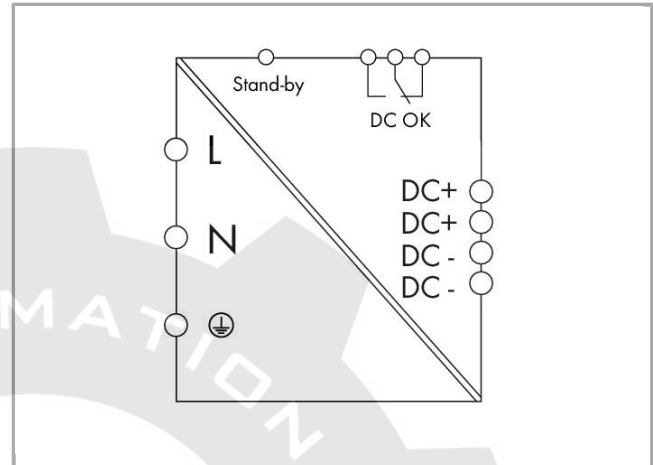


## Data sheet | Item number: 787-819

Switched-mode power supply; Pro; 1-phase; 12 VDC output voltage; 6 A output current; TopBoost + PowerBoost; DC OK contact

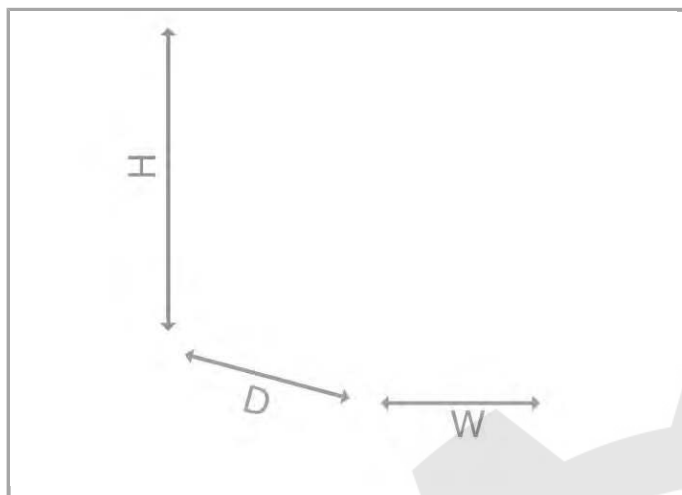


787-819



RoHS  Compliant

[BOMcheck.net](https://www.bomcheck.net)



## Item description

### Features:

- Switched-mode power supply with PowerBoost and TopBoost
- Stand-by input for switching off the output and minimizing power consumption
- DC OK contact for output monitoring
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Enclosed for use in control cabinets
- Electrically isolated output voltage (SELV) per EN 60950-1/UL 60950-1; PELV per EN 60204

## Data

### Technical Data

#### Input

|                                         |                                   |
|-----------------------------------------|-----------------------------------|
| Phases                                  | 1                                 |
| Nominal input voltage $U_{i\text{nom}}$ | AC 100 ... 240 V                  |
| Input voltage range                     | AC 85 ... 264 V; DC 120 ... 373 V |
| Input voltage derating                  | -5 %/V (< 95 VAC)                 |
| Nominal mains frequency range           | 50 ... 60 Hz; 0 Hz                |
| Input current $I_i$                     | $\leq 0.51$ A (230 VAC; 6 ADC)    |
| Discharge current                       | $\leq 1$ mA                       |
| Inrush current                          | $\leq 30$ A (peak)                |
| Power factor correction (PFC)           | Passive                           |
| Mains failure hold-up time              | $\geq 70$ ms (230 VAC)            |

## Output

|                                     |                                           |
|-------------------------------------|-------------------------------------------|
| Nominal output voltage $U_{o\ nom}$ | DC 12 V (SELV)                            |
| Output voltage range                | DC 11 ... 18 V (adjustable)               |
| Factory preset                      | DC 12 V                                   |
| Nominal output current $I_{o\ nom}$ | 6 A (12 VDC)                              |
| Nominal output power                | 72 W                                      |
| Adjustment accuracy                 | $\leq 1\ %$                               |
| Residual ripple                     | $\leq 70\ mV$ (peak-to-peak)              |
| Current limitation                  | $1.1 \times I_{o\ nom}$ typ.              |
| Overload behavior                   | TopBoost/PowerBoost/Constant current mode |
| PowerBoost                          | DC 12 A (4 s); DC 9 A (8 s)               |
| TopBoost                            | DC 21 A (25 ms)                           |

## Signaling and communication

|                            |                                                                                                                      |
|----------------------------|----------------------------------------------------------------------------------------------------------------------|
| Signaling                  | 1 x LED DC OK (green)<br>1 x LED error (red)<br>1 x stand-by input<br>1 x Relaiskontakt DC O.K. (changeover contact) |
| Operation status indicator | LED green (DC OK)<br>LED red (error)                                                                                 |

## Efficiency/Power losses:

|                  |                                                                               |
|------------------|-------------------------------------------------------------------------------|
| Power loss $P_v$ | $\leq 0.5\ W$ (stand-by); $\leq 3\ W$ (no load); $\leq 9.4\ W$ (nominal load) |
| Efficiency       | 83 %                                                                          |

## Fuse protection:

|                             |                                                          |
|-----------------------------|----------------------------------------------------------|
| Internal fuse               | T 2 A / 250 VAC                                          |
| External fuse (required)    | an external DC fuse required for DC input voltage        |
| External fuse (recommended) | Circuit breakers 6 A, 10 A, 16 A, characteristic: B or C |

## Safety and protection:

|                              |                     |
|------------------------------|---------------------|
| Insulation voltage (PRI-SEC) | 4.242 kV DC         |
| Isolation voltage (PRI-GND)  | 2.2 kV DC           |
| Insulation voltage (SEC-GND) | 0.7 kV DC           |
| Protection class             | I                   |
| Protection class             | IP20 (per EN 60529) |
| Feedback voltage             | $\leq DC\ 25\ V$    |
| Overvoltage category         | II                  |

|                               |                             |
|-------------------------------|-----------------------------|
| Transient protection, primary | Varistor                    |
| Short circuit protection      | Yes                         |
| No-load proof                 | Yes                         |
| Parallel operation            | Yes                         |
| Series connection             | Yes                         |
| MTBF                          | > 500,000 h (per IEC 61709) |

## Connection data

|                         |                                  |
|-------------------------|----------------------------------|
| Connection type (1)     | Input/Output                     |
| Connection technology   | CAGE CLAMP®                      |
| WAGO terminal           | 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 inch  |
| Connection type (2)     | Signaling                        |
| Connection technology 2 | CAGE CLAMP®                      |
| WAGO terminal 2         | WAGO 733 Series                  |
| Solid conductor (2)     | 0.08 ... 0.5 mm² / 28 ... 20 AWG |
| Strip length (2)        | 5 ... 6 mm / 0.2 ... 0.24 inch   |

## Geometrical Data

|                                       |                                   |
|---------------------------------------|-----------------------------------|
| Width                                 | 40 mm / 1.575 inch                |
| Height                                | 163 mm / 6.417 inch               |
| Length from upper-edge of DIN-35 rail | 163 mm / 6.417 inch               |
| Note on dimensions                    | Height including female connector |

## Mechanical data

|                  |                                       |
|------------------|---------------------------------------|
| Type of mounting | DIN-35 rail (EN 60715) in 2 positions |
|------------------|---------------------------------------|

## Material Data

|        |       |
|--------|-------|
| Weight | 800 g |
|--------|-------|

## Environmental Requirements

|                                         |                                                    |
|-----------------------------------------|----------------------------------------------------|
| Surrounding air (operating) temperature | -25 ... 70 °C (Device start at -40 °C type-tested) |
| Surrounding air (storage) temperature   | -25 ... 85 °C                                      |
| Relative humidity                       | 5 ... 96 % (no condensation permissible)           |
| Derating                                | -3 %/K (> 50 °C)                                   |
| Pollution degree                        | 2                                                  |
| Climatic category                       | 3K3 (per EN 60721)                                 |

## Standards and specifications

|                          |                                                       |
|--------------------------|-------------------------------------------------------|
| Conformity marking       | 1                                                     |
| Standards/specifications | EN 60950; EN 61204-3; EN 61558-2-16; UL 60950; UL 508 |

## Commercial data

|                    |                           |
|--------------------|---------------------------|
| Product Group      | 6 (Interface Electronics) |
| Country of origin  | DE                        |
| GTIN               | 4050821226499             |
| Customs Tariff No. | 85044082900               |

## Approvals / Certificates

### UL-Approvals

| Logo                                                                               | Approval                             | Additional Approval Text | Certificate name |
|------------------------------------------------------------------------------------|--------------------------------------|--------------------------|------------------|
|    | UL<br>Underwriters Laboratories Inc. | UL 508                   | E255817          |
|  | UL<br>Underwriters Laboratories Inc. | UL 60950-1               | E255815          |

## Compatible products

### Mounting adapter

|                                                                                    |                                                                                                                                      |         |
|------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|---------|
|  | Item no.: 787-895<br>EPSITRON® wall mount adapter; for screw fixing of 787-8xx devices on mounting plate or wall without DIN 35 rail | 787-895 |
|  | Item no.: 787-896<br>Carrier rail adapter; for mounting 787-8xx devices to a DIN 35 rail                                             | 787-896 |
|  | Item no.: 787-897<br>Carrier rail adapter made of zinc die-cast; for mounting 787-8xx devices to a DIN 35 rail                       | 787-897 |

### Marking accessories

|                                                                                    |                                                                                     |          |
|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|----------|
|  | Item no.: 2009-110<br>Marking strips; on reel; not stretchable; plain; snap-on type | 2009-110 |
|  | Item no.: 210-831<br>Marking strips; on reel; 2.3 mm wide; plain; Self-adhesive     | 210-831  |



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

210-832

## ferrule



**Item no.: 216-201**  
Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; insulated; electro-tin plated

216-201



**Item no.: 216-202**  
Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated

216-202



**Item no.: 216-203**  
Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated

216-203



**Item no.: 216-204**  
Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated

216-204



**Item no.: 216-221**  
Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; insulated; electro-tin plated

216-221



**Item no.: 216-222**  
Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated

216-222



**Item no.: 216-223**  
Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated

216-223



**Item no.: 216-224**  
Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated

216-224



**Item no.: 216-241**  
Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90

216-241



**Item no.: 216-242**  
Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90

216-242



**Item no.: 216-243**  
Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90

216-243



**Item no.: 216-244**  
Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90

216-244



**Item no.: 216-262**  
Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90

216-262



**Item no.: 216-263**  
Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90

216-263



**Item no.: 216-264**  
Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90

216-264



**Item no.: 216-284**  
Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90

216-284

**Item no.: 216-301**  
Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; insulated; electro-tin plated

216-301



**Item no.: 216-302**  
Ferrule; Sleeve for 0.34 mm<sup>2</sup> / 22 AWG; insulated; electro-tin plated

216-302

**Item no.: 216-321**  
Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; insulated; electro-tin plated

216-321



**Item no.: 216-322**  
Ferrule; Sleeve for 0.34 mm<sup>2</sup> / 22 AWG; insulated; electro-tin plated

216-322

**tools**

**Item no.: 210-719**  
Operating tool with partially insulated shaft; Type 1, blade (2.5 x 0.4) mm

210-719



**Item no.: 210-720**  
Operating tool with partially insulated shaft; Type 2, blade (3.5 x 0.5) mm

210-720



**Item no.: 210-769**  
SCREWDRIVER

210-769

**Downloads****Documentation****Bid Text**

|                          |             |         |          |
|--------------------------|-------------|---------|----------|
| 787-819                  | Apr 4, 2012 | doc     | Download |
| Stromversorgung EPSITRON |             | 35.3 kB |          |

**Instruction Leaflet**

|                                                       |          |          |
|-------------------------------------------------------|----------|----------|
| Primär getaktete Stromversorgungen EPSITRON-PRO-Power | pdf      | Download |
| DC 12 V, 6 A                                          | 253.1 kB |          |

**Additional Information**

|                                                          |         |          |          |
|----------------------------------------------------------|---------|----------|----------|
| Disposal; Electrical and electronic equipment, Packaging | V 1.0.0 | pdf      | Download |
|                                                          |         | 265.8 kB |          |

**Engineering-Software****Configuration and Commissioning Software**

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |              |          |          |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|----------|----------|
| Used for line length calculation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 1.3.4        | zip      | Download |
| The conductor length calculation assists in planning the secondary fuse protection for conductors to power supply devices from the EPSITRON® PRO power family (787-8xx) as well as EPSITRON(R) CLASSIC Power family (787-16xx). After choosing a 787-8xx and 787-16xx power supply unit, the desired conductor size and associated fuse can be selected. The software tool then calculates the maximum conductor length at which the fuse functions correctly, while also considering the conductor and transfer resistances. The user can select a base load. | Mar 20, 2017 | 125.5 kB |          |

## Product family

### EPSITRON PRO Power

EPSITRON® PRO POWER: Professional and Efficient Power Supply with Extra Power

[Show all products from the family](#)



Subject to changes.

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