DATA SHEET

Three Phase Induction Motor - Squirrel Cage

Customer :

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

Product code : 14451345

Frame	: 182/4TC	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]	: 61.0 kg
Protection degree	: IP55	Moment of inertia (J)	: 0.0080 kgm²
Design	: B		

Output [HP]		5	5	5	5
Poles		2	2	2	2
Frequency [Hz]		60	50	50	50
Rated voltage [V]		230/460	380	400	415
Rated current [A]		12.2/6.10	7.30	6.94	6.84
L. R. Amperes [A]		91.5/45.7	41.6	44.4	47.2
LRC [A]		7.5x(Code J)	5.7x(Code F)	6.4x(Code G)	6.9x(Code H)
No load current [A]		4.40/2.20	2.15	2.40	2.60
Rated speed [RPM]		3490	2850	2865	2875
Slip [%]		3.06	5.00	4.50	4.17
Rated torque [kgfm]		1.04	1.27	1.27	1.26
Locked rotor torque [%]		250	200	229	260
Breakdown torque [%]		380	280	310	340
Service factor		1.15	1.00	1.00	1.00
Temperature rise		80 K	80 K	80 K	80 K
Locked rotor time		46s (cold) 26s (hot)	46s (cold) 26s (hot)	46s (cold) 26s (hot)	46s (cold) 26s (hot)
Noise level[2]		69.0 dB(A)	64.0 dB(A)	64.0 dB(A)	64.0 dB(A)
Efficiency (%)	25%				
	50%	85.5	86.5	86.5	86.5
	75%	87.5	87.5	87.5	87.5
	100%	88.5	86.5	87.5	87.5
Power Factor	25%				
	50%	0.70	0.76	0.72	0.69
	75%	0.81	0.86	0.83	0.80
	100%	0.86	0.89	0.88	0.86

		Drive end	Non drive end
Bearing type	:	6307 2RS	6206 2RS
Sealing	:	Oil Seal	Lip Seal
Lubrication interval	:	-	-
Lubricant amount	:	-	-
Lubricant type	:	Mobil Polyrex EM	

Foundation loads

Max. traction : 59 kgf

Max. compression : 120 kgf

Notes

USABLE @208V 13.5A SF 1.15 SFA 15.5A

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 ºC

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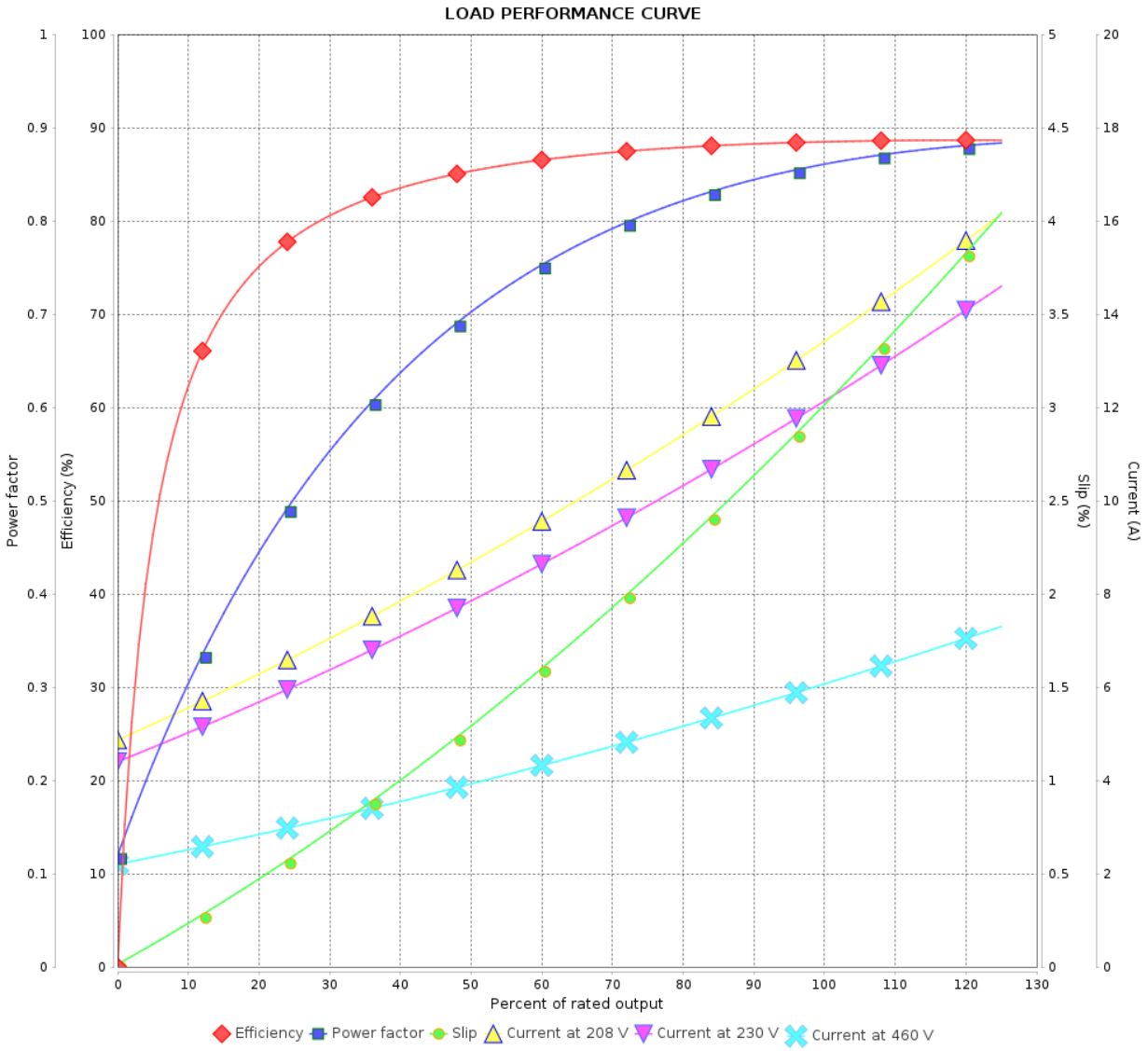

Performance	: 230/460 V 60 Hz 2P		
Rated current	: 12.2/6.10 A	Moment of inertia (J)	: 0.0080 kgm²
LRC	: 7.5	Duty cycle	: Cont.(S1)
Rated torque	: 1.04 kgfm	Insulation class	: F
Locked rotor torque	: 250 %	Service factor	: 1.15
Breakdown torque	: 380 %	Temperature rise	: 80 K
Rated speed	: 3490 rpm	Design	: B

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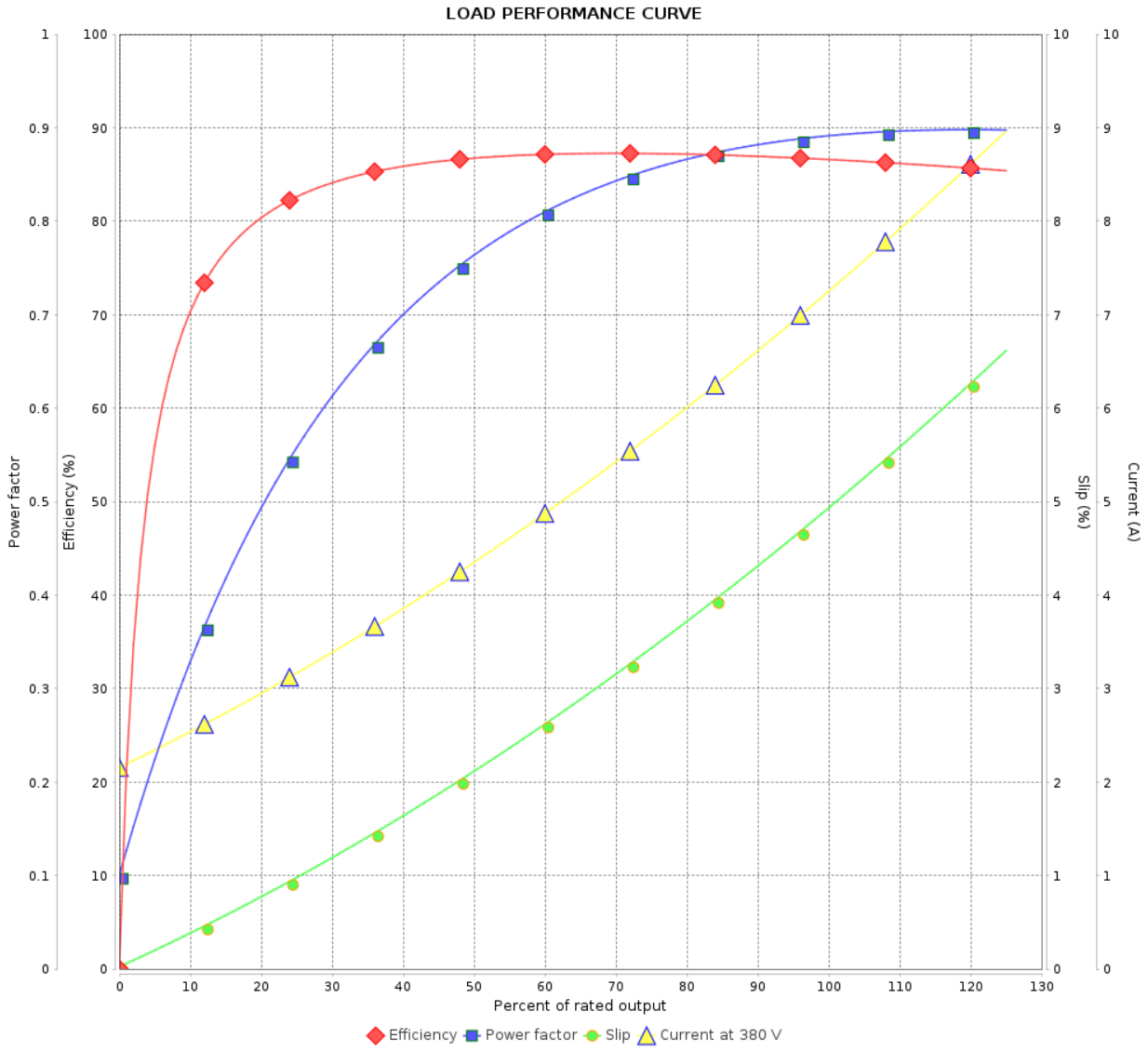

Performance	: 380 V 50 Hz 2P IE2

Rated current	: 7.30 A	Moment of inertia (J)	: 0.0080 kgm²
LRC	: 5.7	Duty cycle	: Cont.(S1)
Rated torque	: 1.27 kgfm	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.00
Breakdown torque	: 280 %	Temperature rise	: 80 K
Rated speed	: 2850 rpm	Design	: B

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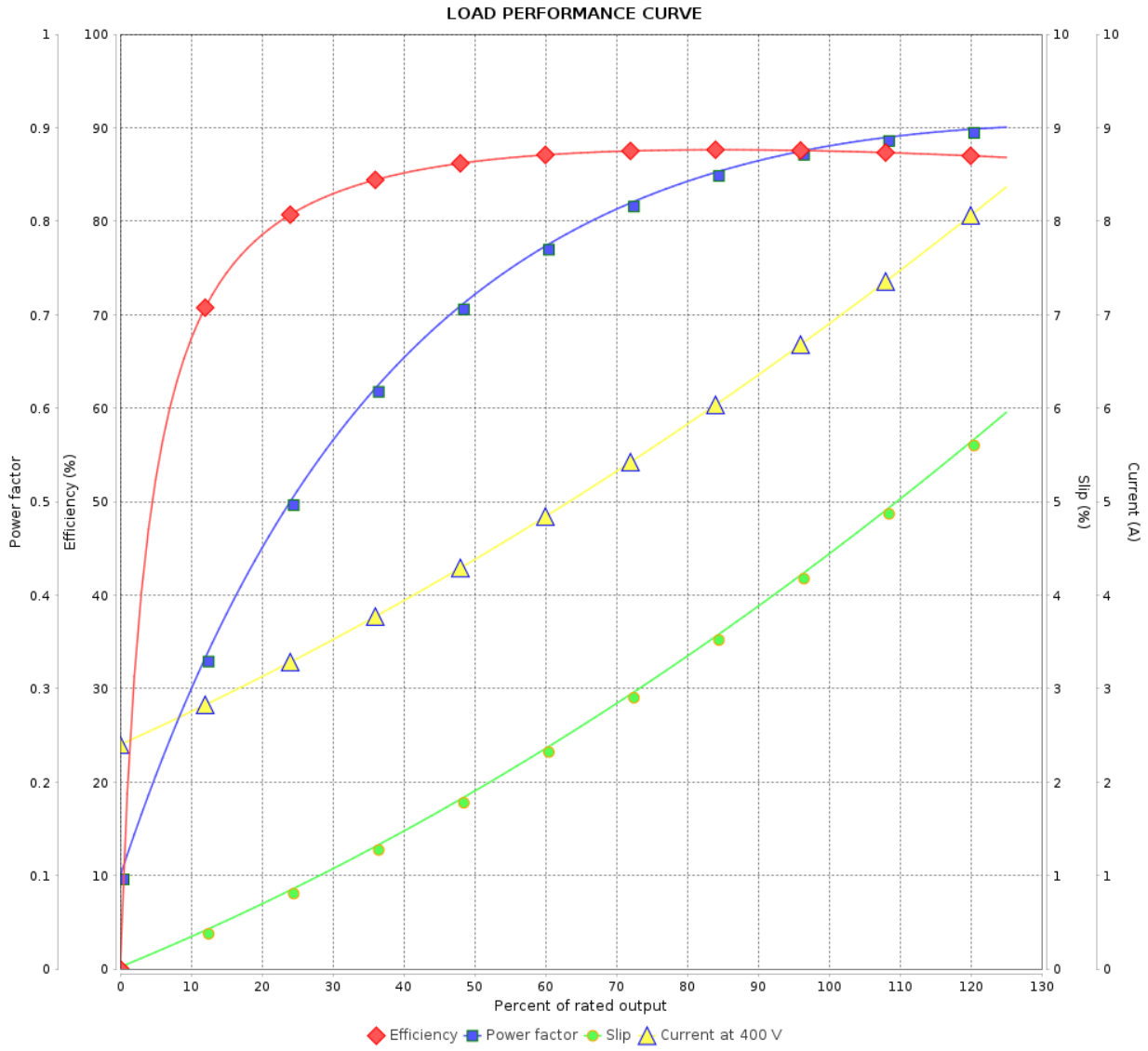

Performance	: 400 V 50 Hz 2P IE2		
Rated current	: 6.94 A	Moment of inertia (J)	: 0.0080 kgm²
LRC	: 6.4	Duty cycle	: Cont.(S1)
Rated torque	: 1.27 kgfm	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	: 1.00
Breakdown torque	: 310 %	Temperature rise	: 80 K
Rated speed	: 2865 rpm	Design	: B

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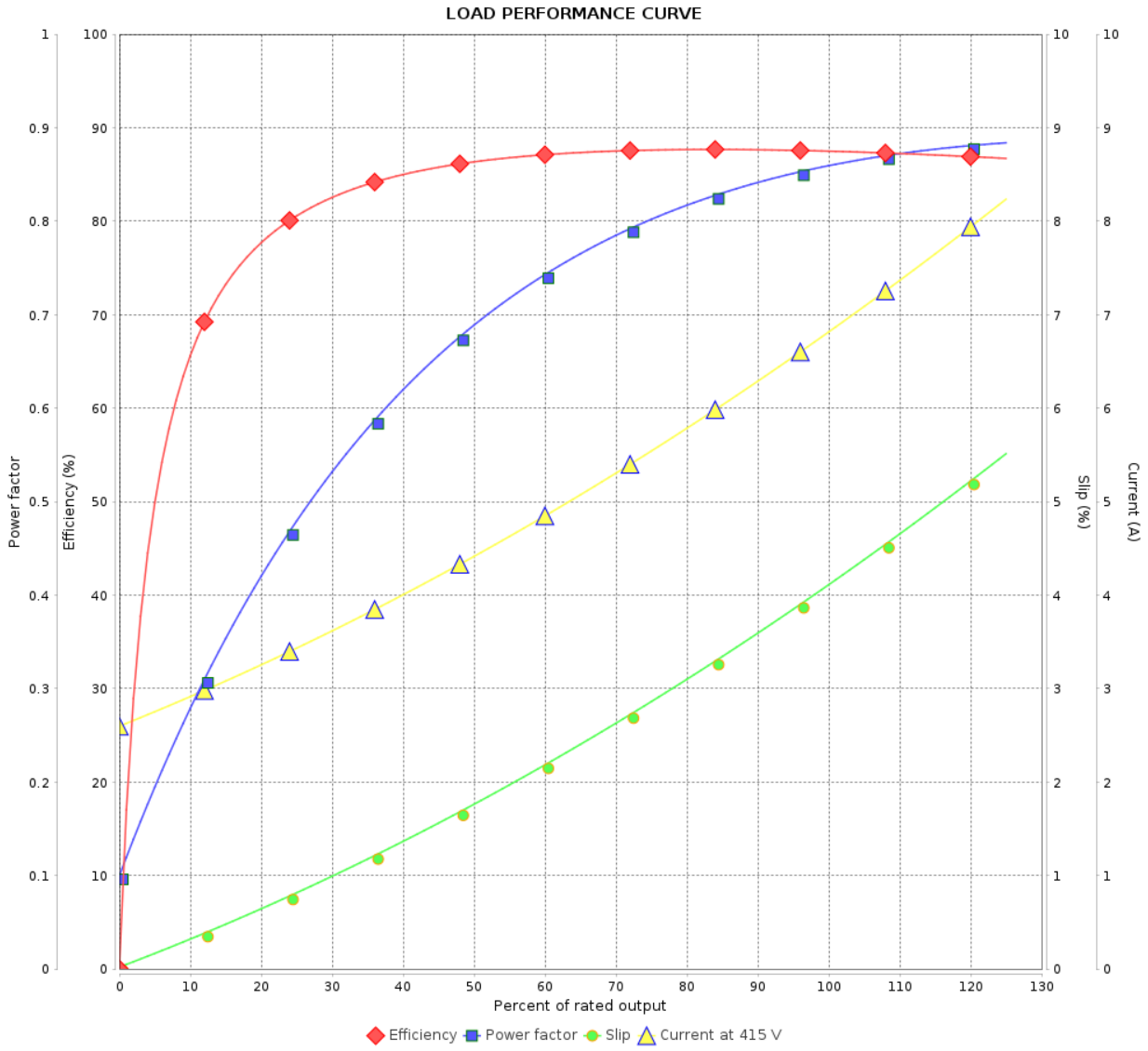

Performance	: 415 V 50 Hz 2P IE2

Rated current	: 6.84 A	Moment of inertia (J)	: 0.0080 kgm²
LRC	: 6.9	Duty cycle	: Cont.(S1)
Rated torque	: 1.26 kgfm	Insulation class	: F
Locked rotor torque	: 260 %	Service factor	: 1.00
Breakdown torque	: 340 %	Temperature rise	: 80 K
Rated speed	: 2875 rpm	Design	: B

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