

# TECO Westinghouse

|                            |   |                           |
|----------------------------|---|---------------------------|
| ISSUED<br><b>8/29/2014</b> | <b>PERFORMANCE DATA</b><br><b>3-PHASE INDUCTION MOTOR</b> | ENCLOSURE<br><b>TEFC</b>  |
| TYPE<br><b>AEHH</b>        |   | CATALOG#<br><b>HH0504</b> |

### NAMEPLATE INFORMATION

| OUTPUT    |             | POLE     | FRAME SIZE  | VOLTAGE    | HZ        | RATED AMBIENT | INS. CLASS | NEMA DESIGN | TIME RATING  | SERVICE FACTOR |
|-----------|-------------|----------|-------------|------------|-----------|---------------|------------|-------------|--------------|----------------|
| HP        | KW          |          |             |            |           |               |            |             |              |                |
| <b>50</b> | <b>37.3</b> | <b>4</b> | <b>326T</b> | <b>460</b> | <b>60</b> | <b>40°C</b>   | <b>F</b>   | <b>B</b>    | <b>CONT.</b> | <b>1.15</b>    |

### VARIABLE FREQUENCY DRIVE SERVICE

|                 |                  |                |                    |  |               |               |               |                |
|-----------------|------------------|----------------|--------------------|--|---------------|---------------|---------------|----------------|
| VARIABLE TORQUE |                  |                |                    | OHMS/PHASE EQUIVALENT WYE CIRCUIT<br>(AT RATED OPERATING TEMPERATURE 25°C) |               |               |               |                |
| HZ              | HP               | RPM            | TORQUE (lb-ft)     | R1   | R2            | X1            | X2            | X <sub>m</sub> |
| <b>3~60</b>     | <b>0.0063~50</b> | <b>90~1800</b> | <b>0.368~148.3</b> | <b>0.0632</b>  | <b>0.1436</b> | <b>0.3803</b> | <b>0.8707</b> | <b>18.415</b>  |

| CONSTANT TORQUE |             |                 |                | CONSTANT HORSEPOWER |           |                  |                    |
|-----------------|-------------|-----------------|----------------|---------------------|-----------|------------------|--------------------|
| HZ              | HP          | RPM             | TORQUE (lb-ft) | HZ                  | HP        | RPM              | TORQUE (lb-ft)     |
| <b>6~60</b>     | <b>5~50</b> | <b>180~1800</b> | <b>148.3</b>   | <b>60~90</b>        | <b>50</b> | <b>1800~2700</b> | <b>148.3~98.87</b> |

### TYPICAL PERFORMANCE

| FULL LOAD RPM | EFFICIENCY  |             |            |            | POWER FACTOR |            |             | SOUND PRESSURE LEVEL @ 3 FT Db(A) |
|---------------|-------------|-------------|------------|------------|--------------|------------|-------------|-----------------------------------|
|               | FULL LOAD   |             | 3/4 LOAD % | 1/2 LOAD % | FULL LOAD %  | 3/4 LOAD % | 1/2 LOAD %  |                                   |
|               | MIN.%       | NOM.%       |            |            |              |            |             |                                   |
| <b>1770</b>   | <b>93.6</b> | <b>94.5</b> | <b>95</b>  | <b>95</b>  | <b>87</b>    | <b>86</b>  | <b>80.5</b> | <b>76</b>                         |

| CURRENTS    |              |              | NEMA KVA CODE LETTER | SAFE STALL TIME IN SECONDS |           |
|-------------|--------------|--------------|----------------------|----------------------------|-----------|
| NO LOAD     | FULL LOAD    | LOCKED ROTOR |                      | COLD                       | HOT       |
| AT 460 VOLT | AT 460 VOLT  | AT 460 VOLT  |                      |                            |           |
| <b>13.1</b> | <b>56.90</b> | <b>363</b>   | <b>G</b>             | <b>17</b>                  | <b>12</b> |

| TORQUE            |                   |              |                 | INERTIA                                     |   |   | ACCEL TIME (DOL)              |                                   | ALLOWABLE STARTS PER HOUR |          |
|-------------------|-------------------|--------------|-----------------|---|---|---|-------------------------------|-----------------------------------|---------------------------|----------|
| FULL LOAD (lb-ft) | LOCKED ROTOR %FLT | PULL UP %FLT | BREAK DOWN %FLT | ROTOR WR <sup>2</sup> (lb-ft <sup>2</sup> ) | NEMA LOAD WK <sup>2</sup> (lb-ft <sup>2</sup> ) | MAX ALLOWABLE WK <sup>2</sup> (lb-ft <sup>2</sup> ) | NEMA LOAD WK <sup>2</sup> Sec | MAX ALLOWABLE WK <sup>2</sup> Sec | COLD                      | HOT      |
| <b>148.30</b>     | <b>210</b>        | <b>170</b>   | <b>220</b>      | <b>10.123</b>                               | <b>232</b>                                      | <b>427</b>  | <b>4.77</b>                   | <b>8.61</b>                       | <b>2</b>                  | <b>1</b> |

|           |                  |             |                    |           |          |
|-----------|------------------|-------------|--------------------|-----------|----------|
| APPROVED: | <b>M. PRATER</b> | DRAWING NO. | <b>31057HH0504</b> | REVISION: | <b>1</b> |
|-----------|------------------|-------------|--------------------|-----------|----------|