

|                                        |                              |        |            |
|----------------------------------------|------------------------------|--------|------------|
| <b>HICO</b><br>3 PHASE INDUCTION MOTOR | <b>PERFORMANCE DATASHEET</b> | ISSUED | 01/15/2026 |
|                                        |                              | MODEL  | 2HP 4P     |

| NAMEPLATE INFORMATION |             |          |                                     |    |            |                |      |            |        |            |
|-----------------------|-------------|----------|-------------------------------------|----|------------|----------------|------|------------|--------|------------|
| OUTPUT                |             | RPM      | VOLTS                               | Hz | FRAME SIZE | ENCLOSURE TYPE | S.F. | INS. CALSS | RATING | AMB. TEMP. |
| HP                    | KW          |          |                                     |    |            |                |      |            |        |            |
| 2                     | 1.5         | 1750     | 230/460                             | 60 | 145T       | TEFC           | 1.25 | F          | CONT.  | 40°C       |
| TEMP. RISE            | NEMA DESIGN | KVA CODE | Class/Division Hazardous Location   |    |            |                |      |            |        |            |
| B                     | B           | K        | Class I, Division 2, Group B, C & D |    |            |                |      |            |        |            |

| TYPICAL PERFORMANCE DATA |      |          |          |                  |          |          |
|--------------------------|------|----------|----------|------------------|----------|----------|
| EFFICIENCY (%)           |      |          |          | POWER FACTOR (%) |          |          |
| FULL LOAD                |      | 3/4 LOAD | 1/2 LOAD | FULL LOAD        | 3/4 LOAD | 1/2 LOAD |
| MIN.                     | NOM. |          |          |                  |          |          |
| 84.0                     | 86.5 | 86.6     | 84.9     | 75               | 67.1     | 54.2     |

| CURRENT        |               |               |              |                       |                        |
|----------------|---------------|---------------|--------------|-----------------------|------------------------|
| FULL LOAD AMPS | 3/4 LOAD AMPS | 1/2 LOAD AMPS | NO LOAD AMPS | STARTING CURRENT AMPS | STARTING CURRENT % FLC |
| 5.8/2.9        | 4.8/2.4       | 4.1/2.0       | 2.8/1.4      | 42.9/21.5             | 740                    |

\* Usable at 208V: 6.1 AMPS (FULL LOAD)

\* Usable at 2HP 50Hz 380V 3.4A 1425R.P.M. S.F. 1.0 EFF. 83.5% (IE2)

| TORQUE            |                    |                  |               | ALLOWABLE STARTS PER HOUR |     |
|-------------------|--------------------|------------------|---------------|---------------------------|-----|
| FULL LOAD (lb-ft) | LOCKED ROTOR % FLT | BREAK DOWN % FLT | PULL UP % FLT | COLD                      | HOT |
| 6                 | 235                | 270              | 204           | 2                         | 1   |

| MECHANICAL DATA                             |                                                 |                                                     |                                     |                  |              |
|---------------------------------------------|-------------------------------------------------|-----------------------------------------------------|-------------------------------------|------------------|--------------|
| INERTIA                                     |                                                 |                                                     | SOUND PRESSURE LEVEL @ 3 ft (dB(A)) | PROTECTION GRADE | WEIGHT (Lbs) |
| 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> ) |                                     |                  |              |
| 0.148                                       | 11                                              | 27                                                  | 67                                  | 55               | 60           |

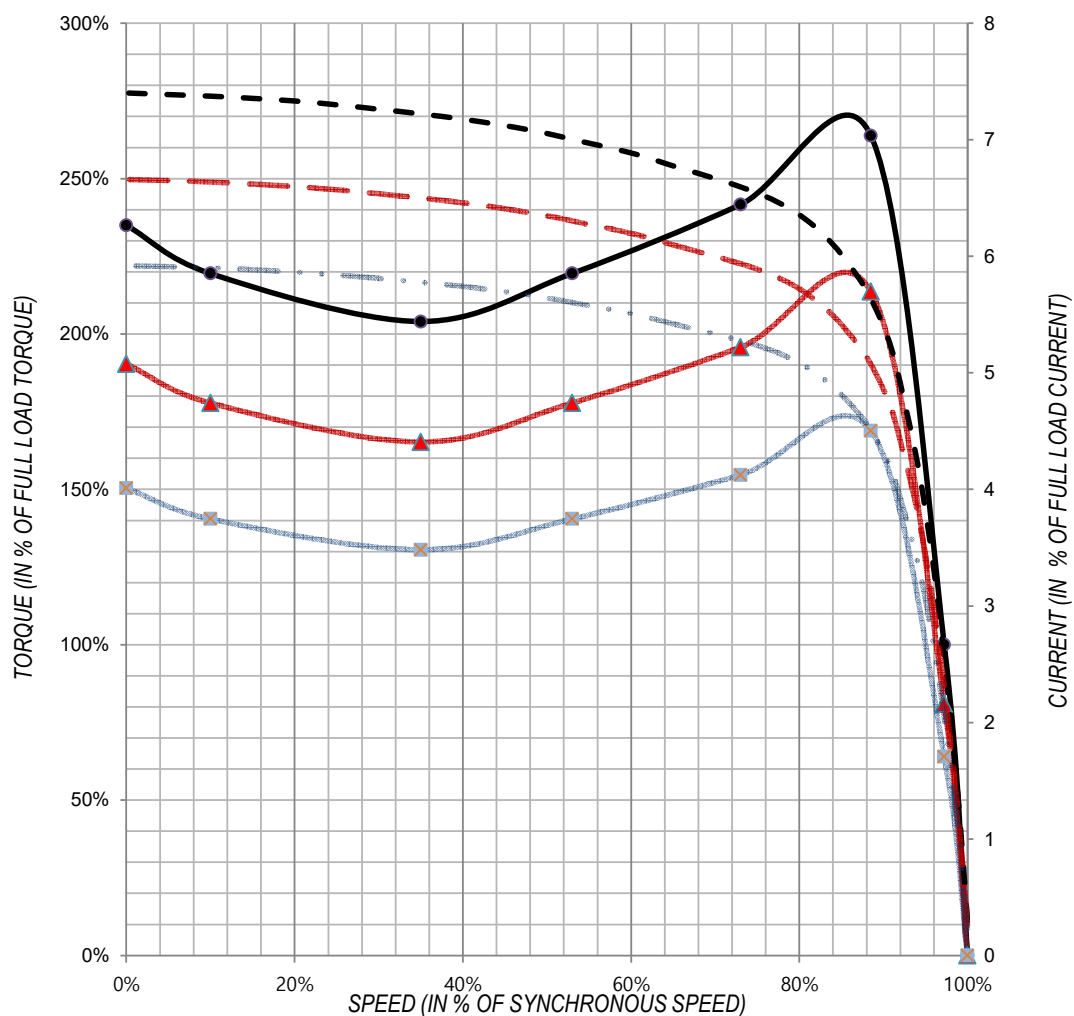
| BEARING |        | GREASE | MOUNTING             |                     |
|---------|--------|--------|----------------------|---------------------|
| DE      | ODE    |        | TYPE OF CONSTRUCTION | TERMINAL BOX DESIGN |
| 6205ZZ  | 6204ZZ | N/A    | RIGID MOUNTING       | NEMA                |

| INVERTER DUTY DATA |       |          |           |               |                                    |
|--------------------|-------|----------|-----------|---------------|------------------------------------|
| TYPE               | HZ    | HP       | RPM       | TORQUE(LB-FT) | NOTE                               |
| VARIABLE TORQUE    | 3~60  | 0.0003~2 | 90~1800   | 0.015~6       | WITH TEMP. RISE CLASS F & S.F. 1.0 |
| CONSTANT TORQUE    | 6~60  | 0.2~2    | 180~1800  | 6             |                                    |
| CONSTANT HP        | 60~90 | 2        | 1800~2700 | 6~4           |                                    |

|                    |             |                 |     |
|--------------------|-------------|-----------------|-----|
| <b>DRAWING NO.</b> | ES1AS180402 | <b>REVISION</b> | 2.1 |
|--------------------|-------------|-----------------|-----|

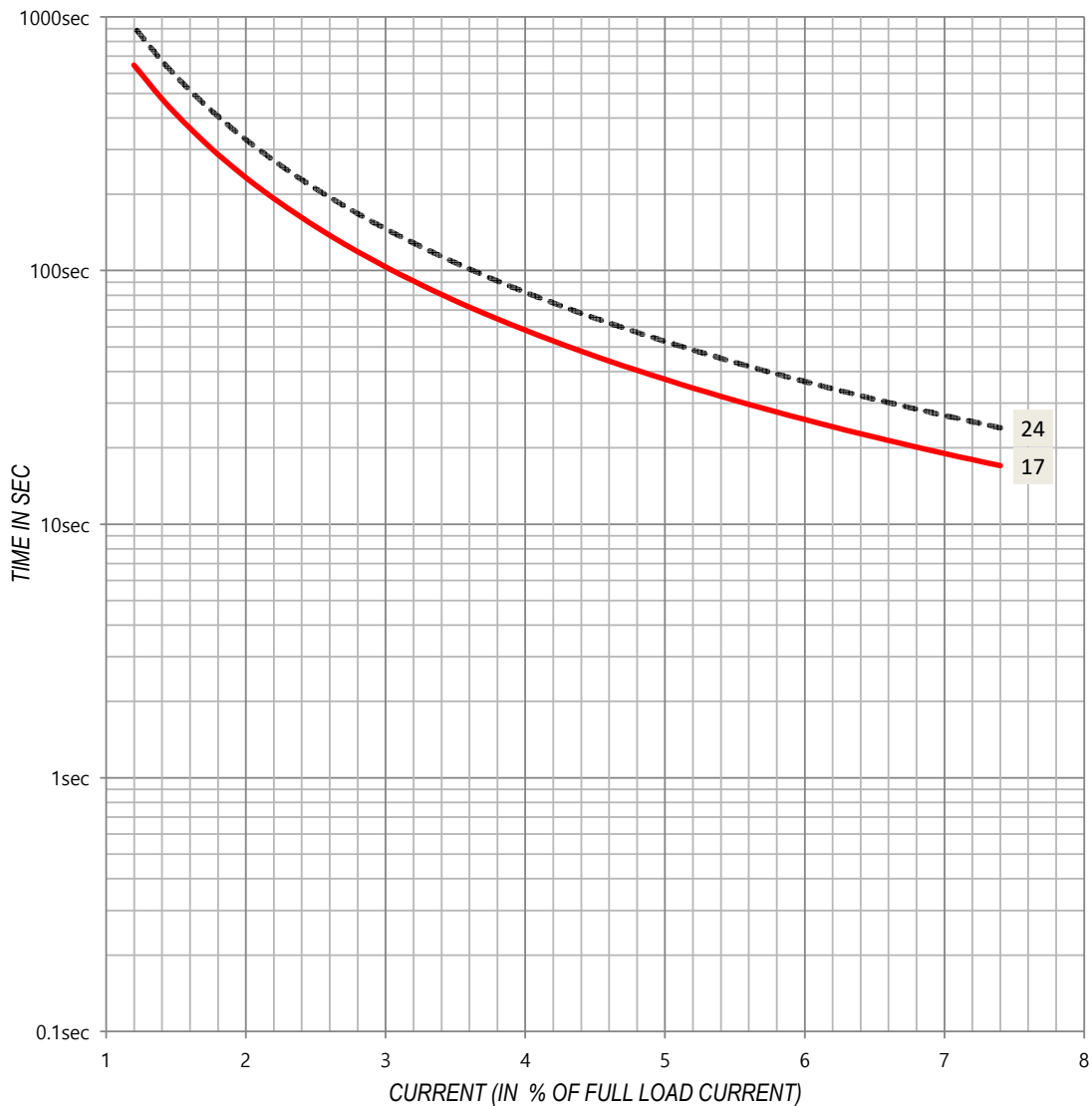
ALL DATA ABOVE ARE SUBJECTED TO CHANGE WITHOUT NOTICE.

| <div> <div>HICO</div> <div>3 PHASE INDUCTION MOTOR</div> </div> | SPEED - TORQUE & CURRENT CURVE |                    |                          |         | Curve No.          |
|-----------------------------------------------------------------|--------------------------------|--------------------|--------------------------|---------|--------------------|
|                                                                 |                                |                    |                          |         | 1ST                |
| OUTPUT                                                          | 2                              | HP                 | POLES                    | 4       | P                  |
| VOLTAGE                                                         | 230/460                        | V                  | FREQUENCY                | 60      | Hz                 |
| FULL LOAD TORQUE                                                | 6.0                            | lb-ft              | FULL LOAD CURRENT        | 5.8/2.9 | A                  |
| LOCKED ROTOR TORQUE                                             | 235                            | %                  | LOCKED-ROTOR CURRENT     | 740     | %                  |
| BREAKDOWN TORQUE                                                | 270                            | %                  | SPEED (at FULL LOAD)     | 1750    | RPM                |
| GD <sup>2</sup> of LOAD :                                       | -                              | lb-ft <sup>2</sup> | GD <sup>2</sup> of MOTOR | 0.148   | lb-ft <sup>2</sup> |



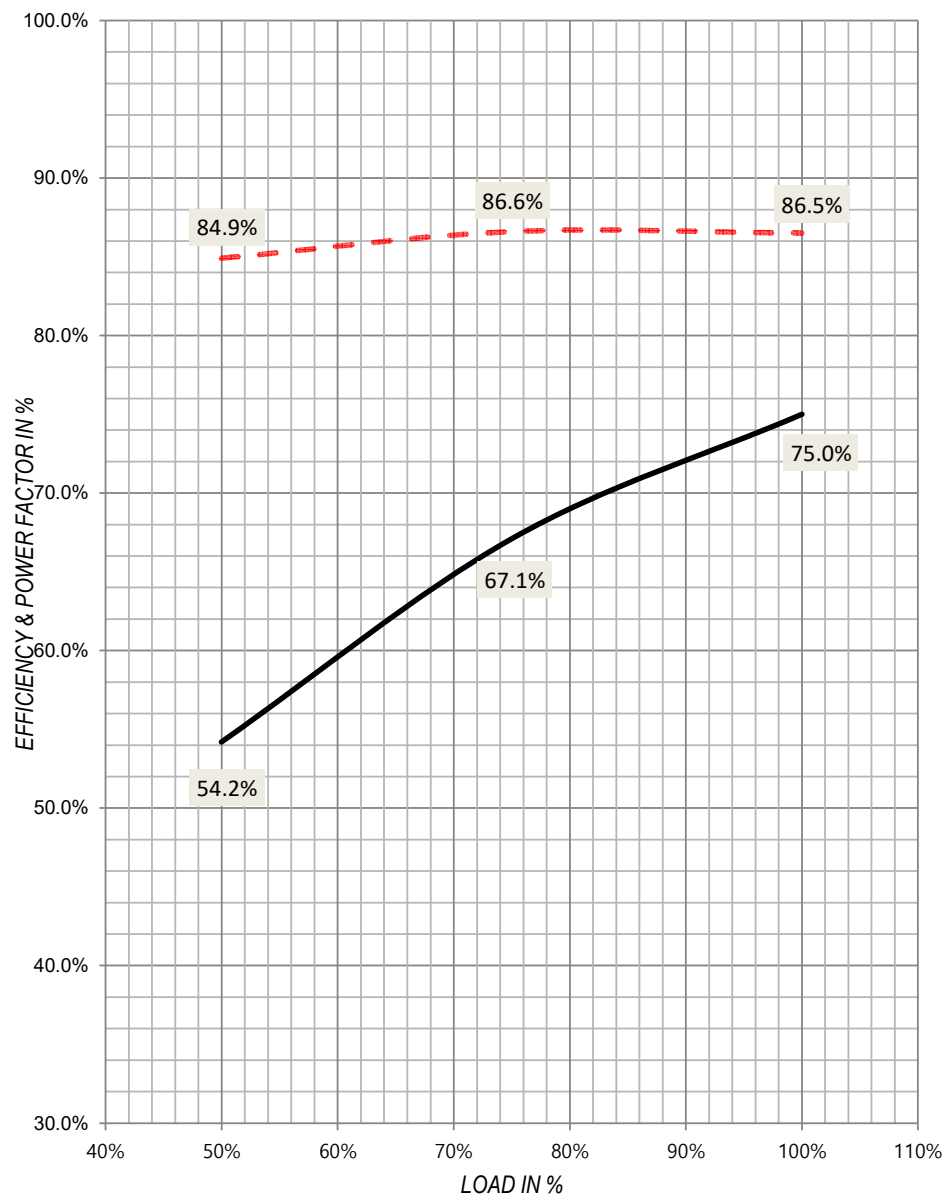
|      |  |                            |                    |
|------|--|----------------------------|--------------------|
| NOTE |  | A : SPEED-TORQUE CURVE AT  | 100% RATED VOLTAGE |
|      |  | B : SPEED-TORQUE CURVE AT  | 90% RATED VOLTAGE  |
|      |  | C : SPEED-TORQUE CURVE AT  | 80% RATED VOLTAGE  |
|      |  | D : SPEED-CURRENT CURVE AT | 100% RATED VOLTAGE |
|      |  | E : SPEED-CURRENT CURVE AT | 90% RATED VOLTAGE  |
|      |  | F : SPEED-CURRENT CURVE AT | 80% RATED VOLTAGE  |

| <div>HICO</div> <div>3 PHASE INDUCTION MOTOR</div> |         |                    | THERMAL LIMIT &<br>TIME - CURRENT CURVE |         | Curve No.          |  |
|----------------------------------------------------|---------|--------------------|-----------------------------------------|---------|--------------------|--|
|                                                    |         |                    |                                         |         | 1TL                |  |
| OUTPUT                                             | 2       | HP                 | POLES                                   | 4       | P                  |  |
| VOLTAGE                                            | 230/460 | V                  | FREQUENCY                               | 60      | Hz                 |  |
| FULL LOAD TORQUE                                   | 6.0     | lb-ft              | FULL LOAD CURRENT                       | 5.8/2.9 | A                  |  |
| LOCKED ROTOR TORQUE                                | 235     | %                  | LOCKED-ROTOR CURRENT                    | 740     | %                  |  |
| BREAKDOWN TORQUE                                   | 270     | %                  | SPEED (at FULL LOAD)                    | 1750    | RPM                |  |
| GD <sup>2</sup> of LOAD :                          | -       | lb-ft <sup>2</sup> | GD <sup>2</sup> of MOTOR                | 0.148   | lb-ft <sup>2</sup> |  |



| NOTE |                                                             |
|------|-------------------------------------------------------------|
|      | A : THERMAL LIMIT CURVE AT HOT CONDITION                    |
|      | B : THERMAL LIMIT CURVE AT COLD CONDITION                   |
|      | C : ※TIME-CURRENT CURVES(C,D,E) NEED BELOW DATA TO BE DRAWN |
|      | D : * LOAD GD2 AT MOTOR SHAFT                               |
|      | E : * SPEED-TORQUE CURVE OF LOAD                            |

|                                        |                                                       |                    |                          |         |                    |
|----------------------------------------|-------------------------------------------------------|--------------------|--------------------------|---------|--------------------|
| <b>HICO</b><br>3 PHASE INDUCTION MOTOR | <b>LOAD - POWER FACTOR<br/>&amp; EFFICIENCY CURVE</b> |                    |                          |         | Curve No.          |
|                                        |                                                       |                    |                          |         | 1PE                |
| OUTPUT                                 | 2                                                     | HP                 | POLES                    | 4       | P                  |
| VOLTAGE                                | 230/460                                               | V                  | FREQUENCY                | 60      | Hz                 |
| FULL LOAD TORQUE                       | 6.0                                                   | lb-ft              | FULL LOAD CURRENT        | 5.8/2.9 | A                  |
| LOCKED ROTOR TORQUE                    | 235                                                   | %                  | LOCKED-ROTOR CURRENT     | 740     | %                  |
| BREAKDOWN TORQUE                       | 270                                                   | %                  | SPEED (at FULL LOAD)     | 1750    | RPM                |
| GD <sup>2</sup> of LOAD :              | -                                                     | lb-ft <sup>2</sup> | GD <sup>2</sup> of MOTOR | 0.148   | lb-ft <sup>2</sup> |



NOTE

- A : LOAD - POWER FACTOR CURVE
- - - B : LOAD - EFFICIENCY CURVE

# HICO

3 PHASE INDUCTION MOTOR

## CONNECTION DIAGRAM

ISSUED

12/01/2024

| DOUBLE VOLTAGE DELTA CONNECTION |              | DOUBLE VOLTAGE STAR CONNECTION |              | SINGLE VOLTAGE STAR-DELTA CONNECTION |                  | DOUBLE VOLTAGE-STAR-DELTA CONNECTION |             |              |             |
|---------------------------------|--------------|--------------------------------|--------------|--------------------------------------|------------------|--------------------------------------|-------------|--------------|-------------|
| LOW VOLTAGE                     | HIGH VOLTAGE | LOW VOLTAGE                    | HIGH VOLTAGE | STAR CONNECTION                      | DELTA CONNECTION | LOW VOLTAGE                          |             | HIGH VOLTAGE |             |
|                                 |              |                                |              |                                      |                  | STAR CONN.                           | DELTA CONN. | STAR CONN.   | DELTA CONN. |
|                                 |              |                                |              |                                      |                  |                                      |             |              |             |
|                                 |              |                                |              |                                      |                  |                                      |             |              |             |
| <b>DIRECT-ON-LINE STARTING</b>  |              | <b>DIRECT-ON-LINE STARTING</b> |              | <b>WYE-DELTA STARTING</b>            |                  | <b>WYE-DELTA STARTING</b>            |             |              |             |

| SINGLE VOLTAGE PART-WINDING CONNECTION |     | DOUBLE VOLTAGE PART WINDING CONNECTION                                            |     |              | DOUBLE VOLTAGE-STAR-DELTA AND PART WINDING (at LOW VOLTAGE) CONNECTION                       |                     |     |                     |     |     |
|----------------------------------------|-----|-----------------------------------------------------------------------------------|-----|--------------|----------------------------------------------------------------------------------------------|---------------------|-----|---------------------|-----|-----|
| PART WINDING CONNECTION                | RUN | LOW VOLTAGE                                                                       |     | HIGH VOLTAGE | LOW VOLTAGE                                                                                  |                     |     | HIGH VOLTAGE        |     |     |
|                                        |     | STARTING                                                                          | RUN |              | PART-WINDING STARTING                                                                        | STAR-DELTA STARTING | RUN | STAR-DELTA STARTING | RUN | RUN |
|                                        |     |                                                                                   |     |              |                                                                                              |                     |     |                     |     |     |
|                                        |     |                                                                                   |     |              |                                                                                              |                     |     |                     |     |     |
| <b>PART-WINDING STARTING</b>           |     | <b>LOW VOLTAGE PART-WINDING STARTING<br/>HIGH VOLTAGE DIRECT-ON-LINE STARTING</b> |     |              | <b>LOW VOLTAGE PART-WINDING/STAR-DELTA STARTING<br/>HIGH VOLTAGE DIRECT-ON-LINE STARTING</b> |                     |     |                     |     |     |

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