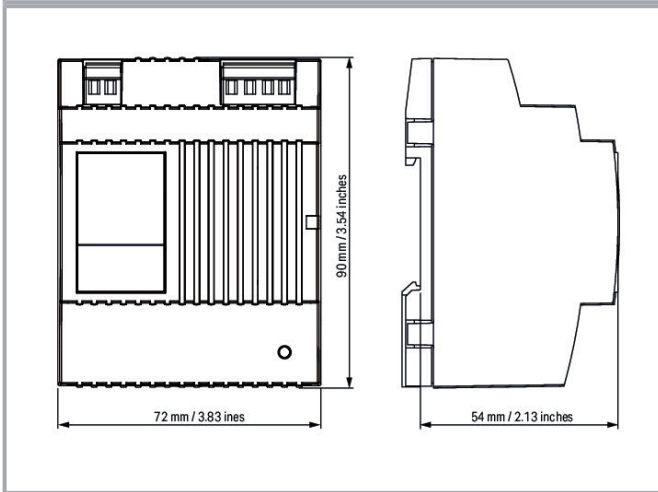
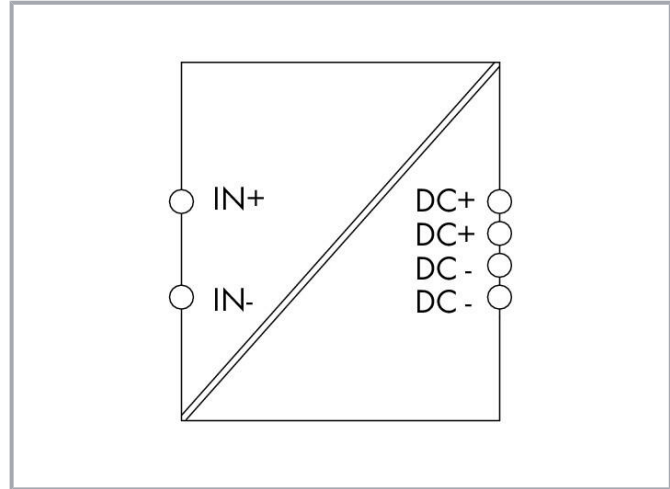


## Data sheet | Item number: 787-1014

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)



## Item description

### Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Stepped profile, ideal for distribution boards/boxes

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

WAGO GmbH & Co. KG  
Hansastr. 27  
32423 Minden  
Phone: +49571 887-0 | Fax: +49571 887-169  
Email: [info.de@wago.com](mailto:info.de@wago.com) | Web: [www.wago.com](http://www.wago.com)

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

- 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

## 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 $I_i$                     | $\leq 0.77\text{ A}$ (77 VDC); $\leq 0.42\text{ A}$ (140 VDC) |
| Inrush current                          | $\leq 30\text{ A}$ (NTC)                                      |
| Mains failure hold-up time              | $\geq 8\text{ ms}$ (77 VDC); $\geq 25\text{ ms}$ (140 VDC)    |

#### Output

|  |  |
|--|--|
| Nominal output voltage $U_{o\text{nom}}$ | DC 24 V (SELV)                                 |
| Nominal output current $I_{o\text{nom}}$ | 2 A (24 VDC); 1.6 A (in any mounting position) |
| Nominal output power                     | 48 W   |
| Residual ripple                          | $\leq 100\text{ mV}$ (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 $P_l$                      | $\leq 1.9\text{ W}$ (110 VDC; No load); $\leq 9.9\text{ W}$ (110 VDC; Nominal load) |
| Power loss (max.) $P_{l(\text{max})}$ | 9.9 W (77 VDC / 24 VDC; 2 A)  |
| Efficiency (typ.)                     | 85 %  |

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



## 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

|                                   |   |
|-----------------------------------|---|
| 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<br>≤ 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 |
|---------------|-------------|

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



## Material Data

|                             |       |
|-----------------------------|-------|
| Flammability class per UL94 | V0    |
| 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<br>EN 61010-2-201<br>EN 61204-3<br>EN 50121-3-2<br>DNV |
| Standards/specifications (pending) | EN 50125<br>UL 60950<br>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 |
|------------------------|-------------------------|


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

## Approvals / Certificates

### General approvals

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



### Declarations of conformity and manufacturer's declarations

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

## Optional accessories


### Marking accessories

#### Marking strip

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

### Tool

#### Operating tool

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

## Downloads

### Documentation

#### Bid Text

|                          |             |                 |          |
|--------------------------|-------------|-----------------|----------|
| 787-1014<br>docx - Datei | 2019 Jun 24 | docx<br>18.9 kB | Download |
| 787-1014                 | 2019 Jun 24 | pdf             | Download |

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



|             |  |  |         |  |
|-------------|--|--|---------|--|
| pdf - Datei |  |  | 75.8 kB |  |
|-------------|--|--|---------|--|

|             |             |        |          |
|-------------|-------------|--------|----------|
| 787-1014    | 2019 Feb 19 | xml    | Download |
| X81 - Datei |             | 5.6 kB |          |

**Instruction Leaflet**

|   |             |               |          |
|---|-------------|---------------|----------|
| Primär getaktete Stromversorgungen COMPACT<br>DC 110 V / DC 24 V, 2 A | 2022 Mar 11 | pdf<br>1.6 MB | Download |
|---|-------------|---------------|----------|

**Additional Information**

|   |                        |               |          |
|---|------------------------|---------------|----------|
| Disposal and Recycling<br>Electrical and electronic equipment, Batteries, Packaging | V 1.1.0<br>2022 Aug 18 | pdf<br>2.2 MB | Download |
|---|------------------------|---------------|----------|

**CAD/CAE-Data**

**CAD data**

|                       |     |          |
|-----------------------|-----|----------|
| 2D/3D Models 787-1014 | URL | Download |
|-----------------------|-----|----------|

**CAE data**

|                            |     |          |
|----------------------------|-----|----------|
| EPLAN Data Portal 787-1014 | URL | Download |
|----------------------------|-----|----------|

|                         |     |          |
|-------------------------|-----|----------|
| WSCAD Universe 787-1014 | URL | Download |
|-------------------------|-----|----------|

|                       |     |          |
|-----------------------|-----|----------|
| ZUKEN Portal 787-1014 | URL | Download |
|-----------------------|-----|----------|

**Environmental Product Compliance**

**Compliance Search**

|   |     |          |
|---|-----|----------|
| Environmental Product Compliance 787-1014<br>DC/DC Converter; Compact; 110 VDC input voltage; 24 VDC output voltage; 2 A output current | URL | Download |
|---|-----|----------|

**Installation Notes**

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