DATA SHEET

Three Phase Induction Motor - Squirrel Cage

Customer :

Product line	: W22 IEEE 841 NEMA Premium Efficiency Three-Phase	Product code :	11431673
		Catalog # :	20018ST3QIE447T-W22

Frame	: 445/7T	Locked rotor time	: 28s (cold) 16s (hot)
Output	: 200 HP (150 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	: 230 A	Protection degree	: IP56
L. R. Amperes	: 1564 A	Cooling method	: IC411 - TEFC
LRC	: 6.8x(Code G)	Mounting	: F-1
No load current	: 70.0 A	Rotation¹	: Both (CW and CCW)
Rated speed	: 1785 rpm	Noise level²	: 73.0 dB(A)
Slip	: 0.83 %	Starting method	: Direct On Line
Rated torque	: 588 ft.lb	Approx. weight³	: 2204 lb
Locked rotor torque	: 229 %		
Breakdown torque	: 250 %		
Insulation class	: F		
Service factor	: 1.15		
Moment of inertia (J)	: 76.2 sq.ft.lb		
Design	: B		

Output	25%		50%		75%		100%	
Efficiency (%)	95.7	94.3	95.8	94.5	96.2	95.0	96.2	95.0
	94.9	94.9	95.0	95.0	95.4	95.4	95.4	95.4
Power Factor	0.50	0.56	0.73	0.78	0.82	0.85	0.85	0.86
	0.53	0.50	0.76	0.73	0.84	0.82	0.86	0.85

Foundation loads

Max. traction	: 3438 lb
Max. compression	: 5642 lb

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

Losses (%)	P1 (0,9;1,0)	4.0	4.0	4.0	4.0
	P2 (0,5;1,0)	3.2	3.2	3.2	3.2
	P3 (0,25;1,0)	2.9	2.9	2.9	2.9
	P4 (0,9;0,5)	2.0	2.0	2.0	2.0
	P5 (0,5;0,5)	1.3	1.3	1.3	1.3
	P6 (0,5;0,25)	0.9	0.9	0.9	0.9
	P7 (0,25;0,25)	0.5	0.5	0.5	0.5

		Drive end	Non drive end
Bearing type	:	6319 C3	6316 C3
Sealing	:	Inpro/Seal	Inpro/Seal
Lubrication interval	:	8000 h	10000 h
Lubricant amount	:	45 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 NEMA MG-1.

Rev.	Changes Summary	Performed	Checked	Date

Performed by				
Checked by			Page	Revision
Date	25/03/2024		1 / 1	

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