

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase Product code : 11413120

Frame : 284/6TS	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 : 174 kg
Protection degree : IP55	Moment of inertia (J) : 0.1419 kgm ²
Design : B	

Output [HP]	30	25	25	25	30	30	30
Poles	2	2	2	2	2	2	2
Frequency [Hz]	60	50	50	50	50	50	50
Rated voltage [V]	230/460	380	400	415	380	400	415
Rated current [A]	68.4/34.2	34.2	32.8	32.0	42.0	39.6	38.2
L. R. Amperes [A]	431/216	202	220	231	206	218	229
LRC [A]	6.3x(Code G)	5.9x(Code F)	6.7x(Code G)	7.2x(Code H)	4.9x(Code E)	5.5x(Code F)	6.0x(Code F)
No load current [A]	18.2/9.10	9.00	10.0	10.5	9.00	10.0	10.5
Rated speed [RPM]	3545	2940	2950	2955	2910	2930	2935
Slip [%]	1.53	2.00	1.67	1.50	3.00	2.33	2.17
Rated torque [kgfm]	6.14	6.17	6.15	6.14	7.48	7.43	7.42
Locked rotor torque [%]	200	190	220	229	160	180	190
Breakdown torque [%]	250	229	270	290	200	220	240
Service factor	1.25	1.00	1.00	1.00	1.00	1.00	1.00
Temperature rise	80 K	105 K	80 K	80 K	105 K	105 K	105 K
Locked rotor time	27s (cold) 15s (hot)	21s (cold) 12s (hot)	21s (cold) 12s (hot)	21s (cold) 12s (hot)	21s (cold) 12s (hot)	21s (cold) 12s (hot)	21s (cold) 12s (hot)
Noise level ²	72.0 dB(A)	67.0 dB(A)	67.0 dB(A)	67.0 dB(A)	67.0 dB(A)	67.0 dB(A)	67.0 dB(A)
Efficiency (%)	25%	0.000			0.000		
	50%	91.7	91.0	91.1	91.2	91.7	91.7
	75%	91.7	91.5	91.5	91.8	90.2	91.0
	100%	91.7	92.4	92.4	92.4	89.5	90.2
Power Factor	25%	0.00			0.00		
	50%	0.80	0.80	0.78	0.76	0.84	0.82
	75%	0.86	0.87	0.85	0.84	0.88	0.87
	100%	0.88	0.89	0.88	0.87	0.89	0.88

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

Losses (%)	P1 (0,9;1,0)	8.6	7.8	7.8	7.8	11.2	10.3	9.4
	P2 (0,5;1,0)	6.7	6.1	6.1	6.1	8.7	8.1	7.4
	P3 (0,25;1,0)	5.9	5.3	5.3	5.3	7.6	7.0	6.4
	P4 (0,9;0,5)	4.2	3.8	3.8	3.8	5.4	5.0	4.6
	P5 (0,5;0,5)	2.5	2.3	2.3	2.3	3.2	3.0	2.7
	P6 (0,5;0,25)	1.5	1.4	1.4	1.4	2.0	1.8	1.7
	P7 (0,25;0,25)	0.9	0.8	0.8	0.8	1.2	1.1	1.0

	<u>Drive end</u>	<u>Non drive end</u>	Foundation loads
Bearing type :	6311 C3	6211 C3	Max. traction : 167 kgf
Sealing :	V'Ring	V'Ring	Max. compression : 341 kgf
Lubrication interval :	14000 h	17000 h	
Lubricant amount :	18 g	11 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.

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

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DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer : _____

Notes
USABLE @208V 76.7A SF 1.10 SFA 84.4A

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LOAD PERFORMANCE CURVE

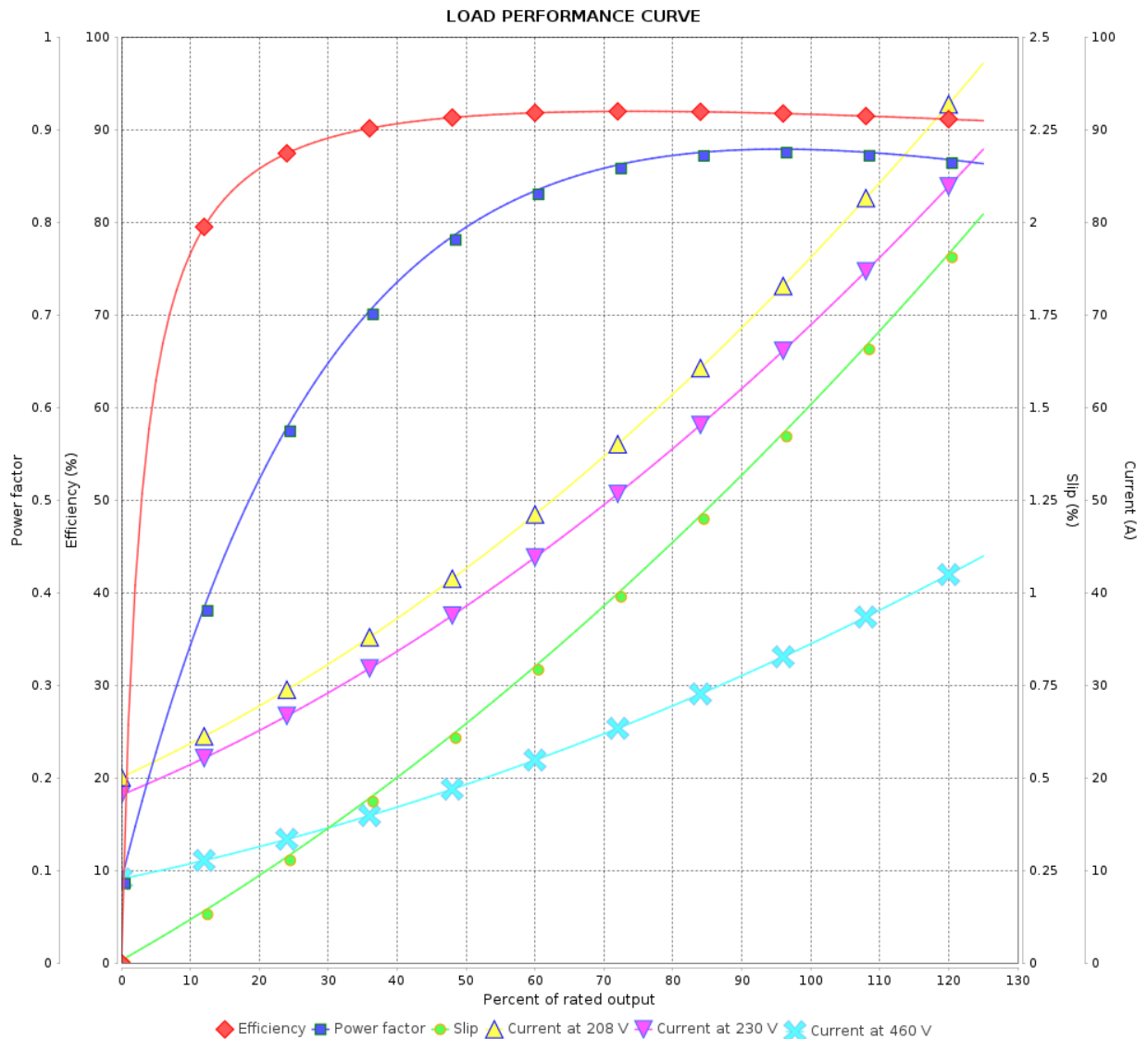
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 11413120



Performance : 230/460 V 60 Hz 2P

Rated current : 68.4/34.2 A
LRC : 6.3
Rated torque : 6.14 kgfm
Locked rotor torque : 200 %
Breakdown torque : 250 %
Rated speed : 3545 rpm

Moment of inertia (J) : 0.1419 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : B

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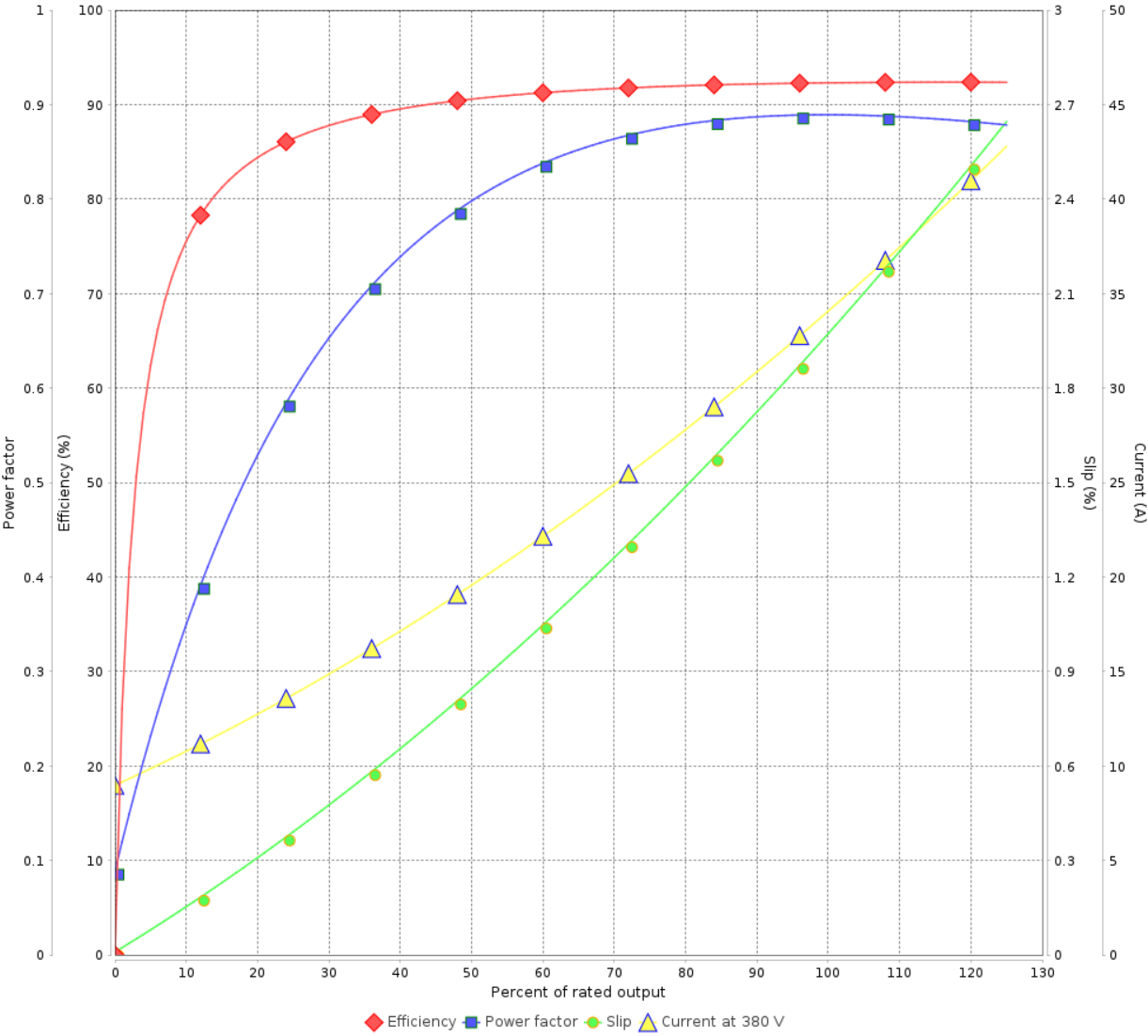
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase Product code : 11413120

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Performance : 380 V 50 Hz 2P IE3			
Rated current	: 34.2 A	Moment of inertia (J)	: 0.1419 kgm²
LRC	: 5.9	Duty cycle	: Cont.(S1)
Rated torque	: 6.17 kgfm	Insulation class	: F
Locked rotor torque	: 190 %	Service factor	: 1.00
Breakdown torque	: 229 %	Temperature rise	: 105 K
Rated speed	: 2940 rpm	Design	: B

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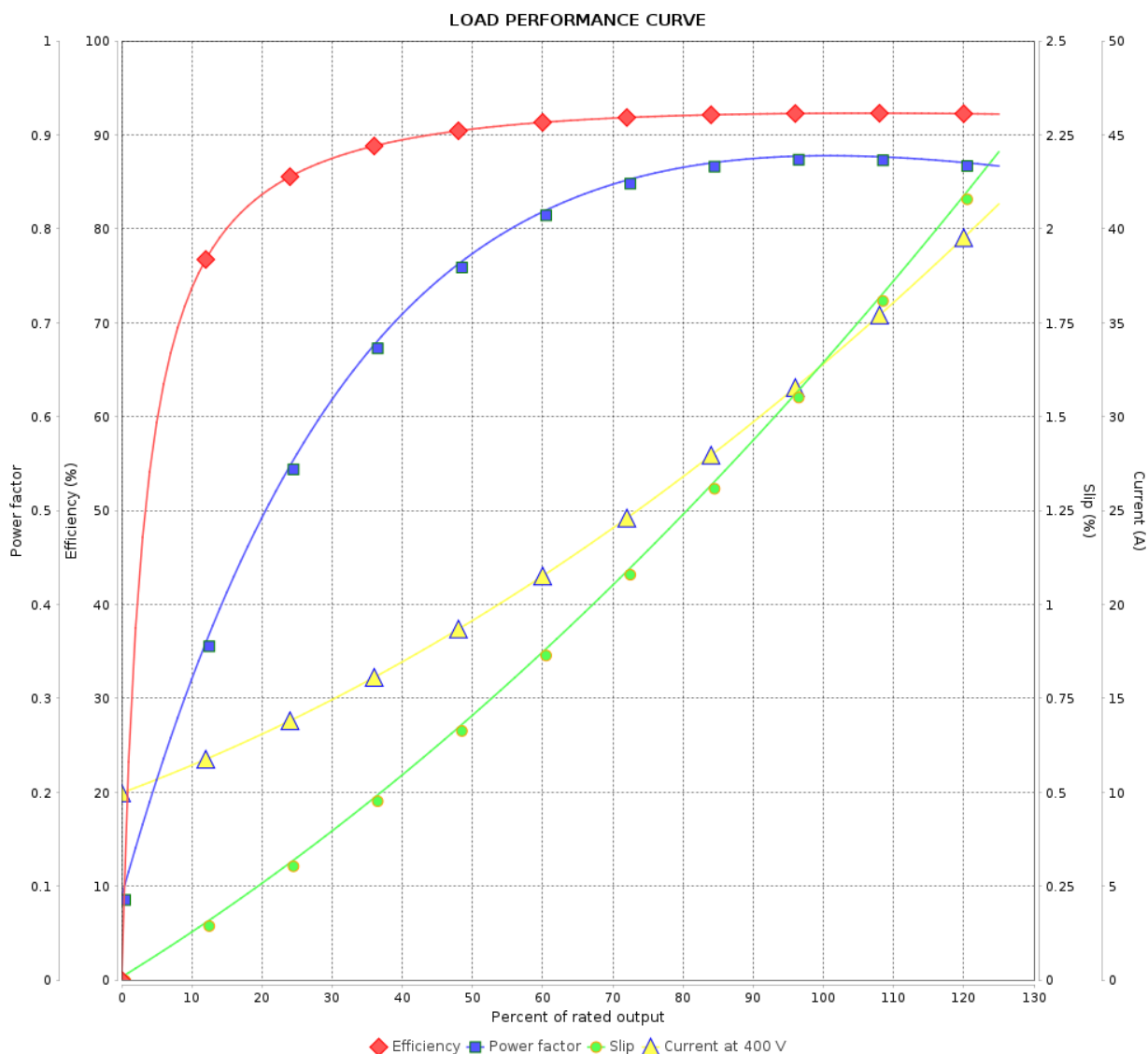
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 11413120



Performance : 400 V 50 Hz 2P IE3

Rated current : 32.8 A
LRC : 6.7
Rated torque : 6.15 kgfm
Locked rotor torque : 220 %
Breakdown torque : 270 %
Rated speed : 2950 rpm

Moment of inertia (J) : 0.1419 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

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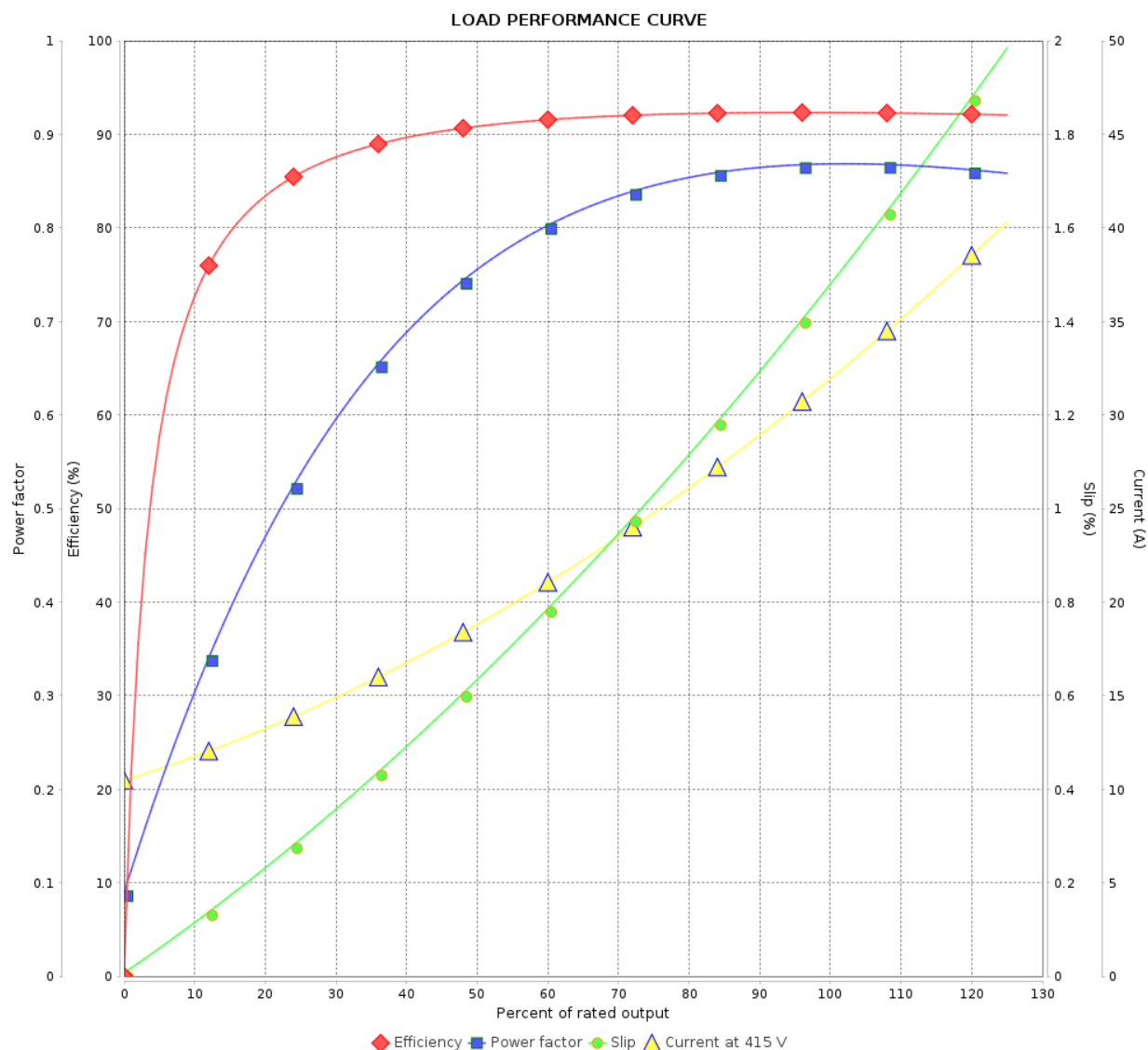
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 11413120



Performance : 415 V 50 Hz 2P IE3

Rated current : 32.0 A
LRC : 7.2
Rated torque : 6.14 kgfm
Locked rotor torque : 229 %
Breakdown torque : 290 %
Rated speed : 2955 rpm

Moment of inertia (J) : 0.1419 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

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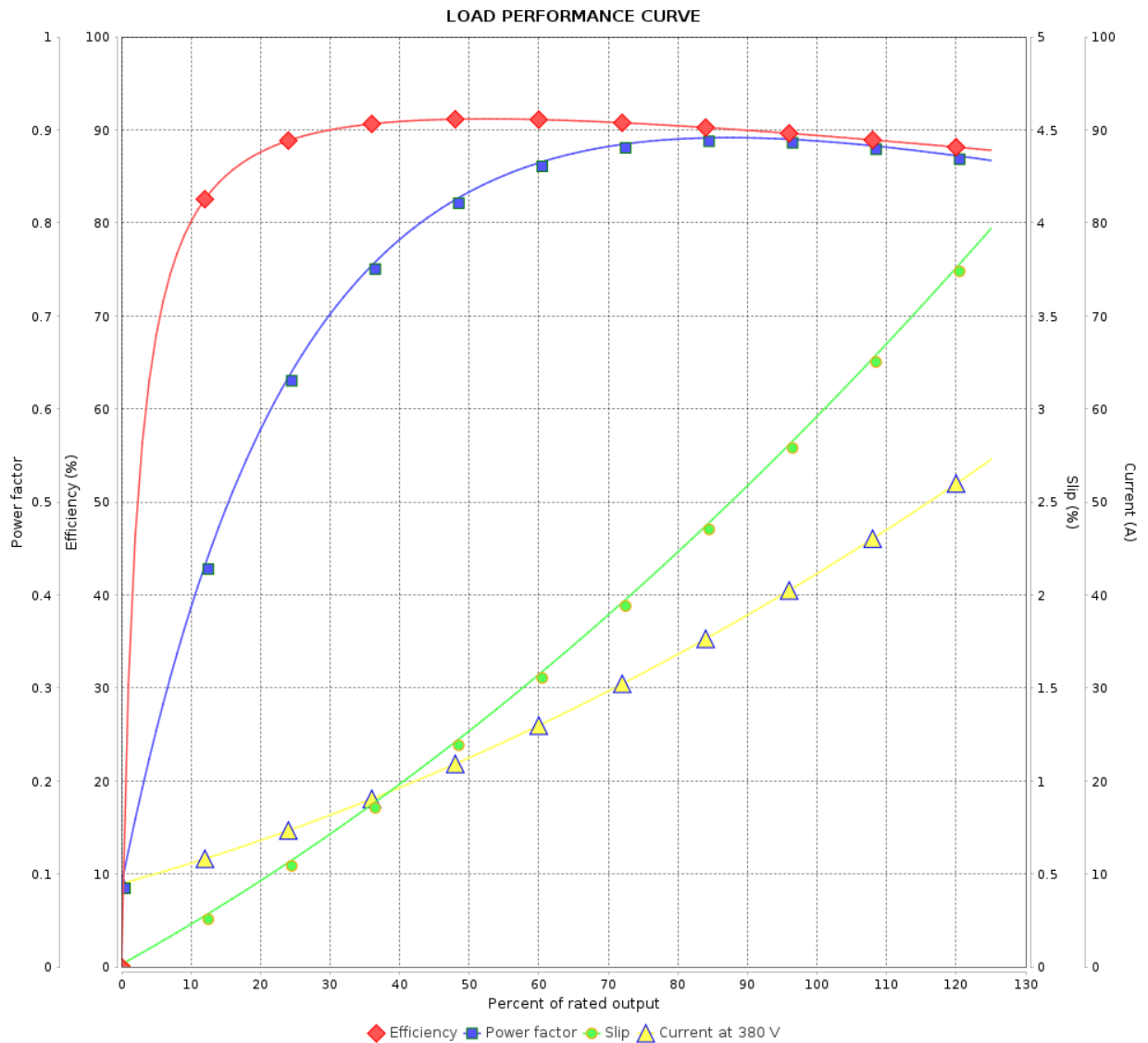
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 11413120



Performance : 380 V 50 Hz 2P

Rated current : 42.0 A
LRC : 4.9
Rated torque : 7.48 kgfm
Locked rotor torque : 160 %
Breakdown torque : 200 %
Rated speed : 2910 rpm

Moment of inertia (J) : 0.1419 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 105 K
Design : B

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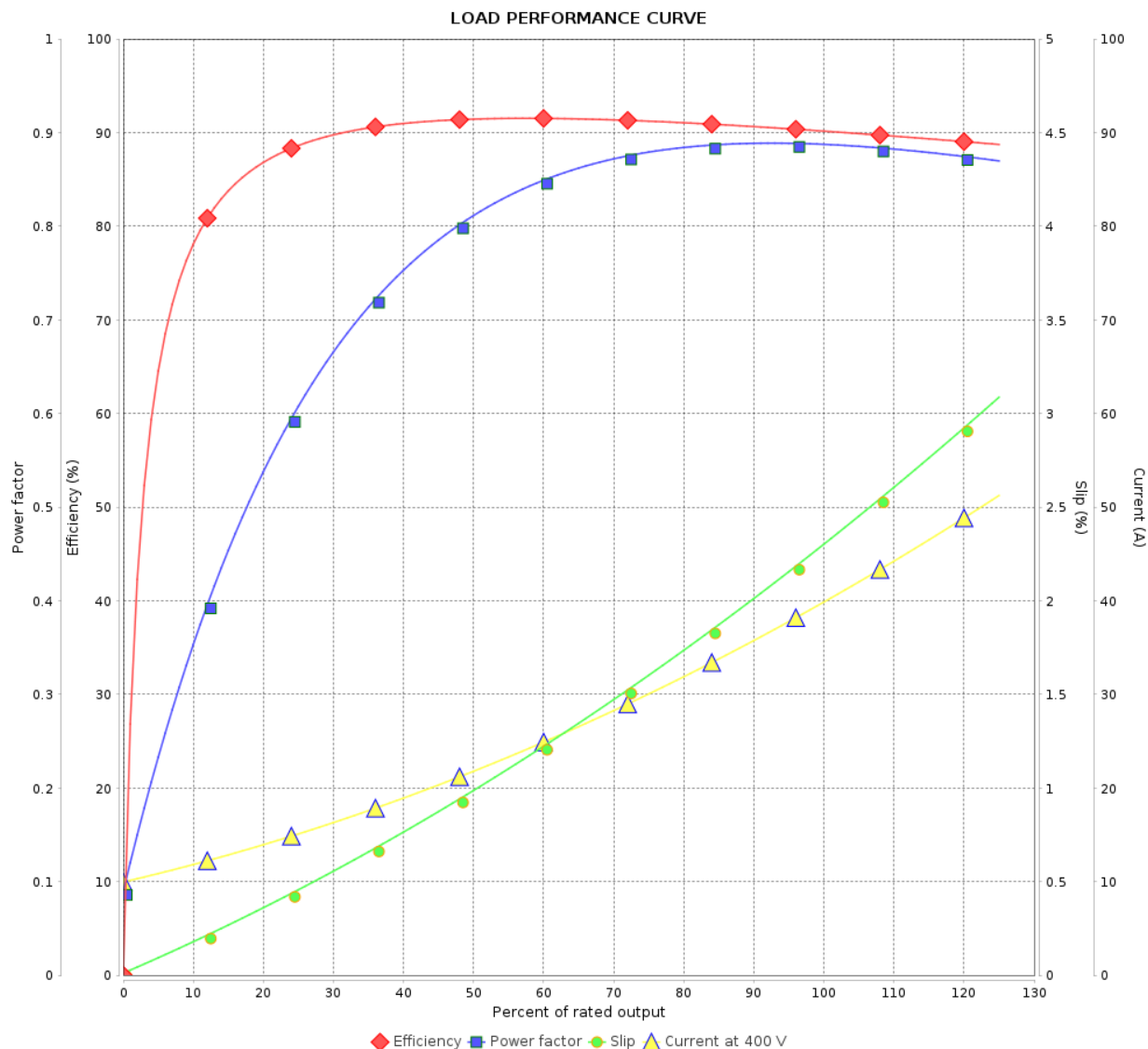
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 11413120



Performance : 400 V 50 Hz 2P IE1

Rated current : 39.6 A
LRC : 5.5
Rated torque : 7.43 kgfm
Locked rotor torque : 180 %
Breakdown torque : 220 %
Rated speed : 2930 rpm

Moment of inertia (J) : 0.1419 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 105 K
Design : B

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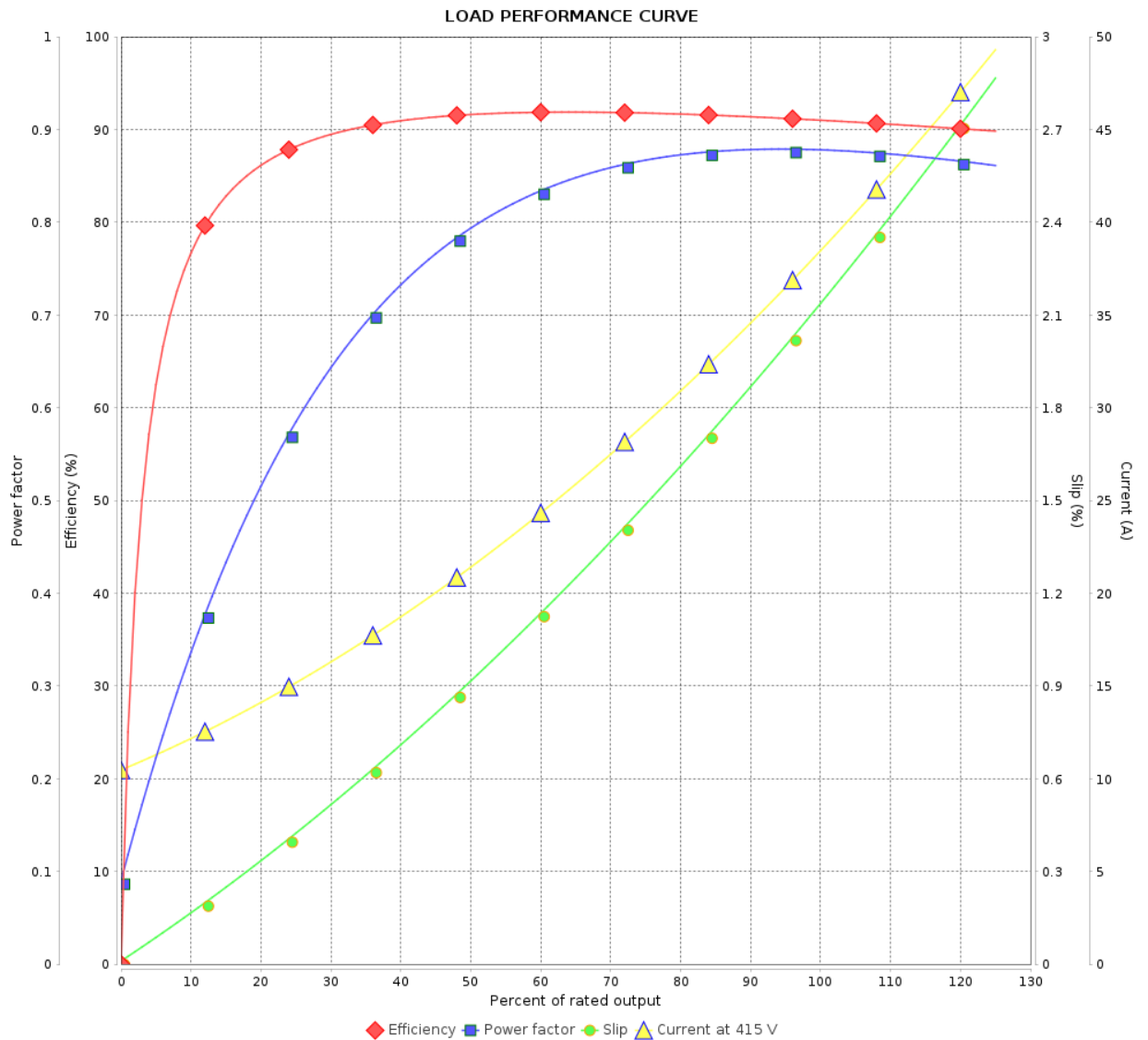
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

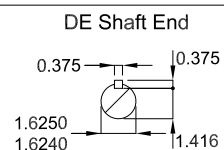
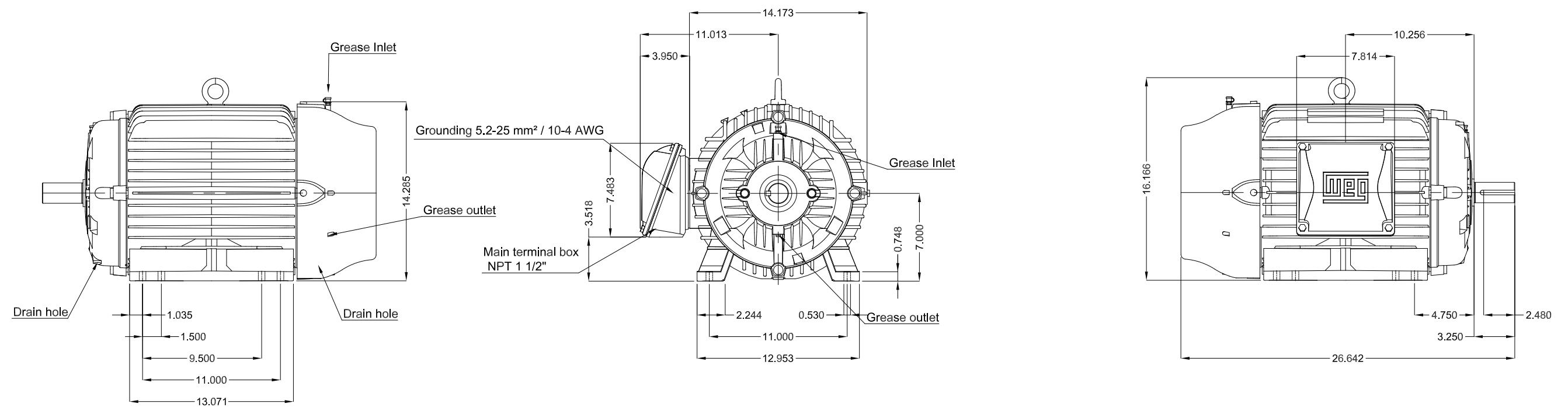
Product code : 11413120





Performance : 415 V 50 Hz 2P IE1

Rated current	: 38.2 A	Moment of inertia (J)	: 0.1419 kgm ²
LRC	: 6.0	Duty cycle	: Cont.(S1)
Rated torque	: 7.42 kgfm	Insulation class	: F
Locked rotor torque	: 190 %	Service factor	: 1.00
Breakdown torque	: 240 %	Temperature rise	: 105 K
Rated speed	: 2935 rpm	Design	: B

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Without vertical jackscrews
Color RAL 5009
Painting plan 203A
Mounting B3R(D)

30 HP 02 Poles 60 Hz										A			
				HYBRISUSER					00				
ECM		LOC		SUMMARY OF MODIFICATIONS			EXECUTED		CHECKED		RELEASED	DATE	VER
EXECUTED		HYBRISUSER				THREE PH. MOTOR W22 NEMA PREM. EFF. FRAME 284/6TS IP55 TEFC			PREVIEW				
CHECKED													
RELEASED													
REL. DATE													
						SHEET		/					