LOW FREQUENCY 3 PHASES UPS

HYUNDAI

10KVA - 60KVA

Brief

Hyundai New Energy Technology is excited to extend our 3-phase solutions with the perfect HD-k3 Series of transformer based double conversion on-line UPS. This series UPS adopts high-speed microprocessor (MCU), Programmable logic device (CPLD) program which are controlled by software, the sixth generation low-exhaust and big-power IGBT and static switch as power components. This series product combines the world's newest control spare parts and the most advanced software. It entirely breaks through the technical bottleneck in traditional simulation age. It adopts the digital control technology and high-precision SMD technology. This UPS can suit for various power grid environments. All features can offer users the big capacity, flexibility, high reliability, stability etc. at a value expected from Hyundai name.

This series is widely used in telecom, bank, security, transporting, utility, manufacture, industry, commerce, government, medical equipment etc.

Highlights

- True On line-Double Conversion Technology.
- 7 inches Big Screen Display.
- Stable Rectifier and Harmonic Filters.
- IGBT PWM Inverter Technology.
- High Efficiency up to 92%.
- Wide Input Voltage Range.
- Advanced Battery Management.
- Short Circuit and Overload Protection.
- 256 Real Time Event Log with Detailed Parameters.
- Static & Manual Bypass Operation.
- Advanced Communication Capabilities.
- Perfect Generator Compatibility.
- Cold Start Function.
- Auto Restart Function.
- Can Set ECO Work Mode.
- Optional EPO Function.

Main Features

- Digital control technique
- Advanced digital circuit system, provide over stable machine run
- Advanced & Intelligent battery management:
- Intelligent inspection system
- Parallel redundancy
- High Precision SMD technique
- The 6th Generation IGBT Inverter
- Static & Manual (Maintenance) Bypass
- Auto Restart
- Advanced User Interface
- Advanced communication Capabilities
- High-performance dynamic characters
- 3 phases separately adjustment, balance stabilizing
- Perfect Generator Compatibility
- Optional EPO (Emergency Power Off)

HYUNDAI UPS - LICENSED BY HYUNDAI CORPORATION, KOREA

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Specification

	MODEL	HD-10K3-60K3							
	Capacity(kVA)	10	15	20	25	30	40	50	60
	Power Watt(kW)	8	12	16	20	24	32	40	48
	Working Principle	Low Frequency Transformer Based True On Line-Double Conversion							
RECTIFIER (INPUT)	Phase	Three Phase							
	Input Power Factor	Standard ≥ 0.9 (6pulse Rectifier+Filter), Optional ≥ 0.96 (12pulse Rectifier+Filter)							
	Input Voltage Range	220/380VAC (230V/400VAC or 240V/415VAC)±25% 3P+N+PE ; 110V/208VAC(120V/220VAC or 277V/480VAC) optional							
	Input Frequency Range	50Hz±10% / 60Hz±10% (Selectable)							
	Total Harmonic Distortion (THDi)	6pulse Rectifier ≤ 3%, Optional 12pulse Rectifier & Filter ≤ 5%							
	Output Ripple	≤ 2%							
	Soft Start	0~100% 5sec							
CHARGING	Charging Mode	Constant current, then constant voltage, charge with temperature compensation, automatic switch Between Equalized charging and Float charging.							
	Float Charging Voltage	432VDC							
	Equalized Charging Voltage	464VDC							
	Temp. Compensated Voltage	-3mV/ ℃/cell							
	Charging Current	0.1C (Automatic adjust according to battery capacity)							
BATTERY	Type	VRLA/AGM/Gel, optional Lithium Battery							
	Battery Capacity	7~999AH settable (Configurate Battery Capacity according to Back-up Time)							
	Quantity	32units 12V batteries (Standard Model: 384VDC)							
	Temperature	20°C~25°C (For Maximum Efficiency)							
INVERTER (OUTPUT)	Phase	Three Phase							
	Power Factor	0.8							
	Nominal Voltage	220/380VAC (230V/400VAC or 240V/415VAC), 3P+N 110V/208VAC(120V/220VAC or 277V/480VAC) optional							
	Output Voltage Regulated Accuracy	±1%(Stable load), ±3%(fluctuant load)							
	Output Frequency Range	50Hz 60Hz ≤ ±0.5% (Asynchronous)							
	Crest Factor	3:1							
	Output Total Harmonic Distortion (THD)	Pure Sine Wave, Linear Load ≤ 3%, Non-Linear Load ≤ 5%							
	Dynamic Characteristics	Instant voltage ≤ ±5% (from 0 to100%), Instant recover time ≤10ms							
	Unbalanced Load Voltage	≤ ±5%							
	Overload Capacity	At 115% load, normal work, At 125% load 10 min, At 150% load 1min, At 200% load 1S							
	Inverter Efficiency	≥ 92% (full load)							
BYPASS	Phase	3 Phase +N							
	Input Nominal Voltage	220/380VAC (230V/400VAC or 240V/415VAC) 110V/208VAC(120V/220VAC or 277V/480VAC) optional							
	Output Nominal Voltage	220/380VAC (230V/400VAC or 240V/415VAC) 110V/208VAC(120V/220VAC or 277V/480VAC) optional							
	Transfer Time	0ms(adopt static switch)							
PROTECTION FUNCTION	Input Protection	Input voltage, frequency over limited protection, Phase fault, Phase lack							
	Output Protection	Over current, short circuit, over voltage, low voltage							
	Battery Protection	Over charge, over-discharge protection							
	Temperature Protection	Environment over temperature protection, inverter over temperature protection							
	Hardware Fault Protection	Assistant power abnormal, breaker cut off, breaker overload, power devices over current/over voltage etc protection							
GENERAL SYSTEM PARAMETERS	Working Environment	Temp: -10 ~ 40°C, relative humidity: 30% ~90%, Altitude ≤ 2000m (1% decrease against 100 meters'rise, max. altitude 4000m)							
	Cooling Method	COMPULSIVE VENTILATION							
	Communitation Interface	RS232/ RS485, optional dry contact, SNMP card (for remote control via Internet)							
	Parallel Operation	4units, max.8units(optional)							
	Auti-surge Capacity	10/700 S, 5KV; 8/20 S, 20KA							
	Protection Level	IP31							
	Safety Performance	Vin-n Vout-n 3000Vac, creepage ≤ 3.5mA , insulating resistance ≥ 2M Ω (500VDC)							
	Noise (dB)	48~55						55~60	
	Dimension (W*D*H) mm (Standard model)	600*620*1250					700*600*1520		
	Weight (Kg)	205	254	265	304	311	407	485	506