

DATA SHEET

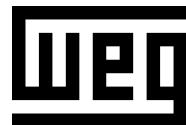
Three Phase Induction Motor - Squirrel Cage



Customer :								
Product line		: W22 NEMA Premium Efficiency Three-Phase		Product code :	12053033			
				Catalog # :	45009ET3G588/9-W22			
Frame	: 588/9T	Locked rotor time	: 48s (cold) 27s (hot)					
Output	: 450 HP (330 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	: 534 A	Protection degree	: IP55					
L. R. Amperes	: 3738 A	Cooling method	: IC411 - TEFC					
LRC	: 7.0x(Code H)	Mounting	: F-1					
No load current	: 200 A	Rotation ¹	: Both (CW and CCW)					
Rated speed	: 893 rpm	Noise level ²	: 75.0 dB(A)					
Slip	: 0.78 %	Starting method	: Direct On Line					
Rated torque	: 2650 ft.lb	Approx. weight ³	: 5811 lb					
Locked rotor torque	: 160 %							
Breakdown torque	: 229 %							
Insulation class	: F							
Service factor	: 1.00							
Moment of inertia (J)	: 617 sq.ft.lb							
Output	25%	50%	75%	100%	Foundation loads			
Efficiency (%)	95.0	95.3	95.2	95.4	Max. traction : 11693 lb			
	95.3	95.3	95.4	95.4				
Power Factor	0.42	0.48	0.65	0.72	Max. compression : 17504 lb			
	0.44	0.41	0.67	0.64				
Losses at normative operating points (speed;torque), in percentage of rated output power								
Losses (%)	P1 (0,9;1,0)	4.7	5.2	5.2	5.2			
	P2 (0,5;1,0)	3.7	4.0	4.0	4.0			
	P3 (0,25;1,0)	3.1	3.4	3.4	3.4			
	P4 (0,9;0,5)	2.6	2.8	2.8	2.8			
	P5 (0,5;0,5)	1.8	2.0	2.0	2.0			
	P6 (0,5;0,25)	1.3	1.5	1.5	1.5			
	P7 (0,25;0,25)	0.8	0.9	0.9	0.9			
			Drive end					
Bearing type	:	6322 C3	Non drive end					
Sealing	:	Taconite Labyrinth	6319 C3					
Lubrication interval	:	14000 h	Taconite Labyrinth					
Lubricant amount	:	60 g	17000 h					
Lubricant type	:	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			
Performed by					Page			
Checked by					Revision			
Date	28/03/2024				1 / 2			

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Space heater information

Voltage: 200 - 240 V

Rev.	Changes Summary		Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	28/03/2024			2 / 2	