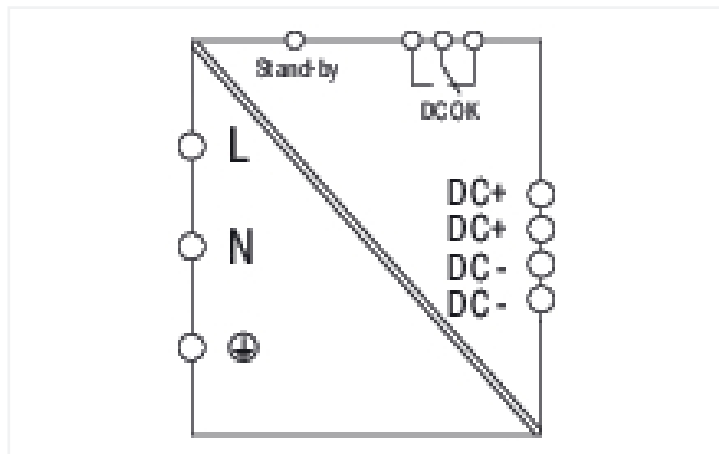


Data Sheet | Item Number: 787-832

Switched-mode power supply; Pro; 1-phase; 24 VDC output voltage; 10 A output current; TopBoost + PowerBoost; DC OK contact; 2,50 mm²

<https://www.wago.com/787-832>



Features:

- Switched-mode power supply with PowerBoost and TopBoost
- Switch off the output and minimize power consumption via stand-by input
- Output monitoring via DC OK contact
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Encapsulated for use in control cabinets
- Electrically isolated output voltage (SELV) per UL 60950-1; PELV per EN 60204

Technical data

Input

Phases	1
Nominal input voltage $U_{i, \text{nom}}$	1 x AC 100 ... 240 V
Input voltage range	1 x AC 85 ... 264 V; DC 120 ... 300 V
Nominal mains frequency range	50 ... 60 Hz; 0 Hz
Input current I_i	≤ 1.2 A (240 VAC; 10 ADC)
Discharge current	≤ 1 mA
Inrush current	≤ 8 A (active power factor correction (PFC))
Power factor correction (PFC)	Active
Mains failure hold-up time	≥ 24 ms (230 VAC)

Output

Nominal output voltage $U_{o, \text{nom}}$	DC 24 V (SELV)
Output voltage range	DC 22 ... 29.5 V (adjustable)
Default Setting	DC 24 V
Nominal output current $I_{o, \text{nom}}$	10 A (24 VDC)
Nominal output power	240 W
Deviation	≤ 1 %
Residual ripple	≤ 70 mV (peak-to-peak)
Current limitation	$1.1 \times I_{o, \text{nom}}$ (typ.)
Overload behavior	TopBoost/PowerBoost/Constant current mode
PowerBoost	DC 20 A (4 s); DC 15 A (8 s)
TopBoost	DC 60 A (25 ms)

Signaling and communication

Signaling	1 x LED DC OK (green) 1 x DC OK relay contact (changeover contact) 1 x Error LED (red) 1 x Stand-by input
Operation status indicator	Green LED (DC OK) Red LED (error)

Efficiency/power losses

Power loss P_i	≤ 0.8 W (standby); ≤ 3.8 W (no load); ≤ 24 W (nominal load)
Efficiency (typ.)	90 %

Circuit protection

Internal fuse	T 6.3 A / 250 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	Circuit breaker: 6 A, 10 A, 16 A; Tripping characteristic: B or C

Safety and protection

Isolation voltage (pri.-sec.)	DC 4.242 kV
Isolation voltage (pri.-PE)	DC 2.2 kV
Isolation voltage (sec.-PE)	DC 0.7 kV
Protection class	I
Protection type	IP20; per EN 60529
Resistance to reverse feed	≤ DC 35 V
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Short-circuit-protected	Yes
Open-circuit-proof	Yes
Parallel operation	Yes
Series operation	Yes
MTBF	> 500,000 h (per IEC 61709)

Connection data

Connection type 1	Input/output
Connection technology	CAGE CLAMP®
WAGO connector	WAGO 231 Series
Solid conductor	0.08 ... 2.5 mm ² / 28 ... 12 AWG
Fine-stranded conductor	0.08 ... 2.5 mm ² / 28 ... 12 AWG
Strip length	8 ... 9 mm / 0.31 ... 0.35 inches
Connection type 2	Signaling
Connection technology 2	CAGE CLAMP®
WAGO connector 2	WAGO 733 Series
Solid conductor 2	0.08 ... 0.5 mm ² / 28 ... 20 AWG
Fine-stranded conductor 2	0.08 ... 0.5 mm ² / 28 ... 20 AWG
Strip length 2	5 ... 6 mm / 0.2 ... 0.24 inches

Physical data

Width	57 mm / 2.244 inches
Height	163 mm / 6.417 inches
Depth from upper-edge of DIN-rail	179 mm / 7.047 inches
Note (dimensions)	Height with connector

Mechanical data

Mounting type	DIN-35 rail
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Material data

Fire load	0 MJ
Weight	1472.2 g

Environmental requirements

Ambient temperature (operation)	-25 ... +70 °C (Device starts at -40 °C (type-tested))
Ambient temperature (storage)	-25 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	-3 %/K (> 50 °C)
Climatic category	3K3 (per EN 60721)