UPS Datasheet

DALE POWER SOLUTIONS

E700E

3:3 10-600kVA

FEATURES

TOWER UPS

ENGINEER INSTALLATION

USB CONNECTIVITY

HIGHLIGHTS

- Three level inverter topology, the efficiency >95%.
- Wide input voltage range 184-276Vac Phase to Neutral
- Fully digitised DSP control
- Flexible battery configuration supporting 32-40 blocks per string
- Cold start and programmable auto re-start functions
- Up to 4 units can operate in parallel
- Smart RS232 and USB comms with monitoring software
- Automatic battery charge in UPS off mode
- Automatic fan speed control with load variation
- LBS function can connect 2 independent groups of UPS systems to work in synchronisation, enhances the reliability of the system.

The E700E series is ideal for protecting data centres and telecommunications systems, IT networks and critical systems in general, where the risks connected with poor energy supply can compromise the continuity of activities and services. The E700E series is available in 10-15-20-30-40-60-80-100-120-160-200-300-400-500-600 kVA models with three-phase input and output and on-line double conversion technology in accordance with VFI-SS-111 classification (as set out in standard IEC EN 62040-3).

The E700E is designed and built using state-of-the-art technology and components. It has a fully controlled IGBT rectifier to minimize the impact on the grid. It is controlled by a DSP (Digital Signal Processor) microprocessor, to provide maximum protection to the powered loads with no impact on downstream systems, and optimised energy savings.

ZERO IMPACT SOURCE

The E700E solves installation problems in systems where the power supply has limited power available, where the UPS is supported by a generator or where there are compatibility problems with loads that generate harmonic currents; the E700E has a zero impact on its power source, whether this is the mains power supply or a generator:

- input current distortion < 5%
- input power factor ≥0.99
- power walk-in function that ensures progressive rectifier start up.

In addition, the E700E plays a filtering and power factor correction role in the power network upstream of the UPS, as it eliminates harmonic components and reactive power generated by the power utilities.

MAXIMUM RELIABILITY AND AVAILABILITY

Distributed parallel configuration of up to 4 units per redundant (N+1) or power parallel system. The UPS system will continue to operate in parallel even if one of the connection cables is interrupted (Closed Loop).

ADVANCED COMMUNICATIONS

The E700E is equipped with LCD and LED providing UPS information, measurements, operating states and alarms in different languages.

The default screen displays UPS status, graphically indicating the status of the various assemblies (rectifier, batteries, inverter, bypass).

- RS232 and RS485 ports
- 2 slots for the installation of optional communications accessories such as SNMP and Volt-Free Relay Cards
- REPO Remote Emergency Power Off for switching off the UPS via a remote emergency button
- Input for the connection of the auxiliary contact of an external manual bypass

FLEXIBILITY

With its flexible configuration, performance, accessories and options, The E700E series is suitable for use in a wide range of applications:

- Suitable for powering capacitive loads, such as blade servers, without any reduction in active power from 0.9 lead to 0.9 lag
- Frequency converter mode
- Cold Start to switch on the UPS even when there is no mains power present
- High power battery chargers to optimise charge time in the event of long runtimes

MODEL	E73310E	E73315E	E73320E	E73330E	E73340E
OVERVIEW					
Active power (kVA)	10kVA	15kVA	20kVA	30kVA	40kVA
Active power (kW)	9kW	13.5kW	18kW	27kW	36kW
INPUT					
Nominal Voltage	380 / 400 / 415Vac (3Ph + N + PE)				
Operating voltage range	184-276VAC				
Operating frequency range	40-70Hz				
Power Factor	>0.99				
OUTPUT					
Output voltage	380 / 400 / 415Vac (3Ph + N + PE)				
Power Factor	0.9pf				
Output Frequency	50-60Hz User Adjustable				
Crest Factor	3:1				
Harmonic Distortion (THD)	≤2% with Linear load, ≤5% with Non-Linear load				
Efficiency	>95%				
BATTERY					
DC Voltage	384/408/432/456/480VDC				
Battery Quantity	32/34/36/38/40 12V Blocks				
Charge Current	6A			10A	
Recharge Time	Variable based on Internal or External battery Capacity				
SYSTEM FEATURES					
Transfer time	0ms				
Overload	<110% 60min/<125% 10min/150% 1min/>150% Immediate Shutdown				
Alarm	Overload, Mains Abnormal, UPS Fault, Battery Low etc.				
Protections	Short Circuit, Overload, Overtemperature, Battery Low				
Communications	Standard RS485/RS232/Parallel Port / E-SNMP/4 (Internal) (Optional) / E-RELAY/4 (Optional)				
ENVIRONMENT					
Operating temperature	0-40°C				
Relative Humidity	0-95%				
Altitude	<1500m				
Noise Level	<60dB				
Heat Loss	0.42kW	0.64kW	0.85kW	1.27kW	1.70kW
PHYSICAL					
Net Weight	123kg	126kg	127kg	127kg	158kg
Dimensions (H x W x D)	1200 x 600 x 780 mm				
SAFETY & EMC					
Standards	EN62040-1-1; EN62040-2; IEC60950; CE				

MODEL	E73360E	E73380E	E733100E	E733120E	E733160E
OVERVIEW					
Active power (kVA)	60kVA	80kVA	100kVA	120kVA	160kVA
Active power (kW)	54kW	72kW	90kW	108kW	144kW
INPUT					
Nominal Voltage	380 / 400 / 415Vac (3Ph + N + PE)				
Operating voltage range	184-276VAC				
Operating frequency range	40-70Hz				
Power Factor	>0.99				
OUTPUT					
Output voltage	380 / 400 / 415Vac (3Ph + N + PE)				
Power Factor	0.9pf				
Output Frequency	50-60Hz User Adjustable				
Crest Factor	3:1				
Harmonic Distortion (THD)	≤2% with Linear load, ≤5% with Non-Linear load				
Efficiency	>95%				
BATTERY					
DC Voltage	384/408/432/456/480VDC				
Battery Quantity	32/34/36/38/40 12V Blocks				
Charge Current	12A			24A	
Recharge Time	Variable based on Internal or External battery Capacity				
SYSTEM FEATURES					
Transfer time	0ms				
Overload	<110% 60min/<125% 10min/150% 1min/>150% Immediate Shutdown				
Alarm	Overload, Mains Abnormal, UPS Fault, Battery Low etc.				
Protections	Short Circuit, Overload, Overtemperature, Battery Low				
Communications	Standard RS485/RS232/Parallel Port / E-SNMP/4 (Internal) (Optional) / E-RELAY/4 (Optional)				
ENVIRONMENT					
Operating temperature	0-40°C				
Relative Humidity	0-95%				
Altitude	<1500m				
Noise Level	<60dB				
Heat Loss	2.54kW	3.39kW	4.24kW	5.09kW	6.79kW
PHYSICAL					
Net Weight	158kg	195kg	286kg	288kg	348kg
Dimensions (H x W x D)	1200 x 600 x 780 mm			1600 x 600 x 780 mm	
SAFETY & EMC					
Standards	EN62040-1-1; EN62040-2; IEC60950; CE				

MODEL	E733200E	E733300E	E733400E	E733500E	E733600E
OVERVIEW					
Active power (kVA)	200kVA	300kVA	400kVA	500kVA	600kVA
Active power (kW)	180kW	270kW	360kW	450kW	540kW
INPUT					
Nominal Voltage	380 / 400 / 415Vac (3Ph + N + PE)				
Operating voltage range	184-276VAC				
Operating frequency range	40-70Hz				
Power Factor	>0.99				
OUTPUT					
Output voltage	380 / 400 / 415Vac (3Ph + N + PE)				
Power Factor	0.9pf				
Output Frequency	50-60Hz User Adjustable				
Crest Factor	3:1				
Harmonic Distortion (THD)	≤2% with Linear load, ≤5% with Non-Linear load				
Efficiency	>95%				
BATTERY					
DC Voltage	384/408/432/456/480VDC				
Battery Quantity	32/34/36/38/40 12V Blocks				
Charge Current	50A	80A	100A	130A	180A
Recharge Time	Variable based on Internal or External battery Capacity				
SYSTEM FEATURES					
Transfer time	0ms				
Overload	<110% 60min/<125% 10min/150% 1min/>150% Immediate Shutdown				
Alarm	Overload, Mains Abnormal, UPS Fault, Battery Low etc.				
Protections	Short Circuit, Overload, Overtemperature, Battery Low				
Communications	Standard RS485/RS232/Parallel Port / E-SNMP/4 (Internal) (Optional) / E-RELAY/4 (Optional)				
ENVIRONMENT					
Operating temperature	0-40°C				
Relative Humidity	0-95%				
Altitude	<1500m				
Noise Level	<60dB				
Heat Loss	8.48kW	12.72kW	16.96kW	21.20kW	28.27kW
PHYSICAL					
Net Weight	380kg	600kg	815kg	860kg	860kg
Dimensions (H x W x D)	1200 x 600 x 850 mm		2000 x 1200 x 850 mm		
SAFETY & EMC					
Standards	EN62040-1-1; EN62040-2; IEC60950; CE				

DALE
POWER SOLUTIONS

Looking for something more bespoke?

With our own purpose-built, manufacturing facility, we're a one-stop shop for our customers providing design consultancy, manufacture and ongoing maintenance for our products.

What we do

- An end-to-end service - design, manufacture, install, commissioning and servicing
- Experts in customised UPS solutions
- In-house mechanical and electrical design capability
- Solutions for any environment, application and location
- Industry-specific solutions including WIMES specified and PADS Approved UPS
- In-house project management team to manage the development and delivery of your product for exactly when you need it.

Get in touch with our team today to discuss your requirements.

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Your power in safe hands