

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W21 Explosion Proof NEMA Premium Efficiency Three-Phase Product code : 16766514

Frame : 254TC	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 : 148 kg
Protection degree : IP55	Moment of inertia (J) : 0.1436 kgm ²
Design : B	

Output [HP]	5	5	5	5
Poles	8	8	8	8
Frequency [Hz]	60	50	50	50
Rated voltage [V]	230/460	380	400	415
Rated current [A]	15.9/7.93	9.17	8.92	8.73
L. R. Amperes [A]	84.0/42.0	48.6	47.3	46.3
LRC [A]	5.3x(Code H)	5.3x(Code H)	5.3x(Code H)	5.3x(Code H)
No load current [A]	11.0/5.50	5.44	5.77	6.03
Rated speed [RPM]	880	720	725	730
Slip [%]	2.22	4.00	3.33	2.67
Rated torque [kgfm]	4.12	5.04	5.01	4.97
Locked rotor torque [%]	210	160	180	200
Breakdown torque [%]	270	200	229	250
Service factor	1.15	1.00	1.00	1.00
Temperature rise	80 K	80 K	80 K	80 K
Locked rotor time	37s (cold) 21s (hot)	37s (cold) 21s (hot)	37s (cold) 21s (hot)	37s (cold) 21s (hot)
Noise level ²	55.0 dB(A)	53.0 dB(A)	53.0 dB(A)	53.0 dB(A)
Efficiency (%)	25%			
	50%	84.0	82.5	82.5
	75%	86.5	84.0	84.0
	100%	87.5	84.0	85.5
Power Factor	25%			
	50%	0.46	0.53	0.50
	75%	0.58	0.65	0.62
	100%	0.67	0.73	0.70

	<u>Drive end</u>	<u>Non drive end</u>	
Bearing type :	6309	6209	Foundation loads
	2RS C3	2RS C3	Max. traction : 121 kgf
Sealing :	Oil Seal	Lip Seal	Max. compression : 269 kgf
Lubrication interval :	-	-	
Lubricant amount :	-	-	
Lubricant type :	Mobil Polyrex EM		

Notes
USABLE @208V 17.5A SF 1.15 SFA 20.2A

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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Customer :

Thermal protection

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

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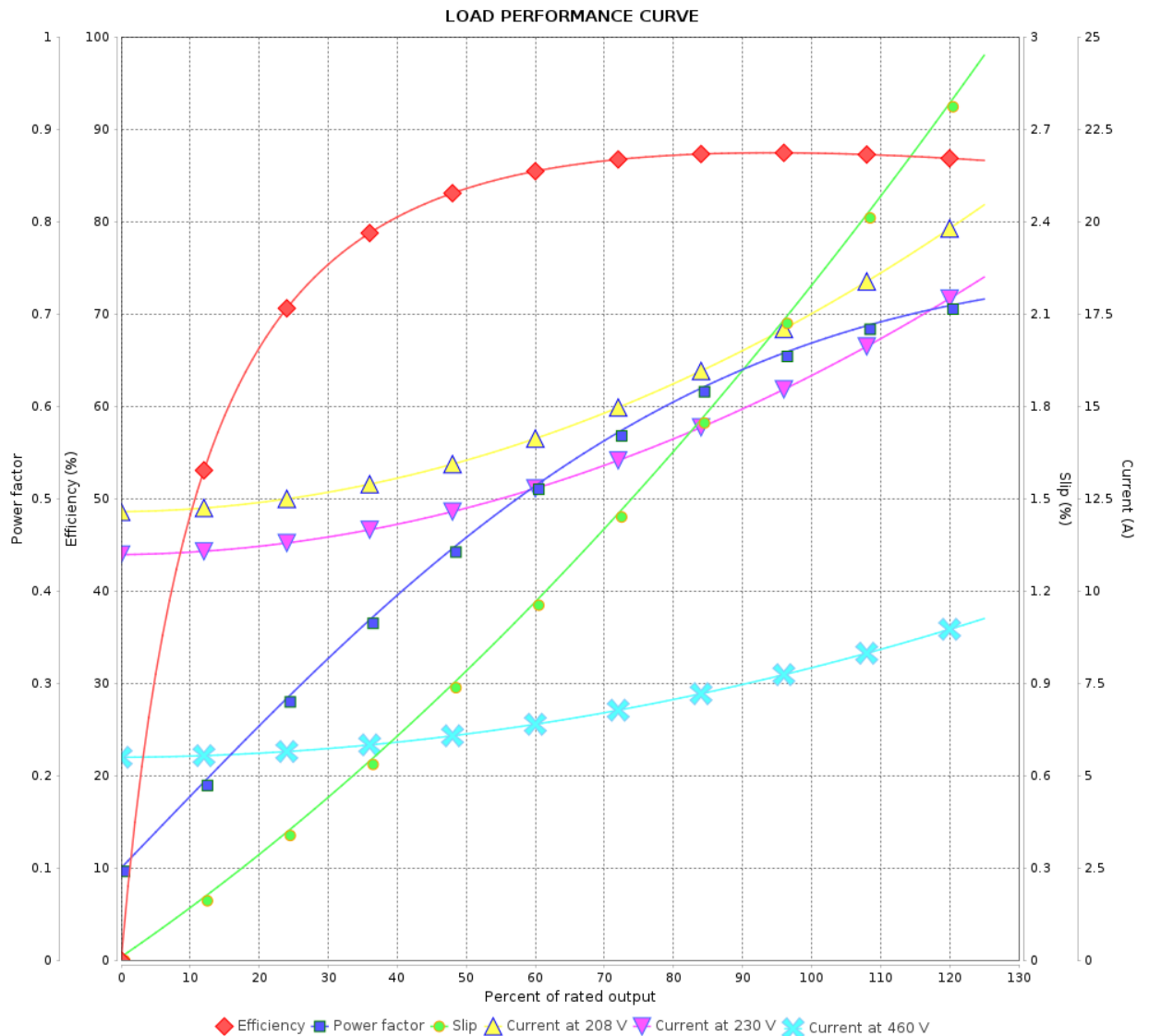
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 16766514



Performance : 230/460 V 60 Hz 8P

Rated current : 15.9/7.93 A
LRC : 5.3
Rated torque : 4.12 kgfm
Locked rotor torque : 210 %
Breakdown torque : 270 %
Rated speed : 880 rpm

Moment of inertia (J) : 0.1436 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 80 K
Design : B

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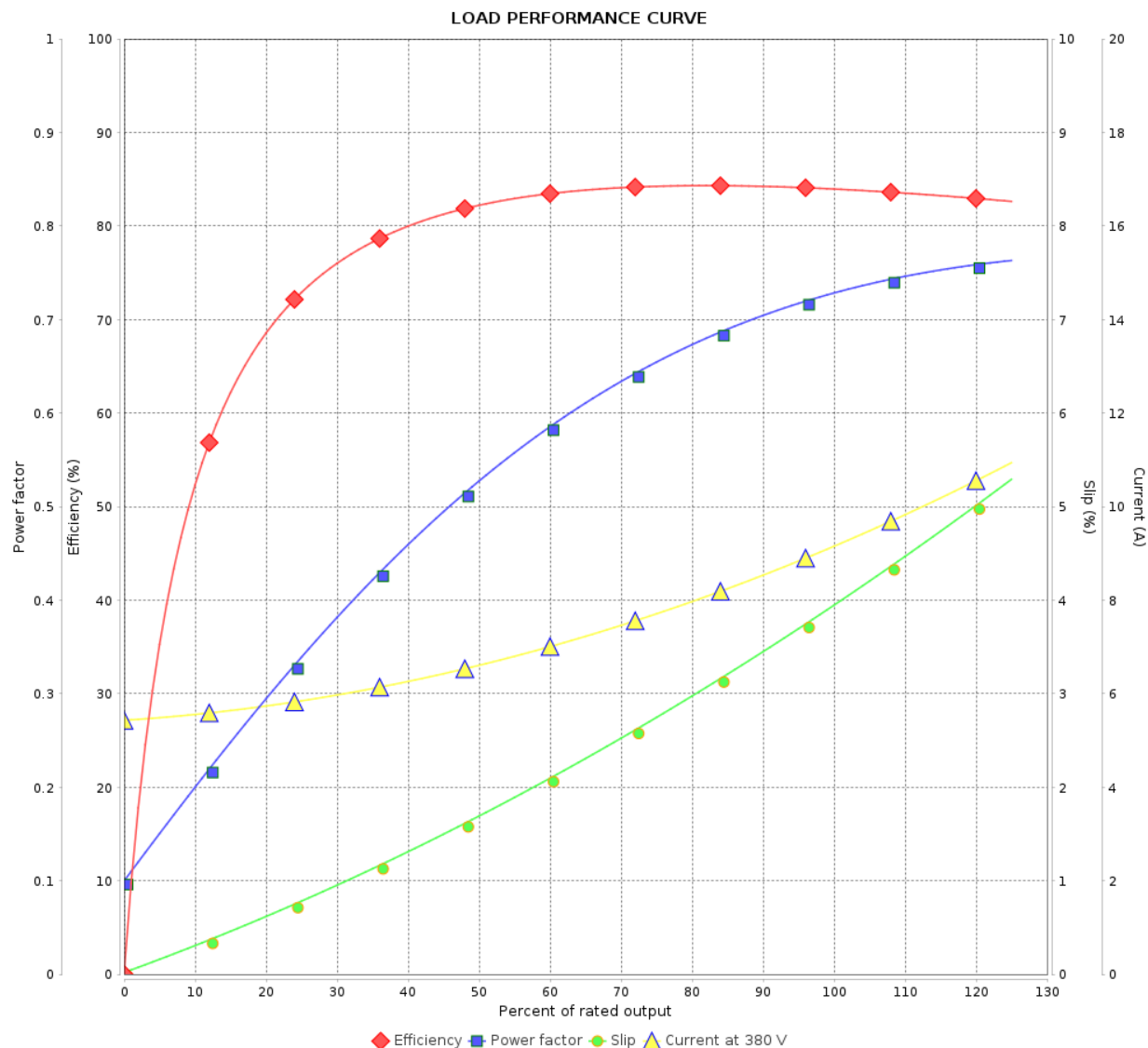
Three Phase Induction Motor - Squirrel Cage



Customer :

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Premium Efficiency Three-Phase

Product code : 16766514



Performance : 380 V 50 Hz 8P IE2

Rated current : 9.17 A
LRC : 5.3
Rated torque : 5.04 kgfm
Locked rotor torque : 160 %
Breakdown torque : 200 %
Rated speed : 720 rpm

Moment of inertia (J) : 0.1436 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

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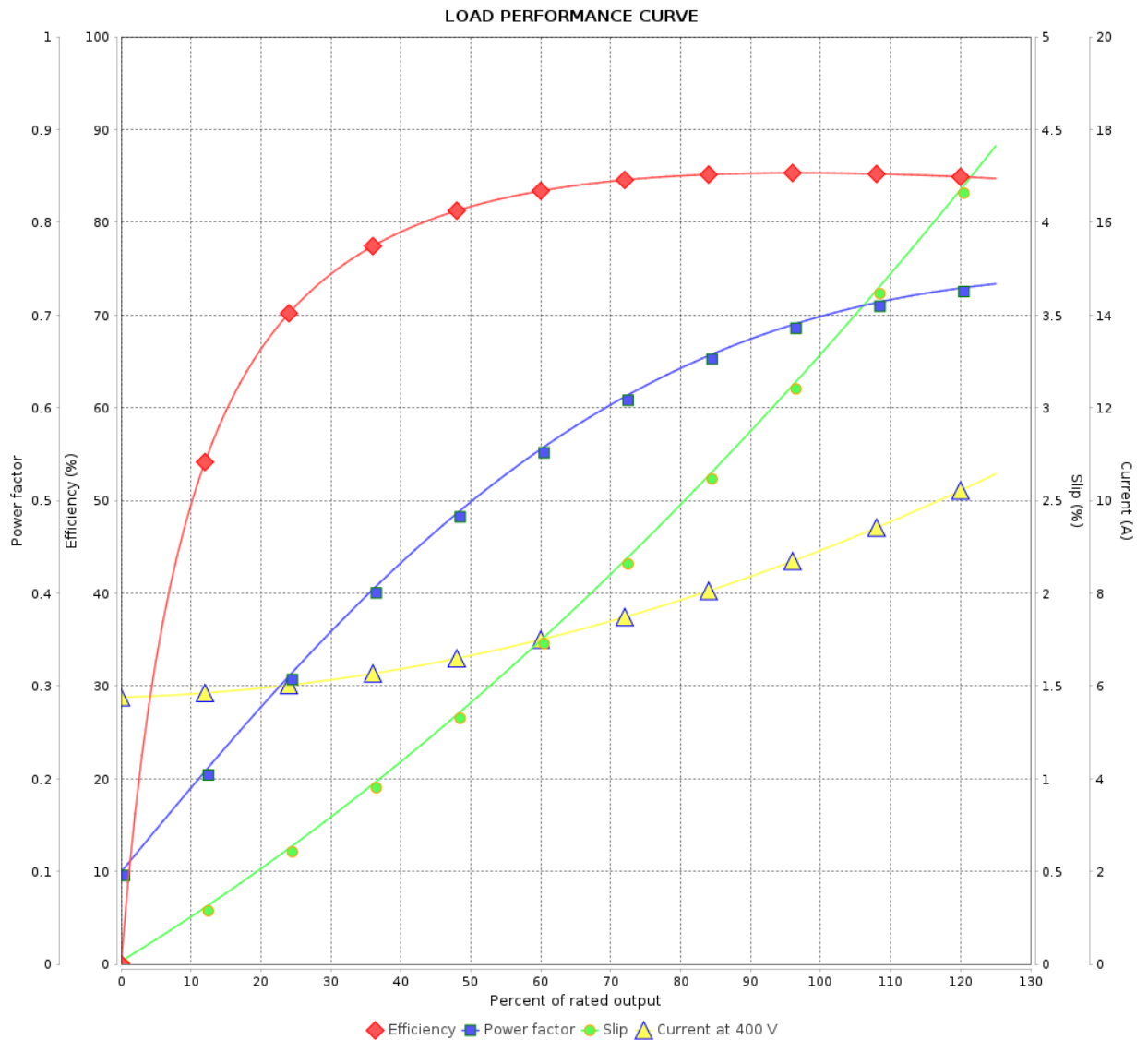
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 16766514



Performance : 400 V 50 Hz 8P IE3

Rated current	: 8.92 A	Moment of inertia (J)	: 0.1436 kgm ²
LRC	: 5.3	Duty cycle	: Cont.(S1)
Rated torque	: 5.01 kgfm	Insulation class	: F
Locked rotor torque	: 180 %	Service factor	: 1.00
Breakdown torque	: 229 %	Temperature rise	: 80 K
Rated speed	: 725 rpm	Design	: B

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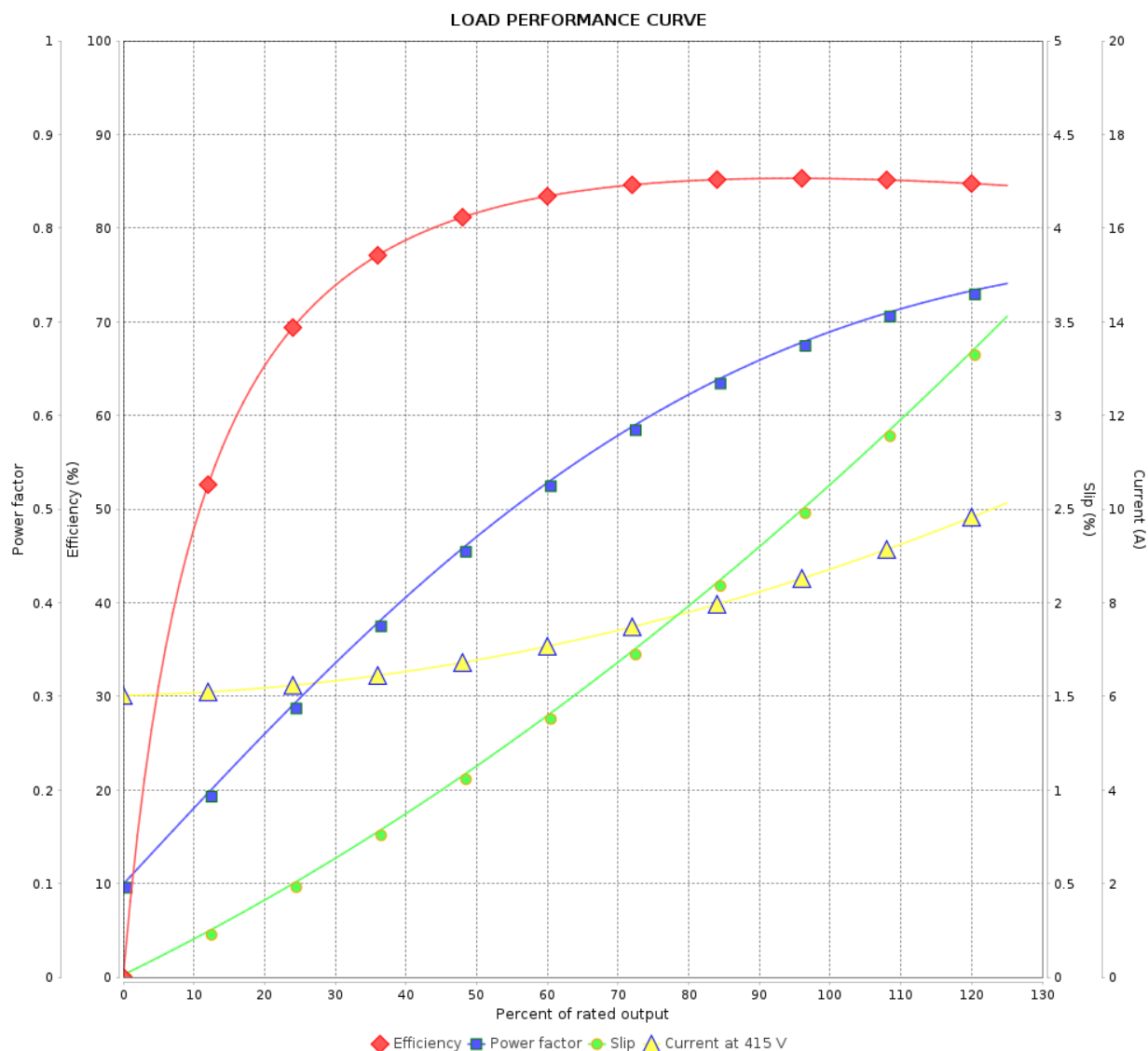
Three Phase Induction Motor - Squirrel Cage



Customer :

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Premium Efficiency Three-Phase

Product code : 16766514



Performance : 415 V 50 Hz 8P IE3

Rated current : 8.73 A
LRC : 5.3
Rated torque : 4.97 kgfm
Locked rotor torque : 200 %
Breakdown torque : 250 %
Rated speed : 730 rpm

Moment of inertia (J) : 0.1436 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

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