

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W21 Explosion Proof NEMA Premium Efficiency Three-Phase Product code : 16681803

Frame	: 326T	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	: 320 kg
Protection degree	: IP55	Moment of inertia (J)	: 0.5255 kgm ²
Design	: B		

Output [HP]	30	30	30	30
Poles	6	6	6	6
Frequency [Hz]	60	50	50	50
Rated voltage [V]	230/460	380	400	415
Rated current [A]	73.4/36.7	43.7	42.2	40.9
L. R. Amperes [A]	521/261	249	266	274
LRC [A]	7.1x(Code G)	5.7x(Code F)	6.3x(Code G)	6.7x(Code H)
No load current [A]	34.0/17.0	17.3	18.6	19.7
Rated speed [RPM]	1180	975	975	980
Slip [%]	1.67	2.50	2.50	2.00
Rated torque [kgfm]	18.5	22.3	22.3	22.2
Locked rotor torque [%]	240	180	200	229
Breakdown torque [%]	270	210	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	45s (cold) 25s (hot)	45s (cold) 25s (hot)	45s (cold) 25s (hot)	45s (cold) 25s (hot)
Noise level ²	62.0 dB(A)	58.0 dB(A)	58.0 dB(A)	58.0 dB(A)
Efficiency (%)	25%			
	50%	92.4	92.4	91.7
	75%	93.0	92.4	92.4
	100%	93.0	91.7	92.4
Power Factor	25%			
	50%	0.63	0.70	0.63
	75%	0.75	0.80	0.75
	100%	0.81	0.84	0.81

	<u>Drive end</u>	<u>Non drive end</u>	Foundation loads	
Bearing type	: 6312 C3	6212 C3	Max. traction	: 552 kgf
Sealing	: Oil Seal	Lip Seal	Max. compression	: 846 kgf
Lubrication interval	: 20000 h	20000 h		
Lubricant amount	: 21 g	13 g		
Lubricant type	: Mobil Polyrex EM			

Notes

USABLE @208V 81.2A SF 1.15 SFA 93.3A

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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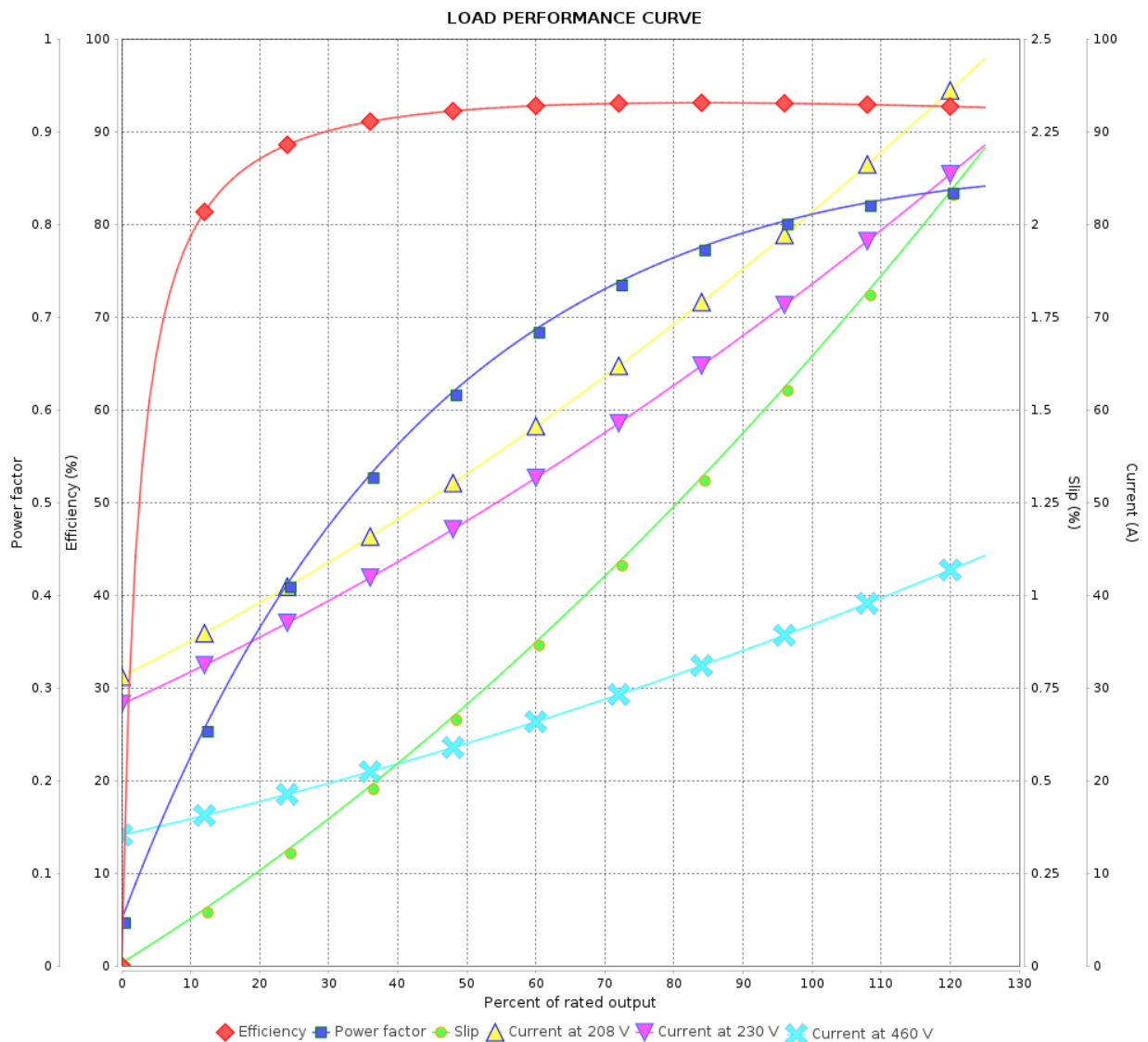
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 16681803



Performance : 230/460 V 60 Hz 6P

Rated current : 73.4/36.7 A
LRC : 7.1
Rated torque : 18.5 kgfm
Locked rotor torque : 240 %
Breakdown torque : 270 %
Rated speed : 1180 rpm

Moment of inertia (J) : 0.5255 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 80 K
Design : B

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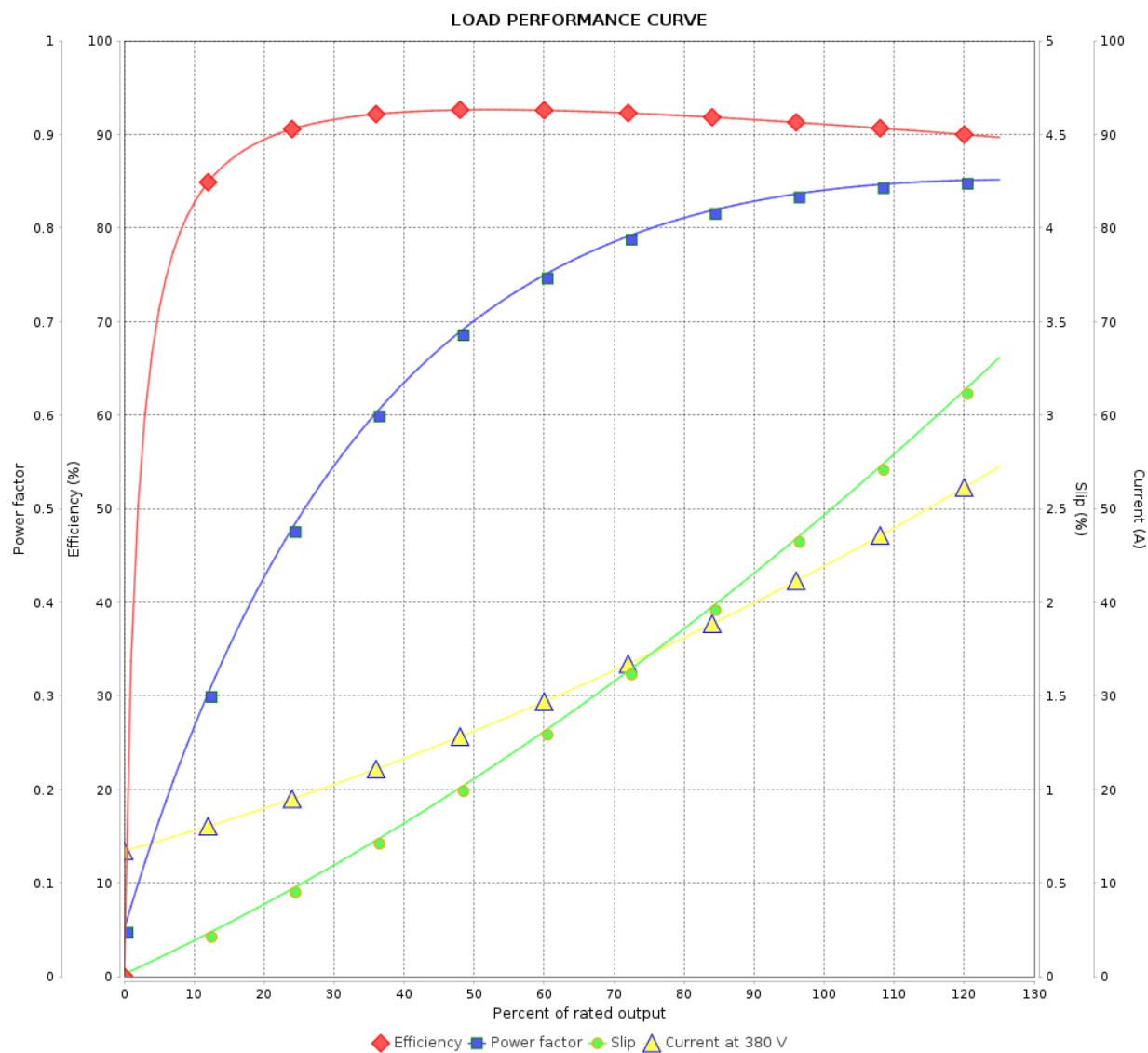
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 16681803



Performance : 380 V 50 Hz 6P IE2

Rated current : 43.7 A
LRC : 5.7
Rated torque : 22.3 kgfm
Locked rotor torque : 180 %
Breakdown torque : 210 %
Rated speed : 975 rpm

Moment of inertia (J) : 0.5255 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

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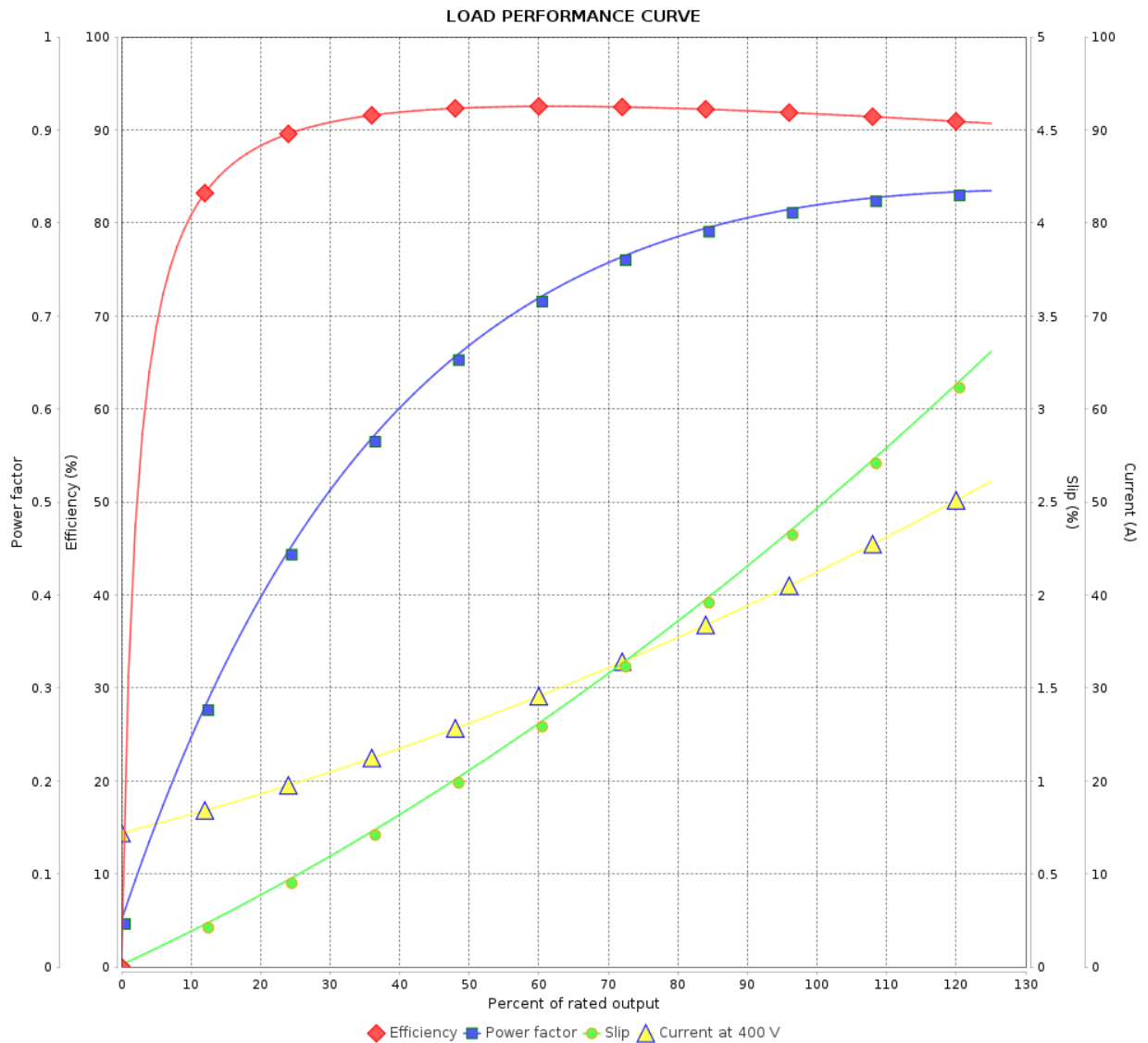
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 16681803



Performance : 400 V 50 Hz 6P IE2

Rated current : 42.2 A
LRC : 6.3
Rated torque : 22.3 kgfm
Locked rotor torque : 200 %
Breakdown torque : 229 %
Rated speed : 975 rpm

Moment of inertia (J) : 0.5255 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

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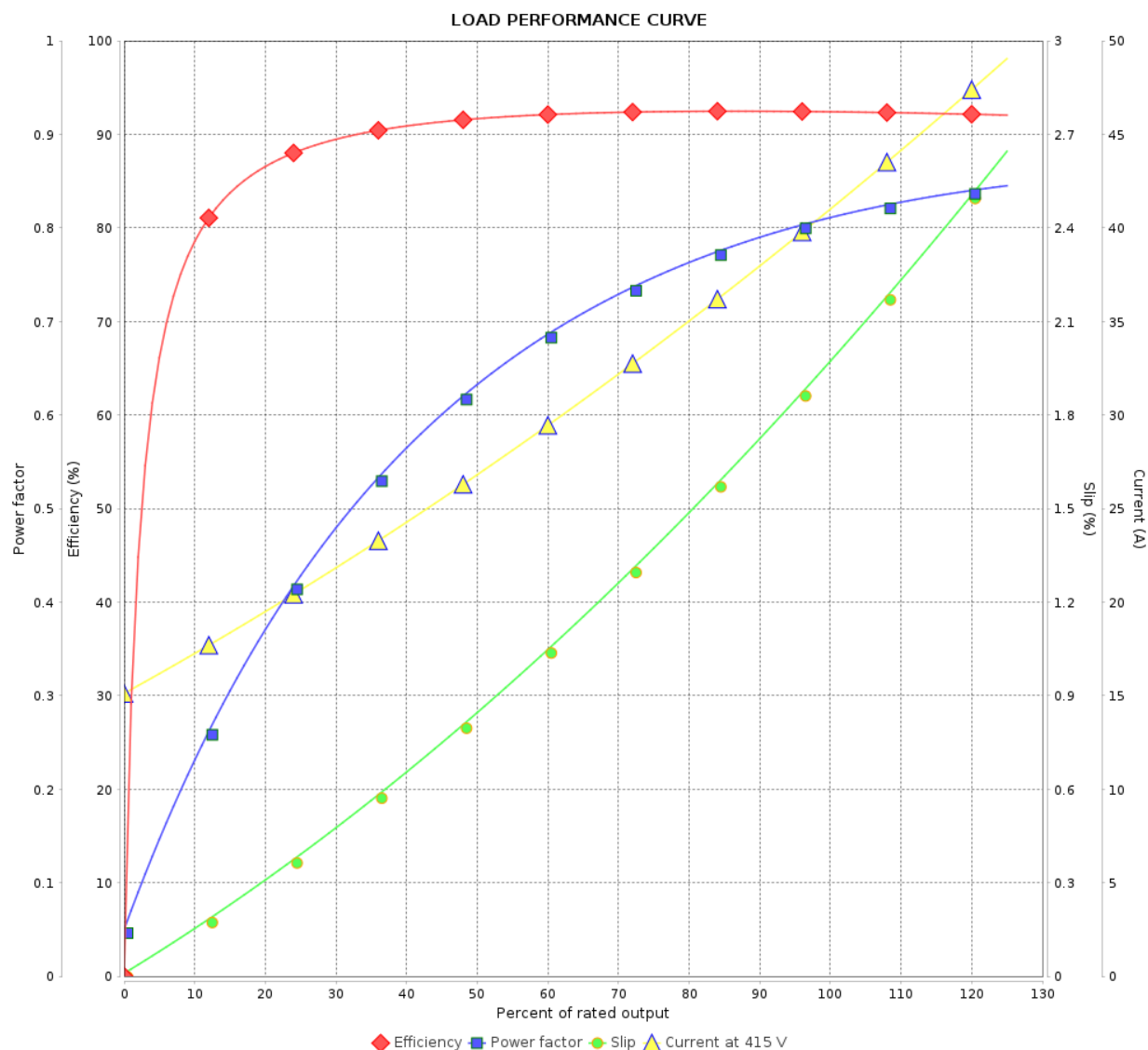
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 16681803



Performance : 415 V 50 Hz 6P IE3

Rated current : 40.9 A
LRC : 6.7
Rated torque : 22.2 kgfm
Locked rotor torque : 229 %
Breakdown torque : 250 %
Rated speed : 980 rpm

Moment of inertia (J) : 0.5255 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

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