

POWER CABINET BP-405

AutroSafe Interactive Fire Detection System, Release 4 Product Datasheet

Features

- Power Cabinet containing 5A/24V power supply and Power Board BSF-400 with 2x12V, 18Ah batteries (batteries not included)
- Power Board BSF-400, including
 - AutroFieldBus interface
 - 115VAC /230VAC input
 - 6 outputs 24VDC (max. 2A each)
 - 1 fault relay output
- Available space for 2x12V, 18Ah batteries
- Conforms to CE standards
- Designed to meet IEC 61508 SIL2 requirements, CEN, EN 54-2, EN 54-4 and EN 54-13 regulations, FM regulations (Factory Mutual) and the maritime SOLAS requirements (Safety Of Life At Sea)

Description/Application

The Power Cabinet BP-405 provides space for two 12V/18Ah batteries (not included).

The maximum power available is 24V/5A.

NOTE:

Do not connect batteries in parallel in an attempt to obtain higher ampere hour (Ah) capacity.

If additional power is required in an installation, an additional cabinet BP-405 with 24V/5A power supply can be used.

The power supply and battery brackets are already mounted when the cabinet is delivered from the factory.



Dipswitch Settings

Dipswitch settings for dipswitch S6 on Power Board BSF-400.

Dip-switch	Name	Description
S6-1	Earth Fault	ON: Earth fault monitoring activated OFF: Earth fault monitoring deactivated
S6-2	Battery Relay	Must always be set to OFF. (Bypasses battery relay control and sets battery relay ON).
S6-3	AutroFieldBus	ON: AutroFieldBus connected OFF: AutroFieldBus not connected
S6-4	Not used	NA
S6-5	Battery	ON: Battery connected OFF: Battery not connected
S6-6	Power Unit Type	ON: BPS-405 OFF: BPS-410

Technical specifications				
Dimensions (mm)	420 x 346 x 146			
Weight (kg)	9,7 kg (without batteries)			
Materials	Steel cabinet			
Mounting	Surface or flush mounting			
Protection class	IEC-529 / IP32			
Operating Temperature	-25°C to +70°C ⁴			
Storage Temperature	-40°C to +70°C			
Current	230VAC 1,6A			
Inrush current	< 35A in 10 ms			
Input voltage range				
115VAC range	230VAC range			
94 – 132 VAC	184 – 264 VAC			
47 – 63 Hz				
Output				
Max load	Max load without battery			
3,5A	5 A			
Min battery size	Max battery size			
7,2 Ah	18 Ah			
Accuracy ¹				
<170mV _{RMS}				
Efficiency				
>86%				
Voltage out				
19-32V				
Overload protection				
7,5A				
Shutdown o/p, re-power on to recover				
Fuses				
Battery ²	Charger ²			
5A	5A			
Dipswitch, S6				
Number	Description	Condition		
S6.1	Earth fault sense	ON/OFF		
S6.2	Battery relay	OFF		
S6.3	AutroFieldBus	ON/OFF		
S6.4	N/A	--		
S6.5	Battery present	ON		
S6.6	BPS-405, Meanwell Power Supply	ON		
Common data				
Fuses				
Name	Electronic fuse	Fuse	Type	Special function
A1	Yes, 7A	2A	Fast	
A2	Yes, 7A	2A	Fast	
B1	Yes, 7A	2A	Fast	
B2	Yes, 7A	2A	Fast	
C1	Yes, 7A	2A	Fast	³
C2	Yes, 7A	2A	Fast	³

¹ The value is given in Volt peak to peak and this is converted to RMS.

² Fuse must have high current breaking capacity.

³ This port turns OFF for 3 seconds during initialization of AutoSafe if the Power Board BSF-400 is connected through AutoFieldBus.

⁴ Cooling is strongly recommended if the unit is placed in environments where the temperature during normal operation is likely to exceed +55°C (and up to +70°C) for long periods of time.

Technical specifications		
Cable parameters		
Output name	Cable size max.	
A1	Single thread 6 mm ² (10 AWG) Multi thread 4 mm ² (12 AWG) Minimum thread 0,2 mm ² (24 AWG)	
A2		
B1		
B2		
C1		
C2		
Battery		
Charger		
AutroFieldBus	Minimum Cat 5	
Dipswitch S5, AutroFieldBus earth fault sense		
S5.1	S5.2	Function
OFF	OFF	AFB earth fault OFF
ON	ON	AFB earth fault ON
BSF-400		
Current consumption	85mA	

Product Name	Description
BP-405	Power Cabinet

Dimensions (mm)

