Tescom®

3 phase in / 3 phase out (10kVA - 20kVA)

DS | Power S SERIES

Uninterruptible Power Supplies

IGBT RECTIFIER
DSP CONTROL

The new Tescom DS Power S Series UPS' appear as a cost effective smaller footprint. Using the same topology and control system this series UPS' have the latest DSP technology to be programmed to suit a wide variety of electrical environments without impending its performance. Efficiency, reliability and functionality are enhanced to l evels unattainable with the old analogue technology. This technology does not only create significant increase in MTBF, but the capability of DSP to accurately manipulate signals at very high speed permits all the UPS subsystems to be controlled with greatly increased precision.



ECO FRIENDLY

General Specifications

- Transformerless UPS topology
- Low input current total harmonic distortion (THD)
- High input power factor
- High efficiency up to %94
- Cold start function
- Static and maintenance by-pass switch
- Output short circuit and overload protection
- External REPO switch input
- 192 events memory (192 events 14.400 alarms)
- Clock and calender (battery supported)
- Automatic battery test ,remaining battery time indicator
- Temperature compensated charge system
- Regenerative backfeed function
- 1 RS232 serial port and 3 dry contact outputs (+2 optional)
- 3 DSP controlled modular structure
- Optional SNMP and MODBUS adaptors
- 2 years warranty
- 10 years spare parts support
- Manufactured under CE,ISO9001,ISO14001,TSE AND GOST international standards
- Full digital structure
- Smaller footprint
- Fewer electronic components
- Output current limiting
- Advanced diagnostics for the input
- Selectable input/output voltage/frequency range
- Output DC leakage protection
- Seperate DSP for inverter control
- Seperate DSP for PFC
- 3 level battery protection
- High charge current capacity
- Charge / discharge current indicator
- Advanced remote control features

Reliable Power

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Technical Specifications

MODEL	DS310S	DS315S	DS320S
Power (kVA)	10	15	20
INPUT			
Voltage	220-230-240/380-400-415 VAC 3 phases 4 wires + earth		
Voltage tolerance	± 20% (+15% -25% for 240/415 VAC)		
Frequency	50Hz / 60Hz selectable		
Frequency tolerance	rated input frequency ± 5% (adjustable)		
Power factor	> 0.98		
THDI	< 5%		
Voltage Distortion	< 10%		
Protection	Fuses, Voltage & Frequency Tolerance, Input power limit, Input PFC		
BYPASS			
Voltage	rated output voltage (220-230-240/380-400-415 VAC 3 phases 4 wires)		
Voltage tolerance	± 10%		
Frequency	rated output frequency (50Hz / 60Hz)		
Frequency tolerance	± 2 % normal operation (configurable for Generator Set operation)		
By-pass Protection	Short circuit, Voltage & Frequency tolerance, VAT transfer, Phase sequence		
OUTPUT			
Power (kW)	9	13,5	18
Power factor	0,9		
Voltage	220-230-240/380-400-415 VAC 3 phases 4 wires + earth		
Voltage tolerance	± 1%		
Frequency	50Hz / 60 Hz (selectable)		
Frequency tolerance	Line synchronized ± 2%, free running ± 0,2% (adjustable)		
Protection	Overload, Advanced short circuit, Voltage tolerance (+/- 10%), DC balance, Regenerative load, Current limiting		
Efficiency	up to 94%		
Crest Factor	3:1		
Overload Time	100-125% load 10 minutes, 125-150% 1 min, >150% by-pass (adjustable)		
THD (at 100% linear load)	< 3%		
BATTERIES			
Type	Sealed Lead Acid - Maintenance free		
Quantity	± 30 (60) batteries (selectable)		
Float charging voltage	± 405 V DC (adjustable)		
End of discharge voltage	± 300 V DC (adjustable)		
Battery cabinet	External (attached cabinet at the bottom of UPS)		
Battery ambient temperature	25 °C		
Battery protection	Battery fuses, 3 level alarms, Charge current limit, Temperature compensation, Deep discharge		
Automatic Battery Test	Standard: every 72 hours (adjustable)		
Boost Charge	Available		
STANDARDS			
Safety	EN 62040-1		
EMC	EN 62040-2		
GENERAL			
Human interface	4 lines LCD panel, mimic leds, 5 vector buttons, buzzer		
Alarm Logging	Standard with time and date (192 events, 14.400 alarms), optional 512 events		
Real Time Clock	Standard (reserved battery supported)		
Communication	1 pcs RS232 serial port		
Dry contact relay outputs	3 pcs standard: bypass, line failure, battery low; 2 pcs optional: Aux-1, Aux-2		
Inputs	Emergency stop input, Generator set		
Generator set kit	Standard (programmable)		
Control Software	Standard for 3 clients management +1 server management		
Protection	Fuses, Power module over temperature, Over current, Temperature high alarms		
Measurements	Voltage (P-N, P-P), Frequency, Current, Power (kVA, kW), Crest factor, Power factor, Service time		
Advanced	Self diagnostics, 4 service time indicators, calibration over RS232		
Operating Temperature	0-40 °C		
Protection Degree	IP20		
Humidity / Altitude	90% (non condensed) / <2000m above sea level		
Acoustic noise	< 55 dB	< 57 dB	< 61 dB
Weight (kg.)	42	44	50
Dimensions (mm) HxWxD:	700x300x770 (w/o batt.) / 1085x300x770 (with 5ah batt.) / 1250x300x770 (with 7-9ah batt.)		
OPTIONS			
Adaptors	SNMP, MODBUS, RS485, Remote panel		
Batteries	continous battery test system		
Software	T-MON Admin multi UPS monitoring,T-MON Server 10-50-100-200 clients - DLOG log loader		
Parralel Operation	Not Available		

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CE