

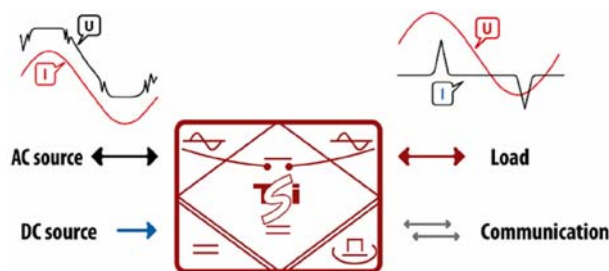


Illustration photo

Description

The inverter range using TSI technology “Twin Sine Innovation” is the latest revolution in the DC/AC inverter business.

This concept gets a significant evolution on the level of the compactness of the system and efficiency. We take the benefit of the AC input when present and use only DC when AC input is not available.



General Features

- Efficiency of 92% in EPC mode, to compare with the 85% of global efficiency of a traditional rectifier/inverter system
 - Energy losses reduced by 50%
 - Better carbon footprint.
- No need for external static switch and reduced sizing of the rectifier
 - The static switch function is integrated in the module using EPC mode
 - The rectifier is only used to charge the battery
- AC input filtering
 - The Y_ONE has unity power factor on AC input
 - Wide AC input range from 175Vac to 275 VAC with pure sine output regulated at 230 VAC. Ideal solution in area with poor AC input grid
- Frequency and output voltage user selectable
- DC input , AC input, AC output on terminals located on the rear panel
- Optional : AC output on 2xIEC socket located on the front with individual fuse protection

Application

- Telecommunications
- IT technologies
- Industrial and Security technologies

Technical specifications

General	
EMC – immunity	IEC 61000-4-2 up to 6
EMC – emission	EN55022, class A
Safety	IEC 60950-1
Cooling	forced
MTBF	240 000 hours
Efficiency	
- EPC – double conversion AC _{in} to AC _{out})	92%
- On-line	89%
Isolation	Double isolation in the DC input channel
RoHS 6	Compliant
Dcin Acin connections	Terminal
AC output	IEC socket optional
Protected against reverse polarity	

AC output power	
Output power	500 VA / 400 W
Overload capacity	150% 15 sec.
Permanent overload	110%
Output power factor range	0 lagging to 0 leading

DC input	
Nominal voltage	48 V _{DC}
Voltage range	40 to 60 V _{DC}
DC current (@ 40 V-400W)	11.2 A
Max DC current (15 sec)	17 A

AC input	
Nominal voltage	230 V
Voltage range	175 to 275 V _{AC}
Power factor	> 99 %
AC input nominal frequency	50 / 60 Hz

AC output	
Nominal voltage	230 V _{AC}
Selectable	220 or 240 V _{AC}
AC output voltage tolerance	< 5 %
Frequency	50 / 60 Hz
Frequency tolerance	+/- 0.01 %
Total harmonic distortion	< 1,5%
Dynamic load impact recovery	0.4 ms
Starting time lag	20 s
Nominal current	2.2 A
Protected against reverse current	
Crest faktor @ nominal power	2.8:1
Protection against short circuit	
Synchronization range	47 to 53 Hz 57 to 63 Hz

Transfer time AC to DC and DC to AC	
Transfer time	0 s

Environment	
Max altitude operation	< 1500m above sea l.
Above 1500m	0,8% per 100m
Operating range	-20°C to + 50°C
Storage temperature range	- 40°C to + 70°C
Relative humidity	95%, non cond.

Signaling	
Local display	LED Synoptic
Output alarm	Dry contacts

Dimensions and Weight	
Width	19"
Depth	230 mm + 20 mm for wiring
Height	1 U
Weight	+/- 2.45 kg
Casing material	Coated steel

Y-ONE with IEC socket front view



Illustration photo

Y-ONE with IEC socket, front view
Y-ONE-EPC-48V-230VAC-500VA-IEC

Y-ONE without IEC socket front view



Y-ONE without IEC socket, frontview
Y-ONE-EPC-48V-230VAC-500VA-BULK

Y-ONE rear view



Y-ONE, rear view

A2B, s.r.o. reserves the right to change any specifications without prior notice. (V122013)