

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 12424295
Catalog # : 02518ST3QIE284T-W22

Frame	: 284/6T	Locked rotor time	: 43s (cold) 24s (hot)
Output	: 25 HP (18.5 kW)	Temperature rise	: 80 K
Poles	: 4	Duty cycle	: Cont.(S1)
Frequency	: 60 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 460 V	Altitude	: 1000 m.a.s.l.
Rated current	: 29.5 A	Protection degree	: IP56
L. R. Amperes	: 183 A	Cooling method	: IC411 - TEFC
LRC	: 6.2x(Code G)	Mounting	: F-1
No load current	: 11.0 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 1770 rpm	Noise level ²	: 63.0 dB(A)
Slip	: 1.67 %	Starting method	: Direct On Line
Rated torque	: 74.2 ft.lb	Approx. weight ³	: 405 lb
Locked rotor torque	: 240 %		
Breakdown torque	: 270 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 5.11 sq.ft.lb		
Design	: B		

Output	25%	50%	75%	100%	Foundation loads					
Efficiency (%)	91.7	92.9	92.4	92.4	93.0	91.7	93.6	91.0	Max. traction	: 814 lb
	92.8	92.2	92.4	92.4	92.4	91.7	92.4			
Power Factor	0.45	0.52	0.70	0.76	0.80	0.84	0.84	0.86	Max. compression	: 1218 lb
	0.48	0.45	0.73	0.70	0.82	0.80	0.85	0.84		

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

Losses (%)	P1 (0,9;1,0)	6.8	6.8	6.8	6.8
	P2 (0,5;1,0)	5.8	5.8	5.8	5.8
	P3 (0,25;1,0)	5.3	5.3	5.3	5.3
	P4 (0,9;0,5)	3.1	3.1	3.1	3.1
	P5 (0,5;0,5)	2.2	2.2	2.2	2.2
	P6 (0,5;0,25)	1.4	1.4	1.4	1.4
	P7 (0,25;0,25)	1.0	1.0	1.0	1.0

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6311 C3	6211 C3
Sealing	:	Inpro/Seal	Inpro/Seal
Lubrication interval	:	20000 h	20000 h
Lubricant amount	:	18 g	11 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	25/03/2024			
			Page	Revision
			1 / 1	