

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :						
Product line : W22 NEMA Premium Efficiency Three-Phase			Product code : 13780982			
Frame	: 284T		Locked rotor time	: 48s (cold) 27s (hot)		
Output	: 20 HP (15 kW)		Temperature rise	: 80 K		
Poles	: 4		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	: 19.3 A		Protection degree	: IP55		
L. R. Amperes	: 116 A		Cooling method	: IC411 - TEFC		
LRC	: 6.0x(Code G)		Mounting	: F-1		
No load current	: 6.16 A		Rotation <sup>1</sup>	: Both (CW and CCW)		
Rated speed	: 1770 rpm		Noise level <sup>2</sup>	: 63.0 dB(A)		
Slip	: 1.67 %		Starting method	: Direct On Line		
Rated torque	: 8.20 kgfm		Approx. weight <sup>3</sup>	: 173 kg		
Locked rotor torque	: 200 %					
Breakdown torque	: 240 %					
Insulation class	: F					
Service factor	: 1.25					
Moment of inertia (J)	: 0.2153 kgm <sup>2</sup>					
Design	: B					
Output	50%	75%	100%	Foundation loads		
Efficiency (%)	92.4	93.0	93.0	Max. traction	: 195 kgf	
Power Factor	0.70	0.80	0.84	Max. compression	: 368 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)
7.4	6.3	5.6	3.3	2.3	1.4	0.9
		<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
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Checked by					Page	Revision
Date	01/02/2024				1 / 2	

# LOAD PERFORMANCE CURVE

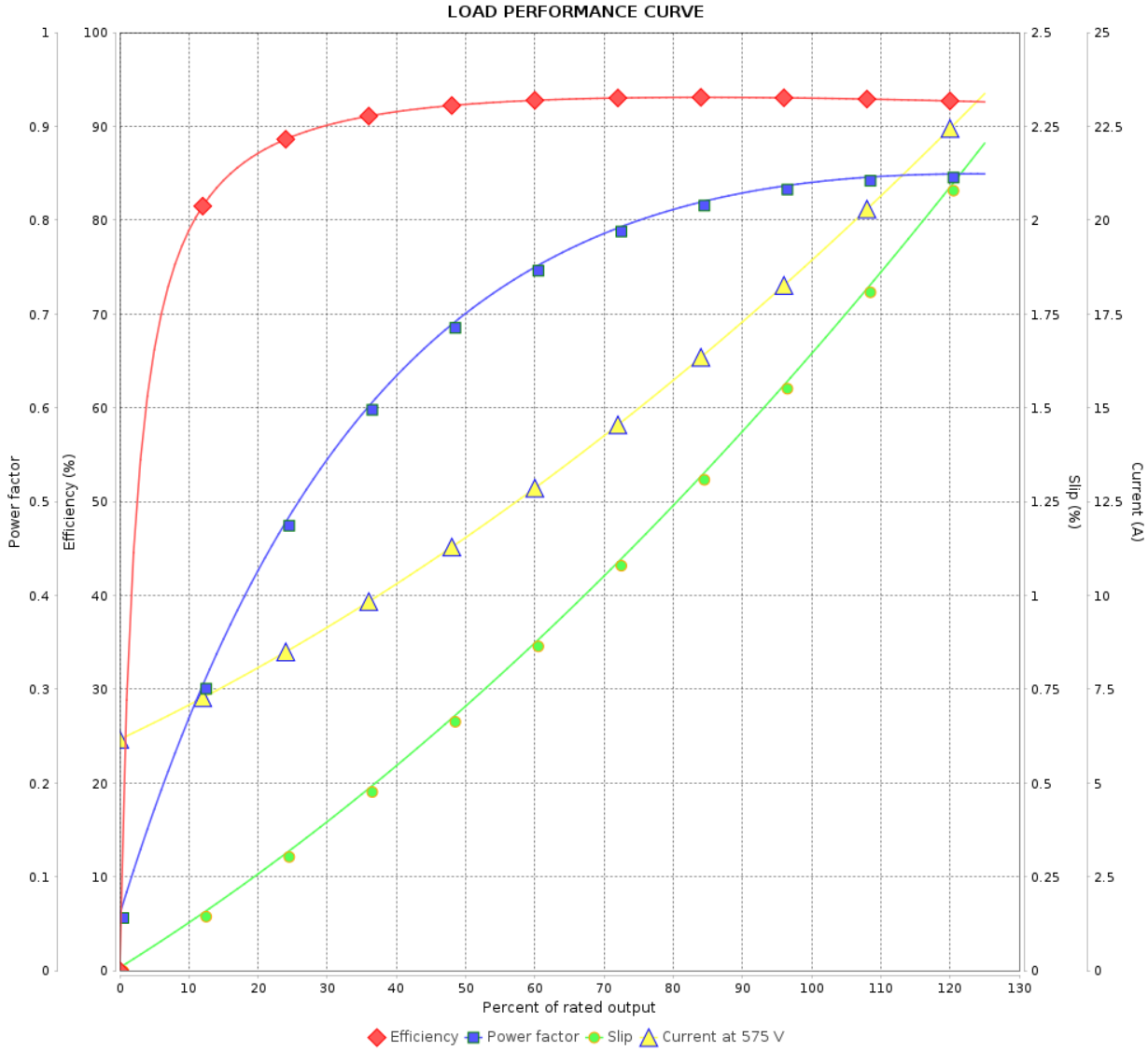
Three Phase Induction Motor - Squirrel Cage



Customer : \_\_\_\_\_

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 13780982



Performance : 575 V 60 Hz 4P

Rated current : 19.3 A  
 LRC : 6.0  
 Rated torque : 8.20 kgfm  
 Locked rotor torque : 200 %  
 Breakdown torque : 240 %  
 Rated speed : 1770 rpm

Moment of inertia (J) : 0.2153 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.25  
 Temperature rise : 80 K  
 Design : B

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