

QUINT-PS/1AC – Single Phase DIN Rail Power Supply

perle.com/products/industrial-power-supply/quint-1-phase.shtml

Robust with SFB (Selective Fuse Breaking) Technology & NFC

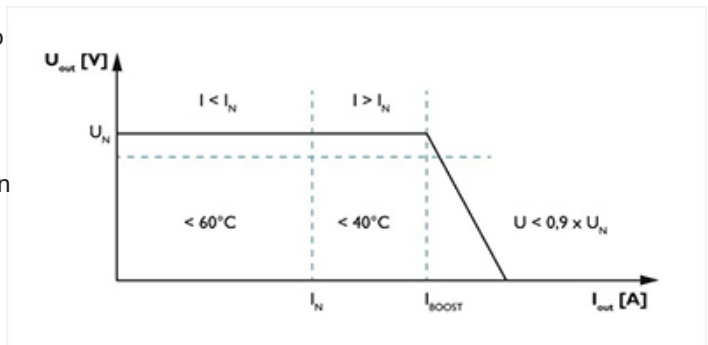
- Output Voltages: 12, 24, or 48 V DC
- Adjustable Output Voltage Ranges: 5 to 56 V DC
- Output Amps: 1.3, 2.5, 3.5, 3.8, 5, 10, 15, 20 or 40 Amps
- Output Watts: 31.2, 60, 84, 91.2, 120, 180, 240, 480 or 960 W
- Single-phase AC or DC input
- Input Voltage Range: 85 to 264 V AC and 90 to 350 V DC



The **QUINT Industrial Power Supplies** offer a complete range of rugged AC to DC and DC to DC Converters built to meet the high stability and efficiency expectations of industrial, machine automation and process control environments. They also feature the unique combination of preventive function monitoring and power reserve in an incredibly compact size. These Switching (switch mode) Power Supplies ensure a regulated output voltage even in the event of voltage fluctuations in the power supply network. During parallel operation, and when connected to different phases, loads are reliably supplied even in the event of problems with the input voltage. With all required safety certifications to support ITE (Information Technology Equipment), ruggedized packaging, extended operating temperatures, high peak load capabilities and high isolation voltages, QUINT Industrial Power Supplies are designed to meet the needs of your industrial application.

POWER BOOST: reliably start difficult loads

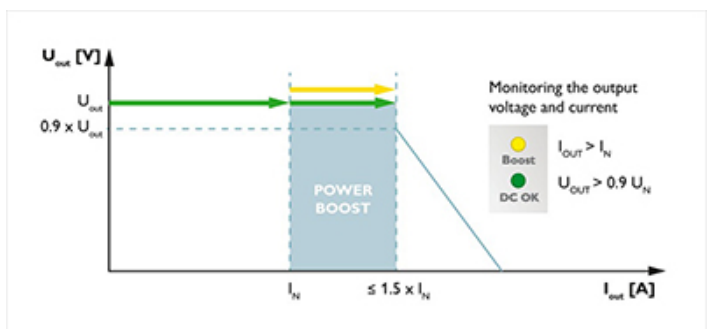
A high degree of flexibility is required to configure, optimize and expand large systems. To optimally adapt a system or machine to your requirements, a power reserve in the power supply unit is crucial. The QUINT supplies up to 50% additional current without a voltage drop. This is useful when it is not possible to predict which loads will be switched on at the same time or high switch-on currents of capacitive loads have to be absorbed without voltage dips. With the QUINT Power Boost function a static boost will continuously provide up to 125% of the nominal current. In addition, you can use the dynamic boost to supply up to 200% of the nominal current for 5 seconds when starting up heavy loads.



Preventive function monitoring reports critical operating states before they occur

With a QUINT Industrial Power Supply, the output voltage and output current are constantly monitored. Preventive function monitoring visualizes critical operating states and indicates them locally and remotely to the controller as follows:

- Via LED
- Via floating relay contact
- Via active switching output



High efficiency and low no load power consumption

Compared with other products on the market, the QUINT Industrial Power Supply provides excellent energy savings. With a very low no load power consumption and high efficiency at nominal load, just a small amount of electrical energy is converted into undesired heat energy making these very ECO friendly power supplies.

SFB (Selective Fuse Breaking) Technology on Select Models

SFB Technology can be used to quickly and reliably trip miniature circuit breakers and fuses connected on the secondary side. In the event of a short circuit on the secondary side, the QUINT supplies up to 6 times the nominal current for 15 ms. Faulty current paths are switched off selectively, the fault is located, and important system parts remain in operation. Loads that are connected in parallel are still supplied with energy ensuring continued operation of these system parts.

- Tripping circuit breakers: The circuit breaker is typically tripped by the high SFB current within 3 to 5 ms. As a result, any voltage dips for loads connected in parallel are avoided.
- Tripping a fuse: Fuses are tripped by melting the predetermined breaking point inside the fuse capsule. The tripping characteristic of the fuse is described by the melting integral (I^2t). A high current is crucial in order to achieve a very short tripping time.



Near Field Communication (NFC) on Select Models

Near Field Communication (NFC) is a transmission standard for wireless and contactless data exchange at a close distance. With NFC, you can easily parameterize QUINT Power Supply settings such as define signaling thresholds for preventive function monitoring, adjust output voltage, and adapt the output characteristic curve to your specific requirements using a PC, mobile phone, or mobile terminal device. You can also save and send configuration profiles on your mobile terminal device. QUINT Power NFC App on the Google Play Store



Ideal application environments for a QUINT DIN Rail Power Supply







- machine building
- automated production process
- industrial control, automation, assembly, and test equipment
- building control, security and surveillance, and climate control systems.
- power countless industrial automation devices such as sensors, controllers and valves





Other reasons to choose a QUINT Industrial Power Supply

- Adjustable Output Voltage Ranges: the output voltage can be optimally adjusted to meet specific application environment requirements, such as compensating for a voltage drop caused by a long cable length.
- Robust input side: high noise immunity, integrated gas-filled surge arrester (up to 6 kV), and ≥ 20 ms mains failure buffer time
- Configurable signaling of DC OK or selectable power thresholds
- Space savings in the control box, thanks to a narrow, slim-line design
- Voltage Isolation input/output: 4 kV AC
- Protections: Short-circuit, Overload, Over voltage, Over-temperature
- To ensure maximum availability all models have high MTBF (Mean Time Between Failure) values.

Part Number	Product Name	Input Voltage Range	Output Voltage (V DC)	Output Range (V DC)	Output Current (Amps)	Output Power (Watts)	Dimensions (W x H x D)	Cable Connection	Additional Features	Detailed Technical Specifications
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29046088	QUINT4- PS/1AC/12DC/15	85 ... 264 V AC 90 ... 350 V DC	12	12 ... 15	15	180	50 x 130 x 125	Screw	SFB Technology NFC Technology Shipbuilding Approvals	 View
28667218	QUINT- PS/1AC/12DC/20	86 ... 264 V AC	12	5 ... 18	20	240	90 x 130 x 125	Screw	SFB Technology Medical Approvals Shipbuilding Approvals	 View
29045978	QUINT4- PS/1AC/24DC/1.3/SC	85 ... 264 V AC 88 ... 350 V DC	24	24 ... 28	1.3	31.2	22.5 x 99 x 90	Screw	UL 1310 NEC Class 2 Shipbuilding Approvals	 View
29095758	QUINT4- PS/1AC/24DC/1.3/PT	85 ... 264 V AC 88 ... 350 V DC	24	24 ... 28	1.3	31.2	22.5 x 106 x 90	Push-in	UL 1310 NEC Class 2 Shipbuilding Approvals	 View
29045988	QUINT4- PS/1AC/24DC/2.5/SC	85 ... 264 V AC 88 ... 350 V DC	24	24 ... 28	2.5	60	32 x 99 x 90	Screw	UL 1310 NEC Class 2 Shipbuilding Approvals	 View
29095768	QUINT4- PS/1AC/24DC/2.5/PT	85 ... 264 V AC 88 ... 350 V DC	24	24 ... 28	2.5	60	32 x 106 x 90	Push-in	UL 1310 NEC Class 2 Shipbuilding Approvals	 View

28667478	QUINT- PS/1AC/24DC/3.5	85 ... 264 V AC 90 ... 350 V DC	24	18 ... 29.5	3.5	84	32 x 130 x 125	Screw	SFB Technology Medical Approvals DeviceNet Certified	 View
29045998	QUINT4- PS/1AC/24DC/3.8/SC	85 ... 264 V AC 88 ... 350 V DC	24	24 ... 28	3.8	91.2	45 x 99 x 90	Screw	UL 1310 NEC Class 2 Shipbuilding Approvals	 View
29095778	QUINT4- PS/1AC/24DC/3.8/PT	85 ... 264 V AC 88 ... 350 V DC	24	24 ... 28	3.8	91.2	45 x 106 x 90	Push-in	UL 1310 NEC Class 2 Shipbuilding Approvals	 View
29046008	QUINT4- PS/1AC/24DC/5	85 ... 264 V AC 90 ... 350 V DC	24	24 ... 29.5	5	120	36 x 130 x 125	Screw	SFB Technology NFC Technology Shipbuilding Approvals	 View
29046018	QUINT4- PS/1AC/24DC/10	85 ... 264 V AC 90 ... 350 V DC	24	24 ... 29.5	10	240	50 x 130 x 125	Screw	SFB Technology NFC Technology	 View
29046028	QUINT4- PS/1AC/24DC/20	85 ... 264 V AC 90 ... 350 V DC	24	24 ... 29.5	20	480	70 x 130 x 125	Screw	SFB Technology NFC Technology Shipbuilding Approvals	 View

28667898	QUINT- PS/1AC/24DC/40	86 ... 264 V AC 90 ... 300 V DC	24	18 ... 29.5	40	960	180 x 130 x 125	Screw	SFB Technology Shipbuilding Approvals	 View
29046108	QUINT4- PS/1AC/48DC/5	85 ... 264 V AC 90 ... 350 V DC	48	48 ... 56	5	240	50 x 130 x 125	Screw	SFB Technology Shipbuilding Approvals	 View
29046118	QUINT4- PS/1AC/48DC/10	85 ... 264 V AC 90 ... 350 V DC	48	48 ... 56	10	480	70 x 130 x 125	Screw	SFB Technology NFC Technology Shipbuilding Approvals	 View
28666958	QUINT- PS/1AC/48DC/20	86 ... 264 V AC 90 ... 300 V DC	48	30 ... 56	20	960	180 x 130 x 125	Screw	SFB Technology Shipbuilding Approvals	 View