

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W21 Explosion Proof NEMA Premium Efficiency Three-Phase Product code : 14876143

Frame	: 213/5T	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	: 90.0 kg
Protection degree	: IP55	Moment of inertia (J)	: 0.0232 kgm ²
Design	: B		

Output [HP]	10	10	10	10
Poles	2	2	2	2
Frequency [Hz]	60	50	50	50
Rated voltage [V]	230/460	380	400	415
Rated current [A]	23.4/11.7	14.1	13.4	13.0
L. R. Amperes [A]	161/80.7	88.8	92.5	89.7
LRC [A]	6.9x(Code H)	6.3x(Code G)	6.9x(Code H)	6.9x(Code H)
No load current [A]	7.20/3.60	3.50	3.80	4.10
Rated speed [RPM]	3525	2895	2910	2920
Slip [%]	2.08	3.50	3.00	2.67
Rated torque [kgfm]	2.06	2.51	2.49	2.49
Locked rotor torque [%]	210	150	180	200
Breakdown torque [%]	280	220	240	260
Service factor	1.15	1.00	1.00	1.00
Temperature rise	80 K	80 K	80 K	80 K
Locked rotor time	54s (cold) 30s (hot)	36s (cold) 20s (hot)	36s (cold) 20s (hot)	36s (cold) 20s (hot)
Noise level ²	72.0 dB(A)	67.0 dB(A)	67.0 dB(A)	67.0 dB(A)
Efficiency (%)	25%			
	50%	88.5	88.5	88.5
	75%	90.2	89.2	89.5
	100%	90.2	88.5	89.5
Power Factor	25%			
	50%	0.79	0.85	0.82
	75%	0.87	0.90	0.88
	100%	0.89	0.91	0.90

	<u>Drive end</u>	<u>Non drive end</u>	Foundation loads	
Bearing type	: 6308 2RS	6207 2RS	Max. traction	: 73 kgf
Sealing	: Oil Seal	Lip Seal	Max. compression	: 165 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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Checked by				
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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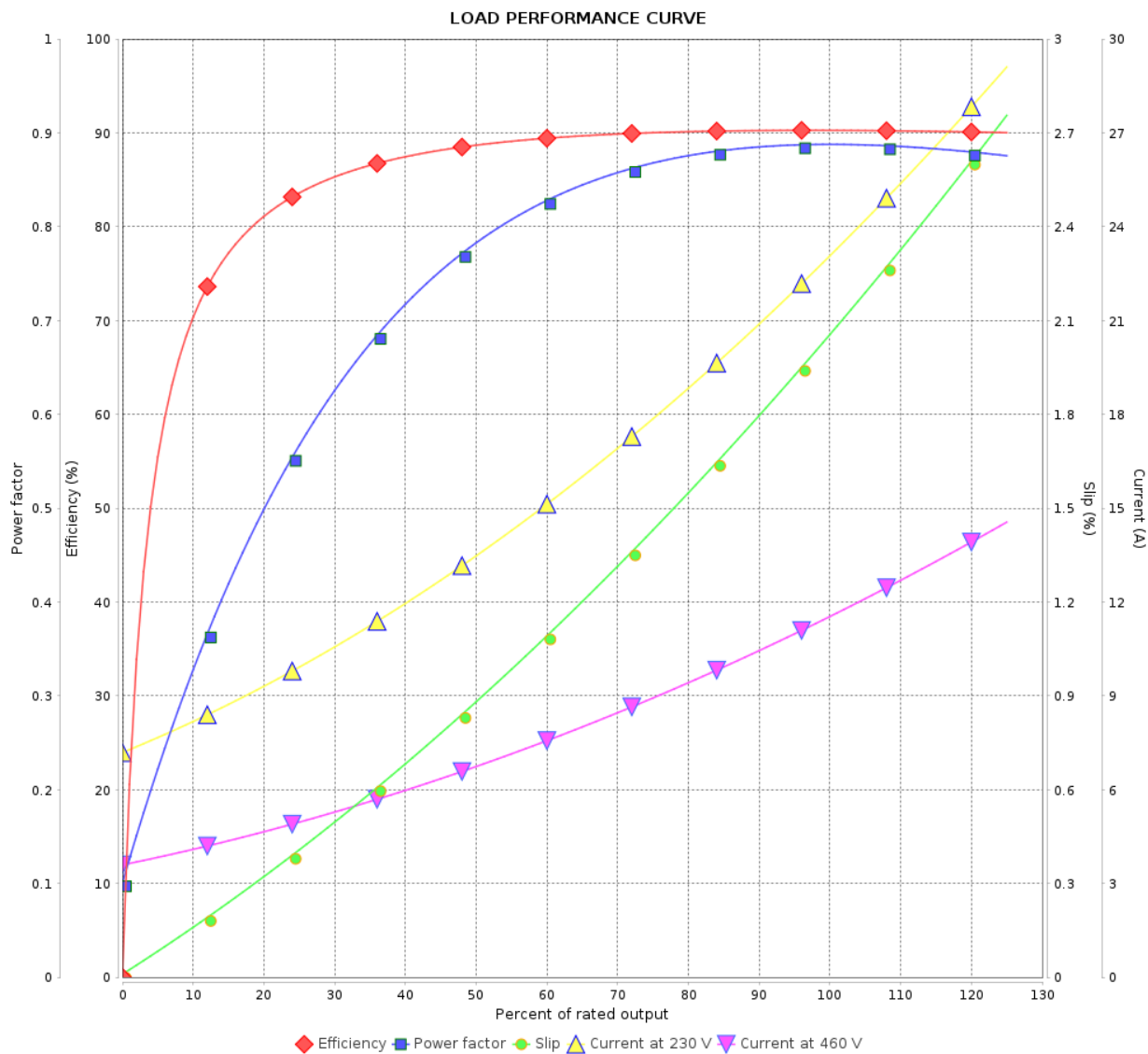
Three Phase Induction Motor - Squirrel Cage



Customer :

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

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Performance : 230/460 V 60 Hz 2P

Rated current : 23.4/11.7 A
LRC : 6.9
Rated torque : 2.06 kgfm
Locked rotor torque : 210 %
Breakdown torque : 280 %
Rated speed : 3525 rpm

Moment of inertia (J) : 0.0232 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 80 K
Design : B

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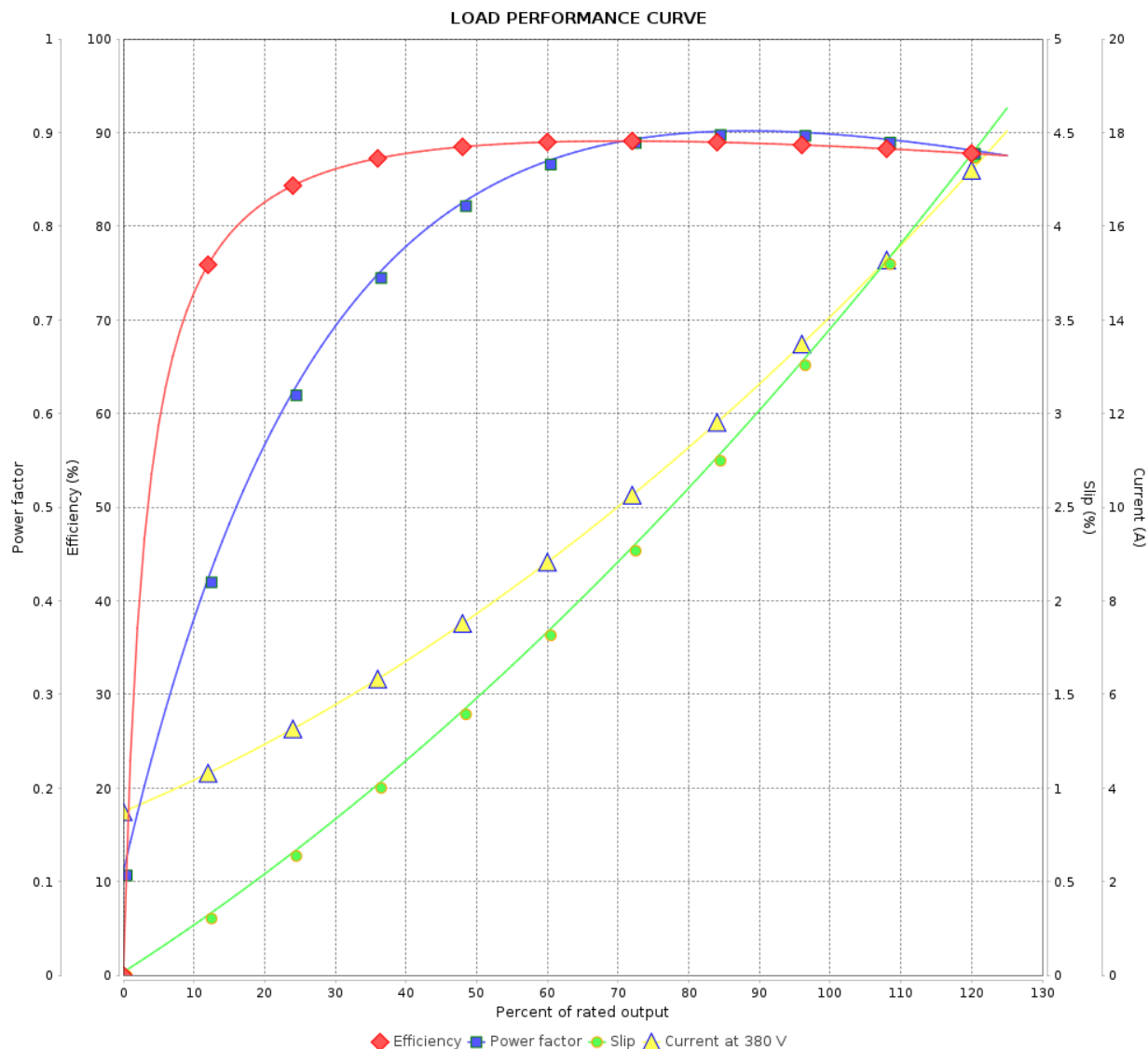
Three Phase Induction Motor - Squirrel Cage



Customer :

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Performance : 380 V 50 Hz 2P IE2

Rated current : 14.1 A
LRC : 6.3
Rated torque : 2.51 kgfm
Locked rotor torque : 150 %
Breakdown torque : 220 %
Rated speed : 2895 rpm

Moment of inertia (J) : 0.0232 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

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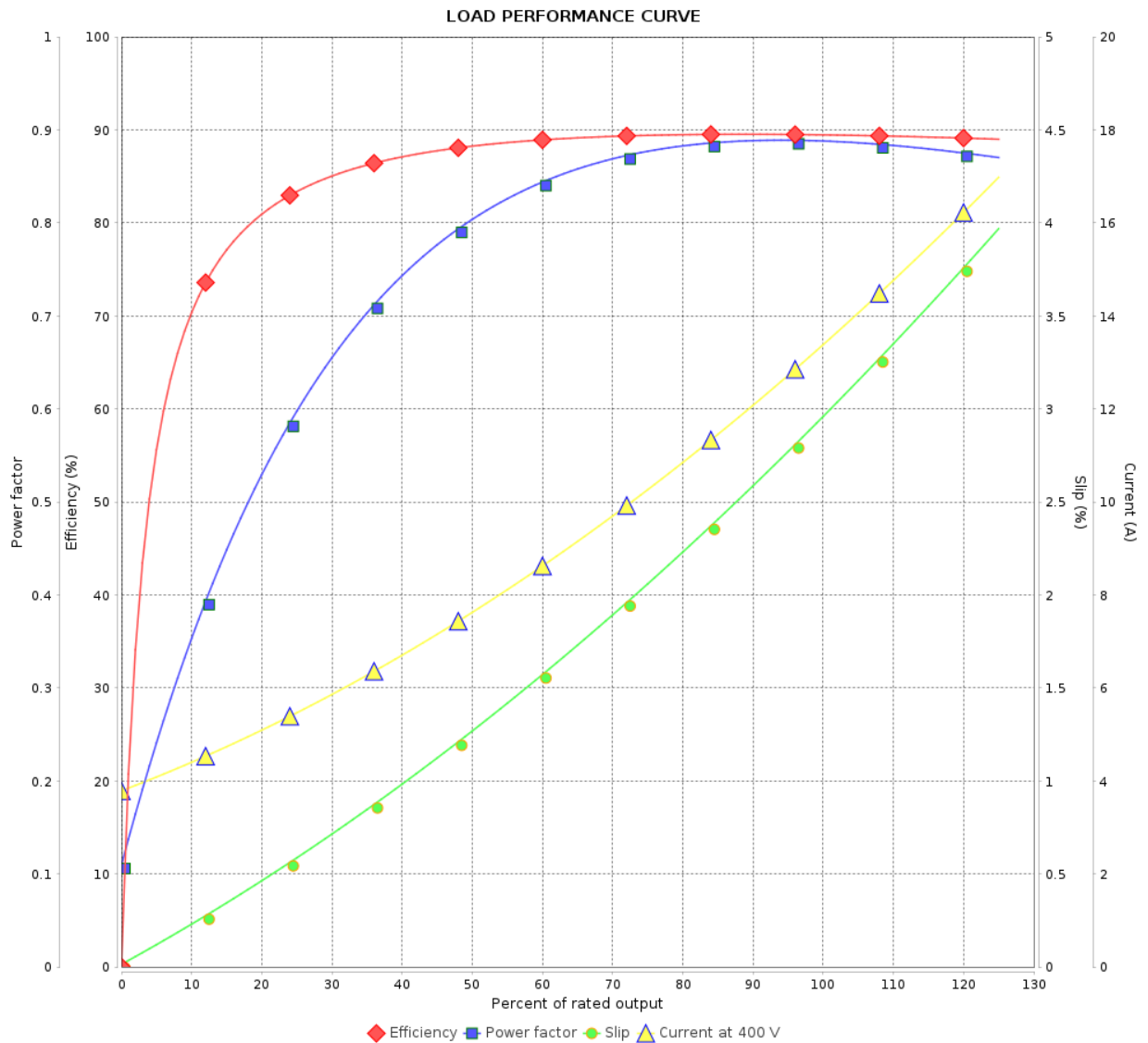
Three Phase Induction Motor - Squirrel Cage



Customer :

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Performance : 400 V 50 Hz 2P IE2

Rated current : 13.4 A
LRC : 6.9
Rated torque : 2.49 kgfm
Locked rotor torque : 180 %
Breakdown torque : 240 %
Rated speed : 2910 rpm

Moment of inertia (J) : 0.0232 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

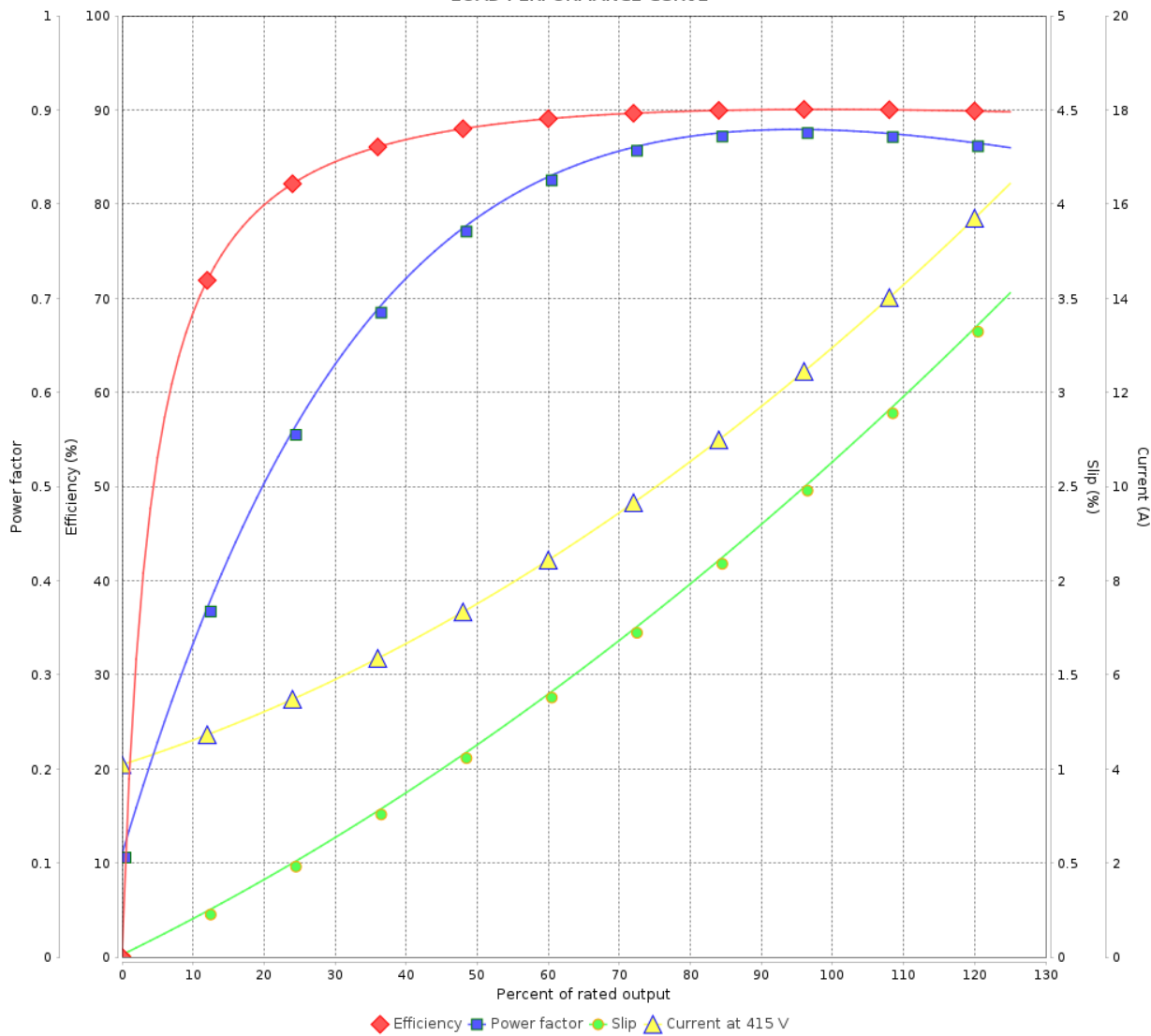


Customer :

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Performance : 415 V 50 Hz 2P IE3

Rated current : 13.0 A
LRC : 6.9
Rated torque : 2.49 kgfm
Locked rotor torque : 200 %
Breakdown torque : 260 %
Rated speed : 2920 rpm

Moment of inertia (J) : 0.0232 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

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