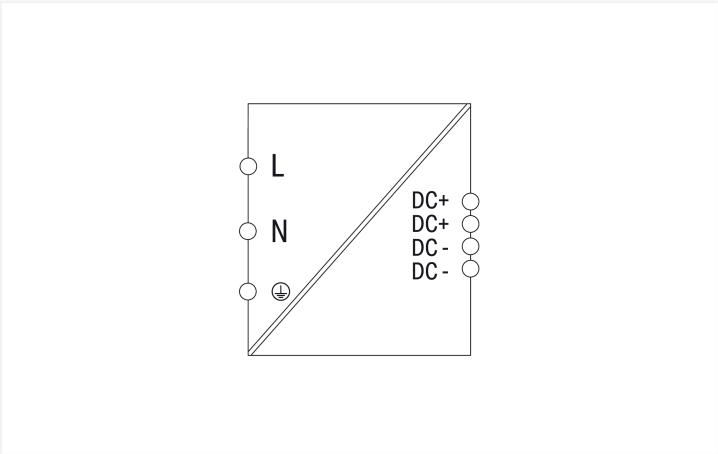
# Data Sheet | Item Number: 787-612

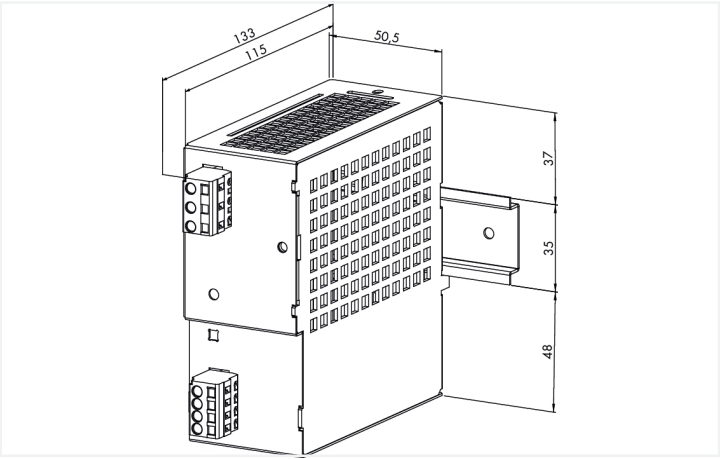
Switched-mode power supply; Classic; 1-phase; 24 VDC output voltage; 2.5 A output current; 2,50 mm²

https://www.wago.com/787-612

**DISCONTINUED: 01.09.2022**






Dimensions in mm

**Features:**

- Switched-mode power supply
- Suitable for protection class I equipment
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Encapsulated for use in control cabinets
- Electrically isolated output voltage (SELV) per EN 60950-1/UL 60950

## Technical data

### Input

| | |
|---|---|
| Phases | 1 |
| Nominal input voltage $U_{i\,nom}$ | 1 x 100 … 240 VAC; 140 … 300 VDC |
| Input voltage range | 1 x 90 … 264 VAC; 130 … 300 VDC |
| Nominal mains frequency range | 50 … 60 Hz; 0 Hz |
| Input current $I_i$ | ≤ 0.6 A (230 VAC) |
| Discharge current | ≤ 0.7 mA |
| Inrush current | ≤ 50 A |
| Power factor correction (PFC) | Passive |

### Input

| | |
|---|---|
| Mains failure hold-up time | ≥ 20 ms (230 VAC) |

## Output

| | |
|---|---|
| Nominal output voltage $U_{o\ nom}$ | 24 VDC (SELV) |
| Output voltage range | 22 … 28.8 VDC (adjustable) |
| Default Setting | 24 VDC |
| Nominal output current $I_{o\ nom}$ | 2.5 A (24 VDC) |
| Deviation | ≤ 2 % |
| Residual ripple | ≤ 100 mV (peak-to-peak) |
| Current limitation | 1.1 x $I_{o\ nom}$ (typ.) |
| Overload behavior | Constant current |

## Signaling and Communication

| | |
|---|---|
| Operation status indicator | Green LED (24 V OK) |

## Efficiency/Power Losses

| | |
|---|---|
| Power loss $P_l$ | ≤ 7 W |
| Power loss (max.) $P_{l\ (max.)}$ | 8 W (90 VAC / 24 VDC; 2.5 A) |
| Efficiency (typ.) | 90 % |

## Circuit Protection

| | |
|---|---|
| Internal fuse | T 1.6 A / 250 VAC |
| Pre-fuse (required) | An external DC fuse is required for the DC input voltage. |
| Backup fuse (recommended) | Circuit breaker: C10 or B16 |

## 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 | ≤ 30 VDC |
| 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 |

## Connection Data

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

### Connection 1

| | |
|---|---|
| Connection type | Input/output |
| Connection technology | CAGE CLAMP® |
| WAGO connector | WAGO 231 Series |
| Solid conductor | 0.08 … 2.5 mm² / 28 … 12 AWG |
| Fine-stranded conductor | 0.08 … 2.5 mm² / 28 … 12 AWG |
| Strip length | 8 … 9 mm / 0.31 … 0.35 inches |

## Physical data

| | |
|---|---|
| Width | 51 mm / 2.008 inches |
| Height | 120 mm / 4.724 inches |
| Depth from upper-edge of DIN-rail | 133 mm / 5.236 inches |


Continued on next page

## Mechanical data

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

## Material data

| | |
|---|---|
| Fire load | 4.4 MJ |
| Weight | 612.7 g |

## Environmental requirements

| | |
|---|---|
| Ambient temperature (operation) | -10 … +70 °C |
| Ambient temperature (storage) | -25 … +85 °C |
| Relative humidity | 30 … 85 % (no condensation permissible) |
| Derating | -3 %/K (> 50 °C) |
| Climatic category | 3K3 (per EN 60721) |

## Standards and Specifications

| | |
|---|---|
| Conformity marking | CE |
| Standards/specifications | EN 60950-1<br>EN 61204-3<br>UL 60950<br>UL 508<br>DNV |

## Commercial data

| | |
|---|---|
| Product Group | 6 (INTERFACE ELECTRONIC) |
| PU (SPU) | 1 pcs |
| Packaging type | Box |
| Country of origin | DE |
| GTIN | 4045454435202 |
| Customs tariff number | 85044083900 |
| End of Sale | 2022-09-01 |
| End of Production | 2022-09-07 |
| End of Delivery | 2023-02-28 |
| End of Service and Repair | 2025-02-28 |

## 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 |


Continued on next page

## Environmental Product Compliance

| | |
|---|---|
| RoHS Compliance Status | Compliant,No Exemption |

## Approvals / Certificates

### General approvals

| Approval | Standard | Certificate Name |
|---|---|---|
| UL<br>Underwriters Laboratories Inc. | UL 508 | E255817 |
| UR<br>Underwriters Laboratories Inc. | UL 60950-1 | E255815 |

### Declarations of conformity and manufacturer's declarations

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

### Approvals for marine applications

| Approval | Standard | Certificate Name |
|---|---|---|
| DNV GL<br>Det Norske Veritas, Germanischer Lloyd | - | TAA00002J6 |

## Downloads

### Environmental Product Compliance

**Compliance Search**

Environmental Product Compliance 787-612

### Documentation

**Bid Text**

| | | | |
|---|---|---|---|
| 787-612 | 13.06.2019 | xml<br>6.70 KB | |
| 787-612 | 13.06.2019 | docx<br>20.23 KB | |

**Instruction Leaflet**

| | | |
|---|---|---|
| Primär getaktete Stromversorgungen CLASSIC | pdf<br>242.38 KB | |


Continued on next page

## CAD/CAE-Data

| CAD data | CAE data |
| --- | --- |
| 2D/3D Models 787-612 | EPLAN Data Portal 787-612 |
| | WSCAD Universe 787-612 |
| | ZUKEN Portal 787-612 |