



## EH9115 Series

### Low Frequency Three Phase (3/3) Online UPS

#### Feature:

- Rated power 20kva to 200kva
- True double-conversion online technology
- DSP 100% micro controlled
- N+1 parallel redundant connection
- High efficiency >92%
- Dual power supply (selectable)
- Accept 100% unbalanced load
- Cold start
- Intelligent battery control
- Compatible with generators
- Powerful communication system (RS232. SNMP. GPRS)

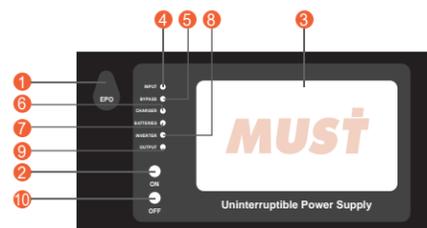
#### Introduction:

Its advanced battery charging system enables the UPS to supply a long backup time while the charging time is rather short, and its temperature compensation system can help to prolong the service life of the battery. Also, its circuit is simple, which reduces the number of components and makes the machine more compact and more reliable.

Its true double-conversion online technology provides pure and safe power supply to all appliances, communication equipment and important loads connected to the internet, and the DSP technology responds quickly to different power supply problems, making sure its load will work uninterruptedly.

It is compatible to all kinds of loads and widely used in the fields of energy sources, transportation, office, medical equipment, engine-room, data center, toll station and so on.

#### LCD Display Information



- |               |                 |
|---------------|-----------------|
| 1. EPO        | 6. Charger led  |
| 2. ON         | 7. Battery led  |
| 3. LCD        | 8. Inverter led |
| 4. Input led  | 9. Output led   |
| 5. Bypass led | 10. OFF         |



Interactive LCD screen

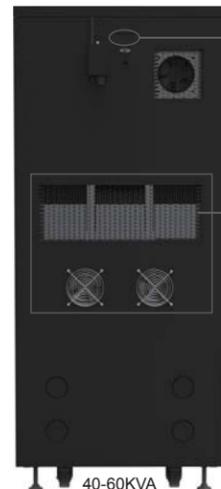
Lock



Communication interface RS232 and RJ-45 (optional)

Heat-dissipating hole

20-30KVA



Communication interface RS232 and RJ-45 (optional)

Heat-dissipating hole

40-60KVA

### Specification

MODEL(EH9115-)	20K3/3	30K3/3	40K3/3	60K3/3	80K3/3	100K3/3	120K3/3	160K3/3	200K3/3
<b>GENERAL</b>									
Capacity	20KVA	30KVA	40KVA	60KVA	80KVA	100KVA	120KVA	160KVA	200KVA
design technology	true online double conversion, inverter based on igbt's, 6 pulses rectifier, dry ISO transformer inverter side.								
features	100% digital with last DSP technology / compatible with worldwide UPS monitoring system, immune to phase rotation input (for rectifier) / dual input (optional)/LCD display / thermomagnetic protection for input, output, bypass and battery / UPS parallel ready with other UPS of the same capacity for redundancy /								
estimated useful life	> 20 years								
efficiency ac / ac	ECOMODE >98%, inverter > 92%, AC-AC 91%								
<b>INPUT</b>									
voltage (*)	3x380/220 vac ± 25% (165v to 275v)								
Thermomagnetic protection	thermomagnetic breaker								
lead wires (*)	3 phases +neutral+ground								
frequency (*)	50hz ± 25% (42.5hz to 62.5hz)								
power factor	0.8 typ at full load								
technology	rectifier 6 PULSES, immune to phase rotation for rectifier input.								
<b>INVERTER</b>									
voltage (selectable) (*)	3x380/220 vac ± 1%								
lead wires (*)	5 wires ( 3 phases +neutral+ground )								
Thermomagnetic protection	Thermomagnetic breaker for output								
frequency	50hz ± 0.1%								
waveform type	Sine wave generated by the inverter with high frequency pwm								
harmonic voltage distortion t.h.d	<2% for linear load / <5% for non-linear load								
crest factor	2.8 to 3.2								
power factor	0.9								
overload recovery.	automatic								
isolation transformer	dry type for inverter - voltage 380v/220v								
voltage regulation	± 1% for balanced load.								
overload capacity (*)	125% for 12 minutes. / 150% for one minute / 200% one cycle								
Short circuit protection	Transfer to bypass								
<b>BYPASS</b>									
Voltage	3x380/220 vac ±25% (adjustable)								
lead wires (*)	5 wires ( 3 phases +neutral+ground )								
Automatic Bypass	static, solid state, 0 mseg for standar transfer, < than half cycle for failure transfer.								
Manual bypass	Thermomagnetic breaker for manual bypass, uninterrupted operation in normal transfers.								
Emergency Power Off	local EPO and / or remote								
Protection and short circuit	Fast fuse and termomagnetic input breaker (different of manual bypass breaker).								
<b>BATTERY</b>									
Thermomagnetic protection	Breaker protection. turn the system off when the battery is low. battery test. smart charger.								
Cold start	Yes								
Quantity	32 pcs (29 to 32 pcs adjustable) ***								
Voltage	Nominal 384 V, Float 435 (Adjustable)								
type (*)	sealed and maintenance free. technology vrla (valve regulated lead acid)								
Backup time at full load (*)	Customize								
typical recharge time.	4 hours 90%								
battery management.	auto-test, adjustable battery transfer point and settings of alarm.								
charger	soft start to full load. Adjustable current for charge batteries.								
<b>PROTECTIONS AND STANDARDS</b>									
hardware protection	Thermomagnetic breaker for input, thermomagnetic breaker for output, thermomagnetic breaker for battery and thermomagnetic breaker for manual bypass, surge protection, fast acting bypass fuse, fast-acting fuses in dc and bypass, fan, redundant power supply, 5 zones temperature sensors, on-off switch, audible alarms.								
Software protection and warning	Discharge batteries, manual shutdown Inverter, manual bypass switch active, emergency power off, manual shutdown, SCR failure, bypass rotation failure, bypass out of range, overload, low battery, low output voltage, high output voltage, DC fuse open, power supply 5v, power supply 14v, inverter overvoltage, overload greater than 200%, transfer failure, inverter voltage out of range, ground and neutral high, SCR inverter fail, UPS in bypass mode, low frequency, charger ON, inverter ON and others.								
Standars	EN 62040-1 safety, EN 62040-2 EMC/EMI, C62.41 surge protection								
<b>MONITORING AND COMMUNICATIONS</b>									
GPRS	Compatible with Global UPS monitoring system **								
front panel	standar: lcd display 240 * 128 reading electrical parameters. touchscreen. LED mimic. Input voltage, bypass voltage, output voltage, inverter voltage, output current, ground to neutral voltage, input frequency, output frequency, bypass frequency, active power, reactive power, total power, ISO transformer temperature, IGBT temperature, DSP temperature, battery or environment temperature, battery voltage, battery current, two power supply voltage etc								
alarms	audible and visual alarms for non-normal conditions.								
communications	rs232 serial port. Dry contacts, "snmp-rj45" for remote monitoring (optional). gprs module for remote monitoring via GPRS network (optional).								
<b>UPS CONDITIONS</b>									
temperature	0°c to 40°c								
relative humidity.	0 to 95% noncondensing								
audible noise	<65 db								
<b>DIMENSIONS AND WEIGHT</b>									
UPS dimensions in mm (front *high * deep)	540*622*1125		664*865*1548		966*890*1748		1160*1043*1900		
UPS weight in "kg"	225	273	437	500	600	700	740	810	850

\* Specification is subject to change without prior notice.

\*\* This feature need the optional GPRS modem.

\*\*\*For 160kva and 200kva models use 40pcs battery, for use less than 32pcs battery derate the output power.