Data sheet | Item number: 787-1650

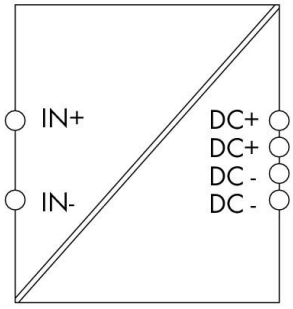
DC/DC Converter; 24 VDC input voltage; 12 VDC output voltage; 4 A output current; galvanically isolated

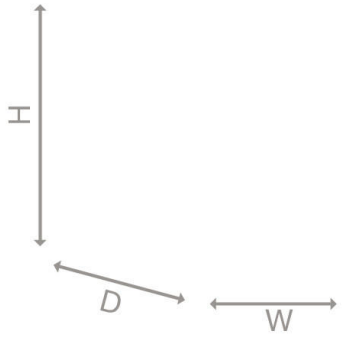
www.wago.com/787-1650



RoHS ✓ Compliant

BOMcheck.net





Item description

Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN 60950-1
- Control deviation: ± 1 %

Subject to changes. Please also observe the further product documentation!

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Do you have any questions about our products?
We are always happy to take your call at +49 (571) 887-44222.

Data
Technical data

Input

Nominal input voltage $U_{i\ nom}$	DC 24 V
Input voltage range	DC 18 … 60 V
Nominal mains frequency range	0 Hz
Input current I_i	≤ 2.56 A (24 VDC); ≤ 0.96 A (60 VDC); ≤ 3.39 A (18 VDC)
Discharge current	≤ 0.25 mA
Inrush current	≤ 60 A (NTC)
Mains failure hold-up time	≥ 5 ms (24 VDC)

Output

Nominal output voltage $U_{o\ nom}$	DC 12 V (SELV)
Output voltage range	DC 11.5 … 14.5 V (adjustable)
Default setting	DC 12 V
Nominal output current $I_{o\ nom}$	4 A
Nominal output power	48 W
Control deviation	≤ 1 %
Residual ripple	≤ 50 mV (peak-to-peak)
Current limitation	1.1 x $I_{o\ nom}$ (typ.)
Overload behavior	Constant current

Signaling and communication

Signaling	1 x Status indication LED (green)
Operation status indicator	Green LED (U_o)

Efficiency/power losses

Power loss P_l	≤ 1 W (No load); ≤ 11.7 W (DC_{in} 24 V / 4 A); ≤ 1.28 W (48 VDC; 40 A)
Power loss (max.) $P_{l\ (max.)}$	15 W (DC_{in} 18 V / 4 A)
Efficiency (typ.)	84 %

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Circuit protection

Internal fuse	T 4 A / 250 VDC
Recommended backup fusing	T 6.3 A

Safety and protection

Isolation voltage (Pri.-Sec.)	DC 2.2 kV
Protection class	III
Protection type	IP20 (per EN 60529)
Resistance to reverse feed	≤ DC 25 V
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Overvoltage protection; secondary	Internal protective circuit ≤ 35 VDC (in the event of a fault)
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)	Eingang/Ausgang/Signalisierung
Connection technology	CAGE CLAMP®
WAGO Connector	WAGO 721 Series
Solid conductor	0.08 … 2.5 mm² / 28 … 12 AWG
Fine-stranded conductor	0.08 … 2.5 mm² / 28 … 12 AWG
Strip length	8 … 9 mm / 0.31 … 0.35 inch

Physical data

Width	45 mm / 1.772 inch
Height	90 mm / 3.543 inch
Depth from upper edge of DIN-rail	107.5 mm / 4.232 inch

Mechanical data

Mounting type	DIN-35 rail

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Material data

Flammability class per UL94	V0
Weight	240 g

Environmental requirements

Surrounding air temperature (operation)	-25 … 70 °C
Surrounding air temperature (storage)	-25 … 85 °C
Relative humidity	5 … 96 % (no condensation permissible)
Derating	-2 %/K (> 55 °C)
Pollution degree	2
Climatic category	3K3 (per EN 60721)

Standards and specifications

Conformity marking	CE
Standards/Specifications	EN 60950-1; EN 61204-3; EN 61558-2-16

Commercial data

Packaging type	BOX
Country of origin	DE
GTIN	4055143737593
Customs tariff number	85044082900

Compatible products

tools



Item no.: 210-769
SCREWDRIVER; green

www.wago.com/210-769

Downloads

Documentation

Bid Text

787-1650 X81 - Datei	1. 7. 2019	xml 6.0 kB	Download
787-1650 docx - Datei	24. 6. 2019	docx 19.6 kB	Download

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Instruction Leaflet

DC/DC Converter 24 VDC input voltage; 12 VDC output voltage; 4 A output current; galvanically isolated	01.03.2018 8. 10. 2020	pdf 174.6 kB	Download

Additional Information

Disposal; Electrical and electronic equipment, Packaging	V 1.0.0	pdf 265.8 kB	Download

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 787-1650 DC/DC Converter; 24 VDC input voltage; 12 VDC output voltage; 4 A output current; galvanically isolated	URL	Download

Installation Notes

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