



Power Supply / Battery Charger 24 (28) V DC / 100 A to 120 A

type number 00441



Rear view

Main Feature:

This range of modular AC / DC-Power-supplies is designed for charging batteries and battery back-up applications for harsh environments and mobile applications.

Electrical Data:

Input:

Nominal voltage:	400 V AC $\pm$ 10 % (3 phase) and 230 V AC $\pm$ 15 % (1 phase)
Line frequency:	50 Hz - 60 Hz
Consumption:	< 13 A at 230 V AC
Inrush current:	< 30 A
Harmonics (current):	Power factor corrected to EN 61000-3-2 for 230 V AC
Power factor:	typ. 0.95 (1 phase with PFC) typ. 0.80 (3 phase)

Output (single phase powered):

Output voltage:	28 V DC (int. adj. 24 V DC - 28 V DC)
Output tolerance:	+0 % / -4 % / (0 % - 100 % load)
Output current:	80 A at 24 V DC
Output power:	> 1900 W max.

Output (three phase powered):

Output voltage:	28 V DC (int. adj. 24 V DC - 28 V DC)
Output tolerance:	+0 -4 % / (0 - 100 % load)
Output current:	120 A for 24 V DC
Output power:	2880 W max.

General Features:

Safety:	EN 60950-1
Output protection:	Current limit (120 % of I_{Nom}) Short circuit protection Over voltage shutdown (125 %) Over temperature shutdown with automatic recovery
Minimum load:	no minimum load required
Efficiency:	typ. 88 % at 400 V AC typ. 83 % at 230 V AC
Isolation:	Input-Output: 3000 V AC Input-Chassis: 1500 V AC Output-Chassis: 200 V DC

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Connectors:

Line input 230 V AC:	ECTA 133, 3-Pin-Connector
Line input 400 V DC:	ECTA 133, 5-Pin-Connector
DC-output:	High current studs (M8)
Alarms:	SJT00RT, 6-Pin-Connector
Ground terminal:	Studs M8 on front or rear

Environmental Data:

Protection:	IP 54 (EN 60529)
Cooling:	Convection cooling temperature controlled fan above +50 °C heatsink temperature

Environmental Data (acc. to MIL-STD-810F):

Operating temp. range:	-40 °C to +70 °C
Derate power:	2 % / °C for $T_{amb} > 50$ °C
Humidity:	0 % to 100 % rel.
Salt fog:	5 % at 35 °C
Vibration.:	Fig. 514.5C3 for wheeled vehicles
Shock:	10 x 10 g / 6 ms

Signals / Alarms:

Display:	Green LED: Power-on-Signal Red LED: Alarm (Batt-low)
Alarms (relay contact):	Power ok, Battery-low

Mechanical Specifications:

Dimensions:	360 x 500 x 124 mm (W x D x H) (overall, without connectors)
Weight:	approx. 16 kg
Material:	Aluminium
Finish / Color:	Powder coating, green RAL 6031 or TBD

Options:

Line input voltages:	Single Phase 110 V AC 60 Hz or 95 V AC - 264 V AC, 50 Hz / 60 Hz (Wide Range Input)
Line filter / EMC:	FCC / EN / VG / MILStandards / TBD
RoHS-compliance:	On request

Ask for further technical information!
Functional or interface modifications can be realized on request. Each configuration change causes a new type number.

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