

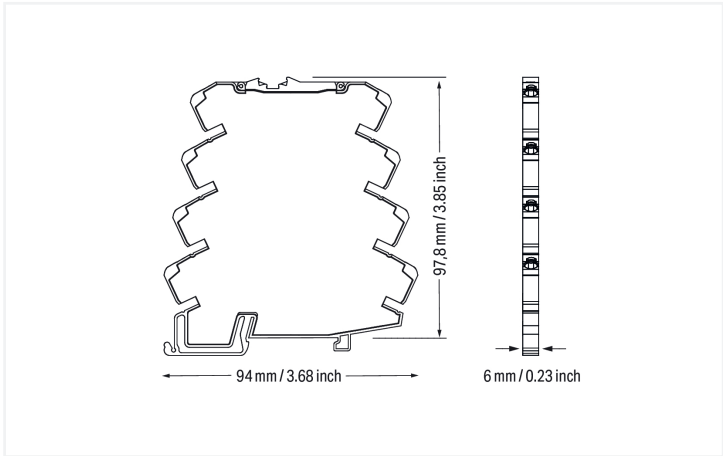
Data Sheet | Item Number: 787-2801

DC/DC Converter; 24 VDC input voltage; 5 VDC output voltage; 0.5 A output current; DC OK contact

<https://www.wago.com/787-2801>



|                    |   |   |                   |
|--------------------|---|---|-------------------|
| DC OK              | 1 | 5 | n.c.              |
| GND                | 2 | 6 | n.c.              |
| V <sub>out</sub> + | 3 | 7 | V <sub>in</sub> + |
| GND                | 4 | 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                              |                                    | Output                              |                        |
| Nominal input voltage $U_{i\,nom}$ | 24 VDC                             | Nominal output voltage $U_{o\,nom}$ | 5 VDC                  |
| Input voltage range                | 10 ... 30 VDC                      | Output voltage range                | ±3 %                   |
| Nominal mains frequency range      | 0 Hz                               | Nominal output current $I_{o\,nom}$ | 0.5 A                  |
| Input current $I_i$                | ≤ 0.34 A                           | Nominal output power                | 2.5 W                  |
| Inrush current                     | ≤ 0.5 A (at nominal input voltage) | Deviation                           | ≤ 3 %                  |
|                                    |                                    | Load regulation                     | ≤ 1 %                  |
|                                    |                                    | Residual ripple                     | ≤ 20 mV (peak-to-peak) |



| Signaling and Communication |                                                                                                               |
|-----------------------------|---------------------------------------------------------------------------------------------------------------|
| Signaling                   | 1 x DC OK LED (green)<br>1 x Short circuit LED (red)<br>1 x Active signal output (U <sub>r</sub> , max. 4 mA) |
| Operation status indicator  | Green LED (U <sub>o</sub> )<br>Red LED (short circuit)                                                        |

| Efficiency/Power Losses   |                                                      |
|---------------------------|------------------------------------------------------|
| Power loss P <sub>I</sub> | ≤ 0.13 W; ≤ 0.6 W (nominal load)                     |
| Efficiency (typ.)         | 82.5 % (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 mm² / 28 ... 14 AWG   |
| Fine-stranded conductor | 0.34 ... 2.5 mm² / 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        | 49.9 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<br>EN 61000-6-3<br>EN 60950-1<br>UL 61010-2-201 |

| Commercial data       |               |
|-----------------------|---------------|
| PU (SPU)              | 1 pcs         |
| Packaging type        | Bag           |
| Country of origin     | DE            |
| GTIN                  | 4055143407052 |
| 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          |                                           |
|-------------------------------------------|-------------------------------------------|
| CAS-No.                                   | 1303-86-2<br>1317-36-8<br>7439-92-1       |
| REACH Candidate List Substance            | Diboron trioxide<br>Lead<br>Lead monoxide |
| 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)        | dd50b732-8f7f-4611-b548-bf9573ea47e5      |
| SCIP notification number (Belgium)        | ac3172f8-3cbe-4f5b-9673-cd53b2ff89b8      |
| SCIP notification number (Bulgaria)       | 21260fb1-503b-4168-9dba-d4525e9688c5      |
| SCIP notification number (Czech Republic) | fa0beb31-1f2e-4c70-9a5a-b2bf14d31c85      |
| SCIP notification number (Denmark)        | 0ad7bafd-8a3f-4226-bcf8-90ccd0e1b480      |
| SCIP notification number (Finland)        | 322b3f8e-3e92-42ca-b31b-ff2e12ae260b      |
| SCIP notification number (France)         | 1716346b-8c81-4e60-ae92-991ce8df89bd      |
| SCIP notification number (Germany)        | c45cc0ab-24fa-4039-8544-5e118629f44a      |
| SCIP notification number (Hungary)        | 2b916107-02f4-4a9e-abad-02090b60a02c      |
| SCIP notification number (Italy)          | 399b6ded-51df-4a3d-a176-1a41fd98f76b      |
| SCIP notification number (Netherlands)    | 65de8cba-9fda-4434-a0b1-d526e9af032b      |
| SCIP notification number (Poland)         | 0bc56092-a29d-4805-9a94-5c8dd1a2a9fd      |
| SCIP notification number (Romania)        | cae1bd68-4828-4698-9fb8-cc38c4553b4d      |
| SCIP notification number (Sweden)         | 1a0a3f03-4fbd-4318-be50-926c4dfdba0f      |



Approvals / Certificates

General approvals



| Approval                                                     | Standard       | Certificate Name  |
|--------------------------------------------------------------|----------------|-------------------|
| EAC<br>GZO Almaty Standart                                   | TP TC 020/2011 | EAC CoC 03081     |
| UL<br>Underwriters Laboratories<br>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 787-2801 |



Documentation

| Bid Text         |
|------------------|
| 787-2801         |
| 19.02.2019       |
| xml<br>5.65 KB   |
| 787-2801         |
| 11.01.2016       |
| doc<br>34.00 KB  |
| 787-2801         |
| 11.01.2016       |
| docx<br>19.85 KB |
| 787-2801         |
| 11.01.2016       |
| pdf<br>89.66 KB  |



| Instruction Leaflet   |
|-----------------------|
| DC/DC-Wandler         |
| V 1.1.1<br>31.03.2020 |
| pdf<br>2359.41 KB     |



CAD/CAE-Data

| CAD data                 |
|--------------------------|
| 2D/3D Models<br>787-2801 |



| CAE data                      |
|-------------------------------|
| EPLAN Data Portal<br>787-2801 |
| WSCAD Universe<br>787-2801    |
| ZUKEN Portal<br>787-2801      |



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