

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :				
Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase	Product code : 12424294 Catalog # : 02518ST3QIE284TC-W22			
Frame : 284/6TC Output : 25 HP (18.5 kW) Poles : 4 Frequency : 60 Hz Rated voltage : 460 V Rated current : 29.5 A L. R. Amperes : 183 A LRC : 6.2x(Code G) No load current : 11.0 A Rated speed : 1770 rpm Slip : 1.67 % Rated torque : 74.2 ft.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	Locked rotor time : 43s (cold) 24s (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 : 413 lb			
Output	25% 50% 75% 100%			
Efficiency (%)	91.7 92.9 92.4 92.4 93.0 91.7 93.6 91.0 92.8 92.2 92.4 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 0.48 0.45 0.73 0.70 0.82 0.80 0.85 0.84			
Foundation loads				
	Max. traction : 809 lb Max. compression : 1222 lb			
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			
Bearing type :	Drive end : 6311 C3 Non drive end : 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			Page	Revision
Date	25/03/2024		1 / 1	