

NEPEAN
Power

CM5 - 1000V Mining Breaker



AVAILABLE FROM
NEPEAN ELECTRONICS

NEPEAN Power is a proven leader in the supply and manufacture of quality engineered solutions, products and technologies. Established in 1994, through the commitment of our dedicated team we have become a supplier of choice.

NEPEAN Power is demonstrating its commitment to new product development and its superiority, providing high performance, versatility and standardisation in a range of breakers.

These proven breakers have a range from 32A up to 630A, and several very big features that go along with its very small size.

- Double insulation – this construction characteristics allows for the UL listed field installation of internal accessories without exposure to the power poles.
- Positive operation – all moulded case breakers from NEPEAN Power ensure that operation indicates the precise position of the moving contacts. This guarantees safe and reliable signalling by the device.
- Installation – can be installed in panels and switchboards in either the horizontal or vertical planes while being fed from either end without any derating of their performance characteristics.
- Ranges of Accessories – in the pursuit of standardisation, all CM5 internal and external accessories can be utilised across the entire range 32-630A.
- Interrupt rating 1000ACV up to 30kA
- Compact sizing
- UL listing and IEC rated for global application and acceptance

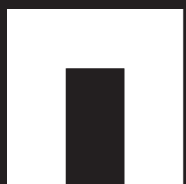
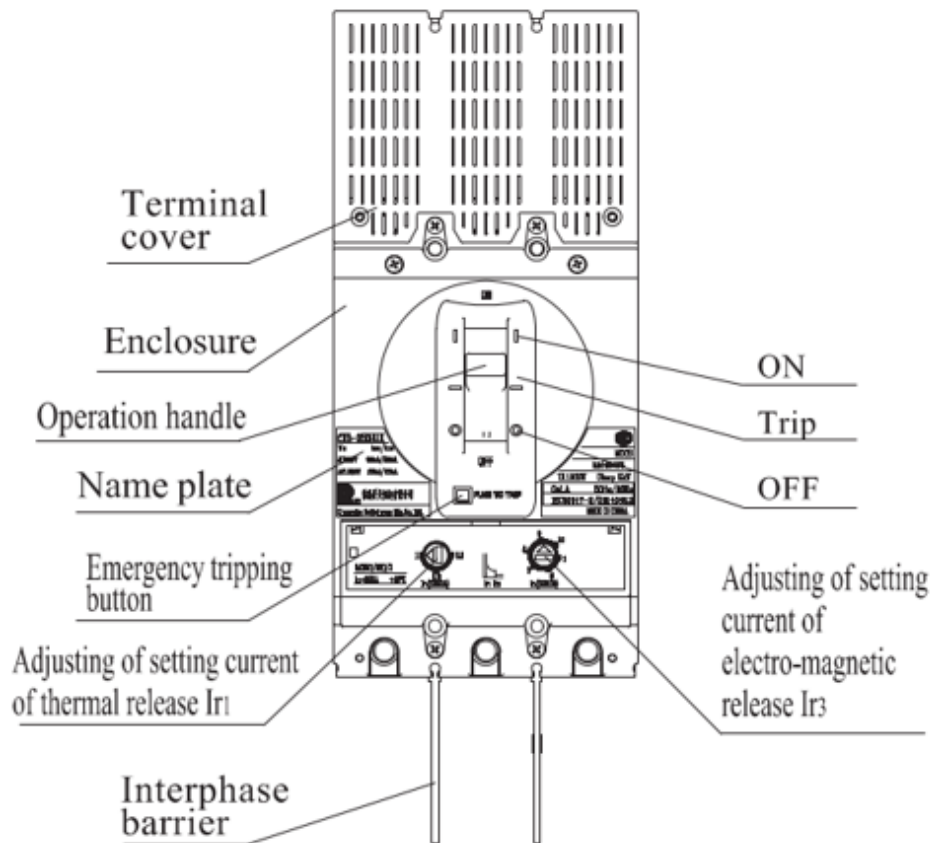
Full Discrimination – High interruptions

Double breaking mechanism, high current limiting capacity and patent technology for all series which ensures stable and reliable interruption and protection from large current and high voltage (AC1000). Effectively reduce the short-circuit energy (I^2t) and decrease the impact to the power system. Peak value of short-circuit is limited at a low value when interrupting, which make discrimination possible between the breakers in different breaking levels.

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Specifications

Frame grade rated current $I_{nm}(A)$		250	400	630
Model		CM5 - 250	CM5 - 400	CM5 - 630
Number of poles		3	3	3
Rated current I_n (A)		32,40,50,63,80,100,125,140,160,180,200,225,250	225,250,315,350,400	400,500,630
Rated insulation voltage U_i (V)		1000	1000	1000
Rated impulse withstand voltage U_{imp} (kV)		8	8	8
Rated working voltage U_e (V) 50/60Hz		AC1000	AC1000	AC1000
Short circuit breaking capacity		H	H	H
Rated Ultimate short-circuit breaking capacity I_{cs} (kA)	AC800	30	50	50
	AC1000	15	15	15
Rated short-circuit breaking capacity I_{cs} (kA)	AC800	30	50	50
	AC1000	12	15	15
Electrical life (times)		1000	1000	1000
Mechanical life (times)		12000	8000	8000
Dimensions (mm)	Width	110	140	140
	Length	165	257	257
	Height	90	110	110



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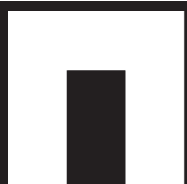
P: +61 2 4088 2790

E: power@nepean.com

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Ordering Information

Part No	Description	Current	OL Range		Inst. Range		kA	Stocked Item
			Min	Max	Min	Max		
CM5-250/32	1000V AC 250Amp Frame/32Amp Ther/Mag 3 Pole	32	25	32	160	320	15	*
CM5-250/40	1000V AC 250Amp Frame/40Amp Ther/Mag 3 Pole	40	32	40	200	400	15	
CM5-250/50	1000V AC 250Amp Frame/50Amp Ther/Mag 3 Pole	50	40	50	250	500	15	
CM5-250/63	1000V AC 250Amp Frame/63Amp Ther/Mag 3 Pole	63	50.4	63	315	630	15	
CM5-250/80	1000V AC 250Amp Frame/80Amp Ther/Mag 3 Pole	80	64	80	400	800	15	
CM5-250/100	1000V AC 250Amp Frame/100Amp Ther/Mag 3 Pole	100	80	100	500	1000	15	*
CM5-250/125	1000V AC 250Amp Frame/125Amp Ther/Mag 3 Pole	125	100	125	625	1250	15	
CM5-250/140	1000V AC 250Amp Frame/140Amp Ther/Mag 3 Pole	140	112	140	700	1400	15	
CM5-250/160	1000V AC 250Amp Frame/160Amp Ther/Mag 3 Pole	160	128	160	800	1600	15	*
CM5-250/180	1000V AC 250Amp Frame/180Amp Ther/Mag 3 Pole	180	144	180	900	1800	15	
CM5-250/200	1000V AC 250Amp Frame/200Amp Ther/Mag 3 Pole	200	160	200	1000	2000	15	
CM5-250/225	1000V AC 250Amp Frame/225Amp Ther/Mag 3 Pole	225	180	225	1125	2250	15	
CM5-250/250	1000V AC 250Amp Frame/250Amp Ther/Mag 3 Pole	250	200	250	1250	2500	15	
CM5-400/225	1000V AC 400Amp Frame/225Amp Ther/Mag 3 Pole	225	180	225	1125	2250	15	
CM5-400/250	1000V AC 400Amp Frame/250Amp Ther/Mag 3 Pole	250	200	250	1250	2500	15	
CM5-400/315	1000V AC 400Amp Frame/315Amp Ther/Mag 3 Pole	315	252	315	1575	3150	15	
CM5-400/350	1000V AC 400Amp Frame/350Amp Ther/Mag 3 Pole	350	280	350	1750	3500	15	
CM5-400/400	1000V AC 400Amp Frame/400Amp Ther/Mag 3 Pole	400	320	400	2000	4000	15	*
CM5-630/500	1000V AC 630Amp Frame/500Amp Ther/Mag 3 Pole	500	400	500	2500	5000	15	*
CM5-630/630	1000V AC 630Amp Frame/630Amp Ther/Mag 3 Pole	630	504	630	3150	6300	15	*



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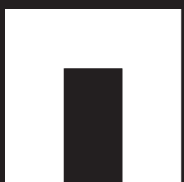
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Accessories

Part No	Description	Stocked Item
FQT1/250Z-110VAC	CM5 Undervolt 110V AC 250/400/630 frame	*
FQT1/250Z-220VAC	CM5 Undervolt 220V AC 250/400/630 frame	*
FQT1/250Z-24VDC	CM5 Undervolt 24V DC 250/400/630 frame	*
FFT1/250Y-110VAC	CM5 Shunt 110V AC 250/400/630 frame	*
FFT1/250Y-24VDC	CM5 Shunt 24V DC 250/400/630 frame	*
CM5-250-RCK	CM5 250A Rear Connect Terminal Bar Kit - 3 Poles	*
CM5-400-RCK	CM5 400A Rear Connect Terminal Bar Kit - 3 Poles	*
PLH-85A	CM5 Stainless Steel Handle 250 frame	*
PLH-120A	CM5 Stainless Steel Handle 400/630 frame	*
FFC1/250Z	CM5 Ext Aux switch 3NO-3NC 250/400/630 frame	*
FBC1/250Y	CM5 Alarm switch 250/400/630 frame 1xC/O	*
FZC1/250	CM5 250A Operating mech c/w Handle	*
FZC1/630	CM5 400-630A Operating mech c/w Handle	*



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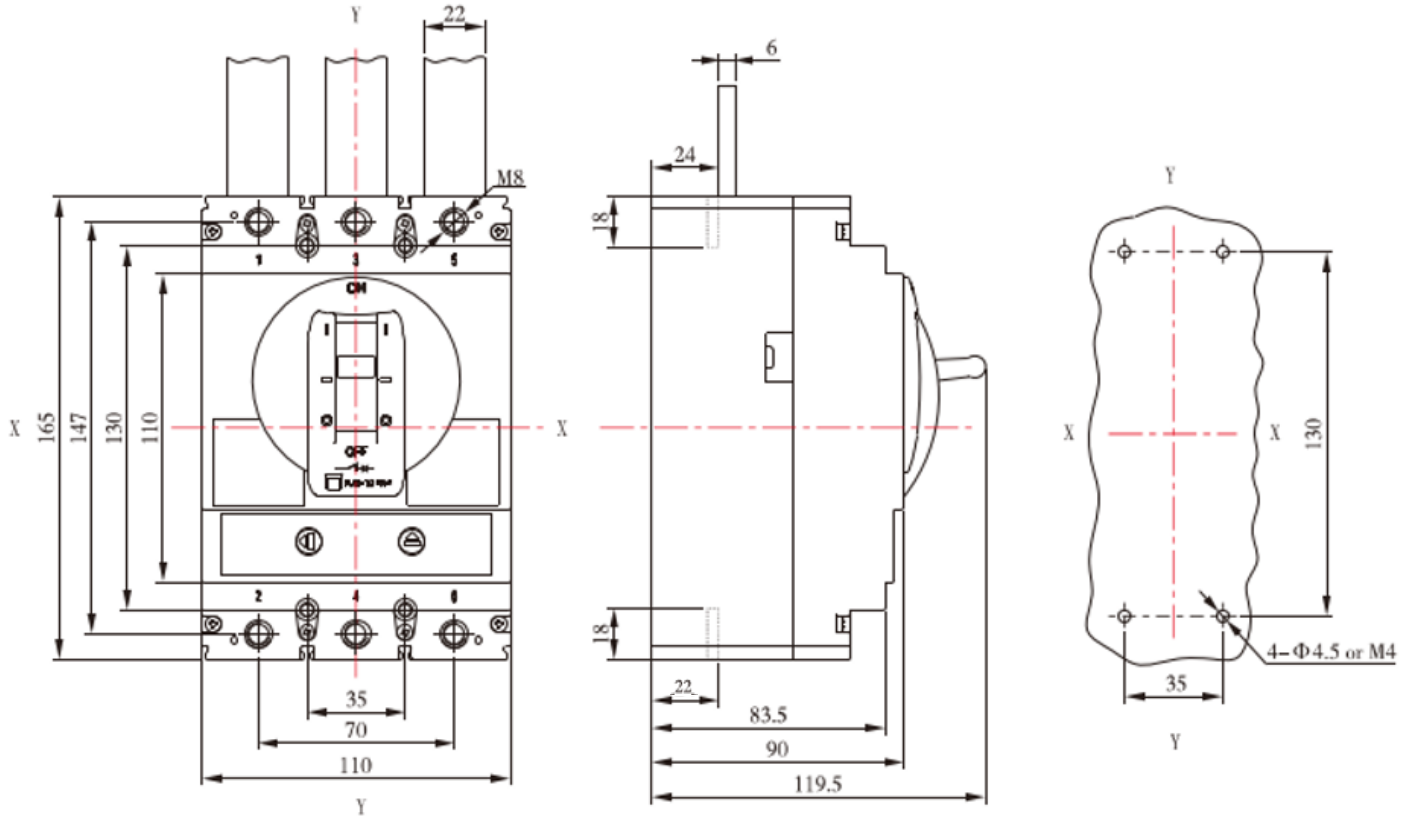
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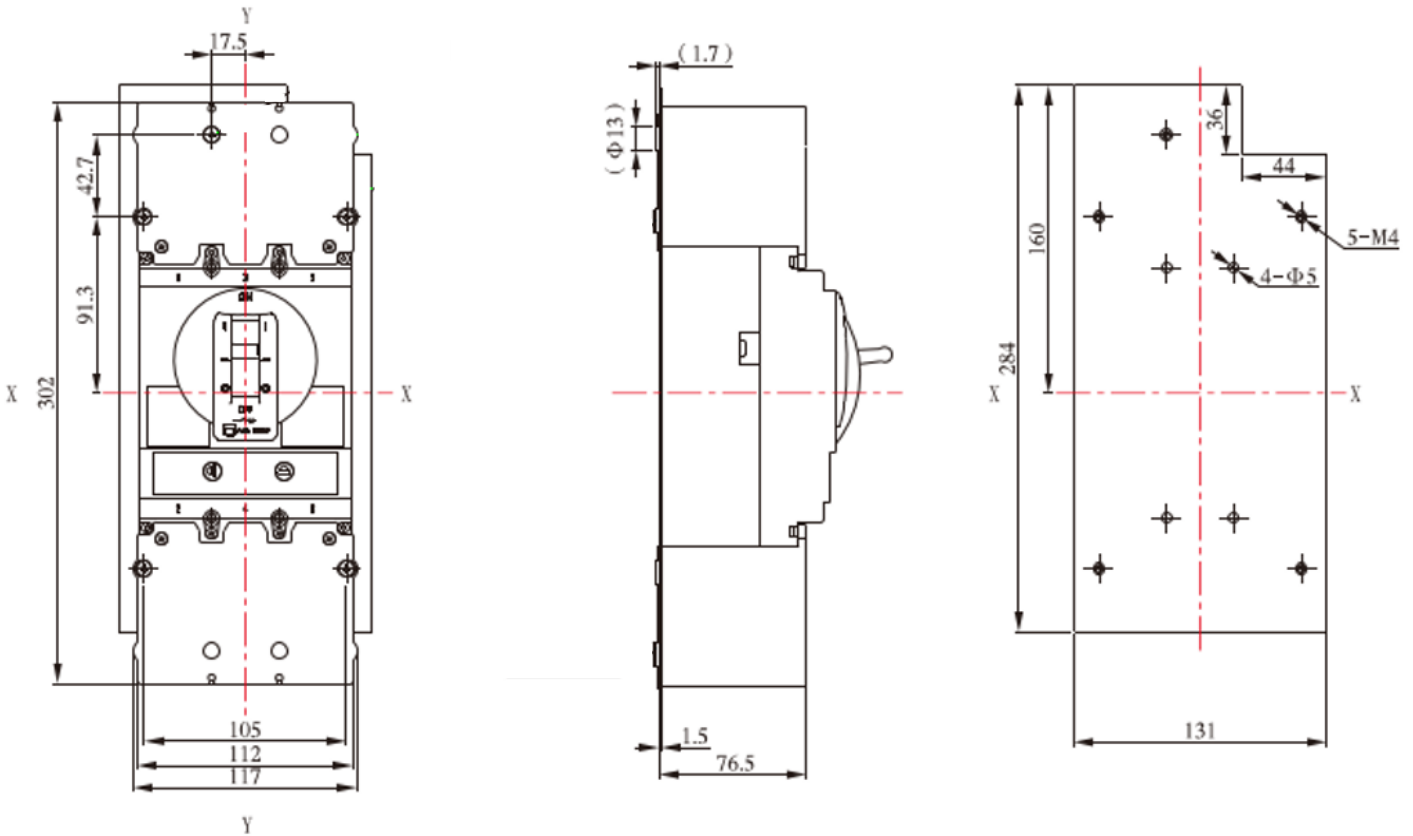
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CM5 - 1000V Mining Breaker

Outline and mounting dimensions CM5-250 basic

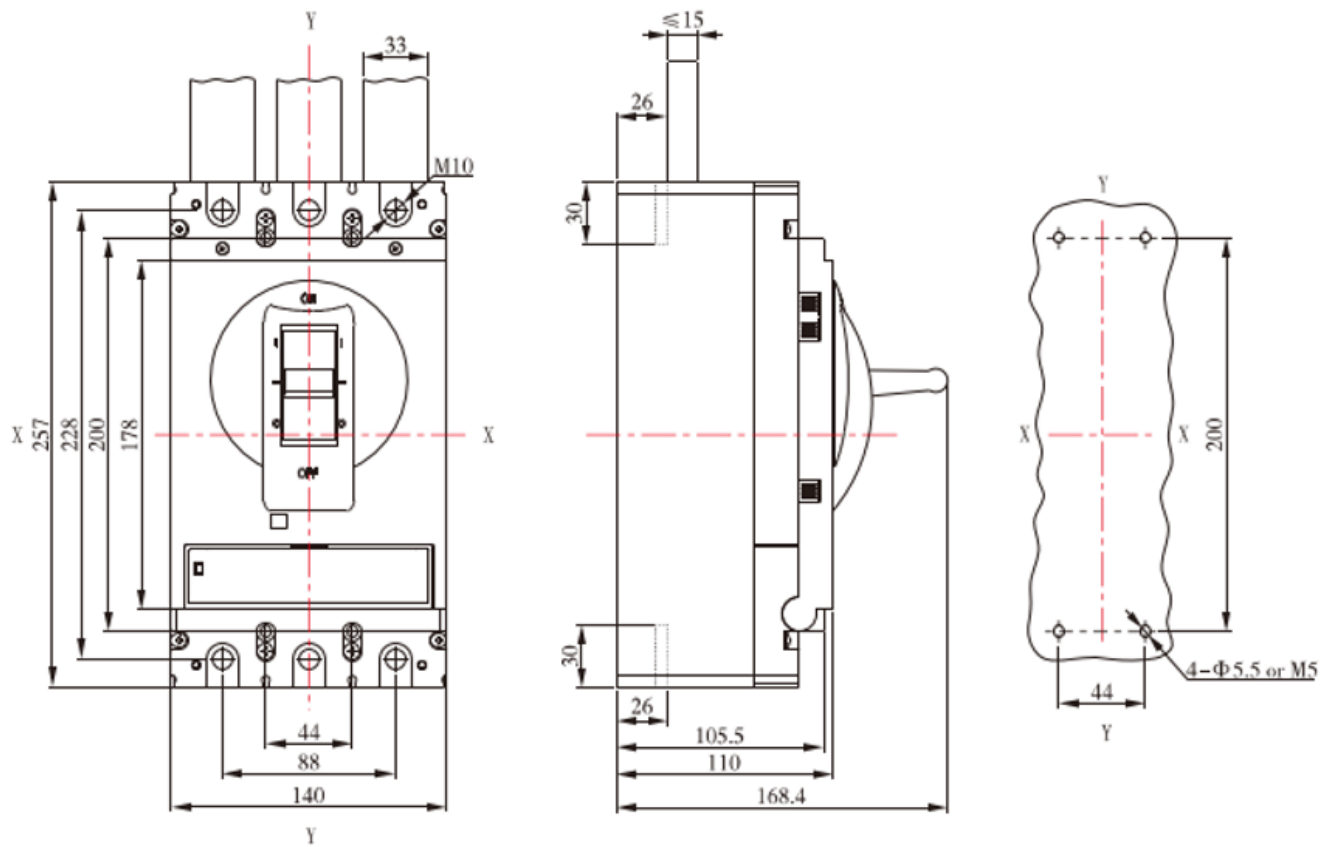


Outline and mounting dimensions CM5-250 with terminal covers



CM5 - 1000V Mining Breaker

Outline and mounting dimensions CM5-400/CM5-630 basic



Outline and mounting dimensions CM5-400/CM5-630 with terminal covers

