

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase Product code : 12445775

Frame : 254/6TC	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 : 123 kg
Protection degree : IP55	Moment of inertia (J) : 0.1652 kgm ²
Design : B	

Output [HP]	7.5	7.5	7.5	7.5
Poles	6	6	6	6
Frequency [Hz]	60	50	50	50
Rated voltage [V]	230/460	380	400	415
Rated current [A]	19.5/9.73	11.6	11.1	11.0
L. R. Amperes [A]	132/66.2	60.2	64.6	68.3
LRC [A]	6.8x(Code H)	5.2x(Code F)	5.8x(Code G)	6.2x(Code H)
No load current [A]	10.6/5.30	5.10	5.50	5.80
Rated speed [RPM]	1178	970	975	975
Slip [%]	1.83	3.00	2.50	2.50
Rated torque [kgfm]	4.62	5.61	5.58	5.58
Locked rotor torque [%]	250	170	200	220
Breakdown torque [%]	300	220	240	260
Service factor	1.25	1.00	1.15	1.15
Temperature rise	80 K	80 K	80 K	80 K
Locked rotor time	54s (cold) 30s (hot)	48s (cold) 27s (hot)	48s (cold) 27s (hot)	48s (cold) 27s (hot)
Noise level ²	59.0 dB(A)	57.0 dB(A)	57.0 dB(A)	57.0 dB(A)
Efficiency (%)	25%			
	50%	89.5	87.5	87.5
	75%	90.2	88.0	88.0
	100%	91.0	88.0	88.0
Power Factor	25%			
	50%	0.60	0.67	0.61
	75%	0.71	0.77	0.73
	100%	0.78	0.82	0.79

Losses at normative operating points (speed;torque), in percentage of rated output power

Losses (%)	P1 (0,9;1,0)	9.7	13.4	13.4	13.4
	P2 (0,5;1,0)	8.2	11.4	11.4	11.4
	P3 (0,25;1,0)	7.6	10.5	10.5	10.5
	P4 (0,9;0,5)	5.3	7.3	7.3	7.3
	P5 (0,5;0,5)	3.7	5.1	5.1	5.1
	P6 (0,5;0,25)	2.7	3.7	3.7	3.7
	P7 (0,25;0,25)	2.0	2.8	2.8	2.8

	<u>Drive end</u>	<u>Non drive end</u>	Foundation loads
Bearing type :	6309 C3	6209 C3	Max. traction : 167 kgf
Sealing :	V'Ring	V'Ring	Max. compression : 289 kgf
Lubrication interval :	20000 h	20000 h	
Lubricant amount :	13 g	9 g	
Lubricant type :	Mobil Polyrex EM		

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.

These are average values based on tests with sinusoidal power supply, subject to the tolerances stipulated in NEMA MG-1.

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Notes
USABLE @208V 21.0A SF 1.15 SFA 24.1A

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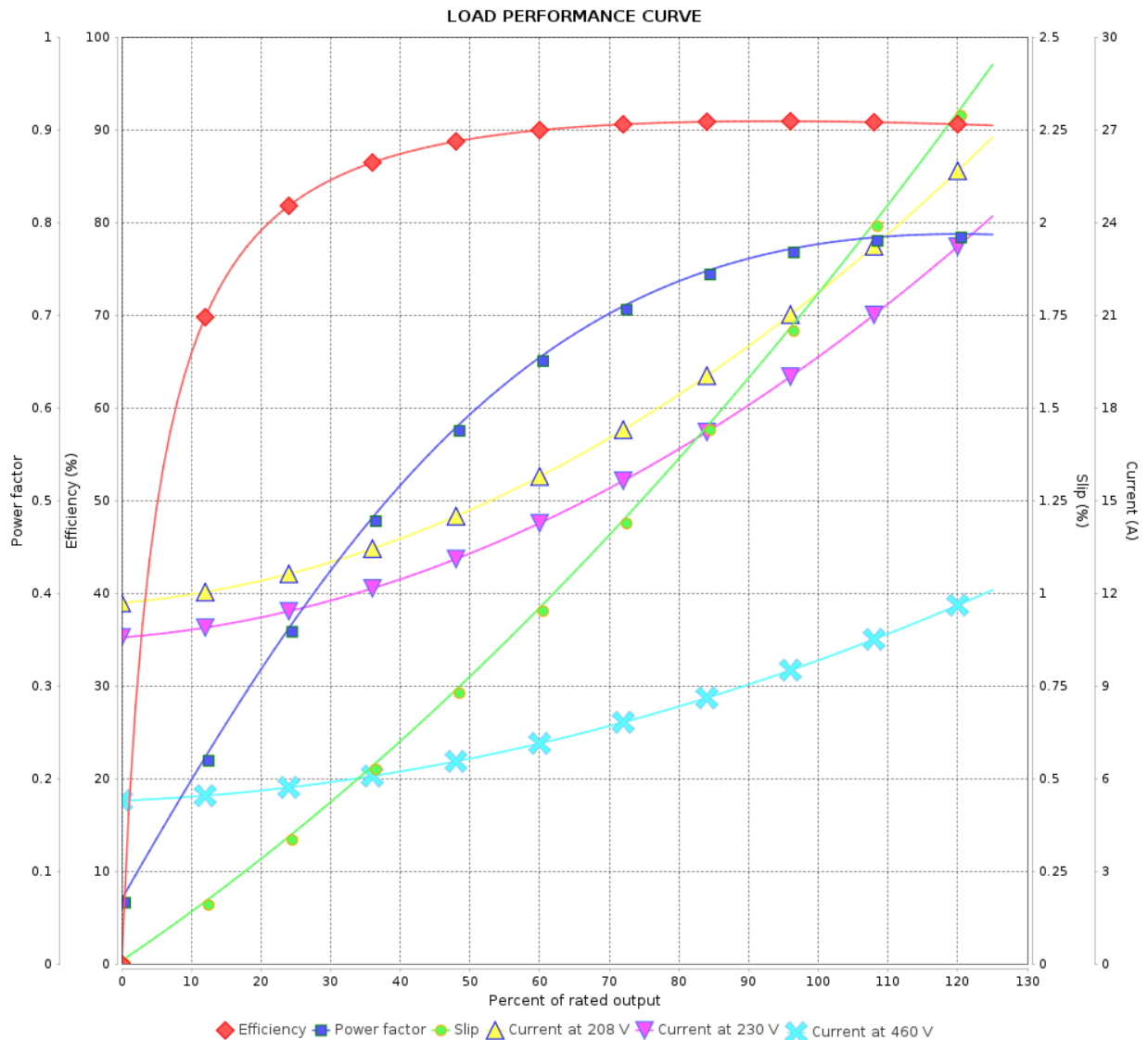
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 12445775



Performance : 230/460 V 60 Hz 6P

Rated current : 19.5/9.73 A
LRC : 6.8
Rated torque : 4.62 kgfm
Locked rotor torque : 250 %
Breakdown torque : 300 %
Rated speed : 1178 rpm

Moment of inertia (J) : 0.1652 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : B

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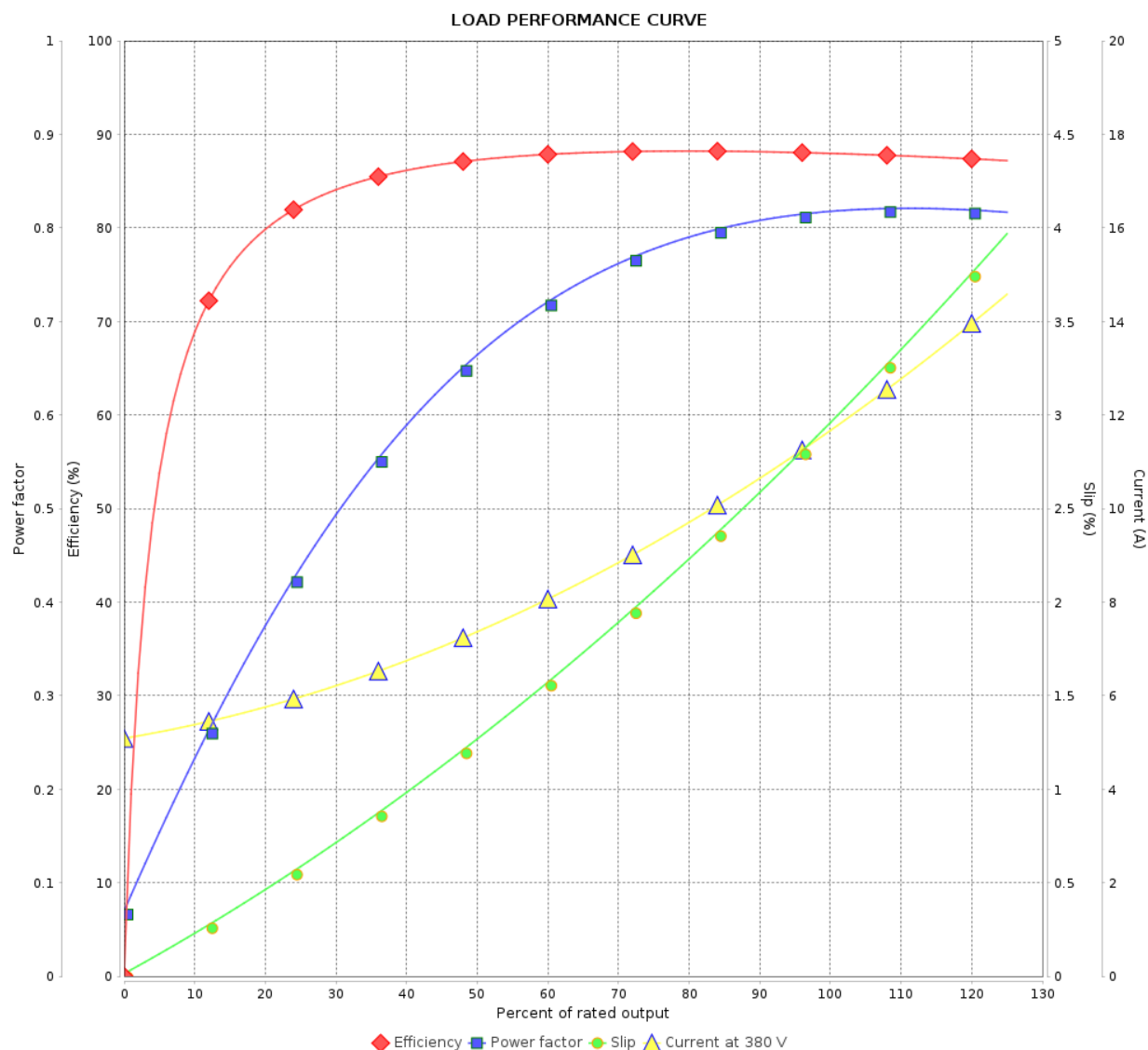
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 12445775



Performance : 380 V 50 Hz 6P IE3

Rated current : 11.6 A
LRC : 5.2
Rated torque : 5.61 kgfm
Locked rotor torque : 170 %
Breakdown torque : 220 %
Rated speed : 970 rpm

Moment of inertia (J) : 0.1652 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

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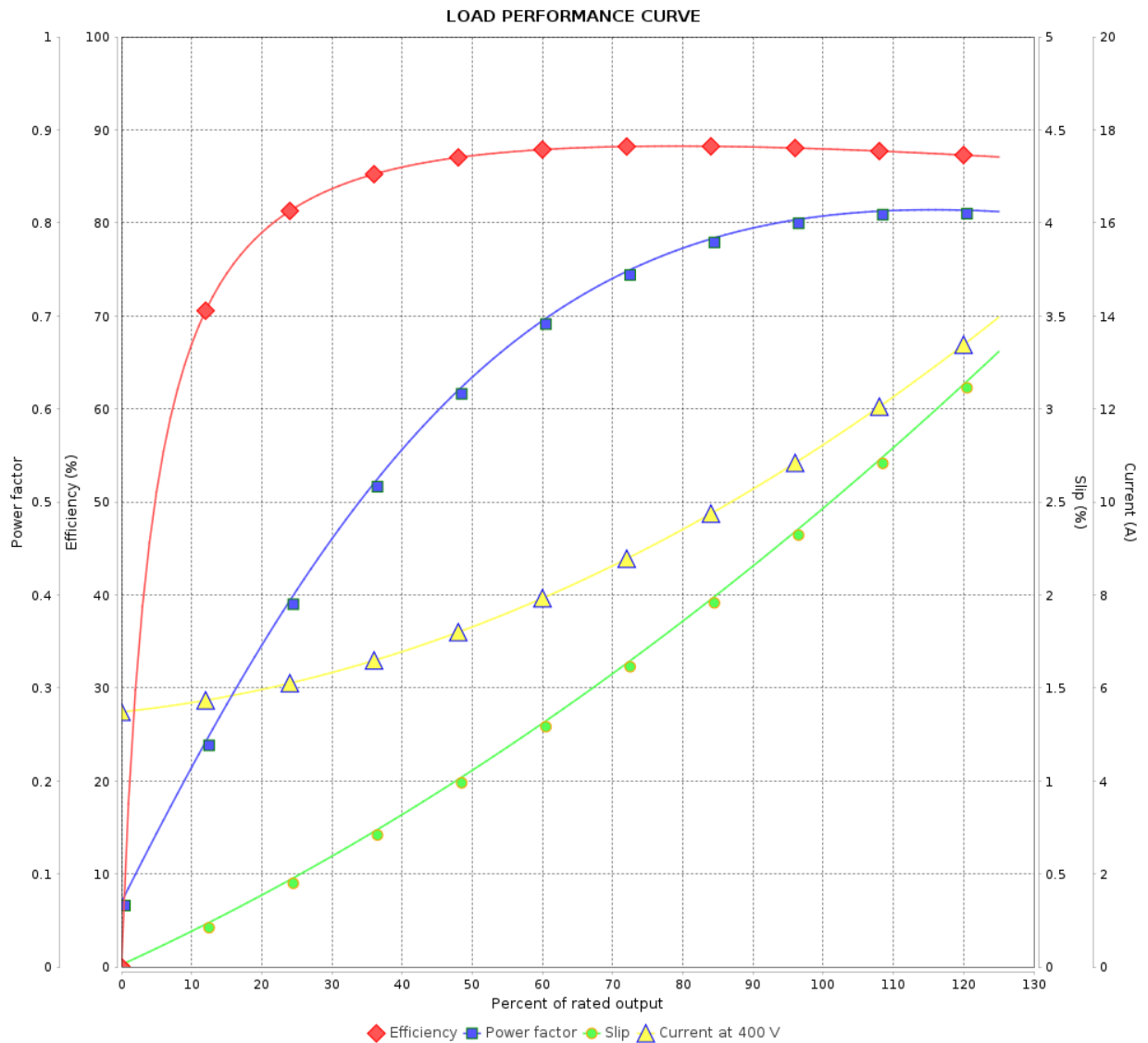
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 12445775



Performance : 400 V 50 Hz 6P IE3

Rated current	: 11.1 A	Moment of inertia (J)	: 0.1652 kgm ²
LRC	: 5.8	Duty cycle	: Cont.(S1)
Rated torque	: 5.58 kgfm	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.15
Breakdown torque	: 240 %	Temperature rise	: 80 K
Rated speed	: 975 rpm	Design	: B

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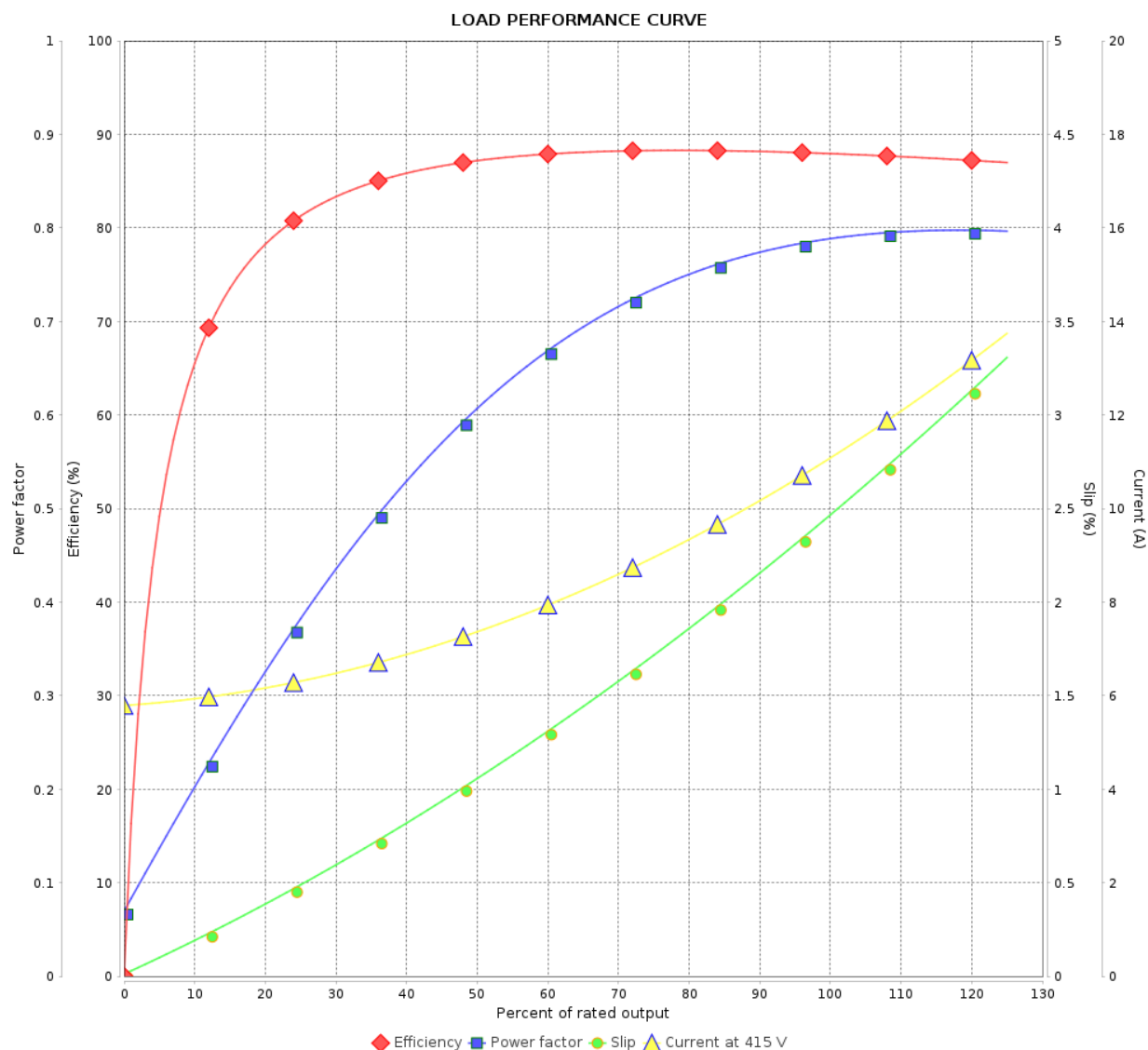
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 12445775



Performance : 415 V 50 Hz 6P IE3

Rated current : 11.0 A
LRC : 6.2
Rated torque : 5.58 kgfm
Locked rotor torque : 220 %
Breakdown torque : 260 %
Rated speed : 975 rpm

Moment of inertia (J) : 0.1652 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 80 K
Design : B

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