

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : W40 NEMA Premium Efficiency Three-Phase      Product code : 14495057

Frame	: 284TC	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>	: 161 kg
Protection degree	: IP23	Moment of inertia (J)	: 0.1563 kgm <sup>2</sup>
Design	: B		

Output [HP]	25	20	20	20
Poles	4	4	4	4
Frequency [Hz]	60	50	50	50
Rated voltage [V]	230/460	380	400	415
Rated current [A]	59.0/29.5	29.5	28.7	28.0
L. R. Amperes [A]	372/186	171	192	199
LRC [A]	6.3x(Code G)	5.8x(Code G)	6.7x(Code H)	7.1x(Code J)
No load current [A]	20.8/10.4	10.3	11.0	11.6
Rated speed [RPM]	1770	1470	1475	1475
Slip [%]	1.67	2.00	1.67	1.67
Rated torque [kgfm]	10.3	9.87	9.84	9.84
Locked rotor torque [%]	229	220	240	270
Breakdown torque [%]	270	250	290	300
Service factor	1.25	1.00	1.00	1.00
Temperature rise	80 K	80 K	80 K	80 K
Locked rotor time	59s (cold) 33s (hot)	55s (cold) 31s (hot)	55s (cold) 31s (hot)	55s (cold) 31s (hot)
Noise level <sup>2</sup>	64.0 dB(A)			
Efficiency (%)	25%	92.8	91.5	91.5
	50%	93.0	91.7	91.7
	75%	93.6	92.1	92.1
	100%	93.6	92.1	92.1
Power Factor	25%	0.46	0.45	0.39
	50%	0.69	0.69	0.62
	75%	0.80	0.79	0.74
	100%	0.84	0.84	0.81

	<u>Drive end</u>	<u>Non drive end</u>	Foundation loads
Bearing type	: 6311 Z C3	6211 Z C3	Max. traction
Sealing	: Without	Without	Max. compression
	Bearing Seal	Bearing Seal	
Lubrication interval	: 20000 h	20000 h	
Lubricant amount	: 18 g	11 g	
Lubricant type	: Mobil Polyrex EM		

Notes  
USABLE @208V 65.2A SF 1.15 SFA 75.0A

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			1 / 5	
Date	22/10/2023			

# LOAD PERFORMANCE CURVE

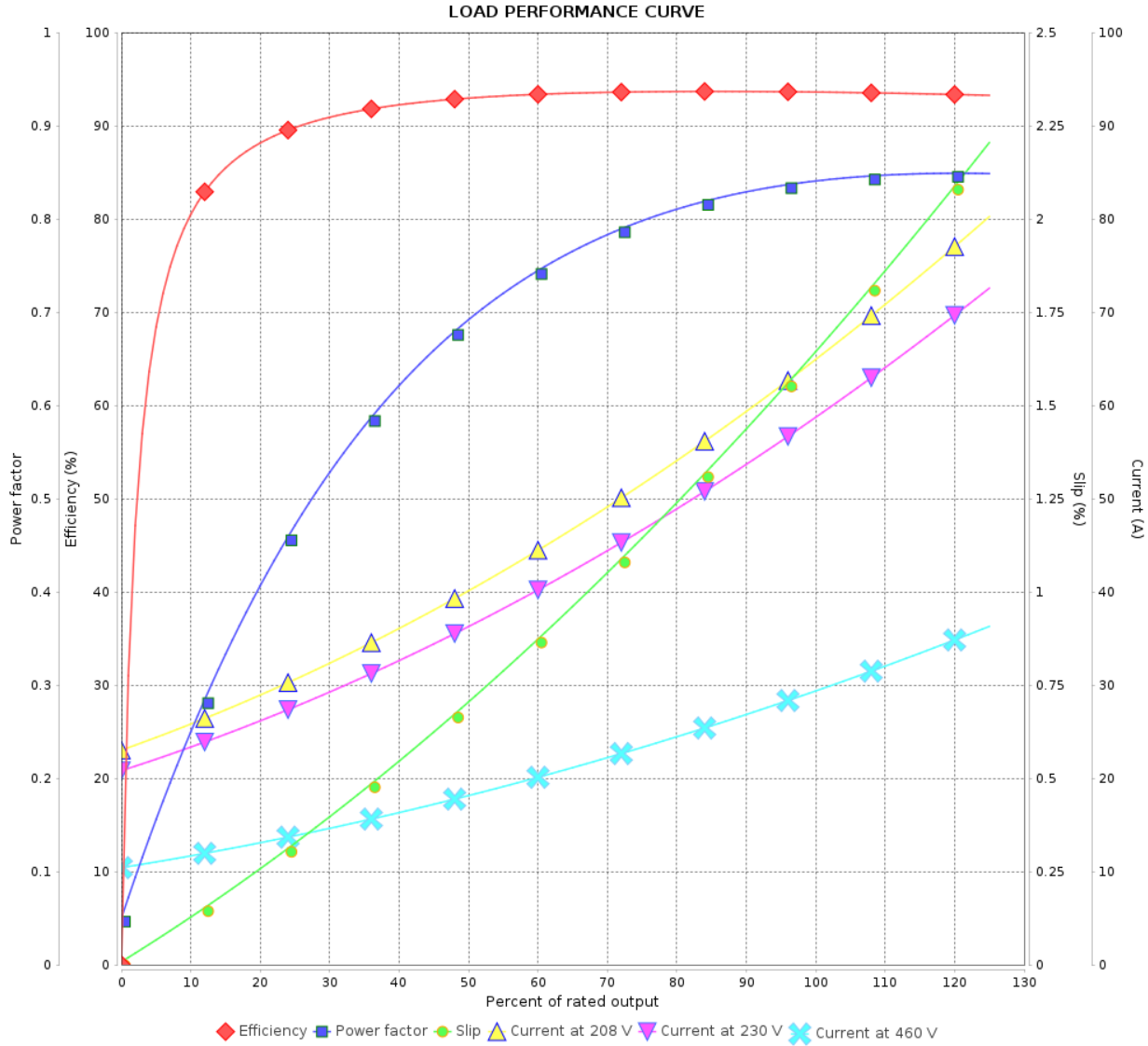
Three Phase Induction Motor - Squirrel Cage



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

Product line : W40 NEMA Premium Efficiency Three-Phase

Product code : 14495057



Performance : 230/460 V 60 Hz 4P

Rated current : 59.0/29.5 A  
 LRC : 6.3  
 Rated torque : 10.3 kgfm  
 Locked rotor torque : 229 %  
 Breakdown torque : 270 %  
 Rated speed : 1770 rpm

Moment of inertia (J) : 0.1563 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
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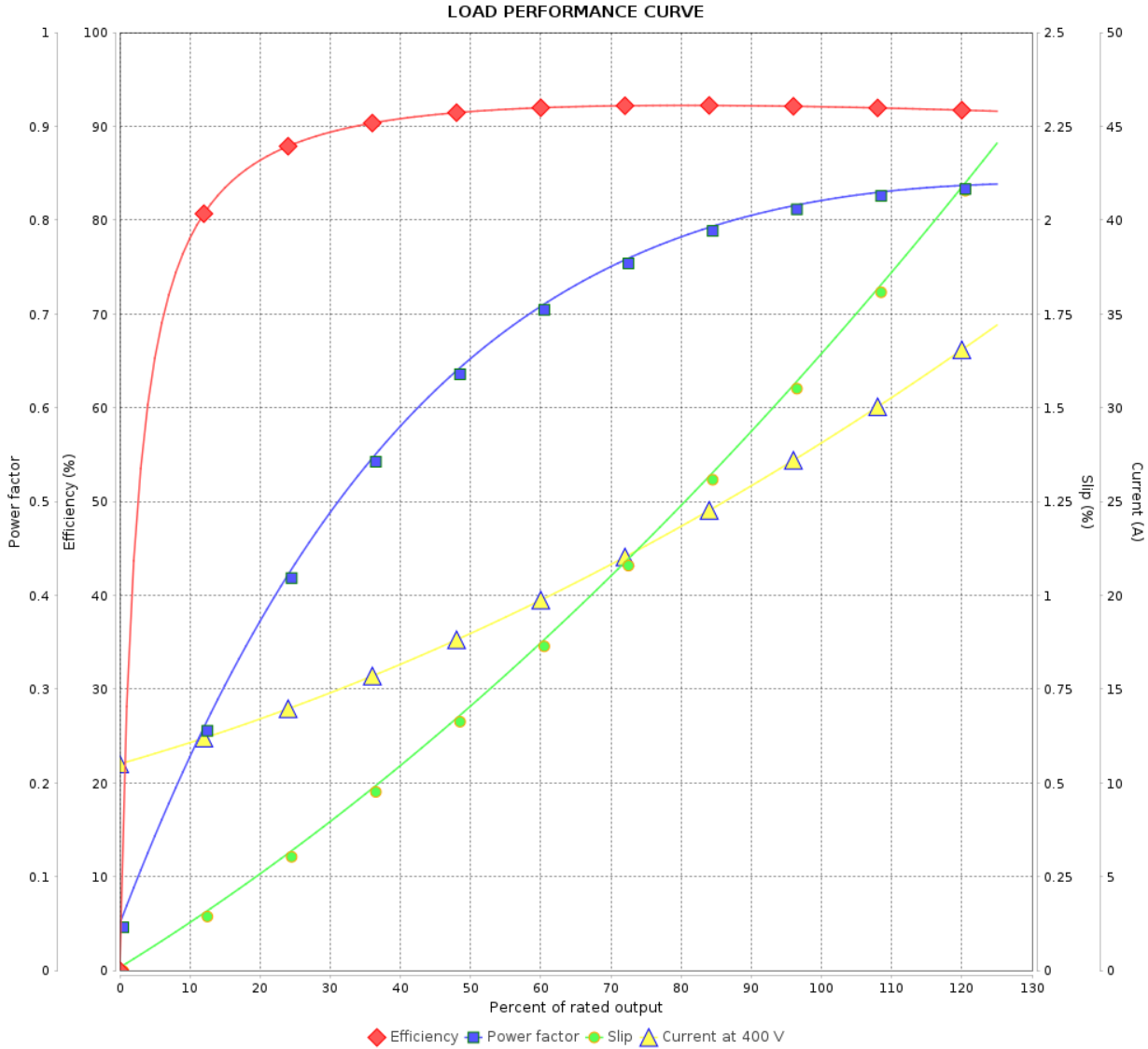
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W40 NEMA Premium Efficiency Three-Phase

Product code : 14495057



Performance : 400 V 50 Hz 4P IE3

Rated current : 28.7 A  
 LRC : 6.7  
 Rated torque : 9.84 kgfm  
 Locked rotor torque : 240 %  
 Breakdown torque : 290 %  
 Rated speed : 1475 rpm

Moment of inertia (J) : 0.1563 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.00  
 Temperature rise : 80 K  
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
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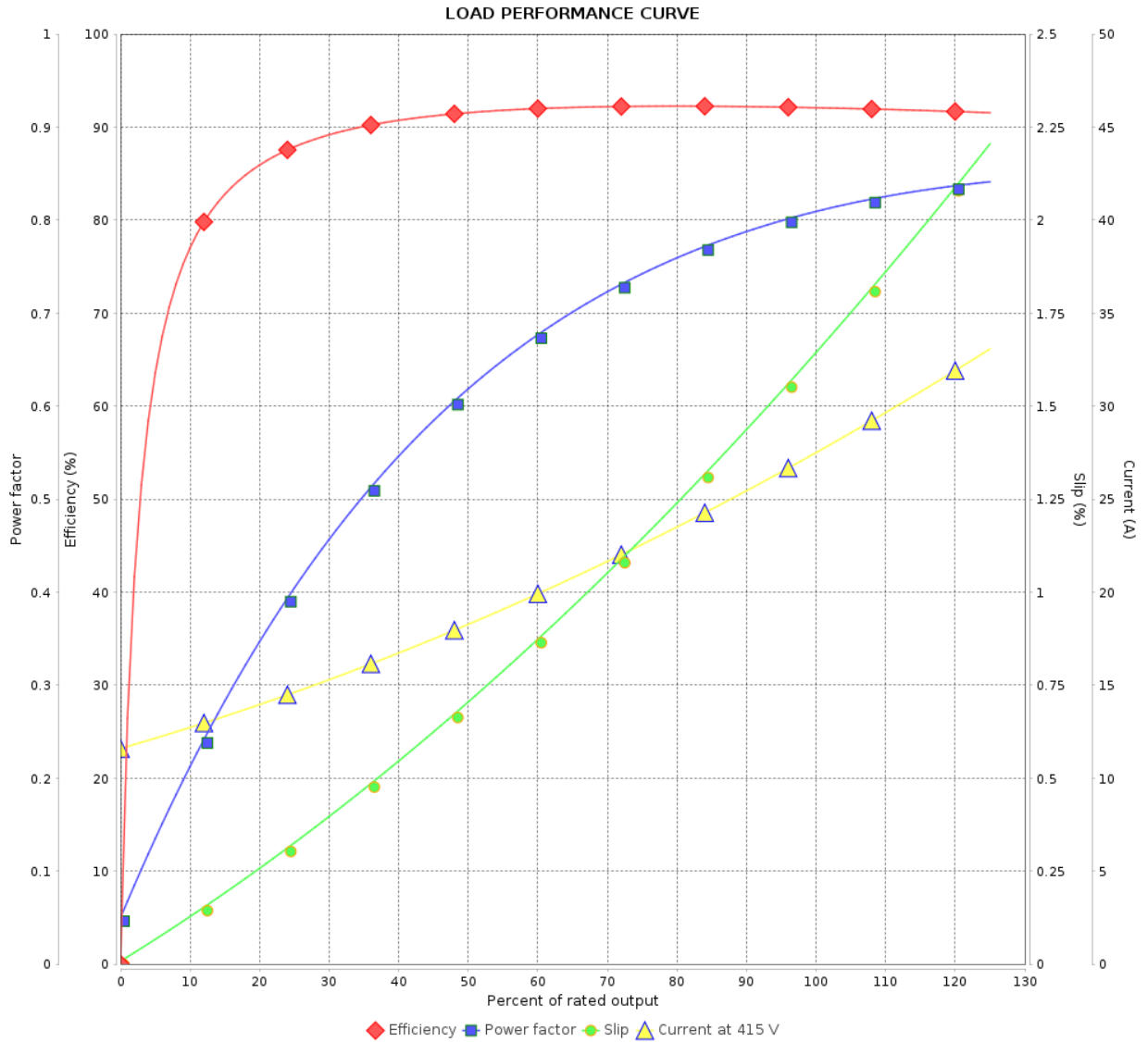
## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W40 NEMA Premium Efficiency Three-Phase

Product code : 14495057



Performance : 415 V 50 Hz 4P IE3

Rated current : 28.0 A  
 LRC : 7.1  
 Rated torque : 9.84 kgfm  
 Locked rotor torque : 270 %  
 Breakdown torque : 300 %  
 Rated speed : 1475 rpm

Moment of inertia (J) : 0.1563 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.00  
 Temperature rise : 80 K  
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
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Date		22/10/2023		