

ONLINE (3:1) LOW FREQ UPS

HYUNDAI

10 kVA ~ 30 kVA (3:1)
PF 0.8



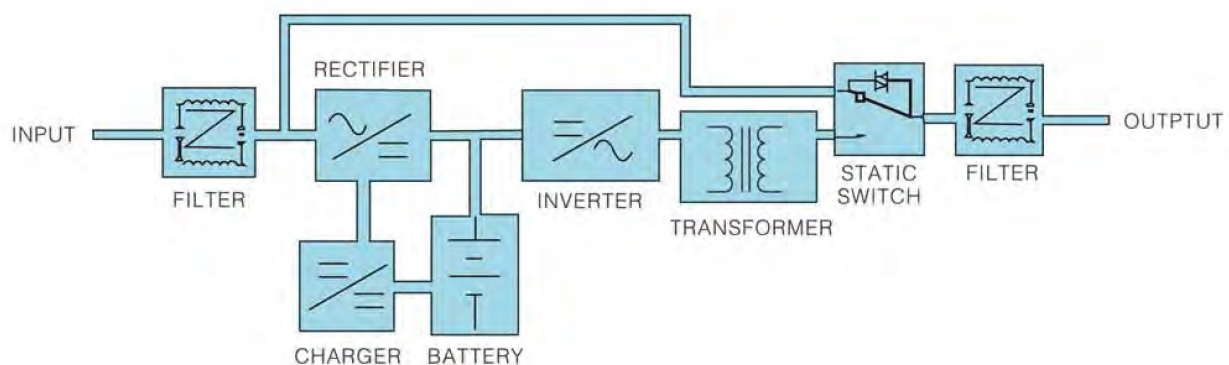
Features

- Three / single-phase models with on-line double conversion technology
- DSP (Digital Signal Processors) technology
- Suitable for all kinds of loads (resistive, inductive and non-linear loads etc)
- High overload capability (up to 150%)
- Bypass dual DSP control design to enhance more reliability
- Supports dual input, hot standby in series
- Redundant & parallelable with advanced parallel current-sharing control technology
- Cold start and mains start function
- High charging capability: 2 A / 4 A / 6 A / 8 A / 10 A / 12 A selectable (standard), 14 A / 16 A / 18 A / 20 A / 22 A / 24 A selectable (options)
- Standard configuration with output isolation transformer
- Superior protection (surgers, short-circuit, overvoltages, undervoltages, overcharge, reverse connection protection etc)
- Advanced communications (RS232 and USB ports (standard), SNMP, dry contacts and RS485 (options))
- Other options (parallel kits, input isolation transformer, bypass isolation transformer and harmonic suppressor)



Rear Panel

- | | |
|------------------|--------------------|
| 1. EPO | 5. SNMP (optional) |
| 2. USB | 6. Fan |
| 3. RS232 | 7. Breaker |
| 4. Parallel port | 8. Terminal |



Specifications

MODEL	HD-10KL	HD-15KL	HD-20KL	HD-30KL
Capacity	10 kVA 8 kW	15 kVA 12 kW	20 kVA 16 kW	30 kVA 24 kW
INPUT				
Rated voltage	380 / 400 / 415 Vac (3 φ + N + PE)			
Voltage range	285 ~ 475 Vac			
Rated frequency	50 Hz / 60 Hz			
Frequency range	40 ~ 70 Hz			
Frequency tracking range	± 5% Hz			
BYPASS				
Rated voltage	220 / 230 / 240 Vac (1 φ + N + PE)			
Overload	Load current < 150% rated current: long time running, 150% ≤ load current < 200% for 1 min, 200% rated current ≤ load current for 200 ms			
BATTERIES				
Battery voltage	192 Vdc			
Battery type	VRLA AGM maintenance-free lead based			
Number of battery	12 V × 16 pcs			
Charging voltage	216 Vdc			
EOD	168 Vdc			
Charging current	Default 8 A (2 A / 4 A / 6 A / 8 A / 10 A / 12 A selectable)			
OUTPUT				
Rated voltage	220 / 230 / 240 (1 φ + N + PE)			
Power factor	0.8			
Waveform	Sinusoidal			
Rated frequency	50 Hz / 60 Hz (settable)			
Frequency precision	Mains mode: track bypass input in the state of synchronization Battery mode: 50 / 60 ± 0.1 Hz			
Voltage precision	± 1%			
Recovery time of transient voltage	< 20 ms			
Crest factor	3:1			
THDV	≤ 3% (linear load); ≤ 6% (non-linear load)			
Overload	Load ≤ 105%: long time running, 105% < load ≤ 125% for 10 min, 125% < load ≤ 150% for 1 min, 150% < load ≤ 200% for 200 ms., 200% < load for 100 ms			
OTHERS				
Transfer time	0 ms			
Protections	Short-circuit – overload – overvoltage – undervoltage – low battery – overtemperature			
Communications	RS232 / USB (standard); RS485 / SNMP / dry contacts (optional)			
Operating temperature	0 ~ 40℃			
Storage temperature	– 25℃ ~ 55℃ (without batteries);			
Relative humidity	0 ~ 95% (non-condensing)			
Operating altitude	≤ 1000 m (derating 1% for each additional 100 m)			
Noise level	< 60 dB (at 1 m)			
MTBF	MTBF > 200000 h			
MTTR	MTTR < 0.5 h			
IP rating	IP 20			
Dimensions (W×D×H) (mm)	310 × 600 × 880	400 × 815 × 1100		
Packaged dimensions (W×D×H) (mm)	430 × 710 × 1080	525 × 925 × 1305		
Net weight (kg)	130	201	230	277
Gross weight (kg)	142	216	245	292

- All specifications subject to change without notice.
- Custom-made specifications are acceptable.