

Motor protection circuit breakers SMT



The SMT motor starter range is the ideal solution to meet the specific needs of electric motor protection. Their presence in the electrical system increases the longevity of machinery and improves the efficiency of production processes, by intervening promptly only when necessary, ensuring the safety of people and property.

Advantages



Immediate diagnosis

The tripped position of the push-buttons provides an immediate visual feedback on the automatic intervention of the motor protection circuit breakers, thus facilitating problem diagnosis by technicians.



Remote opening

The opening release can interrupt the power supply remotely, which is particularly useful in hazardous or hard-to-reach applications, improving operational safety.



Contact signalling

The auxiliary position contact indicates whether the motor protection device is active or inactive. In case of automatic or manual intervention, the state of the contacts changes, informing operators remotely through the monitoring system.



Preliminary check

The mechanical test allows immediate verification of the correct functioning of the motor protection circuit breaker ensuring reliability in case of motor failure.

Applications

Industrial mixers



Industrial cranes



Ventilation systems, water pumping, and compressors



Conveyor belts for the manufacturing industry



Features



- + The compact size of the motor protection circuit breaker facilitates installation and saves space in the electrical distribution boards, while its versatility for both three-phase and single-phase systems eliminates the need to have other specific products.
- + The sealable door prevents tampering with the set regulation, while the lockable push-buttons prevent accidental activations during maintenance, allowing only authorized personnel to re-start the motor.
- + The short-circuit performance guaranteed by the motor protection devices makes back-up protection unnecessary, simplifying the system and reducing maintenance costs due to the absence of an additional safety device like fuses.

Technical Features

Reference standard:	IEC/EN 60947-2
Number of poles:	3
Rated operating voltage (Ue):	220 ÷ 690 V a.c.
Rated insulation voltage (Ui):	690 V a.c.
Rated impulse withstand voltage (Uimp):	6 KV
Rated operating current (Ie):	0.16 ÷ 32A
Type of protection:	Adjustable thermal (Ith) Fixed magnetic (Im)
Adjustable current setting ranges (Ir):	1 ÷ 0.63 Ie (Ie < 14A) 1 ÷ 0.7 Ie (18A < Ie < 23A) 1 ÷ 0.8 (Ie > 23A)

Thermal tripping current (Ith):	1.05 Ir < Ith < 1.2 Ir
Magnetic tripping current (Im):	12 Ie ± 20%
DIN module width:	2.5
Rated frequency:	50/60 Hz
Mechanical endurance (number of O-C cycles):	100.000
Electrical endurance (number of O-C cycles):	100.000 (AC-3)
Max cable section (rigid/flexible):	10 mm ² / 6 mm ²
Rated tightening torque:	2 Nm
Operating temperature:	-25 +60 °C
Phase loss sensitivity:	Yes

Rated power of 3-phase motor 400V ac	Breaking capacity Icu at 400V ac	Setting range for thermal release	Code	Description
< 0.06 kW	100 kA	0.1 - 0.16 A	GWD6501	MPCB 3P 0.1-0.16A 2.5M
0.06 kW	100 kA	0.16 - 0.25 A	GWD6502	MPCB 3P 0.16-0.25A 2.5M
0.09 kW	100 kA	0.25 - 0.4 A	GWD6503	MPCB 3P 0.25-0.4A 2.5M
0.12 - 0.18 kW	100 kA	0.4 - 0.63 A	GWD6504	MPCB 3P 0.4-0.63A 2.5M
0.18 - 0.25 kW	100 kA	0.63 - 1 A	GWD6505	MPCB 3P 0.63-1A 2.5M
0.37 - 0.55 kW	100 kA	1 - 1.6 A	GWD6506	MPCB 3P 1-1.6A 2.5M
0.75 kW	100 kA	1.6 - 2.5 A	GWD6507	MPCB 3P 1.6-2.5A 2.5M
1.1 - 1.5 kW	100 kA	2.5 - 4 A	GWD6508	MPCB 3P 2.5-4A 2.5M
2.2 kW	100 kA	4 - 6.3 A	GWD6509	MPCB 3P 4-6.3A 2.5M
3 - 4 kW	100 kA	6.3 - 10 A	GWD6510	MPCB 3P 6.3-10A 2.5M
5.5 kW	25 kA	9 - 14 A	GWD6511	MPCB 3P 9-14A 2.5M
7.5 kW	25 kA	13 - 18 A	GWD6512	MPCB 3P 13-18A 2.5M
9 - 11 kW	25 kA	17 - 23 A	GWD6513	MPCB 3P 17-23A 2.5M
11 kW	25 kA	23 - 27 A	GWD6514	MPCB 3P 23-27A 2.5M
15 kW	25 kA	25 - 32 A	GWD6515	MPCB 3P 25-32A 2.5M

Type of contact / opening release	Rated supply voltage	No. DIN modules	Code	Description
Aux contact of open/closed position (1NO + 1NC)	240 V ac (1.5 A)	0.5	GWD6516	ON/OFF AUX CONTACT MPCB 0.5M
Shunt trip release	230 V ac	1	GWD6517	SHUNT TRIP RELEASE MPCB 230V 1M
Shunt trip release	400 V ac	1	GWD6518	SHUNT TRIP RELEASE MPCB 400V 1M
Undervoltage release	230 V ac	1	GWD6519	UNDERVOLTAGE RELEASE MPCB 230V 1M
Undervoltage release	400 V ac	1	GWD6520	UNDERVOLTAGE RELEASE MPCB 400V 1M