

## ONLINE DOUBLE CONVERSION WITH INBUILT ISOLATION TRANSFORMER TO HANDLE CHALLENGING AND REGENERATIVE LOADS



### Features

### Advantages

### Benefits

<ul style="list-style-type: none"> <li>• Wide input voltage range (265 ~ 460 Vac)</li> <li>• Linear load derating for input voltages under 360 V to reduce battery usage</li> <li>• Settable delayed start &amp; Rectifier soft star function</li> <li>• Intelligent self diagnosing function</li> <li>• Static bypass mode for Auto switch over during UPS fault</li> <li>• Low MTTR &lt;0.5</li> </ul>	<ul style="list-style-type: none"> <li>• Maximizes Mains Mode function, reduces Battery usage, extends Battery life</li> <li>• Prevents Generator Overload due to starting inrush current</li> <li>• Quick resolution for high TAT</li> <li>• Seamless transfer, uninterrupted uptime</li> <li>• Higher uptime enhances system availability for critical application</li> </ul>	<p>High Uptime / Availability</p>
<ul style="list-style-type: none"> <li>• Frequency range (40 ~ 70 Hz)</li> <li>• Multiple Functions settable</li> <li>• Battery compatibility</li> <li>• Unbalanced Load compatible</li> <li>• Flexible battery configuration</li> <li>• Strong mixed load capacity &amp; high over load capacity</li> </ul>	<ul style="list-style-type: none"> <li>• 50 / 60 Hz Compatible &amp; 60 / 50 Hz frequency conversion</li> <li>• Eco Mode, Frequency conversion mode, Output Voltage User selectable 380 / 400 / 415 V</li> <li>• VRLA / Li-ion / Ni-cad Battery compatible</li> <li>• Efficient operation even with 100% Unbalanced Load</li> <li>• Settable 48 - 52 batteries.</li> <li>• Ensures seamless operation across diverse applications</li> </ul>	<p>High Flexibility</p>
<ul style="list-style-type: none"> <li>• High MTBF &gt; 2,00,000 hours</li> <li>• Online Double conversion with Advanced dual-core DSP technology with IGBT Rectifier</li> <li>• Remote monitoring through SNMP</li> <li>• Standard Emergency Power off (EPO)</li> <li>• Advanced Battery Management</li> <li>• Advanced Digital Parallel architecture</li> <li>• Fan speed varies intelligently with temperature</li> <li>• Complete Protection for connected equipment</li> <li>• Inbuilt Galvanic Isolation Transformer</li> </ul>	<ul style="list-style-type: none"> <li>• Faster and more precise control (<math>\pm 1\%</math> regulation), ensuring stable output power under varying load conditions with better efficiency</li> <li>• Allows to monitor and respond to issues quickly</li> <li>• Safety during faults</li> <li>• Improves Battery health offering predictable Power Back up. Enhances battery life time and also alert for Battery end of life</li> <li>• Upto 6 units parallel capacity for redundancy &amp; load expansion</li> <li>• Enhanced service life</li> <li>• Protection against Short-circuit, Overload, Over Temperature, Over Voltage, Under Voltage, Fan Failure, Battery Low Voltage</li> <li>• Complete Isolation between Input &amp; Output for Safety &amp; Reliability</li> </ul>	<p>High Reliability</p>
<ul style="list-style-type: none"> <li>• Low Operating Cost</li> <li>• Optimal performance with Output Unity Power Factor</li> <li>• Input for PF up to 0.99</li> <li>• Less Thermal Load</li> <li>• Compact internal layout</li> </ul>	<ul style="list-style-type: none"> <li>• High Efficiency - Upto 94% on Online mode; 98% on Eco mode</li> <li>• Maximum utilization of UPS capacity</li> <li>• Economical sizing of the upstream network components</li> <li>• Better efficiency results in lower heat, saving on Air Conditioning</li> <li>• Reduces the floor space</li> </ul>	<p>Low Total Cost of Ownership (TCO)</p>

# KRYKARD HX SERIES 3/3 UPS (40 kVA to 300 kVA)

SPECIFICATION									
MODEL	HX - 40	HX - 60	HX - 80	HX - 100	HX - 120	HX - 160	HX - 200	HX - 250	HX - 300
<b>Rated Capacity</b>	40 kVA / 36 kW	60 kVA / 54 kW	80 kVA / 72 kW	100 kVA / 90 kW	120 kVA / 108 kW	160 kVA / 144 kW	200 kVA / 180 kW	250 kVA / 225 kW	300 kVA / 270 kW
<b>INPUT</b>									
<b>Input Wiring</b>	Three-phase five-wire (3Φ + N + PE)								
<b>Rated Voltage</b>	380 / 400 / 415 Vac								
<b>Voltage Range</b>	360 ~ 460 Vac (non - derating), 260 ~ 360 Vac (linear derating between 70% ~ 100% load)					304 - 346 V (derating 10%), 346 - 456 V (full load)			
<b>Rated Frequency</b>	50 / 60 Hz								
<b>Frequency Range</b>	50 / 60 Hz ± 5 Hz								
<b>Power factor</b>	≥ 0.99								
<b>Delayed start of Rectifier</b>	10 s (1 ~ 300 settable)								
<b>Bypass Voltage Range</b>	± 20% (settable)								
<b>OUTPUT</b>									
<b>Output Wiring</b>	Three-phase five-wire (3Φ + N + PE)								
<b>Rated Voltage</b>	380 / 400 / 415 Vac								
<b>Voltage Regulation</b>	±1%								
<b>Frequency</b>	50 / 60 Hz ± 0.1% in battery mode								
<b>Waveform</b>	Sinusoidal								
<b>Crest Factor</b>	3:1								
<b>Total Harmonic Distortion(THDv)</b>	≤ 2% (linear load); ≤ 5% (non-linear load)								
<b>Inverter Overload Capability</b>	105% ~ 110% for 60 min, 110% ~ 125% for 10 min, 125% ~ 150% for 1 min, 150% ~ 200% for 200ms								
<b>BATTERIES</b>									
<b>DC Voltage</b>	360 Vdc		600 Vdc						
<b>No. of Batteries</b>	30 pcs (29 - 40 selectable)		50 pcs (48 - 52 selectable)						
<b>Charging Current</b>	Charging rate (settable) x battery capacity (settable) x number of battery group (settable)								
<b>Battery Self-Test</b>	Settable periodic self - test; manually configurable test time and voltage								
<b>SYSTEM</b>									
<b>Efficiency</b>	≥ 92% in Line mode ≥ 97% in ECO mode					≥ 94% in Line mode ≥ 98% in ECO mode			
<b>Max. no. of Parallel Connections</b>	6								
<b>Protections</b>	Short - circuit, Over load, Over temperature, Battery low voltage, Over voltage, Under voltage, Fan failure								
<b>Communications</b>	Standard configuration: RS 232, RS 485, Dry contacts Optional configuration: SNMP								
<b>IP rating</b>	IP 30		IP 20						
<b>Display</b>	7 inches LCD touch screen								
<b>OTHERS</b>									
<b>Operating Temperature</b>	0° C ~ 40° C								
<b>Storage Temperature</b>	-25° C ~ 55° C (without battery)								
<b>Relative Humidity</b>	0% ~ 95% (non-condensing)								
<b>Altitude</b>	≤ 1000 m; derating 1% for each additional 100 m				≤ 1000 m; above 1000 m, downgrading 1% for each additional 100 m				
<b>Noise level at 1m</b>	≤ 65 dB								
<b>Dimensions (W × D × H) (mm)</b>	600 x 600 x 1600	800 x 600 x 1800	800 x 800 x 1800			800 x 860 x 1700	1210 x 860 x 1950		
<b>Net Weight (kg)</b>	340	430	580	630	680	790	1135	1275	1355