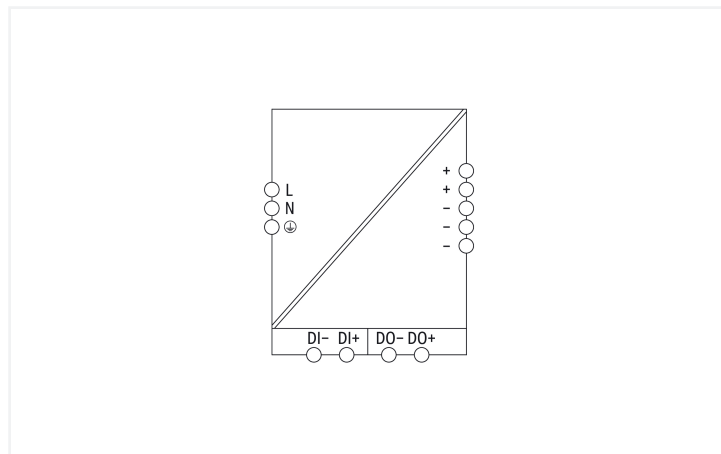


Data Sheet | Item Number: 2787-2144/000-030

Power supply; Pro 2; 1-phase; 24 VDC output voltage; 5 A output current; TopBoost + PowerBoost; communication capability

<https://www.wago.com/2787-2144/000-030>



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 $U_{o, nom}$	24 VDC (SELV)
Nominal input voltage $U_{i, nom}$	1 x 100 ... 240 VAC	Output voltage range	24 ... 28 VDC (adjustable)
Input voltage range	1 x 90 ... 264 VAC	Default Setting	24 VDC
Nominal mains frequency range	50 ... 60 Hz	Nominal output current $I_{o, nom}$	5 A (24 VDC)
Input current I_i	≤ 1 A (240 VAC; nominal load); ≤ 1.8 A (100 VAC; nominal load)	Nominal output power	120 W
Inrush current	≤ 9 A (after 1 ms)	Deviation	≤ 1 %
Power factor correction (PFC)	Active	Residual ripple	≤ 70 mV (peak-to-peak)
Mains failure hold-up time	≥ 20 ms (230 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	7.5 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)
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Efficiency/Power Losses

Power loss P_1	≤ 1 W (standby); ≤ 2 W (no load); ≤ 10 W (230 VAC; nominal load)
Efficiency (typ.)	93.8 % (230 VAC; 5 A; 25 °C)

Circuit Protection

Internal fuse	T 6.3 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
Resistance to reverse feed	≤ 35 VDC
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	$> 1,000,000$ h (per IEC 61709)

Connection Data

Connection 1

Connection type	Input/output/signaling
Connection technology	CAGE CLAMP®
WAGO connector	WAGO 721 Series
Solid conductor	0.08 ... 2.5 mm ² / 28 ... 12 AWG
Fine-stranded conductor	0.08 ... 2.5 mm ² / 28 ... 12 AWG
Fine-stranded conductor; with insulated ferrule	2.5 ... 1.5 mm ² / 12 ... 16 AWG
Fine-stranded conductor; with uninsulated ferrule	1.5 ... 0.08 mm ² / 16 ... 28 AWG
Strip length	8 ... 9 mm / 0.31 ... 0.35 inches

Physical data

Width	35 mm / 1.378 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: 166 mm

Mechanical data

Mounting type	DIN-35 rail
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Material data

Fire load	0 MJ
Weight	650 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) SEMI F47

Commercial data

PU (SPU)	1 pcs
Packaging type	Box
Country of origin	CN
GTIN	4066966115284
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 marine applications



Approval	Standard	Certificate Name
DNV DNV GL SE	DNV-CG-0339, Aug. 2021	TAA00002ZF

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 2787-2144/000-030 ↓

Documentation

Manual			
Product Manual Power supply; Pro 2; 1-phase; 24 VDC output voltage; 5 A output current	V 1.2.2 18.02.2022	pdf 7997.98 KB	↓

Instruction Leaflet			
WAGO Pro 2 Power Supplies	V 1.1.0 26.04.2021	pdf 4445.43 KB	↓

Application Notes

Application Note e!COCKPIT			
e!COCKPIT Application Note WagoAppPower-Supply (a2019012)	1.1.1 06.12.2021	pdf 707.04 KB	↓

CAD/CAE-Data

CAD data	
2D/3D Models 2787-2144/000-030	↓

Runtime Software

Firmware			
2787-2144, Stromversorgung; Pro 2	V 010513 13.10.2021	zip 1087.50 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 Marking

1.2.1.1 Marker carrier



Item No.: 2789-1233

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