

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :												
Product line		: W22 NEMA Premium Efficiency Three-Phase		Product code :	12977510							
				Catalog # :	20009ET3G449T-W22							
Frame	: 447/9T	Locked rotor time	: 23s (cold) 13s (hot)									
Output	: 200 HP (150 kW)	Temperature rise	: 80 K									
Poles	: 8	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	: 254 A	Protection degree	: IP55									
L. R. Amperes	: 1626 A	Cooling method	: IC411 - TEFC									
LRC	: 6.4x(Code H)	Mounting	: F-1									
No load current	: 115 A	Rotation ¹	: Both (CW and CCW)									
Rated speed	: 890 rpm	Noise level ²	: 66.0 dB(A)									
Slip	: 1.11 %	Starting method	: Direct On Line									
Rated torque	: 1180 ft.lb	Approx. weight ³	: 3056 lb									
Locked rotor torque	: 200 %											
Breakdown torque	: 220 %											
Insulation class	: F											
Service factor	: 1.15											
Moment of inertia (J)	: 161 sq.ft.lb											
Design	: B											
Output	25%	50%	75%	100%	Foundation loads							
Efficiency (%)	94.4	94.0	94.5	94.1	95.0	94.5	Max. traction : 6928 lb					
	93.4	92.5	93.6	93.0	94.5	94.1	94.5					
Power Factor	0.38	0.35	0.62	0.59	0.73	0.71	Max. compression : 9984 lb					
0.31	0.28	0.54	0.50	0.67	0.63	0.74	0.71					
Losses at normative operating points (speed;torque), in percentage of rated output power												
Losses (%)	P1 (0,9;1,0)	5.4	5.4	5.4	5.4	5.4						
	P2 (0,5;1,0)	4.3	4.3	4.3	4.3	4.3						
	P3 (0,25;1,0)	3.8	3.8	3.8	3.8	3.8						
	P4 (0,9;0,5)	2.9	2.9	2.9	2.9	2.9						
	P5 (0,5;0,5)	2.0	2.0	2.0	2.0	2.0						
	P6 (0,5;0,25)	1.5	1.5	1.5	1.5	1.5						
	P7 (0,25;0,25)	1.0	1.0	1.0	1.0	1.0						
Bearings			Drive end			Non drive end						
			6322 C3	6319 C3								
			WSeal	WSeal								
			14000 h	17000 h								
			60 g	45 g								
			Mobil Polyrex EM									
Notes:												
This revision replaces and cancel the previous one, which must be eliminated.			These are average values based on tests with sinusoidal power supply, subject to the tolerances stipulated in NEMA MG-1.									
(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.												
Rev.	Changes Summary			Performed	Checked	Date						
Performed by					Page		Revision					
Checked by												
Date		28/03/2024										