

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :								
Product line	: W22 IEEE 841 NEMA Premium Efficiency Three-Phase							
Product code	: 11584438							
Catalog #	: 10009ST3QIE445T-W22							
Frame : 444/5T Output : 100 HP (75 kW) Poles : 8 Frequency : 60 Hz Rated voltage : 460 V Rated current : 127 A L. R. Amperes : 762 A LRC : 6.0x(Code G) No load current : 56.0 A Rated speed : 890 rpm Slip : 1.11 % Rated torque : 590 ft.lb Locked rotor torque : 190 % Breakdown torque : 220 % Insulation class : F Service factor : 1.25 Moment of inertia (J) : 87.3 sq.ft.lb Design : B	Locked rotor time : 27s (cold) 15s (hot) Temperature rise : 80 K Duty cycle : Cont.(S1) Ambient temperature : -20°C to +40°C Altitude : 1000 m.a.s.l. Protection degree : IP56 Cooling method : IC411 - TEFC Mounting : F-1 Rotation ¹ : Both (CW and CCW) Noise level ² : 63.0 dB(A) Starting method : Direct On Line Approx. weight ³ : 1760 lb							
Output	50% 75% 100%							
Efficiency (%)	93.6 92.9 94.1 93.4 94.1 93.2 91.9 91.2 93.0 92.6 93.2 93.1 93.6 93.0 93.0 93.0 92.4 93.0 92.4 93.0 93.0							
Power Factor	0.63 0.59 0.74 0.72 0.79 0.78 0.55 0.51 0.68 0.65 0.75 0.73 0.69 0.65 0.78 0.75 0.81 0.79 0.61 0.73 0.78							
Foundation loads	Max. traction : 3282 lb Max. compression : 5042 lb							
Losses at normative operating points (speed;torque), in percentage of rated output power								
Losses (%)	P1 (0,9;1,0)	6.1	6.1	6.1	6.1	6.1	6.1	6.1
	P2 (0,5;1,0)	4.9	4.9	4.9	4.9	4.9	4.9	4.9
	P3 (0,25;1,0)	4.4	4.4	4.4	4.4	4.4	4.4	4.4
	P4 (0,9;0,5)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
	P5 (0,5;0,5)	2.0	2.0	2.0	2.0	2.0	2.0	2.0
	P6 (0,5;0,25)	1.4	1.4	1.4	1.4	1.4	1.4	1.4
	P7 (0,25;0,25)	0.9	0.9	0.9	0.9	0.9	0.9	0.9
Bearing type	: Drive end 6319 C3 Non drive end 6316 C3							
Sealing	: Inpro/Seal Inpro/Seal							
Lubrication interval	: 17000 h 20000 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					