

## Data Sheet | Item Number: 787-819

Switched-mode power supply; Pro; 1-phase; 12 VDC output voltage; 6 A output current; TopBoost + PowerBoost; DC OK contact

<https://www.wago.com/787-819>



### 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		Output	
Phases	1	Nominal output voltage $U_{o, nom}$	DC 12 V (SELV)
Nominal input voltage $U_{i, nom}$	1 x AC 100 ... 240 V	Output voltage range	DC 11 ... 18 V (adjustable)
Input voltage range	1 x AC 85 ... 264 V; DC 120 ... 300 V	Default Setting	DC 12 V
Input voltage derating	-5 %/V (< 95 VAC)	Nominal output current $I_{o, nom}$	6 A (12 VDC)
Nominal mains frequency range	50 ... 60 Hz; 0 Hz	Nominal output power	72 W
Input current $I_i$	$\leq 0.51$ A (240 VAC; 6 ADC)	Deviation	$\leq 1$ %
Discharge current	$\leq 1$ mA	Residual ripple	$\leq 70$ mV (peak-to-peak)
Inrush current	$\leq 30$ A (peak)	Current limitation	$1.1 \times I_{o, nom}$ (typ.)
Power factor correction (PFC)	Passive	Overload behavior	TopBoost/PowerBoost/Constant current mode
Mains failure hold-up time	$\geq 70$ ms (230 VAC)	PowerBoost	DC 12 A (4 s); DC 9 A (8 s)
		TopBoost	DC 21 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 $P_l$	$\leq 0.5$ W (standby); $\leq 3$ W (no load); $\leq 9.4$ W (nominal load)
Efficiency (typ.)	83 %

### Circuit protection

Internal fuse	T 2 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 25 V
Overtoltage 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 <sup>2</sup> / 28 ... 12 AWG
Fine-stranded conductor	0.08 ... 2.5 mm <sup>2</sup> / 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 <sup>2</sup> / 28 ... 20 AWG
Fine-stranded conductor 2	0.08 ... 0.5 mm <sup>2</sup> / 28 ... 20 AWG
Strip length 2	5 ... 6 mm / 0.2 ... 0.24 inches

### Physical data

Width	40 mm / 1.575 inches
Height	163 mm / 6.417 inches
Depth from upper-edge of DIN-rail	163 mm / 6.417 inches
Note (dimensions)	Height with connector

### Mechanical data

Mounting type	DIN-35 rail
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### Material data

Fire load	0 MJ
Weight	800 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)

### Standards and specifications

Conformity marking	CE
Standards/specifications	EN 61010-1 EN 61010-2-201 EN 61204-3 EN 61558-2-16 UL 60950 UL 508

### Commercial data

Product Group	6 (INTERFACE ELECTRONIC)
eCl@ss 10.0	27-04-07-01
eCl@ss 9.0	27-04-07-01
ETIM 9.0	EC002540
ETIM 8.0	EC002540
PU (SPU)	1 pcs
Packaging type	Box
Country of origin	DE
GTIN	4050821226499
Customs tariff number	85044083900

### Environmental Product Compliance

RoHS Compliance Status	Compliant, No Exemption
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