

# Technical Data Ex9M5

## Moulded Case Circuit Breakers up to 800 A

### General parameters

Suitable for industrial applications

Thermal release adjustable  $(0.8-0.9-1) \times I_n$

Instantaneous short-circuit current release  $(5-6-7-8-9-10) \times I_n$

Internal accessories

Auxiliary contact unit	AX21	101395
Alarm contact unit	AL21	101396
Early-make auxiliary contact	EC 23	106317
Shunt trip releases	SHT24	103723-103730
Undervoltage releases	UVT24	103722-103740

Max. number of installed internal accessories is 4 pcs of AX21, 1 pc of AL21 or EC 23 and 1 pc of a release (SHT24 or UVT24)

External accessories

Direct rotary handle	RHD24	103742
Extended rotary handle	ERH24	103741
Remote motor operators	MOD24	103743-103747
Terminal cover, short	TCV24 3P, 4P	103748, 103750
Terminal cover, long	TCE24 3P, 4P	103749, 104855
Phase barrier set	PB24 3P, 4P	103751, 104856
Connection terminals	MC24	106314

Mounting screws as well as phase barriers in the scope of delivery

### Electrical parameters

	Ex9M5S	Ex9M5N	Ex9M5H	Ex9M5P
Tested according to	IEC/EN 60947-2			
Rated op. voltage $U_e$	415/690 V AC			
Rated insulation voltage $U_i$	800 V			
Rated impulse withstand voltage $U_{imp}$	8 kV			
Rated frequency	50/60 Hz			
Rated ultimate short-circuit breaking capacity $I_{cu}$	36 kA / 415 V 10 kA / 690 V	50 kA / 415 V 10 kA / 690 V	100 kA / 415 V 12 kA / 690 V	150 kA / 415 V 15 kA / 690 V
Rated service short-circuit breaking capacity $I_{cs}$	36 kA / 415 V 5 kA / 690 V	50 kA / 415 V 5 kA / 690 V	100 kA / 415 V 6 kA / 690 V	150 kA / 415 V 7.5 kA / 690 V
Rated short-circuit making capacity $I_{cm}$	75.6 kA / 415 V 17 kA / 690 V	105 kA / 415 V 17 kA / 690 V	220 kA / 415 V 24 kA / 690 V	330 kA / 415 V 30 kA / 690 V
Rated current	630 — 800 A			
Overvoltage category	III			
Utilization category	A			
Mechanical service life	10 000 operation cycles			
Electrical service life	2 000 operation cycles			
Maximum frequency of switch. cycles	60 cycles per hour			
Total disconnection time at short circuit	< 2 ms			
Internal resistance per pole at 800 A	0.08 mΩ			
Power loss per pole at 800 A	51.2 W			
Line voltage connection	arbitrary above or below			

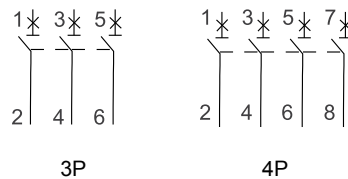
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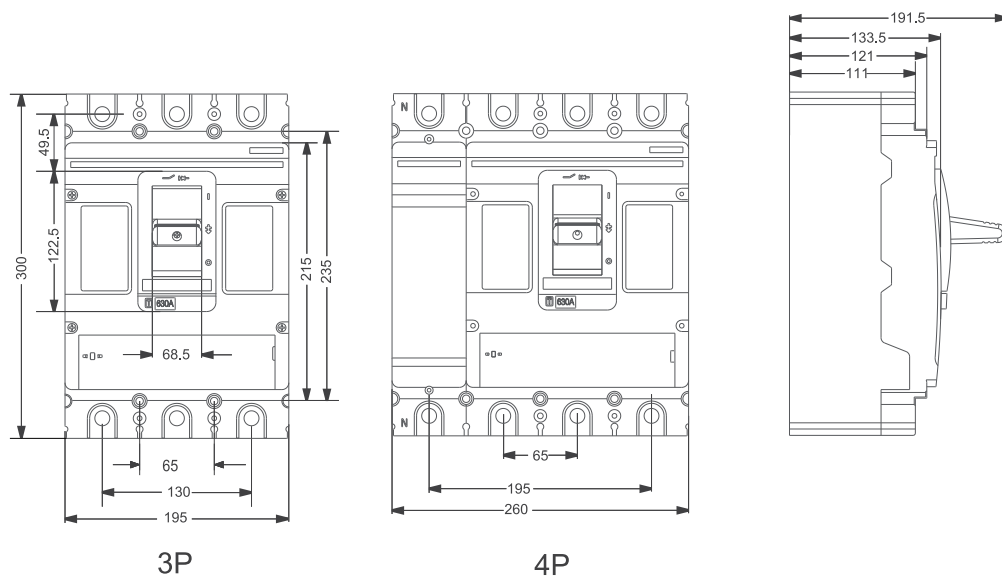
### Mechanical parameters

Device width 3P / 4P	196 / 260 mm
Device height	300 mm
Device depth	142 mm
Mounting	onto panel
Degree of protection	IP40, IP20 terminals
Terminals	M12 screws
Busbar thickness	≤ 10 mm
Busbar width	≤ 50 mm
Cable lug width	≤ 50 mm
Fastening torque of terminals	25 — 30 Nm
Ambient temperature	-25 — +70 °C
Altitude	≤ 2000 m
Relative humidity	≤ 50 % at 40 °C, ≤ 90 % monthly average
Resistance to humidity and heat	class 2
Pollution degree	3
Weight 3P / 4P	10.2 kg / 13.5 kg
Mounting position	vertical, can be rotated by 90° in each axis

### Wiring diagram



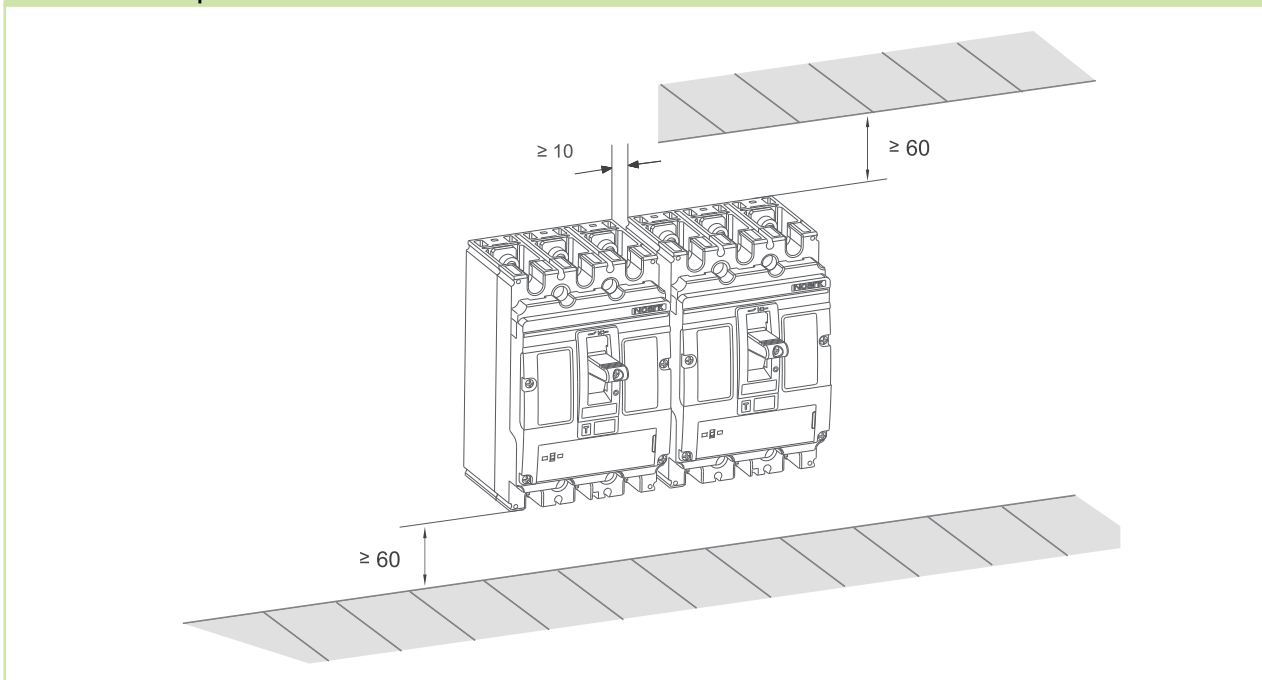
### Dimensions



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### Installation space



### Tripping characteristics

