



INDUSTRY



TRANSPORT

HELIOS
POWER SOLUTIONS

Master Industrial



ONLINE



Tower



3:1 30-80 kVA
DC BUS 220 Vdc



Service
1st start

HIGHLIGHTS

- **Battery voltage: 220 Vdc**
- **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 suited to the most demanding installation environments where there are vibrations, mechanical stresses, dust

and in general where operating conditions are unfavourable to products created for the standard UPS market.

High ICC

The high short-circuit current ($ICC = 3 \times I_n$) 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

Isolation transformer

Synchronisation device (UGS)

Hot connection device (PSJ)

Digital I/O and Generator interface

Parallel configuration kit (Closed Loop)

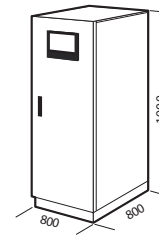
Battery cabinets empty or for extended runtimes

Top Cable Entry cabinets

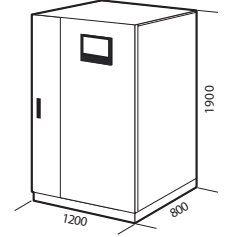
IP rating IP31/IP42

DIMENSIONS

MIM 30 - MIM 40



MIM 60 - MIM 80



MODELS	MIM 30	MIM 40	MIM 60	MIM 80
INPUT				
Nominal voltage	380 - 400 - 415 Vac three-phase			
Voltage tolerance	400 V \pm 20%			
Frequency	45 - 65 Hz			
Power factor	> 0,93			
Current distortion	< 6%			
Soft start	0 \div 100% in 120" configurable			
Permitted frequency tolerance	\pm 2% (selectable from \pm 1% to \pm 5% from front panel)			
Standard equipment provided	Back Feed protection; separable bypass line; battery isolation			
BATTERIES				
Type	VRLA AGM / GEL; NiCd			
Number of cells	108/114			
Maximum charging voltage	274 V			
Temperature compensation	-0,5 V \times °C			
OUTPUT				
Nominal power (kVA)	30	40	60	80
Active power (kW)	24	32	48	64
Nominal voltage	230 Vac single-phase			
Static stability	\pm 1%			
Dynamic stability	\pm 5%			
Voltage distortion	< 1% with linear load / < 3% with non-linear load			
Frequency	50 or 60 Hz (selectable)			
Crest factor	3:1 Ipeak/Irms			
Overload	110% for 60'; 125% for 10'; 150% for 1'			
Short-circuit current	3 x I nom.			
INFO FOR INSTALLATION				
Weight (kg)	640	650	910	940
Dimensions (WxDxH) (mm)	800 x 800 x 1900		1200 x 800 x 1900	
Remote signals	dry contacts			
Remote controls	ESD and bypass			
Communications	Double RS232 + dry contacts + 2 slots for communications interface			
Operating temperature	0 °C / +40 °C			
Relative humidity	<95% non-condensing			
Colour	Light grey RAL 7035			
Noise level at 1 m (ECO Mode)	68 \div 70 dBA			
Ventilation	Redundant fans (front-top)			
IP rating	IP20			
Efficiency	up to 94%			
Standards	Directives LV 2006/95/EC - 2004/108/EC; Safety IEC EN 62040-1; EMC IEC EN 62040-2; Performance IEC EN 62040-3			
Classification in accordance with IEC 62040-3	(Voltage Frequency Independent) VFI - SS - 111			
Moving the UPS	transpallet			