



Power Distribution Unit

26.08..2025 v1.1



PRODSF
TECHNOLOGIES

Features and Benefits

- **Rack-Mountable Design:** Compatible with racks, available in 3U and 4U formats.
- **Customizable Output Configuration:** AC and DC outputs, communication interfaces (USB, ETH) adapted to customer specific applications.
- **Input Power Options:** Either 1-phase 230 V / 16 A or 3-phase 400 V / 32 A inputs can be designed with secure plug connections to suit individual requirements.
- **Reliable Circuit Protection:** All output branches have short circuit and overload protection for increased safety and reliability.
- **CE Certification and IP20 Protection:** Compliant with EU standards and suitable for indoor industrial or lab use.
- **Ideal for Automation and Lab Use:** Designed for high-dependability environments like industrial control systems and test benches.
- **Optional Custom Design:** Fully customised solutions are available on request.
- **Label-ready Output Ports:** Clear labeling options for easy circuit identification, especially in complex rack setups.
- **Short Lead Times for Custom Versions:** Fast prototyping and delivery for non-standard units — ideal for project-based orders.
- **Documentation and Wiring Diagrams Included:** Comes with datasheet and schematic.

Applications

- Industrial automation cabinets, laboratory test benches
- Server and IT racks
- Measurement and calibration systems
- Control and monitoring panels
- PLC and I/O distribution boards
- Educational labs and training simulators
- Cleanroom and electronics assembly setups
- Power distribution in modular enclosures

Description

This **rack-mountable Power Distribution Unit (PDU)** is designed to deliver reliable and safe power distribution in demanding industrial and laboratory environments. Built with flexibility in mind, it supports both single-phase and three-phase inputs and offers a **fully configurable output layout** — including AC sockets, DC terminals, and optional communication ports. Each output branch is individually protected against overload and short circuit, ensuring high operational safety. The robust construction, CE compliance, and IP20 rating make it suitable for a wide range of automation, test, and control applications. **Custom mechanical and electrical designs are available to meet specific project requirements.**

Technical Data - Application Example 1



Front and rear view of Application Example 1

Parameter	Value / Description
Input Voltage and Current	230 V AC / 16 A
Input Phases	1-phase
Input Frequency	50 Hz
Input Connector Type	IEC320-C19 plug with Schuko socket
Output Voltage(s)	230V AC, 24V DC, 12V DC
Number of Output Ports	Multiple (6 x 230V outputs, 1 x 24V DC output, 1 x 12V DC output)
Output Connector Types	230V AC sockets, 24V DC output (STLZ), 12V DC output (STLZ)
Max Load per Output	230V - 10 A, 24V - 8 A, 12V - 8 A

Parameter	Value / Description
Protection Features	Circuit breakers, RCD, fuses
Mounting Type	Rack-mountable, 3 U
Dimensions (W x H x D)	480 mmx133 mmx140 mm
Weight	~10 kg
IP Rating	IP20
Operating Temperature	10 – 30 °C
Humidity Range	Max 60% RH
Certification	CE



Application Example 1 with removed covers

Technical Data - Application Example 2



Front and rear view of Application Example 2

Parameter	Value / Description
Input Voltage and Current	230 V AC / 16 A
Input Phases	1-phase
Input Frequency	50 Hz
Input Connector Type	IEC320-C19 plug with Schuko socket
Output Voltage(s)	230V AC, 12V DC
Number of Output Ports	Multiple (10 x 230V outputs + 6 x 12V DC outputs)
Output Connector Types	230V AC sockets, 12V DC output (STLZ)
Max Load per Output	230V - 10 A, 12V - 8 A

Parameter	Value / Description
Protection Features	Circuit breakers, RCD, fuses
Mounting Type	Rack-mountable, 4 U
Dimensions (W x H x D)	480x175x300
Weight	~10 kg
IP Rating	IP20
Operating Temperature	10 – 30 °C
Humidity Range	Max 60% RH
Certification	CE



Application Example 2 with removed covers

Technical Data - Application Example 3



Front and rear view of Application Example 3

Parameter	Value / Description
Input Voltage and Current	400 V AC / 32 A
Input Phases	3-phase
Input Frequency	50 Hz
Input Connector Type	CEE-Plug, 5-pole, IP44
Output Voltage(s)	400V AC, 230V AC
Number of Output Ports	Multiple (2 x 230V AC outputs + 2 x 400V AC outputs)
Output Connector Types	230V AC sockets, 400V AC CEE-Coupling 5-pole
Max Load per Output	400V - 16 A, 230V - 10 A
Protection Features	Circuit breakers, RCD, fuses

Parameter	Value / Description
Mounting Type	Rack-mountable, 4 U
Dimensions (W x H x D)	480x175x375
Weight	~15 kg
IP Rating	IP20
Operating Temperature	10 – 30 °C
Humidity Range	Max 60% RH
Certification	CE



Application Example 3 with removed covers