

|                                        |                              |        |            |
|----------------------------------------|------------------------------|--------|------------|
| <b>HICO</b><br>3 PHASE INDUCTION MOTOR | <b>PERFORMANCE DATASHEET</b> | ISSUED | 01/15/2026 |
|                                        |                              | MODEL  | 1HP 4P     |

| NAMEPLATE INFORMATION |             |          |                                     |    |            |                |      |            |        |            |
|-----------------------|-------------|----------|-------------------------------------|----|------------|----------------|------|------------|--------|------------|
| OUTPUT                |             | RPM      | VOLTS                               | Hz | FRAME SIZE | ENCLOSURE TYPE | S.F. | INS. CALSS | RATING | AMB. TEMP. |
| HP                    | KW          |          |                                     |    |            |                |      |            |        |            |
| 1                     | 0.75        | 1765     | 575                                 | 60 | 143TD      | TEFC           | 1.25 | F          | CONT.  | 40°C       |
| TEMP. RISE            | NEMA DESIGN | kVA CODE | Class/Division Hazardous Location   |    |            |                |      |            |        |            |
| B                     | B           | N        | 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. |          |          |                  |          |          |
| 82.5                     | 85.5 | 84.8     | 82.1     | 61.1             | 52.8     | 39.3     |

| CURRENT        |               |               |              |                       |                        |
|----------------|---------------|---------------|--------------|-----------------------|------------------------|
| FULL LOAD AMPS | 3/4 LOAD AMPS | 1/2 LOAD AMPS | NO LOAD AMPS | STARTING CURRENT AMPS | STARTING CURRENT % FLC |
| 1.4            | 1.3           | 1.2           | 0.7          | 12                    | 860                    |

| TORQUE            |                    |                  |               | ALLOWABLE STARTS PER HOUR |     |
|-------------------|--------------------|------------------|---------------|---------------------------|-----|
| FULL LOAD (lb-ft) | LOCKED ROTOR % FLT | BREAK DOWN % FLT | PULL UP % FLT | COLD                      | HOT |
| 3                 | 350                | 408              | 316           | 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> ) |                                     |                  |              |
| 0.131                                       | 6                                               | 13                                                  | 67                                  | 55               | 66           |

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

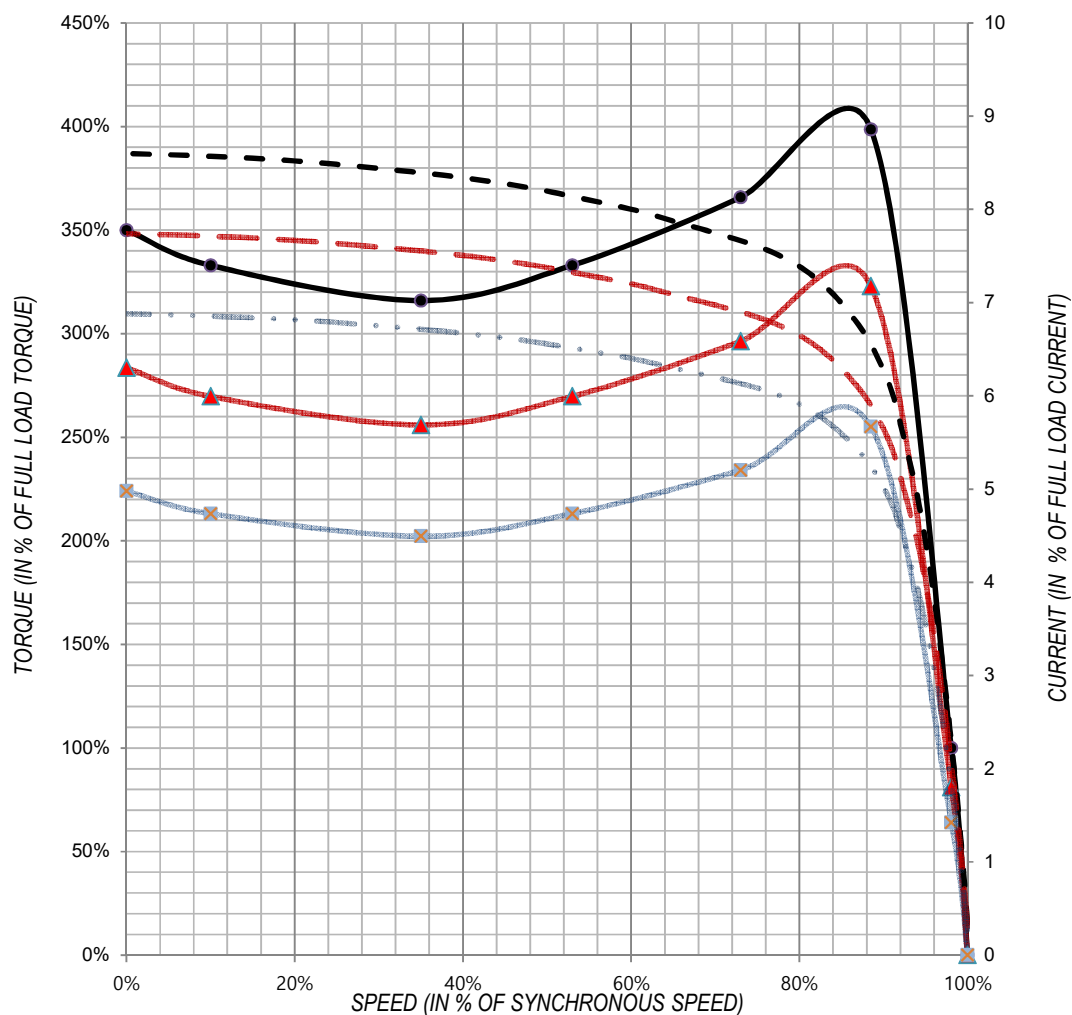
| INVERTER DUTY DATA |       |          |           |               |                                    |
|--------------------|-------|----------|-----------|---------------|------------------------------------|
| TYPE               | HZ    | HP       | RPM       | TORQUE(LB-FT) | NOTE                               |
| VARIABLE TORQUE    | 3~60  | 0.0001~1 | 90~1800   | 0.008~3       | WITH TEMP. RISE CLASS F & S.F. 1.0 |
| CONSTANT TORQUE    | 6~60  | 0.1~1    | 180~1800  | 3             |                                    |
| CONSTANT HP        | 60~90 | 1        | 1800~2700 | 3~2           |                                    |

|             |             |          |     |
|-------------|-------------|----------|-----|
| DRAWING NO. | ES1AS185701 | REVISION | 0.1 |
|-------------|-------------|----------|-----|

ALL DATA ABOVE ARE SUBJECTED TO CHANGE WITHOUT NOTICE.

|                                        |                                           |  |  |  |           |
|----------------------------------------|-------------------------------------------|--|--|--|-----------|
| <b>HICO</b><br>3 PHASE INDUCTION MOTOR | <b>SPEED - TORQUE &amp; CURRENT CURVE</b> |  |  |  | Curve No. |
|                                        |                                           |  |  |  | 1ST       |

|                           |     |                    |                          |       |                    |
|---------------------------|-----|--------------------|--------------------------|-------|--------------------|
| OUTPUT                    | 1   | HP                 | POLES                    | 4     | P                  |
| VOLTAGE                   | 575 | V                  | FREQUENCY                | 60    | Hz                 |
| FULL LOAD TORQUE          | 3.0 | lb-ft              | FULL LOAD CURRENT        | 1.4   | A                  |
| LOCKED ROTOR TORQUE       | 350 | %                  | LOCKED-ROTOR CURRENT     | 860   | %                  |
| BREAKDOWN TORQUE          | 408 | %                  | SPEED (at FULL LOAD)     | 1765  | RPM                |
| GD <sup>2</sup> of LOAD : | -   | lb-ft <sup>2</sup> | GD <sup>2</sup> of MOTOR | 0.131 | lb-ft <sup>2</sup> |

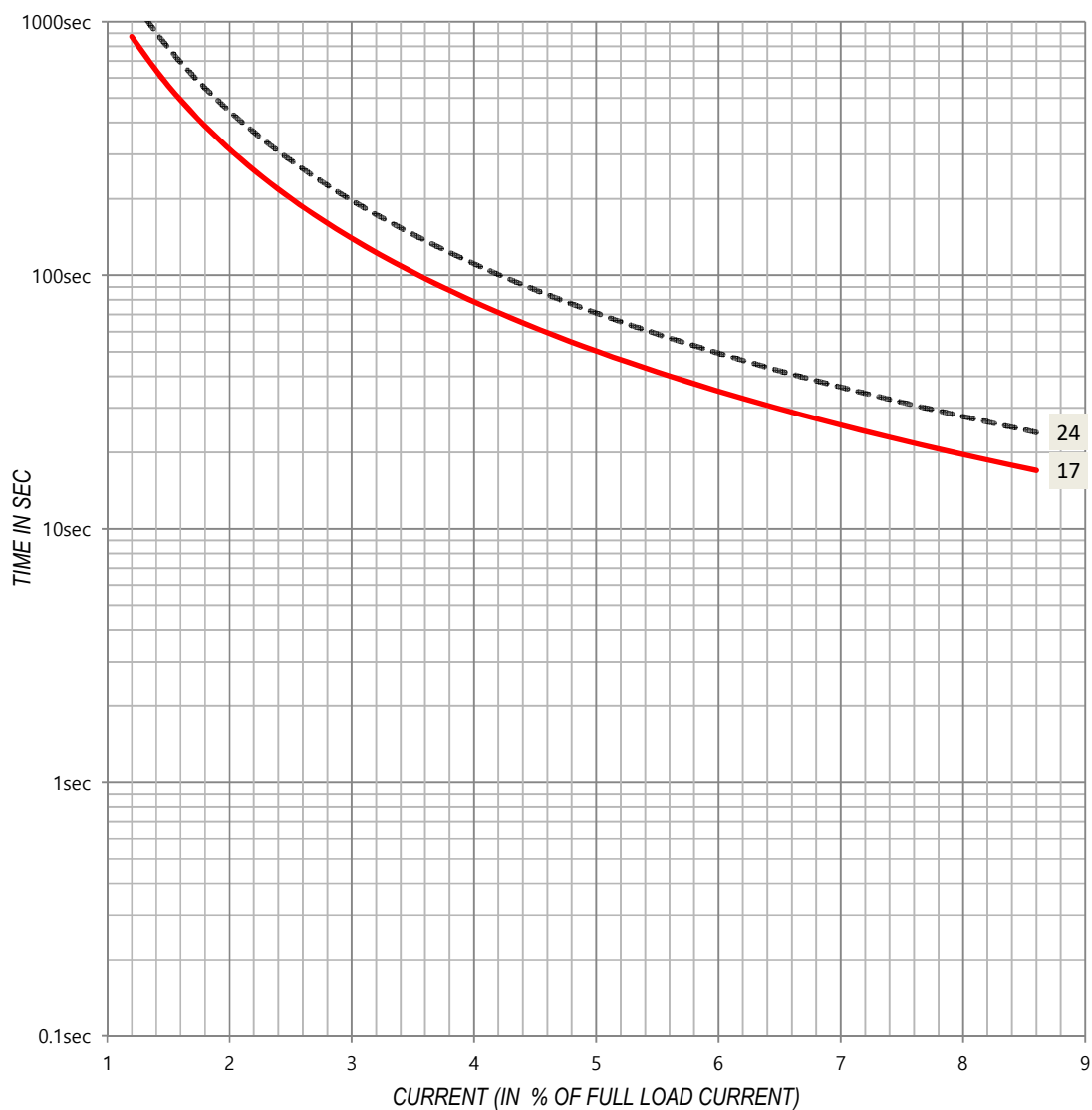


NOTE

|  |                            |                    |
|--|----------------------------|--------------------|
|  | 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  |

|                                        |                                                     |  |  |  |           |
|----------------------------------------|-----------------------------------------------------|--|--|--|-----------|
| <b>HICO</b><br>3 PHASE INDUCTION MOTOR | <b>THERMAL LIMIT &amp;<br/>TIME - CURRENT CURVE</b> |  |  |  | Curve No. |
|                                        |                                                     |  |  |  | 1TL       |

|                           |     |                    |                          |       |                    |
|---------------------------|-----|--------------------|--------------------------|-------|--------------------|
| OUTPUT                    | 1   | HP                 | POLES                    | 4     | P                  |
| VOLTAGE                   | 575 | V                  | FREQUENCY                | 60    | Hz                 |
| FULL LOAD TORQUE          | 3.0 | lb-ft              | FULL LOAD CURRENT        | 1.4   | A                  |
| LOCKED ROTOR TORQUE       | 350 | %                  | LOCKED-ROTOR CURRENT     | 860   | %                  |
| BREAKDOWN TORQUE          | 408 | %                  | SPEED (at FULL LOAD)     | 1765  | RPM                |
| GD <sup>2</sup> of LOAD : | -   | lb-ft <sup>2</sup> | GD <sup>2</sup> of MOTOR | 0.131 | lb-ft <sup>2</sup> |

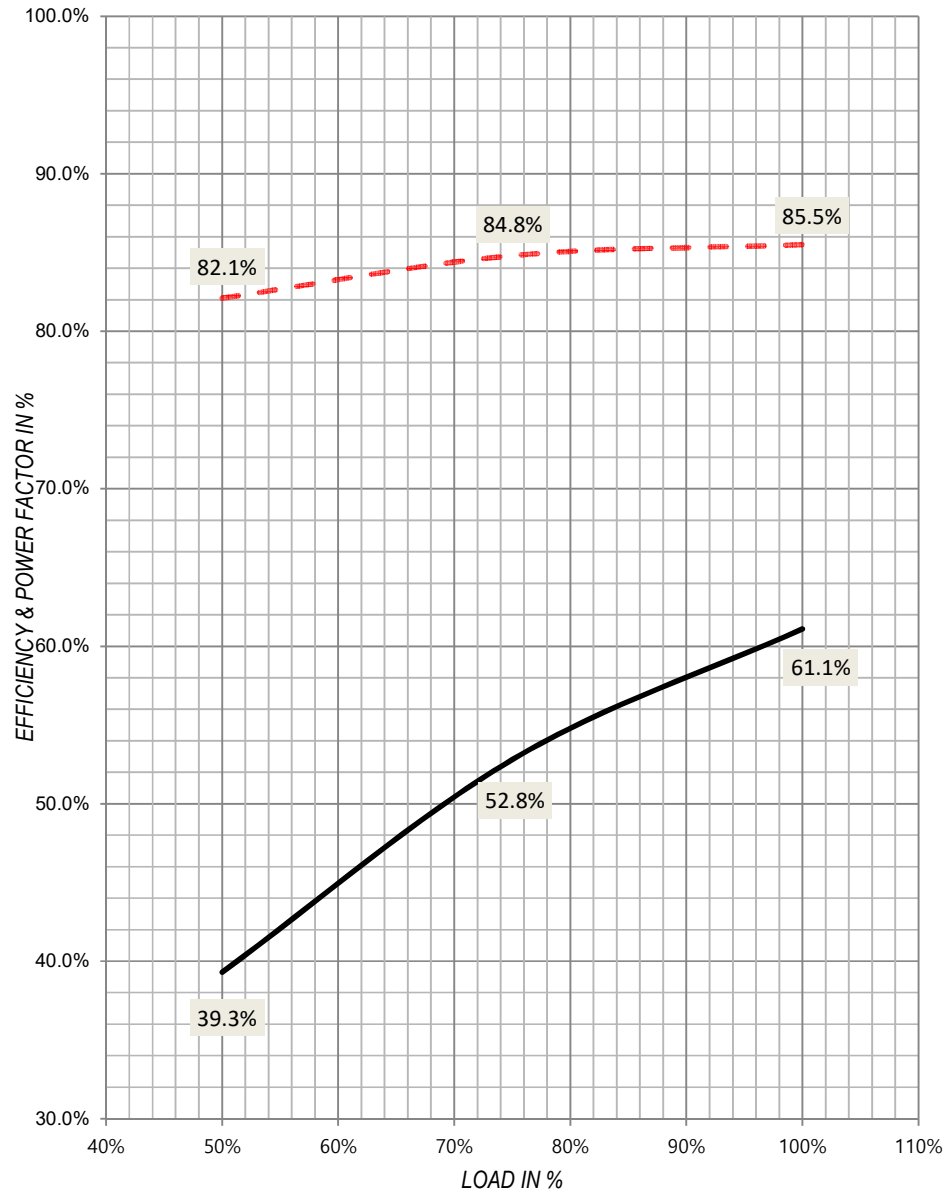


**NOTE**

- 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                    | 1   | HP                 | POLES                    | 4     | P                  |
| VOLTAGE                   | 575 | V                  | FREQUENCY                | 60    | Hz                 |
| FULL LOAD TORQUE          | 3.0 | lb-ft              | FULL LOAD CURRENT        | 1.4   | A                  |
| LOCKED ROTOR TORQUE       | 350 | %                  | LOCKED-ROTOR CURRENT     | 860   | %                  |
| BREAKDOWN TORQUE          | 408 | %                  | SPEED (at FULL LOAD)     | 1765  | RPM                |
| GD <sup>2</sup> of LOAD : | -   | lb-ft <sup>2</sup> | GD <sup>2</sup> of MOTOR | 0.131 | lb-ft <sup>2</sup> |



NOTE

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

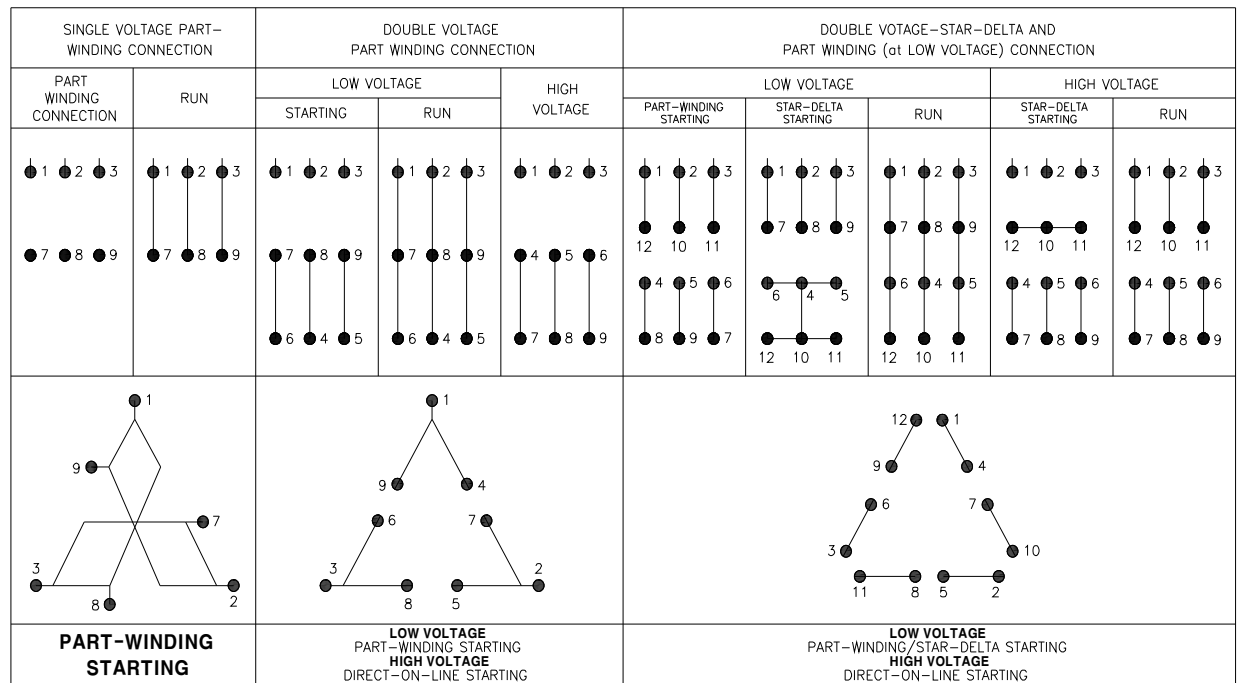
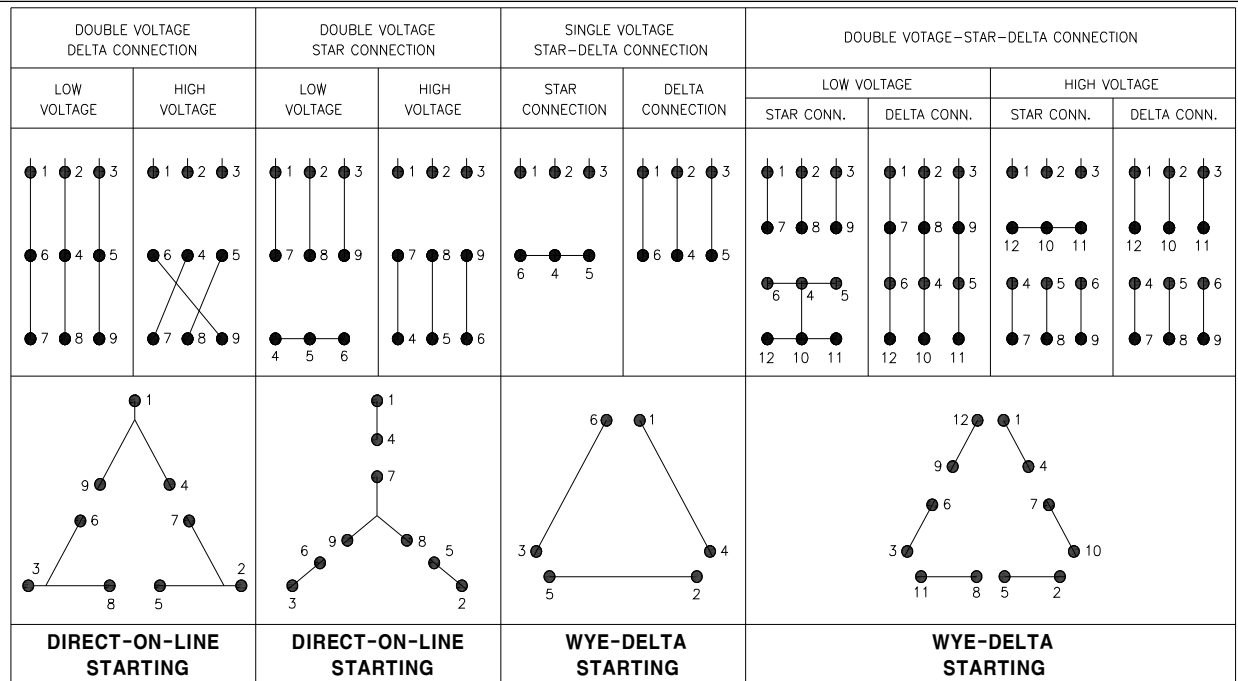
# HICO

3 PHASE INDUCTION MOTOR

## CONNECTION DIAGRAM

ISSUED

12/01/2024



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