

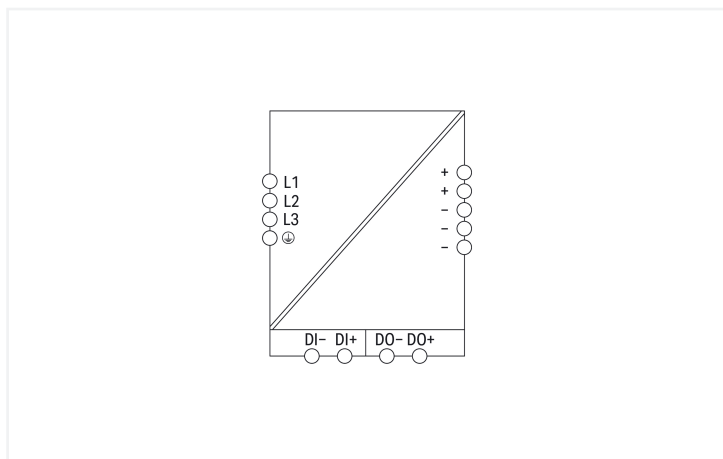
Data Sheet | Item Number: 2787-2348

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>



Similar to illustration



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 $U_{i\text{nom}}$ | 3 x 400 ... 500 VAC (connection without neutral conductor) |
| Input voltage range | 3 x 340 ... 550 VAC |
| Nominal mains frequency range | 50 ... 60 Hz |
| Input current I_i | $\leq 3 \times 1.7 \text{ A}$ (400 VAC; 24 VDC / 40 A) |

| Input | |
|-------------------------------|------------------------------------|
| 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 $U_{o, nom}$ | 24 VDC (SELV) |
| Output voltage range | 24 ... 28 VDC (adjustable) |
| Default Setting | 24 VDC |
| Nominal output current $I_{o, nom}$ | 40 A (24 VDC) |
| Nominal output power | 960 W |
| Deviation | $\leq 1 \%$ |
| Residual ripple | ≤ 70 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 | 60 ADC (5 s) |
| TopBoost | Up to 600 % |

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

| 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 |
| Resistance to reverse feed | ≤ 35 VDC |
| Overtoltage category | III (≤ 2000 m a.s.l.); II (> 2000 m a.s.l.) |
| Pollution degree | 2 |
| Transient suppression (primary) | Yes |
| Overtoltage protection; secondary | Internal protective circuit ≤ 35 VDC (in the event of a fault) |
| Short-circuit-protected | Yes |
| Open-circuit-proof | Yes |
| Parallel operation | Yes |
| Series operation | Yes |
| MTBF | $> 800,000$ h (per IEC 61709) |

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

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

| Circuit Protection | |
|---------------------------|---|
| Internal fuse | 3 x T 3.2 A / 500 VAC |
| Pre-fuse (required) | An external DC fuse is required for the DC input voltage. |
| Backup fuse (recommended) | 3 x 16 A (for USA/Canada: 3 x 15 A) |

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 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 EN 61010-2-201 EN 61204-3 UL 61010-1 UL 61010-2-201 SEMI F47 UL 121201 (HazLoc) |

Commercial data

| | |
|-----------------------|---------------|
| PU (SPU) | 1 pcs |
| Packaging type | Box |
| Country of origin | CN |
| GTIN | 4055143907422 |
| 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 | E255817 |

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 | - | - |

Approvals for hazardous areas



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

Downloads

Environmental Product Compliance

| Compliance Search | |
|--|-------------------|
| Environmental Product Compliance 2787-2348 | ↓ |

Documentation

| Manual | | | |
|---|-----------------------|-------------------|-------------------|
| Product Manual Power Supply; Pro 2; 3-phase; 24 VDC; 40 A | V 1.1.0 15.02.2022 | pdf 8570.51 KB | ↓ |

| Bid Text | | | |
|------------------------------|------------|------------------|-------------------|
| 2787-2348_EUSA | 04.07.2019 | docx 22.77 KB | ↓ |
| 2787-2348_EUSA | 04.07.2019 | xml 7.95 KB | ↓ |
| ausschreiben.de 2787-2348 | | | ↓ |

| Instruction Leaflet | | | |
|----------------------------|-----------------------|-------------------|-------------------|
| WAGO Stromversorgung Pro 2 | V 1.1.0 26.04.2021 | pdf 4610.56 KB | ↓ |

CAD/CAE-Data

| CAD data | | | |
|---------------------------|--|--|-------------------|
| 2D/3D Models 2787-2348 | | | ↓ |

| CAE data | |
|--------------------------------|-------------------|
| EPLAN Data Portal 2787-2348 | ↓ |
| ZUKEN Portal 2787-2348 | ↓ |

Runtime Software

| Firmware | | | |
|-----------------------------------|------------------------|-------------------|-------------------|
| 2787-2348, Stromversorgung; Pro 2 | V 010513 15.10.2021 | zip 1087.29 KB | ↓ |

1 Compatible Products

1.1 Product Expansions

1.1.1 Communication Module

| | | | |
|--|--|---|---|
| | | | |
| Item No.: 2789-9023 Communication module; EtherNet/IP; MQTT Pub/Sub; 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 |

1.2 Optional Accessories

1.2.1 Cables and connectors

1.2.1.1 Communication cable

| |
|--|
| |
| Item No.: 750-923/000-001 Configuration cable; USB connector; Length: 5 m |

1.2.3 Marking

1.2.3.1 Marker

| |
|--|
| |
| Item No.: 2009-115 WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white |

1.2.3.2 Marker carrier



Item No.: 2789-1233

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

1.2.3.3 Marking strip



Item No.: 2009-110

Marking strips; for Smart Printer; on reel;
not stretchable; plain; snap-on type; white

1.2.4 Tool

1.2.4.1 Operating tool



Item No.: 210-720

Operating tool; Blade: 3.5 x 0.5 mm; with a
partially insulated shaft; multicoloured



Item No.: 210-721

Operating tool; Blade: 5.5 x 0.8 mm; with a
partially insulated shaft; multicoloured