

**Data sheet | Item number: 787-1014**

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

[www.wago.com/787-1014](http://www.wago.com/787-1014)



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.



## Item description

### 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

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## Data

### 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)
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 $P_l$	$\leq 1.9$ W (110 VDC; No load); $\leq 9.9$ W (110 VDC; Nominal load)
Power loss (max.) $P_{l\text{ (max.)}}$	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

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## Safety and protection

Protection class	II
Protection type	IP20; per EN 60529
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 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
Weight	250 g

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## 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 8.0	EC002540
ETIM 7.0	EC002540
Recupel Type	
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

Certificate

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Logo	Approval	Additional Approval Text	name
	<b>EAC</b> Brjansker Zertifizierungsstelle	TP TC 004/2011, TP TC 020/2011	EAC RU C-DE.AM02.B. 00089_19

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

Logo	Approval	Additional Approval Text	Certificate name
	<b>EU-Declaration of Conformity</b> WAGO GmbH & Co. KG	-	-

#### Optional accessories

##### Tool

Operating tool		
<b>Item no.: 210-720</b>		<a href="http://www.wago.com/210-720">www.wago.com/210-720</a>
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured		

##### Marking accessories

Marking strip		
<b>Item no.: 210-831</b>		<a href="http://www.wago.com/210-831">www.wago.com/210-831</a>
Marking strips; on reel; 2.3 mm wide; plain; Self-adhesive; white		
<b>Item no.: 210-832</b>		<a href="http://www.wago.com/210-832">www.wago.com/210-832</a>
Marking strips; on reel; 3 mm wide; plain; Self-adhesive; white		

#### Downloads

##### Documentation

##### Bid Text

787-1014 docx - Datei	2019 年6月24 日	docx 18.9 kB	Download
787-1014 pdf - Datei	2019 年6月24 日	pdf 75.8 kB	Download
787-1014 X81 - Datei	2019 年2月19 日	xml 5.6 kB	Download

##### Instruction Leaflet

Primär getaktete Stromversorgungen COMPACT	2022 年3月11 日	pdf 1.6 MB	Download
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DC 110 V / DC 24 V, 2 A

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#### Additional Information

Disposal and Recycling	V 1.1.0	pdf	Download
Electrical and electronic equipment, Batteries, Packaging	2022 年8月18 日	2.2 MB	

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#### CAD/CAE-Data

##### CAD data

2D/3D Models 787-1014	URL	Download
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##### CAE data

EPLAN Data Portal 787-1014	URL	Download
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ZUKEN Portal 787-1014	URL	Download
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#### Environmental Product Compliance

##### Compliance Search

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#### Installation Notes

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