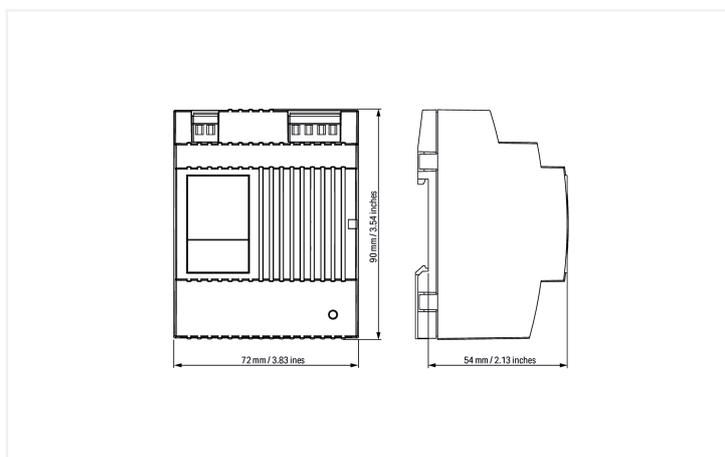
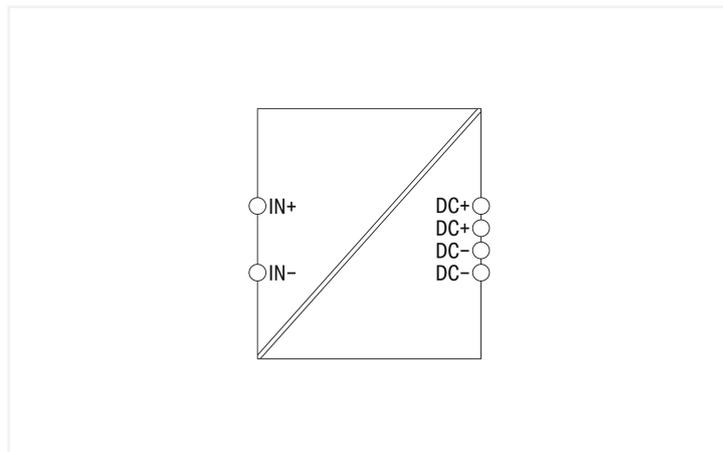


# Data Sheet | Item Number: 787-1014

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 $U_{i, nom}$	110 VDC
Input voltage range	77 ... 140 VDC
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 $U_{o, nom}$	24 VDC (SELV)
Default Setting	24 VDC
Nominal output current $I_{o, nom}$	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	$1.1 \times I_{o, nom}$ (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 fuse (recommended)	Circuit breaker: 6 A, 10 A; Tripping characteristic: B or C

### Safety and protection

Isolation voltage (pri.-sec.)	4.242 kVDC
Protection class	II
Protection type	IP20; per EN 60529
Resistance to reverse feed	$\leq 35$ VDC
Oversvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Oversvoltage 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 1

Connection type	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

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

### 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)
PU (SPU)	1 pcs
Packaging type	Box
Country of origin	DE
GTIN	4050821819714
Customs tariff number	85044083900

### Product Classification

UNSPSC	39121004
eCl@ss 10.0	27-04-07-01
eCl@ss 9.0	27-04-07-01
ETIM 9.0	EC002540
ETIM 10.0	EC002540
ECCN	NO US CLASSIFICATION

Environmental Product Compliance	
RoHS Compliance Status	Compliant, No Exemption

### Approvals / Certificates

General approvals			Declarations of conformity and manufacturer's declarations								
			<table border="1"> <thead> <tr> <th>Approval</th> <th>Standard</th> <th>Certificate Name</th> </tr> </thead> <tbody> <tr> <td>EU-Declaration of Conformity WAGO GmbH &amp; Co. KG</td> <td>-</td> <td>-</td> </tr> </tbody> </table>			Approval	Standard	Certificate Name	EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-
Approval	Standard	Certificate Name									
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EAC GZO Almaty Standart	TP TC 004/2011	EAC CoC 03078									
EAC GZO Almaty Standart	TP TC 020/2011	EAC CoC 03081									

### Downloads

Environmental Product Compliance	
Compliance Search	
Environmental Product Compliance 787-1014	<a href="#">↓</a>

### Documentation

Bid Text				Instruction Leaflet			
787-1014	19.02.2019	xml 5.43 KB	<a href="#">↓</a>	Primär getaktete Stromversorgungen COMPACT	11.03.2022	pdf 1600.57 KB	<a href="#">↓</a>
787-1014	24.06.2019	docx 18.41 KB	<a href="#">↓</a>				
787-1014	24.06.2019	pdf 74.06 KB	<a href="#">↓</a>				

### CAD/CAE-Data

CAD data		CAE data	
2D/3D Models 787-1014	<a href="#">↓</a>	EPLAN Data Portal 787-1014	<a href="#">↓</a>
		WSCAD Universe 787-1014	<a href="#">↓</a>
		ZUKEN Portal 787-1014	<a href="#">↓</a>

## 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