

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W21 Explosion Proof NEMA Premium Efficiency Three-Phase Product code : 14407759

Frame : 284TC	Cooling method : IC411 - TEFC
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 : 204 kg
Protection degree : IP55	Moment of inertia (J) : 0.1914 kgm ²
Design : B	

Output [HP]	25	25	25	25
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	35.9	34.3	33.2
L. R. Amperes [A]	366/183	190	189	196
LRC [A]	6.2x(Code G)	5.3x(Code F)	5.5x(Code F)	5.9x(Code G)
No load current [A]	22.0/11.0	11.0	11.7	12.4
Rated speed [RPM]	1770	1455	1460	1465
Slip [%]	1.67	3.00	2.67	2.33
Rated torque [kgfm]	10.3	12.5	12.4	12.4
Locked rotor torque [%]	240	180	200	220
Breakdown torque [%]	270	210	240	260
Service factor	1.15	1.00	1.00	1.00
Temperature rise	105 K	105 K	105 K	105 K
Locked rotor time	36s (cold) 20s (hot)	25s (cold) 14s (hot)	25s (cold) 14s (hot)	25s (cold) 14s (hot)
Noise level ²	68.0 dB(A)	64.0 dB(A)	64.0 dB(A)	64.0 dB(A)
Efficiency (%)	25%			
	50%	92.4	92.4	92.4
	75%	93.0	91.7	92.4
	100%	93.6	91.0	92.4
Power Factor	25%			
	50%	0.70	0.76	0.70
	75%	0.80	0.84	0.80
	100%	0.84	0.86	0.85

	<u>Drive end</u>	<u>Non drive end</u>	Foundation loads
Bearing type	: 6311 C3	6211 C3	Max. traction : 359 kgf
Sealing	: Oil Seal	Lip Seal	Max. compression : 562 kgf
Lubrication interval	: 20000 h	20000 h	
Lubricant amount	: 18 g	11 g	
Lubricant type	: Mobil Polyrex EM		

Notes
USABLE @208V 64.5A SF 1.15 SFA 74.2A

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.

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Date	28/10/2024			

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Revision

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Customer :

Thermal protection

ID	Application	Type	Quantity	Sensing Temperature
1	Winding	Thermostat - 2 wires	1 x Phase	155 °C

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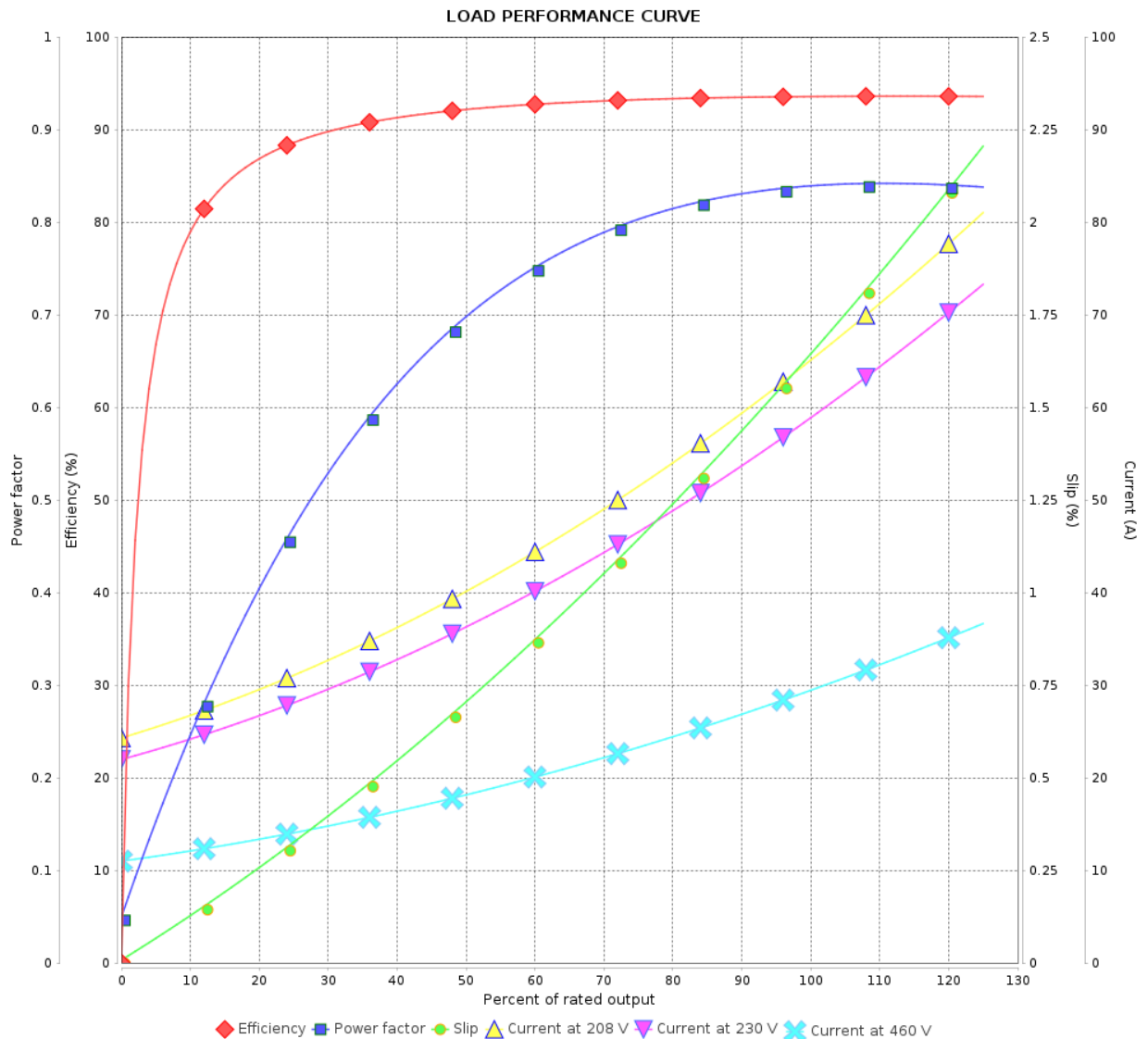
Three Phase Induction Motor - Squirrel Cage



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Performance : 230/460 V 60 Hz 4P

Rated current : 59.0/29.5 A
LRC : 6.2
Rated torque : 10.3 kgfm
Locked rotor torque : 240 %
Breakdown torque : 270 %
Rated speed : 1770 rpm

Moment of inertia (J) : 0.1914 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 105 K
Design : B

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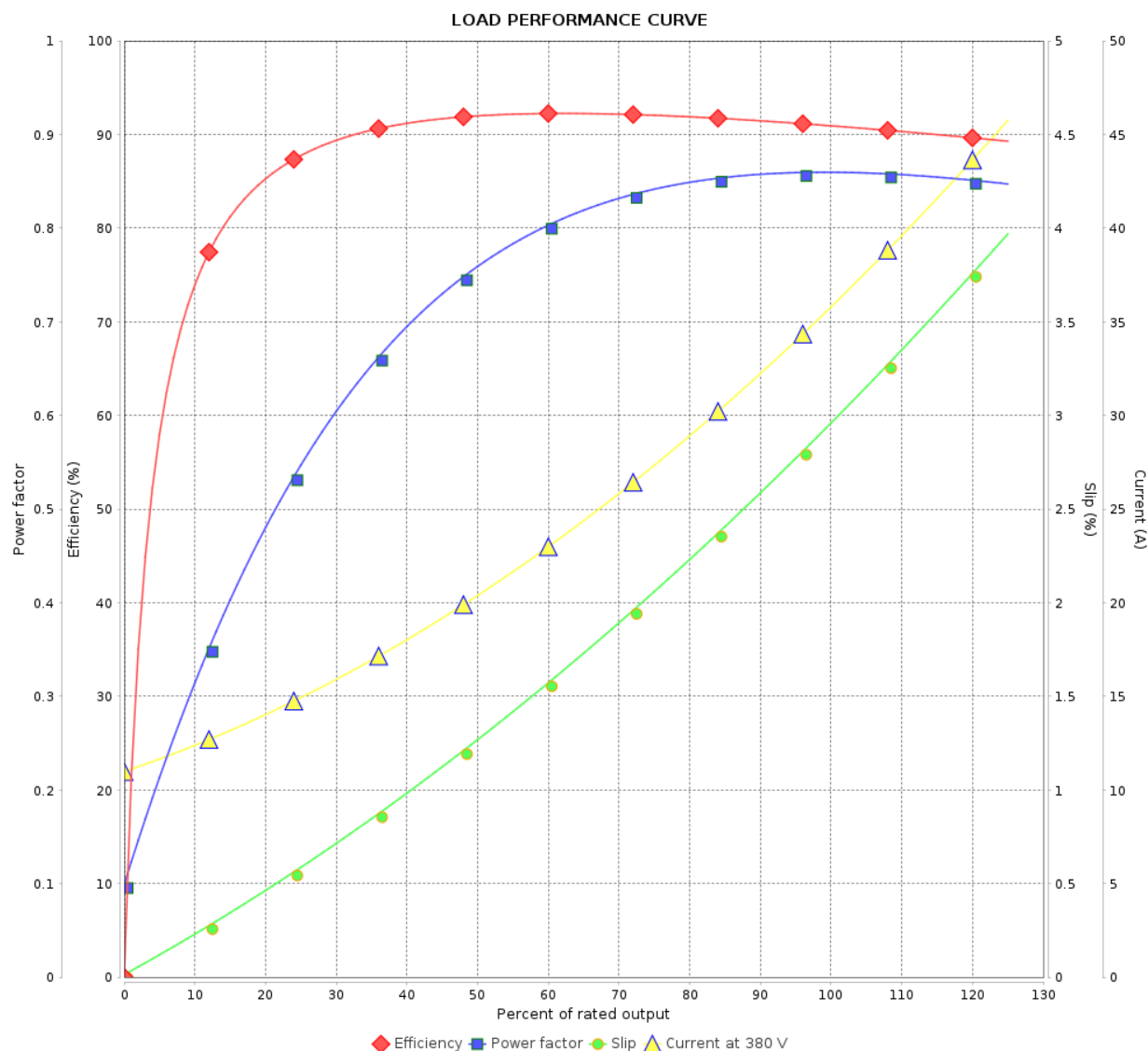
Three Phase Induction Motor - Squirrel Cage



Customer :

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Performance : 380 V 50 Hz 4P IE1

Rated current : 35.9 A
LRC : 5.3
Rated torque : 12.5 kgfm
Locked rotor torque : 180 %
Breakdown torque : 210 %
Rated speed : 1455 rpm

Moment of inertia (J) : 0.1914 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 105 K
Design : B

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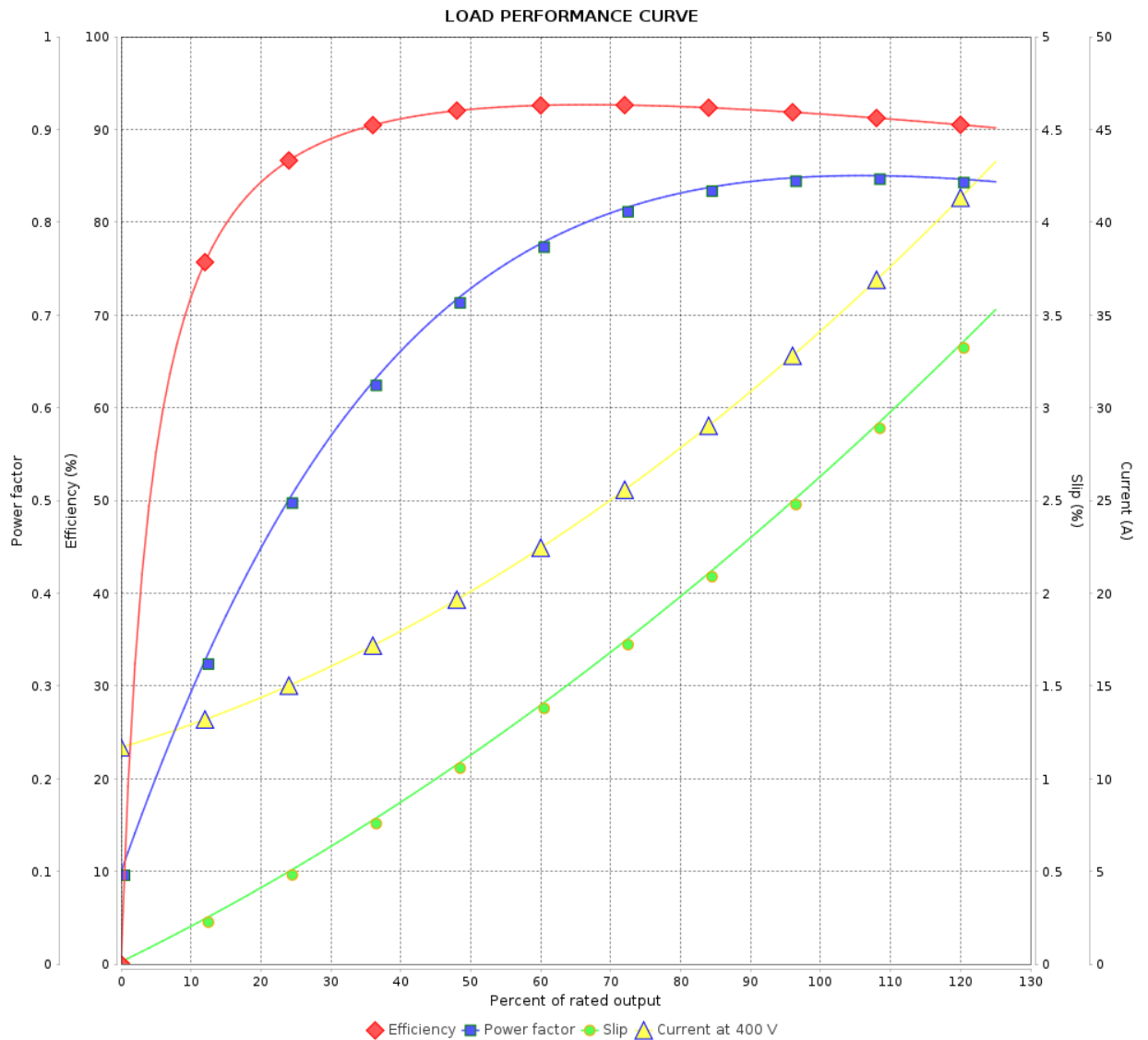
Three Phase Induction Motor - Squirrel Cage



Customer :

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Performance : 400 V 50 Hz 4P IE2

Rated current	: 34.3 A	Moment of inertia (J)	: 0.1914 kgm ²
LRC	: 5.5	Duty cycle	: Cont.(S1)
Rated torque	: 12.4 kgfm	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.00
Breakdown torque	: 240 %	Temperature rise	: 105 K
Rated speed	: 1460 rpm	Design	: B

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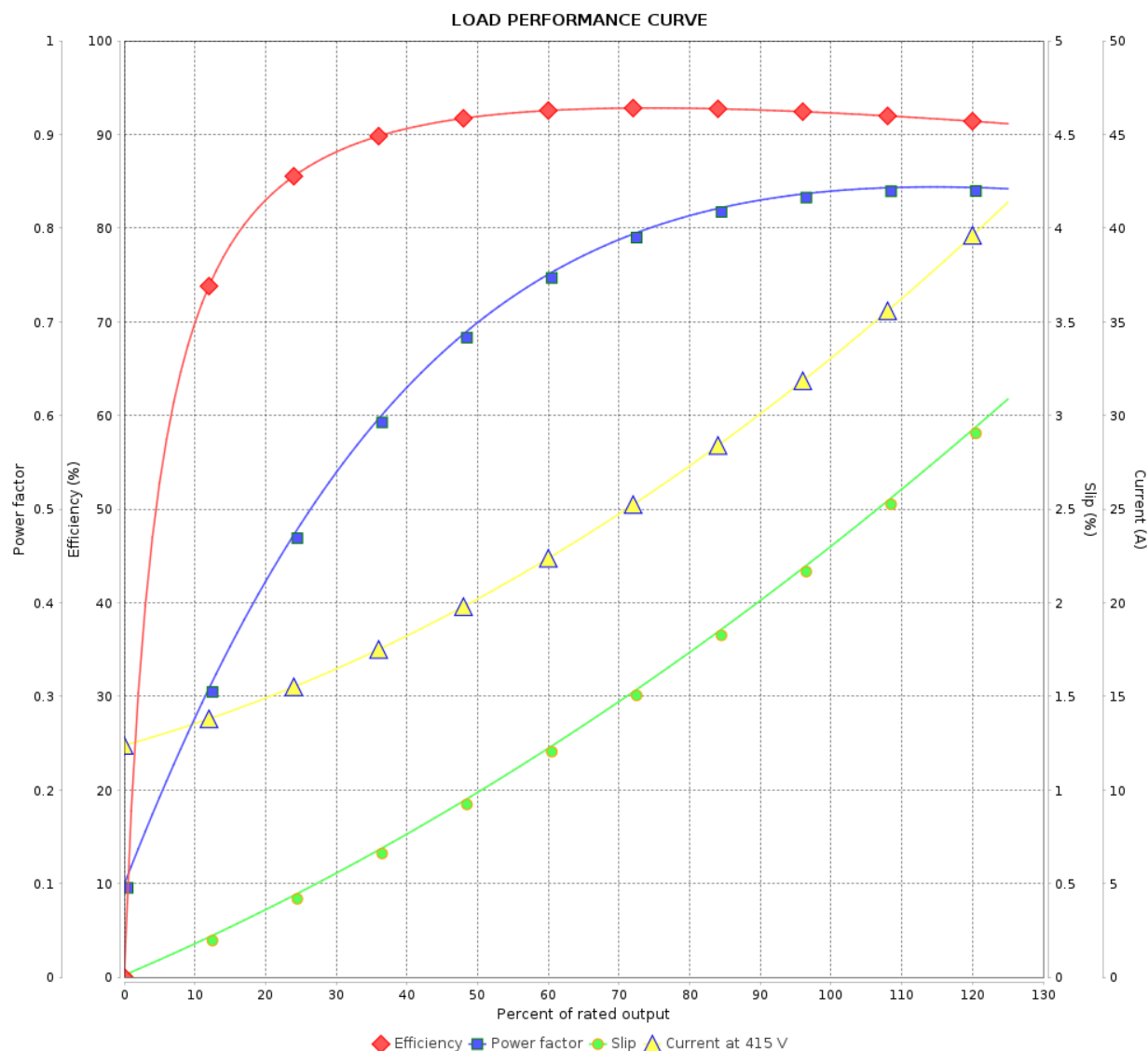
Three Phase Induction Motor - Squirrel Cage



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Performance : 415 V 50 Hz 4P IE2

Rated current : 33.2 A
LRC : 5.9
Rated torque : 12.4 kgfm
Locked rotor torque : 220 %
Breakdown torque : 260 %
Rated speed : 1465 rpm

Moment of inertia (J) : 0.1914 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 105 K
Design : B

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