Accessories

Short Catalog Sheet

METEL EU

PB8-4810

- Input voltage 115 – 277 VAC
- Output voltage 48 VDC / 10A
- Modbus RTU interface
- Battery charging output 48 VDC / 10 A
- Suited for Lead Acid, GEL, AGM, Li-ion batteries
- Relay output signaling mains / backup mode
- Relay output signaling discharged or damaged battery
- Automatic diagnostic of battery status
- Mounting on DIN35
- Passive cooling

The 48VDC backup industrial power supplies suitable for indoor and outdoor applications. Due to the high charging current of up to 10A, the power source is also suitable for applications powered by public lighting.

Available models

Order name	Order code
PB8-4810	4-100-117

Technical parameters

POWER INPUT	
Input voltages	115 - 230 - 277 VAC (90 - 135 VAC / 180 - 305 VAC)
Inrush current (Vn - In nominal load) I2t	≤ 35 A ≤ 5 msec
Frequency	47 - 63 Hz
Input Current (115 - 230 VAC)	9 - 4.5 A (Internal not replaceable fuse 10 A)
Recommended external fuse	16 A (characteristic B)
48 VDC OUTPUT (INTERNALL POWER SUPPLY)*	
Output voltage (Vn) / nominal current (In)	48 VDC / 10 A (turn-on delay max. 1s)
Efficiency (at 50% of rated current)	≥ 91 %
Start up with capacitive load	Yes
Short-circuit / overload / overheating protection	Yes (support start up with capacitive load)
BATTERY OUTPUT	
Connection	4x 12 V batteries connected in series
Max. charging current	10 A ± 5% (Adjusting 10 - 100 %)
Supported batteries	Lead Acid, GEL, AGM, Li-ion
Battery recovery mode	6 - 42 VDC
Reverse polarity battery protection	Yes
Sulfated battery check	Yes - by jumper
Max. quiescent current	≤ 100 mA
Automatic charging curve	4 stage - IUoU
LOAD OUTPUT	
Output voltage VDC (at In)	44 - 57.6 V (follow battery voltage)
Nominal current I load	1.1 x In A ± 5%
Continuous current without / with battery	I load = In 10 A / I load= In + I batt 20 A
Start from battery without main	With button or with RC cable

LOAD OUTPUT	
Protection against total battery discharge	40 - 42 VDC (Battery almost flat alarm: 44 - 46 VDC)
RELAY OUTPUTS	
Count	2
Type of contact	Přepínací
Max. Load	60 VAC / 1A, 30 VDC / 1A (resistive load)
Relay 1 (C-NC-NO) | Relay max. 30 VDC / 1 A	Main power loss detection
Relay 2 (C-NC-NO) | Relay max. 30 VDC / 1 A	Faulty / low battery
INPUT TEMPERATURE SENSOR	
Connector	PB-T1-RJ45
GENERAL DATA	
Weight	1.55 kg
Dimensions - h / w / d	115 x 150 x 135 mm
Pollution degree environment	2
Protection Class (EN/IEC 60529)	IP20
MTBF IEC 61709	Over 300.000 h
Connection terminal blocks screw type	2,5mm(24–14AWG)
ENVIRONMENT	
Ambient temperature / storage temperature	-25 to +70°C / -40 to +85°C (passive cooling)
Humidity at 25 °C	Max. 95 % (non-condensing)
Altitude 0 to 2 000m / 2 000 to 6 000m	0 to 2 000m (no restrictions) / derating 5°C/1000m
Power derating over 50°C	- 2.5%(In) / °C
ELECTRICAL SAFETY	
Protection class	Class I (with PE)
Insulation voltage (IN/OUT)	3000 VAC
Insulation voltage (Input / Earth, PE)	2000 VAC

ELECTRICAL SAFETY	
Insulation voltage (Out Load, Battery / Earth, PE)	500 VAC

Communication interface	
Modbus	RTU

Standards and protocols

Standard	Note

EMC and safety

Standard	Level	Note
EN 61000-6-2		Immunity - industrial environment
EN 61000-6-4		Emissions - industrial environment
EN 62368-1		Safety requirements of Information technology equipment
EN60950		Safety standard for information technology equipment

Notes

- The manufacturer reserves the right to change technical parameters without prior notice.

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