

# INDUCTION MOTOR DATA

**Siemens Industry, Inc.  
Norwood, Ohio**

Customer : East Coast Electrical  
 Serial No. : 3006926945-10, -20  
 Document No. : 3006926945-10,20\_1250HP\_DS  
 Revision : AA

## SPECIFIED REQUIREMENTS

Horsepower : 1250  
 Service Factor : 1.15  
 Voltage : 2300 / 4000  
 Number of Phases : 3  
 Frequency, hertz : 60  
 Ambient, °C : 40  
 Enclosure : WP11  
 Synchronous Speed, RPM : 3600  
 Percent Starting Voltage : 90  
 Maximum Elevation (ft) : 3300

## FRAME DATA

Frame : 5810S  
 Type : CG11  
 Rotor Construction : Fabricated Copper Bar  
 Load Inertia (wk2), lb-ft2 : -  
 Rotor Inertia (wk2), lb-ft2 : 176.6  
 Rotor Weight, lbs : 1169  
 Motor Weight, lbs : 6450  
 Stator Temp. Rise : 80 by RES @ 1SF  
 Sound Pressure Level : 82dBA @ 3ft, unloaded  
 Insulation Class : F-VPI  
 Bearing Type : Sleeve

## PERFORMANCE DATA

|                              |           |                           |      |
|------------------------------|-----------|---------------------------|------|
| Full Load Speed, RPM :       | 3580      | Full Load Torque, lb-ft : | 1834 |
| Current, Amps :              | 268 / 155 | Starting Torque, %FLT :   | 98   |
| Locked Rotor Current, %FLA : | 768       | Breakdown Torque, %FLT :  | 276  |
| kVA/HP :                     | 6.60      | kVA Code :                | H    |

|                        | <u>0.25</u> | <u>0.50</u> | <u>0.75</u> | <u>Full</u> | <u>1.15</u> | <u>No</u>   | <u>Locked</u> |
|------------------------|-------------|-------------|-------------|-------------|-------------|-------------|---------------|
|                        | <u>Load</u> | <u>Load</u> | <u>Load</u> | <u>Load</u> | <u>Load</u> | <u>Load</u> | <u>Rotor</u>  |
| Percent Efficiency :   | 92.3        | 95.0        | 95.6        | 95.5        | 95.3        | N/A         | N/A           |
| Percent Power Factor : | 69.9        | 85.5        | 89.7        | 90.9        | 91.0        | 7.3         | 16.0          |
| Wye Current, Amps :    | 52.2        | 82.8        | 117.7       | 155.0       | 178.3       | 34.2        | 1190          |
| Delta Current, Amps :  | 90.4        | 143.4       | 203.9       | 268.5       | 308.9       | 59.3        | 2062          |

|                                 | <u>100</u> | <u>90</u> | <u>% Voltage</u> | <u>RTD Settings (°C):</u> | <u>Alarm</u> | <u>Shutdown</u> |
|---------------------------------|------------|-----------|------------------|---------------------------|--------------|-----------------|
| Safe Stalled Time, Motor Hot :  | 7          | 9         | Seconds          | <u>Stator:</u>            | 155          | 170             |
| Safe Stalled Time, Motor Cold : | 8          | 11        | Seconds          | <u>Bearings:</u>          | 100          | 105             |
| Acceleration Time :             | -          | -         | Seconds          |                           |              |                 |

Time Constants : 2.103 Seconds Open Circuit  
 0.070 Seconds Short Circuit (AC)  
 X/R Ratio : 16.603

Prepared by I Niggebrugge on 12/19/17

Please Note : 1. Guaranteed values are indicated in (GUAR).  
 2. Suitable for Class 1, GRP B C D , Div 2, Temp. 200°C, Oper. Code T3.