

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase
Product code : 16684657
Catalog # : 03018ST3QAP286T-W22

Frame	: 284/6T	Locked rotor time	: 36s (cold) 20s (hot)
Output	: 30 HP (22 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	: 35.1 A	Protection degree	: IP56
L. R. Amperes	: 214 A	Cooling method	: IC411 - TEFC
LRC	: 6.1x(Code G)	Mounting	: W-8
No load current	: 12.3 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	: 89.0 ft.lb	Approx. weight ³	: 450 lb
Locked rotor torque	: 240 %		
Breakdown torque	: 240 %		
Insulation class	: F		
Service factor	: 1.15		
Moment of inertia (J)	: 5.85 sq.ft.lb		
Design	: B		

Output	25%		50%		75%		100%		Foundation loads	
Efficiency (%)	92.3	89.8	93.0	90.0	93.0	90.2	93.6	90.2	Max. traction	: 947 lb
	90.3	91.0	90.5	91.2	91.0	91.7	91.0	91.7		
Power Factor	0.46	0.53	0.70	0.76	0.80	0.83	0.84	0.86	Max. compression	: 1397 lb
	0.50	0.46	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)	5.2	5.2	5.2	5.2
	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)	0.9	0.9	0.9	0.9

		Drive end	Non drive end
Bearing type	:	NU-311 C3	6211 C3
Sealing	:	Inpro/Seal	Inpro/Seal
Lubrication interval	:	12000 h	17000 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	