

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 14954780

Frame	: 143/5T	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	: 32.1 kg
Protection degree	: IP55	Moment of inertia (J)	: 0.0018 kgm ²
Design	: B		

Output [HP]	1	1	1	1
Poles	2	2	2	2
Frequency [Hz]	60	50	50	50
Rated voltage [V]	230/460	380	400	415
Rated current [A]	2.98/1.49	1.64	1.60	1.58
L. R. Amperes [A]	26.8/13.4	13.1	13.6	14.2
LRC [A]	9.0x(Code M)	8.0x(Code K)	8.5x(Code L)	9.0x(Code M)
No load current [A]	1.30/0.650	0.650	0.700	0.750
Rated speed [RPM]	3500	2885	2895	2905
Slip [%]	2.78	3.83	3.50	3.17
Rated torque [kgfm]	0.207	0.252	0.251	0.250
Locked rotor torque [%]	340	250	290	300
Breakdown torque [%]	400	300	340	370
Service factor	1.15	1.00	1.00	1.00
Temperature rise	80 K	80 K	80 K	80 K
Locked rotor time	72s (cold) 40s (hot)	72s (cold) 40s (hot)	72s (cold) 40s (hot)	72s (cold) 40s (hot)
Noise level ²	68.0 dB(A)	62.0 dB(A)	62.0 dB(A)	62.0 dB(A)
Efficiency (%)	25%			
	50%	75.5	75.5	75.5
	75%	77.0	80.0	80.0
	100%	77.0	80.7	80.7
Power Factor	25%			
	50%	0.65	0.71	0.67
	75%	0.76	0.81	0.78
	100%	0.82	0.86	0.84

	<u>Drive end</u>	<u>Non drive end</u>	Foundation loads	
Bearing type	: 6205 2RS	6204 2RS	Max. traction	: 10 kgf
Sealing	: Oil Seal	Lip Seal	Max. compression	: 42 kgf
Lubrication interval	: -	-		
Lubricant amount	: -	-		
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.

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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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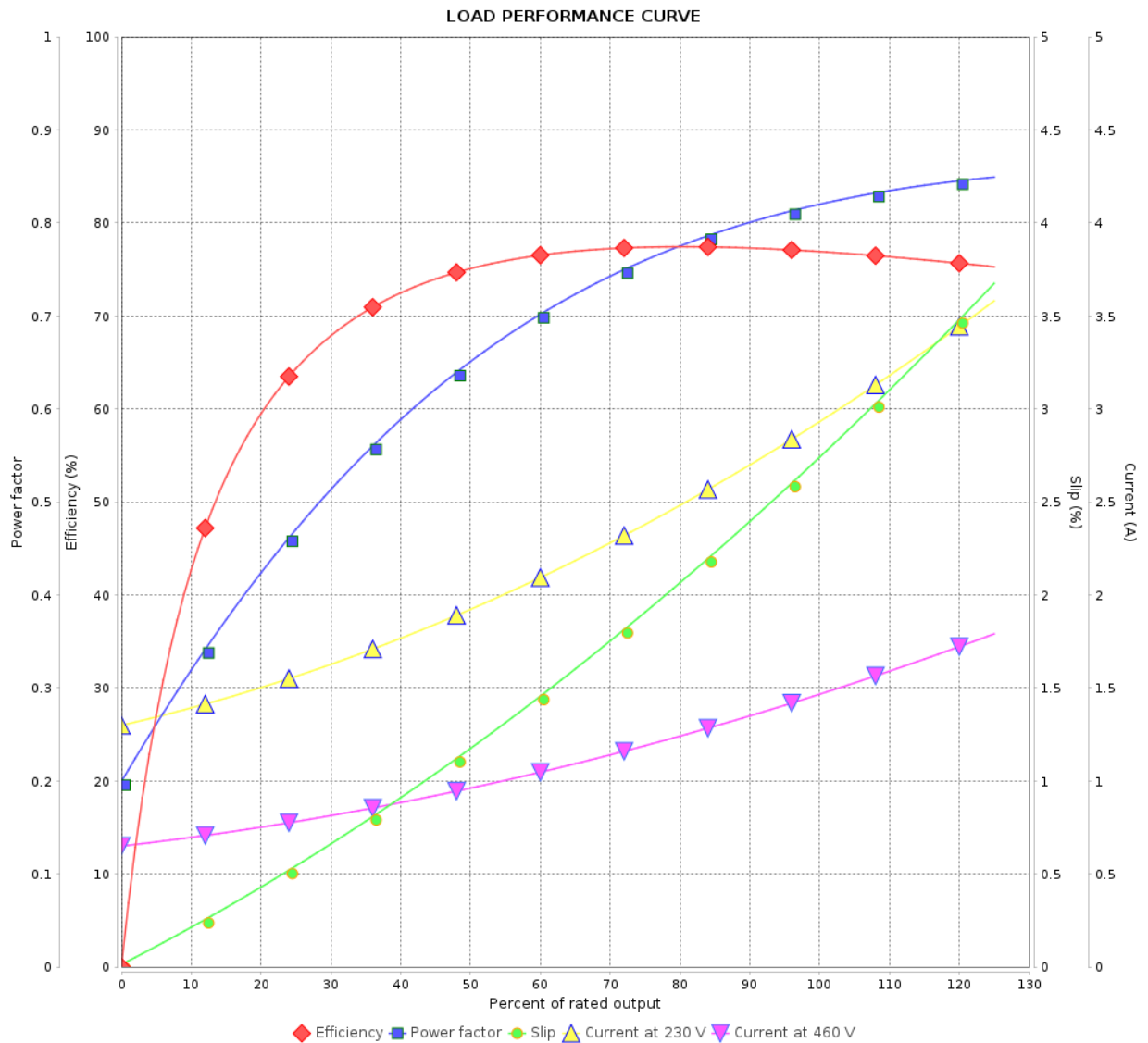
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 14954780



Performance : 230/460 V 60 Hz 2P

Rated current : 2.98/1.49 A
LRC : 9.0
Rated torque : 0.207 kgfm
Locked rotor torque : 340 %
Breakdown torque : 400 %
Rated speed : 3500 rpm

Moment of inertia (J) : 0.0018 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 80 K
Design : B

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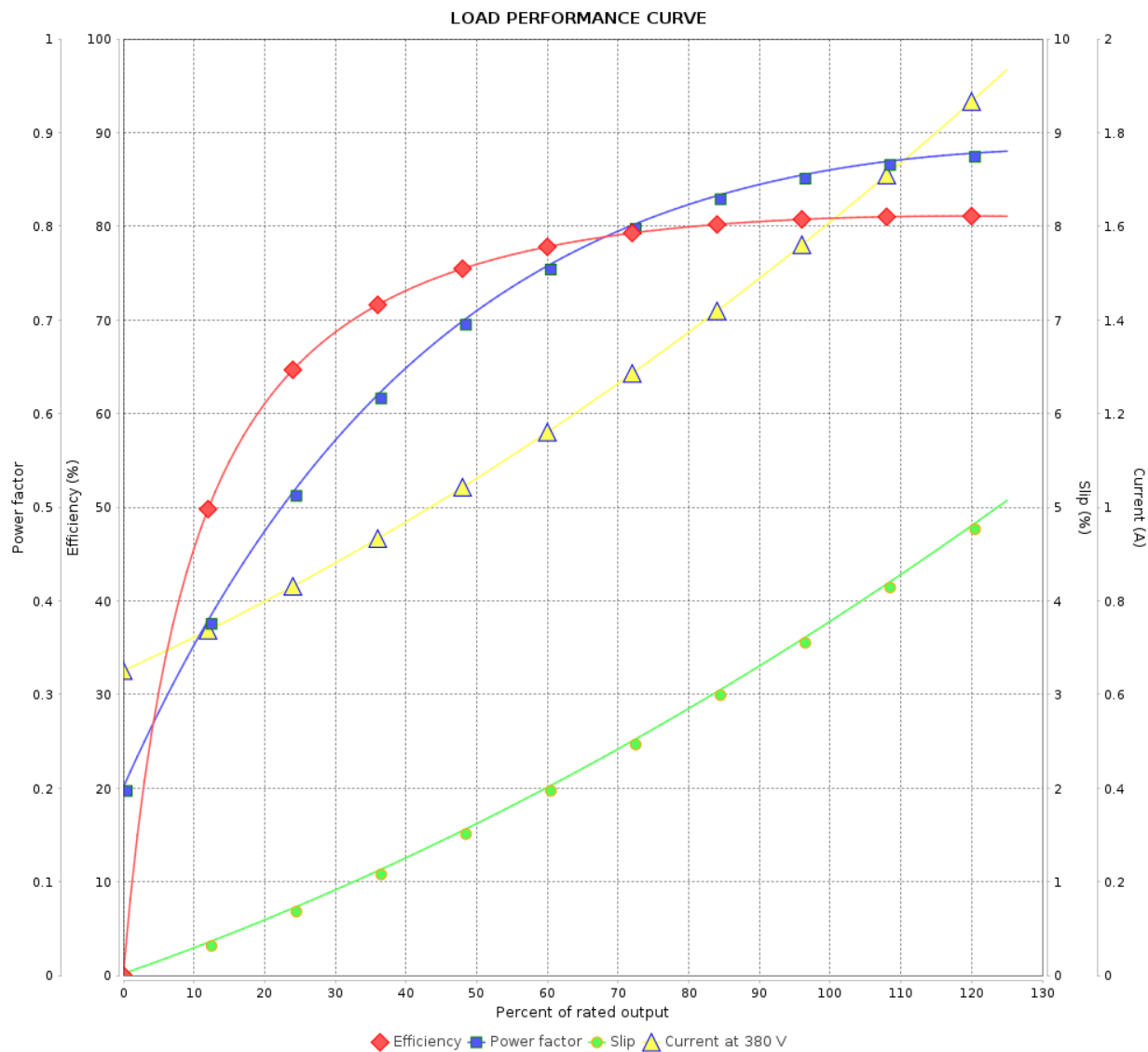
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 14954780



Performance : 380 V 50 Hz 2P IE3

Rated current : 1.64 A
LRC : 8.0
Rated torque : 0.252 kgfm
Locked rotor torque : 250 %
Breakdown torque : 300 %
Rated speed : 2885 rpm

Moment of inertia (J) : 0.0018 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

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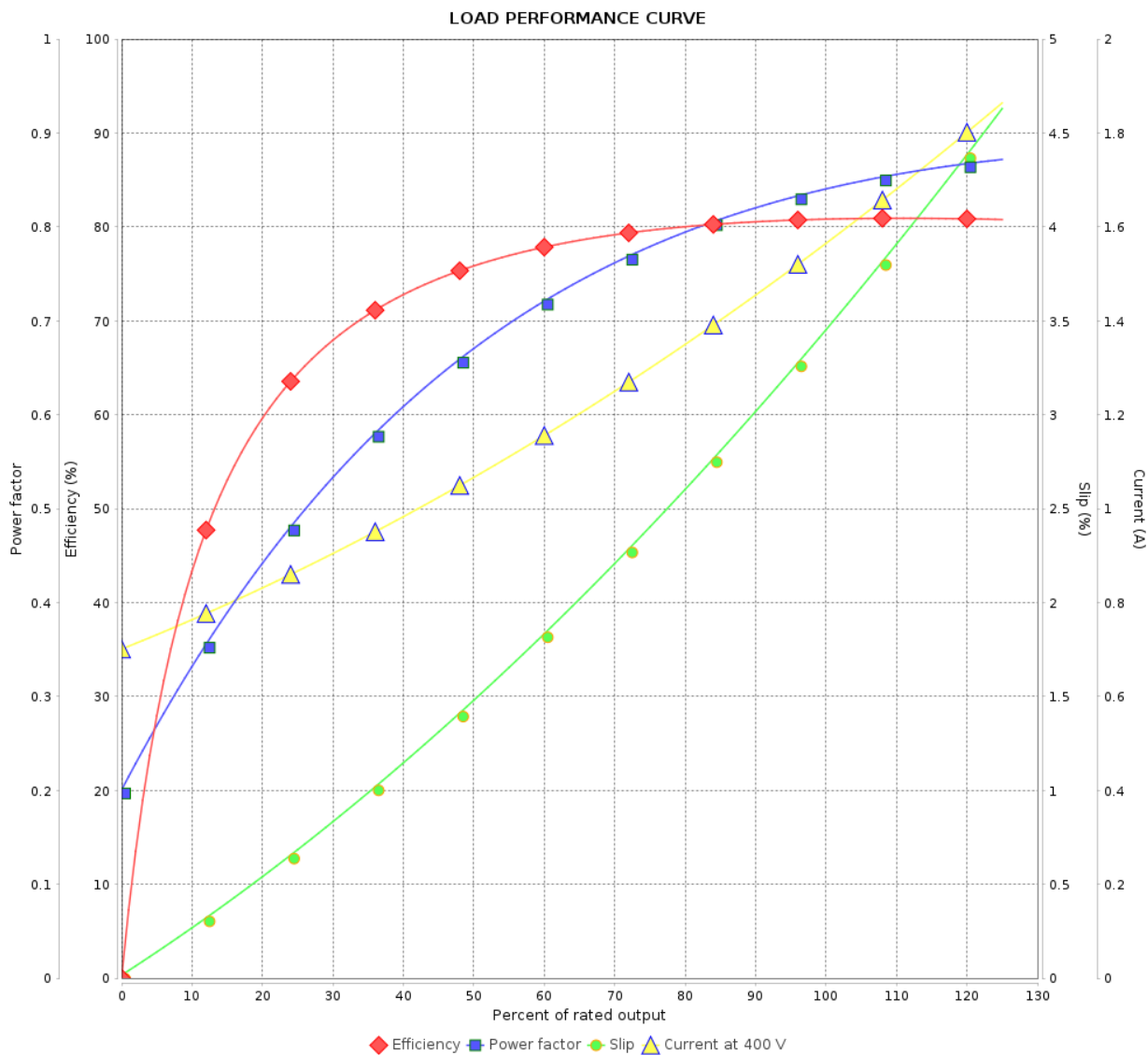
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 14954780



Performance : 400 V 50 Hz 2P IE3

Rated current : 1.60 A
LRC : 8.5
Rated torque : 0.251 kgfm
Locked rotor torque : 290 %
Breakdown torque : 340 %
Rated speed : 2895 rpm

Moment of inertia (J) : 0.0018 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

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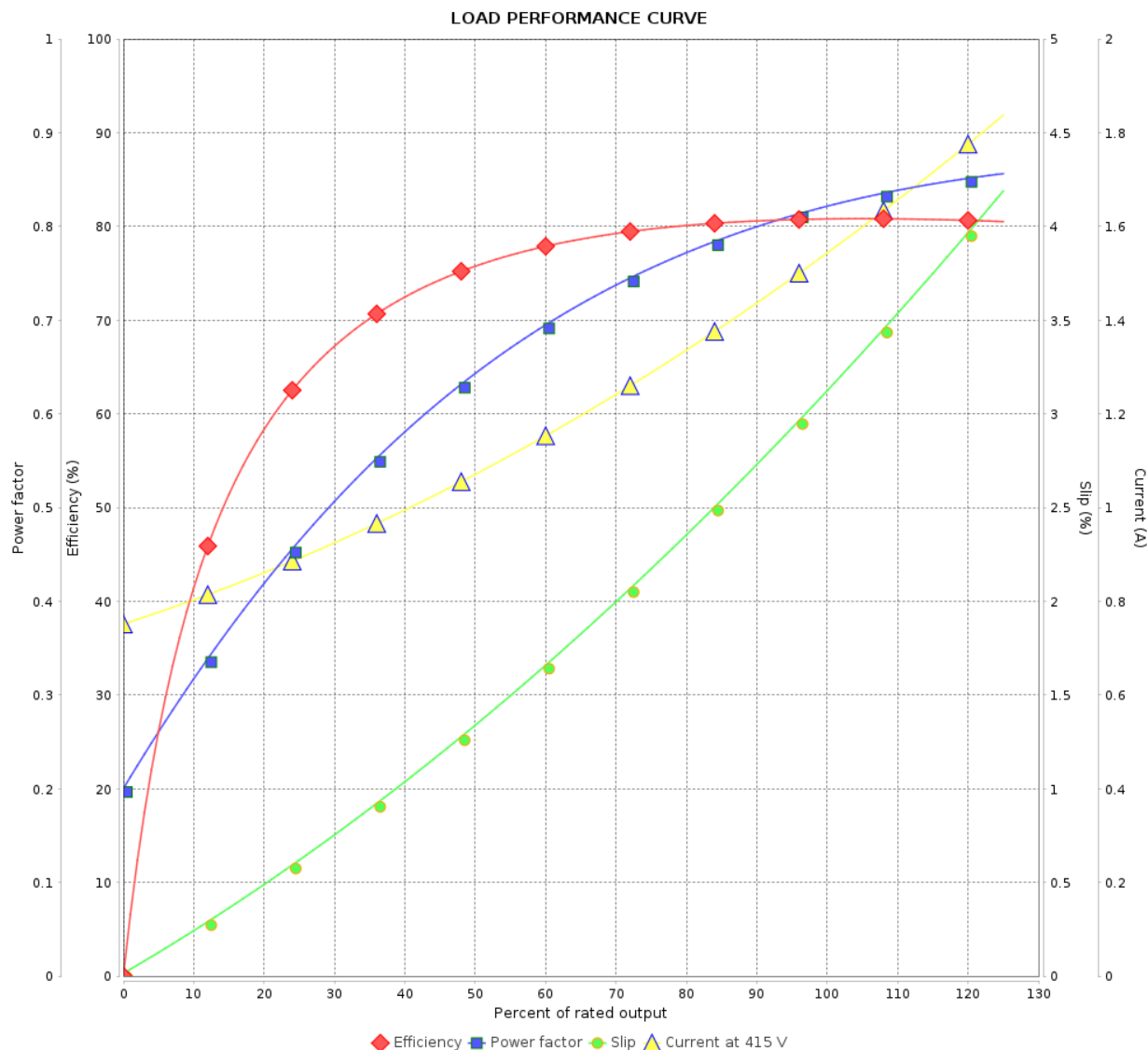
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W21 Explosion Proof NEMA Premium
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Product code : 14954780



Performance : 415 V 50 Hz 2P IE3

Rated current : 1.58 A
LRC : 9.0
Rated torque : 0.250 kgfm
Locked rotor torque : 300 %
Breakdown torque : 370 %
Rated speed : 2905 rpm

Moment of inertia (J) : 0.0018 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

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