

PRO 2 Power Supplies Highest Efficiency, Built in ECB and Compact Design



Class-Leading Features of PRO 2 Power Supplies

- Intelligent load management that supplies 150% power for 5s (PowerBoost), and up to 600% output current for 15ms (TopBoost)
- Extreme reliability even in adverse conditions.
 Heat, cold and altitude have little impact on performance
- Communication capabilities that keep you informed about all important status information and data – ready for IIoT applications
- Easy planning and installation thanks to compact dimensions and a "digital twin" – 2D/3D data are available in the most important formats.

Power supplies are the heart of a control cabinet and must meet high requirements for reliability, efficiency and size. In addition, advanced features such as a built-in electronic circuit breaker, configuration options and communication capabilities make the PRO 2 power supplies ready for the ever-increasing networking and digitalization demands, all while maximizing up-time.



WAGO POWER SUPPLIES PRO 2



The Heart of Your Control Cabinet

TECHNICAL DATA

1-Phase; Output: 24 VDC

	*991 *30 \(\frac{1}{35} \)	*9991	*6691	730 120	
	2787-2144	2787-2146	2787-2147	2787-2448	
Nominal Input Voltage	100 240 VAC	100 240 VAC	100 240 VAC	200-240 VAC	
Input Voltage Range	90 264 VAC; 130 373 VDC	90 264 VAC; 130 373 VDC	90 264 VAC; 130 373 VDC	180 264 VAC; 255 373 VDC	
Nominal Output Voltage	24 VDC	24 VDC	24 VDC	24 VDC	
Output Current	5 A	10 A	20 A	40 A	
Nominal Output Power	120 W	240 W	480 W	960 W	
TopBoost	Up to 600% for 15 ms	Up to 600% for 15 ms	Up to 600% for 15 ms	Up to 600% for 15 ms	
PowerBoost	150% for 5s	150% for 5s	150% for 5s	150% for 5s	
Efficiency	93.8%	95.3%	95.4%	96.3%	
Ambient Operating Temperature	-25 +70 °C Device Starts at -40 °C, Type-Tested	-25 +70 °C Device Starts at -40 °C, Type-Tested	-25 +70 °C Device Starts at -40 °C, Type-Tested	-25 +70 °C Device Starts at -40 °C, Type-Tested	
Approvals	CE, EN 610160-1; EN 61010-2-201; EN 61204-3; UL 61010-1; UL 61010-2-201; ANSI/ISA UL C1, D2; UL 121201 HazLoc Variant** Conformal Coating Variant***				

1-Phase; Output: 12 & 48 VDC



^{*}with connectors, 130 mm without connectors

^{**&}lt;part>/000-030

^{***&}lt;part>/000-070

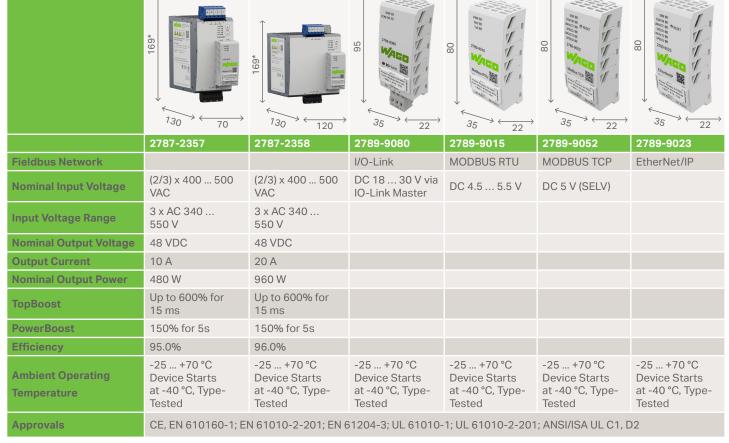
TECHNICAL DATA

3-Phase; Output 24 VDC

	*991 **********************************	*991	100 × 70	130 ← 120	
	2787-2344	2787-2346	2787-2347	2787-2348	
Nominal Input Voltage	(2/3) x 400 500 VAC	(2/3) x 400 500 VAC	(2/3) x 400 500 VAC	(2/3) x 400 500 VAC	
Input Voltage Range	3 x AC 340 550 V	3 x AC 340 550 V	3 x AC 340 550 V	3 x AC 340 550 V	
Nominal Output Voltage	24 VDC	24 VDC	24 VDC	24 VDC	
Output Current	5 A	10 A	20 A	40 A	
Nominal Output Power	120 W	240 W	480 W	960 W	
TopBoost	Up to 600% for 15 ms	Up to 600% for 15 ms	Up to 600% for 15 ms	Up to 600% for 15 ms	
PowerBoost	150% for 5s	150% for 5s	150% for 5s	150% for 5s	
Efficiency	92.5%	93.0%	94.8%	95.3%	
Ambient Operating Temperature	-25 +70 °C Device Starts at -40 °C, Type-Tested	-25 +70 °C Device Starts at -40 °C, Type-Tested	-25 +70 °C Device Starts at -40 °C, Type-Tested	-25 +70 °C Device Starts at -40 °C, Type-Tested	
Approvals	CE, EN 610160-1; EN 61010-2-201; EN 61204-3; UL 61010-1; UL 61010-2-201; ANSI/ISA UL C1, D2; UL 121201 HazLoc Variant** Conformal Coating Variant***				

3-Phase; Output 48 VDC

Communication Modules



^{*}with connectors, 130 mm without connectors

^{**&}lt;part>/000-030

^{***&}lt;part>/000-070

COMMUNICATION

Connecting the PRO 2 power supply to a fieldbus network is a snap...simply plug in the communication module to monitor and share important data like output current and voltage. This modular approach makes the PRO 2 power supplies fieldbus independent and adaptable to popular protocols like Modbus RTU, I/O Link, Modbus TCP/IP and EtherNet/IP.

IIoT Ready

Continuous monitoring of all data and values of your system's power supply

Predictive maintenance for greater system up-time

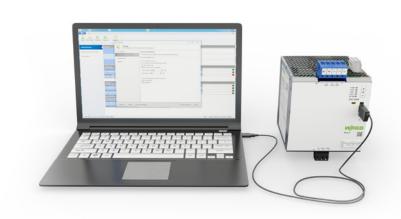


CONFIGURATION

Our free interface configuration software offers local and remote parameter setting. Easily tailor your power supply to meet your system requirements.

Customizable parameters and configuration options provide application flexibility

Connect to WAGO PLCs with CODESYS 3.5 function blocks



LOAD MANAGEMENT

PowerBoost allows for easy switching of capacitive loads and high start-up currents thanks to 150% output power for 5 seconds. TopBoost allows for reliable tripping of circuit breakers by providing 600% power reserves for 15 ms.

Fast and reliable tripping of secondary-side circuit breakers

Power reserve eliminates expensive oversizing

Built-in single channel, configurable Electronic Circuit Breaker



150 % Temporary Power-Boost in the event of load peaks

100 % Normal power

consumption

50 % 25 %

EFFICIENCY

Save cabinet space and increase energy savings with up to 96.3% efficiency. Highly efficient power supplies provide a smaller footprint, produce less heat, and reduce energy waste resulting in:

Lower CO₂ emissions - Just a 5% increase in efficiency saves 1 ton of CO₂ (over 5 years)

Put your PLC into standby mode via your PRO 2 power supply to save energy costs

Save cabinet space



96.3 %

CHALLENGING ENVIRONMENTS

PRO 2 power supplies can be used in extreme temperature ranges from -40 °C ... +70 °C with minimal derating starting at +60 °C. Expect reliable operation in high-vibration and shockprone areas, as well as altitudes up to 5000 m.

Wide temperature range offers application flexibility

Tested according to applicable shock, vibration, and altitude standards

Overvoltage category III provides greater operational reliability



-40 +70 °C

DESIGN

Slim design and less spacing required between devices saves valuable cabinet space. 2D/3D data is available in all relevant formats. The pluggable connectors are labeled in accordance with EN 81346-2 to eliminate wiring errors

Compact design improves control cabinet cooling and reduces panel size

E-CAD drawings reduce time and save costs during implementation





Connections labeled according to EN 81346-2

RELIABILITY

An MTBF > 1,000,000 hours and long service life of the components mean lower costs compared to other power supplies.

Reliable operation of more than 114 years

Reduce maintenance and replacement costs



MTBF: 1,000,000 h

INSTALLATION

CAGE CLAMP® spring pressure connection technology provides fast, vibration-proof and maintenance-free termination of solid, fine-stranded or ferruled conductors. Pluggable connectors offer pre-assembled wiring and ease of installation.

Saving time in commissioning, the front panel interface allows for fast and easy configuration, while an LED bar chart intuitively indicates the current load.

Push-In CAGE CLAMP® connectors save both wiring and installation time

Pluggable connectors allow for pre-wiring

Both LED bar chart and connection point labeling simplify system commissioning







WAGO Corporation

M120 W19129 Freistadt Road Germantown, Wisconsin 53022 Telephone: 800 / DIN Rail (346-7245) Fax: 262 / 255-3232 info.us@wago.com www.wago.us

Canada

WAGO Corporation Tel. 800/DIN Rail (346-7245) Fax 262/255-3232 www.wago.ca

Mexico

WAGO Corporation

Queretaro

Tel. 001/800/309/5975 + 52/442/221/5946 Fax + 52/442/221/5063

rax + 52/442/221 www.wago.mx

WAGO is a registered trademark of WAGO Verwaltungsgesellschaft mbH.

"Copyright – WAGO Kontakttechnik GmbH & Co. KG – all rights reserved. The content and structure of the WAGO Websites, catalogs, videos, and other WAGO media are subject to copyright. The dissemination or changing of the content of these pages and videos is not permitted. Furthermore, the content may neither be copied nor made available to third parties for commercial purposes. Also subject to copyright are the images and videos that were made available to WAGO Kontakttechnik GmbH & Co. KG by third parties."