

Electronic Circuit Breaker PC-0724-800-0



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
Robust DIN rail mounting
Only 42mm width

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

PC-0724-800-0

Type		PC-0724-800-0
Electrical data	Input	
	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	70 A
	Max. input current for each pole of terminal	40 A
	Over voltage protection	Suppressor diode 33 V
	Stand-by current @ 24V	55 mA
	Power losses in stand-by mode @ 24V	1.32 W
	Output	
	Output rated voltage	24 Vdc
	Output rated current	8 x 2 - 10 A
	Maximum voltage drop between input and output	200 mV @ 8 x 10 A
	Initialization time of module	115 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	20 W @ 8 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	
Signaling		
Status display	LED (red, green, orange)	
Signal input S1	DC 24V (On/Off/Reset)	
Signal output S2	DC 24V, max. 25mA (status output channels)	
Signal output S3	DC 24V, max 25mA (Summation message)	
Terminals signaling	Push-In Terminals, max 2,5 mm ²	
Environment		
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. 50A @ 60°C max. 40A @ 70°C	
Cooling method	Natural convection	
Required minimum spacing (left/right)	-	
Required minimum spacing (over/under)	40 mm	
Safety and protection		
Protection index	IP 20	
Safety class	III, without PE connection	
Degree of pollution	2	
Order numbers		
Order Number	PC-0724-800-0	

Type		PC-0724-800-0
Mechanical data	Input	
	Input terminals (2 x "-")	Push-In terminals, max 2,5 mm ²
	Input terminals (2 x "+")	Push-In terminals, max 6 mm ²
	Output	
	Output terminals ("+")	Push-In terminals, max 2,5 mm ²
	Environment	
	Mounting position	horizontal for standard rail DIN TH 35
	Measures and weights	
	Weight	0.40 kg
	Dimensions W x H x D	42 x 127 x 124 mm