increase of the motor current beyond the set rated motor current.

This current rise is detected by the current transformers integrated into the devices and evaluated by corresponding solid-state circuits which then output a pulse to the auxiliary contacts. The auxiliary contacts then switch off the load by means of a contactor. The breaking time depends on the ratio between the tripping current and set current I_e and is stored in the form of a long-term stable tripping characteristic.

The 3RB20 and 3RB21 solid-state overload relays up to 630 A with internal power supply have been designed for inverse-time delayed protection of loads with normal and heavy starting against excessive temperature rises due to overload, phase unbalance or phase failure.

STANDARDS

- IEC60947-4-1
- IEC60947-4-2
- IEC60947-1

3RB Solid-State Overload Relays

3RB30 solid-state overload relays for mounting onto contactors, CLASS 10
For Standard Application



7

Size Contactor	Rating for three-phase motor, rated value kW	Current setting value of the inverse- time delayed overload release A	Short-circuit protection with fuse, type of coordination "2" operational class gG	Order Number	Price List SGD
Size S00					
	0.04...0.9	0.1...0.4	4	3RB3016-1RB0	589.91
	0.12...0.37	0.32...1.25	6	3RB3016-1NB0	589.91
	0.55...1.5	1...4	20	3RB3016-1PB0	589.91
	1.1...5.5	3...12	25	3RB3016-1SB0	589.91
	2.2...7.5	4...16	25	3RB3016-1TB0	589.91
Size S0					
	0.04...0.9	0.1...0.4	4	3RB3026-1RB0	671.55
	0.12...0.37	0.32...1.25	6	3RB3026-1NB0	671.55
	0.55...1.5	1...4	20	3RB3026-1PB0	671.55
	1.1...5.5	3...12	25	3RB3026-1SB0	671.55
	3...11	6...25	50	3RB3026-1QB0	671.55
	5.5...18.5	10...40	50	3RB3026-1VB0	994.15
Size S2					
	<i>Devices with screw terminals (main current side) and for mounting onto contactor</i>				
	7.5...22	12.5...50	250	3RB3036-1UB0	1,099.49
	11...37	20...80	250	3RB3036-1WB0	1,422.10
	<i>Devices with straight-through transformer for stand-alone Installation</i>				
	7.5...22	12.5...50	250	3RB3036-1UW1	1,099.49
	11...37	20...80	250	3RB3036-1WW1	1,422.10
Size S3					
	<i>Devices with screw terminals (main current side) and for mounting onto contactor</i>				
	7.5...22	12.5...50	200	3RB3046-1UB0	1,224.58
	18.5...55	32...115	315	3RB3046-1XB0	1,692.03
	<i>Devices with straight-through transformer for stand-alone Installation</i>				
	7.5...22	12.5...50	200	3RB3046-1UW1	1,547.19
	18.5...55	32...115	315	3RB3046-1XW1	1,692.03

3RB Solid-State Overload Relays

3RB30 solid-state overload relays for mounting onto contactors, CLASS 10 Accessories

Version	Size	Order Number	Price List SGD
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Terminal brackets for stand-alone installation



3RU2916-3AA01

For separate mounting of the
overload relays; screw and snap-on
mounting onto TH35 standard mounting rail

S00
S0
S2
S3

3RU2916-3AA01
3RU2926-3AA01
3RU2936-3AA01
3RU2946-3AA01

67.23
81.23
109.80
142.86



3RU2926-3AA01



3RU2936-3AA01



3RU2946-3AA01

Mechanical RESET



3RB3980-0A
with pushbutton and
extension plunger

Resetting plungers, holders and formers
Pushbuttons with extended stroke
(12mm), IP65, Ø 22 mm
Extension plungers
For distance between the pushbutton and the

3RB3980-0A 26.10
3SU1200-0FB10-0AA0 155.01
3SU1900-0KG10-0AA0 13.07

Cable releases with holder for RESET



For Ø 6.5 mm hole in the control panel;
max. control panel thickness 8 mm

- Length 400 mm
- Length 600 mm

S00...S3
S00...S3

3RB3980-0B
3RB3980-0C

255.30
255.30

3RB Solid-State Overload Relays

**3RB20 solid-state overload relays for mounting onto contactors and stand-alone installation, CLASS 10E
For Standard Application**





7

Size Contactor	Rating for three-phase motor, rated value	Current setting value of the inverse- time delayed overload release	Short-circuit protection with fuse, type of coordination "2" operational class gG	Order Number	Price List SGD
	kW	A			
Size S6					
	<i>Devices with busbar connection, for mounting onto contactor and stand-alone installation</i>				
	30...90	50...200	315	3RB2056-1FC2	1,909.30
	<i>Devices with straight-through transformer, for mounting onto contactor and stand-alone installation</i>				
with box terminals	30...90	50...200	315	3RB2056-1FW2	1,836.88
Size S10/S12					
	<i>Devices with busbar connection, for mounting onto contactor and stand-alone installation</i>				
Size S10 / S12 and size 14 (3TF68/69)	30...132	55...250	400	3RB2066-1GC2	2,067.31
	90...355	160...630	800	3RB2066-1MC2	3,588.16

3RB Solid-State Overload Relays

3RB20 solid-state overload relays for mounting onto contactors and stand-alone installation, CLASS 10E
Accessories

Version	Size	Order Number	Price List SGD	
Mechanical RESET				
	Resetting pluggers, holders and formers	S6...S12	3RB3980-0A	26.10
	Pushbuttons with extended stroke (12mm), IP65, Ø 22 mm	S6...S12	3SU1200-0FB10-0AA0	155.01
	Extension plungers For distance between the pushbutton and the relay	S6...S12	3SU1900-0KG10-0AA0	13.07
<hr/>				
Cable releases with holder for RESET				
	For Ø 6.5 mm hole in the control panel; max. control panel thickness 8 mm			
	• Length 400 mm	S6...S12	3RB3980-0B	255.30
	• Length 600 mm	S6...S12	3RB3980-0C	255.30
<hr/>				

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