



INDUSTRY



TRANSPORT

Master Industrial



ONLINE



Tower

Service
1st start**3:1** 30-80 kVA
220 VDC BUS

HIGHLIGHTS

- **220 VDC bus voltage**
- **Galvanic isolation of input and output**
- **High short circuit current**
- **Redundant ventilation**

INDUSTRIAL APPLICATION PROTECTION

Master Industrial series UPS provide maximum protection and power quality for any type of load, especially industrial applications, such as manufacturing and petrochemical processes, electrical distribution and power plants.

Master Industrial is an ON LINE double conversion UPS (class VFI SS 111 in accordance with IEC EN 62040-3) with input and output isolation transformers.

INDUSTRIAL ENVIRONMENT

Master Industrial is suitable for the most demanding installation environments where there are vibrations, mechanical stresses, dust and in general where the operating conditions are unfavourable to products created for the standard UPS market.

HIGH ICC

The high short circuit current (ICC = 3xIn)

makes it suitable for loads that require high current peaks during switch-on or during normal operation.

DC VOLTAGE 220 V

The input and inverter transformers guarantee the isolation of the batteries, which are sized for a voltage of 220 Vdc (from 108 to 114 elements), 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 monitored and an alarm signal is provided in the event of failure. The Easy Source input features, the Battery Care System and the flexibility and communications capabilities are the same as those of the conventional Master MPS range.

OPTIONS

SOFTWARE & ACCESSORIES

See Master MPS

PRODUCT ACCESSORIES

Battery temperature sensor
Isolation transformer
Synchronisation device (UGS)

Hot connection device (PSJ)

Parallel kit

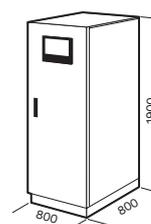
Empty battery cabinets or for extended runtimes

Top Cable Entry cabinet

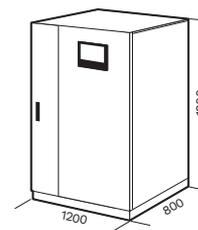
IP rating IP21, IP31/IP42 on request

DIMENSIONS

MIM 30
MIM 40



MIM 60
MIM 80



MODELS	MIM 30	MIM 40	MIM 60	MIM 80
INPUT				
Rated voltage [V]	380 / 400 / 415 three-phase			
Voltage tolerance [V]	400 ±20% @ full load ¹			
Frequency [Hz]	45 - 65			
Power factor	>0.93			
Current distortion	<6%			
Soft start	0 - 100% in 120 s (selectable)			
Permitted frequency tolerance	±2% (selectable from ±1% to ±5%)			
Standard equip. provided	Backfeed protection; separable bypass line; battery isolation			
BYPASS				
Rated voltage [V]	220 / 230 / 240 single-phase + N			
Rated frequency [Hz]	50 or 60 (selectable)			
Permitted frequency tolerance	±2% (selectable from ±1% to ±5%)			
Standard equipment provided	Backfeed protection; separable bypass line			
OUTPUT				
Nominal power [kVA]	30	40	60	80
Active power [kW]	24	32	48	64
Rated voltage [V]	230 single-phase			
Static stability	±1%			
Dynamic stability	EN 62040-3 class performance 1 non-linear load			
Voltage distortion	<1% with linear load / <3% with non-linear load			
Frequency [Hz]	50 or 60 (selectable)			
Crest factor [I _{peak} /I _{rms}]	3:1			
Overload	110% for 60 min; 125% for 10 min; 150% for 1 min			
Short circuit current	3x I _n			
BATTERIES				
Type	VRLA AGM / GEL; NiCd			
Number of cells	108/114			
Maximum charging voltage [V]	274			
OVERALL SPECIFICATIONS				
Weight [kg]	615	630	825	1030
Dimensions (WxDxH) [mm]	800x800x1900		1200x800x1900	
Remote signals	1x opto insulated Input and 3x relays Outputs			
Auxiliary signals	R.E.P.O. - External manual bypass - External output switch			
Communications	UPS status LEDs - Graphic display - 2 slots for communications interface - 2x RS232			
Ambient temp. for the UPS	0 °C - +40 °C			
Recommended temp. for battery life	+20 °C - +25 °C			
Range of relative humidity	5-95% non-condensing			
Colour	RAL 7035			
Noise level at 1 m [dBA ±2] ECO Mode	64 - 68			
Ventilation	Redundant fans (front-top)			
IP rating	IP20			
ECO Mode efficiency	up to 98%			
Standards	European directives: LV 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 Independent) VFI - SS - 111			
Moving the UPS	Pallet jack			

¹ For wider tolerance conditions apply