3P Power

Passion **P**rofession **P**erfection

PRODUCT CATALOGUE

Excellence INDS Series Industrial AC UPS

Excellence INDS Series Industrial AC UPS

FEATURES

- **ADAPTABILITY**

  Designed to accept a wide range of input voltages and frequency range, this AC UPS is capable to cope with the worst utility conditions. It can eliminate harmful distortion from utility power and withstand all kinds of severe impacts from various loads. It is fully capable to support heavy duty equipment, production equipment and DCS (Distributed Control System) system.

- **DOUBLE TRANSFORMATION**

  Double transformation true on-line design adopts DSP technology resulting the small input current harmonics, high input power factor, low output voltage waveform distortion, high reliability, high fault tolerance, strong overload capacity and high resistance to surges

- **NEW EDGE DESIGN TOPOLOGY**

  The true online double conversion with Digital Signal Processor (DSP) control provides an improved solution with high performance in communication and network management. Double isolation between input/output and bypass is applied for total isolation between power line noise, spokes and transients

- **COMPREHENSIVE MONITORING**

  Dry contacts, RS232, RS485, Built-in MODEM Interface and optional SNMP and Battery Detection module are available for users to monitor the system remotely

- **ADVANCED BATTERY MANAGEMENT**

  ABM system allows flexible battery configuration and 3 steps charged control as well as Auto/Manual discharge function and Battery Temperature Compensation make the battery service life longer

- **PARALLEL REDUNDANCY**

  The DSP makes the parallel system simple and flexible without master-slave configuration and allows upto 8 UPSs in parallel to increase the system capacity and operational reliability for power redundancy

- **POWER WALK-IN & ECO MODE**

  Comes with built-in power walk-in function for ease of adaptation to the gen-set as an upstream power. Unique energy efficiency design under good power condition, INDS series UPS can work in ECO mode for up to 98% efficiency, green and energy saving

- **COLORFUL MULTIFUNCTIONAL HMI**

  Full digital touch screen provides the colorful multifunctional human machine interface (HMI). UPS comes with a friendly interface while having complete control to the essential operation parameters, status, alarms and measurements. Up to 500 event logs can be recorded at any event

- **MAXIMUM SAFETY FEATURES**

  Safety features have always been the top priority for our equipment. Comprehensive built-in protection for system over-voltage, over-current and/or over-load, EPO and back feed protection device prevents any voltage back feed in the upstream distribution panel, ensuring the safety of maintenance personnel

SUITABLE FOR INDUSTRIAL & COMMERCIAL APPLICATIONS

* Industrial application such as Process and Control system, Industrial Machinery, Instrument and Measurement, Process monitoring, Control and Security

* Infrastructures application such as Hospital, Airport, Semiconductor, Water Treatment, Incinerator plant and Rail Transportation

* Energy industry application such as Oil & Gas, Petrochemicals, Refinery and Power Plant

* Security and Monitoring application

Excellence INDS Series Industrial AC UPS

MODEL	INDS33010	INDS33015	INDS33020	INDS33030	INDS33040	INDS33045	INDS33050	INDS33060
CAPACITY in kVA	10	15	20	30	40	45	50	60
SYSTEM								
Output PF	0.8							
System Efficiency (Inverter mode)	92% @ 100% Load							
System Efficiency (ECO mode)	98% @ 100% Load							
Maximum Leakage Current	100mA							
MTBF	Above 200,000 Hours							
Dry Contact	Standard: 6 types signal (UPS Fault, UPS Warning, Low Battery, Line Lost, Bypass Mode, Inverter Mode)							
Communication Interface	RS232 and RS485, Option: SNMP							
Operation Temperature	0 ~ 50 °C							
Humidity	95% (Non-condense)							
Cooling	Forced Air							
Max. Altitude	Within 1000m (Every 100m increase, Capacity decrease 1%), Maximum 4000m							
Noise (dB)	45dB ~ 55dB				55dB ~ 60dB			
IP Protection (EN 60529)	**IP20** as Standard Option: Up to IP54 upon request							
Cable Entry	Bottom / Rear							
Safety Standard	Safety: IEC60950-1, IEC62040-1-1 (2008), EMC: EN/IEC62040-2 (2005), Performance: IEC62040-3 (1999)							
PHYSICAL								
W * D * H in mm	405 * 655 * 815			440 * 820 * 1160				
Approx. Weight (kg)	118	120	145	195	280	300	330	365
RECTIFIER INPUT PARAMETERS								
Rated Voltage	380/400/415Vac 3 Phase 4W							
Input Voltage Range	± 15 %- ± 25 % adjustable 290-498Vac							
Rate Frequency	50Hz / 60 Hz Automatic Sensing							
Frequency Range	50Hz / 60Hz +/-10%							
Input Soft Start Function	0 - 100%, 10-300s (Settable)							
Current Harmonic Distortion (THDi)	< 5% @ 50% Load, < 4% @ 100% Load							
Input Power Factor	0.99							
RECTIFIER OUTPUT PARAMETERS								
DC Nominal Voltage	384Vdc							
3 Levels Charging	Float Charge, Hi-rate Charge and Boost Charge							
Highest Charging Voltage	470Vdc							
Charger Output Voltage Regulation	1%							
Ripple Voltage Component	≤5%							
BATTERY								
Nominal Number of Cells Range	Selectable from 174 cells to 192 cells for Lead Acid Battery. Selectable from 290 cells to 300 cells for Ni-Cd Battery							
Charging Current Settings	0.1C for Lead Acid Battery Capacity and 0.2C for Ni-Cd Battery							
Battery Discharge End Voltage	320Vdc							
INVERTER OUTPUT								
Rated Capacity (kVA)	10	15	20	30	40	45	50	60
Rated Power (kW)	0.8	12	16	24	32	36	40	48
Rated Voltage (V)	380/400/415Vac 3 Phase 4W							
Phase Voltage Setting	200 ~ 244V (Control Board)							
Crest Factor	3:1							
Waveform	Sine wave							
Steady-state Voltage Stability	± 1 %							
Transient Voltage Response	± 5 % Within 10ms							
Rated Frequency	Same as Bypass Input							
Frequency Stability	± 1%							
Overload	110% of Rated kVA: 60mins; 125% of Rated kVA: 10mins; 150% of Rated kVA: 1min: > 160% of Rated kVA: 200ms							
Short Circuit 0.1s	Double Input							
Inverter efficiency @ 100 Load	92%							
BYPASS								
Rated Capacity (kVA)	10	15	20	30	40	45	50	60
Rated Voltage (V)	380/400/415Vac 3 Phase 4W							
Input Voltage Range	176Vac ~ 264Vac (Phase ~ Neutral) / 304Vac ~ 456Vac (Phase ~ Phase)							
Rated Frequency (Hz)	50Hz / 60Hz							
Frequency Range	46Hz ~ 54Hz @ 50Hz; 65Hz ~ 64Hz @ 60Hz							
"STANDBY ON" (Eco-mode) Transfer	2 ~ 4ms							
Inverter / Bypass Transfer Time	0ms @ Synchronization between Inverter and Bypass							
Overload	150% of Rated kVA: 60mins; 180% of Rated kVA: 30s; > 200% Rated kVA: 200ms							
Standard Configuration	Feed Flow Protection, Bypass Independently Isolated							

Excellence INDS Series Industrial AC UPS

MODEL	INDS33080	INDS33100	INDS33120	INDS33160	INDS33200	INDS33250	INDS33300	INDS33400
CAPACITY in kVA	80	100	120	160	200	250	300	400
SYSTEM								
Output PF	0.8							
System Efficiency (Inverter mode)	92% @ 100% Load							
System Efficiency (ECO mode)	98% @ 100% Load							
Maximum Leakage Current	100mA							
MTBF	Above 200,000 Hours							
Dry Contact	Standard: 6 types signal (UPS Fault, UPS Warning, Low Battery, Line Lost, Bypass Mode, Inverter Mode)							
Communication Interface	RS232 and RS485, Option: SNMP							
Operation Temperature	0 ~ 50 °C							
Humidity	95% (Non-condense)							
Cooling	Forced Air							
Max. Altitude	Within 1000m (Every 100m increase, Capacity decrease 1%), Maximum 4000m							
Noise (dB)	45dB ~ 55dB				55dB ~ 60dB			
IP Protection (EN 60529)	IP20 as Standard Option: Up to IP54 upon request							
Cable Entry	Bottom / Rear							
Safety Standard	Safety: IEC60950-1, IEC62040-1-1 (2008), EMC: EN/IEC62040-2 (2005), Performance: IEC62040-3 (1999)							
PHYSICAL								
W * D * H in mm	635 * 975 * 1325			710 * 975 * 1650		800 * 1100 * 1800		
Approx. Weight (kg)	470	575	650	760	790	850	980	1100
RECTIFIER INPUT PARAMETERS								
Rated Voltage	380/400/415Vac 3 Phase 4W							
Input Voltage Range	± 15 %- ± 25 % adjustable 290-498Vac							
Rate Frequency	50Hz / 60 Hz Automatic Sensing							
Frequency Range	50Hz / 60Hz +/-10%							
Input Soft Start Function	0 - 100%, 10-300s (Settable)							
Current Harmonic Distortion (THDi)	< 5% @ 50% Load, < 4% @ 100% Load							
Input Power Factor	0.99							
RECTIFIER OUTPUT PARAMETERS								
DC Nominal Voltage	384Vdc							
3 Levels Charging	Float Charge, Hi-rate Charge and Boost Charge							
Highest Charging Voltage	470Vdc							
Charger Output Voltage Regulation	1%							
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Charging Current Settings	0.1C for Lead Acid Battery Capacity and 0.2C for Ni-Cd Battery							
Battery Discharge End Voltage	320Vdc							
INVERTER OUTPUT								
Rated Capacity (kVA)	80	100	120	160	200	250	300	400
Rated Power (kW)	64	80	96	128	160	200	240	320
Rated Voltage (V)	380/400/415Vac 3 Phase 4W							
Phase Voltage Setting	200 ~ 244V (Control Board)							
Crest Factor	3:1							
Waveform	Sine wave							
Steady-state Voltage Stability	± 1 %							
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Standard Configuration	Feed Flow Protection, Bypass Independently Isolated							

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3P Power One Stop Solution

3P Power

Passion Profession Perfection

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