

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :						
Product line	: W22 NEMA Premium Efficiency Three-Phase	Product code :	14104021			
Frame	: 444/5T	Locked rotor time	: 27s (cold) 15s (hot)			
Output	: 100 HP (75 kW)	Temperature rise	: 80 K			
Poles	: 8	Duty cycle	: Cont.(S1)			
Frequency	: 60 Hz	Ambient temperature	: -20°C to +40°C			
Rated voltage	: 575 V	Altitude	: 1000 m.a.s.l.			
Rated current	: 102 A	Protection degree	: IP55			
L. R. Amperes	: 610 A	Cooling method	: IC411 - TEFC			
LRC	: 6.0x(Code G)	Mounting	: F-1			
No load current	: 44.8 A	Rotation ¹	: Both (CW and CCW)			
Rated speed	: 890 rpm	Noise level ²	: 63.0 dB(A)			
Slip	: 1.11 %	Starting method	: Direct On Line			
Rated torque	: 81.5 kgfm	Approx. weight ³	: 804 kg			
Locked rotor torque	: 190 %					
Breakdown torque	: 220 %					
Insulation class	: F					
Service factor	: 1.25					
Moment of inertia (J)	: 3.68 kgm ²					
Design	: B					
Output	50%	75%	100%			
Efficiency (%)	93.6	94.1	94.1			
Power Factor	0.63	0.74	0.79			
Foundation loads		Max. traction : 1167 kgf				
		Max. compression : 1971 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)
6.1	4.9	4.4	3.0	2.0	1.4	0.9
Bearing type		<u>Drive end</u>	<u>Non drive end</u>			
Sealing		NU-319 C3	6316 C3			
Lubrication interval		WSeal	WSeal			
Lubricant amount		15000 h	20000 h			
Lubricant type		45 g	34 g			
		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					Page	Revision
Date	15/01/2024				1 / 2	

LOAD PERFORMANCE CURVE

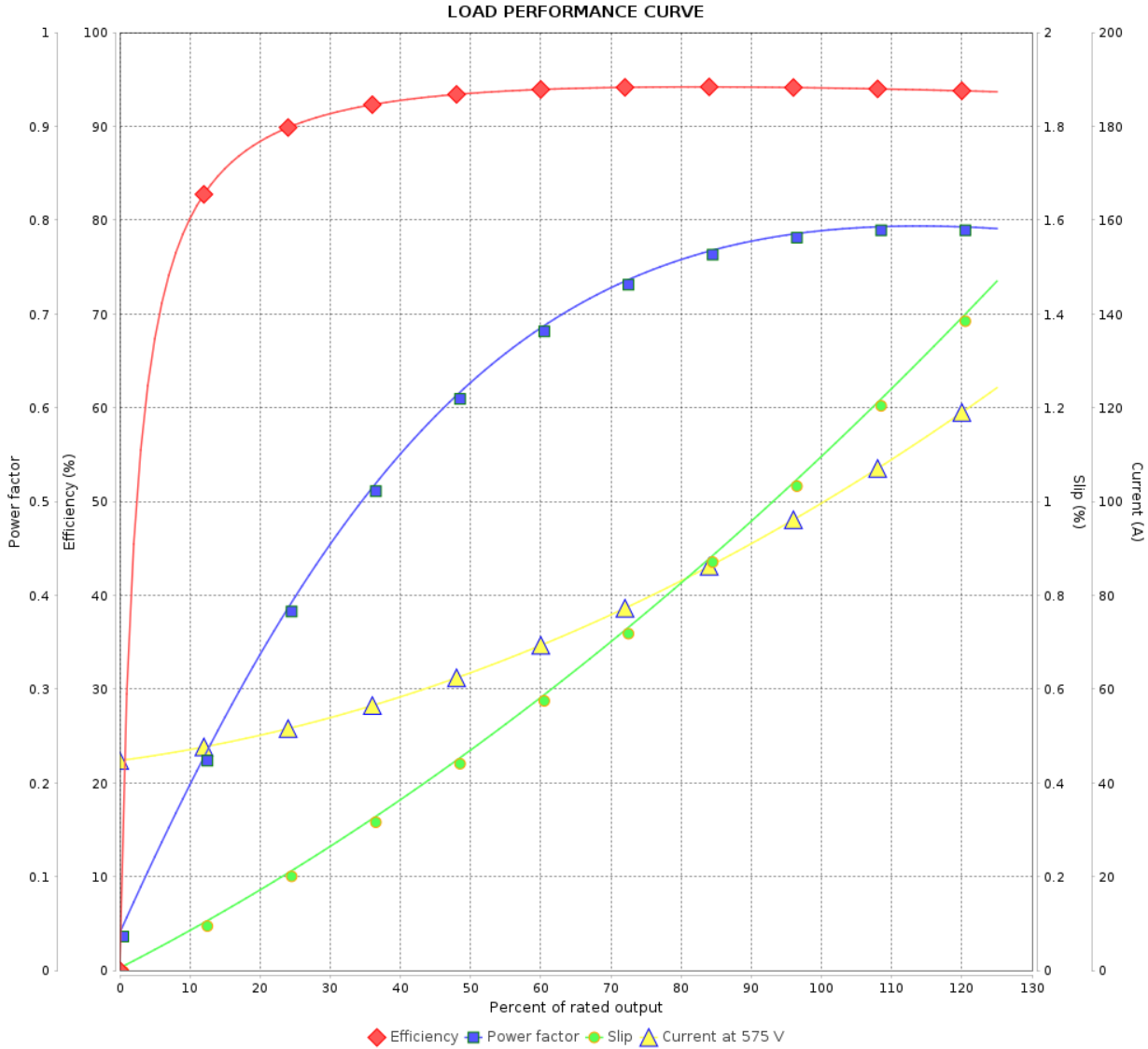
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Product code : 14104021



Performance : 575 V 60 Hz 8P

Rated current : 102 A
 LRC : 6.0
 Rated torque : 81.5 kgfm
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 Breakdown torque : 220 %
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Moment of inertia (J) : 3.68 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

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Performed by			Page 2 / 2	Revision
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