

**MASTER
GUARD**

MASTERGUARD UPS

Series E_i

6–20 kVA

Series
E_i

Reliability with On-line technology for industry and IT&TC: This UPS is based on the latest technology and 35 years of experience - Siemens technology for three-phase and AC-devices, with all the advantages of modern electronics. The bypass-switch and the emergency-power-off-interface are safety features to guarantee in combination with the communication capabilities an excellent system integration. Highest security for high-end-applications and flexible use for big and small enterprises.



Flexibly expandable, easy usage : The Series E_i units can be expanded with battery packs as required. By integrating up to two external modules, even longer backup times are possible. The front panel with pictograms is easy to survey and the UPS will be controllable with half an eye. The MASTERGUARD monitoring- and shutdown-software makes the PC to a power control center. And with its unique mobility, the units can be put to use locally - anywhere at every time. they rest on rollers, are lightweight and have small dimensions, thus enabling them to be installed just about anywhere.

The Series E_i is the allround-UPS of the MASTERGUARD-units with single-phase output. Perfect for relatively small computer centers and server farms as well as for telecommunications and processes in industrial automation.

With its three-phase or single-phase power input, modern double-conversion technology, multiple system integration capabilities and high power margins, the Series E_i is the most efficient all-round protection against any kind of disturbance or problem in the main supply system.

MASTERGUARD Series E	E, 60	E, 100	E, 100-3	E, 200-3
Principle of operation	Online double-conversion system			
Rated power (cos φ ind. = 0,7)	6.000 VA	10.000 VA	10.000 VA	20.000 VA
Input				
Rated voltage	230 V, 1-ph.		400 V, 3-ph.	
Voltage range	176 – 276 V		304 - 478 V	
Frequency	50/60 Hz ± 5%, automatic frequency recognition			
Power factor	> 0,97	> 0,97	> 0,95	> 0,95
Battery	Sealed lead-acid battery, maintenance-free			
Backup-time with integrated battery at nominal load				
	8 min	8 min	8 min	10 min
Backup-time with one external battery pack at nominal power				
	46 min	31 min	31 min	52 min
Output	single-phase			
Voltage	220, 230 , 240 V (adjustable)			
Static voltage tolerance	± 2 %			
Frequency	50 or 60 Hz (same as input frequency)			
Frequency tolerance, normal oper.	Output synchronized with the supply frequency			
Frequency tolerance, power failure	± 0,5 % (internal frequency generator)			
Resistance to short-circuits/overload rating	125 % of the rated load for 60 sec 150 % of the rated load for 10 sec Short circuit proof			
Distortion coefficient for linear load	< 3 %	< 3 %	< 3 %	< 5 %
non-linear load	< 8 %	< 8 %	< 8 %	< 8 %
Crest-factor	3			
Automatic bypass	integrated			
Safety				
Electrical safety	EN 50091-1			
RFI class	EN 50091-2			
Test certificates	TÜV-GS seal			
Permissible ambient temperature during operation	+ 0 °C to + 40 °C			
during storage	- 15 °C to + 40 °C			
Relative humidity	20 to 90 %, no condensation			
Noise level in dB (A)	55	55	55	60
Interfaces				
Data communication	COM: Sub-D 9-pole, male (RS232, indications) (Option: plug-in card)			
Safety	EmergencyPowerOff-Interface (Interface contacts)			
Mains power connection	Direct-wired connections			
Load connections	Direct wired + 2 x IEC320 16 A ¹⁾	direct wired -	direct wired -	direct wired -
Dimensions				
Size (W x H x D in mm)	260 x 705 x 605	300 x 710 x 675	300 x 710 x 675	420 x 1180 x 800
Weight	90 kg	110 kg	112 kg	325 kg
Minimum fuse connection of the mains supply	35 A	50 A	50 A	100 A
Dimensions battery-packs				
Size (B x H x T in mm)	260 x 705 x 605	300 x 710 x 675	300 x 710 x 675	420 x 1180 x 800
Weight	130 kg	164 kg	164 kg	420 kg
Accessories				
	– Communication-software – Battery-packs (BP), SNMP-adapter – external manual bypass switch – Surveillance service LIFE2000			

¹⁾ with Schuko-outlet distributor (3-times)