Linear, buffer power supply units, 27.6 V/DC with automatic operation control



AWZ 224 v.2.0 CODE:

TYPE: PSU-B/A-27.6V/L-2A/1/EL-TR-2x7Ah/MC



DESCRIPTION

The buffer power supply unit is destined for uninterruptible supplying devices requiring stabilized voltage 24 V/DC (+/-15%). It supplies voltage U= 22.0 V-27.6 V DC (20.0 V-27.6 V DC battery operation) of total current efficiency 2.75 A. In case of network power supply failure, immediate switching over to battery supply takes place. The power supply unit is equipped with protections: short-circuit protection (SCP), overload protection (OLP), over heating protection (OHP), over-voltage protection (OVP). It is adapted for cooperation with lead-acid, dry battery (SLA). The power supply unit automatically controls the process of charging and maintaining the battery, it is also equipped with dynamic battery test and protection against excessive discharge (UVP). Moreover, it is equipped with optical and acoustic signaling informing about operation status and with technical outputs (BS, AW) destined for remote operation control (SSWiN, KD). The power supply unit is enclosed in a metal casing with space for the battery. The casing is equipped with a microswitch signaling opening the door (front panel).

TECHNICAL DATA

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Casing:	metal, IP20, color RAL9003,
Dimensions:	W=230, H=300, D=98, W1=235, H1=305, D1=90 mm, D2=14 [mm, ±2]
Net/ gross weight:	3.3 / 3.5 [kg]
Space for battery:	2 x 7Ah/12V Sealed Lead-Acid (SLA), 2 x EUROPOWER EP 7.2-12
Antisabotage protection:	1 x microswitch: opening the casing, 0.5 A@50 V/DC max. NC cont.
Closing:	screwed: cheese screw x 1
Remarks:	distance from wall (ground) 8 mm
Power supply:	230 V/AC (-15%/+10%), 50Hz, 0.45 A max. (5.0 A "cold start-up")
Transformer:	TR 100 VA/24 V
Power of the PSU:	P=55 W max.
Type of the PSU:	A, 1st stage (EPS- External Power Source)
Output voltage:	22.0 V- 27.6 VDC - buffer, 20.0 V- 27.6 VDC battery, Vpp< 400 mV (±1%)
Output current:	2.0 A max. (1st degree =0.69 A)
Number of supply outputs:	1
Current charging the battery:	450 mA max (2x7 Ah@Ubat=20 V)
Current consumption by the PSU:	15 mA max
Short-circuit protection (SCP, OCP):	200% ÷ 250% of the PSU power + F1: fuse in the battery circuit
Overload protection (OLP):	110% ÷ 150% of the PSU power, PTC + F2: fuse in the 230 VAC circuit
Over-voltage protection (OVP):	U>29 V- failure signaling, U>32 V: disconnecting supply output (±5%)
Supervoltage protection:	varistors
Battery protection (UVP):	U<20 V (±5%), disconnection delay adjustment: 20 s/15 m/1 h/off
Technical output BS (AC failure):	NO, signaling delay adjustment: 0 s/5 min/1 h/6 h
Technical output AW (failure):	NC, failure signaling: battery (no/negative test), supply output
	(operation: SCP/OCP/OVP/UVP), exceeding max. temp.
Type of technical outputs:	OC, 50 mA (max.)
Acoustic signaling of operation:	piezoelectric signaling device (~75 dB/0.3 m)
Optical signaling of operation:	LED: AC/DC supply status, failure
Operating conditions:	1st environmental class, 5°C÷ 40°C
Certificates, declarations:	Certificate: PN-EN 50131-6, CE, decl. RoHS
Remarks:	PSU cooling: convection, battery output: connectors 6.3 F-2.5
	outputs: connectors Φ 0.51÷2.05 (AWG 24-12)