

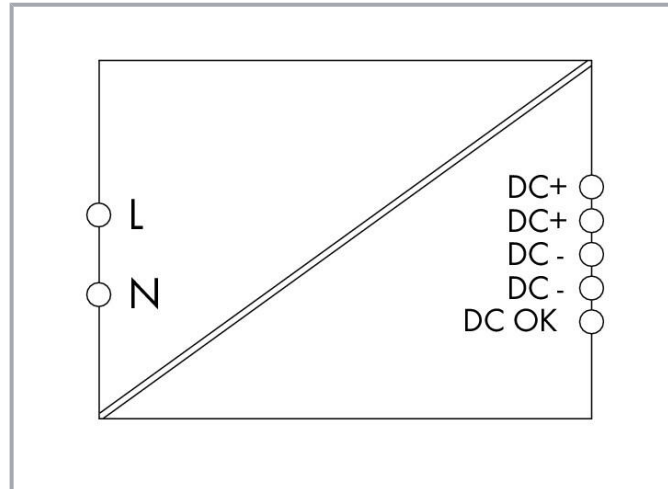
## Data sheet | Item number: 787-1611

Switched-mode power supply; Classic; 1-phase; 12 VDC output voltage; 4 A output current; NEC Class 2; DC OK signal

[www.wago.com/787-1611](http://www.wago.com/787-1611)



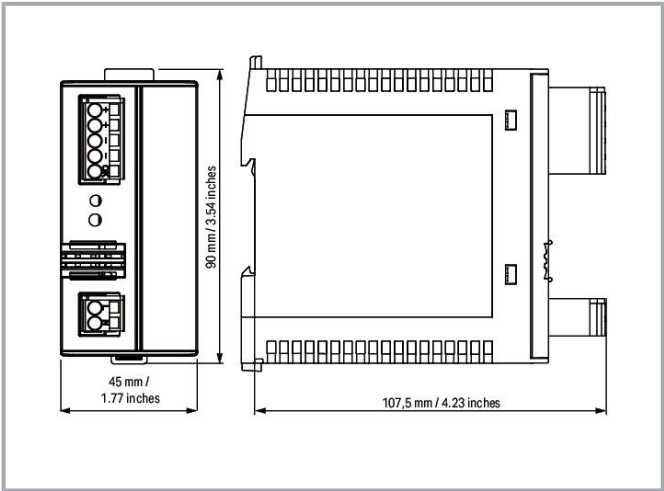
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Subject to changes. Please also observe the further product documentation!

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Item description

Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Encapsulated for use in control cabinets
- Limited Power Source (LPS) per NEC Class 2
- Bounce-free switching signal (DC OK)
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per UL 60950-1; PELV per EN 60204
- GL approval, also suitable for EMC 1 in conjunction with 787-980 Filter Module

Data

Technical data

Input

|                                    |                                                                |
|------------------------------------|----------------------------------------------------------------|
| Phases                             | 1                                                              |
| Nominal input voltage $U_{i\,nom}$ | 1 x AC 100 ... 240 V                                           |
| Input voltage range                | 1 x AC 85 ... 264 V; DC 120 ... 300 V                          |
| Input voltage derating             | -2.5 %/V (< 95 VAC)                                            |
| Nominal mains frequency range      | 44 ... 66 Hz; 0 Hz                                             |
| Input current $I_i$                | $\leq 0.46\text{ A}$ (240 VAC); $\leq 0.86\text{ A}$ (100 VAC) |
| Inrush current                     | $\leq 30\text{ A}$                                             |
| Power factor correction (PFC)      | Passive                                                        |

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|                            |                                                 |
|----------------------------|-------------------------------------------------|
| Mains failure hold-up time | $\geq 120$ ms (230 VAC); $\geq 15$ ms (100 VAC) |
|----------------------------|-------------------------------------------------|

## Output

|                                     |                                 |
|-------------------------------------|---------------------------------|
| Nominal output voltage $U_{o\ nom}$ | DC 12 V (SELV)                  |
| Output voltage range                | DC 11.5 ... 14.5 V (adjustable) |
| Default setting                     | DC 12 V                         |
| Nominal output current $I_{o\ nom}$ | 4 A (12 VDC); 4.2 A (< 40 °C)   |
| Nominal output power                | 48 W                            |
| Deviation                           | $\leq 1$ %                      |
| Residual ripple                     | $\leq 20$ mV (peak-to-peak)     |
| Current limitation                  | $1.1 \times I_{o\ nom}$ (typ.)  |
| Overload behavior                   | Constant current                |

## Signaling and communication

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

## Efficiency/power losses

|                                   |                                                |
|-----------------------------------|------------------------------------------------|
| Power loss $P_l$                  | $\leq 1$ W; $\leq 8$ W (230 VAC; nominal load) |
| Power loss (max.) $P_{l\ (max.)}$ | 9.1 W (100 VAC / 12 VDC; 4 A)                  |
| Efficiency (typ.)                 | 86 %                                           |

## Circuit protection

|                             |                                                                   |
|-----------------------------|-------------------------------------------------------------------|
| Internal fuse               | T 4 A / 250 VAC                                                   |
| Backup fusing (required)    | An external DC fuse is required for the DC input voltage.         |
| Backup fusing (recommended) | Circuit breaker: 6 A, 10 A, 16 A; Tripping characteristic: B or C |

## Safety and protection

|                                   |                             |
|-----------------------------------|-----------------------------|
| Protection class                  | II                          |
| Protection type                   | IP20; per EN 60529          |
| Overvoltage category              | II                          |
| Pollution degree                  | 2                           |
| Transient suppression (primary)   | Varistor                    |
| Overvoltage protection; secondary | Internal protective circuit |

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|                         |                                    |
|-------------------------|------------------------------------|
|                         | ≤ 35 VDC (in the event of a fault) |
| Short-circuit-protected | Yes                                |
| Open-circuit-proof      | Yes                                |
| Parallel operation      | Yes                                |
| Series operation        | Yes                                |
| MTBF                    | > 500,000 h (per IEC 61709)        |

## Connection data

|                         |                                   |
|-------------------------|-----------------------------------|
| Connection type 1       | Input/Output/Signaling            |
| Connection technology   | CAGE CLAMP®                       |
| WAGO connector          | WAGO 721 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                             | 45 mm / 1.772 inches    |
| Height                            | 90 mm / 3.543 inches    |
| Depth from upper-edge of DIN-rail | 107.5 mm / 4.232 inches |

## Mechanical Data

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

## Material data

|           |         |
|-----------|---------|
| Fire load | 0.24 MJ |
| Weight    | 257.6 g |

## Environmental requirements

|                                 |                                                        |
|---------------------------------|--------------------------------------------------------|
| Ambient temperature (operation) | -25 ... +70 °C (Device starts at -40 °C (type-tested)) |
| Ambient temperature (storage)   | -25 ... +85 °C                                         |
| Relative humidity               | 5 ... 96 % (no condensation permissible)               |
| Derating                        | -3 %/K (> 50 °C)                                       |
| Climatic category               | 3K3 (per EN 60721)                                     |

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## Standards and specifications

|                          |                                                                                                     |
|--------------------------|-----------------------------------------------------------------------------------------------------|
| Conformity marking       | CE                                                                                                  |
| Standards/specifications | EN 61010-1<br>EN 61010-2-201<br>EN 61204-3<br>EN 60335-1<br>UL 60950-1<br>UL 508<br>DNV<br>SEMI F47 |

## Commercial data

|                       |                          |
|-----------------------|--------------------------|
| Product Group         | 6 (INTERFACE ELECTRONIC) |
| 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        | box                      |
| Country of origin     | DE                       |
| GTIN                  | 4055143060448            |
| Customs tariff number | 85044083900              |

## Environmental Product Compliance

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

## Approvals / Certificates

### General approvals

| Logo                                                                               | Approval                               | Additional Approval Text       | Certificate name            |
|------------------------------------------------------------------------------------|----------------------------------------|--------------------------------|-----------------------------|
|  | EAC<br>Brjansker Zertifizierungsstelle | TP TC 004/2011, TP TC 020/2011 | EAC RU C-DE.AM02.B.00089_19 |
|  | UL<br>Underwriters Laboratories Inc.   | UL 508                         | E255817                     |

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UL  
Underwriters Laboratories Inc.

UL 60950-1

E255815

## Declarations of conformity and manufacturer's declarations

| Logo                                                                             | Approval                                           | Additional Approval Text | Certificate name |
|----------------------------------------------------------------------------------|----------------------------------------------------|--------------------------|------------------|
|  | EU-Declaration of Conformity<br>WAGO GmbH & Co. KG | -                        | -                |
|  | MFD for SEMI F47<br>WAGO GmbH & Co. KG             | -                        | -                |

## Approvals for marine applications

| Logo                                                                              | Approval                | Additional Approval Text | Certificate name |
|-----------------------------------------------------------------------------------|-------------------------|--------------------------|------------------|
|  | DNV<br>DNV Germany GmbH | DNVGL-CG-339, Dec. 2019  | TAA00002YC       |

## Optional accessories

## Tool

|                                                                                    |                                                                                                           |  |                                                                |
|------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|--|----------------------------------------------------------------|
| Operating tool                                                                     |                                                                                                           |  |                                                                |
|  | Item no.: 210-769<br>SCREWDRIVER; green                                                                   |  | <a href="http://www.wago.com/210-769">www.wago.com/210-769</a> |
|  | Item no.: 210-720<br>Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured |  | <a href="http://www.wago.com/210-720">www.wago.com/210-720</a> |

## Marking accessories

|                                                                                    |                                                                                                               |  |                                                                  |
|------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|--|------------------------------------------------------------------|
| Marking strip                                                                      |                                                                                                               |  |                                                                  |
|  | Item no.: 2009-110<br>Marking strips; for Smart Printer; on reel; not stretchable; plain; snap-on type; white |  | <a href="http://www.wago.com/2009-110">www.wago.com/2009-110</a> |

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**Item no.: 210-831**

Marking strips; on reel; 2.3 mm wide; plain; Self-adhesive; white

[www.wago.com/210-831](http://www.wago.com/210-831)**Item no.: 210-832**

Marking strips; on reel; 3 mm wide; plain; Self-adhesive; white

[www.wago.com/210-832](http://www.wago.com/210-832)**Marker****Item no.: 2009-115**

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

[www.wago.com/2009-115](http://www.wago.com/2009-115)**Item no.: 793-501**

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

[www.wago.com/793-501](http://www.wago.com/793-501)**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

[www.wago.com/793-5501](http://www.wago.com/793-5501)**Downloads****Documentation****Bid Text**

|                          |             |                 |          |
|--------------------------|-------------|-----------------|----------|
| 787-1611<br>X81 - Datei  | 2019 Jul 4  | xml<br>7.1 kB   | Download |
| 787-1611<br>docx - Datei | 2019 May 31 | docx<br>20.4 kB | Download |

**Instruction Leaflet**

|                                                            |  |                 |          |
|------------------------------------------------------------|--|-----------------|----------|
| Primär getaktete Stromversorgungen CLASSIC<br>DC 12 V, 4 A |  | pdf<br>321.7 kB | Download |
|------------------------------------------------------------|--|-----------------|----------|

**Additional Information**

|                                                                                     |                        |               |          |
|-------------------------------------------------------------------------------------|------------------------|---------------|----------|
| Disposal and Recycling<br>Electrical and electronic equipment, Batteries, Packaging | V 1.1.0<br>2022 Aug 18 | pdf<br>2.2 MB | Download |
|-------------------------------------------------------------------------------------|------------------------|---------------|----------|

**CAD/CAE-Data****CAD data**

|                       |  |     |          |
|-----------------------|--|-----|----------|
| 2D/3D Models 787-1611 |  | URL | Download |
|-----------------------|--|-----|----------|

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CAE data

|                                     |     |          |
|-------------------------------------|-----|----------|
| EPLAN Data Portal 787-1611          | URL | Download |
| WSCAD Universe 787-1611             | URL | Download |
| ZUKEN Portal 787-1611               | URL | Download |
| Asset Administration Shell          |     |          |
| Asset Administration Shell 787-1611 | URL | Download |

Environmental Product Compliance

Compliance Search

|                                                                                                                    |     |          |
|--------------------------------------------------------------------------------------------------------------------|-----|----------|
| Environmental Product Compliance 787-1611                                                                          | URL | Download |
| Switched-mode power supply; Classic; 1-phase; 12 VDC output voltage; 4 A output current; NEC Class 2; DC OK signal |     |          |

Installation Notes

Product family

- Classic
  - EPSITRON® CLASSIC POWER: The Robust Power Supply – with Integrated TopBoost (Optional)
  - [Show all products from the family](#)

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