Data Sheet | Item Number: 2687-2148

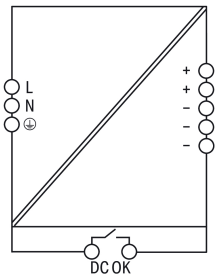
Power supply; Eco 2; 1-phase; 24 VDC output voltage; 40 A output current; PowerBoost; DC OK contact

https://www.wago.com/2687-2148









Features:

- Power supply with PowerBoost
- 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 (Item No. 2789-1223, not included) for WAGO's marking cards (WMB) and WAGO's marking strips

Technical data

Input

Phases	1
Nominal input voltage $U_{i\,nom}$	1 x 100 … 240 VAC
Input voltage range	1 x 90 … 264 VAC
Nominal mains frequency range	50 … 60 Hz
Input current I_i	≤ 4.4 A (230 VAC; nominal load); ≤ 10.5 A (100 VAC; nominal load)
Inrush current	≤ 25 A (after 1 ms)
Power factor	≥ 0.95 (230 VAC)

Output

Nominal output voltage $U_{o\,nom}$	24 VDC (SELV/PELV)
Output voltage range	24 … 28 VDC
Nominal output current $I_{o\,nom}$	40 A
Nominal output power	960 W
Deviation	≤ 1 %
Residual ripple	≤ 75 mV (peak-to-peak)
Overload behavior	Constant power up to 120 % for 5 s, followed by 100 % constant current until boost is available again; shutdown and automatic restart in the event of a short circuit

Output

PowerBoost	48 ADC (5 s)

Signaling and Communication

Signaling	Optical status indication (DC OK, green LED) Optical status indication (overload, red LED) Signal output (DC OK)
Signaling note	DC OK contact: max. 31 VDC, 50 mA, resistive load only

Efficiency/Power Losses

Power loss P_l	≤ 3 W (no load); ≤ 53 W (nominal load)
Efficiency (typ.)	95 %

Circuit Protection

Internal fuse	T 20 A / 250 VAC
Backup fuse (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)	0.5 kVDC
Isolation voltage (sec.-signal)	0.5 kVDC
Protection class	I
Protection type	IP20; Per EN 60529 (not assessed by UL)
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	> 1,150,000 h (at 25 °C)

Connection Data

Connection 1

Connection type	Input
Connection technology	Push-in CAGE CLAMP®
WAGO connector	WAGO 2604 Series
Solid conductor	0.2 … 4 mm² / 24 … 12 AWG
Fine-stranded conductor	0.2 … 4 mm² / 24 … 12 AWG
Fine-stranded conductor; with insulated ferrule	0.25 … 2.5 mm²
Fine-stranded conductor; with uninsulated ferrule	0.25 … 2.5 mm²
Strip length	9 … 11 mm / 0.35 … 0.43 inches

Connection 2

Connection type	Output
Connection technology	Push-in CAGE CLAMP®
WAGO connector	WAGO 2616 Series
Solid conductor	0.75 … 16 mm² / 18 … 4 AWG
Fine-stranded conductor	0.75 … 25 mm² / 18 … 4 AWG
Fine-stranded conductor; with insulated ferrule	0.75 … 16 mm²
Fine-stranded conductor; with uninsulated ferrule	0.75 … 16 mm²
Strip length	18 … 20 mm / 0.71 … 0.79 inches

Connection 3

Connection type	Signaling
Connection technology	Push-in CAGE CLAMP®
WAGO connector	WAGO 2086 Series
Solid conductor	0.14 … 1.5 mm² / 28 … 16 AWG
Fine-stranded conductor	0.14 … 1.5 mm² / 26 … 14 AWG
Fine-stranded conductor; with insulated ferrule	0.25 … 0.75 mm²
Fine-stranded conductor; with uninsulated ferrule	0.25 … 1.5 mm²
Strip length	8 … 9 mm / 0.31 … 0.35 inches

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Physical data

Width	125 mm / 4.92 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

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	-2 %/K (> 45 °C); -2.5 %/V (> 24 VDC)
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 UL 121201 (HazLoc)

Commercial data

PU (SPU)	1 pcs
Packaging type	Box
Country of origin	CN
GTIN	4066966433081
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

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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	-	-
UK-Declaration of Conformity WAGO GmbH & Co. KG	-	-

Approvals for hazardous areas

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

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 2687-2148

Documentation

Bid Text

2687-2148	14.04.2025	docx 39.33 KB
2687-2148	14.04.2025	x81 7.81 KB

Instruction Leaflet

Stromversorgung; Eco 2	V 1.0.0 08.05.2025	pdf 2599.23 KB

CAD/CAE-Data

CAD data

2D/3D Models 2687-2148