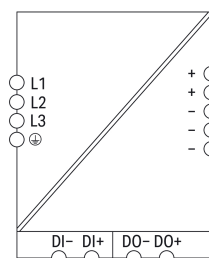


Data Sheet | Item Number: 2787-2348/000-070

Power supply; Pro 2; 3-phase; 24 VDC output voltage; 40 A output current; TopBoost + PowerBoost; Protection Coating; communication capability

<https://www.wago.com/2787-2348/000-070>



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
- Coated PCBs, resistant to flowing mixed gas per ISA 571.04:1985, G3 Group A
- Marker slot for WAGO marking cards (WMB) and WAGO marking strips

Technical data			
Input		Output	
Phases	3	Nominal output voltage $U_{o\,nom}$	24 VDC (SELV)
Nominal input voltage $U_{i\,nom}$	3 x 400 ... 500 VAC (connection without neutral conductor)	Output voltage range	24 ... 28 VDC (adjustable)
Input voltage range	3 x 340 ... 550 VAC	Default Setting	24 VDC
Nominal mains frequency range	50 ... 60 Hz	Nominal output current $I_{o\,nom}$	40 A (24 VDC)
Input current I_i	$\leq 3 \times 1.7 \text{ A}$ (400 VAC; 24 VDC / 40 A)	Nominal output power	960 W
Inrush current	$\leq 15 \text{ A}$ (after 1 ms)	Deviation	$\leq 1 \%$
Power factor correction (PFC)	Active	Residual ripple	$\leq 70 \text{ mV}$ (peak-to-peak)
Mains failure hold-up time	$\geq 20 \text{ ms}$ (3 x 400 VAC)	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 %

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)

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
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)

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
Protective coating	Coated PCBs
Resistance to reverse feed	$\leq 35 \text{ VDC}$
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 $\leq 35 \text{ VDC}$ (in the event of a fault)
Short-circuit-protected	Yes
Open-circuit-proof	Yes
Parallel operation	Yes
Series operation	Yes



Safety and protection	
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 mm² / 28 ... 12 AWG	Solid conductor	0.5 ... 10 mm² / 20 ... 8 AWG
Fine-stranded conductor	0.08 ... 2.5 mm² / 28 ... 12 AWG	Fine-stranded conductor	0.5 ... 10 mm² / 20 ... 8 AWG
Fine-stranded conductor; with insulated ferrule	0.25 ... 1.5 mm² / 20 ... 16 AWG	Fine-stranded conductor; with insulated ferrule	0.5 ... 6 mm²
Fine-stranded conductor; with uninsulated ferrule	0.25 ... 2.5 mm² / 20 ... 14 AWG	Fine-stranded conductor; with uninsulated ferrule	0.5 ... 6 mm²
Strip length	8 ... 9 mm / 0.31 ... 0.35 inches	Strip length	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 Height with connector: 169 mm

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	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 DNV UL 121201 (HazLoc) ISA S71.04:1985; G3 Group A SEMI F47



Commercial data		
PU (SPU)	1 pcs	
Packaging type	Box	
Country of origin	CN	
GTIN	4066966133653	
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			Declarations of conformity and manufacturer's declarations		
 					
Approval	Standard	Certificate Name	Approval	Standard	Certificate Name
EAC GZO Almaty Standart	TP TC 004/2011	EAC CoC 03080	EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-
EAC GZO Almaty Standart	TP TC 020/2011	EAC CoC 03081	MFD for SEMI F47 WAGO GmbH & Co. KG	-	-
UL Underwriters Laboratories Inc.	UL 61010-2-201	E255817	UK-Declaration of Conformity WAGO GmbH & Co. KG	-	-

Approvals for marine applications			Approvals for hazardous areas		
					
Approval	Standard	Certificate Name	Approval	Standard	Certificate Name
DNV DNV GL SE	DNV-CG-0339, Aug. 2021	TAA00002ZF	UL Underwriters Laboratories Inc. (HAZARDOUS LOCATIONS)	UL 121201	A-E198726



Downloads

Environmental Product Compliance

Compliance Search
Environmental Product Compliance 2787-2348/000-070



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



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 2787-2348/000-070



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

1.1.2 Display Module



Item No.: 2789-9090
Display Module

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

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

Current addresses can be found at: www.wago.com