

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IE2 Three-Phase

Product code : 14421096
Catalog # : E07518EP3Y280SMF3-W2

Frame	: 280S/M	Locked rotor time	: 36s (cold) 20s (hot)
Output	: 75 kW (100 HP)	Temperature rise	: 80 K
Poles	: 4	Duty cycle	: S1
Frequency	: 50 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 380/660 V	Altitude	: 1000 m.a.s.l.
Rated current	: 142/81.8 A	Protection degree	: IP55
L. R. Amperes	: 951/548 A	Cooling method	: IC411 - TEFC
LRC	: 6.7	Mounting	: B3T
No load current	: 43.0/24.8 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 1486 rpm	Noise level ²	: 71.0 dB(A)
Slip	: 0.93 %	Starting method	: Direct On Line
Rated torque	: 356 ft.lb	Approx. weight ³	: 1409 lb
Locked rotor torque	: 190 %		
Breakdown torque	: 229 %		
Insulation class	: F		
Service factor	: 1.00		
Moment of inertia (J)	: 39.0 sq.ft.lb		
Design	: N		

Output	25%	50%	75%	100%	Foundation loads					
Efficiency (%)	93.5	93.7	93.8	93.8	94.0	94.4	94.2	94.4	Max. traction	: 1580 lb
	93.3	91.9	93.5	92.4	94.3	94.1	94.4	94.5		
Power Factor	0.53	0.48	0.77	0.73	0.83	0.81	0.85	0.84	Max. compression	: 2990 lb
	0.44	0.46	0.70	0.72	0.79	0.80	0.83	0.84		

Losses at normative operating points (speed;torque), in percentage of rated output power

Losses (%)	P1 (0,9;1,0)	5.7	5.5	5.5	5.4
	P2 (0,5;1,0)	4.1	4.0	4.0	3.9
	P3 (0,25;1,0)	3.7	3.5	3.5	3.5
	P4 (0,9;0,5)	2.9	2.8	2.8	2.8
	P5 (0,5;0,5)	1.7	1.6	1.6	1.6
	P6 (0,5;0,25)	1.1	1.1	1.1	1.0
	P7 (0,25;0,25)	0.7	0.6	0.6	0.6

		Drive end	Non drive end
Bearing type	:	6316 C3	6316 C3
Sealing	:	WSeal	WSeal
Lubrication interval	:	13000 h	13000 h
Lubricant amount	:	34 g	34 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 IEC 60034-1.

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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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