

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :									
Product line	: W22 High Efficiency Three-Phase		Product code :	12822510					
Frame	: 256TC	Locked rotor time	: 27s (cold) 15s (hot)						
Output	: 20 HP (15 kW)	Temperature rise	: 80 K						
Poles	: 4	Duty cycle	: Cont.(S1)						
Frequency	: 60 Hz	Ambient temperature	: -20°C to +40°C						
Rated voltage	: 230/460 V	Altitude	: 1000 m.a.s.l.						
Rated current	: 48.6/24.3 A	Protection degree	: IP55						
L. R. Amperes	: 292/146 A	Cooling method	: IC411 - TEFC						
LRC	: 6.0x(Code G)	Mounting	: W-6						
No load current	: 18.0/9.00 A	Rotation ¹	: Both (CW and CCW)						
Rated speed	: 1765 rpm	Noise level ²	: 64.0 dB(A)						
Slip	: 1.94 %	Starting method	: Direct On Line						
Rated torque	: 59.5 ft.lb	Approx. weight ³	: 291 lb						
Locked rotor torque	: 200 %								
Breakdown torque	: 240 %								
Insulation class	: F								
Service factor	: 1.25								
Moment of inertia (J)	: 2.86 sq.ft.lb								
Design	: B								
Output	25%	50%	75%	100%	Foundation loads				
Efficiency (%)	90.0	86.6	90.2	87.0	91.0	87.3	91.0	87.4	Max. traction : 614 lb
	88.6	89.2	88.9	89.5	89.0	89.9	89.1	90.0	Max. compression : 904 lb
Power Factor	0.46	0.53	0.72	0.77	0.81	0.85	0.85	0.87	
	0.50	0.47	0.75	0.72	0.83	0.82	0.86	0.86	
Losses at normative operating points (speed;torque), in percentage of rated output power									
Losses (%)	P1 (0,9;1,0)	10.0	14.5	12.3	11.2				
	P2 (0,5;1,0)	9.1	13.2	11.2	10.2				
	P3 (0,25;1,0)	8.1	11.9	10.1	9.1				
	P4 (0,9;0,5)	4.5	6.5	5.5	5.0				
	P5 (0,5;0,5)	3.3	4.8	4.0	3.7				
	P6 (0,5;0,25)	2.0	3.0	2.5	2.3				
	P7 (0,25;0,25)	1.5	2.2	1.9	1.7				
Drive end Non drive end									
Bearing type	:	6309 C3	6209 C3						
Sealing	:	V'Ring	V'Ring						
Lubrication interval	:	18000 h	19000 h						
Lubricant amount	:	13 g	9 g						
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 / 1				