UPS Datasheet

DALE POWER SOLUTIONS

E700B

3:3 10-40kVA

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
- In Built battery system supporting runtimes of up to 1 hour at full load dependent on model.
- Automatic fan speed control with load variation

The E700B 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 E700B series is available in 10-15-20-30-40 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 E700B 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 E700B 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 E700B 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 E700B 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).

FLEXIBILITY

With its flexible configuration, performance, accessories and options, The E700B 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

ADVANCED COMMUNICATIONS

The E700B 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

BUILT-IN BATTERY BACKUP

With the built in battery system, The E700B can provide up to 60 minutes backup time at full load on a 10kVA UPS system.

MODEL	E73310B	E73315B	E73320B	E73330B	E73340B
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					
Battery Model	12V 38Ah				
DC Voltage	384/408/432/456/480VDC (Internal Battery 432VDC)				
Battery Quantity	32/34/36/38/40 12V Blocks (Internal Battery 36x 12V Blocks)				
Backup At Half Load	150 Minutes	90 Minutes	60 Minutes	35 Minutes	25 Minutes
Backup At Full Load	60 Minutes	35 Minutes	25 Minutes	12 Minutes	8 Minutes
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	591kg	594kg	595kg	595kg	626kg
Dimensions (H x W x D)	1200 x 600 x 780 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