

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Tru-Metric IE3 Three-Phase Product code : 14514183

Frame	: 90S	Locked rotor time	: 27s (cold) 15s (hot)
Output	: 1.5 HP (1.1 kW)	Temperature rise	: 80 K
Poles	: 4	Duty cycle	: S1
Frequency	: 60 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 230/460 V	Altitude	: 1000 m.a.s.l.
Rated current	: 4.10/2.05 A	Protection degree	: IP55
L. R. Amperes	: 34.8/17.4 A	Cooling method	: IC411 - TEFC
LRC	: 8.5	Mounting	: B35L(E)
No load current	: 2.43/1.22 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 1755 rpm	Noise level ²	: 51.0 dB(A)
Slip	: 2.50 %	Starting method	: Direct On Line
Rated torque	: 0.620 kgfm	Approx. weight ³	: 23.4 kg
Locked rotor torque	: 290 %		
Breakdown torque	: 350 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 0.0055 kgm ²		
Design	: N		

Output	50%	75%	100%	Foundation loads	
Efficiency (%)	80.0	84.0	86.5	Max. traction	: 50 kgf
Power Factor	0.57	0.70	0.78	Max. compression	: 73 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)
14.6	11.9	12.2	8.6	6.0	4.7	3.4

	Drive end	Non drive end
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 / 2 Revision		
Checked by				
Date	24/10/2024			

LOAD PERFORMANCE CURVE

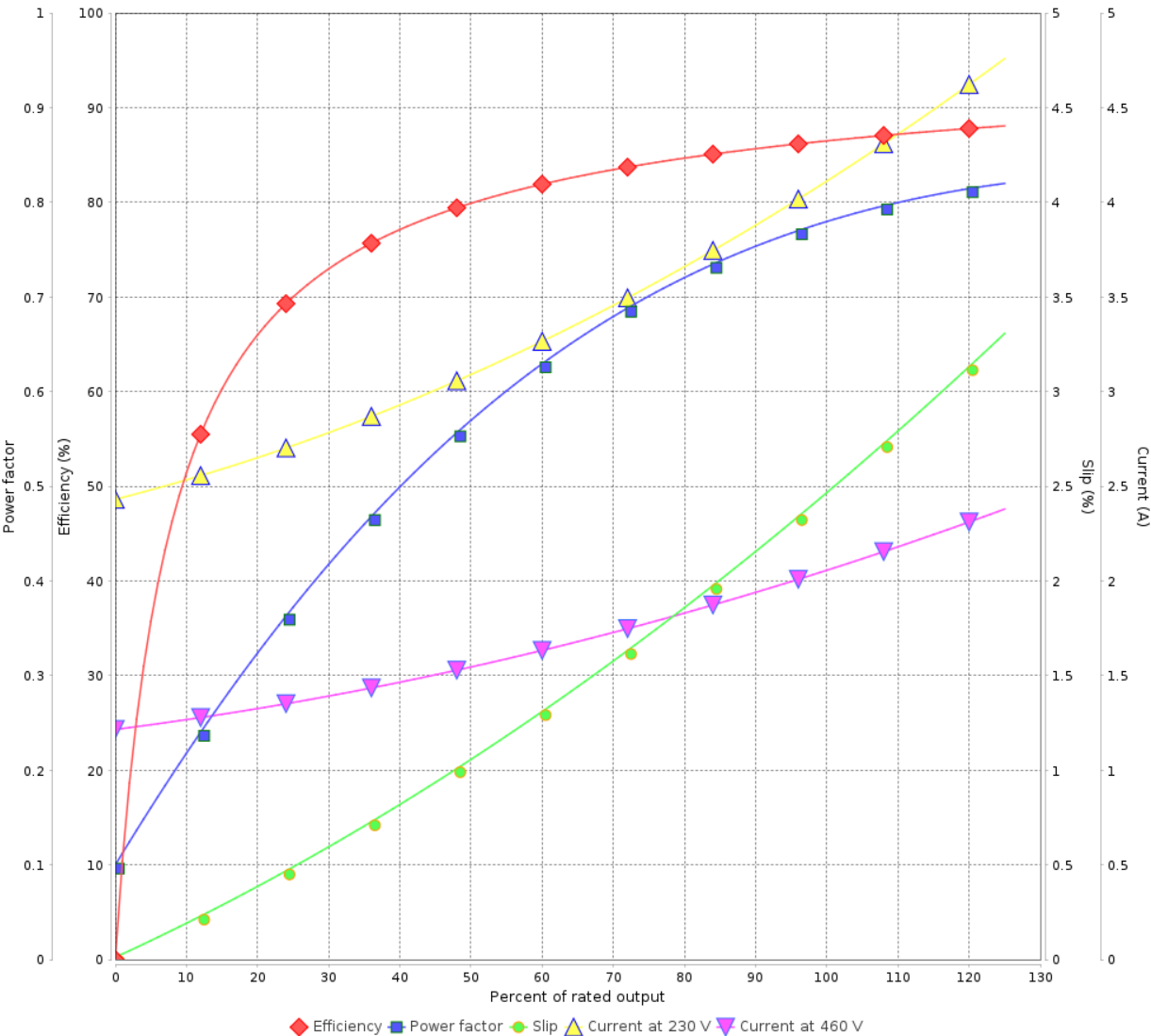
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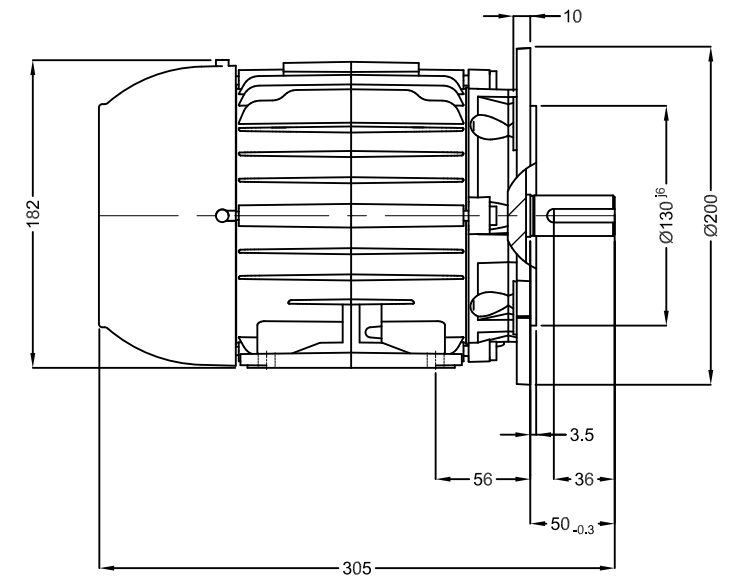




Performance : 230/460 V 60 Hz 4P

Rated current : 4.10/2.05 A
LRC : 8.5
Rated torque : 0.620 kgfm
Locked rotor torque : 290 %
Breakdown torque : 350 %
Rated speed : 1755 rpm

Moment of inertia (J) : 0.0055 kgm²
Duty cycle : S1
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : N

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1.5 HP 04 Poles 60 Hz							A
				HYBRISUSER			00
ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	HYBRISUSER	 THREE PH. MOTOR W22 IE3 FRAME 90S IP55 TEFC	PREVIEW				
CHECKED			WDD 00				
RELEASED							
REL. DATE			SHEET /				