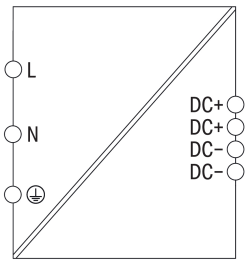
# Data Sheet | Item Number: 787-1701

Switched-mode power supply; Eco; 1-phase; 12 VDC output voltage; 2 A output current; DC-OK LED

https://www.wago.com/787-1701




Similar to illustration

**Features:**

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Encapsulated for use in control cabinets
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per EN 60335-1; PELV per EN 60204
- DIN-35 rail mountable in different positions
- Direct installation on mounting plate via cable grip

## Technical data

### Input

| | |
|---|---|
| Phases | 1 |
| Nominal input voltage $U_{i\,nom}$ | 1 x 100 … 240 VAC |
| Input voltage range | 1 x 90 … 264 VAC; 125 … 375 VDC |
| Nominal mains frequency range | 47 … 63 Hz; 0 Hz |
| Input current $I_i$ | ≤ 0.7 A (100 VAC) |
| Discharge current | ≤ 3.5 mA |
| Inrush current | ≤ 18 A |
| Power factor correction (PFC) | Passive |
| Mains failure hold-up time | ≥ 10 ms (230 VAC) |

### Output

| | |
|---|---|
| Nominal output voltage $U_{o\,nom}$ | 12 VDC (SELV) |
| Output voltage range | 10 … 14 VDC (adjustable) |
| Default Setting | 12 VDC |
| Nominal output current $I_{o\,nom}$ | 2 A (12 VDC; 110 … 240 VAC); 1.6 A (12 VDC; 100 … 240 VAC) |
| Nominal output power | 24 W |
| Deviation | ≤ 1 % |
| Residual ripple | ≤ 150 mV (peak-to-peak) |
| Overload behavior | Constant power (in overload range: 1.05 … 1.4 x $I_{o\,nom}$); Shutdown and automatic restart in the event of a short circuit |

### Signaling and Communication

| | |
|---|---|
| Signaling | 1 x DC OK LED (green) |
| Operation status indicator | Green LED ($U_o$) |

### Efficiency/Power Losses

| | |
|---|---|
| Power loss $P_l$ | ≤ 6 W (230 VAC; 12 VDC; 2 A) |
| Efficiency (typ.) | 80 % (230 VAC; 2 ADC) |

## Circuit Protection

| | |
|---|---|
| Internal fuse | F 1 A / 250 VAC |
| Pre-fuse (required) | An external DC fuse is required for the DC input voltage. |
| Backup fuse (recommended) | Circuit breaker: B6, B10 |

## Safety and protection

| | |
|---|---|
| Isolation voltage (pri.-sec.) | 4.242 kVDC |
| Isolation voltage (pri.-PE) | 2.2 kVDC |
| Isolation voltage (sec.-PE) | 0.7 kVDC |
| Protection class | I |
| Protection type | IP20; per EN 60529 |
| Resistance to reverse feed | ≤ 14 VDC |
| Overvoltage category | II |
| Pollution degree | 2 |
| Transient suppression (primary) | Varistor |
| Short-circuit-protected | Yes |
| Open-circuit-proof | Yes |
| Parallel operation | Yes |
| Series operation | Yes, for 2 devices of the same type |
| MTBF | > 300,000 h (per IEC 61709) |

## Connection Data

| | |
|---|---|
| Note (conductor cross-section) | 12 AWG: THHN, THWN |

### Connection 1

| | |
|---|---|
| Connection type | Input/output |
| Connection technology | CAGE CLAMP® |
| WAGO connector | WAGO 236 Series |
| Solid conductor | 0.08 … 2.5 mm² / 28 … 12 AWG |
| Fine-stranded conductor | 0.08 … 2.5 mm² / 28 … 12 AWG |
| Strip length | 6 … 7 mm / 0.24 … 0.28 inches |

## Physical data

| | |
|---|---|
| Width | 30 mm / 1.181 inches |
| Height | 90 mm / 3.543 inches |
| Depth from upper-edge of DIN-rail | 99 mm / 3.898 inches |

## Mechanical data

| | |
|---|---|
| Mounting type | DIN-35 rail<br>Screw mount |

## Material data

| | |
|---|---|
| Fire load | 0.118 MJ |
| Weight | 250 g |


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## Environmental requirements

| | |
|---|---|
| Ambient temperature (operation) | -20 … +60 °C |
| Ambient temperature (storage) | -25 … +75 °C |
| Relative humidity | 10 … 95 % (no condensation permissible) |
| Derating | -4 %/K (> 45 °C) |
| Climatic category | 3K3 (per EN 60721) |

## Standards and Specifications

| | |
|---|---|
| Conformity marking | CE |
| Standards/specifications | EN 61204-3<br>EN 60335-1<br>EN 61558-2-6<br>EN 62368-1<br>SEMI F47 |

## Commercial data

| | |
|---|---|
| PU (SPU) | 1 pcs |
| Packaging type | Box |
| Country of origin | CN |
| GTIN | 4055143656023 |
| 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

| | |
|---|---|
| RoHS Compliance Status | Compliant,No Exemption |
| SCIP notification number (Bulgaria) | 4527369a-7479-4512-a4ab-cccc93eea45c |
| SCIP notification number (Czech Republic) | c046c5df-f40a-44e5-a226-6077f8efd221 |

## Approvals / Certificates

### General approvals

| Approval | Standard | Certificate Name |
|---|---|---|
| EAC<br>GZO Almaty Standart | TP TC 004/2011 | EAC CoC 03078 |
| EAC<br>GZO Almaty Standart | TP TC 020/2011 | EAC CoC 03081 |

### Declarations of conformity and manufacturer's declarations

| Approval | Standard | Certificate Name |
|---|---|---|
| EU-Declaration of Conformity<br>WAGO GmbH & Co. KG | - | - |
| MFD for SEMI F47<br>WAGO GmbH & Co. KG | - | - |


Continued on next page

## Downloads

### Environmental Product Compliance

**Compliance Search**

Environmental Product Compliance 787-1701

### Documentation

**Bid Text**

| | | |
|---|---|---|
| 787-1701 | 01.10.2019 | xml 6.73 KB |
| 787-1701 | 01.10.2019 | docx 20.12 KB |

**Instruction Leaflet**

| | | |
|---|---|---|
| ECO Power Switched-Mode Power Supplies | V 1.2 21.12.2020 | pdf 249.88 KB |

### CAD/CAE-Data

**CAD data**

2D/3D Models 787-1701

**CAE data**

EPLAN Data Portal 787-1701

ZUKEN Portal 787-1701

## 1 Compatible Products

### 1.1 Optional Accessories

#### 1.1.1 Marking

##### 1.1.1.1 Marking strip



Item No.: 210-831
Marking strips; on reel; 2.3 mm wide; plain; Self-adhesive; white



Item No.: 210-832
Marking strips; on reel; 3 mm wide; plain; Self-adhesive; 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



Item No.: 210-769
SCREWDRIVER; green