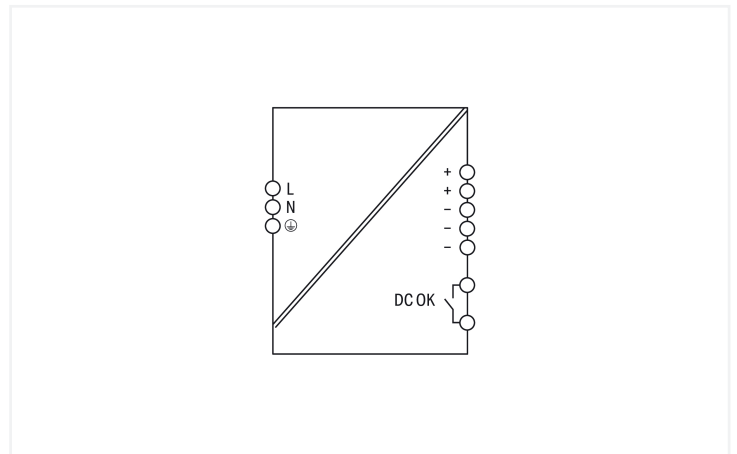


Data Sheet | Item Number: 2687-2146

Power supply; Eco 2; 1-phase; 24 VDC output voltage; 10 A output current; DC OK contact

<https://www.wago.com/2687-2146>



Features:

- Signal output, optical status indication
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Connection technology with push-in termination and tool-free lever operation
- Electrically isolated output voltage (SELV/PELV) per EN 61010/UL 61010
- Marker slot (2789-1233, not included) for WAGO marking cards (WMB) and WAGO marking strips

Technical data

Input

| | |
|------------------------------------|--|
| Phases | 1 |
| Nominal input voltage $U_{i, nom}$ | 1 x 100 ... 240 VAC |
| Input voltage range | 1 x 90 ... 264 VAC |
| Nominal mains frequency range | 50 ... 60 Hz; 0 Hz |
| Input current I_i | ≤ 1.1 A (230 VAC; nominal load); ≤ 2.7 A (100 VAC; nominal load) |
| Inrush current | ≤ 25 A (after 1 ms) |
| Power factor correction (PFC) | Active |
| Mains failure hold-up time | ≥ 25 ms (230 VAC) |

Output

| | |
|-------------------------------------|---|
| Nominal output voltage $U_{o, nom}$ | 24 VDC (SELV) |
| Output voltage range | 23 ... 28 VDC (adjustable) |
| Default Setting | 24 VDC |
| Nominal output current $I_{o, nom}$ | 10 A (24 VDC) |
| Nominal output power | 240 W |
| Deviation | ≤ 1 % |
| Residual ripple | ≤ 75 mV (peak-to-peak) |
| Overload behavior | Constant current up to 105 ... 110 %; shut-down and automatic restart in the event of a short circuit |

Signaling and Communication

| | |
|-----------|---|
| Signaling | Optical status indication (overload) Optical status indication (DC OK) Digital signal output (DO) |
|-----------|---|

Efficiency/Power Losses

| | |
|-------------------|--|
| Power loss P_i | ≤ 3 W (230 VAC; no load); ≤ 13 W (230 VAC; nominal load) |
| Efficiency (typ.) | 93 % |

Circuit Protection

| | |
|---------------|-------------------|
| Internal fuse | T 6.3 A / 250 VAC |
|---------------|-------------------|

Safety and protection

| | |
|-----------------------------------|--|
| Isolation voltage (pri.-sec., AC) | 3510 V |
| Isolation voltage (pri.-PE, AC) | 2200 V |
| Isolation voltage (sec.-PE) | 0.5 kVDC |
| Isolation voltage (sec.-signal) | 0.5 kVDC |
| Protection class | I |
| Protection type | IP20; per EN 60529 |
| Overvoltage category | III (≤ 2000 m a.s.l.); II (> 2000 m a.s.l.) |
| Pollution degree | 2 |
| Short-circuit-protected | Yes |
| Open-circuit-proof | Yes |
| Parallel operation | Yes |
| Series operation | Yes |
| MTBF | $> 1,000,000$ h (per IEC 61709) |

Connection Data

Connection 1

| | |
|---|---|
| Connection type | Input/output/signaling |
| Connection technology | Push-in CAGE CLAMP® |
| WAGO connector | WAGO 2604 Series |
| Solid conductor | 0.2 ... 4 mm ² / 24 ... 12 AWG |
| Fine-stranded conductor | 0.2 ... 4 mm ² / 24 ... 12 AWG |
| Fine-stranded conductor; with insulated ferrule | 0.25 ... 2.5 mm ² |
| Fine-stranded conductor; with uninsulated ferrule | 0.25 ... 2.5 mm ² |
| Strip length | 9 ... 11 mm / 0.35 ... 0.43 inches |

Physical data

| | |
|-----------------------------------|-----------------------|
| Width | 50 mm / 1.97 inches |
| Height | 130 mm / 5.118 inches |
| Depth from upper-edge of DIN-rail | 130 mm / 5.118 inches |

Mechanical data

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

Material data

| | |
|-----------|-------|
| Fire load | 0 MJ |
| Weight | 800 g |

Environmental requirements

| | |
|---------------------------------|--|
| Ambient temperature (operation) | -25 ... +70 °C (Device starts at -40 °C (type-tested)) |
| Ambient temperature (storage) | -40 ... +85 °C |
| Relative humidity | 5 ... 96 % (no condensation permissible) |
| Derating | -3 %/K (> 45 °C) |
| Climatic category | 3K3 (per EN 60721) |
| Operating altitude (max.) | 5000 m |

Standards and Specifications

| | |
|--------------------------|--|
| Conformity marking | CE |
| Standards/specifications | EN 61010-1 EN 61010-2-201 EN 61204-3 UL 61010-1 UL 61010-2-201 UL 121201 (HazLoc) |

Commercial data

| | |
|-----------------------|---------------|
| PU (SPU) | 1 pcs |
| Packaging type | Box |
| Country of origin | CN |
| GTIN | 4066966342451 |
| Customs tariff number | 85044083900 |

Product Classification

| | |
|-----------|----------------------|
| UNSPSC | 39121004 |
| ETIM 9.0 | EC002540 |
| ETIM 10.0 | EC002540 |
| ECCN | NO US CLASSIFICATION |

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 03080 |
| EAC GZO Almaty Standart | TP TC 020/2011 | EAC CoC 03081 |
| UL Underwriters Laboratories Inc. | UL 61010-2-201 | |

Declarations of conformity and manufacturer's declarations

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

Approvals for hazardous areas



| Approval | Standard | Certificate Name |
|--|-----------|--------------------------------|
| UL Underwriters Laboratories Inc. (HAZARDOUS LOCATIONS) | UL 121201 | UL_E198726_Serie 2687-2146 (x) |

Downloads

Environmental Product Compliance


| Compliance Search |
|--|
| Environmental Product Compliance 2687-2146 ↓ |

Documentation

| Manual |
|---|
| Power supply; Eco 2; 1-phase; 24 VDC output voltage; 10 A output current V 1.1.0 19.03.2024 pdf 4686.20 KB ↓ |


| Bid Text |
|--|
| 2687-2146 xml 7.29 KB ↓ |
| 2687-2146 docx 29.98 KB ↓ |

Instruction Leaflet

| | | | |
|---------------------|-----------------------|-------------------|---|
| Power Supply; Eco 2 | V 1.0.0 02.02.2023 | pdf 2308.20 KB |  |
|---------------------|-----------------------|-------------------|---|

CAD/CAE-Data

CAD data

| | |
|---------------------------|---|
| 2D/3D Models 2687-2146 |  |
|---------------------------|---|

1 Compatible Products

1.1 Optional Accessories

1.1.1 Marking

1.1.1.1 Marker carrier

[Item No.: 2789-1233](#)

Marker carrier; for WMB or marking strips;
Length: 33 mm