

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W21 Explosion Proof NEMA Premium Efficiency Three-Phase Product code : 14217588

Frame	: 213/5TC	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	: 91.1 kg
Protection degree	: IP55	Moment of inertia (J)	: 0.0198 kgm ²
Design	: B		

Output [HP]	7.5	7.5	7.5	7.5
Poles	2	2	2	2
Frequency [Hz]	60	50	50	50
Rated voltage [V]	230/460	380	400	415
Rated current [A]	17.3/8.67	10.4	10.0	9.61
L. R. Amperes [A]	125/62.4	64.5	68.0	71.1
LRC [A]	7.2x(Code H)	6.2x(Code G)	6.8x(Code G)	7.4x(Code H)
No load current [A]	5.50/2.75	2.65	2.85	2.95
Rated speed [RPM]	3535	2910	2920	2925
Slip [%]	1.81	3.00	2.67	2.50
Rated torque [kgfm]	1.54	1.87	1.86	1.86
Locked rotor torque [%]	229	180	200	210
Breakdown torque [%]	300	229	260	290
Service factor	1.15	1.00	1.00	1.00
Temperature rise	80 K	80 K	80 K	80 K
Locked rotor time	41s (cold) 23s (hot)	46s (cold) 26s (hot)	46s (cold) 26s (hot)	46s (cold) 26s (hot)
Noise level ²	72.0 dB(A)	67.0 dB(A)	67.0 dB(A)	67.0 dB(A)
Efficiency (%)	25%			
	50%	85.5	86.5	86.5
	75%	88.5	87.5	88.5
	100%	89.5	89.0	89.5
Power Factor	25%			
	50%	0.78	0.83	0.79
	75%	0.86	0.88	0.86
	100%	0.89	0.90	0.89

	<u>Drive end</u>	<u>Non drive end</u>	Foundation loads	
Bearing type	: 6308 2RS	6207 2RS	Max. traction	: 52 kgf
Sealing	: Oil Seal	Lip Seal	Max. compression	: 147 kgf
Lubrication interval	: -	-		
Lubricant amount	: -	-		
Lubricant type	: Mobil Polyrex EM			

Notes

USABLE @208V 19.8A SF 1.15 SFA 22.8A

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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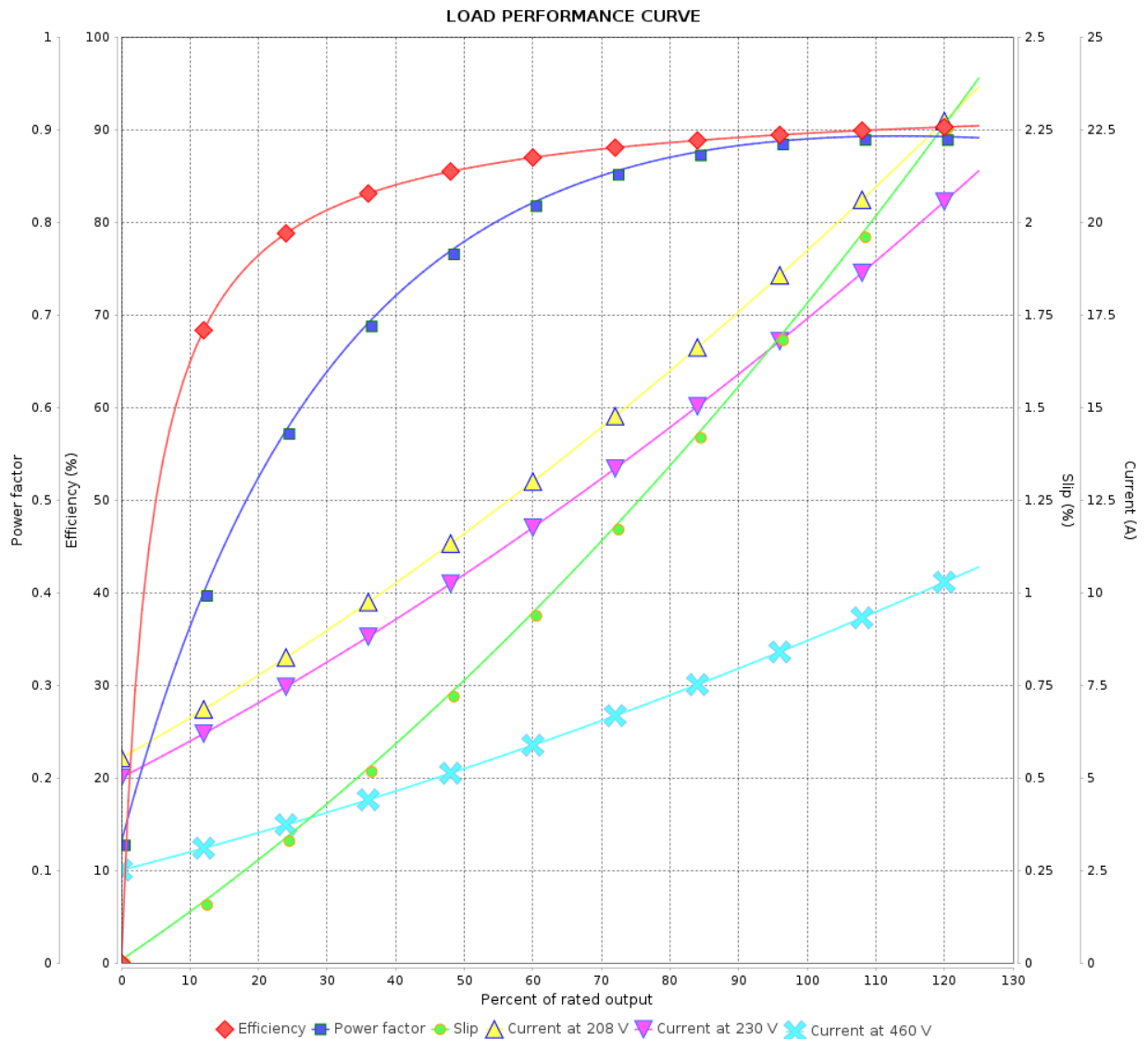
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Customer :

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Premium Efficiency Three-Phase

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Performance : 230/460 V 60 Hz 2P

Rated current : 17.3/8.67 A
LRC : 7.2
Rated torque : 1.54 kgfm
Locked rotor torque : 229 %
Breakdown torque : 300 %
Rated speed : 3535 rpm

Moment of inertia (J) : 0.0198 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 80 K
Design : B

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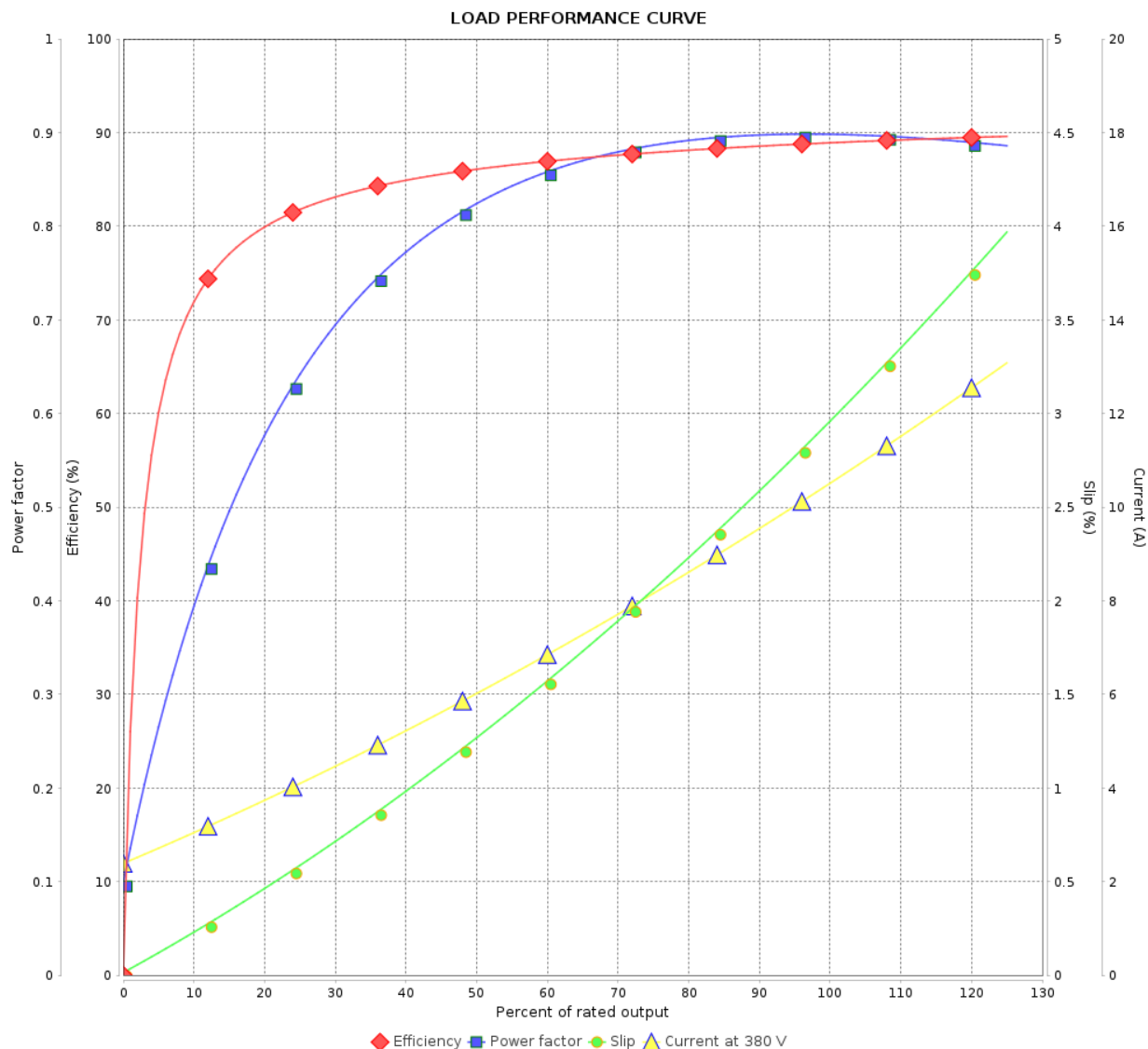
Three Phase Induction Motor - Squirrel Cage



Customer :

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Performance : 380 V 50 Hz 2P IE2

Rated current : 10.4 A
LRC : 6.2
Rated torque : 1.87 kgfm
Locked rotor torque : 180 %
Breakdown torque : 229 %
Rated speed : 2910 rpm

Moment of inertia (J) : 0.0198 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

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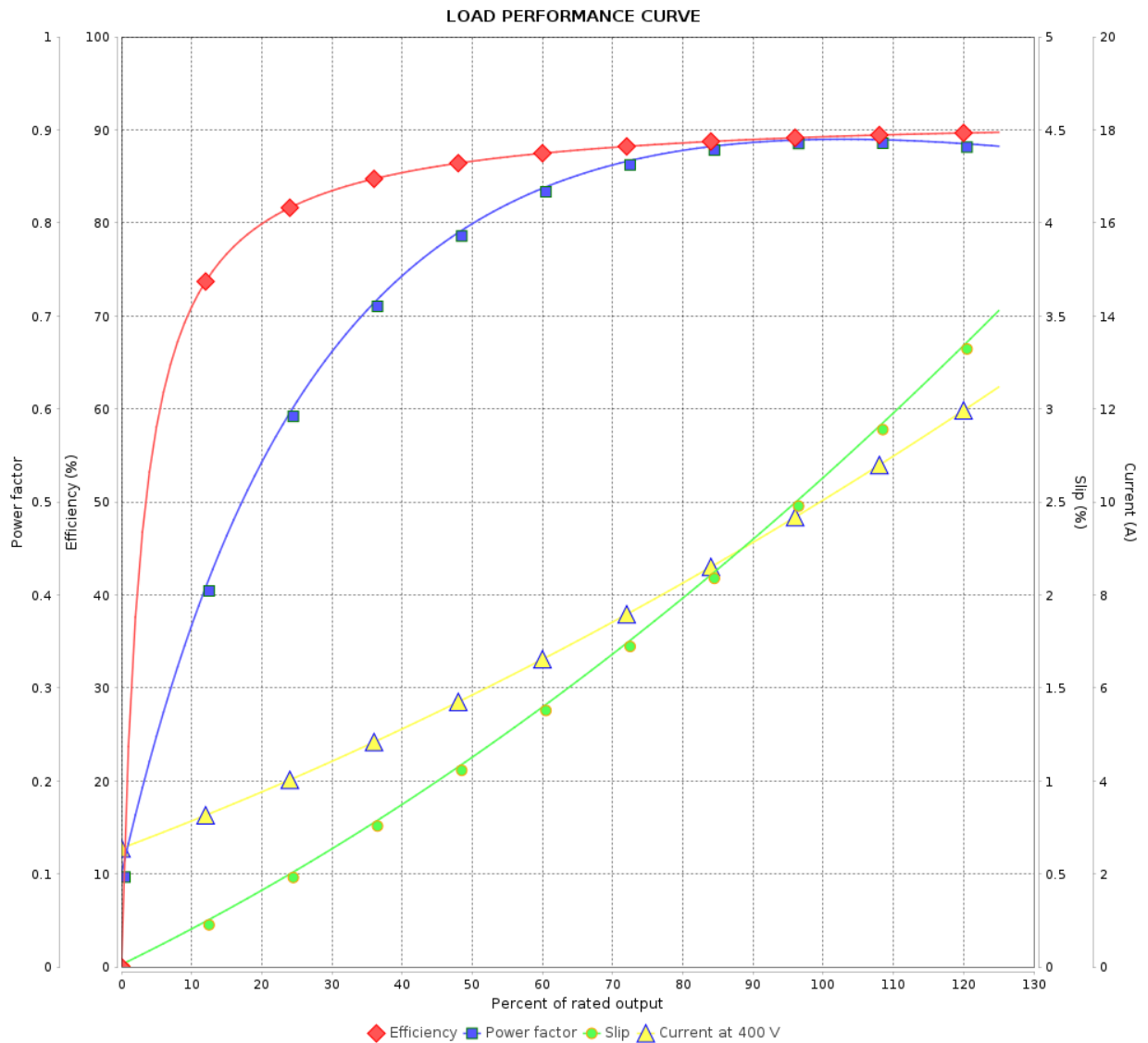
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Customer :

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Performance : 400 V 50 Hz 2P IE3

Rated current	: 10.0 A	Moment of inertia (J)	: 0.0198 kgm ²
LRC	: 6.8	Duty cycle	: Cont.(S1)
Rated torque	: 1.86 kgfm	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.00
Breakdown torque	: 260 %	Temperature rise	: 80 K
Rated speed	: 2920 rpm	Design	: B

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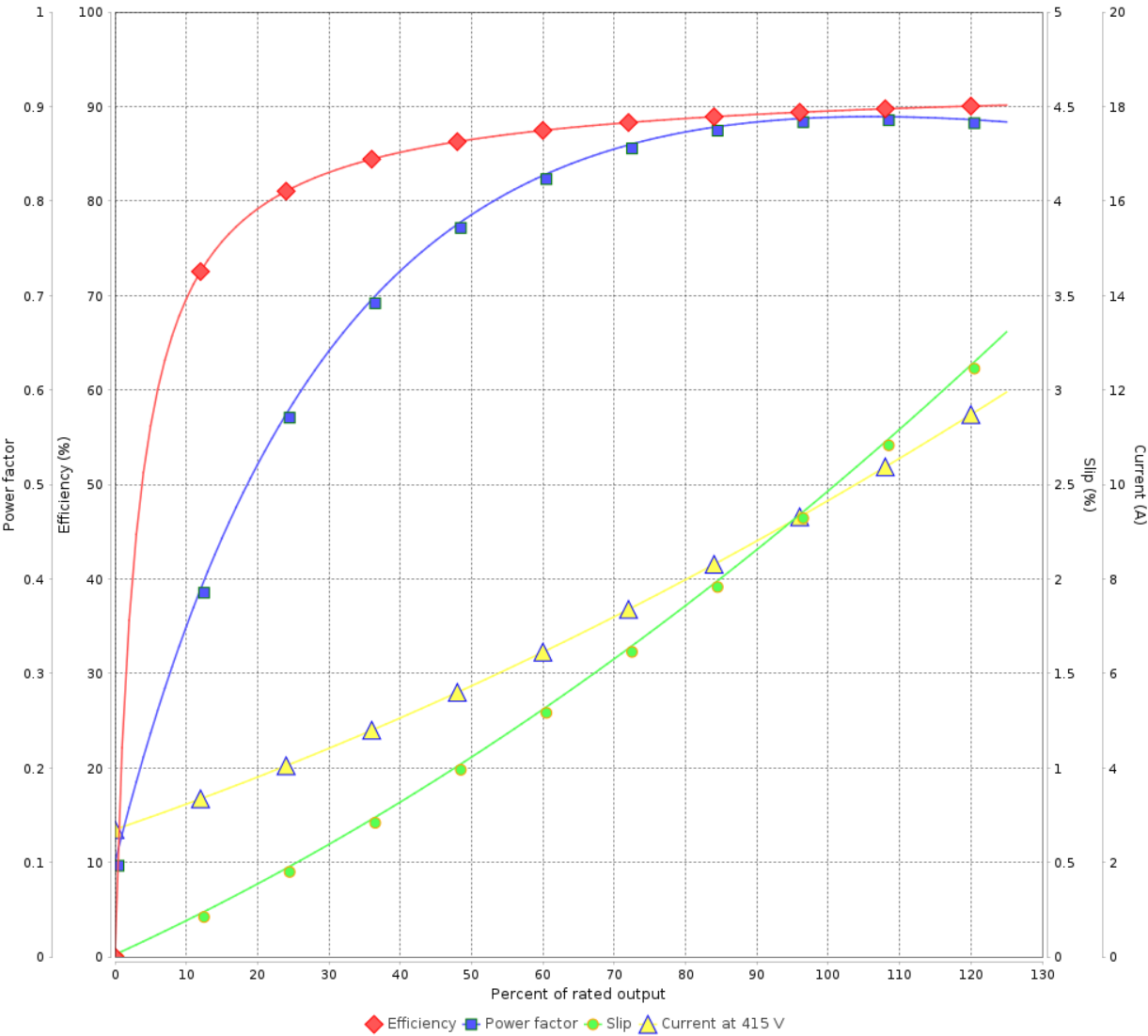


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Performance : 415 V 50 Hz 2P IE3

Rated current : 9.61 A
LRC : 7.4
Rated torque : 1.86 kgfm
Locked rotor torque : 210 %
Breakdown torque : 290 %
Rated speed : 2925 rpm

Moment of inertia (J) : 0.0198 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

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