## PRODUCT INFORMATION



### PEAK POWER SUPPORT - PUNCH POWER 200 FLYWHEEL



Designed to support peak loads such as tower cranes and hoists, the Flywheel uses Formula One technology to store and distribute energy, enabling you to save fuel by significantly downsizing generators, while still ensuring uninterrupted power.

### When to use Peak Power Support?

If your site has dynamic loads that require short but very high bursts of power (hoists & tower cranes).

### What savings can I expect?

An PPS system will enable you to downsize your generator, lower your emissions and significantly reduce fuel consumption often resulting in cost savings.

### **General Description**

- Electrically Connected Flywheel Energy Storage System allowing 200kVA generator downsizing based on 2Hz frequency variation.
- System response to load in less than 0.03 seconds and can sustain 85kW load requirement for 5 seconds, assisting generator to reach continuous load requirement.
- Power Factor Correction and Power Monitoring options at current ratings of 74A, 124A and 197A continuous.
- · Three-pole circuit breaker
- Connection terminal 125A IEC or 500A Powersafe options
- · Access door panels to serviceable items
- Fork and frame protection pads
- Fixed central lifting eye
- · Forklift Pockets
- · Reinforced drag points
- · Zintec steel canopy
- · HD door hinges and locking handles
- IP67 DSE M840 HMI with user-friendly GUI
- Remote communication, monitoring, control & diagnostics

General Characteristics	
Energy Storage system ref.	600S
Motor ref.	4PLSES250ME
Canopy	200/600S
Frequency (Hz)	50/60
Voltage (V)	400/480
Standard Control Panel	DSE M840
Operating Temperature (°C)	-20 to +45
Weight (kg)	1,170 to 1,240

Dimensions	
Length (mm)	1600
Width (mm)	1200
Height (mm)	1508

Sound Levels	
Acoustic pressure level @ 1m in dB(A) 50Hz (60% Speed)	68
Acoustic pressure level @ 7m in dB(A) 50Hz (60% Speed)	58

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Oil/Cooling System	
Oil system capacity (l)	3.0
Oil sump capacity (l)	1.0

### **Electrical Connections**

1 x 125A three phase IEC form plug, MCB protected. Custom distribution options available upon request

Motor Characteristics	
Motor manufacturer	NIDEC
Motor ref.	4PLSES250ME
Number of phases	Three phase
Maximum speed (rpm)	4,050
Number of poles	4
Coupling	Direct
Indication of protection	IP55
Technology	Induction
Voltage (V)	400/415
Rated Frequency (Hz)	50-60
Continuous Nominal Rating (kW)	55
Peak Power Rating (kW)	85
Peak Power Rate (kW/s)	2,500
Load Reaction Time (ms)	<30
Efficiency Class	IE3
Weight (kg)	350
Frame Size	250ME

### **Power Definition**

Peak Power: Peak Power is available for an unlimited number of transient events and up to 80,000 operational hours.

Energy Storage Module	
Manufacturer	PUNCH Flybrid
Model	600S
Life Expectancy (cycles)	10,000,000+
Weight (kg)	95



### **General Description**

- The PP200 system utilises an IP67 DSE M840 4.3" programmable display complete with a custom PUNCH Flybrid GUI to provide easy to use operation and robust operation.
- · Standard specifications: Active power, Voltage,
- · Frequency readings.
- · Alarms and faults: Oil pressure, Oil temperature,
- · Vacuum, Emergency stop button.
- Energy Storage Module parameters: State of Charge (%), Oil Pressure, Oil Temperature, Vacuum Level
- · CANbus ECU control
- $\boldsymbol{\cdot}$  Event log management and diagnostics.
- Communications: Ethernet/USB Interface
- · Optional: Remote control (3G/4G), data logging

Maintenance	
Oil & Filters Service Interval (months)	12

### Warranty

2 Years or 6.600 hours

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### **Dimensions**

