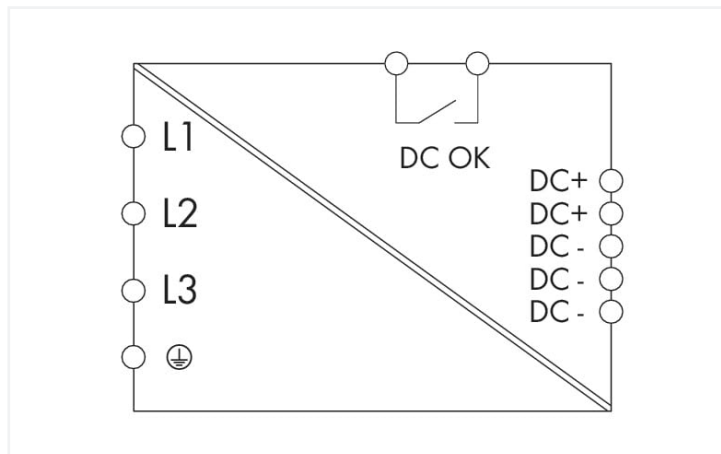


Data Sheet | Item Number: 787-2742

Power supply; Eco; 3-phase; 24 VDC output voltage; 20 A output current; DC OK contact

<https://www.wago.com/787-2742>



Features:

- Economical power supply for standard applications
- Natural convection cooling when horizontally mounted
- Encapsulated for use in control cabinets
- Fast and tool-free termination via lever-actuated terminal blocks with push-in connection technology
- DC OK signal output
- Parallel operation
- Electrically isolated output voltage (SELV) per EN 60950-1/UL 60950-1; PELV per EN 60204-1

Technical data

| Input | | Output | |
|------------------------------------|--|-------------------------------------|---|
| Phases | 2 / 3 | Nominal output voltage $U_{o, nom}$ | DC 24 V (SELV) |
| Nominal input voltage $U_{i, nom}$ | (2 / 3) x AC 400 ... 480 V | Output voltage range | DC 22 ... 28 V (adjustable) |
| Input voltage range | (2 / 3) x AC 325 ... 575 V; DC 560 ... 700 V | Default setting | DC 24 V |
| Nominal mains frequency range | 47 ... 63 Hz; 0 Hz | Nominal output current $I_{o, nom}$ | 20 A (24 VDC) |
| Input current I_i | $\leq 3 \times 1.2 \text{ A}$ (400 VAC) | Nominal output power | 480 W |
| Discharge current | $\leq 3.5 \text{ mA}$ | Deviation | $\leq 1 \%$ |
| Inrush current | $\leq 30 \text{ A}$ (400 VAC) | Residual ripple | $\leq 150 \text{ mV}$ (peak-to-peak) |
| Power factor | ≥ 0.7 (400 VAC) | Overload behavior | Constant power (in overload range: $1.05 \dots 1.4 \times I_{o, nom}$); Shutdown and automatic restart in the event of a short circuit |
| Power factor correction (PFC) | Passive | | |
| Mains failure hold-up time | $\geq 10 \text{ ms}$ (3 x 400 VAC) | | |

Signaling and communication

| | |
|----------------------------|--|
| Signaling | 1 x LED DC OK (green) 1 x Overload LED (red) 1 x DC OK signal output (PhotoMOS as make contact; can be loaded with max. 31.2 V / 100 mA) |
| Operation status indicator | Green LED (U_o) Red LED (overload) |

Efficiency/power losses

| | |
|-------------------|---|
| Power loss P_l | $\leq 2.15 \text{ W}$ (400 VAC; no load); $\leq 42.5 \text{ W}$ (400 VAC; nominal load) |
| Efficiency (typ.) | 92 % |

Circuit protection

| | |
|-----------------------------|---|
| Internal fuse | 3 x T 3.15 A / 500 VAC |
| Backup fusing (required) | An external DC fuse is required for the DC input voltage. |
| Backup fusing (recommended) | 3 x Circuit breaker $\geq 10 \text{ A}$; 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 30 V |
| Overvoltage category | II |
| Pollution degree | 2 |
| Transient suppression (primary) | Varistor |
| Short-circuit-protected | Yes |
| Open-circuit-proof | Yes |
| Parallel operation | Yes |
| Series operation | 2 devices (max.) |
| MTBF | > 1,800,000 h (per IEC 61709) |

Connection data

| | |
|---------------------------|---|
| Connection type 1 | Input/output |
| Connection technology | Push-in CAGE CLAMP® |
| WAGO connector | WAGO 2606 Series |
| Solid conductor | 0.5 ... 6 mm ² / 20 ... 10 AWG |
| Fine-stranded conductor | 0.5 ... 6 mm ² / 20 ... 10 AWG |
| Strip length | 11 ... 13 mm / 0.43 ... 0.51 inches |
| Connection type 2 | Signaling |
| Connection technology 2 | Push-in CAGE CLAMP® |
| WAGO connector 2 | <i>picoMAX</i> ® 3.5 (WAGO 2091 Series) |
| Solid conductor 2 | 0.2 ... 1.5 mm ² / 24 ... 14 AWG |
| Fine-stranded conductor 2 | 0.2 ... 1.5 mm ² / 24 ... 14 AWG |
| Strip length 2 | 8 ... 9 mm / 0.31 ... 0.35 inches |

Physical data

| | |
|-----------------------------------|-----------------------|
| Width | 80 mm / 3.15 inches |
| Height | 130 mm / 5.118 inches |
| Depth from upper-edge of DIN-rail | 170 mm / 6.693 inches |

Mechanical data

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

Material data

| | |
|-----------|----------|
| Fire load | 0.197 MJ |
| Weight | 1710 g |

Environmental requirements

| | |
|-----------------------------------|--|
| Ambient temperature (operation) | -20 ... +70 °C |
| Ambient temperature (storage) | -40 ... +85 °C |
| Relative humidity | 10 ... 95 % (no condensation permissible) |
| Derating | -2%/K (> 45°C) |
| Climatic category | 3K3 (per EN 60721) |
| Resistance to shock and vibration | Shock: 15g (per EN 60068-2-27) Vibration: 1g (per EN 60068-2-6) |

Standards and specifications

| | |
|--------------------------|--|
| Conformity marking | CE; EAC |
| Standards/specifications | EN 61204-3 EN 62368-1 cURus 60950-1 cURus 62368-1 cULus 508 CSA C22.2 SEMI F47 |

Commercial data

| | |
|-----------------------|---------------|
| 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 | 4055143588973 |
| Customs tariff number | 85044083900 |

Environmental Product Compliance

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

Approvals / Certificates

General approvals



| Approval | Standard | Certificate Name |
|---|----------------|------------------|
| EAC GZO Almaty Standart | TP TC 004/2011 | EAC CoC 03078 |
| EAC GZO Almaty Standart | TP TC 020/2011 | EAC CoC 03081 |
| UL Underwriters Laboratories Inc. | UL 508 | E255817 |
| UL Underwriters Laboratories Inc. | UL 60950-1 | E255815 |
| UR Underwriters Laboratories Inc. | UL 62368-1 | E255815 |

Declarations of conformity and manufacturer's declarations

| Approval | Standard | Certificate Name |
|---|----------|------------------|
| EU-Declaration of Confor- mity WAGO GmbH & Co. KG | - | - |
| MFD for SEMI F47 WAGO GmbH & Co. KG | - | - |

Downloads

Environmental Product Compliance

| Compliance Search | | | |
|---|--|--|---|
| Environmental Product Compliance 787-2742 | | | ↓ |

Documentation

| Bid Text | | | |
|----------|------------|------------------|---|
| 787-2742 | 13.06.2019 | xml 7.42 KB | ↓ |
| 787-2742 | 13.06.2019 | docx 23.18 KB | ↓ |

| Instruction Leaflet | | | |
|--------------------------------------|---------|------------------|---|
| Primär getaktete Stromversorgung ECO | V 1.5.0 | pdf 980.89 KB | ↓ |

CAD/CAE-Data

| CAD data | |
|-----------------------|---|
| 2D/3D Models 787-2742 | ↓ |

| CAE data | |
|----------------------------|---|
| EPLAN Data Portal 787-2742 | ↓ |
| ZUKEN Portal 787-2742 | ↓ |

1 Compatible Products

1.1 Optional Accessories

1.1.1 Tool

1.1.1.1 Operating tool



Item No.: 210-719
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

Item No.: 210-769
SCREWDRIVER; green