

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 High Efficiency Three-Phase

Product code : 11354955

Frame : 404/5T  
 Output : 60 HP (45 kW)  
 Poles : 8  
 Frequency : 60 Hz  
 Rated voltage : 230/460 V  
 Rated current : 148/74.2 A  
 L. R. Amperes : 935/467 A  
 LRC : 6.3x(Code G)  
 No load current : 58.0/29.0 A  
 Rated speed : 880 rpm  
 Slip : 2.22 %  
 Rated torque : 358 ft.lb  
 Locked rotor torque : 180 %  
 Breakdown torque : 250 %  
 Insulation class : F  
 Service factor : 1.25  
 Moment of inertia (J) : 36.9 sq.ft.lb  
 Design : B

Locked rotor time : 19s (cold) 11s (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  
 Rotation<sup>1</sup> : Both (CW and CCW)  
 Noise level<sup>2</sup> : 60.0 dB(A)  
 Starting method : Direct On Line  
 Approx. weight<sup>3</sup> : 1087 lb

Output	50%	75%	100%
Efficiency (%)	91.7 91.0	92.4 91.6	91.7 91.6
	91.0 91.0	91.6 91.6	91.6 91.6
Power Factor	0.70 0.70	0.80 0.80	0.83 0.84
	0.66 0.63	0.78 0.75	0.83 0.81

Foundation loads  
 Max. traction : 3128 lb  
 Max. compression : 4214 lb

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

Losses (%)	P1 (0,9;1,0)	8.7	8.8	8.8	8.8
	P2 (0,5;1,0)	7.5	7.6	7.6	7.6
	P3 (0,25;1,0)	7.6	7.7	7.7	7.7
	P4 (0,9;0,5)	3.6	3.7	3.7	3.7
	P5 (0,5;0,5)	2.7	2.7	2.7	2.7
	P6 (0,5;0,25)	1.6	1.6	1.6	1.6
	P7 (0,25;0,25)	1.2	1.2	1.2	1.2

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6316 C3	6314 C3
Sealing	:	WSeal	WSeal
Lubrication interval	:	20000 h	20000 h
Lubricant amount	:	34 g	27 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				
Date	29/03/2024			
			Page	Revision
			1 / 1	