

Moulded Case Circuit Breakers - CH Frame

CH Frame

Standard conformity :	IEC 60947-2
Rated operational voltage :	500V AC
Rated Insulation Voltage :	690V AC
Type of release :	Thermomagnetic
Utilisation Category :	A
Rated frequency :	50/60 Hz
Ambient temp :	40oC (50oC on request)
Operating altitude :	2000 meters
Humidity :	0 - 90%
Rated impulse voltage :	8 KV

Cable capacity

240mm² (M12 stud)

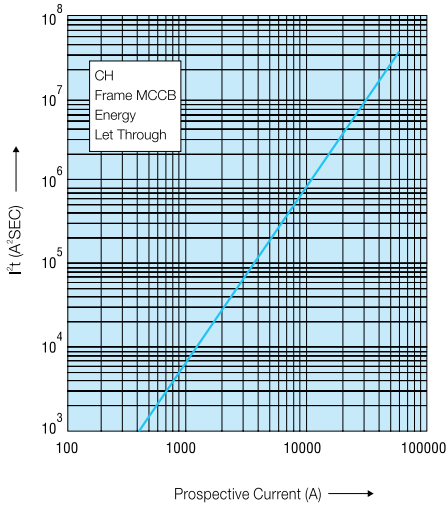
Frame	CN	
No. of Poles	3P/4PwSN	
Standard current ratings (I_n)	A	160-800*
Thermal release setting (Adjustable)	70-100% of I_n	
Magnetic release setting	Adjustable	
160-315A CN/CH Frame	5-10 times I_n	
400-800A CN/CH Frame	4-10 times I_n	
Rated short circuit making capacity (Peak) 1cm	KA	105
Rated ultimate short circuit breaking capacity (I_{cu}), KA (at different voltages)	240V	70
	380V	50
	415V	50
	500V	35
$I_{cs} = \% I_{cu}$	50%	
Weight TP (Triple Pole)	Kg	9.2
	FPwSN (Four Pole with Switched Neutral)	Kg
Terminal capacity (cable)	Sq.mm	-
Bus bar (width)	mm	40



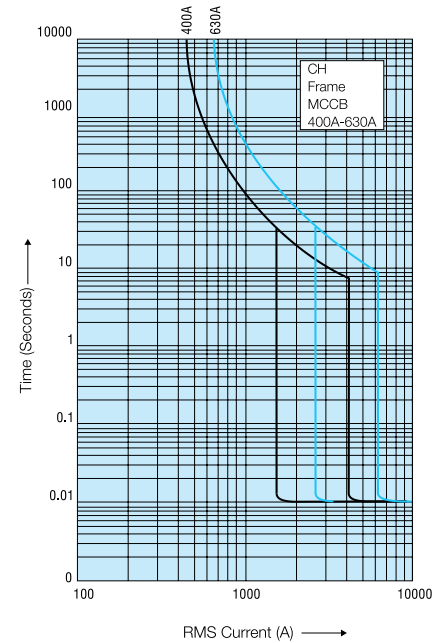
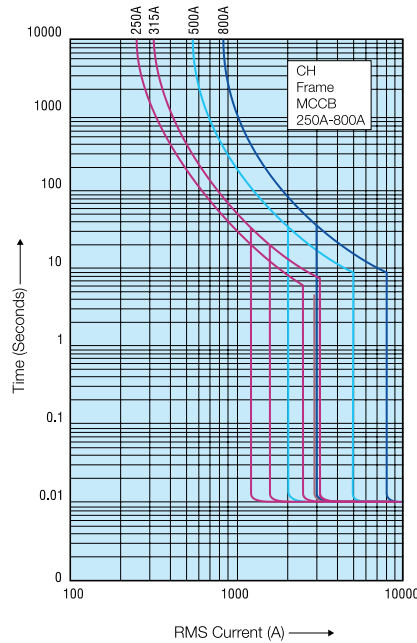
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Energy Let Through (I²t) Characteristics



Time/Current Characteristics



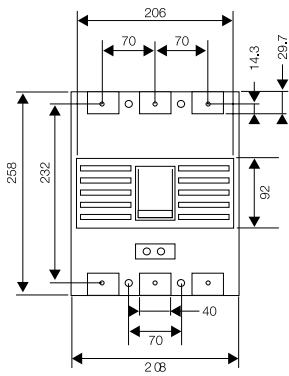
CN/CH Frame MCCB

Tripping Elements	
Overload: Adjustable 70-100% of In	Instantaneous - Adjustable 160-315A (5-10 In), 400-800A (4-10 In)
Rating	SP, TP
(160-315A)	5-10 In
(400-800A)	4-10 In

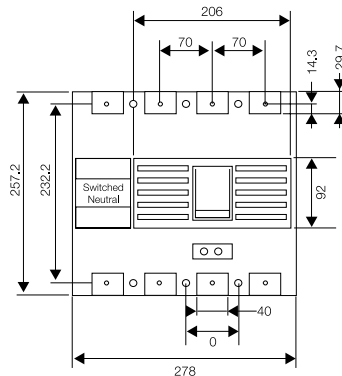
CN/CH Frame Maximum Earth Loop Impedances Z _s (Ohms) for U _o = 240 VAC						
Current rating (A)	160	200	250	315	400	500
0.4 Second Tripping Time	0.13636Ω	0.1091Ω	0.0873Ω	0.0693Ω	0.0545Ω	0.0436Ω
5.00 Second Tripping Time	0.2727Ω	0.2182Ω	0.1745Ω	0.1385Ω	0.1364Ω	0.1091Ω
Current rating (A)	630	800	1000	1250	1600	Magnetic Trip Stting
0.4 Second Tripping Time	0.0346Ω	0.0272Ω	0.0218Ω	0.0175Ω	0.0136Ω	High
5.00 Second Tripping Time	0.0866Ω	0.0682Ω	0.0545Ω	0.0436Ω	0.0273Ω	Low



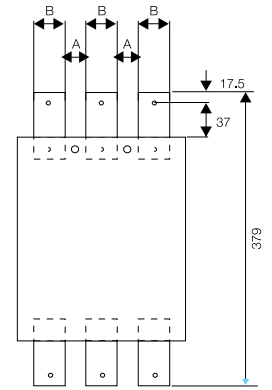
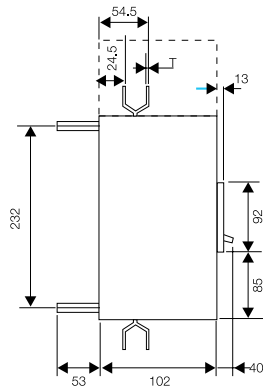
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Three Pole



Four Pole with Switched Neutral



Three Pole with Extended Terminals

S. No.	Frame	A	B	T
1	16 - 250A	40	30	5
2	315 - 400A	20	50	5
3	500 - 800A	20	50	6

Catalogue No's

Description	Breaking capacity kA	Rating	Poles	Part No.
Circuit breaker switch	50kA	320A	3	PSCH3320CB
Circuit breaker switch	50kA	400A	3	PSCH3400CB
Circuit breaker switch	50kA	400A	4	PSCH4400CB
Circuit breaker switch	50kA	630A	3	PSCH3630CB
MCCB Incomer	50kA	250A	3	PSCH3250MC
MCCB incomer	50kA	320A	3	PSCH3320MC
MCCB incomer	50kA	400A	3	PSCH3400MC
MCCB incomer	50kA	630A	3	PSCH3630MC
MCCB incomer	50kA	400A	4	PSCH4400MC
MCCB incomer	50kA	630A	4	PSCH4630MC



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