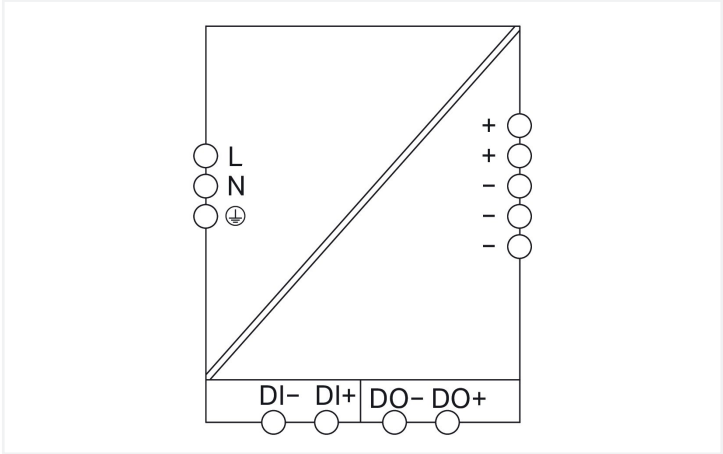




**Features:**

- 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                              |                                 | Output                              |                                                                                              |
| Phases                             | 1                               | Nominal output voltage $U_{o\ nom}$ | DC 48 V (SELV)                                                                               |
| Nominal input voltage $U_{i\ nom}$ | 1 x AC 100 ... 240 V            | Output voltage range                | DC 48 ... 56 V (adjustable)                                                                  |
| Input voltage range                | 1 x AC 90 ... 264 V             | Default Setting                     | DC 48 V                                                                                      |
| Nominal mains frequency range      | 50 ... 60 Hz                    | Nominal output current $I_{o\ nom}$ | 10 A (48 VDC)                                                                                |
| Input current $I_i$                | ≤ 5.9 A (240 VAC; nominal load) | Nominal output power                | 480 W                                                                                        |
| Inrush current                     | ≤ 12 A (after 1 ms)             | Deviation                           | ≤ 1 %                                                                                        |
| Power factor correction (PFC)      | Active                          | Residual ripple                     | ≤ 70 mV (peak-to-peak)                                                                       |
| Mains failure hold-up time         | ≥ 24 ms (230 VAC)               | Current limitation                  | 1.1 x $I_{o\ nom}$ (typ.)                                                                    |
|                                    |                                 | Overload behavior                   | TopBoost/PowerBoost/Time-limited constant current mode (other overload behaviors can be set) |



| Output     |               |
|------------|---------------|
| PowerBoost | DC 15 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)                                                                                                                 |
| Communications              | EtherNet/IP™ (2789-9023 Communication Module)<br>IO-Link (2789-9080 Communication Module)<br>Modbus RTU (Communication Module 2789-9015)<br>USB (750-923 Communication Cable)<br>Modbus TCP (2789-9052 Communication Module) |

| Efficiency/power losses   |                                                                      |
|---------------------------|----------------------------------------------------------------------|
| Power loss P <sub>I</sub> | ≤ 1.3 W (standby); ≤ 2.6 W (no load); ≤ 24 W (230 VAC; nominal load) |
| Efficiency (typ.)         | 95.3 %                                                               |

| Circuit protection          |                             |
|-----------------------------|-----------------------------|
| Internal fuse               | T 10 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                          |
| Overvoltage category              | III (≤ 2000 m a.s.l.); II (> 2000 m a.s.l.) |
| Pollution degree                  | 2                                           |
| Transient suppression (primary)   | Yes                                         |
| 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/output/signaling            |
| Connection technology                             | CAGE CLAMP®                       |
| WAGO connector                                    | WAGO 721 Series                   |
| 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   | 2.5 ... 1.5 mm² / 12 ... 16 AWG   |
| Fine-stranded conductor; with uninsulated ferrule | 1.5 ... 0.08 mm² / 16 ... 28 AWG  |
| Strip length                                      | 8 ... 9 mm / 0.31 ... 0.35 inches |

| Physical data                     |                                                           |
|-----------------------------------|-----------------------------------------------------------|
| Width                             | 70 mm / 2.756 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: 166 mm |



| Mechanical data |             |
|-----------------|-------------|
| Mounting type   | DIN-35 rail |

| Material data |        |
|---------------|--------|
| Fire load     | 0 MJ   |
| Weight        | 1450 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>SEMI F47 |

| Commercial data       |               |
|-----------------------|---------------|
| ETIM 9.0              | EC002540      |
| ETIM 8.0              | EC002540      |
| PU (SPU)              | 1 pcs         |
| Packaging type        | Box           |
| Country of origin     | CN            |
| GTIN                  | 4066966121391 |
| Customs tariff number | 85044083900   |

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

Approvals / Certificates

| General approvals                                                                                                                                                                                                                                          |                |               | Declarations of conformity and manufacturer's declarations |          |                  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|---------------|------------------------------------------------------------|----------|------------------|
|    |                |               | Approval                                                   | Standard | Certificate Name |
| EAC                                                                                                                                                                                                                                                        | TP TC 004/2011 | EAC CoC 03080 | EU-Declaration of Confor-<br>mity<br>WAGO GmbH & Co. KG    | -        | -                |
| GZO Almaty Standart                                                                                                                                                                                                                                        |                |               |                                                            |          |                  |
| EAC                                                                                                                                                                                                                                                        | TP TC 020/2011 | EAC CoC 03081 | MFD for SEMI F47<br>WAGO GmbH & Co. KG                     | -        | -                |
| GZO Almaty Standart                                                                                                                                                                                                                                        |                |               |                                                            |          |                  |
| UL                                                                                                                                                                                                                                                         | UL 61010-2-201 | E255817       |                                                            |          |                  |
| Underwriters Laboratories<br>Inc.                                                                                                                                                                                                                          |                |               |                                                            |          |                  |



Approvals for hazardous areas



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

Downloads

Environmental Product Compliance

| Compliance Search                             |
|-----------------------------------------------|
| Environmental Product<br>Compliance 2787-2157 |



Documentation

| Manual                                                                                            |
|---------------------------------------------------------------------------------------------------|
| Product Manual Power<br>supply; Pro 2; 1-phase;<br>48 VDC output voltage;<br>10 A output current; |

V 1.0.2  
18.02.2022

pdf  
8365.79 KB



| Bid Text         |
|------------------|
| 2787-2157        |
| 11.05.2022       |
| xml<br>8.80 KB   |
| 2787-2157        |
| 11.05.2022       |
| docx<br>32.55 KB |



| Instruction Leaflet                                                                 |
|-------------------------------------------------------------------------------------|
| Power supply; Pro 2; 1-<br>phase; 48 VDC output<br>voltage; 10 A output<br>current; |

V 1.0.0  
03.05.2021

pdf  
4328.65 KB



CAD/CAE-Data

| CAD data                  |
|---------------------------|
| 2D/3D Models<br>2787-2157 |



Runtime Software

| Firmware                               |
|----------------------------------------|
| 2787-2157, Stromver-<br>sorgung; Pro 2 |

V 010513  
15.10.2021

zip  
987.09 KB





1 Compatible Products

1.1 Product Expansions

1.1.1 Communication module



[Item No.: 2789-9023](#)  
Communication module; EtherNet/IP;  
MQTT; communication capability



[Item No.: 2789-9080](#)  
Communication module; IO-Link; commu-  
nication 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 Marking

1.2.1.1 Marker carrier



[Item No.: 2789-1233](#)  
Marker carrier; for WMB or marking strips;  
Length: 33 mm