

Frequency Converter

Type FW-5443 (1~) and FW-5444 (3~)



Rated Power up to 10-500 kVA, 16.7 up to 400 Hz

Characteristics:

- Sinusoidal input current (feedback free)
- IGBT rectifier (small THD)
- Event log

Options:

- Increased short circuit current



Design:

The new static frequency converter contains proven and approved components from the UPS technology. The output voltage and the output frequency are permanently set.

If you want adjustable output frequency and / or output voltage please refer to our TS-AC brochure.

A clearly construction and a simple maintenance characterize the new power supply system.

Technical Data	
Mains voltage	208/380/400/480/500/660 V (3~, PE) 230/460 V (1~, PE) +/- 10 % without N, 16,7 Hz, 50 Hz or 60 Hz
Output voltage	fixed voltage in range 10 – 750 ±1% permanent 1-/3-phase
Output frequency	fixed frequency 16 ⅔, 40, 50, 60, 400,800 Hz
Output frequency accuracy	±0,1 % fs
Rated output power	10 – 500 kVA
Voltage regulation static dynamic asymmetric load	±1 % (fs) ±4 at 100 % load change (50/60 Hz), ±8 % (400 Hz) ±2 at 100 % unbalance load
Regulation time effective value	<25 msec
Regulation time momentary value	<4 msec
Overload characteristic	150 % for 1 min. / 125 % for 10 min. / 110 % for 20 min.
Short-circuit characteristic	2 x I nom., at 1-phase output, 2-4 x I nom., at 3-phase output, for 5s according EN 62040-1
Waveform	sinusoidal
Distortion factor (with linear load)	≤ 3 % > 100 Hz ≤ 5 %
Applied guidelines and standards	
Low voltage directive	2014/35/EU
EMC-Guideline	2014/30/EU
RoHS-Guideline	2011/65/EU
EMC	EN 62040-2 requirements for EMC (UPS) EN 61000-6-2 noise immunity EN 6100-6-4 transient emissions
Permissible power factor	power derating, if power factor deviates from 0,8 lagging
Crest factor of the load current	≤ 2,3 (at 100 % Load)
Standard Design:	
Permissible ambient temperature	+5 up to 40 °C
Permissible environment	Storage according to EN 60721-3-1: 1K21 / 1M11 +5 up to +40 °C Transport according to EN 60721-3-2: 2K12 / 2M4 -45 up to +70 °C Operation according to EN 60721-3-3: 3K22 / 3M11 +5 up to +40 °C • 5-85 % relative humidity, no condensation • Degree of pollution 2
Permissible operating altitude	1000 m above m.s.l. with rated load
Protection class	IP 20 according to IEC 60529
Paint finish	RAL 7035
Cooling	“AN” natural air cooling or „AF“ forced air cooling depended on rated power

* Subject to change without notice (tech)

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