

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :					
Product line : W22 P Base NEMA Premium Efficiency Three-Phase		Product code : 14605782			
Frame : 404/5HPH Insulation class : F Duty cycle : Cont.(S1) Ambient temperature : -20°C to +40°C Altitude : 1000 m.a.s.l. Protection degree : IP55 Design : B		Cooling method : IC411 - TEFC Mounting : W-6 Rotation ¹ : Both (CW and CCW) Starting method : Direct On Line Approx. weight ³ : 512 kg Moment of inertia (J) : 0.5561 kgm ²			
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	93.1	
	75%	94.1	93.8	93.8	
	100%	94.1	94.3	94.3	
Power Factor	25%				
	50%	0.83	0.82	0.80	
	75%	0.88	0.88	0.86	
	100%	0.89	0.89	0.89	
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
Bearing type : <u>Drive end</u> 6316 C3 <u>Non drive end</u> 6314 C3 Sealing : Lip Seal Lip Seal Lubrication interval : 2000 h 3000 h Lubricant amount : 34 g 27 g Lubricant type : Isoflex NBU-15		Foundation loads Max. traction Max. compression			
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 243A SF 1.10 SFA 268A

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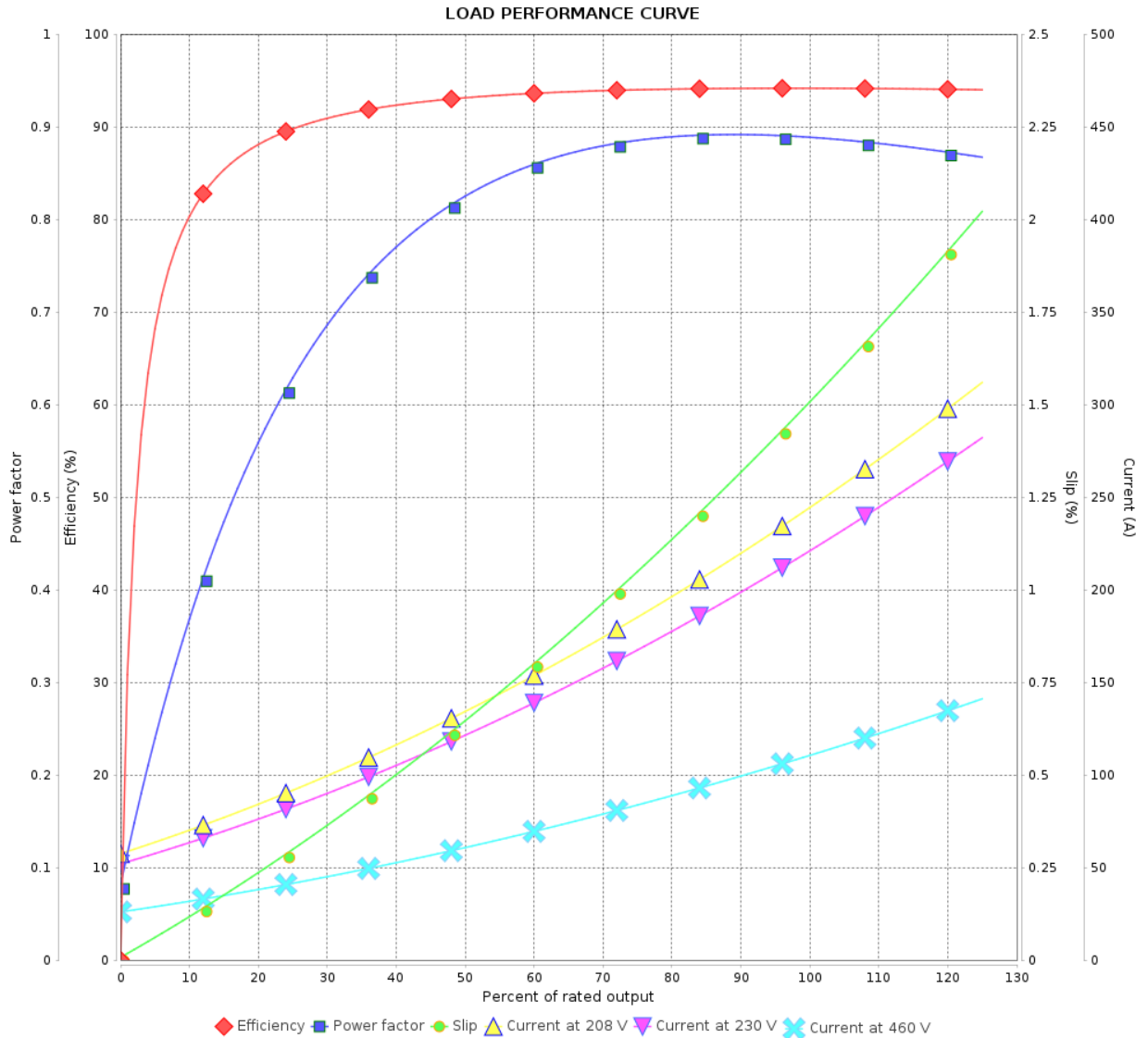
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Performance : 230/460 V 60 Hz 2P

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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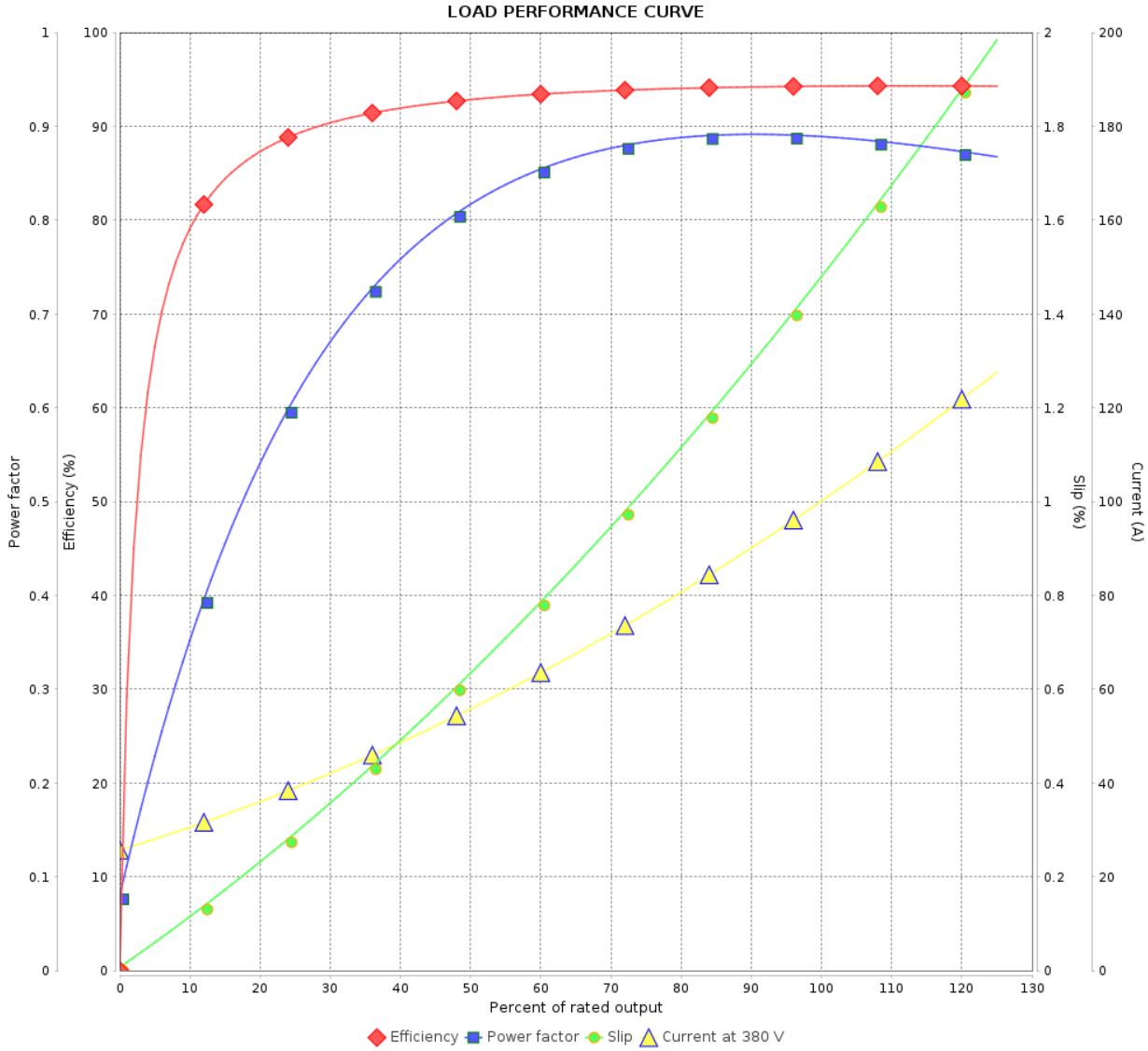
Three Phase Induction Motor - Squirrel Cage



Customer :

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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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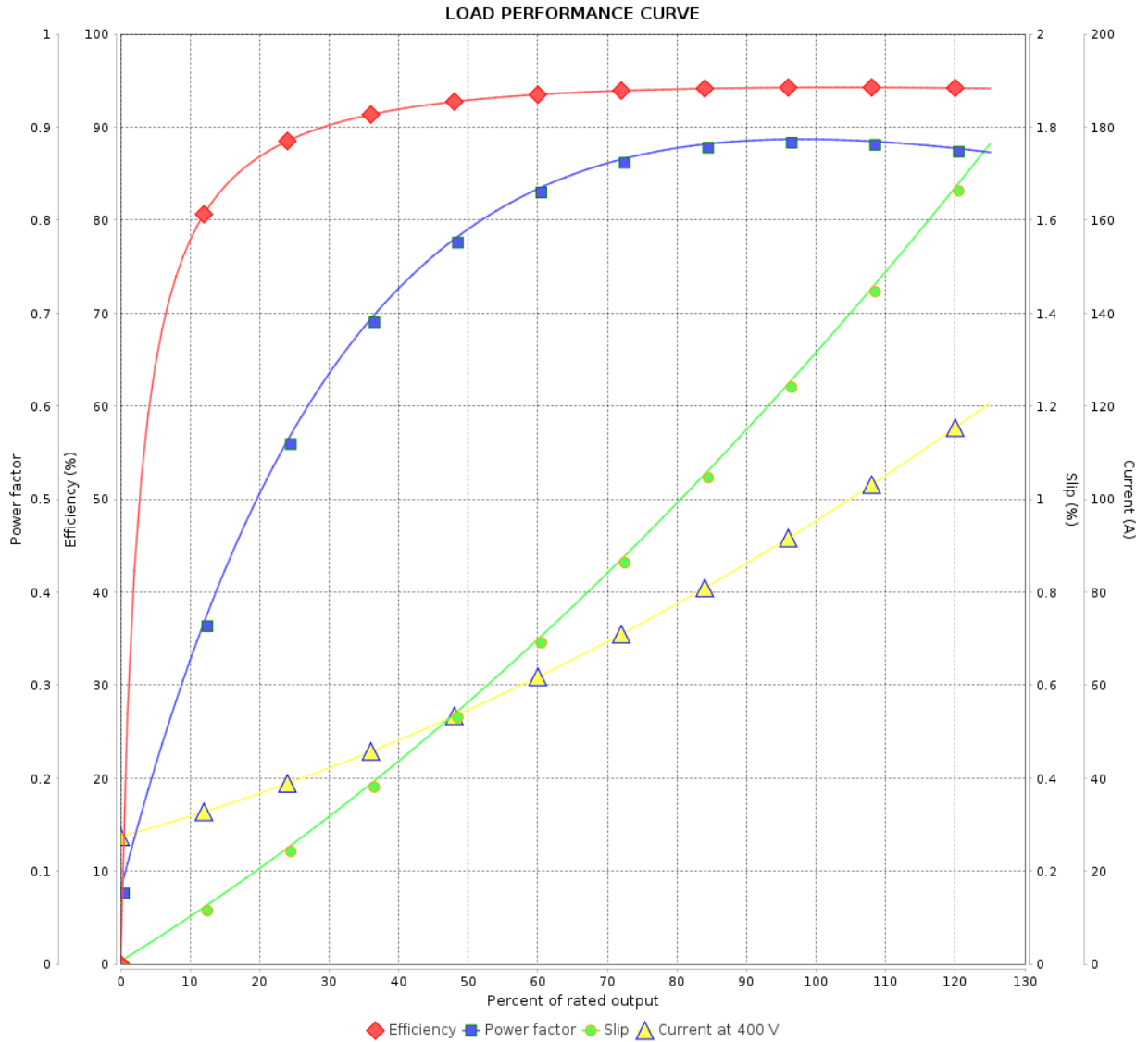
Three Phase Induction Motor - Squirrel Cage



Customer :

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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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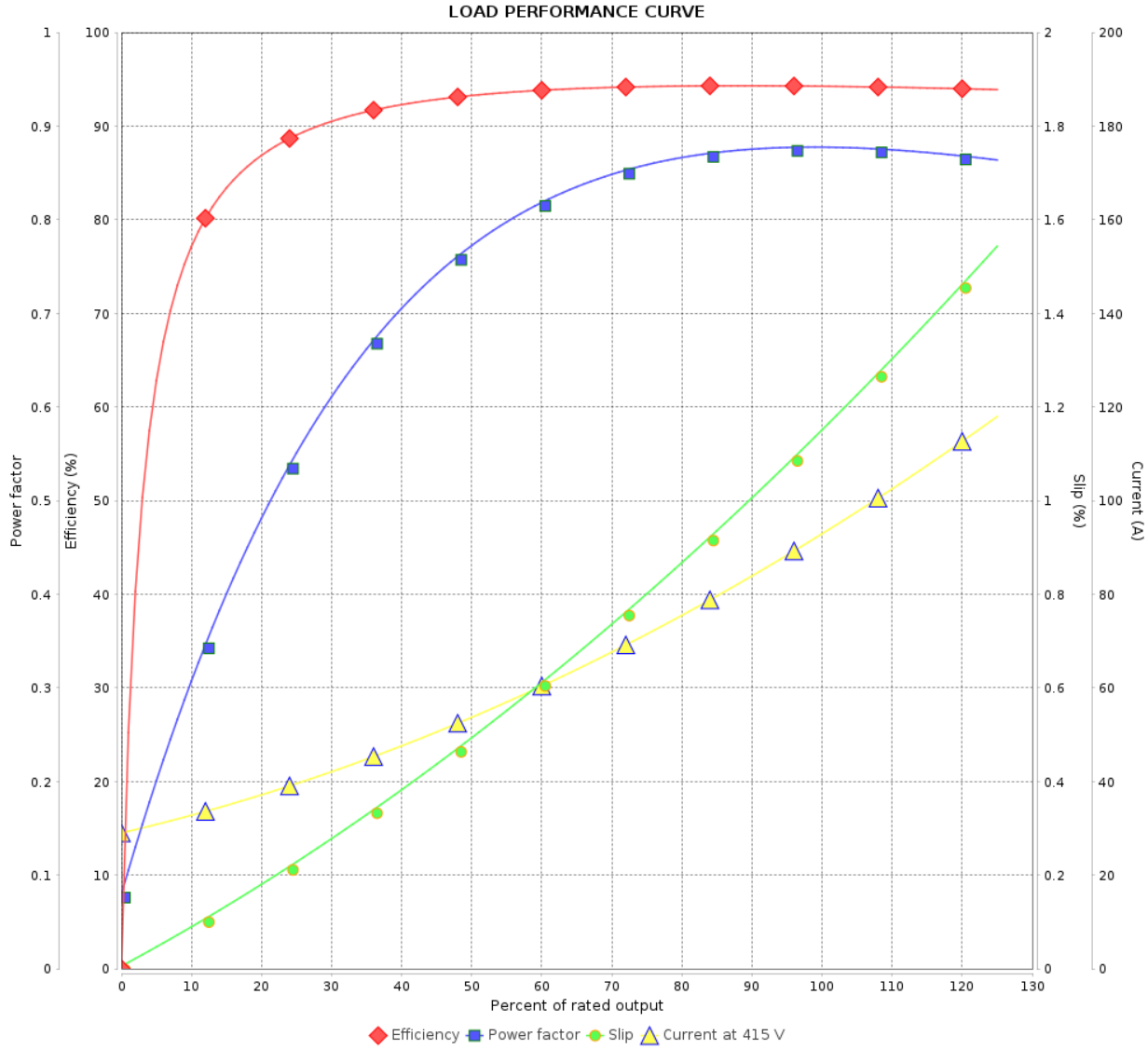
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Customer :

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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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