

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Tru-Metric IE3 Three-Phase

Product code :

16993738

Catalog # :

01818ET3E180MF3-W22

Frame : 180M  
Output : 25 HP (18.5 kW)  
Poles : 4  
Frequency : 50 Hz  
Rated voltage : 380 V  
Rated current : 36.1 A  
L. R. Amperes : 264 A  
LRC : 7.3  
No load current : 14.0 A  
Rated speed : 1470 rpm  
Slip : 2.00 %  
Rated torque : 89.3 ft.lb  
Locked rotor torque : 250 %  
Breakdown torque : 270 %  
Insulation class : F  
Service factor : 1.25  
Moment of inertia (J) : 4.75 sq.ft.lb  
Design : N

Locked rotor time : 21s (cold) 12s (hot)  
Temperature rise : 80 K  
Duty cycle : S1  
Ambient temperature : -20°C to +40°C  
Altitude : 1000 m.a.s.l.  
Protection degree : IP55  
Cooling method : IC411 - TEFC  
Mounting : B3T  
Rotation<sup>1</sup> : Both (CW and CCW)  
Noise level<sup>2</sup> : 61.0 dB(A)  
Starting method : Direct On Line  
Approx. weight<sup>3</sup> : 397 lb

Output	25%		50%		75%		100%	
Efficiency (%)	92.1	91.7	92.3	91.8	92.6	92.8	92.6	92.7
	89.8		91.0		92.4		93.6	
Power Factor	0.44	0.37	0.68	0.61	0.79	0.73	0.84	0.80
	0.38		0.62		0.75		0.81	

Foundation loads  
Max. traction : 1084 lb  
Max. compression : 1481 lb

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

Losses (%)	P1 (0,9;1,0)	7.6	7.5	6.5
	P2 (0,5;1,0)	5.9	5.8	5.0
	P3 (0,25;1,0)	5.3	5.2	4.5
	P4 (0,9;0,5)	4.4	4.3	3.7
	P5 (0,5;0,5)	2.8	2.8	2.4
	P6 (0,5;0,25)	2.1	2.0	1.8
	P7 (0,25;0,25)	1.4	1.3	1.2

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6311 C3	6211 C3
Sealing	:	V'Ring	V'Ring
Lubrication interval	:	20000 h	20000 h
Lubricant amount	:	18 g	11 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	26/03/2024			
			Page	Revision
			1 / 1	