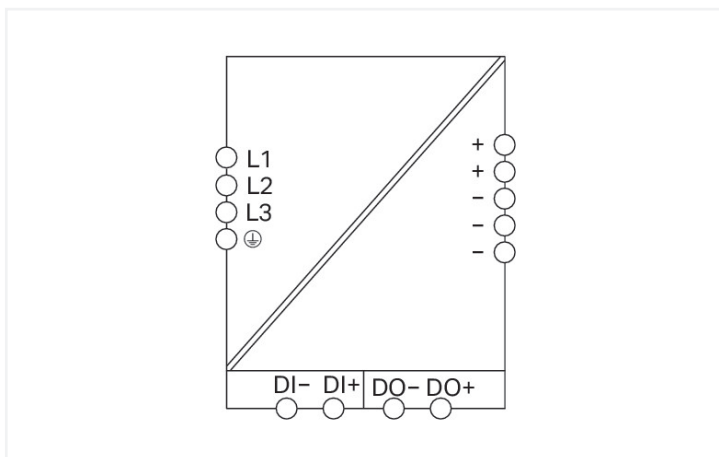


# Data Sheet | Item Number: 2787-2348/000-030

Power supply; Pro 2; 3-phase; 24 VDC output voltage; 40 A output current; Top-Boost + PowerBoost; communication capability

<https://www.wago.com/2787-2348/000-030>



## Features:

- Power supply with TopBoost, PowerBoost and configurable overload behavior
- Configurable digital signal input and output, optical status indication, function keys
- Communication interface for configuration and monitoring
- Optional connection to IO-Link, EtherNet/IP™, Modbus TCP or Modbus RTU
- Suitable for both parallel and series operation
- Natural convection cooling when horizontally mounted
- Pluggable connection technology
- Electrically isolated output voltage (SELV/PELV) per EN 61010-2-201/UL 61010-2-201
- Marker slot for WAGO marking cards (WMB) and WAGO marking strips

## Technical data

### Input

|                                   |   |
|-----------------------------------|---|
| Phases                            | 3   |
| Nominal input voltage $U_{i,nom}$ | 3 x AC 400 ... 500 V (connection without neutral conductor) |
| Input voltage range               | 3 x AC 340 ... 550 V  |
| Nominal mains frequency range     | 50 ... 60 Hz  |
| Input current $I_i$               | $\leq 3 \times 1.7 \text{ A}$ (400 VAC; 24 VDC / 40 A)      |
| Inrush current                    | $\leq 15 \text{ A}$ (after 1 ms)                            |
| Power factor correction (PFC)     | Active  |
| Mains failure hold-up time        | $\geq 20 \text{ ms}$ (3 x 400 VAC)                          |

### Output

|                                    |  |
|------------------------------------|--|
| Nominal output voltage $U_{o,nom}$ | DC 24 V (SELV)   |
| Output voltage range               | DC 24 ... 28 V (adjustable)  |
| Default setting                    | DC 24 V  |
| Nominal output current $I_{o,nom}$ | 40 A (24 VDC)  |
| Nominal output power               | 960 W  |
| Deviation                          | $\leq 1 \%$  |
| Residual ripple                    | $\leq 70 \text{ mV}$ (peak-to-peak)  |
| Current limitation                 | $1.1 \times I_{o,nom}$ (typ.)  |
| Overload behavior                  | TopBoost/PowerBoost/Time-limited constant current mode (other overload behaviors can be set) |
| PowerBoost                         | DC 60 A (5 s)  |
| TopBoost                           | Up to 600 %  |

## Signaling and communication

|               |   |
|---------------|---|
| Signaling     | Optical status indication (DC OK; load; warning and error states)<br>Digital signal input and output (DI/DO)  |
| Communication | USB (750-923 Communication Cable)<br>Ethernet/IP (2789-9023 Communication Module)<br>IO-Link (2789-9080 Communication Module)<br>Modbus RTU (Communication Module 2789-9015)<br>Modbus TCP (2789-9052 Communication Module) |

## Efficiency/power losses

|                   |                               |
|-------------------|-------------------------------|
| Efficiency (typ.) | 96.1 % (400 VAC; 40 A; 25 °C) |
|-------------------|-------------------------------|

## Circuit protection

|                             |   |
|-----------------------------|---|
| Internal fuse               | 3 x T 3.2 A / 500 VAC                                     |
| Backup fusing (required)    | An external DC fuse is required for the DC input voltage. |
| Backup fusing (recommended) | 3 x 16 A (for USA/Canada: 3 x 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   |
| Resistance to reverse feed        | $\leq \text{DC } 35 \text{ V}$   |
| Overvoltage category              | III ( $\leq 2000 \text{ m a.s.l.}$ ); II ( $> 2000 \text{ m a.s.l.}$ )         |
| Pollution degree                  | 2  |
| Transient suppression (primary)   | Yes  |
| Overvoltage protection; secondary | Internal protective circuit<br>$\leq 35 \text{ VDC}$ (in the event of a fault) |
| Short-circuit-protected           | Yes  |
| Open-circuit-proof                | Yes  |
| Parallel operation                | Yes  |
| Series operation                  | Yes  |
| MTBF                              | $> 800,000 \text{ h}$ (per IEC 61709)  |

### Connection data

|   |  |
|---|--|
| Connection type 1                                   | Input/signaling                              |
| Connection technology                               | CAGE CLAMP®                                  |
| WAGO connector                                      | WAGO 721 Series                              |
| Solid conductor                                     | 0.08 ... 2.5 mm <sup>2</sup> / 28 ... 12 AWG |
| Fine-stranded conductor                             | 0.08 ... 2.5 mm <sup>2</sup> / 28 ... 12 AWG |
| Fine-stranded conductor; with insulated ferrule     | 0.25 ... 1.5 mm <sup>2</sup> / 20 ... 16 AWG |
| Fine-stranded conductor; with uninsulated ferrule   | 0.25 ... 2.5 mm <sup>2</sup> / 20 ... 14 AWG |
| Strip length  | 8 ... 9 mm / 0.31 ... 0.35 inches            |
| Connection type 2                                   | Output                                       |
| Connection technology 2                             | Push-in CAGE CLAMP®                          |
| WAGO connector 2                                    | WAGO 831 Series                              |
| Solid conductor 2                                   | 0.5 ... 10 mm <sup>2</sup> / 20 ... 8 AWG    |
| Fine-stranded conductor 2                           | 0.5 ... 10 mm <sup>2</sup> / 20 ... 8 AWG    |
| Fine-stranded conductor; with insulated ferrule 2   | 0.5 ... 6 mm <sup>2</sup>                    |
| Fine-stranded conductor; with uninsulated ferrule 2 | 0.5 ... 6 mm <sup>2</sup>                    |
| Strip length 2                                      | 13 ... 15 mm / 0.51 ... 0.59 inches          |

### Physical data

|                                   |   |
|-----------------------------------|---|
| Width                             | 120 mm / 4.724 inches                                     |
| Height                            | 130 mm / 5.118 inches                                     |
| Depth from upper-edge of DIN-rail | 130 mm / 5.118 inches                                     |
| Note (dimensions)                 | Height without connector<br>Height with connector: 169 mm |

### Mechanical data

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

### Material data

|           |        |
|-----------|--------|
| Fire load | 0 MJ   |
| Weight    | 2000 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                        | See instruction leaflet                                |
| 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>DNV<br>UL HazLoc<br>SEMI F47 |

**Commercial data**

|                       |               |
|-----------------------|---------------|
| ETIM 8.0              | EC002540      |
| ETIM 7.0              | EC002540      |
| PU (SPU)              | 1 pcs         |
| Packaging type        | Box           |
| Country of origin     | CN            |
| GTIN                  | 4066966137842 |
| Customs tariff number | 85044083900   |

**Environmental Product Compliance**

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

**Approvals / Certificates**

**General approvals**



| Approval                             | Standard       | Certificate Name |
|--------------------------------------|----------------|------------------|
| UL<br>Underwriters Laboratories Inc. | UL 61010-2-201 | E255817          |

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

| 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 marine applications**



| Approval         | Standard               | Certificate Name |
|------------------|------------------------|------------------|
| DNV<br>DNV GL SE | DNV-CG-0339, Aug. 2021 | TAA00002ZF       |

**Approvals for hazardous areas**



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

**Downloads**

**Environmental Product Compliance**

|   |   |
|---|---|
| Compliance Search                                     |   |
| Environmental Product Compliance<br>2787-2348/000-030 | ↓ |

## Documentation

| Manual  |                       |                   |                   |
|---|-----------------------|-------------------|-------------------|
| Product Manual Power Supply; Pro 2; 3-phase; 24 VDC; 40 A | V 1.1.0<br>15.02.2022 | pdf<br>8570.51 KB | <a href="#">↓</a> |

| Instruction Leaflet        |                       |                   |                   |
|----------------------------|-----------------------|-------------------|-------------------|
| WAGO Stromversorgung Pro 2 | V 1.1.0<br>26.04.2021 | pdf<br>4610.56 KB | <a href="#">↓</a> |

## CAD/CAE-Data

| CAD data                          |                   |
|-----------------------------------|-------------------|
| 2D/3D Models<br>2787-2348/000-030 | <a href="#">↓</a> |

## 1 Compatible Products

### 1.1 Optional Accessories

#### 1.1.1 Communication

##### 1.1.1.1 Communication module



**Item No.: 2789-9023**  
Communication module; EtherNet/IP; MQTT; communication capability



**Item No.: 2789-9080**  
Communication module; IO-Link; communication capability



**Item No.: 2789-9015**  
Communication module; Modbus RTU; RJ45; communication capability



**Item No.: 2789-9052**  
Communication module; Modbus TCP; communication capability

### 1.1.2 Marking

#### 1.1.2.1 Marker carrier



**Item No.: 2789-1233**  
Marker carrier; for WMB or marking strips; Length: 33 mm