

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :												
Product line	: W22 NEMA Premium Efficiency Three-Phase			Product code :	12821872							
				Catalog # :	00112ET3ER145TC-W22							
Frame	: 145TC	Locked rotor time	: 50s (cold) 28s (hot)									
Output	: 1 HP (0.75 kW)	Temperature rise	: 80 K									
Poles	: 6	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	: 3.46/1.73 A	Protection degree	: IP55									
L. R. Amperes	: 21.5/10.7 A	Cooling method	: IC411 - TEFC									
LRC	: 6.2x(Code K)	Mounting	: W-6									
No load current	: 2.20/1.10 A	Rotation ¹	: Both (CW and CCW)									
Rated speed	: 1160 rpm	Noise level ²	: 50.0 dB(A)									
Slip	: 3.33 %	Starting method	: Direct On Line									
Rated torque	: 4.53 ft.lb	Approx. weight ³	: 53.5 lb									
Locked rotor torque	: 260 %											
Breakdown torque	: 300 %											
Insulation class	: F											
Service factor	: 1.25											
Moment of inertia (J)	: 0.1595 sq.ft.lb											
Design	: B											
Output	25%	50%	75%	100%	Foundation loads							
Efficiency (%)	76.0	73.6	77.0	74.8	82.0	78.4	82.5					
	71.6	68.6	73.2	70.7	77.5	75.8	78.9					
	77.6	76.1	77.0	75.5	80.0	80.0	78.5					
	73.4	74.0	78.5	78.5								
Power Factor	0.26	0.25	0.45	0.44	0.57	0.57	0.66					
	0.23	0.21	0.41	0.38	0.53	0.50	0.62					
	0.31	0.28	0.53	0.49	0.66	0.62	0.74					
	0.26	0.46	0.59	0.68								
Losses at normative operating points (speed/torque), in percentage of rated output power												
Losses (%)	P1 (0,9;1,0)	20.0	20.0	20.0	20.0	20.0	20.0					
	P2 (0,5;1,0)	16.7	16.7	16.7	16.7	16.7	16.7					
	P3 (0,25;1,0)	16.9	16.9	16.9	16.9	16.9	16.9					
	P4 (0,9;0,5)	12.6	12.6	12.6	12.6	12.6	12.6					
	P5 (0,5;0,5)	9.2	9.2	9.2	9.2	9.2	9.2					
	P6 (0,5;0,25)	7.6	7.6	7.6	7.6	7.6	7.6					
	P7 (0,25;0,25)	5.8	5.8	5.8	5.8	5.8	5.8					
Drive end												
Bearing type	:	6205 ZZ	Non drive end									
Sealing	:	V'Ring	6204 ZZ									
Lubrication interval	:	-	V'Ring									
Lubricant amount	:	-	-									
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	Date						
Performed by												
Checked by												
Date		26/03/2024										
				Page		Revision						
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