AC IGBT
UPS Datasheet - 1 Phase Output

ERSKINE
by DALE POWER SOLUTIONS

UP7011 5 - 160kVA

IGBT Based Industrial UPS

Built for Demanding Industrial Applications

IGBT RECTIFIER

High efficiency rectifier with low harmonic distortion, improved power factor and grid feedback battery testing allowing the battery capacity to be tested without the need of external load bank.

INTELLIGENT CONTROL

Advanced control technology continuously optimises performance, ensuring stable power correction and reliable UPS operation.

OPEN PROTOCOL

Open protocol allows users to access diagnostics and services without proprietary restrictions or manufacturer log-in.

Custom Engineering

Every system is engineered to meet the exact requirements of the application. This approach ensures optimal performance, reliability, and seamless integration on site.

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Standard Specifications - AC Input	
Supply Phase & Voltage	Three phase 400VAC - special voltages also available on request
Supply Voltage Variation	± 10%
Supply Frequency	50 / 60Hz
Supply Frequency Variation	± 5% to meet output specification
Supply Power Factor	0.99
Supply Power Distortion	≤ 5% THD

Standard Specifications - UPS Output	
Output Voltage	230VAC AC single phase, neutral with protective earth
Static Voltage Regulation	± 1% for 0 - 100% load variation ± 2% for 100% unbalanced load
Dynamic Voltage Regulation	± 4% for 100% load step, 4mS recovery to within static limits
Overload Capability	150% for 1 minute, 125% for 10 minutes, 110% for 20 minutes
Short Circuit Capability	2 x rated output current for 5 seconds
Waveform	Sinusoidal
Distortion	<3% with linear load
Crest Factor (Load Current):	<2.3 at 100% rated load
Frequency	50Hz with option for 60Hz, +/-0.1% controlled or synchronised to the bypass supply
Load Power Factor Range:	0 lag to 0 lead, output power de-rated if power factor deviates from 0.8 lag

Mechanical Specifications	
Protection Rating	IP20-IP42 according to EN 60529
Enclosure Finish	Light grey RAL7035 textured
Cooling	Natural or fan assisted cooling dependant on rating
Audible Noise Level	50 - 70dBA dependant on rating and load
Cable Entry	Top, bottom or custom arrangements available

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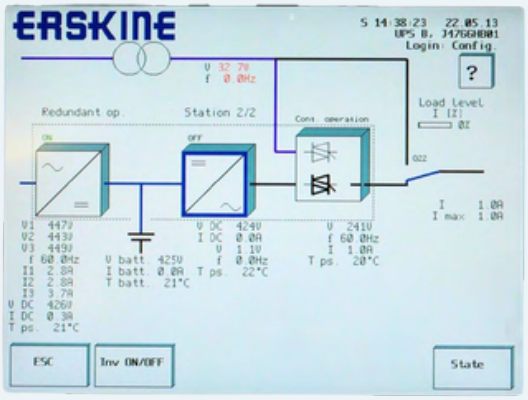
General	
Operating & Storage Temperature Range	+5°C to +40°C
Operating Temperature De-Rate	Up to 45°C with a derate of 10%
Operating Altitude	0 to 1000m
Operating Humidity	5% to 85% RH - Non-condensing
Safety	BS EN 62040-1
EMC	BS EN 62040-2

TFT Instrumentation Monitoring	
System Overview	The UPS user interface provides indication of measured UPS operating values. The settings can be changed and operating mode selected. The flow of power through the UPS is displayed on a multi-coloured mimic display with colour coded symbols. Measured values are displayed alongside the associated measurement points. A three level password system protects the UPS configuration against unauthorised changes.
Measurements	• Rectifier input voltage, input frequency, output voltage & current • Battery terminal voltage, current & charge state • Inverter input voltage & current, output voltage & frequency, power section temperature • Bypass input voltage & frequency • UPS output voltage, current & frequency
Event History Log Capacity	512 events
Display Example	

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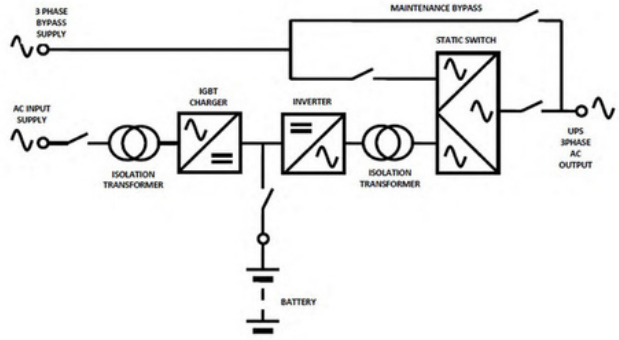
Standard Range 220V DC Bus & 372V DC Bus				
Ratings (kVA)	220V DC Bus		372V DC Bus	
	Dimensions (mmH x mmW x mmD) *	Weight (Kg)	Dimensions (mmH x mmW x mmD) *	Weight (Kg)
5	2000 x 800 x 800	400	2000 x 800 x 800	400
7.5	2000 x 800 x 800	430	2000 x 800 x 800	430
10	2000 x 1000 x 800	460	2000 x 1000 x 800	460
15	2000 x 1000 x 800	570	2000 x 1000 x 800	570
20	2000 x 1000 x 800	620	2000 x 1000 x 800	620
30	2000 x 1000 x 800	780	2000 x 1000 x 800	780
40	2000 x 1200 x 800	980	2000 x 1000 x 800	980
50	2000 x 1200 x 800	1105	2000 x 1200 x 800	1105
60	2000 x 1800 x 800	1170	2000 x 1600 x 800	1170
80	2000 x 2000 x 800	1560	2000 x 2000 x 800	1560
100	2000 x 2200 x 800	1790	2000 x 2200 x 800	1790
120	2000 x 2200 x 800	2060	2000 x 2200 x 800	2060
160	2000 x 2400 x 800	2350	2000 x 2400 x 800	2350
200	2000 x 3200 x 800	2700	2000 x 3200 x 800	2700

*UPS only without options

OPTIONS

- Bypass isolation transformer
- Bypass automatic voltage regulators
- Additional analogue metering
- Extra configurable remote alarm relay contacts (6 included as standard)
- Special AC input and output voltages
- Increased rectifier ratings for higher charger currents
- Customer specific distribution isolators, circuit breakers or fuses
- Charger and/or battery isolation
- Anti condensation heaters
- Dual and parallel configurations
- Panel lighting
- Special DC bus voltages available
- Battery charge voltage temperature compensation (NTC)
- Different battery technologies i.e. VRLA, vented lead acid or NiCad
- Battery autonomies to suit customer requirements
- Battery voltage imbalance alarm
- Battery boxes and stands
- Battery fuse boxes
- Increased panel protection ratings up to a maximum of IP42
- Custom enclosure paint colours
- Remote monitoring and control via Modbus or Profibus

Single Line Diagram



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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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