

RECTIFIERS BATTERY CHARGERS

TPS 160

Rectifier battery charger for industrial applications

Description

TPS-160

It's a rectifier battery charger with 24V output voltage, capable to manage lead-acid batteries up to 18Ah of capacity. Besides it has three DC outputs: two of 24 Vdc and one of 12 Vdc. The total output power is 160 watts. It has a built-in battery check system to verify the state battery both automatically or manually.

TPS-160 CT

The TPS-160 CT is a switching rectifier-battery charger with galvanic isolation up to 10 KV. Capable to handle lead-acid batteries of up to 18Ah, it has two outputs: the main one, 48 Vdc and the auxiliary at 12Vdc. The total output power is 160 watts and it has a battery check system built-in, which could be used automatically or manually.

TPS-160 UF

In addition to the characteristics described for the TPS-160 CT, the TPS-160 UF model provides module surge arrester for the AC input as well as output Breaker, all accessible from the front part of the unit.



TPS 160



TPS 160-CT



TPS 160-UF

Features

- > Compact size
- > High efficiency
- > High frequency switching
- > Easy maintenance
- > LED signalling
- > PFC: power factor corrector
- > Batteries: Pb & NiCd
- > Free contact relays alarms

electrical

railway

industrial

telecommunications

data centers

facilities



NON - STOP POWER

ZIGOR

AC INPUT ELECTRICAL CHARACTERISTICS

Model	TPS 160	TPS 160 CT	TPS 160 UF
Nominal voltage	120 VAC +15% / -20%		230 VAC +15% / -15%
Nominal frequency range		50-60 Hz	
Harmonic current distortion		< 10%	
Power factor		> 0,99 full load	

DC OUTPUT ELECTRICAL CHARACTERISTICS

Max. Output voltage	24V		48V
Battery voltage	27,3 V ± 1%		54,6 V ± 1%
Temperature compensation (-24 mV/°C)			
Voltage range	20,5 – 27,8V		40,8 – 55,6V
Mains off or limiting load current			
Ripple			< 20 mVrms
Battery in floating mode			< 2 mV psfometric
Dynamic regulation			Overshot < 0,5 V
From 10% to 90% & from 90% to 10% of nominal power	Response time 5ms		Response time 10ms
Permanent total power	2 outputs of 3 A		3 A

AUXILIARY OUTPUT

Output voltage	12 V ±10%		24 V± 10%
Ripple	< 55 mVrms		< 55 mVrms
Battery in floating mode	< 1 mV psfometric		
Permanent maximum current			
Output + Battery load + Auxiliary output	2 A		0.5 A
Peak consumption<= 10 seconds	120 W		24 W
Dynamic regulation			
From 10% to 90% & from 90% to 10% of nominal power	Overshot < 1,6V Overshot < 0,6V		Overshot +/- 50mV
Dynamic regulation (in both cases)	Response time 1,5ms		Response time 600ms
Constant total power		160 W	
Efficiency		70%	
Maximum battery current	1.6A		1,2 A
Maximum total current	6.5A		3,3 A

STANDARDS

Certificates		CE	
Directives		73/23/CEE-93/68/CEE 89/336/CEE-93/68/CEE	
Standards	UNE-EN 50178 / EN 50081-1 / EN 50082-2 / IEC 1000-4-2 / IEC 1000-4-3 / ENV 50204/ EN 50082-2 / IEC 1000-4-4 / EN 50082-2 / ENV 50141 / IEC 1000-4-5 / UNE-EN 61000-3-2 / UNE 20177		

MECHANICAL CHARACTERISTICS

Operating temperature		0°C ÷ 60°C	
Storage temperature		-40°C ÷ 80°C	
Dimensions (HxWxD) (mm)	Body 214 x 124 x 240 Front 266 (6U) x 132.5		19' – 3U – Depth 265mm
Altitude		<1000 m	
Relative humidity		5% a 90% (without condensing)	
Cooling		Natural convection	
Weight	4,2 Kg		15 Kg
Protection degree		IP20	

PROTECTIONS

Model	TPS 160	TPS 160 CT	TPS 160 UF
BATTERY	Temperature compensation (-2mV/°C/e.) Electronic control for charging current LVD built-in to protect the batteries		
AC INPUT	3 Amps Fuse for AC input, accessible from the front of the unit	-	-
	VDR: protection at AC input		Modular surge arrester for the AC input
DC OUTPUT	Electronic short-circuit protection for both 24 Vdc outputs	-	-
		VDR protection at DC output	
	-	-	DC output breaker (20A)