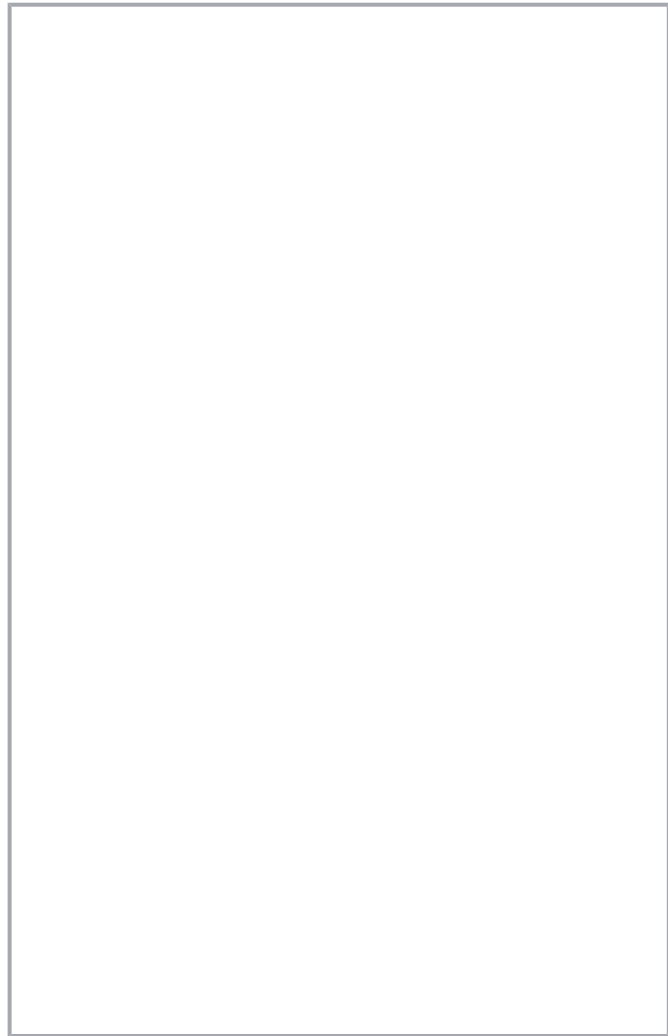
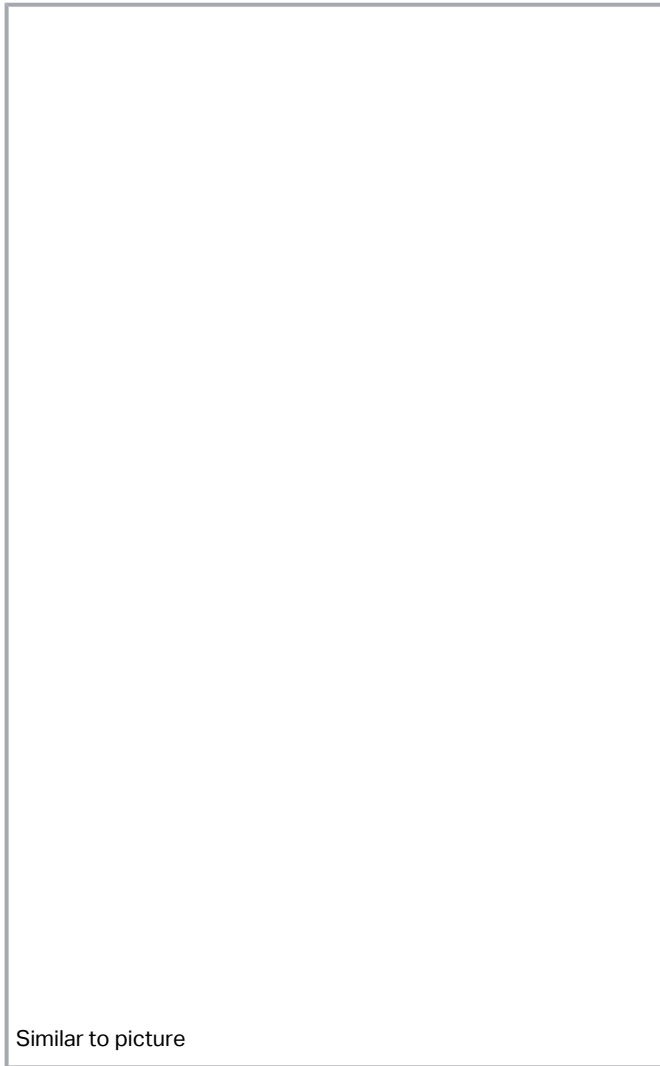


## Data sheet | Item number: 787-1635

Switched-mode power supply; Classic; 1-phase; 48 VDC output voltage; 10 A output current; TopBoost; DC OK contact

[www.wago.com/787-1635](http://www.wago.com/787-1635)



### Item description

#### Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Encapsulated for use in control cabinets
- DC OK contact

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

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- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per UL 60950-1; PELV per EN 60204
- GL approval

## Data

### Technical data

#### Input

|   |  |
|---|--|
| Phases                                    | 1  |
| Nominal input voltage $U_{i \text{ nom}}$ | 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 (< 100 VAC)   |
| Nominal mains frequency range             | 44 ... 66 Hz; 0 Hz   |
| Input current $I_i$                       | $\leq 2.23 \text{ A}$ (230 VAC); $\leq 5.56 \text{ A}$ (100 VAC) |
| Inrush current                            | $\leq 30 \text{ A}$  |
| Power factor correction (PFC)             | Active   |
| Mains failure hold-up time                | $\geq 20 \text{ ms}$ (230 VAC); $\geq 20 \text{ ms}$ (100 VAC)   |

#### Output

|  |                                       |
|--|---------------------------------------|
| Nominal output voltage $U_{o \text{ nom}}$ | DC 48 V (SELV)                        |
| Output voltage range                       | DC 40 ... 56 V (adjustable)           |
| Default setting                            | DC 48 V                               |
| Nominal output current $I_{o \text{ nom}}$ | 10 A (48 VDC)                         |
| Nominal output power                       | 480 W                                 |
| Deviation                                  | $\leq 1 \%$                           |
| Residual ripple                            | $\leq 80 \text{ mV}$ (peak-to-peak)   |
| Current limitation                         | $1.1 \times I_{o \text{ nom}}$ (typ.) |
| Overload behavior                          | Constant current                      |

#### Signaling and Communication

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

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



## Efficiency/power losses

|  |  |
|--|--|
| Power loss $P_I$                       | $\leq 11.7 \text{ W}; \leq 36.3 \text{ W}$ (230 VAC; nominal load) |
| Power loss (max.) $P_{I(\text{max.})}$ | 64.9 W (100 VAC / 48 VDC; 10 A)                                    |
| Efficiency (typ.)                      | 93 %   |

## Circuit protection

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

## Safety and protection

|                                   |  |
|-----------------------------------|--|
| Isolation voltage (sec.-PE)       | DC 0.7 kV  |
| Protection class                  | I  |
| Protection type                   | IP20; per EN 60529   |
| Overvoltage category              | II   |
| Pollution degree                  | 2  |
| Transient suppression (primary)   | Varistor   |
| Overvoltage protection; secondary | Internal protective circuit<br>$\leq 60 \text{ VDC}$ (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/Signaling                              |
| Connection technology   | CAGE CLAMP®                                  |
| WAGO connector          | WAGO 721 Series                              |
| Solid conductor         | 0.08 ... 2.5 mm <sup>2</sup> / 28 ... 12 AWG |
| Fine-stranded conductor | 0.08 ... 2.5 mm <sup>2</sup> / 28 ... 12 AWG |
| Strip length            | 8 ... 9 mm / 0.31 ... 0.35 inches            |
| Connection type 2       | Output                                       |
| Connection technology 2 | Push-in CAGE CLAMP®                          |

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



|                           |   |
|---------------------------|---|
| WAGO connector 2          | WAGO 831 Series                           |
| Solid conductor 2         | 0.5 ... 10 mm <sup>2</sup> / 20 ... 8 AWG |
| Fine-stranded conductor 2 | 0.5 ... 10 mm <sup>2</sup> / 20 ... 8 AWG |
| Strip length 2            | 13 ... 15 mm / 0.51 ... 0.59 inches       |

### Physical data

|                                   |                       |
|-----------------------------------|-----------------------|
| Width                             | 95 mm / 3.74 inches   |
| Height                            | 127 mm / 5 inches     |
| Depth from upper-edge of DIN-rail | 170 mm / 6.693 inches |

### Mechanical Data

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

### Material Data

|        |        |
|--------|--------|
| Weight | 1600 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                        | -5 %/K (> 60 °C, 196... 264 VAC); -2.5 %/K (> 50 °C, 85 ... 195 VAC) |
| Climatic category               | 3K3 (per EN 60721)   |

### Standards and specifications

|                          |   |
|--------------------------|---|
| Conformity marking       | CE  |
| Standards/specifications | EN 61010-1<br>EN 61010-2-201<br>EN 61204-3<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              |

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

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|                       |               |
|-----------------------|---------------|
| ETIM 8.0              | EC002540      |
| ETIM 7.0              | EC002540      |
| Recupel Type          |               |
| PU (SPU)              | 1 pcs         |
| Packaging type        | box           |
| Country of origin     | DE            |
| GTIN                  | 4055143060547 |
| Customs tariff number | 85044083900   |

## Environmental Product Compliance

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

## Approvals / Certificates

### General approvals

| Logo | Approval                                      | Additional Approval Text       | Certificate name            |
|------|---|--------------------------------|-----------------------------|
|      | <b>EAC</b><br>Brjansker Zertifizierungsstelle | TP TC 004/2011, TP TC 020/2011 | EAC RU C-DE.AM02.B.00089_19 |
|      | <b>UL</b><br>Underwriters Laboratories Inc.   | UL 508                         | E255817                     |
|      | <b>UL</b><br>Underwriters Laboratories Inc.   | UL 60950-1                     | E255815                     |

### Declarations of conformity and manufacturer's declarations

| Logo | Approval  | Additional Approval Text | Certificate name |
|------|---|--------------------------|------------------|
|      | <b>EU-Declaration of Conformity</b><br>WAGO GmbH & Co. KG | -                        | -                |
|      | <b>MFD with product reference</b><br>WAGO GmbH & Co. KG   | -                        | -                |

### Approvals for marine applications

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

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## Optional accessories

### Tool

| Operating tool           |  |  |
|--------------------------|--|--|
| <b>Item no.: 210-721</b> | Operating tool; Blade: 5.5 x 0.8 mm; with a partially insulated shaft; multicoloured | <a href="http://www.wago.com/210-721">www.wago.com/210-721</a> |
| <b>Item no.: 210-769</b> | SCREWDRIVER; green   | <a href="http://www.wago.com/210-769">www.wago.com/210-769</a> |
| <b>Item no.: 210-720</b> | 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> |

### Mounting adapter

| DIN-rail adapter                 |  |  |
|----------------------------------|--|--|
| <b>Item no.: 787-897/000-010</b> | Carrier rail adapter made of zinc die-cast; horizontal mounting of 787-16xx (TS35) | <a href="http://www.wago.com/787-897/000-010">www.wago.com/787-897/000-010</a> |

### Marking accessories

| Marking strip             |   |  |
|---------------------------|---|--|
| <b>Item no.: 2009-110</b> | 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> |
| <b>Item no.: 210-831</b>  | Marking strips; on reel; 2.3 mm wide; plain; Self-adhesive; white                       | <a href="http://www.wago.com/210-831">www.wago.com/210-831</a>   |
| <b>Item no.: 210-832</b>  | Marking strips; on reel; 3 mm wide; plain; Self-adhesive; white                         | <a href="http://www.wago.com/210-832">www.wago.com/210-832</a>   |

### Marker

|                           |   |  |
|---------------------------|---|--|
| <b>Item no.: 2009-145</b> | Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white         | <a href="http://www.wago.com/2009-145">www.wago.com/2009-145</a> |
| <b>Item no.: 2009-115</b> | WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white              | <a href="http://www.wago.com/2009-115">www.wago.com/2009-115</a> |
| <b>Item no.: 248-501</b>  | Mini-WSB marking card; as card; not stretchable; plain; snap-on type; white   | <a href="http://www.wago.com/248-501">www.wago.com/248-501</a>   |
| <b>Item no.: 793-501</b>  | WMB marking card; as card; not stretchable; plain; snap-on type; white  | <a href="http://www.wago.com/793-501">www.wago.com/793-501</a>   |
| <b>Item no.: 793-5501</b> | WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; white | <a href="http://www.wago.com/793-5501">www.wago.com/793-5501</a> |

## Downloads

### Documentation

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

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### Bid Text

|                         |            |               |          |
|-------------------------|------------|---------------|----------|
| 787-1635<br>X81 - Datei | 2019 年7月4日 | xml<br>7.3 kB | Download |
|-------------------------|------------|---------------|----------|

|                          |            |                 |          |
|--------------------------|------------|-----------------|----------|
| 787-1635<br>docx - Datei | 2019 年6月4日 | docx<br>21.8 kB | Download |
|--------------------------|------------|-----------------|----------|

### Instruction Leaflet

|   |  |                 |          |
|---|--|-----------------|----------|
| Primär getaktete Stromversorgungen CLASSIC<br>DC 48 V, 10 A |  | pdf<br>250.8 kB | Download |
|---|--|-----------------|----------|

### Additional Information

|   |                        |               |          |
|---|------------------------|---------------|----------|
| Disposal and Recycling<br>Electrical and electronic equipment, Batteries, Packaging | V 1.1.0<br>2022 年8月18日 | pdf<br>2.2 MB | Download |
|---|------------------------|---------------|----------|

### Engineering-Software

#### Configuration and Commissioning Software

|  |                      |                 |          |
|--|----------------------|-----------------|----------|
| WAGO Line Length Calculation<br>Die WAGO Leitungslaengenrechnung hilft bei der Planung der sekundärseitigen Absicherung von Leitungen an WAGO Stromversorgungen Pro (787-8xx) und Classic (787-16xx). Nach Auswahl eines Netzgerätes kann der gewünschte Leitungsquerschnitt und der zugehörige Leitungsschutzschalter ausgewählt werden. Das Software-Werkzeug berechnet dann die maximale Leitungslänge, bei der die Absicherung unter Berücksichtigung der Leitungs- und Übergangswiderstände ordnungsgemäß funktioniert. Die Auswahl einer Grundlast kann vom Anwender vorgenommen werden. | 1.3.5<br>2019 年12月9日 | exe<br>337.4 kB | Download |
|--|----------------------|-----------------|----------|

### CAD/CAE-Data

#### CAE data

|                            |  |     |          |
|----------------------------|--|-----|----------|
| EPLAN Data Portal 787-1635 |  | URL | Download |
|----------------------------|--|-----|----------|

|                         |  |     |          |
|-------------------------|--|-----|----------|
| WSCAD Universe 787-1635 |  | URL | Download |
|-------------------------|--|-----|----------|

|                       |  |     |          |
|-----------------------|--|-----|----------|
| ZUKEN Portal 787-1635 |  | URL | Download |
|-----------------------|--|-----|----------|

#### CAD data

2D/3D Models 787-1635

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



[URL](#)

[Download](#)

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## Environmental Product Compliance

### Compliance Search

Environmental Product Compliance 787-1635

[URL](#)

[Download](#)

Switched-mode power supply; Classic; 1-phase; 48 VDC output voltage; 10 A output current; TopBoost; DC OK contact

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## Installation Notes

### Product family

#### Classic

EPSITRON® CLASSIC POWER: The Robust Power Supply – with Integrated TopBoost (Optional)

[Show all products from the family](#)

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

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