

GENERATOR STARTING SOLUTIONS: 2-TERMINAL SERIES

FEATURES AND BENEFITS

- Uses ultracapacitor technology. No lead. No acid.
- Consistent power from -40°F to +149°F (-40°C to +65°C)
- No electrolyte maintenance, ever
- Configurable for generator sets from 15kW to 2 MW+

TYPICAL APPLICATIONS

- Ensures starting reliability for generator sets in critical/Level 1 sites such as hospitals, hotels, data centers, server farms and more



PRODUCT SPECIFICATIONS

| ELECTRICAL | GEN 31-0900-12V-2T | GEN 31-1800-12V-2T | GEN 31-0900-24V-2T | GEN 31-0980-24V-2T |
|---------------------------------|---|---|---|---|
| Number of Terminals | 2 | 2 | 2 | 2 |
| Charger Type | External | External | External | External |
| Starter Voltage | 12 V | 12 V | 24 V | 24 V |
| Operating Voltage - Min/Max | 7.2 V/16.2 V | 7.2 V/16.2 V | 14.4 V/27.0 V | 14.4 V/27.0 V |
| Module Capacitance | 500 F | 1,000 F | 300 F | 340 F |
| ESR | 0.004 Ω | 0.002 Ω | 0.004 Ω | 0.004 Ω |
| Peak Power ¹ | 16.4 kW | 32.8 kW | 45.6 kW | 45.6 kW |
| Total Energy ² | 18.2 Wh | 36.5 Wh | 30.4 Wh | 34.4 Wh |
| Cold Cranking Amps ³ | 900 CCA | 1800 CCA | 900 CCA | 980 CCA |
| Weight per Module | 13.0 lbs/5.9 kg | 18.5 lbs/8.4 kg | 16.5 lbs/7.5 kg | 17.5 lbs/7.9 kg |
| Terminals Type and Number | SAE 3/8"-16UNC, 2 each | SAE 3/8"-16UNC, 2 each | SAE 3/8"-16UNC, 2 each | SAE 3/8"-16UNC, 2 each |
| Environmental | SAE J1455, RoHS 2002/95/EC | SAE J1455, RoHS 2002/95/EC | SAE J1455, RoHS 2002/95/EC | SAE J1455, RoHS 2002/95/EC |
| Safety | UL2200 | UL2200 | UL2200 | UL2200 |
| BCI Group Size/Dimension | Group 31 / 13" L x 6 13/16" W x 9 7/16" H (330mm L x 173mm W x 240mm H) | Group 31 / 13" L x 6 13/16" W x 9 7/16" H (330mm L x 173mm W x 240mm H) | Group 31 / 13" L x 6 13/16" W x 9 7/16" H (330mm L x 173mm W x 240mm H) | Group 31 / 13" L x 6 13/16" W x 9 7/16" H (330mm L x 173mm W x 240mm H) |
| Operating Temperature Range | -40°F to +149°F (-40°C to +65°C) | -40°F to +149°F (-40°C to +65°C) | -40°F to +149°F (-40°C to +65°C) | -40°F to +149°F (-40°C to +65°C) |

GENERATOR STARTING SOLUTIONS: 3-TERMINAL SERIES

FEATURES AND BENEFITS

- Uses ultracapacitor technology. No lead. No acid.
- Consistent power from -40°F to +149°F (-40°C to +65°C)
- No electrolyte maintenance, ever
- Internal charger keeps GSS module fully charged

TYPICAL APPLICATIONS

- Ensures starting reliability for towable generator sets up to 16 liters displacement



PRODUCT SPECIFICATIONS

| ELECTRICAL | ULTRA 31/900 | ULTRA 31/1800 | ULTRA 31/900/24V | ULTRA 31/1100/24V |
|---------------------------------|--|--|--|--|
| Number of Terminals | 3 | 3 | 3 | 3 |
| Charger Type | Internal | Internal | Internal | Internal |
| Starter Voltage | 12 V | 12V | 24 V | 24V |
| Operating Voltage - Min/Max | 7.2 V/16.2 V | 7.2 V/16.2 V | 14.4 V/27.0 V | 14.4 V/28.5 V |
| Module Capacitance | 500 F | 1,000 F | 300 F | 340 F |
| ESR | 0.004 Ω | 0.002 Ω | 0.004 Ω | 0.004 Ω |
| Peak Power ¹ | 16.4 kW | 32.8 kW | 45.6 kW | 50.8 kW |
| Total Energy ² | 18.2 Wh | 36.5 Wh | 30.4 Wh | 38.4 Wh |
| Cold Cranking Amps ³ | 900 CCA | 1800 CCA | 900 CCA | 1100 CCA |
| Weight per Module | 13.5 lbs/6.2 kg | 19.0 lbs/8.7 kg | 17.0 lbs/7.8 kg | 18.0 lbs/8.2 kg |
| Terminals Type and Number | SAE 3/8"-16UNC, 3 each | SAE 3/8"-16UNC, 3 each | SAE 3/8"-16UNC, 3 each | SAE 3/8"-16UNC, 3 each |
| Environmental | SAE J1455, RoHS 2002/95/EC | SAE J1455, RoHS 2002/95/EC | SAE J1455, RoHS 2002/95/EC | SAE J1455, RoHS 2002/95/EC |
| BCI Group Size/Dimension | Group 31 / 13" L x 6 13/16" W x 9 7/16" H (330mm L x 173mm W x 240mm H) | Group 31 / 13" L x 6 13/16" W x 9 7/16" H (330mm L x 173mm W x 240mm H) | Group 31 / 13" L x 6 13/16" W x 9 7/16" H (330mm L x 173mm W x 240mm H) | Group 31 / 13" L x 6 13/16" W x 9 7/16" H (330mm L x 173mm W x 240mm H) |
| Operating Temperature Range | -40°F to +149°F (-40°C to +65°C) | -40°F to +149°F (-40°C to +65°C) | -40°F to +149°F (-40°C to +65°C) | -40°F to +149°F (-40°C to +65°C) |

FOOTNOTES

1. Peak Power = $V_{max}^2 / 4 \times ESR$

2. Total Energy = $1/2 \times C \times V_{max}^2 / 3,600$

3. CCA = $C \times (V_{max} - V_{min}) / (T + C \times ESR)$ where T = 3 seconds

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