

# Electronic Circuit Breaker PM-0724-400-0



## Advantages

Adjustable output current for each output channel
Ability to turn-on high load capacitance at each channel
On/Off/Reset for each output channel via button and PLC
Summation message
Push-In terminals
LED signalization and remote request for each output channel

## Applications

The electronic circuit breakers distribute the current of a power source to multiple DC 24V output channels and monitor the channels reliably for overload and short circuit.

## Standards

Electronic circuit breaker  
UL 508, UL 2367

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

EMC:  
EN 61000-6-2, EN 61000-6-3

## Approvals



UL 2367, UL 508



# Electronic Circuit Breaker

## PM-0724-400-0

Type		PM-0724-400-0
<b>Electrical data</b>	<b>Input</b>	
	Input rated voltage	24 Vdc
	Input voltage range	18 - 30 Vdc
	Maximal residual ripple of supplied input voltage	3 %
	Required input voltage for turning-on of outputs	20 V (Turn-off Threshold 18 V)
	Max. total input current	40 A
	Max. input current for each pole of terminal	40 A
	Over voltage protection	Suppressor diode 33 V
	Stand-by current @ 24V	35 mA
	Power losses in stand-by mode @ 24V	0.84 W
	<b>Output</b>	
	Output rated voltage	24 Vdc
	Output rated current	4 x 2 - 10 A
	Maximum voltage drop between input and output	200 mV @ 4 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)
	Max. power losses	10 W @ 4 x 10 A
	Efficiency	99 %
	Maximum turn-on capacity for each channel	>50 - 500 mF
	Internal output fuse	15 A
	Resistance to reverse feed max.	35 Vdc
	Parallel use of outputs	Not allowed
	Serial use of outputs	Not allowed
	<b>Signaling</b>	
Status display	LED (red, green, orange)	
Signal input S1	24 Vdc (On/Off/Reset)	
Signal output S2	24 Vdc, max. 25mA (status output channels)	
Signal output S3	24 Vdc, max 25mA (Summation message)	
Terminals signaling	Push-In terminals, max 2,5 mm <sup>2</sup>	
<b>Environment</b>		
Storage temperature	-25° C ... +85° C	
Ambient temperature	-25° C ... +70° C	
Derating	Max. output current per channel: 10 A Total current (all channels together): max. 40A @ 40°C max. 35A @ 50°C max. 25A @ 60°C max. 20A @ 70°C	
Cooling method	Natural convection	
Required minimum spacing (left/right)	-	
Required minimum spacing (over/under)	40 mm	
<b>Safety and protection</b>		
Protection index	IP 20	
Safety class	III, without PE connection	
Degree of pollution	2	
<b>Order numbers</b>		
<b>Order Number</b>	<b>PM-0724-400-0</b>	

Type		PM-0724-400-0
<b>Mechanical data</b>	<b>Input</b>	
	Input terminals (2 x "-" )	Push-In terminals, max 2,5 mm <sup>2</sup>
	Input terminals (2 x "+" )	Push-In terminals, max 6 mm <sup>2</sup>
	<b>Output</b>	
	Output terminals ("+" )	Push-In terminals, max 2,5 mm <sup>2</sup>
	<b>Environment</b>	
	Mounting position	horizontal for standard rail DIN TH 35
	<b>Measures and weights</b>	
	Weight	0.14 kg
	Dimensions W x H x D	45 x 90 x 97,5 mm

Subjects to change.