

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W40 NEMA Premium Efficiency Three-Phase

Product code : 13821179

Catalog # : 70036OT3Q5010S-W40

Frame : 5010/11
 Output : 700 HP (515 kW)
 Poles : 2
 Frequency : 60 Hz
 Rated voltage : 460 V
 Rated current : 764 A
 L. R. Amperes : 5195 A
 LRC : 6.8x(Code G)
 No load current : 140 A
 Rated speed : 3570 rpm
 Slip : 0.83 %
 Rated torque : 1030 ft.lb
 Locked rotor torque : 229 %
 Breakdown torque : 240 %
 Insulation class : F
 Service factor : 1.15
 Moment of inertia (J) : 78.5 sq.ft.lb

Locked rotor time : 28s (cold) 16s (hot)
 Temperature rise : 80 K
 Duty cycle : Cont.(S1)
 Ambient temperature : -20°C to +40°C
 Altitude : 1000 m.a.s.l.
 Protection degree : IP23
 Cooling method : IC01 - ODP
 Mounting : F-1
 Rotation¹ : Both (CW and CCW)
 Noise level² : 89.0 dB(A)
 Starting method : Direct On Line
 Approx. weight³ : 3419 lb

Output	25%		50%		75%		100%	
Efficiency (%)	94.9	94.5	95.4	95.0	95.8	95.4	96.2	95.8
	94.5	94.3	95.0	94.8	95.4	95.3	95.8	95.8
	94.8	94.8	95.3	95.3	95.3	95.3	95.8	95.8
			95.2		95.2		95.8	
Power Factor	0.61	0.60	0.79	0.78	0.86	0.85	0.88	0.88
	0.56	0.52	0.75	0.72	0.84	0.82	0.86	0.85
	0.62	0.59	0.80	0.78	0.86	0.84	0.88	0.86
	0.56		0.75		0.83		0.85	

Foundation loads

Max. traction

Max. compression

	Drive end	Non drive end
Bearing type :	6314 C3	6314 C3
Sealing :	Without Bearing Seal	Without Bearing Seal
Lubrication interval :	4500 h	4500 h
Lubricant amount :	27 g	27 g
Lubricant type :	Mobil Polyrex EM	

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).
- (3) Approximate weight subject to changes after manufacturing process.
- (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	28/03/2024			

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 Revision

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Customer :

Thermal protection

ID	Application	Type	Quantity	Sensing Temperature
1	Winding	Thermistor - 2 wires	1 x Phase	155 °C

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Date	28/03/2024				