

TRANSPORT

# **Master FC400**











### 3:3 30-125 kVA

### HIGHLIGHTS

- Frequency Converter 50/400 Hz
- Output voltage: 208 V - 3F
- Galvanic isolation
- Applications: airport, military and naval
- Battery backup

Master FC400 series static Frequency Converters are available from 30 to 125 kVA, with 50 or 60 Hz input and 400 Hz output. The result of extensive experience acquired in the UPS industry, the Master FC400 series is distinguished by the use of technologically advanced components and for excellent reliability, ease of maintenance and ease of operation. The Master FC400 series uses double conversion technology (VFI SS 111 voltage and frequency independent compliant with IEC EN 62040-3), with an integrated output transformer to ensure the galvanic isolation of the load from mains disturbances under all conditions. The output voltage is 208 V threephase (adjustable 200-215 V). Thanks to high frequency IGBT technology and digital control, Master FC400 Frequency Converters are ideal for airport, military and naval applications.

### MINIMUM IMPACT ON MAINS - EASY SOURCE

The Master FC400 was designed to reduce to a minimum the impact on the mains or generator located upstream, thanks to the low harmonic content input and the progressive start of the rectifier. These features make the Master FC400 Frequency Converters especially compatible with generators.

## EASY INSTALLATION AND MAINTENANCE

The Master FC400 requires a small space for installation (only 0.86 m<sup>2</sup> for a 125 kVA model). The main assemblies of the UPS can be easily accessed for maintenance, via the removable front panel. Fans located in the top of the UPS cabinet, eliminate the need for side or rear access, and allow the UPS to be placed against a wall.

### **APPLICATIONS**

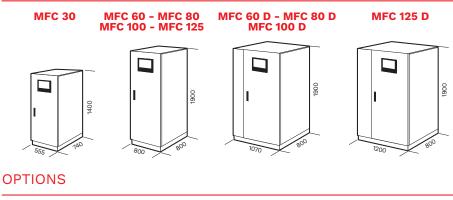
Master FC400 provides additional protection for a wide range of applications, including:

- Powering airplanes in airports
- Radar and flight-control systems
- Naval applications
- Military applications
- Power for test benches.

#### **BATTERY BACK-UP**

MFC is also available as UPS with battery back-up.

### DIMENSIONS



SOF	TWARE & ACCESSOR	RIES	IP rating IP31/IP42		
See	Master MPS		Parallel configuration kit (Closed Loop)		
			12 pulse version (D)		
PRO	DUCT ACCESSORIES	;	Filtering of 5 <sup>th</sup> and 11 <sup>th</sup> harmonics (HC)		
Inpu	it isolation transforme	ər	Top Cable Entry cabinets		
IFC 30	MFC 60	MFC 80	MFC 100	MFC 125	

MODELS	MFC 30	MFC 60	MFC 80	MFC 100	MFC 125			
INPUT	· ·		1					
Rated voltage [V]	380 / 400 / 415 three-phase							
Voltage tolerance [V]	400 ±20% @ full load¹							
Frequency [Hz]	45 - 65							
Current distortion	<5% C (HC Version)							
Soft start	0 - 100% in 120 sec. configurable							
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Nominal power [kVA]	30	60	80	100	125			
Active power [kW]	24	48	64	80	100			
Rated voltage [V]	208 three-phase + N							
	±1%							
Dynamic stability	±5%							
Voltage distortion	<3% with linear load / <4% with non-linear load							
Frequency [Hz]	400							
Crest factor [lpeack/lrms]	3:1							
Overload	110% for 60 min.; 125% for 10 min.; 150% for 1 min.							
OVERALL SPECIFICATIONS								
Weight [kg]	330	480	500	530	590			
Dimensions (WxDxH) [mm]	555x740x1400 800x800x1900							
Remote signals	dry contacts							
Remote controls	ESD and ON/OFF							
Communications	Double RS232 + dry contacts + 2 slots for communications interface							
Ambient temperature for the UPS	0 °C - +40 °C (50 °C @ 75% load)							
Recommended temperature for battery life	+20 °C - +25 °C							
Range of relative humidity	5-95% non-condensing							
Colour	Light grey RAL 7035							
Noise level at 1 m (ECO Mode) [dBA]	62	65	68	70	72			
P rating	IP20 (others on request)							
Efficiency	up to 92%							
Altitude [m]	6000 max altitude							
Standards	European directives: L V 2014/35/EU low voltage Directive EMC 2014/30/EU electromagnetic compatibility Directive Standards: Safety IEC EN 62040-1; EMC IEC EN 62040-2; RoHS compliant Classification in accordance with IEC 62040-3 (Voltage frequency Indioendent) VFI - SS - 111							
Classification in accordance with IEC 62040-3	(Voltage Frequency Independent) VFI - SS - 111							
Moving the UPS	Pallet jack							

<sup>1</sup> For wider tolerance conditions apply.



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