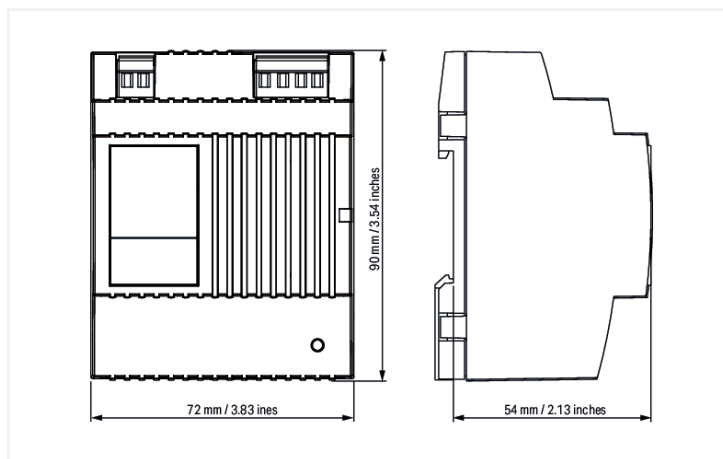
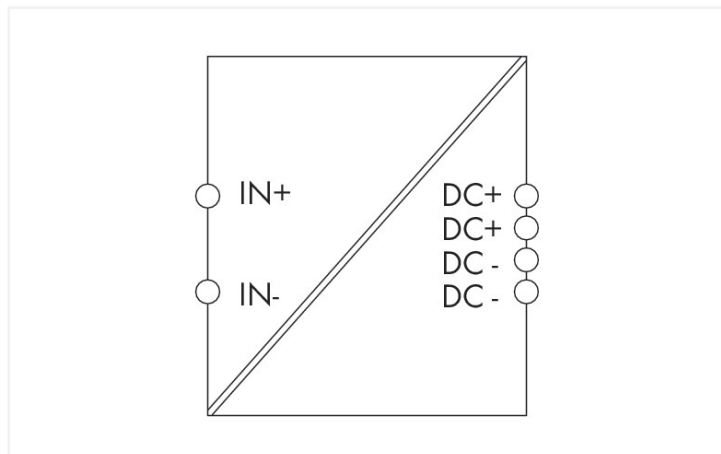


# Data Sheet | Item Number: 787-1014

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:  $\pm 1\%$  ( $\pm 10\%$  within the application range of EN 50121-3-2)
- Suitable for railway applications

## Technical data

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

Output	
Nominal output voltage $U_{o, \text{nom}}$	DC 24 V (SELV)
Default setting	DC 24 V
Nominal output current $I_{o, \text{nom}}$	2 A (24 VDC); 1.6 A (in any mounting position)
Nominal output power	48 W
Deviation	$\leq 1\%$
Residual ripple	$\leq 100$ mV (peak-to-peak)
Current limitation	$1.1 \times I_{o, \text{nom}}$ (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 $P_I$	$\leq 1.9$ W (110 VDC; no load); $\leq 9.9$ W (110 VDC; nominal load)
Power loss (max.) $P_{I(max)}$	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	$\leq$ DC 35 V
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Overvoltage protection; secondary	Internal protective circuit $\leq 40$ 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 mm <sup>2</sup> / 28 ... 12 AWG
Fine-stranded conductor	0.08 ... 2.5 mm <sup>2</sup> / 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

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)
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 8.0	EC002540
ETIM 7.0	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
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### Approvals / Certificates

#### General approvals



Approval	Standard	Certificate Name
EAC Brjansker Zertifizierungs- stelle	TP TC 004/2011, TP TC 020/2011	EAC RU C-DE.AM02. B.00089_19

#### Declarations of conformity and manufacturer's declarations

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

### 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	
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CAD/CAE-Data

CAD data

2D/3D Models 787-1014	
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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

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

Current addresses can be found at: [www.wago.com](http://www.wago.com)