ECM Technology

These 51 frame unit bearing motors are primarily used in commercial refrigeration applications, both evaporator and condenser, but can be used in any application demanding high efficiency and dependability with output ratings between 4 – 12 watts and 13 – 23 watts. These motors significantly outperform both shaded pole and PSC technology. With efficiencies three times higher than shaded pole motors and 45% higher than PSC, in addition to the reliable and quiet unit bearing design, they provide users great reliability and excellent energy savings for their applications.

Environmental Summary:
- Storage Temps: -40 to 80° C ambient
- Operating Temps: -40 to 55° C ambient
- Design Life: 10 years, 83,720 hours on time

Mechanical Summary:
- 3.3” Electronically commutated aluminum or cast iron unit bearing
- 1/4” x 20 threaded shaft
- Aluminum enclosure (totally enclosed)
- Five .150” diameter cored mounting holes on rear
- Horizontal shaft (+/- 15°) or vertical shaft up operating position
- Standard 18 gauge, 2 conductor leads
- Lead cord may be terminated with 1/2” stripped wire, in-house molded plugs, eyelets, 1/4” quick connects, or special terminals
- RoHS compliant

Applications:
- Bottle coolers
- Display cases
- Reach-In coolers
- Vending machines

Features:
- Output 4 – 12W and 13 – 23W
- ~66% peak efficiency
- Speed regulated within +/-6%
- Regulated speed: +/-6% Full Scale
- 1 Discrete speed
- 51fr Unit bearing motor; cast aluminum frame
- Side pedestal mounting feet (2 sets standard)
Unit Bearing Motors / OEM Direct Replacement Motors

51 Frame Motors For Domestic Refrigeration

Features:
- Single phase, shaded pole
- Fan duty, continuous, air over
- Class A insulation
- 60/50 Hertz
- Impedance protected
- For accessories see pages M-44 – M-46

<table>
<thead>
<tr>
<th>MARS NO.</th>
<th>GE NO. 5KS</th>
<th>WATTS</th>
<th>ROT OSE</th>
<th>VOLTS</th>
<th>AMPS</th>
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<td>2</td>
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Tyler Refrigeration OEM Direct Replacement Refrigeration Motors

Features:
- Universal 5 hole rear mount
- Dual mounting pads

EM&S PSC Type Replacement For GE

Features:
- Drop-in replacement
- Single phase PSC
- Fan duty, continuous, air over
- Low temp oil
- Reliable unit bearing
- Internal capacitor

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<th>MARS NO.</th>
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Copeland OEM Direct Replacement Refrigeration Motors

Features:
- Single speed
- Cast iron
- Single foot pad, horizontal only
- Automatic thermal protection

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<tr>
<th>MARS NO.</th>
<th>WATTS</th>
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1660 RPM 1/4” – 20 Threaded

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* 00117 replaces Hussmann SVC 441-302