

DS 300 H-HB Series

10-400kVA INDUSTRIAL UPS

The new DS 300 HB & HB UPS range delivers cost effective power protection for a wide variety of critical applications like offices, communication networks, commercial and industrial environments. The modern UPS architecture, that incorporates three independent DSP circuits combined with 3-level topology and low Total Harmonic Distortion (THDi), is ideal for installations that require high switching frequencies, complex filtering and superior efficiency. The units can be used as a single, standalone UPS or as a multi-cabinet UPS system with up to 8 units connected in parallel, achieving a total power capacity of up to 3.2 MW.



3 phase in / 3 phase out

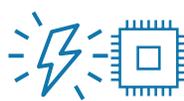
ENHANCED POWER PROTECTION



TELECOM



BUILDING POWER
INFRASTRUCTION



CRITICAL
LOADS



HEAVY
INDUSTRY



DATA
CENTERS



TRANSPORT
INFRASTRUCTURE



HOSPITALS

GENERAL SPECIFICATIONS

- Transformerless UPS topology
- 3 Level topology
- High input power factor
- High efficiency up to 95%
- Cold start function
- Static and maintenance by-pass switch
- Output short circuit and overload protection
- External REPO switch input
- 512 events memory (512 events 45.000 alarms)
- Clock and calendar (battery supported)
- Automatic battery test, remaining battery time indicator
- Temperature compensated charge system (optional)
- 2 RS232 serial ports and 12 dry contact outputs
- 3 DSP controlled modular structure
- Optional SNMP and MODBUS adaptors
- Optional LCD graphical panel
- Optional USB flash memory
- Full digital structure design
- Small footprint
- Eco mode operation (optional)
- Output current limiting
- Advanced diagnostics
- Configurable input/output voltage/frequency/range
- Split by-pass input (second input)
- Output DC leakage protection
- Separate DSP for inverter control
- Separate DSP for the PFC
- 3 level battery protection
- High charge current capacity
- Charge/discharge current indicator
- Advanced remote control
- Manufactured according to EC Directive EN62040
- 10 years spare parts support
- 2 years warranty

DS 300 H - HB SERIES

INDUSTRIAL UPS *3 phase in / 3 phase out* 10-400 kVA



| H Models / P.F = 0.9 | DS310H | DS315H | DS320H | DS330H | DS340H | DS360H | DS380H | DS3100H | DS3300H | DS3400H | |
|-----------------------------|---|----------|----------|----------|----------|--------------|----------|----------|----------|---------------|--|
| Tescom Codes | UPS.0645 | UPS.0660 | UPS.0646 | UPS.0647 | UPS.0648 | UPS.0649 | UPS.0650 | UPS.0651 | UPS.0656 | UPS.0321 | |
| HB Models / P.F = 1 | DS310HB | DS315HB | | DS330HB | DS340HB | DS360HB | DS380HB | DS3100HB | DS3300HB | DS3400HB | |
| Tescom Codes | UPS.0734 | UPS.0736 | | UPS.0835 | UPS.0555 | UPS.0556 | UPS.0557 | UPS.0558 | UPS.0616 | UPS.0642 | |
| Power (kVA) | 10 | 15 | 20 | 30 | 40 | 60 | 80 | 100 | 300 | 400 | |
| INPUT | | | | | | | | | | | |
| Voltage | 380/400 VAC 3P + N + G ± 20% (at 100% load) / - 40% (at 70% load) | | | | | | | | | | |
| Frequency | 50Hz / 60Hz , ± 5% | | | | | | | | | | |
| Power factor (at 100% load) | ≥ 0.99 | | | | | | | | | | |
| THDI (*) | ≤ 3% | | | | | | | | | | |
| By-pass voltage | 380/400 VAC 3 Phase + N, ± 10% | | | | | | | | | | |
| Voltage distortion | ≤ 10% | | | | | | | | | | |
| Protections | Fuses, Voltage & Frequency tolerance, Input power limit, Phase sequency indicator | | | | | | | | | | |
| OUTPUT | | | | | | | | | | | |
| Power (kW) H models P.F=0.9 | 9 | 13.5 | 18 | 27 | 36 | 54 | 72 | 90 | 270 | 360 | |
| Power (KW) HB models P.F=1 | 10 | 15 | 20 | 30 | 40 | 60 | 80 | 100 | 300 | 400 | |
| Power factor | 0.9 (0,8 and 1 optional) | | | | | | | | | | |
| Voltage | 380/400 VAC 3P + N, ± 1% (415 VAC optional) | | | | | | | | | | |
| Frequency | 50Hz / 60Hz | | | | | | | | | | |
| Frequency tolerance | Line synchronized: ± 2% (adjustable) / Free running: ± 0,1% | | | | | | | | | | |
| Efficiency | up to 95% | | | | | | | | | | |
| Crest factor | 3:1 | | | | | | | | | | |
| Overload capacity | 100% - 125% load: 10 min, 125% - 150% load: 1 min, - > 150% load: by pass | | | | | | | | | | |
| Other protections | Advanced short circuit, Voltage tolerance, DC balance, Regenerative load, Current limiting | | | | | | | | | | |
| VoltageTHD | ≤ 3% (at 100% linear load) | | | | | | | | | | |
| BATTERY | | | | | | | | | | | |
| Type | VRLA AGM / GEL / NiCd | | | | | | | | | | |
| Number of batteries | 2x30 (±30) : 60 pieces | | | | | | | | | | |
| Charge voltage | 2x405 VDC | | | | | | | | | | |
| End of discharge voltage | 2x300 VDC | | | | | | | | | | |
| Battery cabinet | Internal | | | | | | | External | | | |
| Battery ambient temperature | 25°C | | | | | | | | | | |
| Protections | 3 level alarms, Battery fuses, Charging current limit, Temperature compensation (optional) | | | | | | | | | | |
| Automatic testing | Standard every 72 hours (adjustable) | | | | | | | | | | |
| GENERAL | | | | | | | | | | | |
| Standards | EN62040-1, EN62040-2, EN62040-3 | | | | | | | | | | |
| User interface | 4 lines LCD panel, Mimic leds, 5 vector buttons, Buzzer, Optional TFT panel | | | | | | | | | | |
| Indicators | P-N voltage, P-P voltage, Current, Power, Crest Factor, Frequency, PF, Service Time | | | | | | | | | | |
| Advanced | Self diagnostics, 3 maintenance time indicators, Calibration over RS232, operating hour meter | | | | | | | | | | |
| Communication | 2xRS232 serial ports, 4 standard and 8 optional DRY contact alarm relays | | | | | | | | | | |
| Inputs | EPO input, Interactive battery panel input, Genset input | | | | | | | | | | |
| Genset kit | Standard (programmable) | | | | | | | | | | |
| Software | Standard T-Mon UPS Management Software (3 clients + 1 server management) | | | | | | | | | | |
| Alarm logging | Standard:with time & date 512 events | | | | | | | | | | |
| Protections | Power module over-temperature, Overcurrent, Temperature high alarm | | | | | | | | | | |
| Temperature ranges | 0°C - 40°C | | | | | | | | | | |
| Protection degree | IP20 | | | | | | | | | | |
| Relative humidity | 90% max (non-condensing) | | | | | | | | | | |
| Altitude | < 1000m above sea level | | | | | | | | | | |
| Acoustic noise | < 57 dBA | | | < 62 dBA | | | | < 65 dBA | < 68 Dba | | |
| Net weight (kg) | 87 | 87 | 91 | 100 | 173 | 197 | 209 | 220 | 635 | 680 | |
| Dimensions (mm) HxWxD | 1040x400x815 | | | | | 1440x515x855 | | | | 1900x1250x775 | |
| OPTIONS | | | | | | | | | | | |
| Transformer | Galvanic isolation transformer at the input & output (internal) | | | | | | | | | | |
| Software | T-Mon Admin Multi UPS monitoring 10-50-100-200 clients, T-Mon Server 50-100-200 clients | | | | | | | | | | |
| Adaptors | SNMP, RS485, Remote monitoring panel, MODBUS (RS485 or TCP/IP), USB Alarm Logger, TCP/IP, GSM/GPRS Modem, Comport multiplexer | | | | | | | | | | |
| Parallel operation | up to 8 units | | | | | | | | | | |