

# EVOLUTION

Performance  
and reliability  
for guaranteed  
power

Quick  
and easy  
installation  
user-friendly  
operation



Eco-design



F3U Rack



Rack



C6



C23



C24



C38



C48



C85



C180



Available in wall-mounted cabinets with or without battery, and rack-mounted.  
Complies with Directives LVD, EMC, and standards WEEE 2002/96 EC,  
and RoHS 2002/95 EC.

## Standards-based specifications

### ■ Safety Standard

- EN 60950-1, SELV class.

### ■ EMC - Immunity Standards

- EN 61000-6-1
- EN 61000-6-2

### ■ EMC - Emission Standards

- EN 61000-3-2
- EN 61000-6-3
- EN 61000-6-4
- EN 55022 Class B

### ■ Environmental Standards

This product range is environmental policy (ISO 14001, RoHS and WEEE).



## Electrical specifications

### ■ Network input

- Voltages: 98 V to 264 V (115 V-15% to 230 V+15%) single-phase,
- Frequency: 45 Hz to 65 Hz,
- Class I,
- Inrush current limited by NTC,
- Neutral systems: TT, TN, IT.

Note:

For the 100 W - 150 W range:  
voltage 230V +/- 15% (195 V to 264 V)

## Ratings

	65W	75W	100W	150W	200W	300W	400W	600W
12 Vdc	5A	6A	8A	12A	16A	24A	32A	48A
24 Vdc		3A	4A	6A	8A	12A	16A	24A
48 Vdc			2A	3A	4A	6A	8A	12A

The currents (In) shown are at rated output power

## Environmental specifications

- Humidity in storage: Relative humidity 10% to 95% (non-condensing)
- Humidity in operation : Relative humidity 20% to 95% (non-condensing)
- Storage temperature: -25°C to +85°C

### ■ Operating temperature:

Efficiency	65W - 100W	150W - 600W
75% of load	-5°C to +50°C	-5°C to +50°C
100 % of load	-5°C to +50°C	-5°C to +40°C

- Above 2,000 m, the maximum temperature decreases 5% every 1,000 m
- Service life: 50,000 hours at 25 °C (ext. environment) and 75% of load, presented in cabinet

Circuit breaker (D curve) to be provided upstream

	65W-75W	100W	150W	200W	300W	400W	600W
Mains consumption @ 195V	0.5A	0.75A	1A	1.5A	2A	3A	4A

Rated voltage	65W - 75W	100W - 150W	200W - 300W	400W - 600W
At 20% load	71%	75%	84%	85%
At rated load	85%	84%	90%	91%

## Output

Tension nominale	12V	24V	48V
Floating voltage (U <sub>n</sub> ) set at half-load and at 25 °C (V)	13.6 +/-0.5%	27.2 +/-0.5%	54.4 +/-0.5%
Adjustment range (V) (only in case of direct power supply)	12-14	23-29	46-58
Charger current limitation	In		

## Battery backup



## Display and remote reporting of the information

**/// Automatic disconnection of the charge at end of discharge** to preserve its future capacity.

- Prevents excessively deep discharge that can permanently downgrade performance, cut-off threshold 1.8 V/cell.(+/- 0.5%).
- A report is sent before disconnection. Pre-cut-off alarm threshold 1.85 V/cell.(+/- 0.5%).

During autonomous operation, up to the cut-off threshold, the design of the SLAT unit significantly limits the charger's own consumption on the battery. This allows your application to take full advantage of the battery's capacity.

**Table of charger consumption on the battery in autonomous mode**

	12V	24V	48V
65W - 75W	96 mA	108 mA	-
100W - 150W	49 mA	75 mA	85 mA
200W - 300W	65 mA	45 mA	37 mA
400W - 600W	141 mA	106 mA	73 mA

## For optimal communication

### /// Mains:

Presence indicated by a green LED.

Remote reporting by dry contact with delay (failsafe) with time delay.

### /// Charger:

Correct operation indicated by a green LED.

Charger fault if mains fuse is out of order or not present, or if product is out of order.

Remote reporting by dry contact with delay (failsafe).

### /// Load presence:

Voltage presence (no threshold) on the load outputs indicated by green LED.

If either of the two outputs has no voltage, the LED will go out.

No associated relay.

### /// Battery:

Presence indicated by a green LED.

Battery fault

if battery is not present (test every 30 seconds for the 1st 20 minutes after the installation, then every 15 min) or

if battery voltage < 1.85 V/cell in autonomous mode.

Voltage of less than 1.85 V/element indicated by flashing orange LED (autonomous mode).

Remote reporting by dry contact with delay (failsafe).

### *Comment:*

*In the case of C6 cabinet installation, signaling is accomplished by a single indicator light:*

*No fault: green*

*Mains fault: orange*

*battery or charger fault, or load not present: red (this fault takes priority over a mains fault).*

### /// Internal signaling on the motherboard

An LED on the motherboard indicates operational status before the cabinet is closed (display board not connected).

Signals:

- All OK: green,
- Mains fault: orange,
- battery or charger fault, or load not present: red (this fault takes priority over a mains fault).

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## Connection specifications:

\* the alarm report connector is unpluggable

*note: the battery and 12 V/48 A load terminals are 35 mm<sup>2</sup>*

## Options

### ■ 3 output connections with fuse, 4 output connections possible:

- Board to be installed by the customer. Secured by 4 clips on the motherboard.
- Connectors with 2.5 mm<sup>2</sup> screw terminals.
- Fuse 5 X 20 rating 4 A.

### ■ Omega DIN rail mounting kit

- Adapter for mounting the C6 and C23 cabinet on a DIN type rail.

### ■ Digital display on C85 cabinet. (in quantity, consult us)

### ■ TCR cabinet

- For redundancy maximal current 40A.

Screw terminal	65W - 75W	100W - 150W	200W - 300W	400W - 600W
Mains	2.5 mm <sup>2</sup>	2.5 mm <sup>2</sup>	2.5 mm <sup>2</sup>	2.5 mm <sup>2</sup>
Batteries	2.5 mm <sup>2</sup>	6 mm <sup>2</sup>	6 mm <sup>2</sup>	10 mm <sup>2</sup>
Load (2 outputs)	2.5 mm <sup>2</sup>	6 mm <sup>2</sup>	6 mm <sup>2</sup>	10 mm <sup>2</sup>
Alarm reports*	1.5 mm <sup>2</sup>	1.5 mm <sup>2</sup>	1.5 mm <sup>2</sup>	1.5 mm <sup>2</sup>



board 150W EVOLUTION

## Cabinet and rack characteristics

Cabinet	Dimensions W x H x D (mm)	IP	Base	Cover
C6	194 x 243 x 97	IP30	Metal Ral 9006	ABS Ral 9003
C23	248 x 322 x 126	IP30	Metal Ral 9006	ABS Ral 9003
C24	322 x 248 x 126	IP30	Metal Ral 9006	ABS Ral 9003
C38	289 x 350 x 189	IP31	Metal Ral 7035	Metal Ral 7035
C48	425 x 345 x 120	IP30	Metal Ral 9006	Metal Ral 9003
C85	408 x 408 x 224	IP31	Metal Ral 7035	Metal Ral 7035
C180	505 x 610 x 430	IP31	Metal Ral 7035	Metal Ral 7035
F3U Rack	482 x 132 x 110	IP30	Metal Ral 7035	Metal Ral 7035
Rack	483 x 132 x 110	IP30	Metal Ral 7035	Metal Ral 7035

## Types of battery cabinets

Cabinet	Type	12V	24V	48V
C24	Wall-mounted	7 Ah, 12 Ah, 24 Ah (2 x 12 Ah)	7 Ah, 12 Ah	2,1 Ah
C38	Wall-mounted & Floor-mounted	24 Ah, 38 Ah	17 Ah, 24 Ah	7 Ah, 12 Ah
C48	Wall-mounted	24 Ah (2 x 12 Ah), 36 Ah (3 x 12 Ah), 48 Ah (4 x 12 Ah)	7 Ah, 12 Ah, 24 Ah (4 x 12 Ah)	7 Ah, 12 Ah
C85	Wall-mounted & Floor-mounted	48 Ah (2 x 24 Ah), 65 Ah, 90 Ah, 96 Ah (4 x 24 Ah)	24 Ah, 38 Ah, 48 Ah (4 x 24 Ah)	12 Ah, 17 Ah, 24 Ah
C180	Floor-mounted	120 Ah, 140 Ah, 180 Ah	65 Ah, 90 Ah, 120 Ah, 140 Ah, 180 Ah	38 Ah, 65 Ah, 90 Ah