

CAPACITOR SINGLE PHASE GENERATORS

Basic Model 201CSA5411

Date: 8/18/11

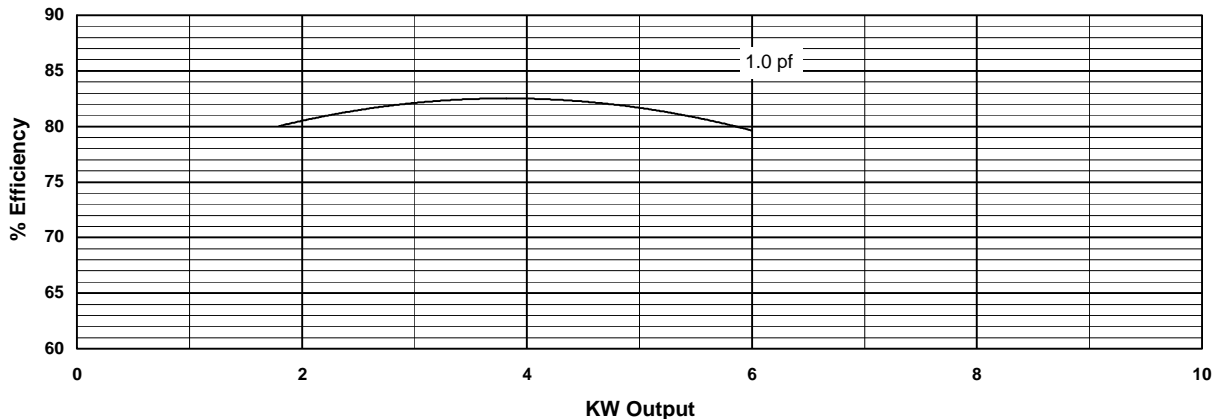
TYPICAL SUBMITTAL DATA

| | | | |
|----------------------|-----------------------|-----------------------------|---------|
| Kilowatt ratings at | 1800 RPM | 60 Hertz | 4 Leads |
| kW (kVA) | 1 Phase | Dripproof or Open Enclosure | |
| P.F. Volts | Class B | Class F | |
| | 80 °C ① Continuous | 105 °C ① Continuous | |
| 1.0 P.F. 120/240V | 5.4 (5.4) | 6.0 (6.0) | |

① Rise by resistance method, Mil-Std-705, Method 680.1b.

| MIL-Std-705B | | | MIL-Std-705B | | |
|--------------|--------------------------------------|------------|--------------|---|------------|
| Method | Description | Value | Method | Description | Value |
| 302.1a | High Potential Test | | 601.4a | L-L Harmonics Max. - Total (Distortion Factor) | 27% |
| | Main Stator | 1500 volts | | | |
| | Main Rotor | 1500 volts | 601.4a | L-L Harmonics Max. - Single | 25% |
| 401.1a | Stator Resistance, Line to Line | | --- | Coupling - Single Bearing | Flexible |
| | L-L 240V Connection | 0.703 ohms | --- | Maximum Vibration | |
| | Rotor Resistance | 1.200 ohms | | Single Bearing | 0.002 in |
| | E1-E4 Winding Resistance | 1.832 ohms | | Double Bearing | 0.001 in |
| 415.0a | Rated Load Efficiency at 105°C Cont. | 80.3% | --- | Generator Frame | 201 |
| 505.3b | Overspeed | 2250 RPM | --- | Insulation | Class F |
| | | | --- | Capacitor Rating | 450V, 25µF |

TYPICAL GENERATOR EFFICIENCY



Application Guidelines The Marathon Electric capacitor generators are designed to minimize the length of the generator package. They utilize a capacitor excitation system which succeeds in eliminating the extra generator length associated with a brushless exciter. Since the capacitor winding is excited from the negative sequence voltage, there must be some harmonics present to provide this form of generator excitation. Because of the intrinsic harmonic content of the voltage waveform, this product is not recommended for uses where waveform distortion is of concern. The motor starting capability of this capacitor generator is also significantly less than a comparable transformer or electronically regulated generator. Primary use of this product is to power incandescent lighting, while providing a small amount of auxiliary power (total kW not to exceed rated kW).