Power supply; Pro 2; 3-phase; 24 VDC output voltage; 20 A output current; TopBoost + PowerBoost; communication capability with hazardous locations approvals



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| Picture differs from the item. | |
|--------------------------------|--|
| | |

Subject to changes. Please also observe the further product documentation!

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Item description

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
- 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

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Data Technical data

Input

| Phases | 3 |
|-------------------------------|---|
| Nominal input voltage [V] | 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 | ≤ 3 x 0.8 A (400 VAC; 24 VDC / 20 ADC) |
| Inrush current | ≤ 15 A (after 1 ms) |
| Power factor correction (PFC) | Active |
| Mains failure hold-up time | ≥ 20 ms (3 x 400 VAC) |
| | |

Output

| Nominal output voltage [V] | DC 24 V (SELV) |
|--------------------------------|--|
| Output voltage range | DC 24 28 V (adjustable) |
| Default setting | DC 24 V |
| Nominal output current I o nom | 20 A (24 VDC) |
| Nominal output power | 480 W |
| Deviation | ≤ 1 % |
| Residual ripple | ≤ 70 mV (Peak-to-peak) |
| Current limitation | 1.1 x l _{o nom} (typ.) |
| Overload behavior | TopBoost/PowerBoost/Time-limited constant current mode (other overload behaviors can be set) |
| PowerBoost | DC 30 A (5 s) |
| TopBoost | up to 600 % |
| | |

Signaling and communication

| Signaling | Optical status indication (DC OK; load; warning and error states) Digital signal input and output (DI/DO) Optical status indication (DC OK; load; warning and error states) |
|---------------|---|
| | Digital signal input and output (DI/DO) |
| Communication | IO-Link (with 2789-9080 module) |
| | Modbus RTU (with 2789-9015 module) |
| | Modbus TCP (with 2789-9052 module) |
| | RS232 (with 750-923 cable) |
| | |

 $\label{thm:condition} \textbf{Subject to changes. Please also observe the further product documentation!}$

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Efficiency/power losses

| Power loss P _I | ≤ 3.6 W (Standby); ≤ 4.4 W (No load); ≤ 21 W (400 VAC; Nominal load) |
|---------------------------|--|
| Efficiency (typ.) | 95.9 % (400 VAC; 20 A; 25 °C) |

Circuit protection

| Internal fuse | 3 x T 2.5 A / 500 VAC |
|---------------------------|---|
| Required backup fusing | An external DC fuse is required for the DC input voltage. An external DC fuse is required for the DC input voltage. |
| Recommended backup fusing | 3 x 16 A (for USA/Canada: 3 x 15 A) 3 x 16 A (for USA/Canada: 3 x 15 A) |

Safety and protection

| Isolation voltage (prisec., AC) | 3,510 V | |
|-----------------------------------|---|--|
| Isolation voltage (priPE, AC) | 2,200 V | |
| Isolation voltage (secPE) | DC 0.5 kV | |
| Isolation voltage (SecSignal) | DC 0.5 kV | |
| Protection class | I | |
| Protection type | IP20 | |
| Note on protection type | Per EN 60529 | |
| Resistance to reverse feed | ≤ DC 35 V | |
| Overvoltage category | III (≤ 2000 m a. s.l.); II (> 2000 m a. s.l.) | |
| Pollution degree | 2 | |
| Transient suppression (primary) | Yes | |
| Overvoltage protection; secondary | Internal protective circuit ≤ 35 VDC (in the event of a fault) | |
| | 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 type 1 | Input/signaling |
|-----------------------|-------------------------|
| Connection technology | CAGE CLAMP [®] |
| WAGO Connector | WAGO 721 Series |

 $\label{thm:condition} \textbf{Subject to changes. Please also observe the further product documentation!}$

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| Solid conductor | 0.08 2.5 mm² / 28 12 AWG |
|---|---------------------------|
| Fine-stranded conductor | 0.08 2.5 mm² / 28 12 AWG |
| Fine-stranded conductor; with insulated ferrule | 0.25 1.5 mm² / 20 16 AWG |
| Fine-stranded conductor; with uninsulated ferrule | 0.25 2.5 mm² / 20 14 AWG |
| Strip length | 8 9 mm / 0.31 0.35 inch |
| Connection type 2 | Output |
| Connection technology 2 | Push-in CAGE CLAMP® |
| WAGO Connector 2 | WAGO 831 Series |
| Solid conductor 2 | 0.5 10 mm² / 20 8 AWG |
| Fine-stranded conductor 2 | 0.5 10 mm² / 20 8 AWG |
| Fine-stranded conductor; with insulated ferrule 2 | 0.5 6 mm² |
| Fine-stranded conductor; with uninsulated ferrule 2 | 0.5 6 mm² |
| Strip length 2 | 13 15 mm / 0.51 0.59 inch |

Physical data

| Width | 70 mm / 2.756 inch |
|-----------------------------------|-------------------------------|
| Height | 130 mm / 5.118 inch |
| Depth from upper-edge of DIN-rail | 130 mm / 5.118 inch |
| Note (dimensions) | Height without connector |
| | Height with connector: 169 mm |
| | Height without connector |
| | Height with connector: 169 mm |

Mechanical data

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

Material data

| *** | |
|--------|--------|
| Weight | 1400 g |

Environmental requirements

| Ambient temperature (operation) | -25 +70 °C (Device starts at -40 °C (type-tested)) |
|---------------------------------------|--|
| Surrounding air temperature (storage) | -40 +85 °C |
| Relative humidity | 596% (no condensation permissible) |
| Derating | See instruction leaflet |
| Operating altitude (max.) | 5000 m |

 $\label{thm:continuity} \textbf{Subject to changes. Please also observe the further product documentation!}$

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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 | |
| | DNV GL | |
| | UL HazLoc | |

Commercial data

| PU (SPU) | 1 Pieces |
|-------------------------------------|---------------|
| Packaging type | box |
| Country of origin VKOrg Germany | DE |
| GTIN | 4055144138320 |
| Customs tariff number VKOrg Germany | 85044082900 |

Approvals / Certificates

Ex-Approvals

| Logo | Approval | Additional Approval Text | Certificate name |
|------|---|--------------------------|---------------------|
| (Î) | UL Underwriters Laboratories Inc. (HAZARDOUS LOCATIONS) | UL 121201 | E198726 |

Ship Approvals

| Logo | Approval | Additional Approval Text | Certificate name |
|------|-------------------------|--------------------------|------------------|
| | DNV DNV Germany GmbH | DNV-CG-0339,Aug.2021 | TAA00002ZF |

UL-Approvals

| | | | Certificate | |
|------|--------------------------------|--------------------------|-------------|--|
| Logo | Approval | Additional Approval Text | name | |
| | UL | UL 61010-2-201 | E255817 | |
| (U | Underwriters Laboratories Inc. | | | |

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Downloads

Documentation

Manual

| Power Supply; Pro 2; 3-phase; DC 24 V; 20 A | V 1.1.0 | pdf | Download |
|--|-------------|----------|----------|
| TopBoost + PowerBoost; Communication capability | 2022 Feb 15 | 8.6 MB | |
| Instruction Leaflet | | | |
| WAGO Stromversorgung Pro 2 | V 1.1.0 | pdf | Download |
| 3-phasig; Ausgangsspannung DC 24 V; Ausgangsstrom 20 A; TopBoost + | 2021 Apr 26 | 4.7 MB | |
| PowerBoost; kommunikationsfähig | | | |
| Additional Information | | | |
| Disposal; Electrical and electronic equipment, Packaging | V 1.0.0 | pdf | Download |
| | | 265.8 kB | |

Engineering-Software

WAGO IO-Link Configurator

WAGO IO-Link Configurator

V5.1.1-6618

ZIP

Download

2022 Feb 16

91.8 MB

WAGO IO-Link Configurator allows configuration, parameterization, operation and monitoring of WAGO IO-Link Masters in the WAGO I/O System 750 and WAGO I/O System Field, and especially of the WAGO IO-Link devices connected to them.

Additionally, WAGO IO-Link Configurator can be used for complete configuration and operation of all IO-Link devices of third-party manufacturers, as long as they comply with the IO-Link specification. A product's process data can be visualized graphically and stored in trend curves. Up to eight elements can be selected for visualization, and the data can be recorded for up to 24 hours.

Device description files for the IO-Link Masters (IOLM) or IO-Link Devices (IODD) can be used to integrate new devices into the tool at any time. Convenient access to the IO-Link user organization's IODDfinder is available for the IODDs. This allows automated selective download of IODDs when integrating new IO-Link devices. An integrated IODD viewer allows detailed insight into the IODD device description.

WAGO IO-Link Configurator can be used either as a standalone program or integrated into engineering systems with a TCI interface and WAGO-I/O-CHECK.

IO-Link Configurator can also be used to integrate the IO-Link Master (750-657) of the WAGO I/O System 750 Series and to access all the configurator's functions. This is made possible by the WAGO I/O System 750 IO-Link Adapter, which can be retrofitted. The WAGO I/O System 750 IO-Link Adapter requires the current version of WAGO IO-Link Configurator and a current version of WAGO-I/O-CHECK.

In addition, the download file contains the device descriptions for the respective fieldbus systems of the WAGO I/O System Field modules. These are pre-installed in the Configurator setup.

The WAGO IO-Link Configurator license is assigned to the specific PC on which it is installed (a workstation license).

Register now and test our engineering software for 30 days at no cost.

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Environmental Product Compliance

Compliance Search

Environmental Product Compliance 2787-2347/000-030

URL

Download

Power supply; Pro 2; 3-phase; 24 VDC output voltage; 20 A output current; TopBoost

+ PowerBoost; communication capability

Installation Notes

Product family

Pro 2

Show all products from the family

 $\label{thm:continuity} \textbf{Subject to changes. Please also observe the further product documentation!}$

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