

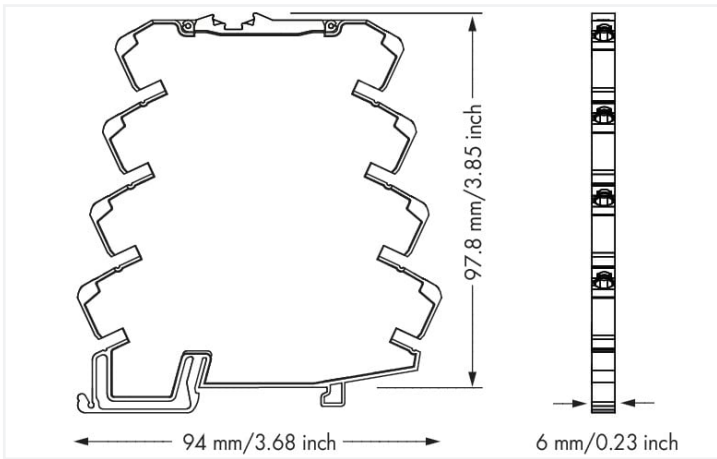
# Data Sheet | Item Number: 787-2803

DC/DC Converter; 48 VDC input voltage; 24 VDC output voltage; 0.5 A output current; DC OK contact

<https://www.wago.com/787-2803>



|         |   |    |   |       |
|---------|---|----|---|-------|
| DC O.K. | 1 |    | 5 | n.c.  |
| GND     | 2 |    | 6 | n.c.  |
| Vin+    | 3 |    | 7 | Vout+ |
| GND     | 4 | IN | 8 | GND   |



Dimensions in mm

## Features:

- DC/DC converter in a compact 6 mm housing
- DC/DC converters (787-28xx) supply devices with 5, 10, 12 or 24 VDC from a 24 or 48 VDC power supply with an output power up to 12 W.
- Output voltage monitoring via DC OK signal output
- Can be commoned with 857 and 2857 Series devices
- Comprehensive range of approvals for multiple applications

## Technical data

| Input                              |   |
|------------------------------------|---|
| Nominal input voltage $U_{i, nom}$ | DC 48 V                                 |
| Input voltage range                | DC 40 ... 55 V                          |
| Nominal mains frequency range      | 0 Hz                                    |
| Input current $I_i$                | $\leq 0.34$ A                           |
| Inrush current                     | $\leq 0.5$ A (at nominal input voltage) |

| Output                              |                             |
|-------------------------------------|-----------------------------|
| Nominal output voltage $U_{o, nom}$ | DC 24 V                     |
| Output voltage range                | $\pm 3$ %                   |
| Nominal output current $I_{o, nom}$ | 0.5 A                       |
| Nominal output power                | 12 W                        |
| Deviation                           | $\leq 3$ %                  |
| Load regulation                     | $\leq 1$ %                  |
| Residual ripple                     | $\leq 20$ mV (peak-to-peak) |

### Signaling and communication

|                            |   |
|----------------------------|---|
| Signaling                  | 1 x LED DC OK (green)<br>1 x Short circuit LED (red)<br>1 x Active signal output ( $U_i$ , max. 4 mA) |
| Operation status indicator | Green LED ( $U_o$ )<br>Red LED (short circuit)  |

### Efficiency/power losses

|                   |  |
|-------------------|--|
| Power loss $P_I$  | $\leq 0.29$ W; $\leq 1.2$ W (nominal load)         |
| Efficiency (typ.) | 91 % (at nominal input voltage and nominal output) |

### Circuit protection

|               |    |
|---------------|----|
| Internal fuse | No |
|---------------|----|

### Safety and protection

|                            |                    |
|----------------------------|--------------------|
| Protection class           | III                |
| Protection type            | IP20; per EN 60529 |
| Reverse voltage protection | Yes                |
| Resistance to reverse feed | $\leq$ DC 27 V     |
| Pollution degree           | 2                  |
| Short-circuit-protected    | Yes                |
| Open-circuit-proof         | Yes                |
| Parallel operation         | No                 |
| Series operation           | No                 |
| MTBF                       | $> 1,800,000$ h    |

### Connection data

|                         |  |
|-------------------------|--|
| Number of jumper slots  | 8  |
| Connection technology   | Push-in CAGE CLAMP®                          |
| WAGO connector          | WAGO 857 Series                              |
| Solid conductor         | 0.08 ... 2.5 mm <sup>2</sup> / 28 ... 14 AWG |
| Fine-stranded conductor | 0.34 ... 2.5 mm <sup>2</sup> / 22 ... 14 AWG |
| Strip length            | 9 ... 10 mm / 0.35 ... 0.39 inches           |

### Physical data

|                                   |                       |
|-----------------------------------|-----------------------|
| Width                             | 6 mm / 0.236 inches   |
| Height                            | 94 mm / 3.701 inches  |
| Depth from upper-edge of DIN-rail | 97.8 mm / 3.85 inches |

### Mechanical data

|               |             |
|---------------|-------------|
| Mounting type | DIN-35 rail |
|---------------|-------------|

### Material data

|           |          |
|-----------|----------|
| Fire load | 0.418 MJ |
| Weight    | 32.6 g   |

### Environmental requirements

|                                 |                                     |
|---------------------------------|-------------------------------------|
| Ambient temperature (operation) | -25 ... +70 °C                      |
| Ambient temperature (storage)   | -40 ... +85 °C                      |
| Relative humidity               | ≤ 95% (no condensation permissible) |
| Derating                        | No derating                         |

### Standards and specifications

|                          |  |
|--------------------------|--|
| Conformity marking       | CE   |
| Standards/specifications | EN 61000-6-2<br>EN 61000-6-3<br>EN 60950-1<br>UL 61010-2-201 |

### Commercial data

|                       |               |
|-----------------------|---------------|
| 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        | Bag           |
| Country of origin     | DE            |
| GTIN                  | 4055143454308 |
| Customs tariff number | 85044083900   |

### Environmental Product Compliance

|   |  |
|---|--|
| CAS-No.                                   | 11120-22-2<br>1303-86-2<br>1317-36-8<br>7439-92-1          |
| REACH Candidate List Substance            | Diboron trioxide<br>Lead<br>Lead monoxide<br>Lead silicate |
| RoHS Compliance Status                    | Compliant,With Exemption                                   |
| RoHS Exemption                            | 6(c)<br>7(a)<br>7(c)-I<br>7(c)-II                          |
| SCIP notification number (Austria)        | c06db537-0a5a-4220-8f2b-6f34eb4706e8                       |
| SCIP notification number (Belgium)        | 77620286-9aeb-4063-bfa6-b38879d6ffe4                       |
| SCIP notification number (Bulgaria)       | 506c13f5-9391-4958-838f-5f0590dd1624                       |
| SCIP notification number (Czech Republic) | 697a1d03-e058-4eef-820b-195017d6db4a                       |
| SCIP notification number (Denmark)        | bbb01115-d42e-455a-8cba-988b00df85e7                       |
| SCIP notification number (Finland)        | 3ee1e817-0598-48d7-8ecd-385e4fd11fb2                       |
| SCIP notification number (France)         | 1628bb87-2a72-4b21-9f69-a5f68107ff06                       |
| SCIP notification number (Germany)        | f913db78-e89b-4c3a-b5c7-9fd73456200f                       |
| SCIP notification number (Hungary)        | abe94f88-eed3-442d-97e8-0b89f20bf97e                       |
| SCIP notification number (Italy)          | bbd4d650-347e-4ae6-a63c-785f72b346a3                       |
| SCIP notification number (Netherlands)    | 52af1220-96e8-4853-8e39-017689eaabbb                       |
| SCIP notification number (Poland)         | 5a040602-33c3-41c9-9967-40320ba5f067                       |
| SCIP notification number (Romania)        | 3676d4b4-25c1-4d88-845c-a3079105cf7c                       |
| SCIP notification number (Sweden)         | 84380937-9397-4467-bc46-0d54e3c6a3ed                       |

### Approvals / Certificates

General approvals



| Approval  | Standard       | Certificate Name                        |
|---|----------------|---|
| EAC<br>Brjansker Zertifizierungsstelle                    | TP TC 020/2011 | EAC_Certificate_RU_C-DE.AM02.B.00115_19 |
| UL<br>Underwriters Laboratories Inc. (ORDINARY LOCATIONS) | UL 61010-2-201 | E175199 Vol3 Sec1                       |

Declarations of conformity and manufacturer's declarations

| Approval   | Standard | Certificate Name |
|--|----------|------------------|
| EU-Declaration of Conformity<br>WAGO GmbH & Co. KG | -        | -                |

Downloads

Environmental Product Compliance

| Compliance Search   |
|---|
| Environmental Product Compliance 787-2803 <a href="#">↓</a> |

Documentation

| Bid Text |            |                  |                   |
|----------|------------|------------------|-------------------|
| 787-2803 | 24.06.2019 | docx<br>19.94 KB | <a href="#">↓</a> |
| 787-2803 | 24.06.2019 | pdf<br>89.81 KB  | <a href="#">↓</a> |
| 787-2803 | 06.12.2019 | xml<br>6.10 KB   | <a href="#">↓</a> |

| Instruction Leaflet |                       |                   |                   |
|---------------------|-----------------------|-------------------|-------------------|
| DC/DC-Wandler       | V 1.1.1<br>31.03.2020 | pdf<br>2359.41 KB | <a href="#">↓</a> |

CAD/CAE-Data

| CAD data                                   |
|--|
| 2D/3D Models<br>787-2803 <a href="#">↓</a> |

| CAE data  |
|---|
| EPLAN Data Portal<br>787-2803 <a href="#">↓</a> |
| WSCAD Universe<br>787-2803 <a href="#">↓</a>    |
| ZUKEN Portal<br>787-2803 <a href="#">↓</a>      |

1 Compatible Products

1.1 Optional Accessories

1.1.1 Marking

### 1.1.1.1 Marker



#### Item No.: 793-5501

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; white

#### Item No.: 793-502

WMB marking card; as card; MARKED; 1 ... 10 (10x); not stretchable; Horizontal marking; snap-on type; white

#### Item No.: 793-566

WMB marking card; as card; MARKED; 1 ... 50 (2x); not stretchable; Horizontal marking; snap-on type; white

#### Item No.: 793-503

WMB marking card; as card; MARKED; 11 ... 20 (10x); not stretchable; Horizontal marking; snap-on type; white



#### Item No.: 793-504

WMB marking card; as card; MARKED; 21 ... 30 (10x); not stretchable; Horizontal marking; snap-on type; white

#### Item No.: 793-505

WMB marking card; as card; MARKED; 31 ... 40 (10x); not stretchable; Horizontal marking; snap-on type; white

#### Item No.: 793-506

WMB marking card; as card; MARKED; 41 ... 50 (10x); not stretchable; Horizontal marking; snap-on type; white

#### Item No.: 793-501

WMB marking card; as card; not stretchable; plain; snap-on type; white



#### Item No.: 2009-115

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white

### 1.1.1.2 Marking strip



#### Item No.: 2009-110

Marking strips; for Smart Printer; on reel; not stretchable; plain; snap-on type; 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