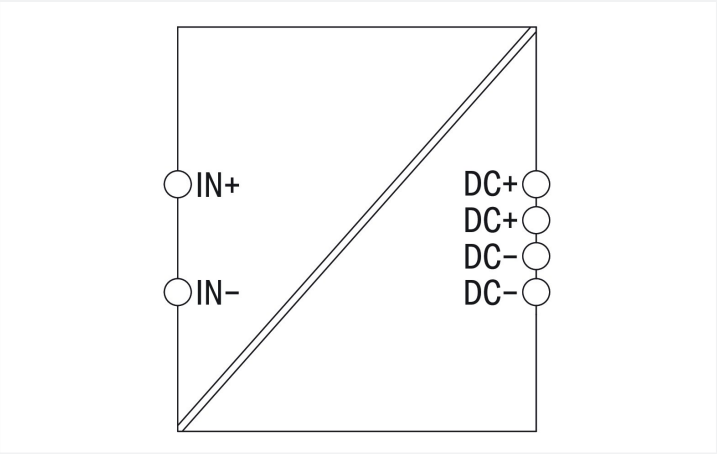
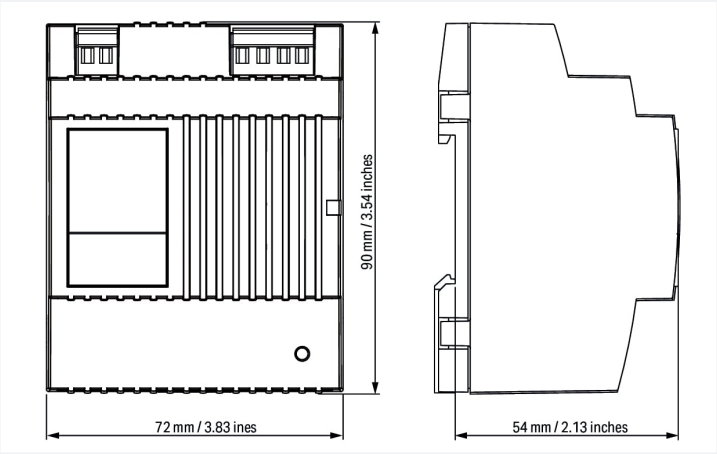
Data Sheet | Item Number: 787-1014

DC/DC Converter; Compact; 110 VDC input voltage; 24 VDC output voltage; 2 A output current

https://www.wago.com/787-1014





Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Stepped profile, ideal for distribution boards/boxes
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN 60950-1/UL 60950-1
- Control deviation: ±1 % (±10 % within the application range of EN 50121-3-2)
- Suitable for railway applications

Technical data

Input

Nominal input voltage $U_{i\,nom}$	110 VDC
Input voltage range	77 … 140 VDC
Nominal mains frequency range	0 Hz
Input current I_i	≤ 0.77 A (77 VDC); ≤ 0.42 A (140 VDC)
Discharge current	≤ 1 mA
Inrush current	≤ 30 A (NTC)
Mains failure hold-up time	≥ 8 ms (77 VDC); ≥ 25 ms (140 VDC)

Output

Nominal output voltage $U_{o\,nom}$	24 VDC (SELV)
Default Setting	DC 24 V
Nominal output current $I_{o\,nom}$	2 A (24 VDC); 1.6 A (in any mounting position)
Nominal output power	48 W
Deviation	≤ 1 %
Residual ripple	≤ 100 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	≤ 1.9 W (110 VDC; no load); ≤ 9.9 W (110 VDC; nominal load)
Power loss (max.) $P_{l\,(max.)}$	9.9 W (77 VDC / 24 VDC; 2 A)
Efficiency (typ.)	85 %

Circuit protection

Internal fuse	T 4 A / 125 VDC
Backup fusing (recommended)	Circuit breaker: 6 A, 10 A; Tripping characteristic: B or C

Safety and protection

Isolation voltage (pri.-sec.)	DC 4.242 kV
Protection class	II
Protection type	IP20; per EN 60529
Resistance to reverse feed	≤ 35 VDC
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Overvoltage protection; secondary	Internal protective circuit ≤ 40 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	Input/output
Connection technology	CAGE CLAMP®
WAGO connector	WAGO 740 Series
Solid conductor	0.08 … 2.5 mm² / 28 … 12 AWG
Fine-stranded conductor	0.08 … 2.5 mm² / 28 … 12 AWG
Strip length	6 … 7 mm / 0.24 … 0.28 inches

Physical data

Width	72 mm / 2.835 inches
Height	89 mm / 3.504 inches
Depth	59 mm / 2.323 inches
Depth from upper-edge of DIN-rail	55 mm / 2.165 inches

Mechanical data

Housing design	DIN-rail-mount enclosure
Mounting type	DIN-35 rail

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Material data

Flammability class per UL94	V0
Fire load	0 MJ
Weight	250 g

Environmental requirements

Ambient temperature (operation)	-40 … +70 °C
Ambient temperature (storage)	-40 … +85 °C
Relative humidity	5 … 96 % (Coated PCB)
Derating	-1.5 %/K (> 55 °C)
Climatic category	3K3 (per EN 60721)
Resistance to shock and vibration	Category 1, Class B (per EN 61373:2010)

Standards and specifications

Conformity marking	CE
Standards/specifications	EN 61010-1 EN 61010-2-201 EN 61204-3 EN 50121-3-2 DNV
Standards/specifications (pending)	EN 50125 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	4050821819714
Customs tariff number	85044083900

Environmental Product Compliance

RoHS Compliance Status	Compliant,No Exemption

Approvals / Certificates

General approvals

Approval	Standard	Certificate Name
EAC GZO Almaty Standart	TP TC 004/2011	EAC CoC 03078
EAC GZO Almaty Standart	TP TC 020/2011	EAC CoC 03081

Declarations of conformity and manufacturer's declarations

Approval	Standard	Certificate Name
EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-

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Downloads

Environmental Product Compliance

Compliance Search
Environmental Product Compliance 787-1014

Documentation

Bid Text

787-1014	19.02.2019	xml 5.43 KB	
787-1014	24.06.2019	docx 18.41 KB	
787-1014	24.06.2019	pdf 74.06 KB	

Instruction Leaflet

Primär getaktete Stromversorgungen COMPACT	11.03.2022	pdf 1600.57 KB	

CAD/CAE-Data

CAD data

2D/3D Models 787-1014

CAE data

EPLAN Data Portal 787-1014
WSCAD Universe 787-1014
ZUKEN Portal 787-1014

1 Compatible Products

1.1 Optional Accessories

1.1.1 Marking

1.1.1.1 Marking strip

Item No.: 210-831
Marking strips; on reel; 2.3 mm wide; plain; Self-adhesive; white

Item No.: 210-832
Marking strips; on reel; 3 mm wide; plain; Self-adhesive; white

1.1.2 Tool

1.1.2.1 Operating tool

Item No.: 210-720
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured