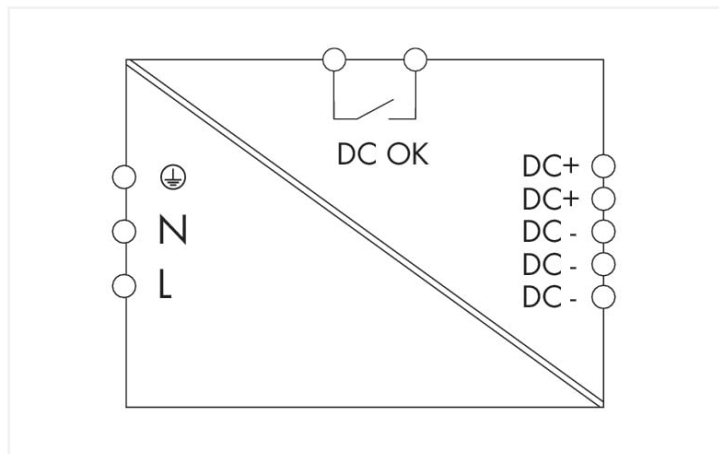


## Data Sheet | Item Number: 787-736

Switched-mode power supply; Eco; 1-phase; 24 VDC output voltage; 40 A output current; DC OK contact; 6,00 mm<sup>2</sup>

<https://www.wago.com/787-736>



### Features:

- Natural convection cooling when horizontally mounted
- Encapsulated for use in control cabinets
- Fast and tool-free termination via lever-actuated PCB terminal blocks
- Bounce-free switching signal (DC OK) via optocoupler
- Parallel operation
- Electrically isolated output voltage (SELV) per UL 60950-1; PELV per EN 60204

### Technical data

| Input                                   |  |
|---|--|
| Phases                                  | 1  |
| Nominal input voltage $U_{i\text{nom}}$ | 1 x AC 110 ... 240 V                         |
| Input voltage range                     | 1 x AC 90 ... 264 V; DC 130 ... 373 V        |
| Input voltage derating                  | -2 %/V (< 100 VAC)                           |
| Nominal mains frequency range           | 47 ... 63 Hz; 0 Hz                           |
| Input current $I_i$                     | $\leq 6$ A (230 VAC); $\leq 12$ A (115 VAC)  |
| Discharge current                       | $\leq 2$ mA                                  |
| Inrush current                          | $\leq 30$ A                                  |
| Power factor                            | $\geq 0.94$ (230 VAC); $\geq 0.98$ (115 VAC) |
| Power factor correction (PFC)           | active                                       |
| Mains failure hold-up time              | $\geq 17$ ms (230 VAC)                       |

| Output                                   |  |
|--|--|
| Nominal output voltage $U_{o\text{nom}}$ | DC 24 V (SELV)   |
| Output voltage range                     | DC 22 ... 28 V (adjustable)  |
| Default setting                          | DC 24 V  |
| Nominal output current $I_{o\text{nom}}$ | 40 A (24 VDC)  |
| Nominal output power                     | 960 W  |
| Deviation                                | $\leq 1$ %   |
| Residual ripple                          | $\leq 100$ mV (peak-to-peak)   |
| Overload behavior                        | Constant power (in overload range: $1.15 \dots 1.4 \times I_{o\text{nom}}$ ); Shutdown and automatic restart in the event of a short circuit |

### Signaling and communication

|                            |  |
|----------------------------|--|
| Signaling                  | 1 x LED DC OK (green)<br>1 x Overload LED (red)<br>1 x DC OK signal output (optocoupler as make contact; max. 31.2 V; 20 mA) |
| Operation status indicator | Green LED (24 VDC OK)<br>Red LED (overload)  |

### Efficiency/power losses

|                   |                                      |
|-------------------|--------------------------------------|
| Power loss $P_l$  | $\leq 107$ W (230 VAC; nominal load) |
| Efficiency (typ.) | 90 %                                 |

### Circuit protection

|                             |  |
|-----------------------------|--|
| Internal fuse               | T 20 A / 250 VAC   |
| Backup fusing (required)    | An external DC fuse is required for the DC input voltage.          |
| Backup fusing (recommended) | Circuit breaker: 13 A, 16 A, 20 A; Tripping characteristic: B or C |

### Safety and protection

|                                 |                             |
|---------------------------------|-----------------------------|
| Isolation voltage (pri.-sec.)   | DC 4.242 kV                 |
| Isolation voltage (pri.-PE)     | DC 2.2 kV                   |
| Isolation voltage (sec.-PE)     | DC 0.7 kV                   |
| Isolation voltage (sec.-signal) | DC 0.7 kV                   |
| Protection class                | I                           |
| Protection type                 | IP20; per EN 60529          |
| Resistance to reverse feed      | ≤ DC 29 V                   |
| Overvoltage category            | II                          |
| Pollution degree                | 2                           |
| Transient suppression (primary) | Varistor                    |
| Short-circuit-protected         | Yes                         |
| Open-circuit-proof              | Yes                         |
| Parallel operation              | Yes                         |
| Series operation                | Yes                         |
| MTBF                            | > 250,000 h (per IEC 61709) |

### Connection data

|                           |   |
|---------------------------|---|
| Connection type 1         | Input/signaling                           |
| Connection technology     | CAGE CLAMP®                               |
| WAGO connector            | WAGO 2706 Series                          |
| Solid conductor           | 0.5 ... 6 mm <sup>2</sup> / 20 ... 10 AWG |
| Fine-stranded conductor   | 0.5 ... 6 mm <sup>2</sup> / 20 ... 10 AWG |
| Strip length              | 11 ... 12 mm / 0.43 ... 0.47 inches       |
| Connection type 2         | Output                                    |
| Connection technology 2   | CAGE CLAMP®                               |
| WAGO connector 2          | WAGO 2716 Series                          |
| Solid conductor 2         | 1.5 ... 16 mm <sup>2</sup> / 16 ... 6 AWG |
| Fine-stranded conductor 2 | 1.5 ... 16 mm <sup>2</sup> / 16 ... 6 AWG |
| Strip length 2            | 12 ... 13 mm / 0.47 ... 0.51 inches       |

### Physical data

|                                   |                       |
|-----------------------------------|-----------------------|
| Width                             | 170 mm / 6.69 inches  |
| Height                            | 136 mm / 5.354 inches |
| Depth from upper-edge of DIN-rail | 150 mm / 5.91 inches  |

### Mechanical data

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

### Material data

|           |        |
|-----------|--------|
| Fire load | 0 MJ   |
| Weight    | 74.1 g |

### Environmental requirements

|                                 |                                     |
|---------------------------------|-------------------------------------|
| Ambient temperature (operation) | -25 ... +70 °C                      |
| Ambient temperature (storage)   | -40 ... +85 °C                      |
| Relative humidity               | ≤ 95% (no condensation permissible) |
| Derating                        | -2.66 %/K (> 55 °C)                 |
| Climatic category               | 3K3 (per EN 60721)                  |

### Standards and specifications

|                          |  |
|--------------------------|--|
| Conformity marking       | CE   |
| Standards/specifications | EN 62368-1<br>EN 61204-3<br>EN 61000-6-2<br>EN 61000-6-3<br>UL 60950-1<br>UL 508<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     | CN                       |
| GTIN                  | 4050821748250            |
| Customs tariff number | 85044083900              |

### Environmental Product Compliance

|   |                                      |
|---|--------------------------------------|
| RoHS Compliance Status                    | Compliant,With Exemption             |
| RoHS Exemption                            | 6(c)<br>7(a)<br>7(c)-I<br>7(c)-II    |
| SCIP notification number (Bulgaria)       | a62607a7-2856-4d66-af7d-40c67b37a0f5 |
| SCIP notification number (Czech Republic) | 6a5b31a3-c7f4-42d8-9112-e5ab02ad13dd |