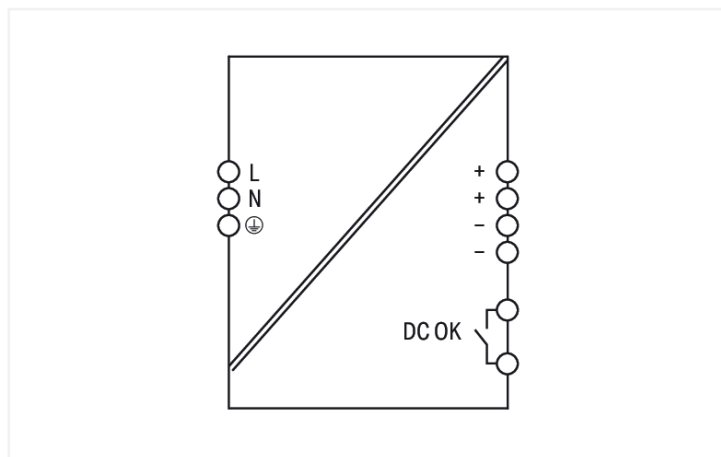


# Data Sheet | Item Number: 2687-2144

Power supply; Eco 2; 1-phase; 24 VDC output voltage; 5 A output current; DC OK contact



<https://www.wago.com/2687-2144>



## 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 $U_{i, \text{nom}}$ | 1 x AC 100 ... 240 V   |
| Input voltage range                       | 1 x AC 90 ... 264 V  |
| Nominal mains frequency range             | 50 ... 60 Hz; 0 Hz   |
| Input current $I_i$                       | $\leq 0.8$ A (230 VAC; nominal load); $\leq 1.5$ A (100 VAC; nominal load) |
| Inrush current                            | $\leq 20$ A (after 1 ms)   |
| Power factor correction (PFC)             | Active   |
| Mains failure hold-up time                | $\geq 20$ ms (230 VAC)   |

### Output

|  |  |
|--|--|
| Nominal output voltage $U_{o, \text{nom}}$ | DC 24 V (SELV)   |
| Output voltage range                       | DC 23 ... 28 V (adjustable)  |
| Default setting                            | DC 24 V  |
| Nominal output current $I_{o, \text{nom}}$ | 5 A (24 VDC)   |
| Nominal output power                       | 120 W  |
| Deviation                                  | $\leq 1$ %   |
| Residual ripple                            | $\leq 75$ mV (peak-to-peak)  |
| Overload behavior                          | Constant current up to 125 %; shutdown and automatic restart in the event of a short circuit |

## Signaling and communication

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

## Efficiency/power losses

|                   |  |
|-------------------|--|
| Power loss $P_I$  | $\leq 3$ W; $\leq 12$ W (nominal load) |
| Efficiency (typ.) | 90 %                                   |

## Circuit protection

|                             |                             |
|-----------------------------|-----------------------------|
| Internal fuse               | T 3.15 A / 250 VAC          |
| Backup fusing (recommended) | 16 A (for USA/Canada: 15 A) |

## Safety and protection

|                                   |  |
|-----------------------------------|--|
| Isolation voltage (pri.-sec., AC) | 3510 V   |
| Isolation voltage (pri.-PE, AC)   | 2200 V   |
| Isolation voltage (sec.-PE)       | DC 0.5 kV  |
| Isolation voltage (sec.-signal)   | DC 0.5 kV  |
| Protection class                  | I  |
| Protection type                   | IP20; per EN 60529                                   |
| Oversoltage category              | III ( $\leq 2000$ 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                  | No   |
| MTBF                              | $> 1,000,000$ h (per IEC 61709)                      |

## Connection data

|                         |   |
|-------------------------|---|
| Connection type 1       | Input/output/signaling                    |
| Connection technology   | Push-in CAGE CLAMP®                       |
| Solid conductor         | 0.2 ... 4 mm <sup>2</sup> / 24 ... 12 AWG |
| Fine-stranded conductor | 0.2 ... 4 mm <sup>2</sup> / 24 ... 12 AWG |

### Physical data

|                                   |                       |
|-----------------------------------|-----------------------|
| Width                             | 38 mm / 1.496 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    | 620 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                        | -2.5 %/K, > 55 °C; -10 %/V, > 24 V                     |
| Climatic category               | 3K3 (per EN 60721)                                     |
| Operating altitude (max.)       | 5000 m   |

### Standards and specifications

|                          |  |
|--------------------------|--|
| Conformity marking       | CE   |
| Standards/specifications | EN 61010-1<br>EN 61010-2-201<br>EN 61204-3<br>UL 61010-1<br>UL 61010-2-201<br>SEMI F47 |

### Commercial data

|                       |               |
|-----------------------|---------------|
| ETIM 8.0              | EC002540      |
| ETIM 7.0              | EC002540      |
| PU (SPU)              | 1 pcs         |
| Country of origin     | CN            |
| GTIN                  | 4066966401080 |
| Customs tariff number | 85044083900   |

### Environmental Product Compliance

|   |   |
|---|---|
| CAS-No.                                   | 1303-86-2<br>1317-36-8<br>7439-92-1<br>79-94-7  |
| REACH Candidate List Substance            | 2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol<br>Diboron trioxide<br>Lead<br>Lead monoxide |
| RoHS Compliance Status                    | Compliant,With Exemption  |
| RoHS Exemption                            | 6(c)<br>7(a)<br>7(c)-I<br>7(c)-II   |
| SCIP notification number (Austria)        | 88b095ec-76a2-44ba-bc4f-8af04d3aa869  |
| SCIP notification number (Belgium)        | 1f36d4b5-c2bd-4fa4-9ba7-fab4560274ea  |
| SCIP notification number (Bulgaria)       | ece2741c-94c2-4643-8455-4af30ed67835  |
| SCIP notification number (Czech Republic) | cd95343d-b393-43cf-80b0-ccc5257bbfd   |
| SCIP notification number (Denmark)        | 8de2a84b-c12a-4761-91dd-b119773534c8  |

**Environmental Product Compliance**

|  |                                      |
|--|--------------------------------------|
| SCIP notification number (Finland)     | 37dca7ef-68a8-4237-96ee-ffc69fca1b79 |
| SCIP notification number (France)      | be625ff9-61f8-44cb-a1b4-9c91e7ab498f |
| SCIP notification number (Germany)     | 0f1a79bc-42ce-497c-93aa-169b84dec80a |
| SCIP notification number (Hungary)     | c75d9660-e9e0-4f6a-8094-a02f7eb002c5 |
| SCIP notification number (Italy)       | 4058ebcb-e5d3-4e13-8a2c-bb034a513773 |
| SCIP notification number (Netherlands) | e09550f1-21a2-4612-b815-cd116bb56de2 |
| SCIP notification number (Poland)      | 42928b5b-13e1-44dc-bfe4-9af43f5d13b6 |
| SCIP notification number (Romania)     | 42dd0d9d-70ff-4898-aa20-05f92774b9fb |
| SCIP notification number (Sweden)      | d048877f-4660-48fa-8533-a6cfed8010d2 |

**Approvals / Certificates**

**General approvals**      **Declarations of conformity and manufacturer's declarations**



| Approval                             | Standard       | Certificate Name                |
|--------------------------------------|----------------|---------------------------------|
| UL<br>Underwriters Laboratories Inc. | UL 61010-2-201 | UL-US-2218925-0_UL-CA-2218432-0 |

| Approval   | Standard | Certificate Name |
|--|----------|------------------|
| EU-Declaration of Conformity<br>WAGO GmbH & Co. KG | -        | -                |
| MFD with product reference<br>WAGO GmbH & Co. KG   | -        | -                |
| UK-Declaration of Conformity<br>WAGO GmbH & Co. KG | -        | -                |

**Approvals for hazardous areas**



| Approval   | Standard  | Certificate Name |
|--|-----------|------------------|
| UL<br>Underwriters Laboratories Inc. (HAZARDOUS LOCATIONS) | UL 121201 | E198726          |

**Downloads**

**Environmental Product Compliance**

| Compliance Search                          |
|--|
| Environmental Product Compliance 2687-2144 |

## Documentation

| Manual  |                       |                   |                   |
|---|-----------------------|-------------------|-------------------|
| Power supply; Eco 2; 1-phase; 24 VDC output voltage; 5 A output current | V 1.0.0<br>19.12.2022 | pdf<br>4207.46 KB | <a href="#">↓</a> |

| Bid Text  |                  |                   |
|-----------|------------------|-------------------|
| 2687-2144 | xml<br>7.26 KB   | <a href="#">↓</a> |
| 2687-2144 | docx<br>29.77 KB | <a href="#">↓</a> |

| Instruction Leaflet |                       |                   |                   |
|---------------------|-----------------------|-------------------|-------------------|
| Power supply; Eco 2 | V 1.3.0<br>08.11.2022 | pdf<br>2307.76 KB | <a href="#">↓</a> |

## CAD/CAE-Data


| CAD data                  |                   |
|---------------------------|-------------------|
| 2D/3D Models<br>2687-2144 | <a href="#">↓</a> |

## 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