

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : W22 Tru-Metric IE3 Three-Phase Product code : 13272585

Frame	: 180L	Locked rotor time	: 23s (cold) 13s (hot)
Output	: 20 HP (15 kW)	Temperature rise	: 80 K
Poles	: 6	Duty cycle	: S1
Frequency	: 60 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 460 V	Altitude	: 1000 m.a.s.l.
Rated current	: 24.7 A	Protection degree	: IP55
L. R. Amperes	: 228 A	Cooling method	: IC411 - TEFC
LRC	: 9.2	Mounting	: B3L(E)
No load current	: 10.7 A	Rotation <sup>1</sup>	: Both (CW and CCW)
Rated speed	: 1180 rpm	Noise level <sup>2</sup>	: 59.0 dB(A)
Slip	: 1.67 %	Starting method	: Direct On Line
Rated torque	: 12.3 kgfm	Approx. weight <sup>3</sup>	: 195 kg
Locked rotor torque	: 300 %		
Breakdown torque	: 390 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 0.3240 kgm <sup>2</sup>		
Design	: N		

Output	50%	75%	100%	Foundation loads	
Efficiency (%)	91.0	91.7	91.7	Max. traction	: 590 kgf
Power Factor	0.68	0.79	0.83	Max. compression	: 785 kgf

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

P1 (0,9;1,0)	P2 (0,5;1,0)	P3 (0,25;1,0)	P4 (0,9;0,5)	P5 (0,5;0,5)	P6 (0,5;0,25)	P7 (0,25;0,25)
8.6	7.2	7.0	4.3	3.0	2.0	1.4

		<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.

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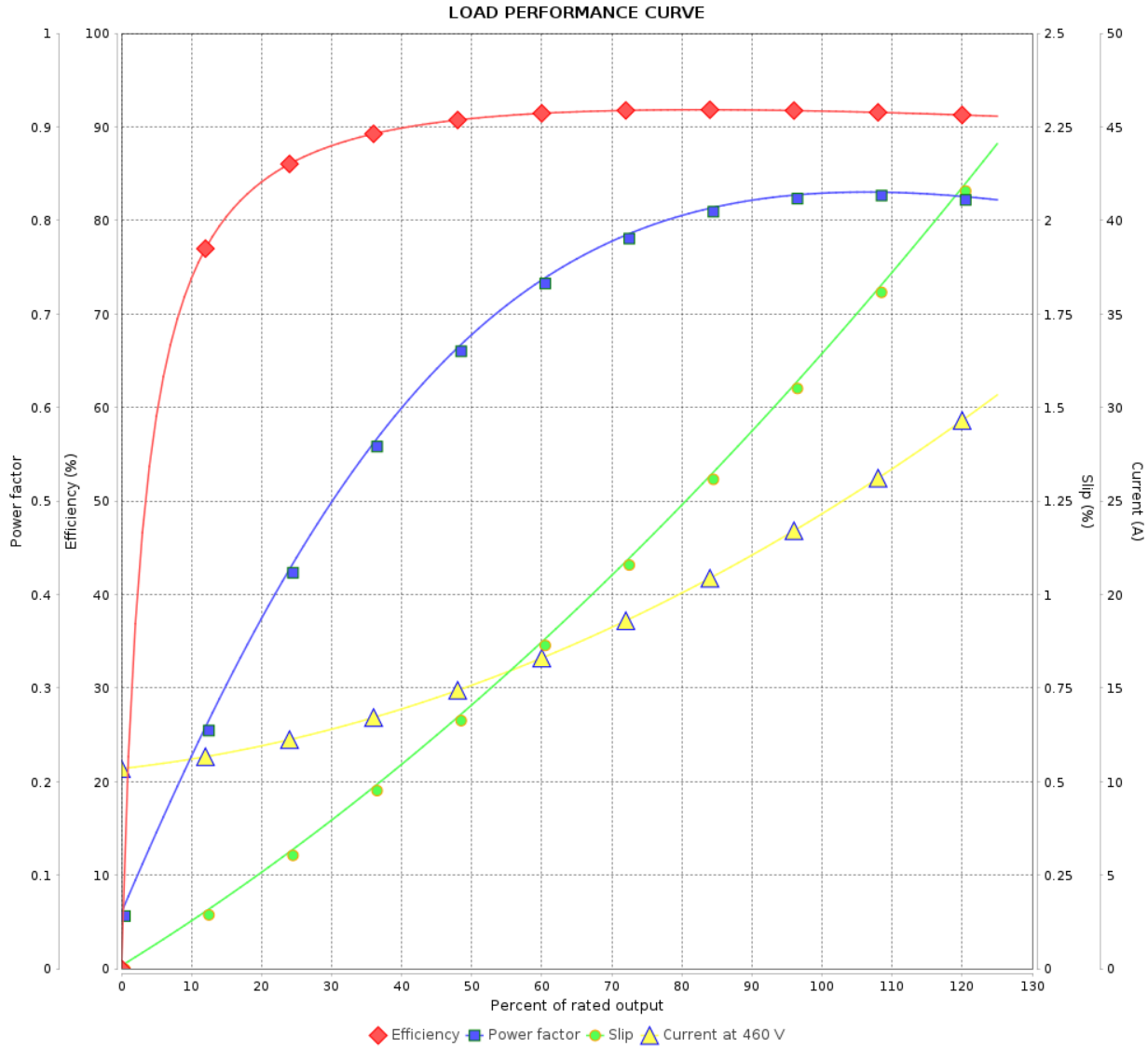
# LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Tru-Metric IE3 Three-Phase Product code : 13272585



Performance : 460 V 60 Hz 6P

Rated current : 24.7 A  
 LRC : 9.2  
 Rated torque : 12.3 kgfm  
 Locked rotor torque : 300 %  
 Breakdown torque : 390 %  
 Rated speed : 1180 rpm

Moment of inertia (J) : 0.3240 kgm<sup>2</sup>  
 Duty cycle : S1  
 Insulation class : F  
 Service factor : 1.25  
 Temperature rise : 80 K  
 Design : N

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