

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :				
Product line		: W21 Explosion Proof NEMA Premium Efficiency Three-Phase		Product code : 14380393
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	: 94.4 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
Bearing type	: <u>Drive end</u> 6308 2RS <u>Non drive end</u> 6207 2RS	Foundation loads		
Sealing	: Oil Seal Lip Seal	Max. traction	: 72 kgf	
Lubrication interval	: - -	Max. compression	: 166 kgf	
Lubricant amount	: - -			
Lubricant type	: Mobil Polyrex EM			
Notes USABLE @208V 25.7A SF 1.15 SFA 29.5A				
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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Thermal protection

ID	Application	Type	Quantity	Sensing Temperature
1	Winding	Thermostat - 2 wires	1 x Phase	155 °C

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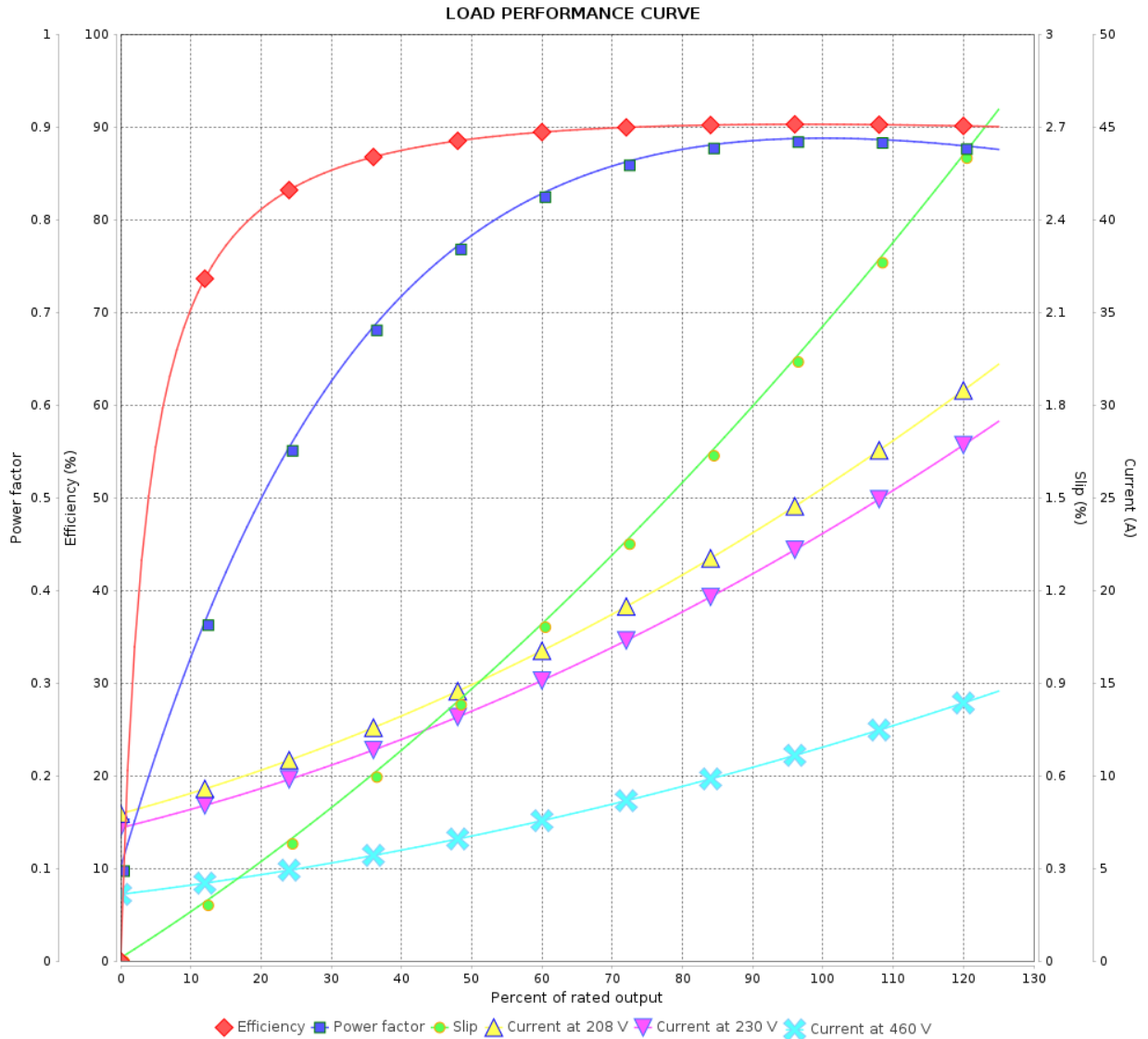
Three Phase Induction Motor - Squirrel Cage



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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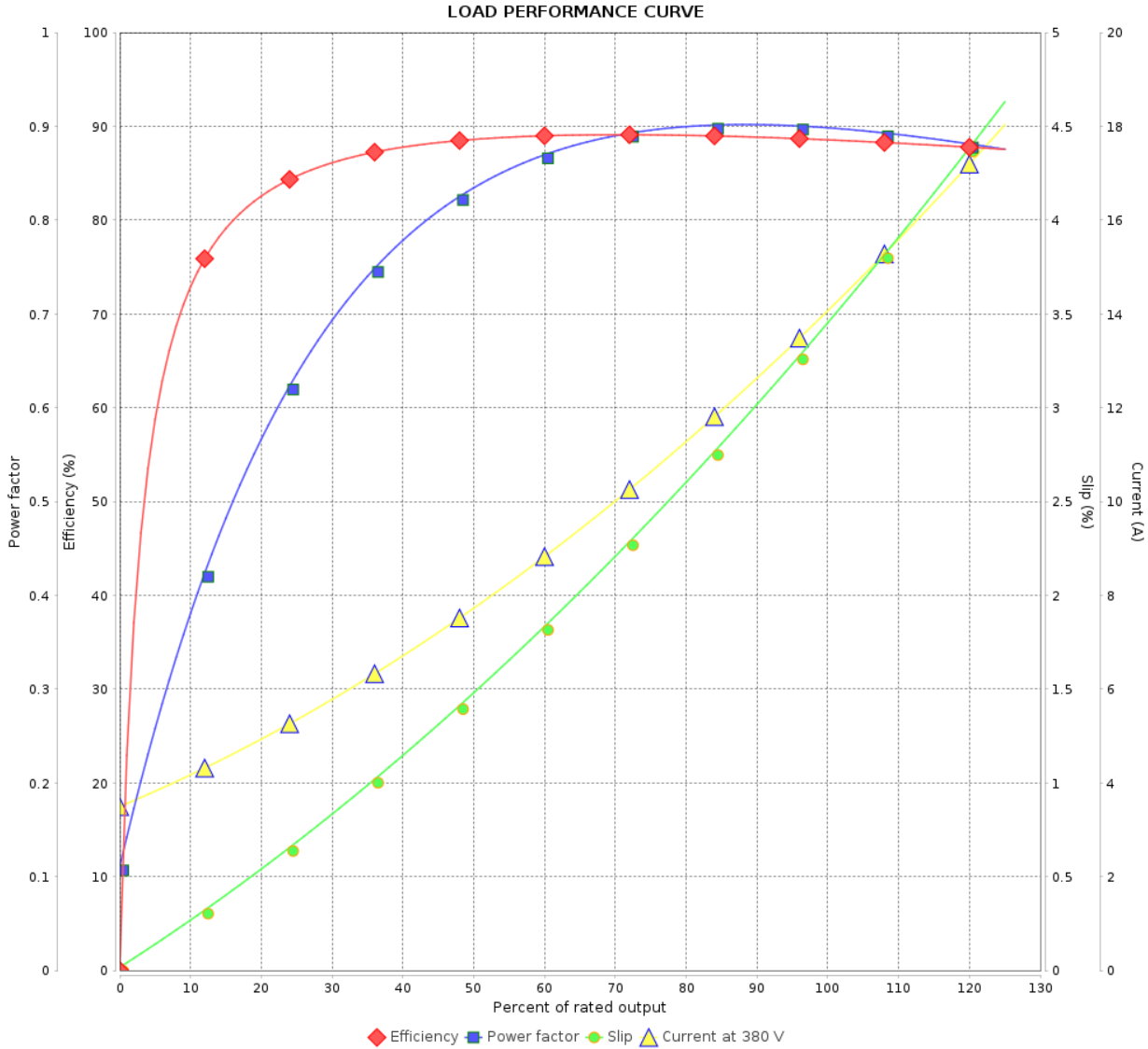
Three Phase Induction Motor - Squirrel Cage



Customer :

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Performance : 380 V 50 Hz 2P IE2

Rated current	: 14.1 A	Moment of inertia (J)	: 0.0232 kgm ²
LRC	: 6.3	Duty cycle	: Cont.(S1)
Rated torque	: 2.51 kgfm	Insulation class	: F
Locked rotor torque	: 150 %	Service factor	: 1.00
Breakdown torque	: 220 %	Temperature rise	: 80 K
Rated speed	: 2895 rpm	Design	: B

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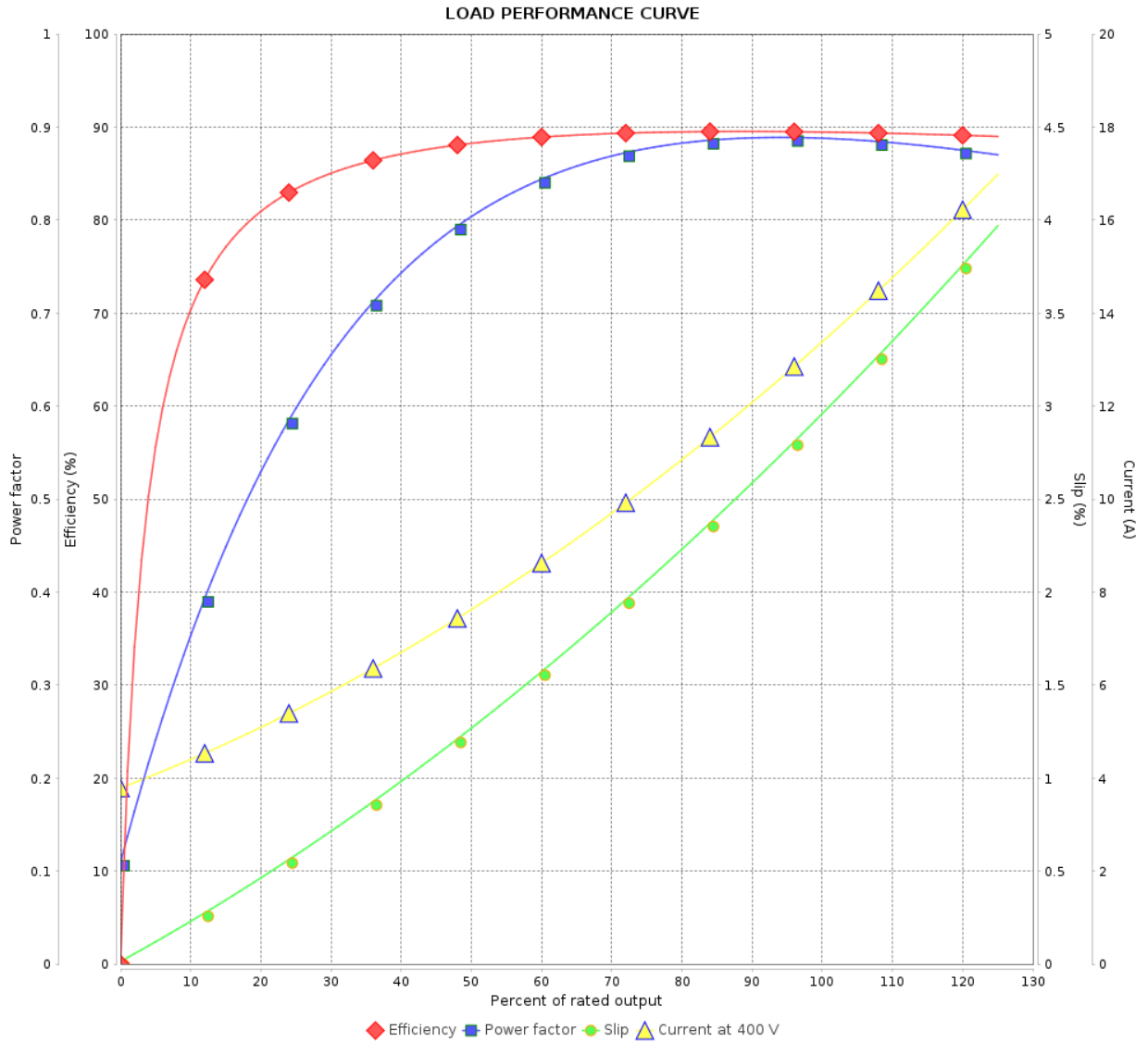
Three Phase Induction Motor - Squirrel Cage



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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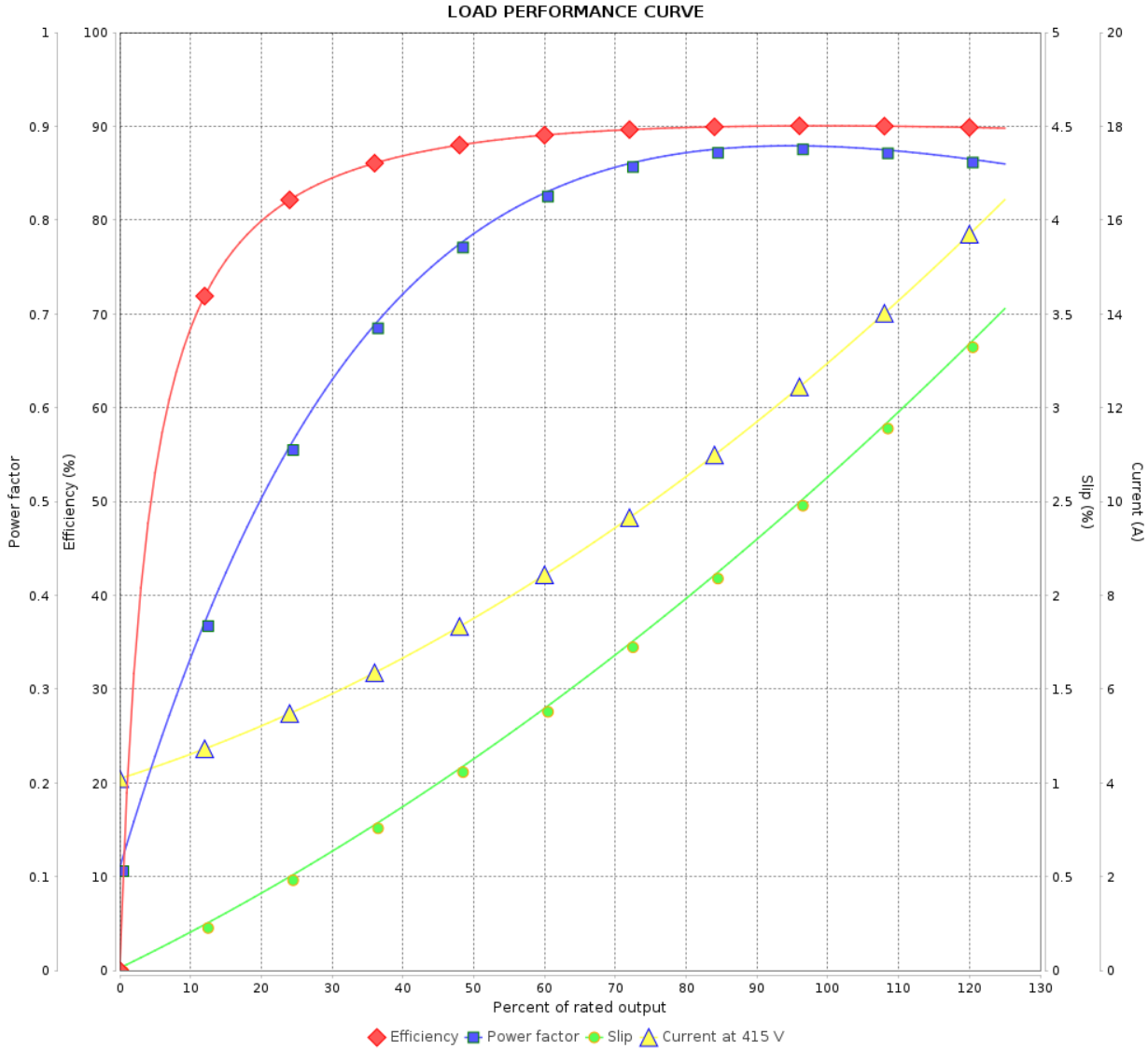
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Performance : 415 V 50 Hz 2P IE3

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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