

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : W40 NEMA Premium Efficiency Three-Phase      Product code : 14980749

Frame	: 444/5TC	Cooling method	: IC01 - ODP
Insulation class	: F	Mounting	: F-1
Duty cycle	: Cont.(S1)	Rotation <sup>1</sup>	: Both (CW and CCW)
Ambient temperature	: -20°C to +40°C	Starting method	: Direct On Line
Altitude	: 1000 m.a.s.l.	Approx. weight <sup>3</sup>	: 624 kg
Protection degree	: IP23	Moment of inertia (J)	: 1.77 kgm <sup>2</sup>
Design	: B		

Output [HP]	150	125	125	125
Poles	4	4	4	4
Frequency [Hz]	60	50	50	50
Rated voltage [V]	460	380	400	415
Rated current [A]	170	169	162	158
L. R. Amperes [A]	1105	1183	1199	1138
LRC [A]	6.5x(Code G)	7.0x(Code G)	7.4x(Code H)	7.2x(Code H)
No load current [A]	58.0	57.7	62.5	66.5
Rated speed [RPM]	1784	1485	1485	1485
Slip [%]	0.89	1.00	1.00	1.00
Rated torque [kgfm]	61.0	61.1	61.1	61.1
Locked rotor torque [%]	200	190	220	240
Breakdown torque [%]	240	240	270	290
Service factor	1.25	1.00	1.00	1.00
Temperature rise	80 K	80 K	80 K	80 K
Locked rotor time	39s (cold) 22s (hot)	37s (cold) 21s (hot)	36s (cold) 20s (hot)	39s (cold) 22s (hot)
Noise level <sup>2</sup>	78.0 dB(A)			
Efficiency (%)	25%			
	50%	95.4	94.9	94.9
	75%	95.8	95.3	95.3
	100%	95.8	95.3	95.3
Power Factor	25%			
	50%	0.74	0.74	0.70
	75%	0.82	0.82	0.80
	100%	0.85	0.85	0.84

Bearing type	: <u>Drive end</u> 6319 C3	<u>Non drive end</u> 6212 Z C3	Foundation loads	Max. traction : 1237 kgf
	: Without	Without		
Sealing	: Bearing Seal	Bearing Seal		
Lubrication interval	: 20000 h	20000 h		
Lubricant amount	: 45 g	13 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			Page	Revision
Checked by				
Date				

# LOAD PERFORMANCE CURVE

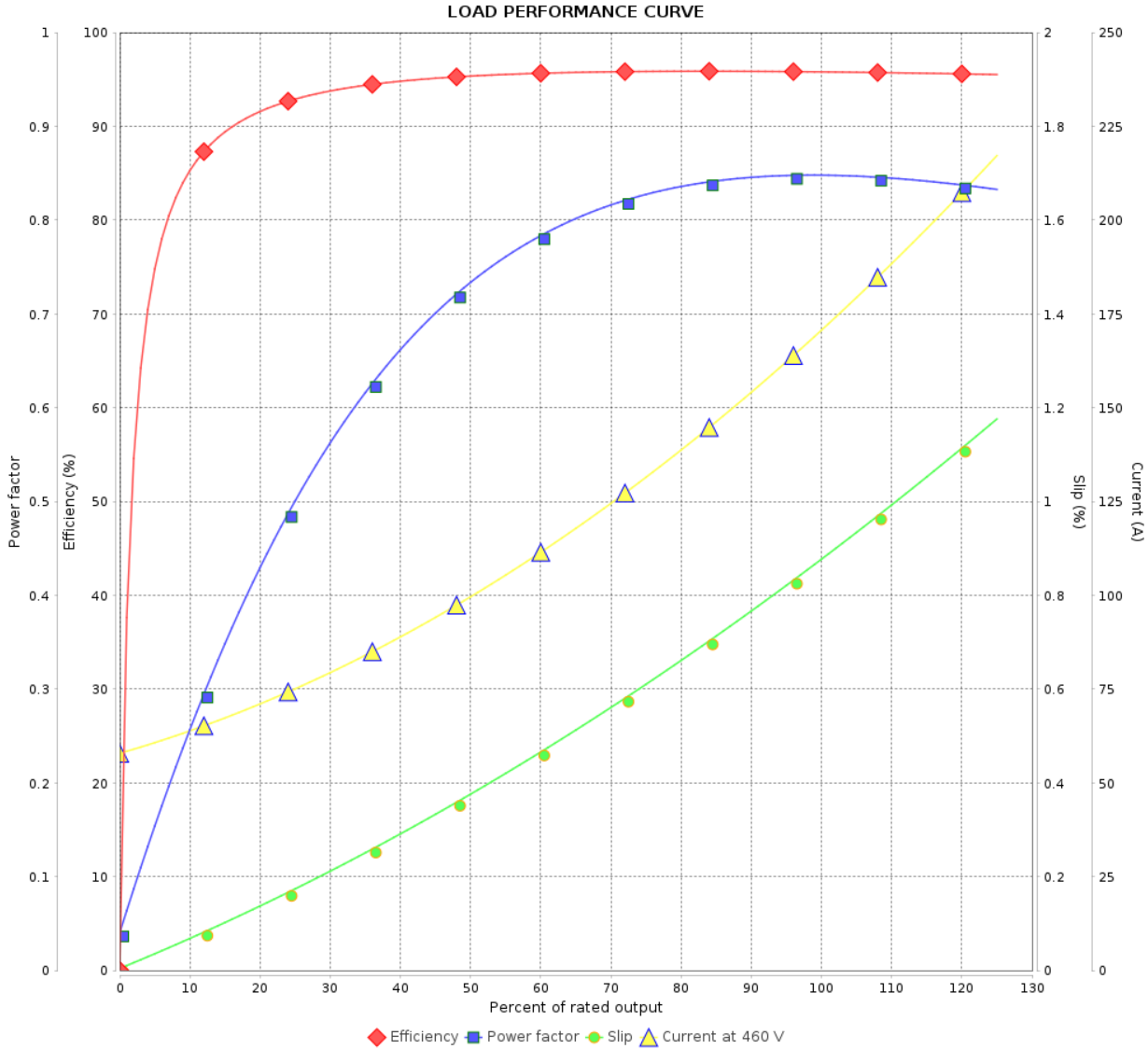
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W40 NEMA Premium Efficiency Three-Phase

Product code : 14980749



Performance : 460 V 60 Hz 4P

Rated current : 170 A  
 LRC : 6.5  
 Rated torque : 61.0 kgfm  
 Locked rotor torque : 200 %  
 Breakdown torque : 240 %  
 Rated speed : 1784 rpm

Moment of inertia (J) : 1.77 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.25  
 Temperature rise : 80 K  
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 2 / 5	Revision
Checked by				
Date	15/01/2024			



# LOAD PERFORMANCE CURVE

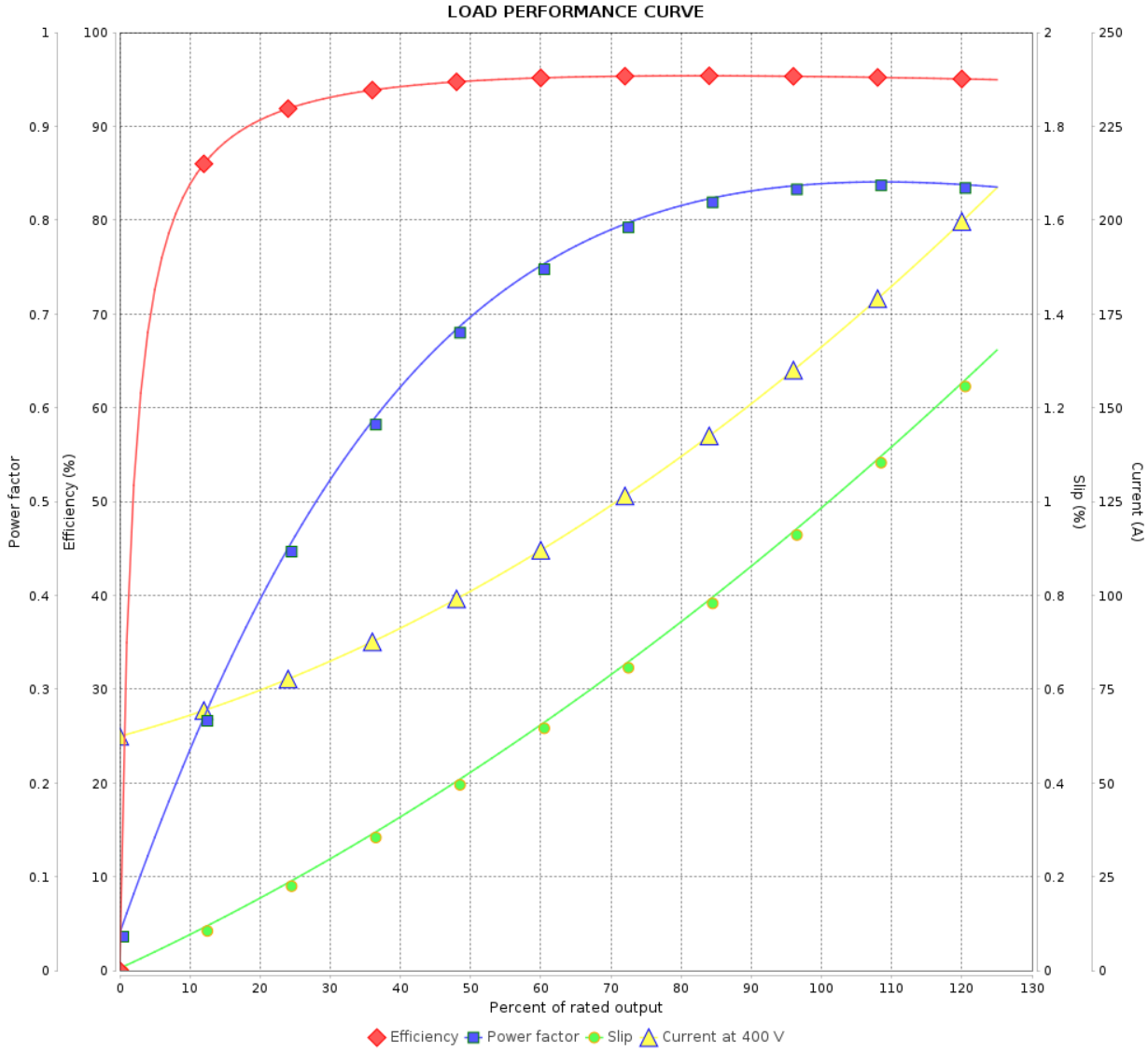
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W40 NEMA Premium Efficiency Three-Phase

Product code : 14980749



Performance : 400 V 50 Hz 4P IE3

Rated current	: 162 A	Moment of inertia (J)	: 1.77 kgm <sup>2</sup>
LRC	: 7.4	Duty cycle	: Cont.(S1)
Rated torque	: 61.1 kgfm	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.00
Breakdown torque	: 270 %	Temperature rise	: 80 K
Rated speed	: 1485 rpm	Design	: B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page	Revision
Checked by			4 / 5	
Date	15/01/2024			

