Electronic circuit breaker with thermomagnetic characteristic

PM-0748-200-2



Advantages

Adjustable tripping current for each output channel via current selector switch

Ability to turn-on high load capacitance at each channel

Sequential and load-dependent switching-on of channels

Comprehensive single-channel-diagnostics and remote switching on/off of each output channel using only two lines or potential-free signal output

LED signalization and remote request for each output channel

Group alarm contact

3 years warranty

Applications

ECONOMY SMART circuit breakers with a thermomagnetic characteristic represent an economical alternative to the classic circuit breaker. They also ensure reliable tripping even in the case of high line resistance. This makes the $\,$ circuit breakers ideal for use in standard machine production. The electronic circuit breaker distributes and monitors the load current over several current circuits. Overloads and short circuits on an output are reliably recognized. The electronics permit brief current peaks and switch longer overloads off. The rated current for each output can be individually set with a current selector switch accessible from the front. The outputs are activated depending on the time delay and load to avoid an overload current. If the rated current is exceeded for a certain amount of time, the output will be switched off automatically and can be reactivated after a waiting time (thermal relaxation) using the pushbutton or the remote signal input S1. The pushbutton can also be used to switch the output manually. It is possible to read out the state of each output using the three signal contacts. The state of each output is also indicated with a multi-colored LED.

Standards

Safety: EN 60950-1, EN 50178, EN/IEC 60204-1

EMC:

EN 61000-6-2, EN 61000-6-3

Safety extra-low voltage (SELV/PELV): IEC 60364-4-41 (DIN VDE 0100-410)

CE acc. to 2004/108/EG (EMC-Directive)

Approvals







UL 2367. UL 508. DNV GL

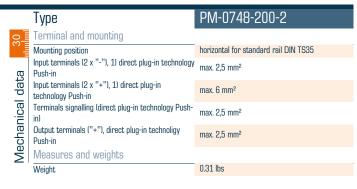




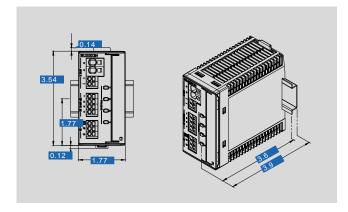
Order Number

Electronic circuit breaker with thermomagnetic characteristic **PM-0748-200-2**

	Type	PM-0748-200-2
ιŢ	Special features	
ւ+ Ի Ը	Characteristics	Potential-free signal output
	Input	
Electrical data	Input rated voltage	48 Vdc
g	Input voltage range	32 - 58 Vdc
<u>_</u>	Maximal residual ripple of supplied input voltage	3 %
<u>ا ٽ</u>	Required input voltage for turning-on of outputs	35 Vdc
당	Max. total input current	20 A
اق	Max. input current for each pole of terminal	40 A
ш	Over voltage protection	Suppressor diode 68 V
	Stand-by current	14,5 mA @ 48 Vdc
	Power losses in stand-by mode	0,7 W @ 48 Vdc
	Output	
	Output rated voltage	48 Vdc
	Output rated current	2 x 2 - 10 A, adjustable
	Maximum voltage drop between input and output	150 mV @ 2 x 10 A
	Initialization time of module	250 ms
	Turn-on delay of outputs	Load dependent, min. 50 ms / max. 5 s
	Waiting periode after switch-off of an output	500 ms (short circuit) 20 s (overload)
	Efficiency	99 %
	Max. power losses	4,5 W (2 x 10 A)
	Internal output fuse	15 A
	Resistance to reverse feed max.	58 Vdc
	Parallel use of outputs	Not allowed Not allowed
	Serial use of outputs	Not allowed
	Signaling	
	Status indicator	LED (red, green, orange)
	Signal input S1	15 - 58 Vdc (On / Off / Reset)
	Signal output S2	"13": Solid State Relais; max. 58 Vdc / 40 Vac / 100 mA
	Signal output S3	"14": Solid State Relais; max. 58 Vdc / 40 Vac / 100 mA
	Approvals	
	Approvals	cURus, cULus, DNV GL
	Environment	
	Storage temperature	-13 °F to +185 °F
	Ambient temperature	-13 °F to + 158 °F
	Derating	
	Type of cooling	Natural convection
	Required minimum spacing (left/right)	0.00 inch
	Required minimum spacing (over/under)	1.57 inch
	Safety and protection	
	Protection index	IP 20
	Safety class	III, without PE connection
	Degree of pollution	2
	Order numbers	



Dimensions in inch



PM-0748-200-2