

General description:

FUR 230/0,8 is a compact single-phase inverter providing a pure sine wave AC supply. In conjunction with a DC Power system, it provides an excellent and reliable AC backup solution.

Inverter is built based on innovative design solutions allowed to achieve very high efficiency at small size. FUR inverters does not support parallel operation mode.

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 seamless transfer time.

EPC mode offers one more advantage – lower required power rating of DC power system. DC power system is used only to charge the battery to the capacity necessary to provide requisite back-up time. When AC mains is present loads are supplied from energy coming from AC mains.

With innovative technology FUR series is ideal for telecommunications, IT and industrial applications. Compact dimensions (1U, 19") allow installation wherever there is a need for uninterruptible supply of AC loads.

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 arising from AC mains.

Application:

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

Features:

- + true sine wave output (THD < 1,5%);
- + sinusoidal current consumption from the AC mains;
- + very high efficiency: up to 92% (EPC mode);
- + compact design (1U, 19");
- + wide operating temperature range;
- + Wide range of AC input voltage 150÷265Vac;
- + LED indication of operation status;
- + output voltage regulation;
- + fully digital controlled (CAN);
- + immunity to electromagnetic interferences;
- + AC input, DC input and AC output are located on the rear panel (optional Front terminal connections);
- + seamless transfer between the primary and secondary sources - built-in switching solution (inverter does not require an external switching system).



Basic parameters of the inverter:

Output parameters:

Nominal output power	VA	800
	W	640
Overload capacity	-	150% (15 s)
	-	110% (permanent within T° range)
AC voltage	Vac	230
Nominal current	Aac	3,5
Frequency	Hz	50...60 ±0,01%
Crest factor at nominal power	-	2,8:1
THD (resistive load)	-	< 1,5%

Input parameters:

Nominal AC voltage	Vac	230
AC voltage range	Vac	150 ÷ 265
Power factor	-	> 0,99
Frequency (selectable)	Hz	50/60
Nominal DC voltage	Vdc	48
DC voltage range	Vdc	40 ÷ 60
Nominal DC current	A _{dc}	18A@40V
Efficiency	-	92% (EPC mode) 89% (on-line mode)

General data:

Range of ambient temperature	°C	-20 ÷ +50
Humidity	-	95%, non-condensing
Cooling	-	forced
EMC (immunity)	-	EN 61000-4-2 do 6
EMC (emission)	-	EN 55022 (A)
Safety	-	IEC 60950-1- EN62040-1-1
Dimensions (HxWxD)	mm	1U x 485 x 230
Weight	kg	3,8
RoHS	-	compliant

Signaling & supervision:

Display	-	Synoptic LED
Alarms output	-	Dry contacts in inverter shelf