

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11610563

Catalog # : 00218ET3E145TC-W22

Frame : 143/5TC
Output : 2 HP (1.5 kW)
Poles : 4
Frequency : 60 Hz
Rated voltage : 230/460 V
Rated current : 5.58/2.79 A
L. R. Amperes : 46.3/23.2 A
LRC : 8.3x(Code L)
No load current : 3.26/1.63 A
Rated speed : 1750 rpm
Slip : 2.78 %
Rated torque : 6.00 ft.lb
Locked rotor torque : 270 %
Breakdown torque : 320 %
Insulation class : F
Service factor : 1.25
Moment of inertia (J) : 0.1561 sq.ft.lb
Design : B

Locked rotor time : 18s (cold) 10s (hot)
Temperature rise : 80 K
Duty cycle : Cont.(S1)
Ambient temperature : -20°C to +40°C
Altitude : 1000 m.a.s.l.
Protection degree : IP55
Cooling method : IC411 - TEFC
Mounting : F-1
Rotation¹ : Both (CW and CCW)
Noise level² : 51.0 dB(A)
Starting method : Direct On Line
Approx. weight³ : 52.3 lb

Output	50%	75%	100%
Efficiency (%)	85.5 84.0 82.0 81.4 85.5 84.0 84.0	86.5 84.2 83.5 83.1 84.0 84.0 84.0	86.5 84.5 84.5 84.1 82.5 84.0 84.0
Power Factor	0.57 0.55 0.50 0.47 0.66 0.62 0.60	0.70 0.69 0.64 0.61 0.78 0.74 0.72	0.78 0.77 0.73 0.71 0.83 0.80 0.79

Foundation loads
Max. traction : 157 lb

Max. compression : 209 lb

Losses at normative operating points (speed;torque), in percentage of rated output power

Losses (%)	P1 (0,9;1,0)	15.0	15.0	15.0	15.0	15.0	15.0	15.0
	P2 (0,5;1,0)	12.8	12.8	12.8	12.8	12.8	12.8	12.8
	P3 (0,25;1,0)	12.1	12.1	12.1	12.1	12.1	12.1	12.1
	P4 (0,9;0,5)	8.4	8.4	8.4	8.4	8.4	8.4	8.4
	P5 (0,5;0,5)	6.0	6.0	6.0	6.0	6.0	6.0	6.0
	P6 (0,5;0,25)	4.7	4.7	4.7	4.7	4.7	4.7	4.7
	P7 (0,25;0,25)	3.5	3.5	3.5	3.5	3.5	3.5	3.5

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6205 ZZ	6204 ZZ
Sealing	:	V'Ring	V'Ring
Lubrication interval	:	-	-
Lubricant amount	:	-	-
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		Page 1 / 1		
Checked by				
Date	28/03/2024			
		Revision		