

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : W40 NEMA Premium Efficiency Three-Phase Product code : 14272523

Frame	: 404/5TC	Cooling method	: IC01 - ODP
Insulation class	: F	Mounting	: F-1
Duty cycle	: Cont.(S1)	Rotation ¹	: Both (CW and CCW)
Ambient temperature	: -20°C to +40°C	Starting method	: Direct On Line
Altitude	: 1000 m.a.s.l.	Approx. weight ³	: 444 kg
Protection degree	: IP23	Moment of inertia (J)	: 0.9245 kgm ²
Design	: B		

Output [HP]	100	75	75	75
Poles	4	4	4	4
Frequency [Hz]	60	50	50	50
Rated voltage [V]	230/460	380	400	415
Rated current [A]	229/115	103	98.6	96.2
L. R. Amperes [A]	1560/780	739	690	750
LRC [A]	6.8x(Code G)	7.2x(Code H)	7.0x(Code H)	7.8x(Code J)
No load current [A]	74.0/37.0	37.0	39.0	41.0
Rated speed [RPM]	1780	1482	1484	1485
Slip [%]	1.11	1.20	1.07	1.00
Rated torque [kgfm]	40.8	36.7	36.7	36.7
Locked rotor torque [%]	200	220	240	270
Breakdown torque [%]	250	250	280	300
Service factor	1.25	1.00	1.00	1.00
Temperature rise	80 K	80 K	80 K	80 K
Locked rotor time	21s (cold) 12s (hot)	23s (cold) 13s (hot)	21s (cold) 12s (hot)	25s (cold) 14s (hot)
Noise level ²	69.0 dB(A)			
Efficiency (%)	25%	94.9	90.2	90.3
	50%	95.0	91.9	92.0
	75%	95.4	92.9	92.9
	100%	95.4	94.7	94.7
Power Factor	25%	0.50	0.48	0.46
	50%	0.75	0.73	0.72
	75%	0.83	0.82	0.80
	100%	0.86	0.86	0.85

	<u>Drive end</u>	<u>Non drive end</u>	Foundation loads
Bearing type	: 6316 C3	6212 Z C3	Max. traction : 860 kgf
Sealing	: Without	Without	Max. compression : 1304 kgf
	Bearing Seal	Bearing Seal	
Lubrication interval	: 20000 h	20000 h	
Lubricant amount	: 34 g	13 g	
Lubricant type	: Mobil Polyrex EM		

Notes
USABLE @208V 254A SF 1.15 SFA 292A

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 / 5	

LOAD PERFORMANCE CURVE

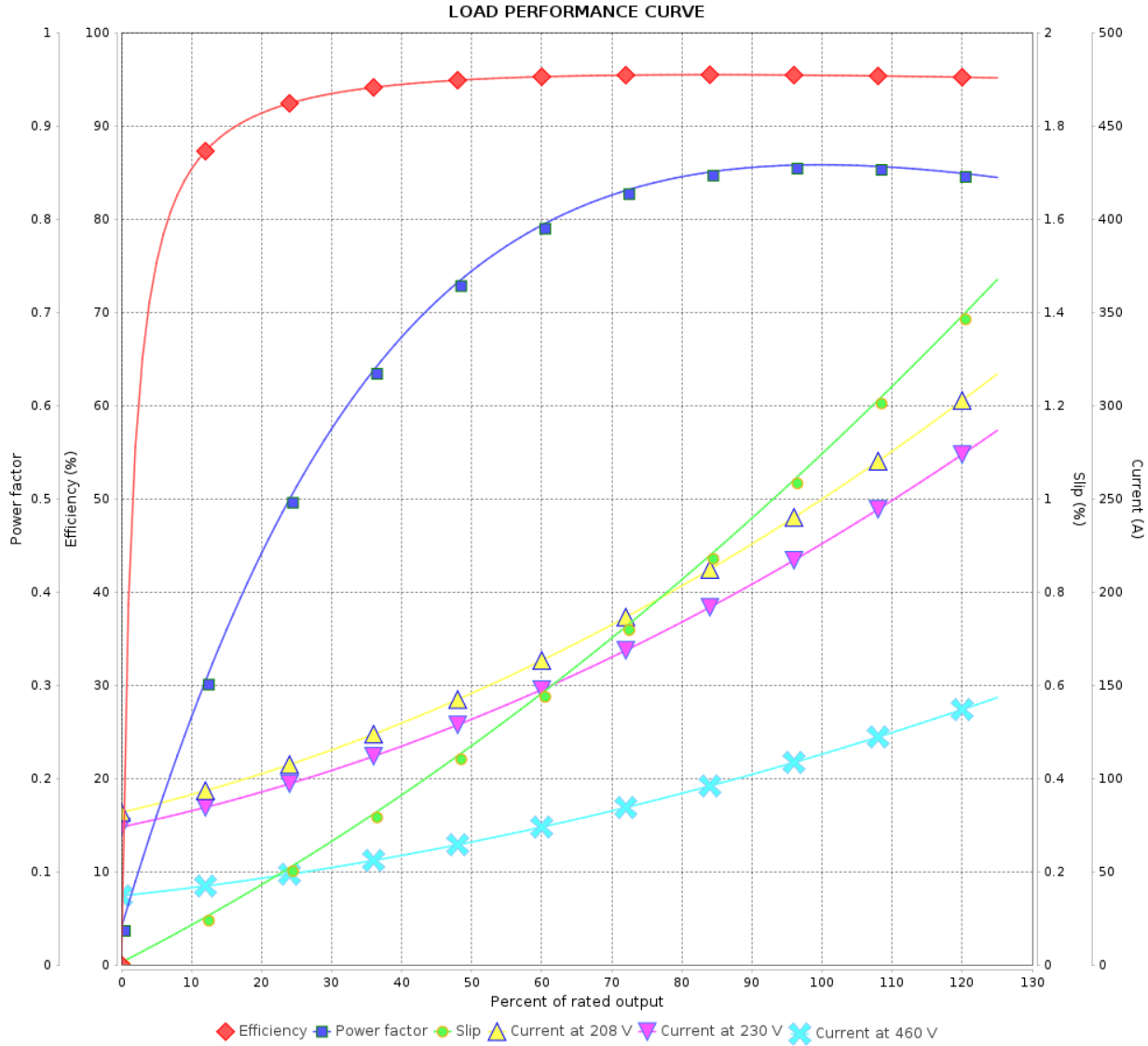
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W40 NEMA Premium Efficiency Three-Phase

Product code : 14272523



Performance : 230/460 V 60 Hz 4P

Rated current : 229/115 A
 LRC : 6.8
 Rated torque : 40.8 kgfm
 Locked rotor torque : 200 %
 Breakdown torque : 250 %
 Rated speed : 1780 rpm

Moment of inertia (J) : 0.9245 kgm²
 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			

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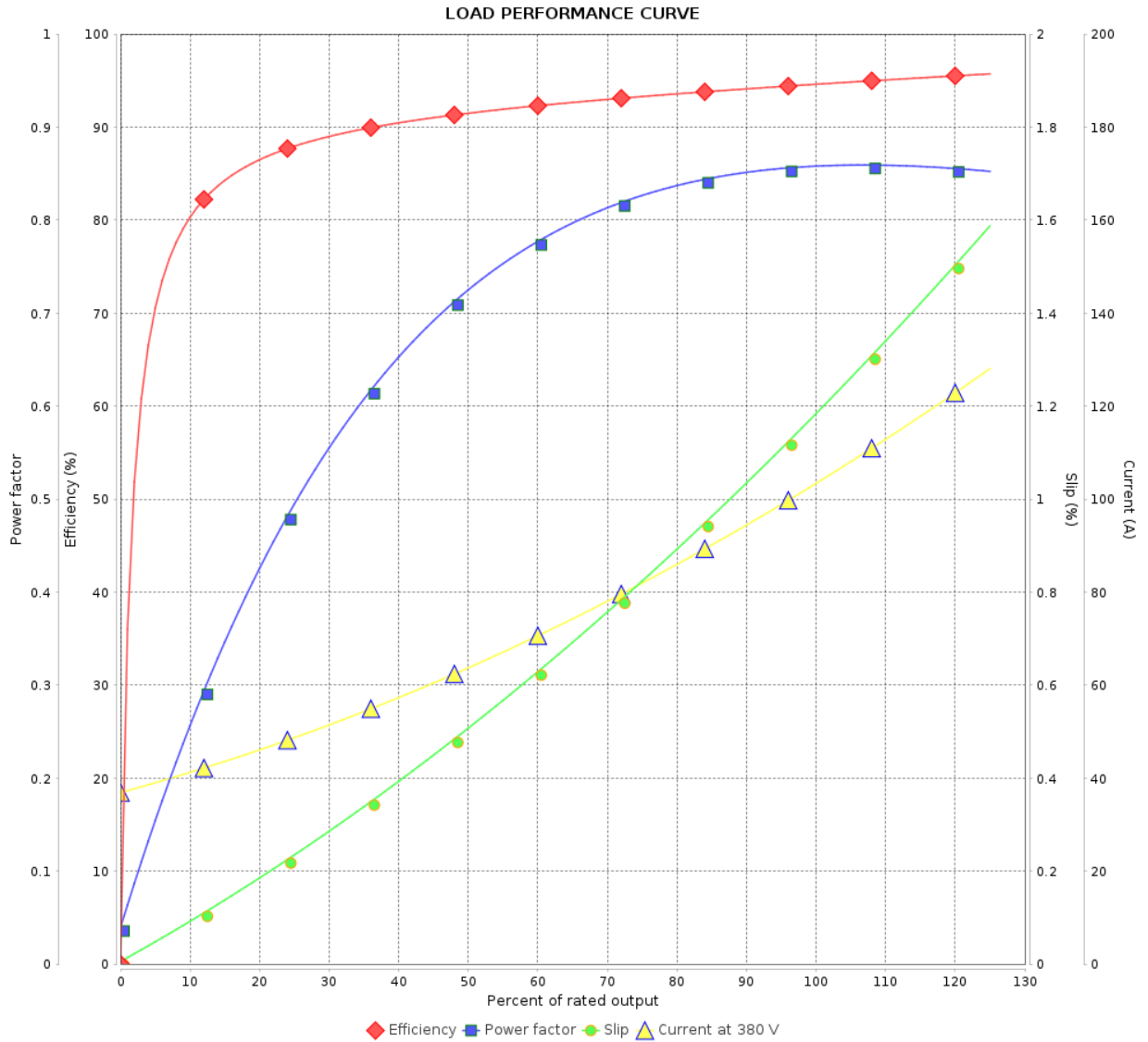
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W40 NEMA Premium Efficiency Three-Phase

Product code : 14272523



Performance : 380 V 50 Hz 4P IE3

Rated current : 103 A
 LRC : 7.2
 Rated torque : 36.7 kgfm
 Locked rotor torque : 220 %
 Breakdown torque : 250 %
 Rated speed : 1482 rpm

Moment of inertia (J) : 0.9245 kgm²
 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
Checked by		3 / 5		
Date		15/01/2024		

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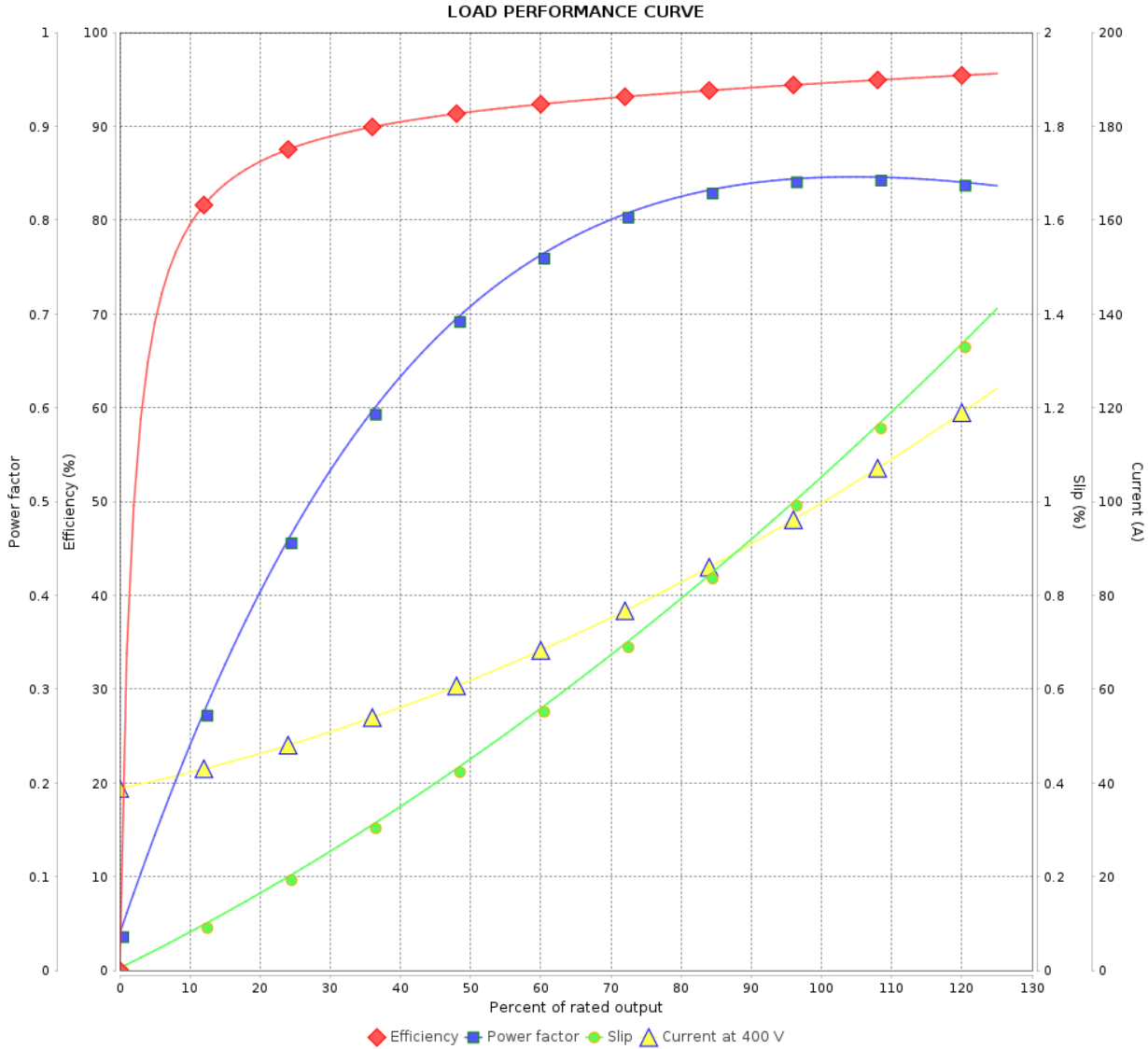
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W40 NEMA Premium Efficiency Three-Phase

Product code : 14272523



Performance : 400 V 50 Hz 4P IE3

Rated current : 98.6 A
 LRC : 7.0
 Rated torque : 36.7 kgfm
 Locked rotor torque : 240 %
 Breakdown torque : 280 %
 Rated speed : 1484 rpm

Moment of inertia (J) : 0.9245 kgm²
 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 4 / 5	Revision
Checked by				
Date	15/01/2024			

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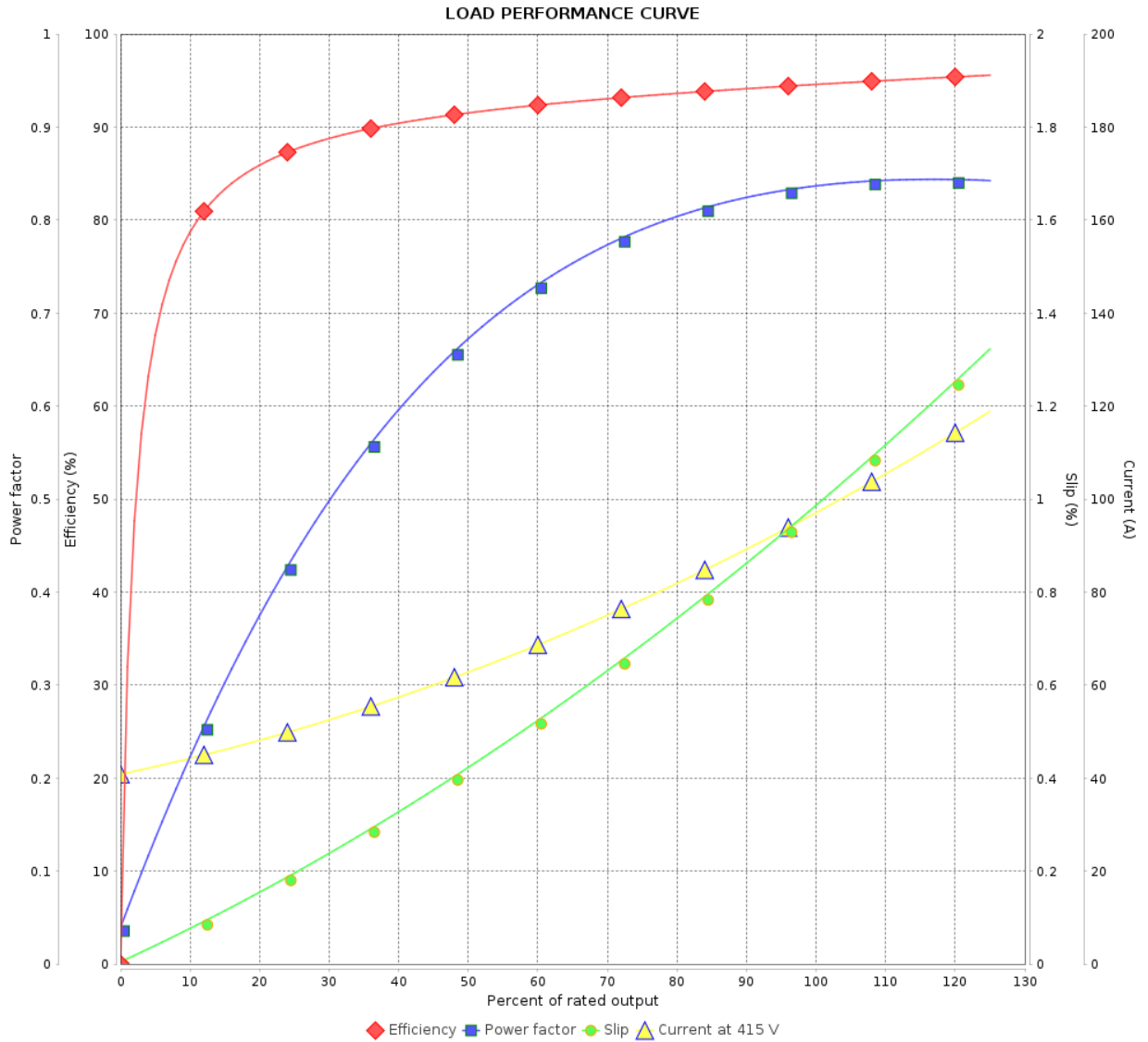
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W40 NEMA Premium Efficiency Three-Phase

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Performance : 415 V 50 Hz 4P IE3

Rated current : 96.2 A
 LRC : 7.8
 Rated torque : 36.7 kgfm
 Locked rotor torque : 270 %
 Breakdown torque : 300 %
 Rated speed : 1485 rpm

Moment of inertia (J) : 0.9245 kgm²
 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				
Checked by				
Date				
			Page	Revision
			5 / 5	