

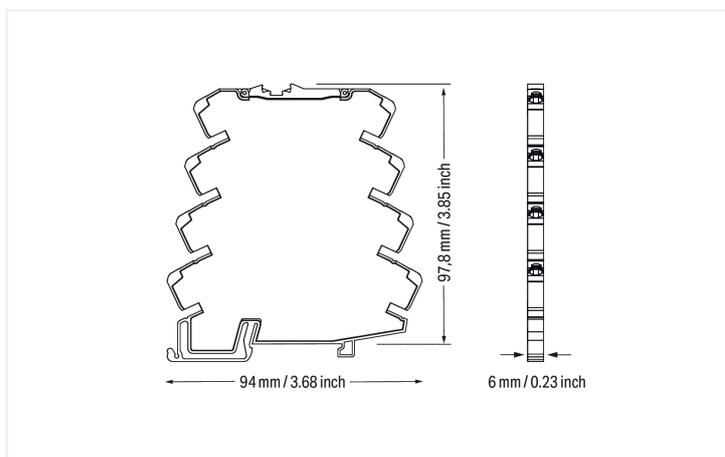
Data Sheet | Item Number: 787-2805

DC/DC Converter; 24 VDC input voltage; 12 VDC output voltage; 0.5 A output current; DC OK contact

<https://www.wago.com/787-2805>



| | | | | |
|--------------------|---|-------|---|-------------------|
| DC OK | 1 | DC OK | 5 | n.c. |
| GND | 2 | | 6 | n.c. |
| V _{out} + | 3 | OUT | 7 | V _{in} + |
| GND | 4 | IN | 8 | GND |



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 $U_{i, nom}$ | 24 VDC |
| Input voltage range | 15 ... 30 VDC |
| Nominal mains frequency range | 0 Hz |
| Input current I_i | ≤ 0.5 A |
| Inrush current | ≤ 0.5 A (at nominal input voltage) |

Output

| | |
|-------------------------------------|-----------------------------|
| Nominal output voltage $U_{o, nom}$ | 12 VDC |
| Output voltage range | ± 2 % |
| Nominal output current $I_{o, nom}$ | 0.5 A |
| Nominal output power | 6 W |
| Deviation | ≤ 2 % |
| Load regulation | ≤ 1 % |
| Residual ripple | ≤ 20 mV (peak-to-peak) |

Signaling and Communication

| | |
|----------------------------|---|
| Signaling | 1 x DC OK LED (green) 1 x Short circuit LED (red) 1 x Active signal output (U _r , max. 4 mA) |
| Operation status indicator | Green LED (U _o) Red LED (short circuit) |

Efficiency/Power Losses

| | |
|---------------------------|--|
| Power loss P _I | ≤ 0.21 W; ≤ 0.7 W (nominal load) |
| Efficiency (typ.) | 90 % (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 | ≤ 16 VDC |
| 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 1

| | |
|-------------------------|--|
| Connection technology | Push-in CAGE CLAMP® |
| WAGO connector | WAGO 857 Series |
| Solid conductor | 0.08 ... 2.5 mm ² / 28 ... 14 AWG |
| Fine-stranded conductor | 0.34 ... 2.5 mm ² / 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 | 0.363 MJ |
| Weight | 48.6 g |

Environmental requirements

| | |
|---------------------------------|---|
| Ambient temperature (operation) | -25 ... +70 °C |
| Ambient temperature (storage) | -40 ... +85 °C |
| Relative humidity | ≤ 95 % (no condensation permissible) |
| Derating | No derating |
| Climatic category | 3K3 (per EN 60721; except for low air pressure) |

Standards and Specifications

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

Commercial data

| | |
|-----------------------|---------------|
| PU (SPU) | 1 pcs |
| Packaging type | Bag |
| Country of origin | DE |
| GTIN | 4055143407045 |
| Customs tariff number | 85044083900 |

Product Classification

| | |
|-------------|----------------------|
| UNSPSC | 39121006 |
| 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

| | |
|---|---|
| CAS-No. | 1303-86-2 1317-36-8 7439-92-1 |
| REACH Candidate List Substance | Diboron trioxide Lead Lead monoxide |
| RoHS Compliance Status | Compliant, With Exemption |
| RoHS Exemption | 6(c) 7(a) 7(c)-I 7(c)-II |
| SCIP notification number (Austria) | 4f2a43e4-a730-4da6-863a-5a38b11c0458 |
| SCIP notification number (Belgium) | f9285629-a82b-482e-9934-56caaa89bd90 |
| SCIP notification number (Bulgaria) | aa1c2089-ca90-475b-b065-b290f8c47c73 |
| SCIP notification number (Czech Republic) | e4407a61-44ef-46f6-8b71-5957fb1b0e35 |
| SCIP notification number (Denmark) | 62e3f530-0083-4301-a58f-c18079aaac67 |
| SCIP notification number (Finland) | b5859d05-b7e1-4a35-a43a-cf33af17f955 |
| SCIP notification number (France) | 9a8251e6-a882-4123-987f-3af679ef6e75 |
| SCIP notification number (Germany) | 6edaf339-2ec1-4a85-bfcf-c4ac37d4e41b |
| SCIP notification number (Hungary) | 50511142-efbe-4d96-bb7d-4eb00b7c1b98 |
| SCIP notification number (Italy) | 7c3519fd-876f-4af4-a334-e0f41b17ffce |
| SCIP notification number (Netherlands) | f84285ba-e8f4-418f-8037-d27c744e1818 |
| SCIP notification number (Poland) | 91abfe2e-594d-4cbf-9277-a9a191349087 |
| SCIP notification number (Romania) | a5085aab-1513-44f7-a544-88b3170333b2 |
| SCIP notification number (Sweden) | 7ecaaaff-70ab-45de-8e2c-ff4a34524af3 |

Approvals / Certificates

General approvals



| Approval | Standard | Certificate Name |
|---|----------------|-------------------|
| EAC GZO Almaty Standart | TP TC 020/2011 | EAC CoC 03081 |
| UL 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 WAGO GmbH & Co. KG | - | - |

Downloads

Environmental Product Compliance

| Compliance Search |
|---|
| Environmental Product Compliance 787-2805 ↓ |

Documentation

| Bid Text | | | |
|----------|------------|------------------|-------------------|
| 787-2805 | 19.02.2019 | xml 5.65 KB | ↓ |
| 787-2805 | 11.01.2016 | doc 34.50 KB | ↓ |
| 787-2805 | 11.01.2016 | docx 19.89 KB | ↓ |
| 787-2805 | 11.01.2016 | pdf 89.73 KB | ↓ |

| Instruction Leaflet | | | |
|---------------------|-----------------------|-------------------|-------------------|
| DC/DC-Wandler | V 1.1.1 31.03.2020 | pdf 2359.41 KB | ↓ |

CAD/CAE-Data

| CAD data |
|--|
| 2D/3D Models 787-2805 ↓ |

| CAE data |
|---|
| EPLAN Data Portal 787-2805 ↓ |
| WSCAD Universe 787-2805 ↓ |
| ZUKEN Portal 787-2805 ↓ |

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