

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Rolled Steel Three-Phase

Product code : 12676261  
Catalog # : .2518ES3E56-S

|                     |                  |                             |                     |
|---------------------|------------------|-----------------------------|---------------------|
| Frame               | : 56             | Cooling method              | : IC411 - TEFC      |
| Insulation class    | : F              | Mounting                    | : F-1               |
| Duty cycle          | : Cont.(S1)      | Rotation <sup>1</sup>       | : Both (CW and CCW) |
| Ambient temperature | : -20°C to +40°C | Starting method             | : Direct On Line    |
| Altitude            | : 1000 m.a.s.l.  | Approx. weight <sup>2</sup> | : 18.4 lb           |
| Protection degree   | : IP55           | Moment of inertia (J)       | : 0.0453 sq.ft.lb   |

|                          |                      |                      |                      |
|--------------------------|----------------------|----------------------|----------------------|
| Output [HP]              | 0.25                 | 0.25                 | 0.25                 |
| Poles                    | 4                    | 4                    | 4                    |
| Frequency [Hz]           | 60                   | 50                   | 50                   |
| Rated voltage [V]        | 208-230/460          | 190/380              | 220/415              |
| Rated current [A]        | 1.15-1.04/0.521      | 1.13/0.564           | 1.10/0.585           |
| L. R. Amperes [A]        | 7.26-6.56/3.28       | 5.98/2.99            | 6.29/3.33            |
| LRC [A]                  | 6.3x(Code M)         | 5.3x(Code J)         | 5.7x(Code L)         |
| No load current [A]      | 0.776-0.900/0.450    | 0.844/0.422          | 0.919/0.487          |
| Rated speed [RPM]        | 1765                 | 1455                 | 1465                 |
| Slip [%]                 | 1.94                 | 3.00                 | 2.33                 |
| Rated torque [ft.lb]     | 0.734                | 0.890                | 0.884                |
| Locked rotor torque [%]  | 240                  | 180                  | 220                  |
| Breakdown torque [%]     | 300                  | 280                  | 340                  |
| Service factor           |                      | 1.15                 | 1.15                 |
| Temperature rise         | 80 K                 | 80 K                 | 80 K                 |
| Locked rotor time        | 68s (cold) 38s (hot) | 72s (cold) 40s (hot) | 63s (cold) 35s (hot) |
| Noise level <sup>2</sup> | 52.0 dB(A)           | 49.0 dB(A)           | 49.0 dB(A)           |
| Efficiency (%)           | 25%                  | 54.4                 | 56.7                 |
|                          | 50%                  | 57.5                 | 59.3                 |
|                          | 75%                  | 66.0                 | 66.2                 |
|                          | 100%                 | 70.0                 | 69.3                 |
| Power Factor             | 25%                  | 0.24                 | 0.28                 |
|                          | 50%                  | 0.43                 | 0.50                 |
|                          | 75%                  | 0.54                 | 0.61                 |
|                          | 100%                 | 0.62                 | 0.70                 |

### Notes

This revision replaces and cancel the previous one, which must be eliminated.

- (1) Looking the motor from the shaft end.
- (2) Measured at 1m and with tolerance of +3dB(A).
- (4) At 100% of full load.

These are average values based on tests with sinusoidal power supply, subject to the tolerances stipulated in NEMA MG-1.

| Rev.         | Changes Summary | Performed | Checked | Date |
|--------------|-----------------|-----------|---------|------|
|              |                 |           |         |      |
| Performed by |                 |           |         |      |
| Checked by   |                 |           |         |      |
| Date         | 23/01/2018      |           |         |      |

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