

Substitution guide

## *Equivalence between Masterpact M and the new range NT/NW*

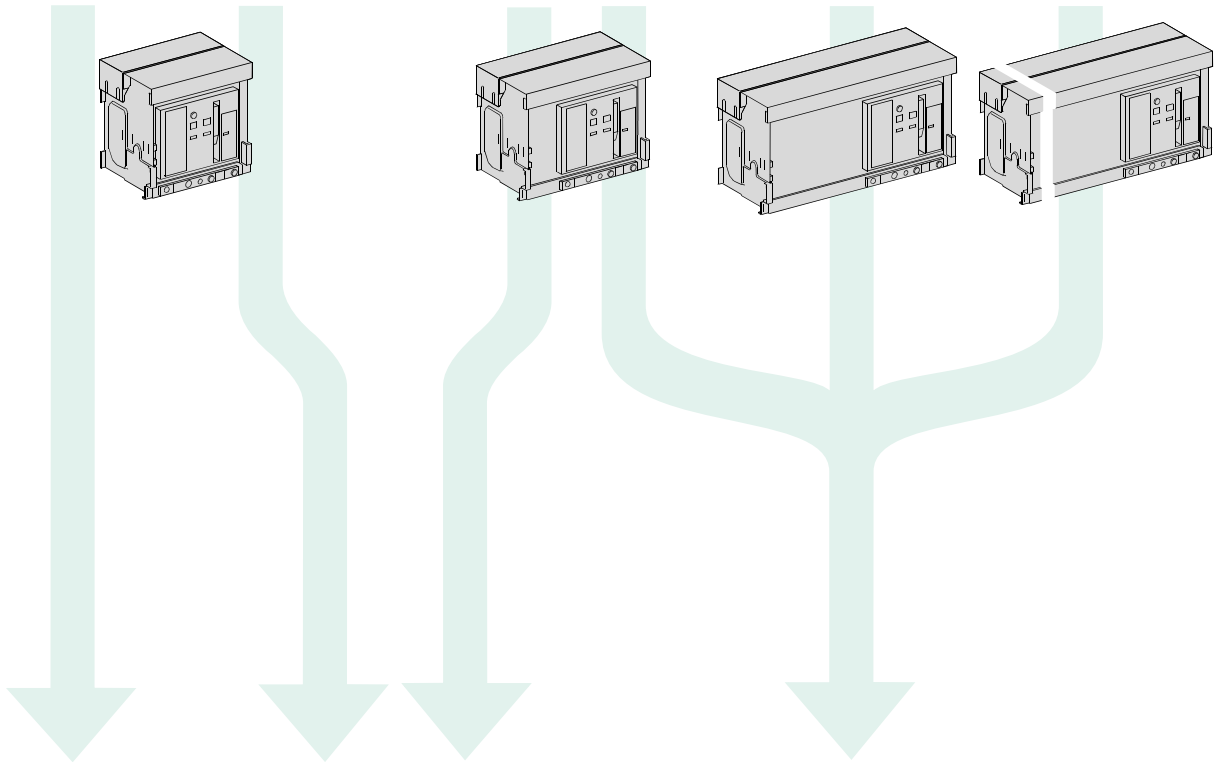


Merlin Gerin
Modicon
Square D
Telemecanique



**Masterpact  
M 08 - 63**

08 - 10 - 12 - 16 - 20 - 25 - 32	40	50	63
D/O H W D	D/O H W D	D/O H W D	D/O H W D
3P 439X435X367	3P 439X550X367	3P 484X815X367	3P 484X1045X367
4P 439X550X367	4P 484X815X367	4P 484X1045X367	4P 484X1045X367



**Masterpact  
NT 06 - 16**

06 - 08 - 10 - 12 - 16
D/O H W D
3P 322X288X277.5
4P 322X358X277.5



**Masterpact  
NW 08 - 63**

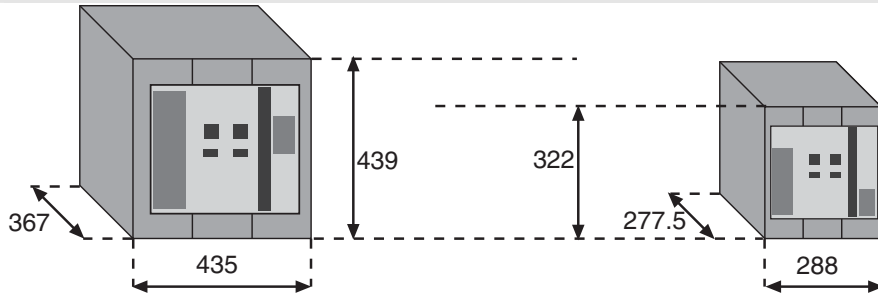
08 - 10 - 12 - 16 - 20 - 25 - 32 - 40	40b - 50 - 63
D/O H W D	D/O H W D
3P 439X441X394.5	3P 479X786 X394.5
4P 439X556X394.5	4P 479X1016X394.5



**Masterpact M**

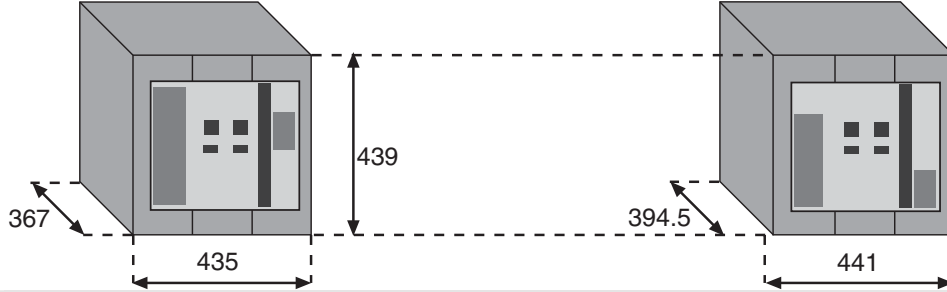
**Masterpact NT**

**800 / 1600 A**

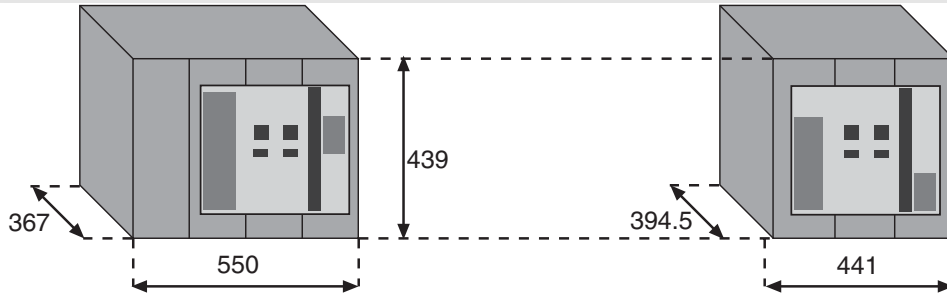


**Masterpact NW**

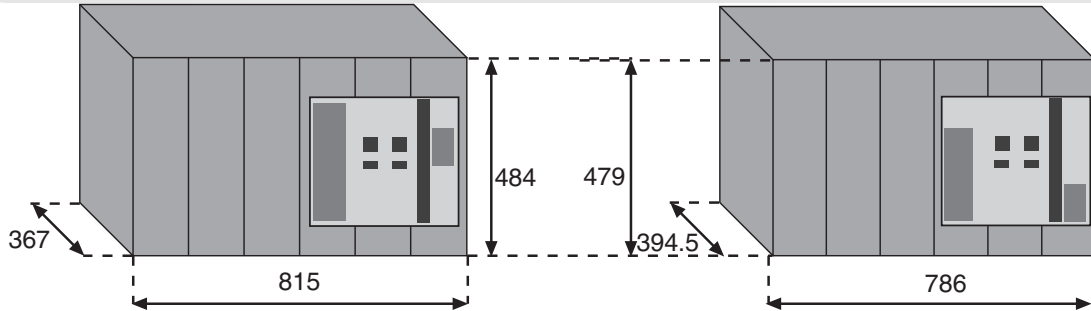
**800 / 3200 A**



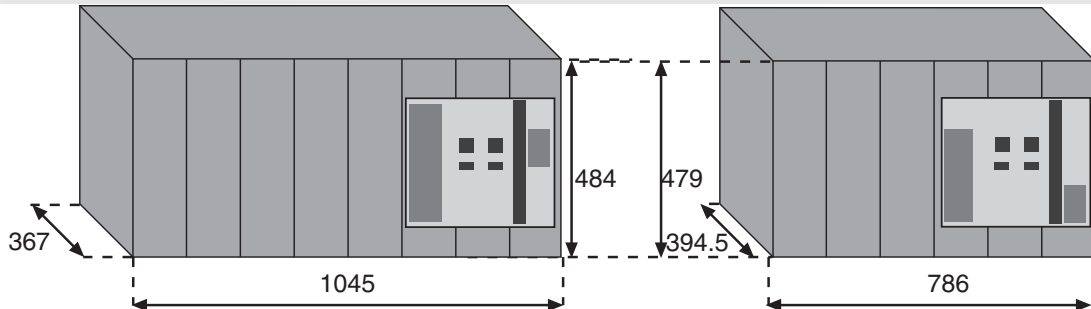
**4000 A**



**5000 A**



**6300 A**



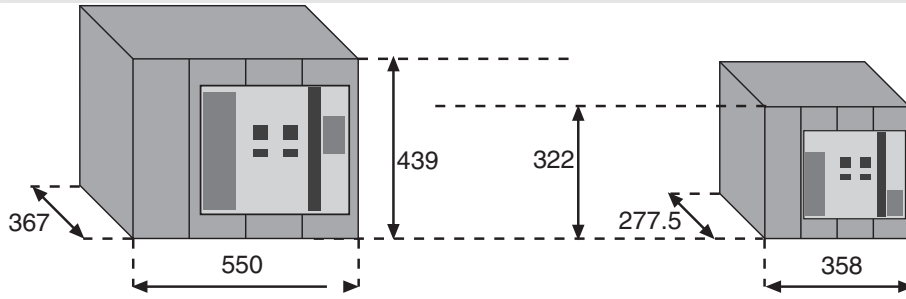
■ Depths are without terminals.

*Dimensions comparison 3P+N Draw out*

**Masterpact M**

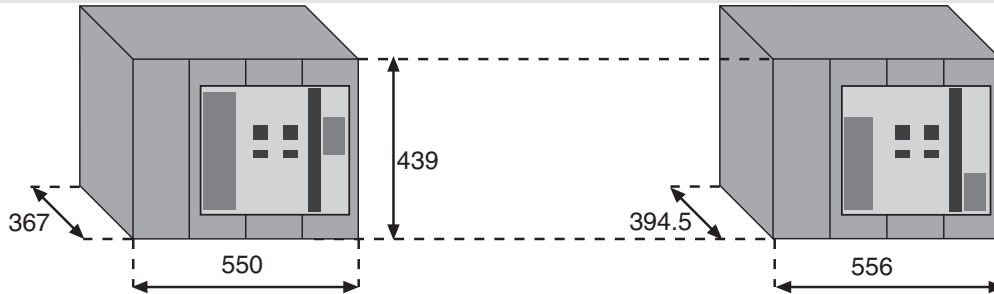
**Masterpact NT**

**800 / 1600 A**

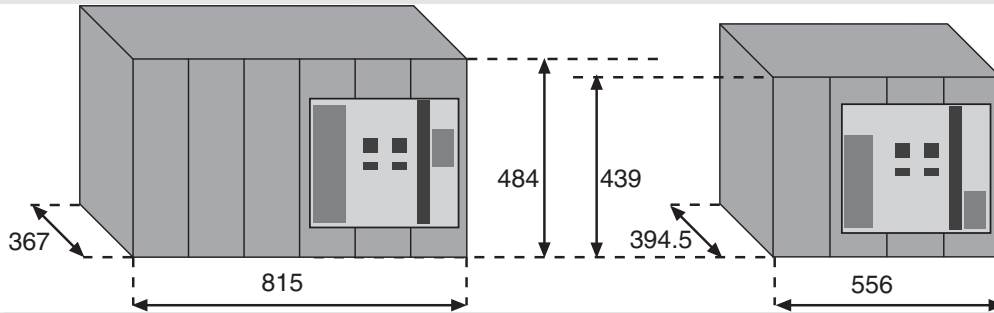


**Masterpact NW**

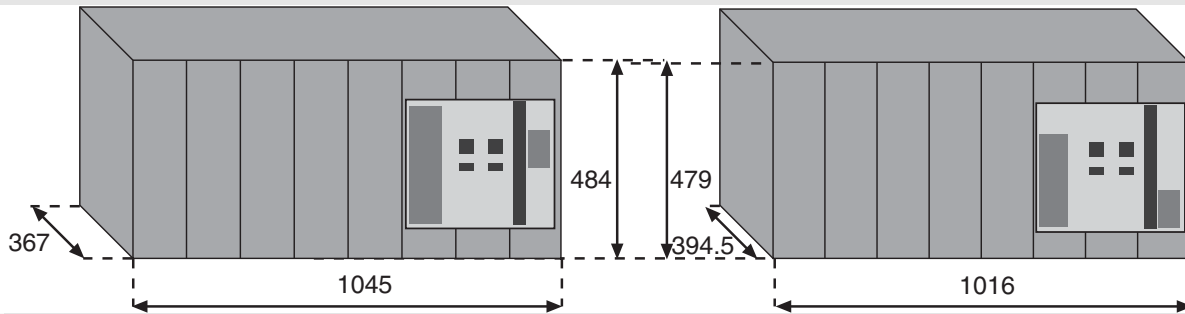
**800 / 3200 A**



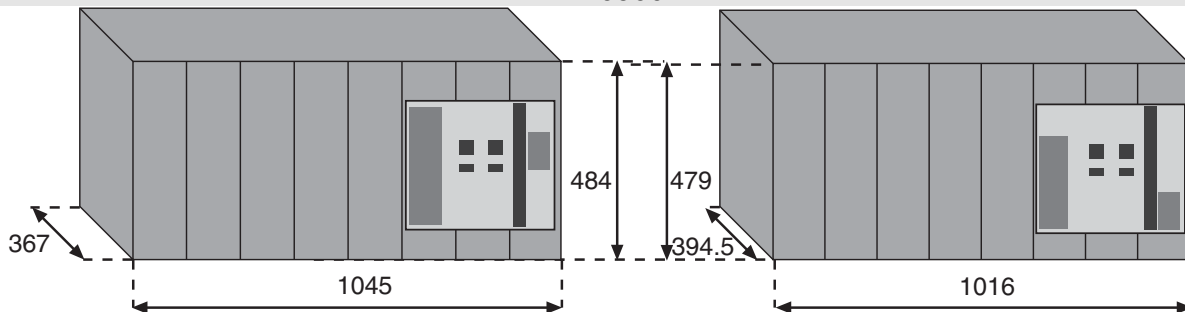
**4000 A**



**5000 A**



**6300 A**

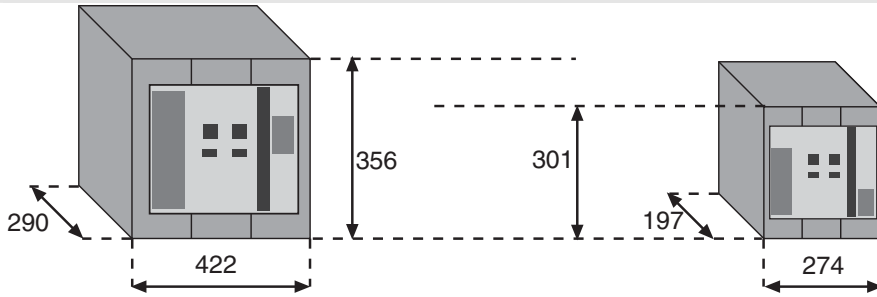


■ Depths are without terminals.

Masterpact M

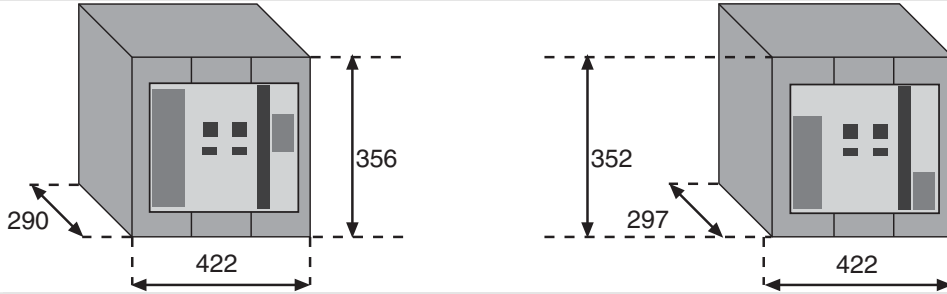
Masterpact NT

800 / 1600 A

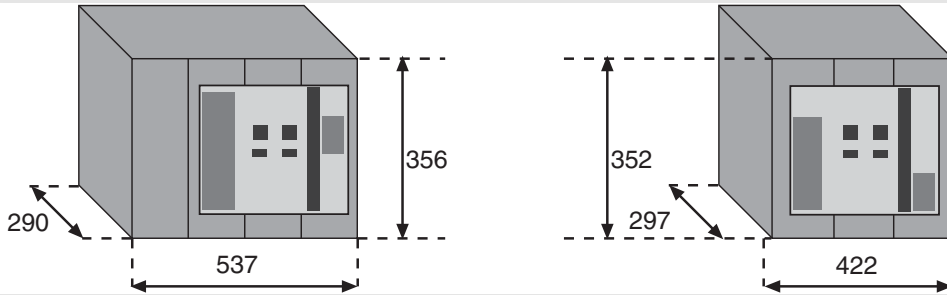


Masterpact NW

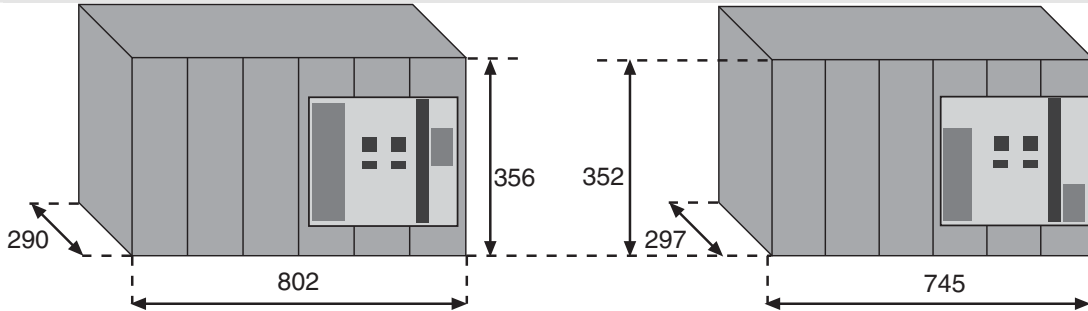
800 / 3200 A



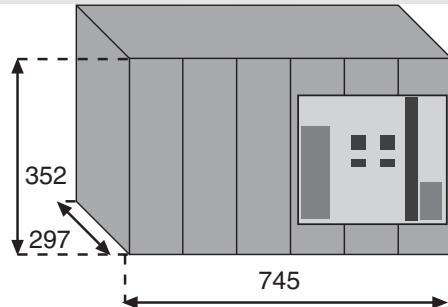
4000 A



5000 A



6300 A

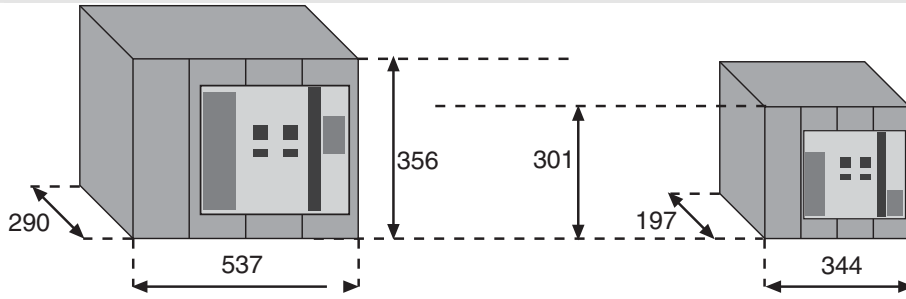


- Depths are without terminals.
- Heights include secondary wiring block.
- Widths include fixing brackets.

**Masterpact M**

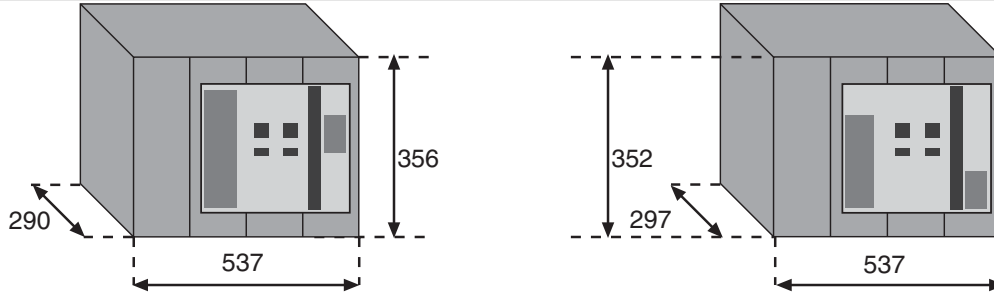
**Masterpact NT**

**800 / 1600 A**

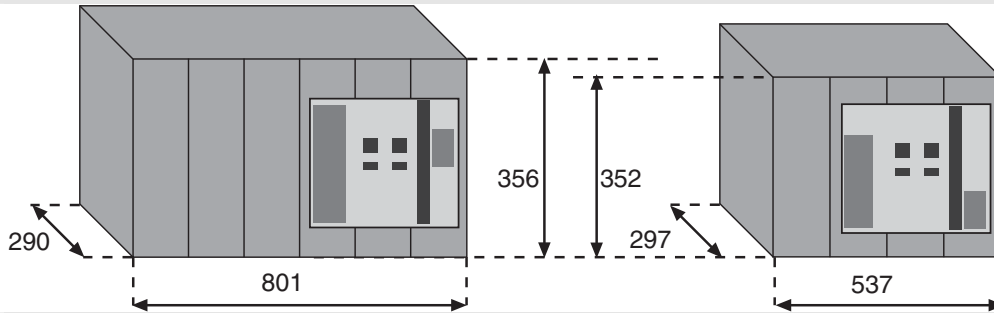


**Masterpact NW**

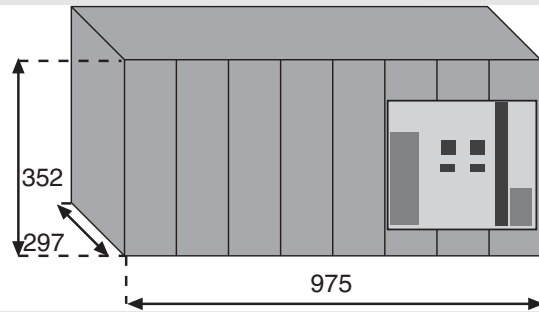
**800 / 3200 A**



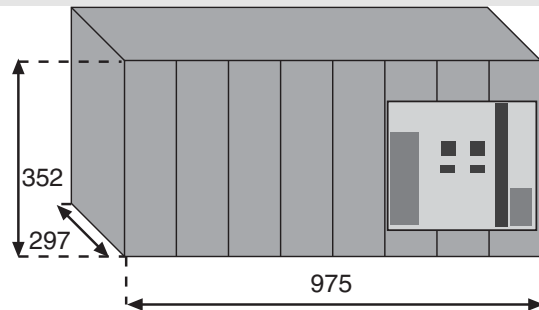
**4000 A**



**5000 A**



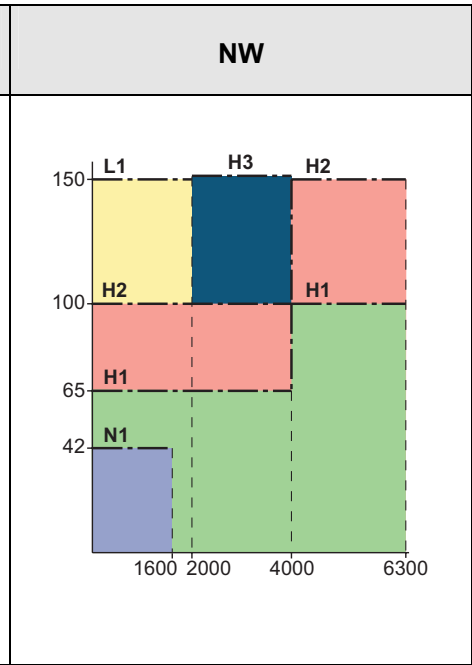
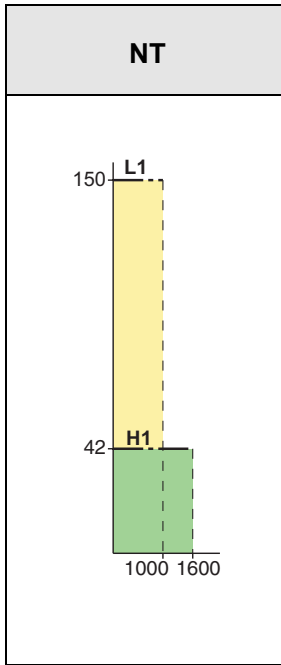
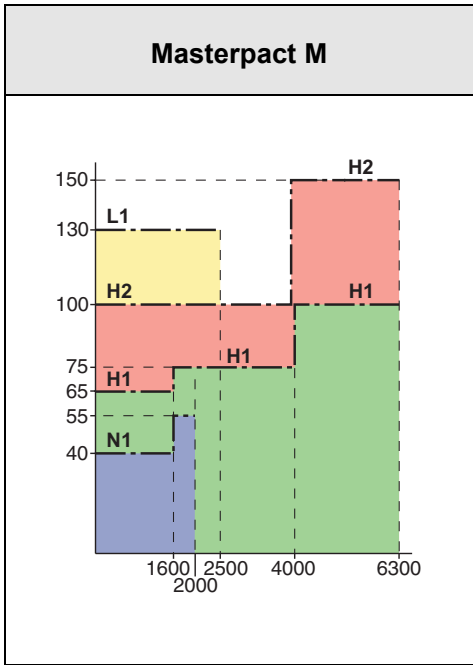
**6300 A**



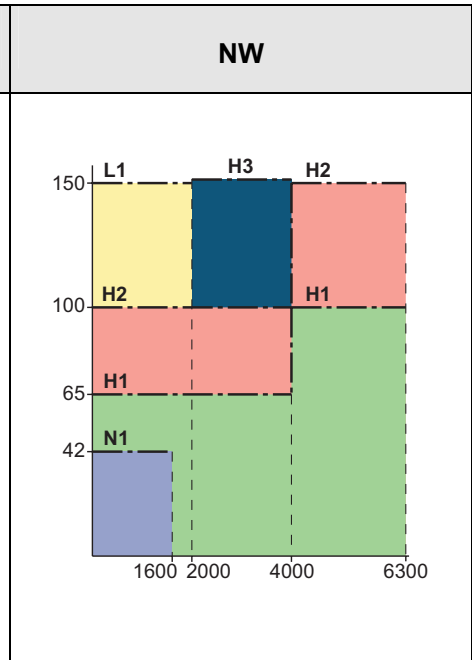
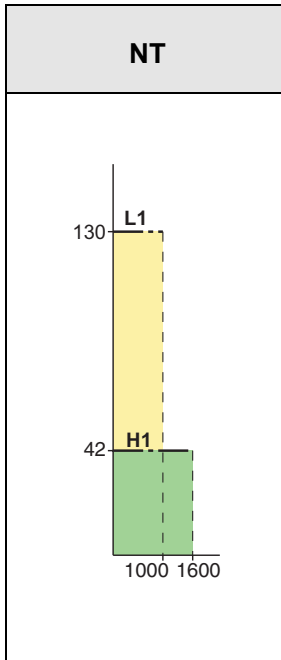
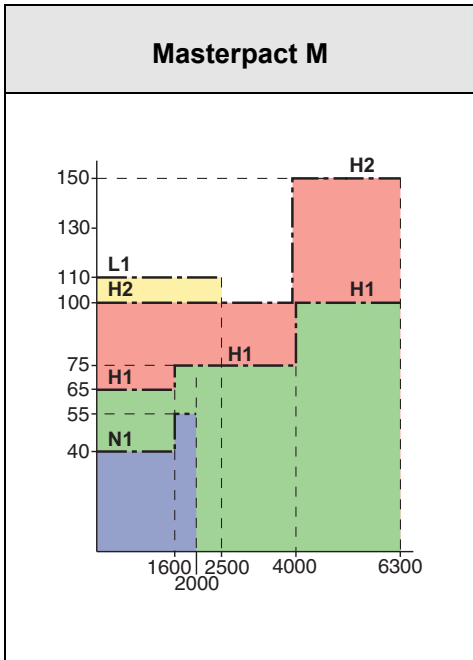
- Depths are without terminals.
- Heights include secondary wiring block.
- Widths include fixing brackets.

Breaking capacity comparison

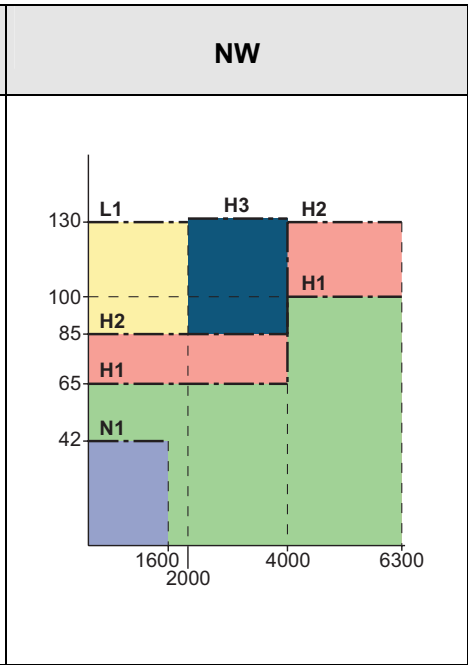
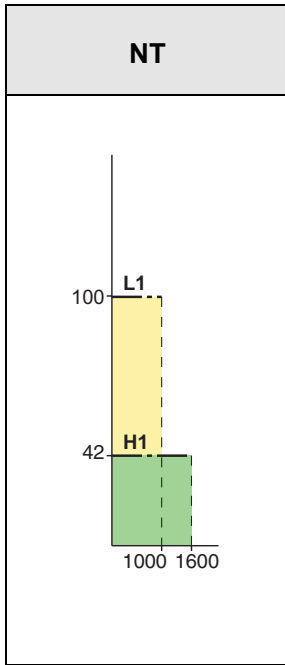
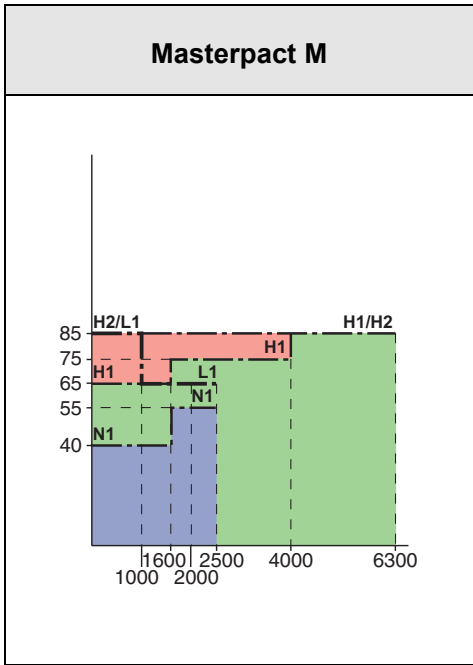
220/415 V



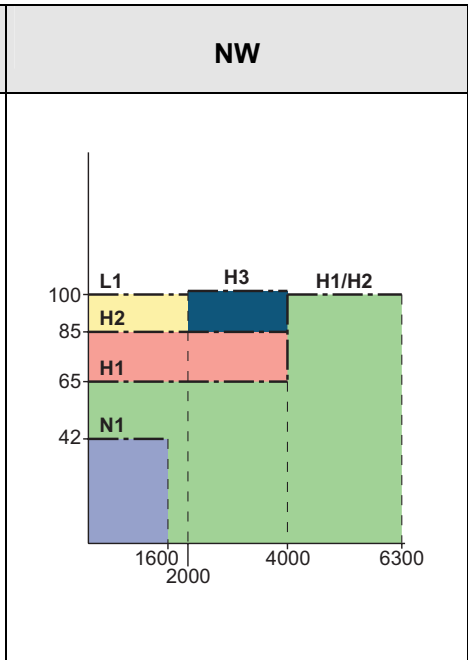
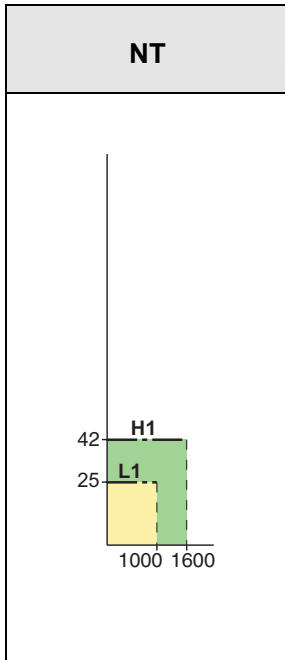
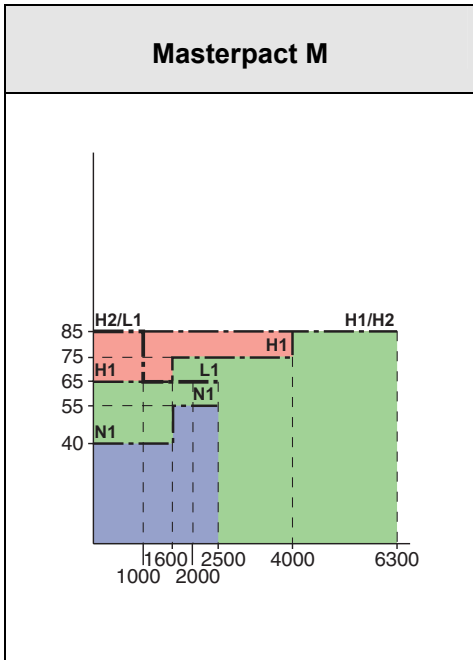
440 V



525 V



690 V





**Control units substitution  
STR versus Micrologic**



Control units functions list

	STR					Micrologic										
	18	28	38	58	68	2.0	5.0		6.0			7.0				
						A	A	P	H	A	P	H	A	P	H	
Protection against overloads																
Long time I <sup>2</sup> t curve		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Long time √IDMTL∇ curve								■	■		■	■		■	■	
Time delay tr				■	■		■	■	■	■	■	■	■	■	■	■
Thermal memory		■	■	■	■		■	■	■	■	■	■	■	■	■	■
Protection against short circuits																
Short time			■	■	■		■	■	■	■	■	■	■	■	■	■
Time delay t <sub>sd</sub>			■	■	■		■	■	■	■	■	■	■	■	■	■
Adjustable instantaneous	■	■		■	■	■	■	■	■	■	■	■	■	■	■	■
Fixed instantaneous			■													
Making current release DIN F	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Protection against ground faults																
Source ground return			■	■	■				■	■	■					
Residual			■	■	■				■	■	■					
Time delay (t <sub>g</sub> )			■	■	■				■	■	■					
Protection against earth leakages																
Sensitivity (I <sub>Δn</sub> )													■	■	■	
Time delay (t <sub>Δn</sub> )													■	■	■	
Additional protections																
Current imbalance									■	■		■	■		■	■
Maximum current									■	■		■	■		■	■
Voltage imbalance									■	■		■	■		■	■
Maximum/minimum voltage									■	■		■	■		■	■
Reverse power									■	■		■	■		■	■
Maximum/minimum frequency									■	■		■	■		■	■
Phase sequence									■	■		■	■		■	■
Zone selective interlocking Zsi				■	■	■	■	■	■	■	■	■	■	■	■	■
Load shedding and reconnection				■	■				■	■		■	■		■	■
Real-time measurements																
current		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
voltage					■				■	■		■	■		■	■
power						■			■	■		■	■		■	■
energy									■	■		■	■		■	■
frequency					■				■	■		■	■		■	■
Demand measurement current & power									■	■		■	■		■	■
Maintenance indicators and records					■				■	■		■	■		■	■
Tripping and alarm histories									■			■			■	
Event log									■	■		■	■		■	■
Energy quality indicators																
Fundamentals I,U,P									■			■			■	
THD									■			■			■	
Current and voltage Harmonics									■			■			■	
Waveform capture									■			■			■	
Alarm programming									■			■			■	
Communication capability				■	■	■	■	■	■	■	■	■	■	■	■	■

## Control units substitution



Functions	Masterpact M	Masterpact NT and NW
Distribution protection LI Ammeter	STR28  STR28 + option I	Micrologic 2.0A  Micrologic 2.0A
Selective protection LSI Ammeter Fault indication Load monitoring	STR38  STR38 + option I STR38 + option F STR38 + option R	Micrologic 5.0A  Micrologic 5.0A Micrologic 5.0A Micrologic 5.0P/H
Selective protection LSI + ground fault protection Ammeter Fault indication Load monitoring	STR38 + option T ou W  STR38 + option T ou W + option I STR38 + option T ou W + option F STR38 + option T ou W + option R	Micrologic 6.0A  Micrologic 6.0A Micrologic 6.0A Micrologic 6.0P/H
Selective protection LSI + earth leakage protection Ammeter Fault indication Load monitoring	STR38 + vigirex RH  STR38 + vigirex RH + option I STR38 + vigirex RH + option F STR38 + vigirex RH + option R	Micrologic 7.0A  Micrologic 7.0A Micrologic 7.0A Micrologic 7.0P/H
Universal protection LSI Ammeter Fault indication Segregated alarm switch for selected fault type Load monitoring Zone selective interlocking Communication	STR58  STR58 + option I STR58 + option F STR58 + option V STR58 + option R STR58 + option ZSI STR58 + option COM	Micrologic 5.0A  Micrologic 5.0A Micrologic 5.0A Micrologic 5.0P/H Micrologic 5.0P/H Micrologic 5.0P/H COM module
Universal protection LSI + ground fault protection Ammeter Fault indication Segregated alarm switch for selected fault type Load monitoring Zone selective interlocking Communication	STR58 + option T ou W  STR58 + option T ou W + option I STR58 + option T ou W + option F STR58 + option T ou W + option V STR58 + option T ou W + option R STR58 + option T ou W + option ZSI STR58 + option T ou W + option COM	Micrologic 6.0A  Micrologic 6.0A Micrologic 6.0A Micrologic 6.0P/H Micrologic 6.0P/H Micrologic 6.0P/H module COM
Universal protection LSI + earth leakage protection Ammeter Fault indication Segregated alarm switch for selected fault type Load monitoring Zone selective interlocking Communication	STR58 + Vigirex RH  STR58 + Vigirex RH + option I STR58 + Vigirex RH + option F STR58 + Vigirex RH + option V STR58 + Vigirex RH + option R STR58 + Vigirex RH + option ZSI STR58 + Vigirex RH + option COM	Micrologic 7.0A  Micrologic 7.0A Micrologic 7.0A Micrologic 7.0P/H Micrologic 7.0P/H Micrologic 7.0P/H COM module

## Control units substitution



Functions	Masterpact M	Masterpact NT et NW
Universal protection LSI Power measurement Load monitoring Trip indication (type of fault and/or self monitoring) Zone selective interlocking (ground fault only) Communication	STR68 STR68 + option P STR68 + option module « m » without data transmission (m02...m15) with data transmission (m23...m31) STR68 + option module « m » without data transmission (m01...m16) with data transmission (m18...m31) STR68 + option module « m » without data transmission (m08...m15) with data transmission (m21...m24) STR68 + option module « m » (m17...m31) and ET44	Micrologic 5.0P/H Micrologic 5.0P/H Micrologic 5.0P/H Micrologic 5.0P/H Micrologic 5.0P/H COM module
Universal protection LSI + ground fault protection Power measurement Load monitoring Trip indication (type of fault and/or self monitoring) Zone selective interlocking (ground fault only) Communication	STR68 + option T ou W STR68 + option T ou W et P STR68 + option T ou W et module « m » without data transmission. (m02...m15) with data transmission (m23...m31) STR68 + option T ou W et module « m » without data transmission (m01...m16) with data transmission (m18...m31) STR68 + option T ou W and module « m » without data transmission (m08...m15) with data transmission.(m21...m24) STR68 + option T ou W and module « m » (m17...m31) and ET 44	Micrologic 6.0P/H Micrologic 6.0P/H Micrologic 6.0P/H Micrologic 6.0P/H Micrologic 6.0P/H COM module
Universal protection LSI + earth leakage protection Power measurement Load monitoring Trip indication (type of fault and/or self monitoring) Zone selective interlocking (ground fault only) Communication	STR68 + Vigirex RH STR68 + Vigirex RH + option P STR68 + Vigirex RH + option module « m » without data transmission (m02...m15) with data transmission (m23...m31) STR68 + Vigirex RH + option module « m » without data transmission (m01...m16) with data transmission (m18...m31) option module « m » without data transmission (m08...m15) with data transmission (m21...m24) STR68 + Vigirex RH + option module « m » (m17...m31) and ET 44	Micrologic 7.0P/H Micrologic 7.0P/H Micrologic 7.0P/H Micrologic 7.0P/H Micrologic 7.0P/H COM module