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)	Rotation¹	: Both (CW and CCW)
Ambient temperature	: -20°C to +40°C	Starting method	: Direct On Line
Altitude	: 1000 m.a.s.l.	Approx. weight³	: 150 kg
Protection degree	: IP55	Moment of inertia (J)	: 0.1436 kgm²
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 level²		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	82.5
	75%	86.5	84.0	84.0	84.0
	100%	87.5	84.0	85.5	85.5
Power Factor	25%				
	50%	0.46	0.53	0.50	0.47
	75%	0.58	0.65	0.62	0.60
	100%	0.67	0.73	0.70	0.69

		Drive end	Non drive end
Bearing type	:	6309 2RS C3	6209 2RS C3
Sealing	:	Oil Seal	Lip Seal
Lubrication interval	:	-	-
Lubricant amount	:	-	-
Lubricant type	:	Mobil Polyrex EM	

Foundation loads

Max. traction : 120 kgf

Max. compression : 270 kgf

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 ºC

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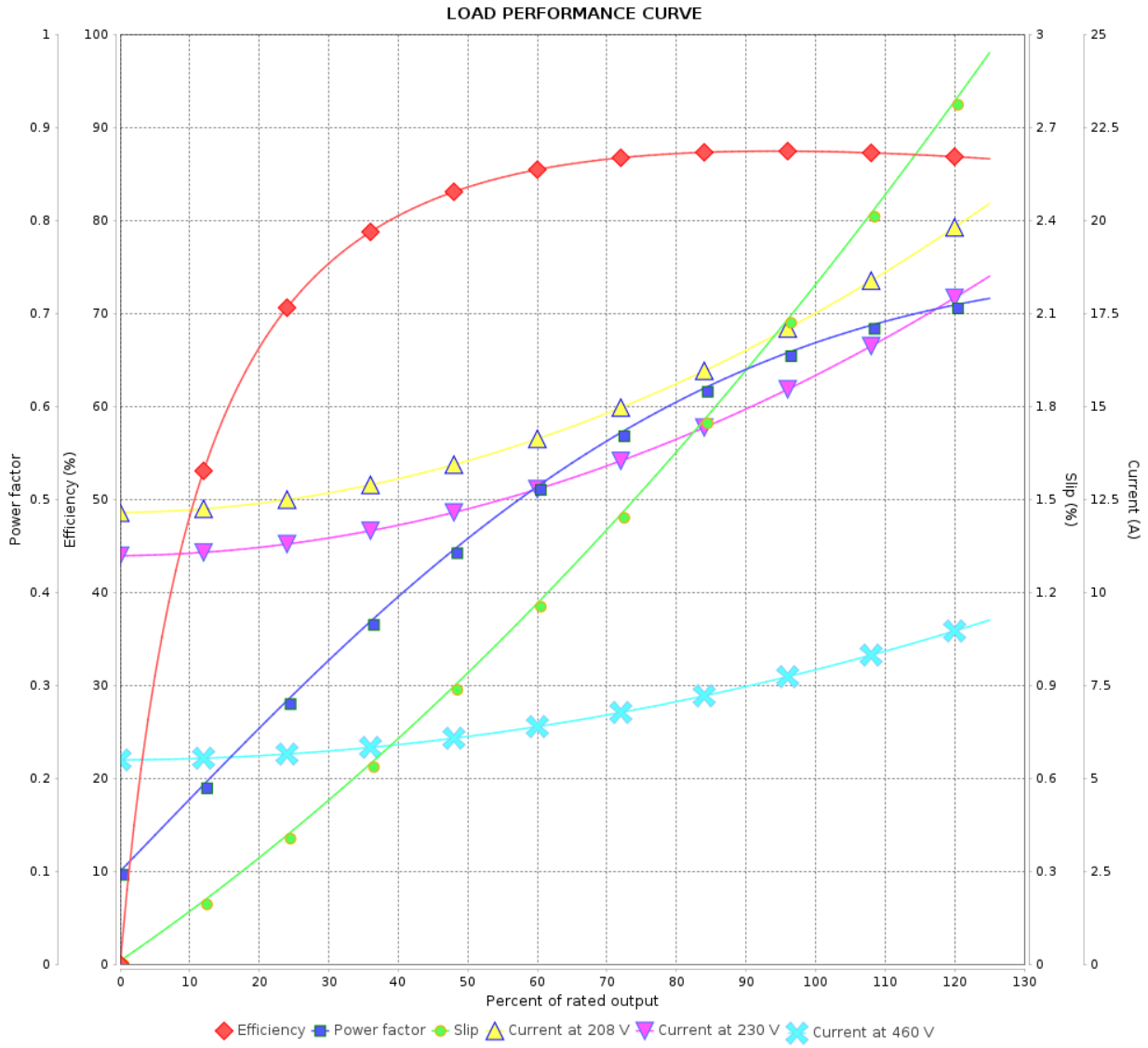

Performance	: 230/460 V 60 Hz 8P		
Rated current	: 15.9/7.93 A	Moment of inertia (J)	: 0.1436 kgm²
LRC	: 5.3	Duty cycle	: Cont.(S1)
Rated torque	: 4.12 kgfm	Insulation class	: F
Locked rotor torque	: 210 %	Service factor	: 1.15
Breakdown torque	: 270 %	Temperature rise	: 80 K
Rated speed	: 880 rpm	Design	: B

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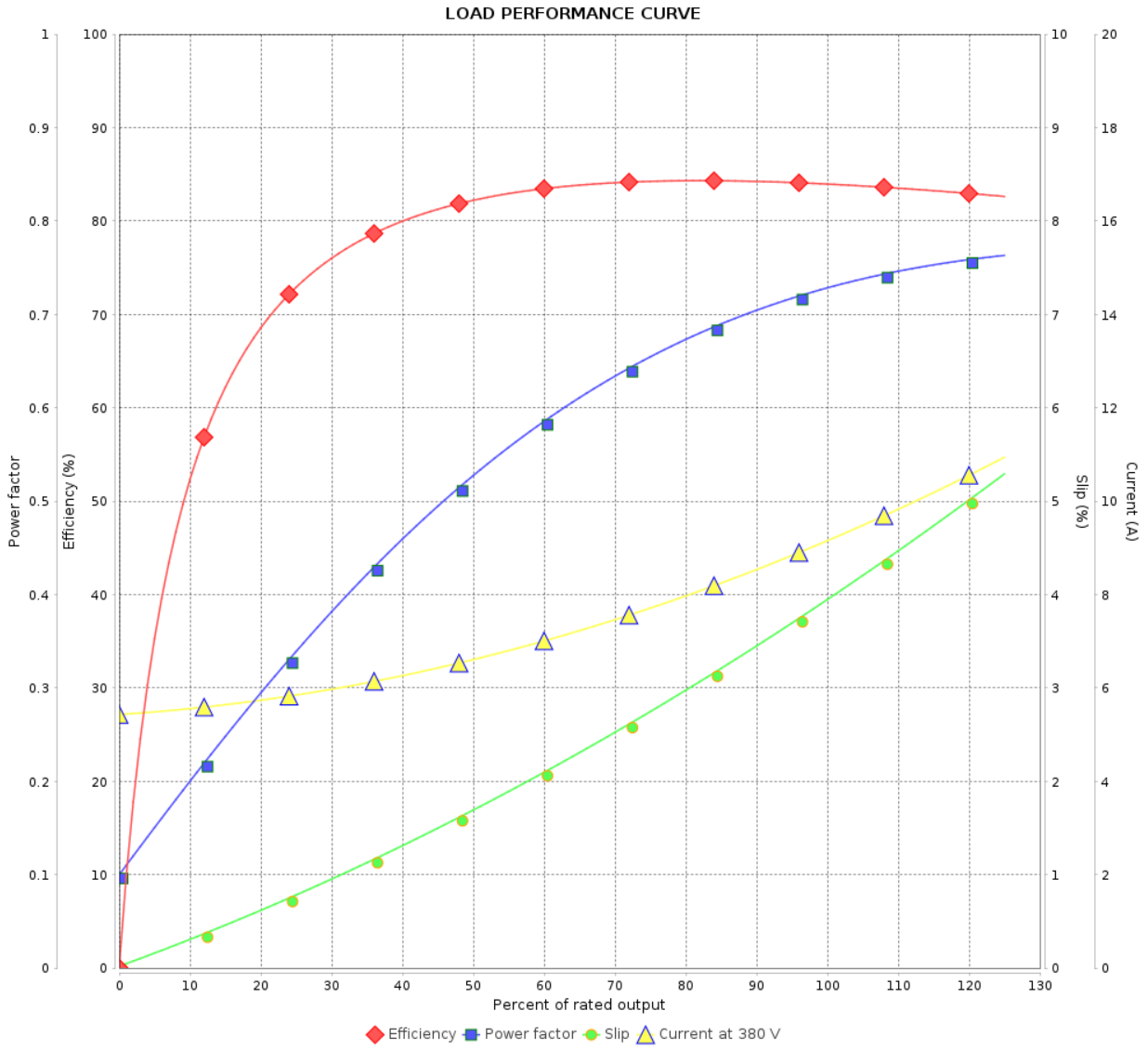

Performance	: 380 V 50 Hz 8P IE2		
Rated current	: 9.17 A	Moment of inertia (J)	: 0.1436 kgm²
LRC	: 5.3	Duty cycle	: Cont.(S1)
Rated torque	: 5.04 kgfm	Insulation class	: F
Locked rotor torque	: 160 %	Service factor	: 1.00
Breakdown torque	: 200 %	Temperature rise	: 80 K
Rated speed	: 720 rpm	Design	: B

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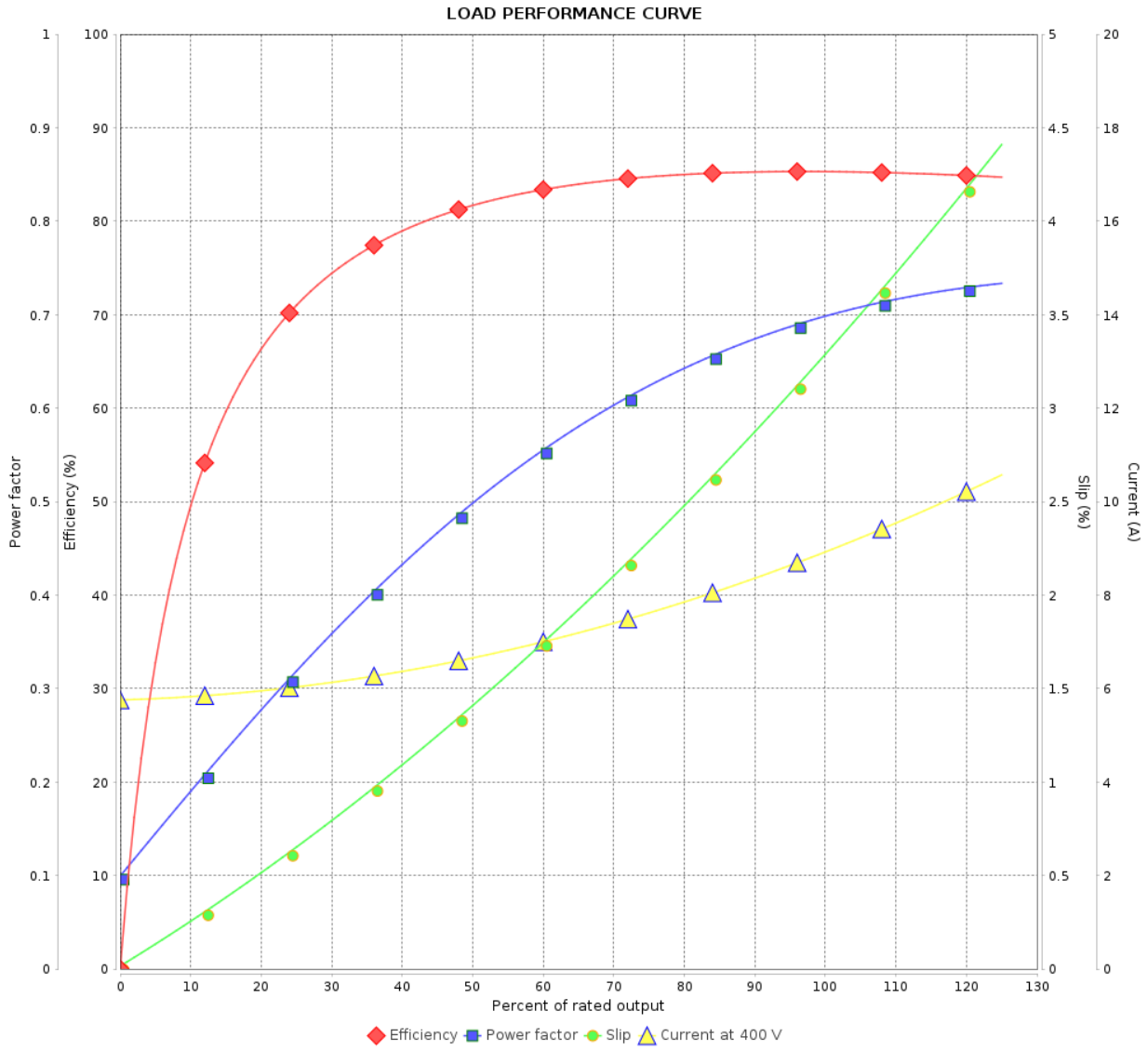

Performance	: 400 V 50 Hz 8P IE3		
Rated current	: 8.92 A	Moment of inertia (J)	: 0.1436 kgm²
LRC	: 5.3	Duty cycle	: Cont.(S1)
Rated torque	: 5.01 kgfm	Insulation class	: F
Locked rotor torque	: 180 %	Service factor	: 1.00
Breakdown torque	: 229 %	Temperature rise	: 80 K
Rated speed	: 725 rpm	Design	: B

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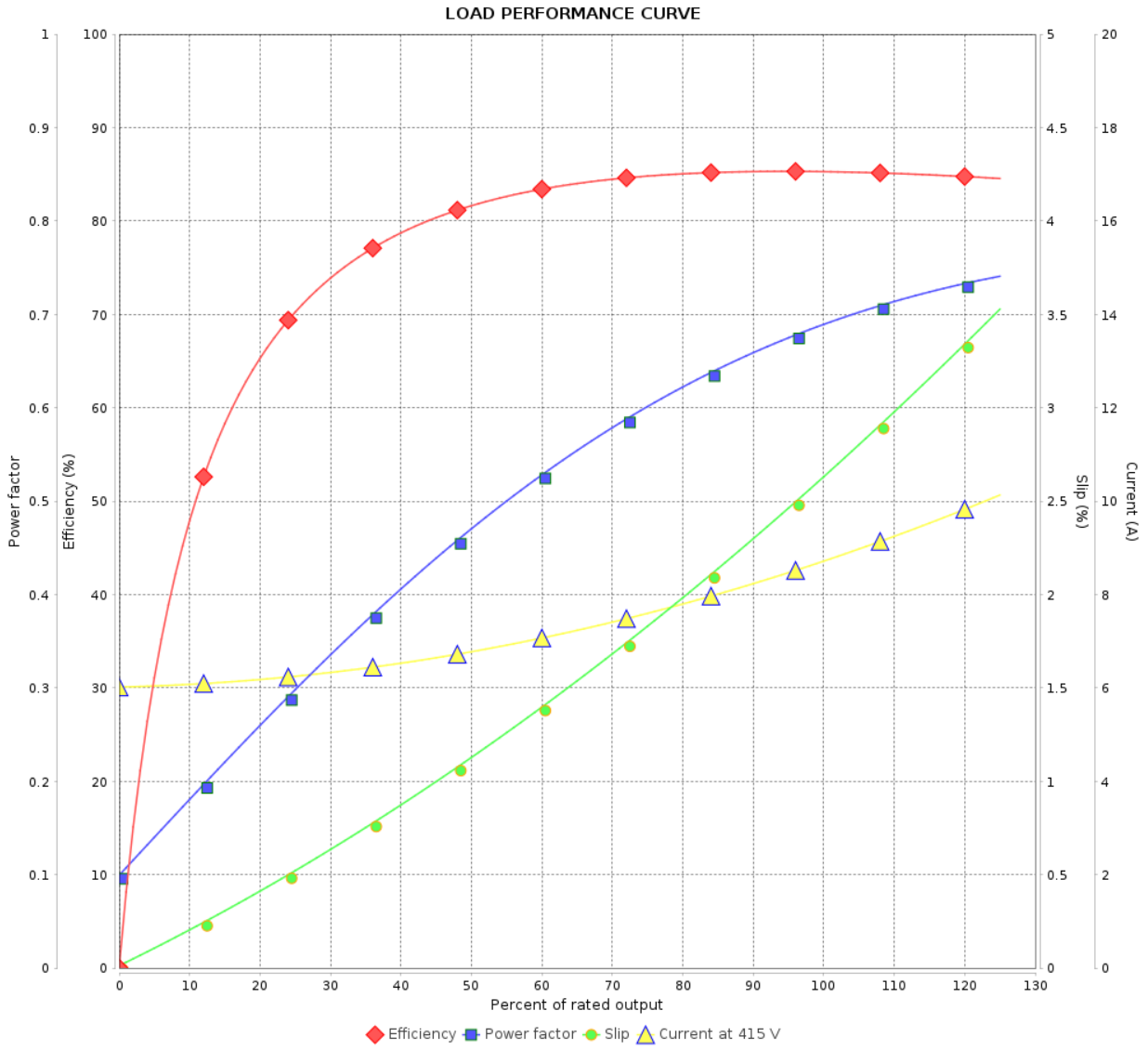

Performance	: 415 V 50 Hz 8P IE3		
Rated current	: 8.73 A	Moment of inertia (J)	: 0.1436 kgm²
LRC	: 5.3	Duty cycle	: Cont.(S1)
Rated torque	: 4.97 kgfm	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.00
Breakdown torque	: 250 %	Temperature rise	: 80 K
Rated speed	: 730 rpm	Design	: B

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