INDUSTRIAL PROCESSES

INDUSTRIAL PLCS

Master Industrial

30-80 kVA

Three-phase/Single-phase
DC BUS 220 Vdc

Highlights

- Battery voltage: 220 Vdc
- Galvanic isolation
- High short-circuit current
- Redundant ventilation

Industrial Application Protection

The MASTER INDUSTRIAL series UPS provide maximum protection and power quality for any type of load, especially industrial applications, manufacturing and petrochemical processes, electrical distribution and power plants. MASTER INDUSTRIAL is an On-line double conversion UPS (VFI SS 111 - IEC EN 62040-3) with input and inverter transformers.

Industrial Environment

MASTER INDUSTRIAL is suited to demanding installation environments where there are vibrations, mechanical stress, dust and where operating conditions are unfavourable to products created for general IT environments (different levels of IP protection available upon request).

High ICC

The high short-circuit current (Icc = 3) makes it suitable for loads that require high current peaks; during switch-on or during normal operation.

Continuous voltage 220Vdc

The input and inverter output transformers guarantee isolation of the AC side and the batteries, which are sized for a 220Vdc voltage (from 108 to 114 blocks) - the standard industrial value.

Redundant ventilation

Redundant ventilation at 100% load is standard, ensuring operation with a normal load with half of the fans operating; in addition, each fan is checked and an alarm signal is provided in case of failure.

The Easy Source input feature, the Battery Care System, and the flexibility and communication capabilities are the same as those available in the traditional MASTER MPS series.

Dimensions (mm)

MODELS	MIM 30	MIM 40	MIM 60	MIM 80
POWER	30	40	60	80
INPUT				
Nominal voltage	380 - 400 - 415 Vac Three-phase			
Voltage tolerance	400 V ± 20%			
Frequency	45 ÷ 65 Hz			
Power factor	≥ 0.93			
Current distortion	< 5%			
Soft start	0 - 100% in 30'' configurable			
Permissible frequency tolerance	± 2% (selectable from ± 1% to ± 5% from front panel)			
Standard equipment	Back Feed protection; separable bypass line; battery isolation			
BATTERIES				
Number of cells	108 ÷ 114			
Max charge voltage	274 V			
Temperature compensation	-0.5 Vx°C			
OUTPUT				
Nominal power (kVA)	30	40	60	80
Active power (kW)	24	32	48	64
Nominal voltage	230 Vac Single-phase			
Static stability	± 1%			
Dynamic stability	± 5%			
Voltage distortion	< 1% with linear load / < 3% with non-linear load			
Frequency	50 or 60 Hz (selectable)			
Crest factor (Ipeack/Irms)	3:1			
Overload	110% for 60'; 125% for 10'; 150% for 1'			
Short circuit current	3 I nom.			
INFO FOR INSTALLATION				
Weight (kg)	850	900	1400	1500
Dimensions (hwd) (mm)	1900 x 800 x 800		1900 x 1600 x 800	
Remote signals	volt-free contacts			
Remote controls	ESD and bypass			
Communication	Double RS232 + remote contacts + 2 slots for communications interface			
Ambient temperature	0°C / +40°C			
Relative humidity	< 95% non-condensing			
Colour	Dark grey RAL 7016			
Noise level	63 ÷ 68 dBA a 1 m			
Ventilation	Redundant fans			
Protection level	IP20			
Rendimento	up to 94%			
Regulations	Regulatory Directives LV 2006/95/EC - 2004/108/EC; IEC Safety EN 62040-1; EMC IEC EN 62040-2; IEC Performance EN 62040-3			
Classification according to IEC 62040-3	(Voltage Frequency Independent) VFI - SS - 111			