

General description:

Modular, single-phase FUL 230/0.75 inverters with a rated power output of 750VA are intended for convert direct current to alternating current in the parallel mode. FUL inverter is built based on innovative design solutions allowed to achieve very high efficiency at small size.

The inverter offers EPC (Enhanced Power Conversion) mode, where energy from the AC mains is buffered and then converted to alternating voltage output. This mode is characterized by: very high efficiency, sinusoidal current from mains and zero switching time.

EPC mode offers one more savings - lower necessary DC power supply system. DC power supply system serves only to recharge the battery with a capacity necessary to provide required back-up time. When AC mains is present loads are supplied from energy coming from AC mains.

Due to innovative technology the FUL series is an ideal solution for telecom, IT and industrial applications. The high power density modules: 4x750VA are packed into a light and compact case (1U, 19").

The AC-to-AC conversion isolates the AC output from the AC input and features a double filtering function. The voltage supplied to the critical load is a pure sine despite all the disturbances (harmonics, surges, glitches) usually carried by the grid.

Application:

- + IT network systems;
- + professional telecommunications systems;
- + industrial automation systems.

Features:

- + True sine wave output (THD < 1,5%);
- + Very high efficiency: up to 94%;
- + Compact design;
- + Very wide temperature operating range;
- + Parallelable output with current share and synchronization;
- + Configurable for being used as 3-Phase source;
- + LED indication of operation status;
- + Output voltage regulation;
- + Hot plug;
- + Fully digital controlled (CAN link);
- + Immunity to electromagnetic interferences.



Basic parameters of the inverter:

Output parameters:

Nominal output power	VA	750
Output power (resistive load)	W	525
Overload capacity	-	135% 15seconds
AC voltage	Vac	230
AC voltage range (adjustable)	-	200... 240
Voltage accuracy	-	2%
Frequency	Hz	50...60
Frequency accuracy	-	0,03%
Crest factor at nominal power	-	3,5
THD (resistive load)	-	< 1,5%

Input parameters:

Nominal AC voltage	Aac	230
AC voltage range	Aac	185...265
Power factor	-	~0,99
Frequency (selectable)	Hz	50 – 60
Nominal DC voltage	Vdc	48
DC voltage range	Vdc	40 ~ 60
Nominal DC current	Adc	12.5A @48V 15A @40V
Efficiency	-	94% (EPC mode) 89% (on-line mode)
Voltage ripple	mV	2

General data:

Range of ambient temperature	°C	-20 ~ +65 (derating >40°C)
Humidity	-	95%, non-condensing
Cooling	-	forced, fans
EMC (immunity)	-	EN 61000-4
EMC (emission)	-	EN 55022 (Class B)
Safety	-	EN 60950
Dimensions (HxWxD)	mm	1U x 106 x 325
Weight	kg	2,1
RoHS	-	compliant

Signaling & supervision

Display	-	Synoptic LED
Alarms output	-	Dry contacts on shelf