

# TECO Westinghouse

|                            |                                                           |                            |
|----------------------------|-----------------------------------------------------------|----------------------------|
| ISSUED<br><b>8/15/2014</b> | <b>PERFORMANCE DATA</b><br><b>3-PHASE INDUCTION MOTOR</b> | ENCLOSURE<br><b>TEFC</b>   |
| TYPE<br><b>AEHH8N</b>      |                                                           | CATALOG#<br><b>EP1004C</b> |

## NAMEPLATE INFORMATION

| OUTPUT     |             | POLE     | FRAME SIZE   | VOLTAGE        | HZ        | RATED AMBIENT | INS. CLASS | NEMA DESIGN | TIME RATING  | SERVICE FACTOR |
|------------|-------------|----------|--------------|----------------|-----------|---------------|------------|-------------|--------------|----------------|
| HP         | KW          |          |              |                |           |               |            |             |              |                |
| <b>100</b> | <b>74.6</b> | <b>4</b> | <b>405TC</b> | <b>230/460</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<br>(lb-ft)  | R1                                                                         | R2            | X1            | X2            | X <sub>m</sub> |
| <b>3~60</b>     | <b>0.0125~100</b> | <b>90~1800</b> | <b>0.729~295.8</b> | <b>0.0262</b>                                                              | <b>0.0741</b> | <b>0.1669</b> | <b>0.3738</b> | <b>10.277</b>  |

|                 |               |                 |                   |                     |            |                  |                    |
|-----------------|---------------|-----------------|-------------------|---------------------|------------|------------------|--------------------|
| CONSTANT TORQUE |               |                 |                   | CONSTANT HORSEPOWER |            |                  |                    |
| HZ              | HP            | RPM             | TORQUE<br>(lb-ft) | HZ                  | HP         | RPM              | TORQUE<br>(lb-ft)  |
| <b>6~60</b>     | <b>10~100</b> | <b>180~1800</b> | <b>295.8</b>      | <b>60~90</b>        | <b>100</b> | <b>1800~2700</b> | <b>295.8~197.2</b> |

## TYPICAL PERFORMANCE

| FULL<br>LOAD<br>RPM | EFFICIENCY |       |               |               | POWER FACTOR   |               |               | SOUND<br>PRESSURE<br>LEVEL @ 3 FT<br>Db(A) |
|---------------------|------------|-------|---------------|---------------|----------------|---------------|---------------|--------------------------------------------|
|                     | FULL LOAD  |       | 3/4 LOAD<br>% | 1/2 LOAD<br>% | FULL LOAD<br>% | 3/4 LOAD<br>% | 1/2 LOAD<br>% |                                            |
|                     | MIN.%      | NOM.% |               |               |                |               |               |                                            |
| 1775                | 94.5       | 95.4  | 95.4          | 95            | 87.5           | 85.5          | 80            | 82                                         |

| CURRENTS          |                   |                   |                   |                   |                   |                   |                   |                   | NEMA<br>KVA<br>CODE<br>LETTER | SAFE STALL<br>TIME IN<br>SECONDS |     |
|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------------------|----------------------------------|-----|
| NO LOAD           |                   |                   | FULL LOAD         |                   |                   | LOCKED ROTOR      |                   |                   |                               | COLD                             | HOT |
| AT<br>208<br>VOLT | AT<br>230<br>VOLT | AT<br>460<br>VOLT | AT<br>208<br>VOLT | AT<br>230<br>VOLT | AT<br>460<br>VOLT | AT<br>208<br>VOLT | AT<br>230<br>VOLT | AT<br>460<br>VOLT |                               |                                  |     |
| 49.20             | 50.80             | 25.4              | 247.69            | 224.00            | 112.00            | 1311.3            | 1450.0            | 725               | G                             | 17                               | 12  |

| 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>295.80</b>     | <b>215</b>        | <b>140</b>   | <b>215</b>      | <b>26.637</b>                               | <b>441</b>                                      | <b>590</b>                                          | <b>4.65</b>                   | <b>6.13</b>                       | <b>2</b>                  | <b>1</b> |

|           |                  |             |                     |           |          |
|-----------|------------------|-------------|---------------------|-----------|----------|
| APPROVED: | <b>M. PRATER</b> | DRAWING NO. | <b>31057EP1004C</b> | REVISION: | <b>1</b> |
|-----------|------------------|-------------|---------------------|-----------|----------|