

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 P Base NEMA Premium Efficiency Three-Phase Product code : 13017464

Frame : 404/5HP	Cooling method : IC411 - TEFC
Insulation class : F	Mounting : W-6
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 : 511 kg
Protection degree : IP55	Moment of inertia (J) : 0.5561 kgm ²
Design : B	

Output [HP]	100	75	75	75
Poles	2	2	2	2
Frequency [Hz]	60	50	50	50
Rated voltage [V]	230/460	380	400	415
Rated current [A]	224/112	99.6	94.6	92.2
L. R. Amperes [A]	1456/728	677	719	756
LRC [A]	6.5x(Code G)	6.8x(Code G)	7.6x(Code H)	8.2x(Code J)
No load current [A]	52.0/26.0	25.7	27.5	29.1
Rated speed [RPM]	3545	2955	2960	2965
Slip [%]	1.53	1.50	1.33	1.17
Rated torque [kgfm]	20.5	18.4	18.4	18.4
Locked rotor torque [%]	240	250	280	300
Breakdown torque [%]	260	280	310	330
Service factor	1.25	1.00	1.00	1.00
Temperature rise	80 K	80 K	80 K	80 K
Locked rotor time	25s (cold) 14s (hot)	18s (cold) 10s (hot)	18s (cold) 10s (hot)	18s (cold) 10s (hot)
Noise level ²	79.0 dB(A)	74.0 dB(A)	74.0 dB(A)	74.0 dB(A)
Efficiency (%)	25%			
	50%	93.0	93.0	93.5
	75%	94.1	93.8	94.0
	100%	94.1	94.3	94.3
Power Factor	25%			
	50%	0.83	0.82	0.78
	75%	0.88	0.88	0.85
	100%	0.89	0.89	0.88

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

Losses (%)	P1 (0,9;1,0)	5.9	5.9	5.9	5.9
	P2 (0,5;1,0)	4.6	4.6	4.6	4.6
	P3 (0,25;1,0)	4.4	4.4	4.4	4.4
	P4 (0,9;0,5)	2.8	2.8	2.8	2.8
	P5 (0,5;0,5)	1.6	1.6	1.6	1.6
	P6 (0,5;0,25)	0.9	0.9	0.9	0.9
	P7 (0,25;0,25)	0.5	0.5	0.5	0.5

	<u>Drive end</u>	<u>Non drive end</u>	Foundation loads
Bearing type :	6316 C3	6314 C3	Max. traction
Sealing :	Lip Seal	Lip Seal	Max. compression
Lubrication interval :	2000 h	3000 h	
Lubricant amount :	34 g	27 g	
Lubricant type :	Isoflex NBU-15		

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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Customer : _____

Notes
USABLE @208V 243A SF 1.10 SFA 268A

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LOAD PERFORMANCE CURVE

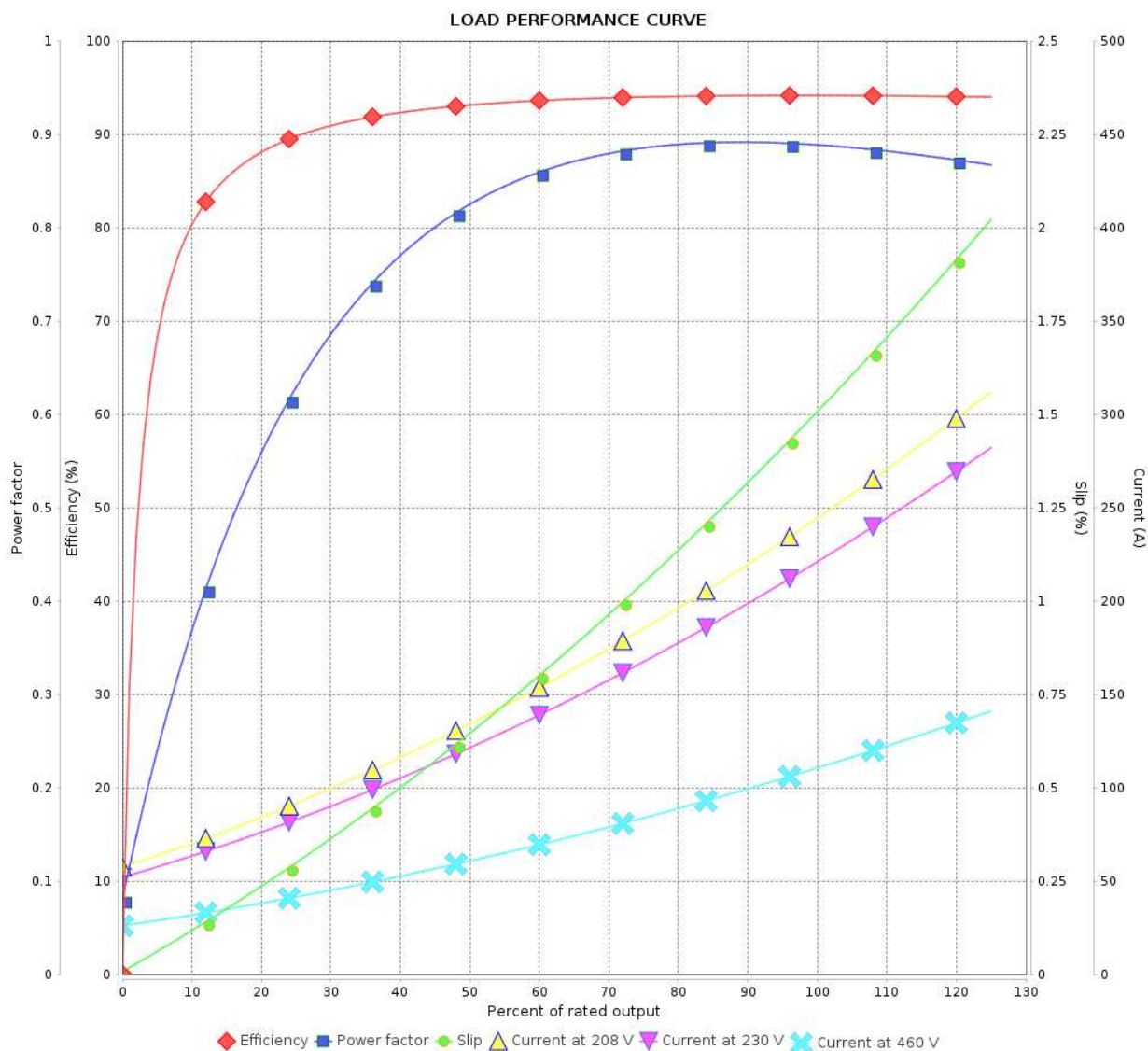
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 P Base NEMA Premium
Efficiency Three-Phase

Product code : 13017464



Performance : 230/460 V 60 Hz 2P

Rated current : 224/112 A
LRC : 6.5
Rated torque : 20.5 kgfm
Locked rotor torque : 240 %
Breakdown torque : 260 %
Rated speed : 3545 rpm

Moment of inertia (J) : 0.5561 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : B

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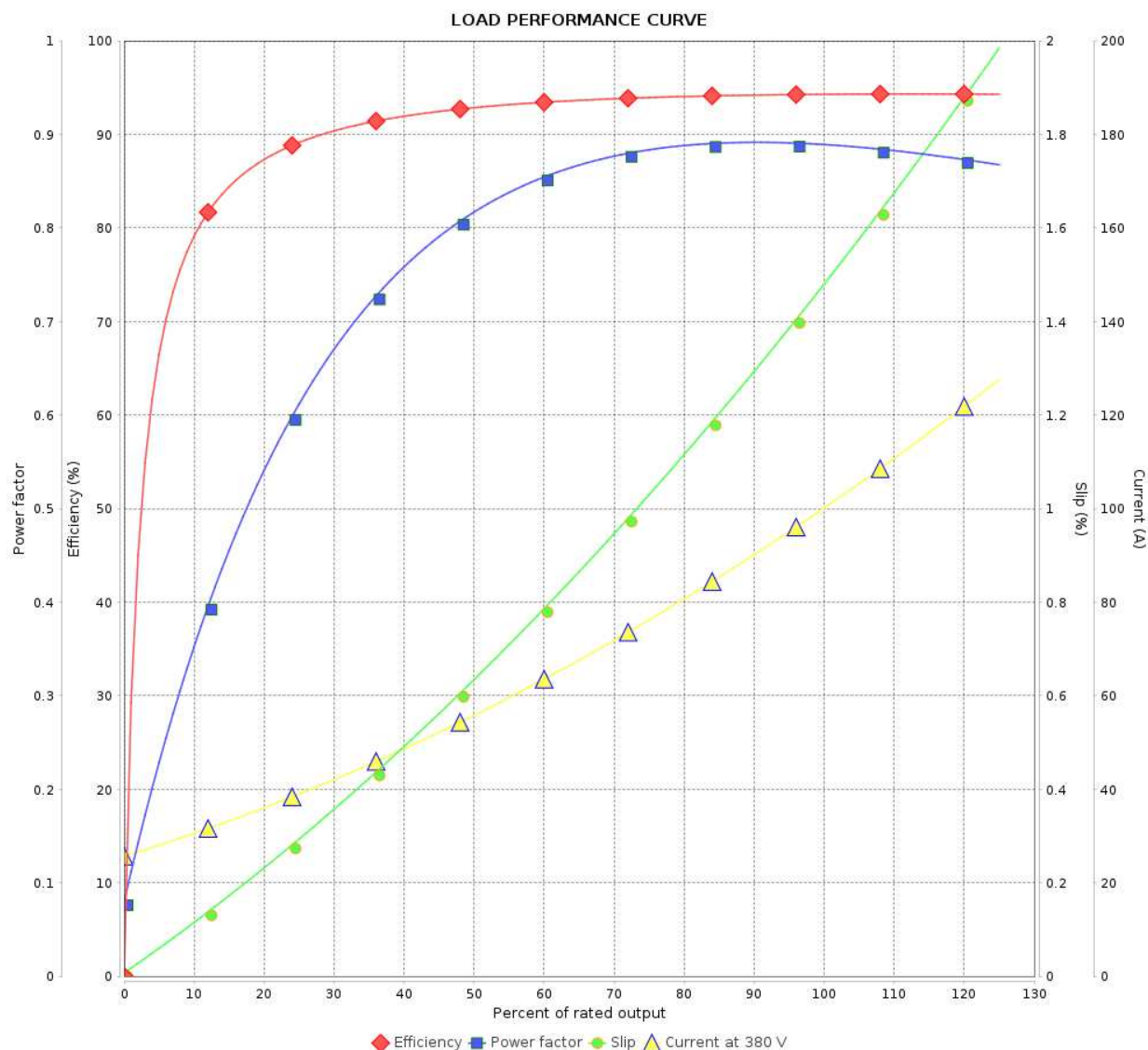
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 P Base NEMA Premium
Efficiency Three-Phase

Product code : 13017464



Performance : 380 V 50 Hz 2P IE3

Rated current : 99.6 A
LRC : 6.8
Rated torque : 18.4 kgfm
Locked rotor torque : 250 %
Breakdown torque : 280 %
Rated speed : 2955 rpm

Moment of inertia (J) : 0.5561 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

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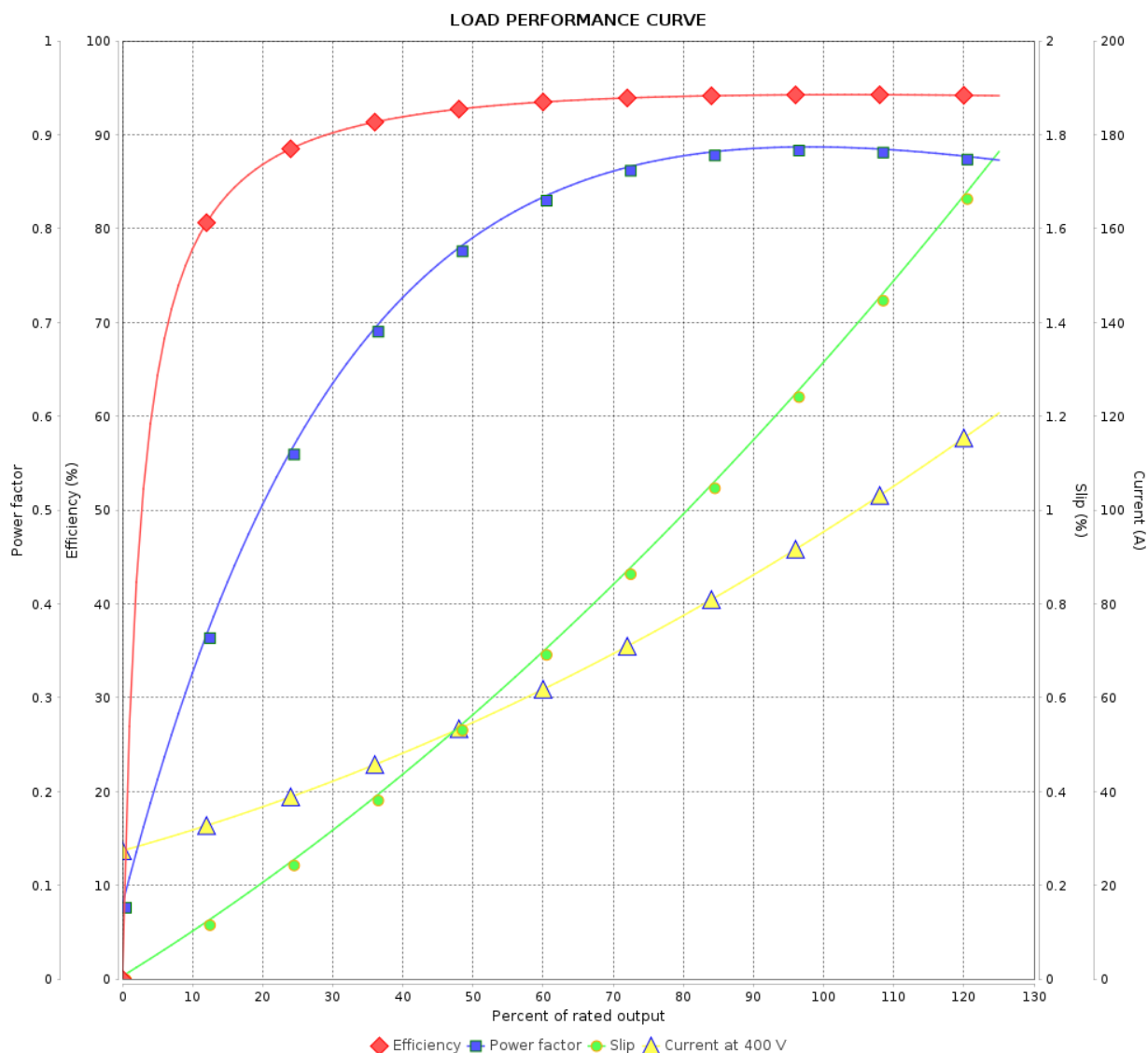
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 P Base NEMA Premium
Efficiency Three-Phase

Product code : 13017464



Performance : 400 V 50 Hz 2P IE3

Rated current : 94.6 A
LRC : 7.6
Rated torque : 18.4 kgfm
Locked rotor torque : 280 %
Breakdown torque : 310 %
Rated speed : 2960 rpm

Moment of inertia (J) : 0.5561 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

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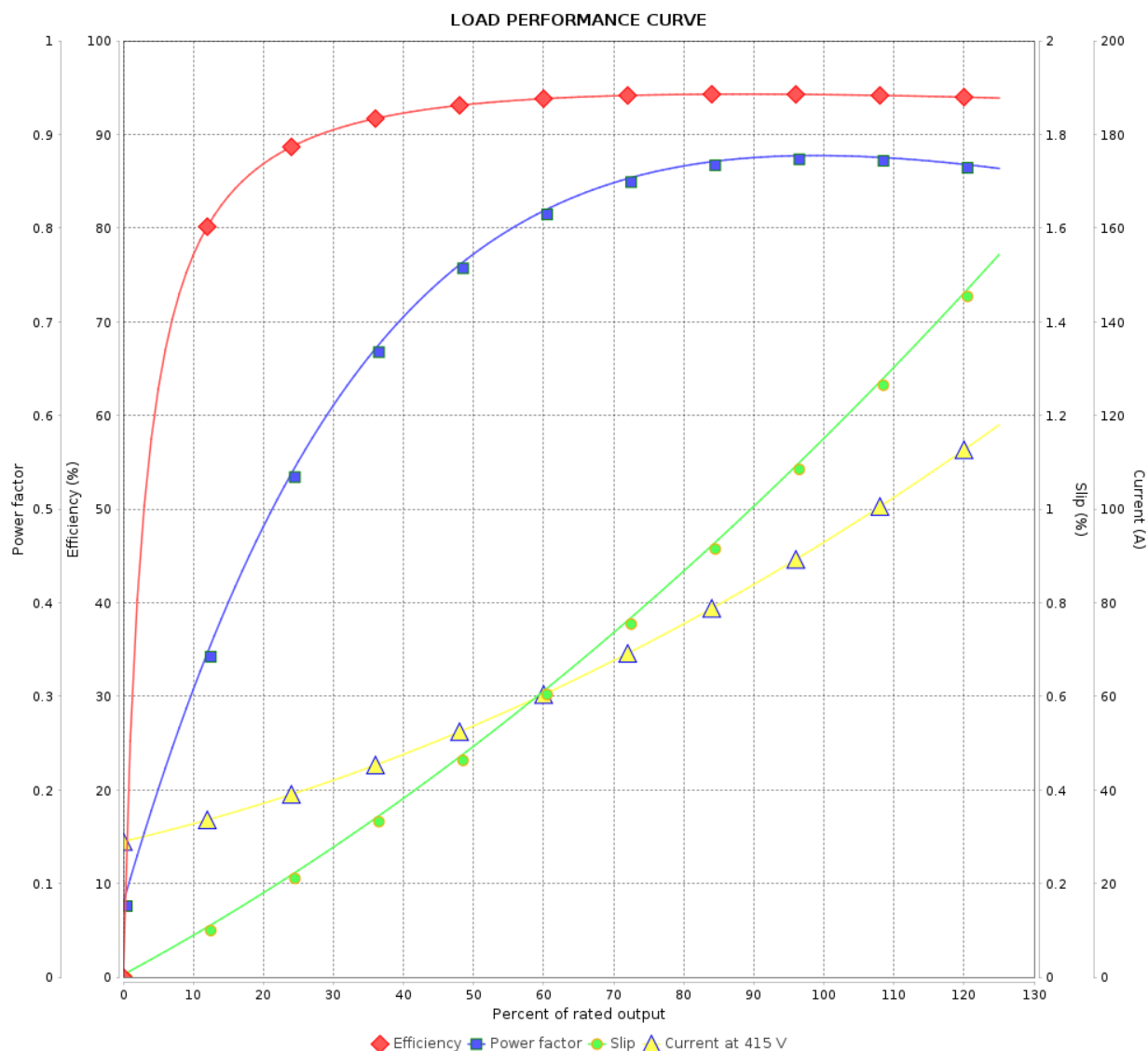
Three Phase Induction Motor - Squirrel Cage



Customer :

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Efficiency Three-Phase

Product code : 13017464



Performance : 415 V 50 Hz 2P IE3

Rated current : 92.2 A
LRC : 8.2
Rated torque : 18.4 kgfm
Locked rotor torque : 300 %
Breakdown torque : 330 %
Rated speed : 2965 rpm

Moment of inertia (J) : 0.5561 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

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