

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase Product code : 11441768

Frame : 213/5T	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 : 72.5 kg
Protection degree : IP55	Moment of inertia (J) : 0.0268 kgm ²
Design : B	

Output [HP]	10	7.5	7.5	7.5	10	10	10
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]	23.2/11.6	10.5	10.1	9.91	14.2	13.6	13.1
L. R. Amperes [A]	167/83.5	82.9	87.7	90.2	79.2	87.0	90.4
LRC [A]	7.2x(Code H)	7.9x(Code J)	8.7x(Code K)	9.1x(Code K)	5.6x(Code F)	6.4x(Code G)	6.9x(Code H)
No load current [A]	7.00/3.50	3.50	3.70	3.90	3.50	3.70	3.90
Rated speed [RPM]	3530	2935	2945	2945	2910	2920	2925
Slip [%]	1.94	2.17	1.83	1.83	3.00	2.67	2.50
Rated torque [kgfm]	2.06	1.85	1.85	1.85	2.49	2.49	2.48
Locked rotor torque [%]	220	220	240	260	170	180	200
Breakdown torque [%]	290	300	340	360	220	250	270
Service factor	1.25	1.25	1.25	1.25	1.00	1.00	1.00
Temperature rise	80 K	80 K	80 K	80 K	105 K	105 K	105 K
Locked rotor time	27s (cold) 15s (hot)	30s (cold) 17s (hot)	25s (cold) 14s (hot)	27s (cold) 15s (hot)	21s (cold) 12s (hot)	19s (cold) 11s (hot)	19s (cold) 11s (hot)
Noise level ²	68.0 dB(A)	63.0 dB(A)	63.0 dB(A)	63.0 dB(A)	63.0 dB(A)	63.0 dB(A)	63.0 dB(A)
Efficiency (%)	25%						
	50%	89.5	88.6	88.4	87.7	89.5	89.5
	75%	90.2	89.6	89.6	89.5	89.5	89.5
	100%	90.2	89.5	89.5	89.8	88.5	88.5
Power Factor	25%						
	50%	0.79	0.75	0.72	0.70	0.83	0.81
	75%	0.87	0.86	0.83	0.82	0.90	0.88
	100%	0.90	0.89	0.88	0.86	0.91	0.90

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

Losses (%)	P1 (0,9;1,0)	10.6	11.5	11.5	11.1	12.7	12.7	12.7
	P2 (0,5;1,0)	8.9	9.6	9.6	9.3	10.6	10.6	10.6
	P3 (0,25;1,0)	8.2	8.8	8.8	8.5	9.8	9.8	9.8
	P4 (0,9;0,5)	5.1	5.5	5.5	5.3	6.1	6.1	6.1
	P5 (0,5;0,5)	3.3	3.5	3.5	3.4	3.9	3.9	3.9
	P6 (0,5;0,25)	2.0	2.2	2.2	2.1	2.4	2.4	2.4
	P7 (0,25;0,25)	1.3	1.4	1.4	1.3	1.5	1.5	1.5

	<u>Drive end</u>	<u>Non drive end</u>	Foundation loads
Bearing type :	6308 ZZ	6207 ZZ	Max. traction : 87 kgf
Sealing :	V'Ring	V'Ring	Max. compression : 160 kgf
Lubrication interval :	-	-	
Lubricant amount :	-	-	
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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Three Phase Induction Motor - Squirrel Cage



Customer : _____

Notes
USABLE @208V 25.7A SF 1.15 SFA 29.5A

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LOAD PERFORMANCE CURVE

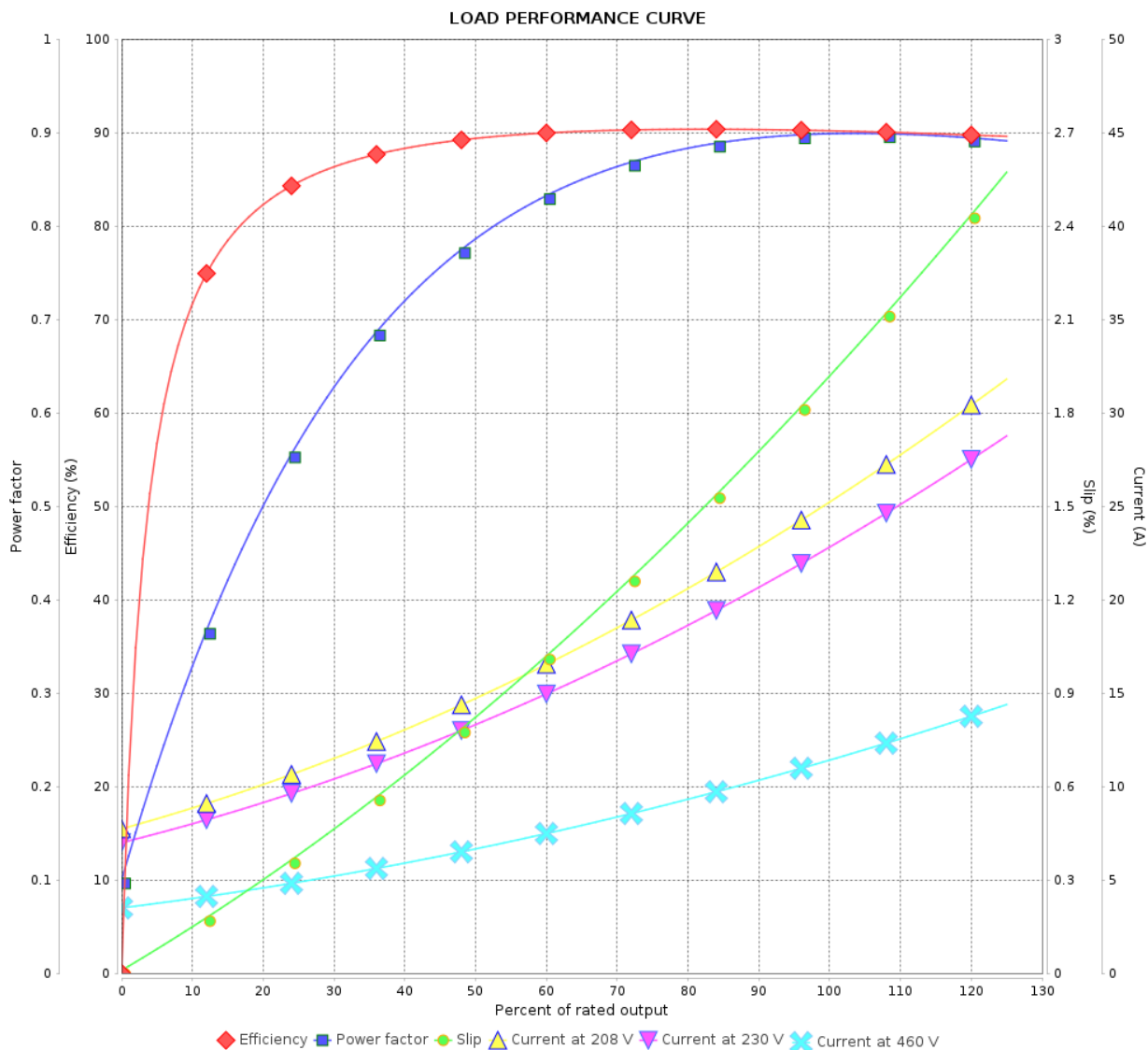
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 11441768



Performance : 230/460 V 60 Hz 2P

Rated current : 23.2/11.6 A
LRC : 7.2
Rated torque : 2.06 kgfm
Locked rotor torque : 220 %
Breakdown torque : 290 %
Rated speed : 3530 rpm

Moment of inertia (J) : 0.0268 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : B

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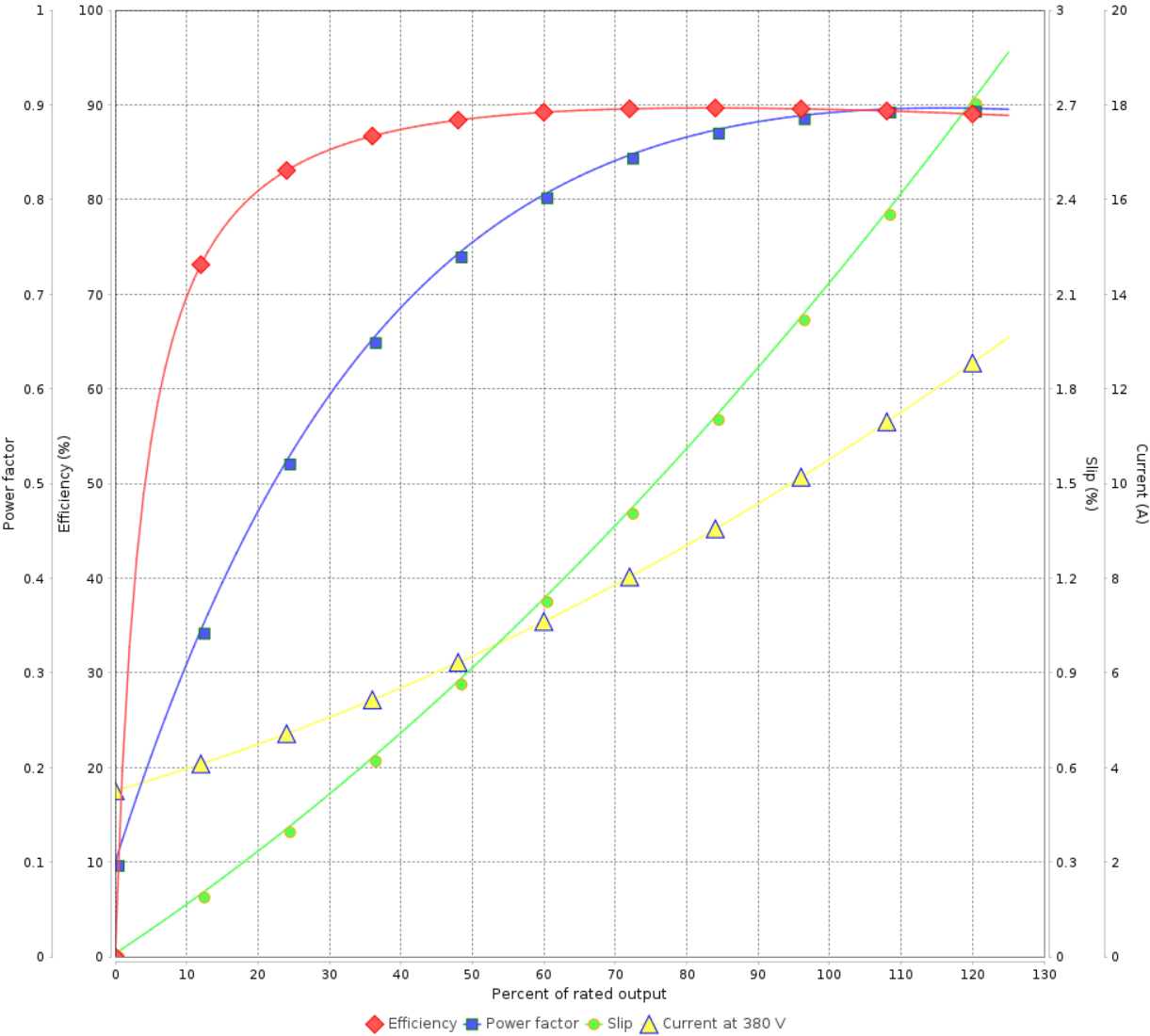
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase Product code : 11441768

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Performance : 380 V 50 Hz 2P IE3			
Rated current	: 10.5 A	Moment of inertia (J)	: 0.0268 kgm²
LRC	: 7.9	Duty cycle	: Cont.(S1)
Rated torque	: 1.85 kgfm	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.25
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 2935 rpm	Design	: B

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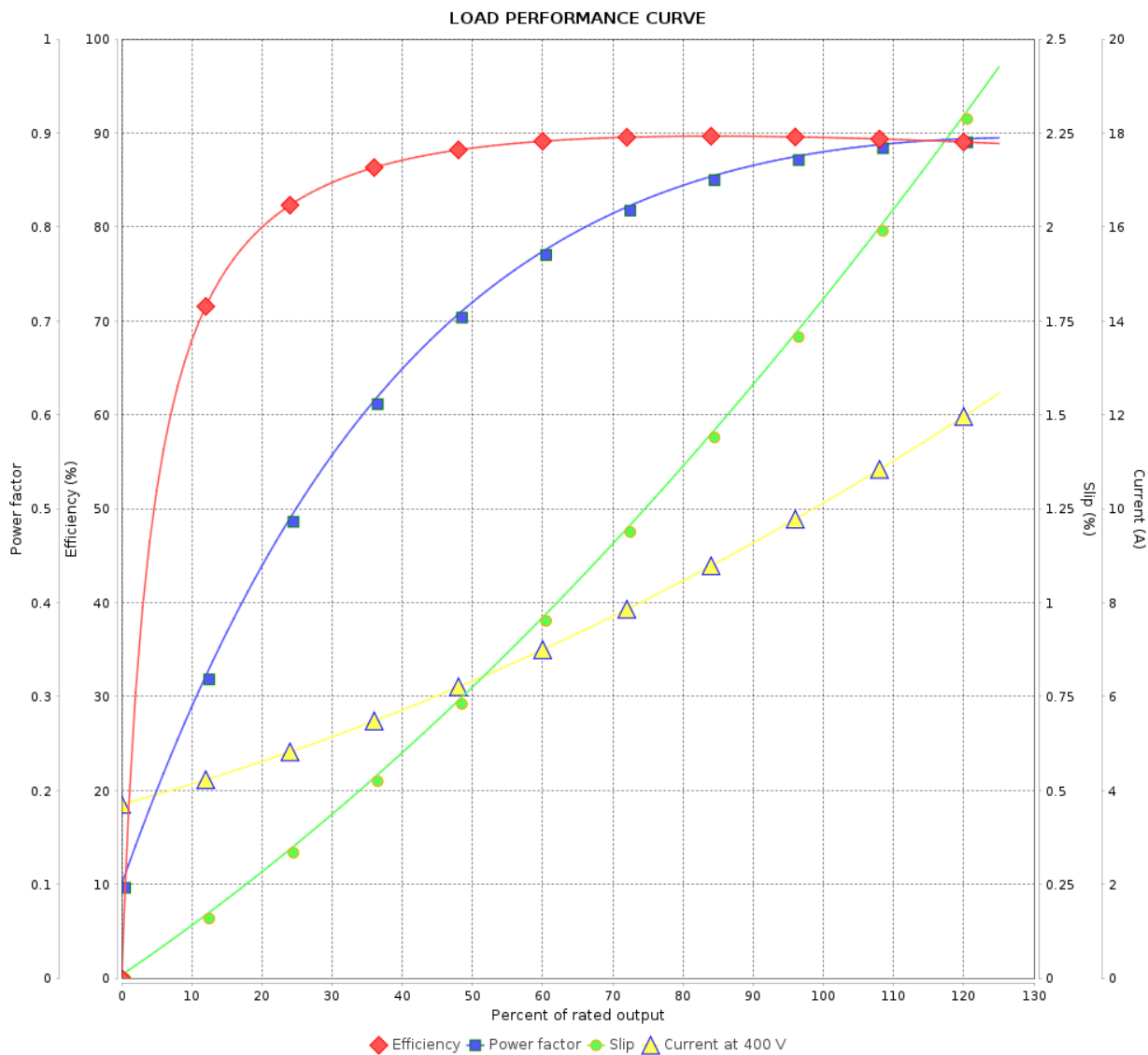
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 11441768



Performance : 400 V 50 Hz 2P IE3

Rated current : 10.1 A
LRC : 8.7
Rated torque : 1.85 kgfm
Locked rotor torque : 240 %
Breakdown torque : 340 %
Rated speed : 2945 rpm

Moment of inertia (J) : 0.0268 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : B

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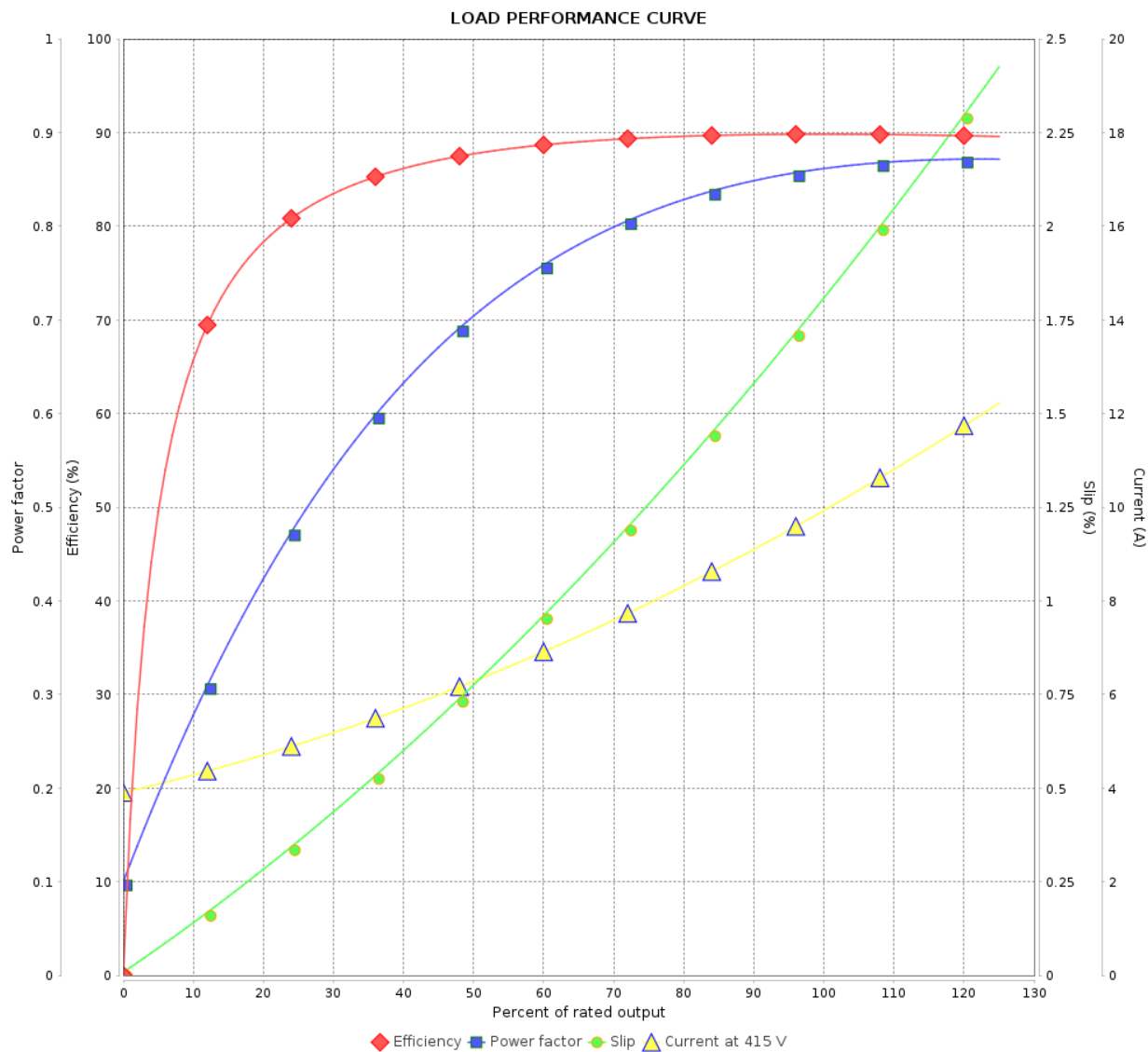
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 11441768



Performance : 415 V 50 Hz 2P IE3

Rated current : 9.91 A
LRC : 9.1
Rated torque : 1.85 kgfm
Locked rotor torque : 260 %
Breakdown torque : 360 %
Rated speed : 2945 rpm

Moment of inertia (J) : 0.0268 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : B

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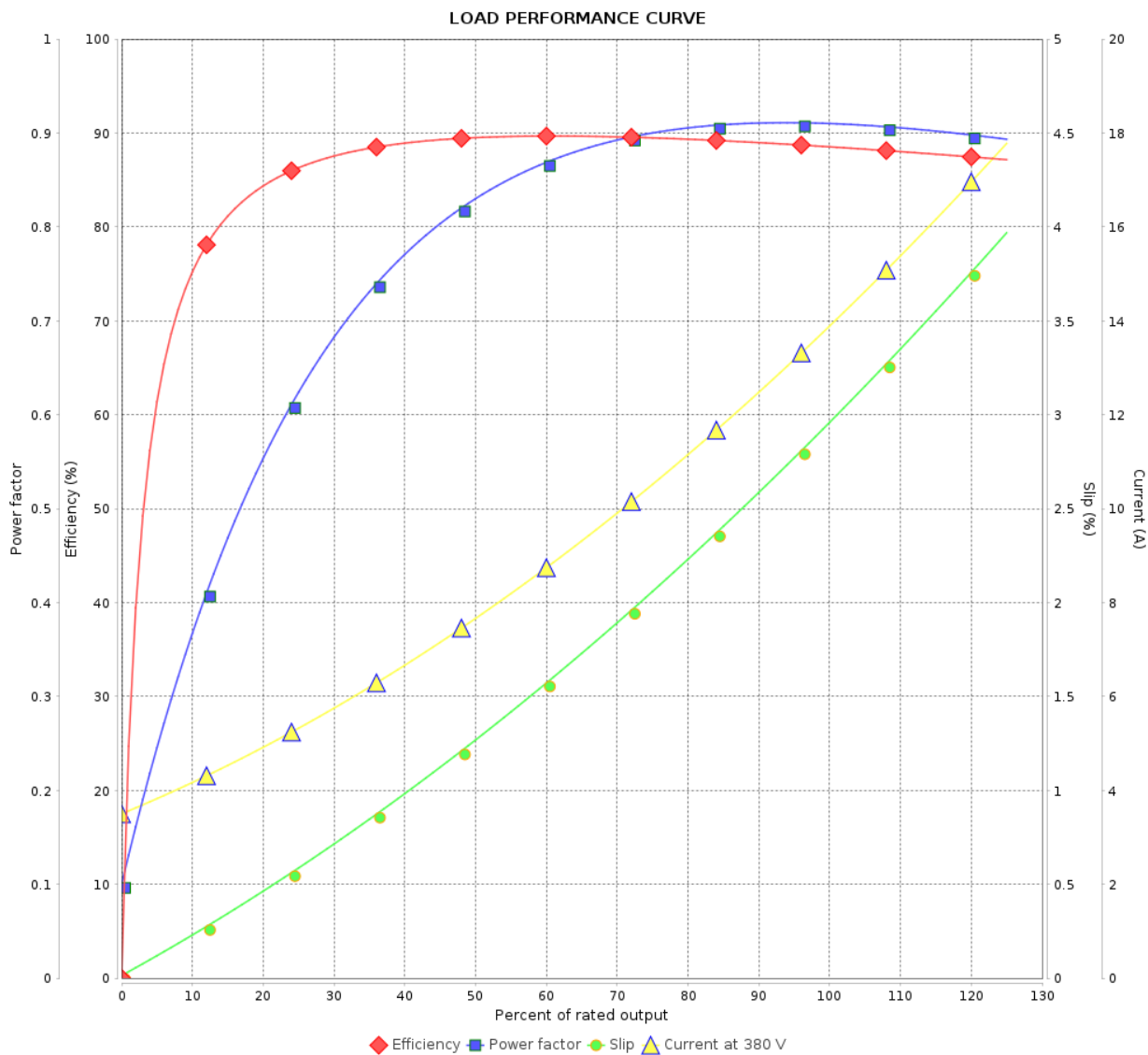
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 11441768



Performance : 380 V 50 Hz 2P IE2

Rated current : 14.2 A
LRC : 5.6
Rated torque : 2.49 kgfm
Locked rotor torque : 170 %
Breakdown torque : 220 %
Rated speed : 2910 rpm

Moment of inertia (J) : 0.0268 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 105 K
Design : B

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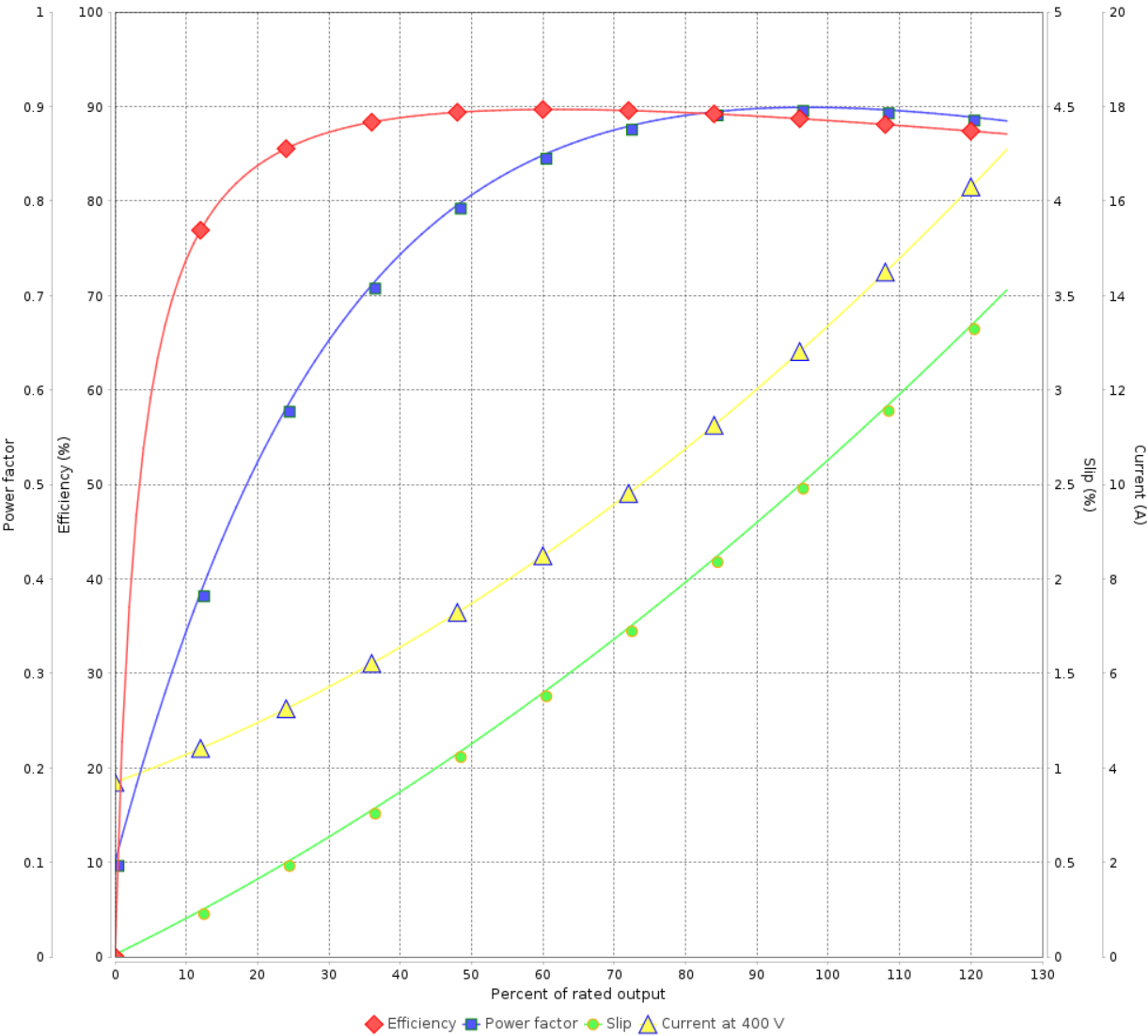
Three Phase Induction Motor - Squirrel Cage



Customer :

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Performance : 400 V 50 Hz 2P IE2

Rated current	: 13.6 A	Moment of inertia (J)	: 0.0268 kgm ²
LRC	: 6.4	Duty cycle	: Cont.(S1)
Rated torque	: 2.49 kgfm	Insulation class	: F
Locked rotor torque	: 180 %	Service factor	: 1.00
Breakdown torque	: 250 %	Temperature rise	: 105 K
Rated speed	: 2920 rpm	Design	: B

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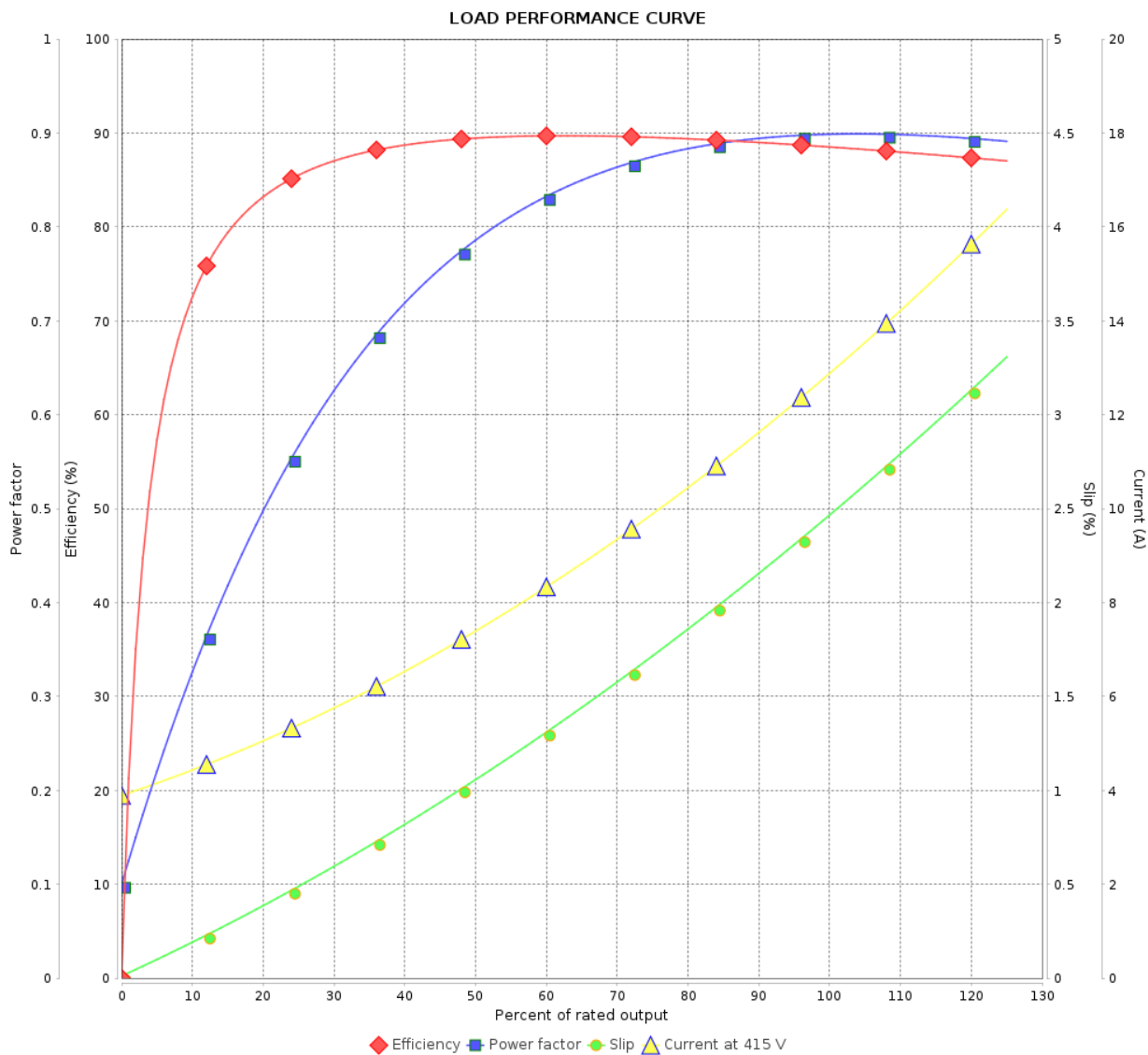
Three Phase Induction Motor - Squirrel Cage



Customer :

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Three-Phase

Product code : 11441768

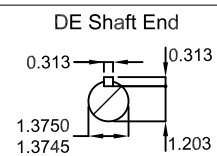
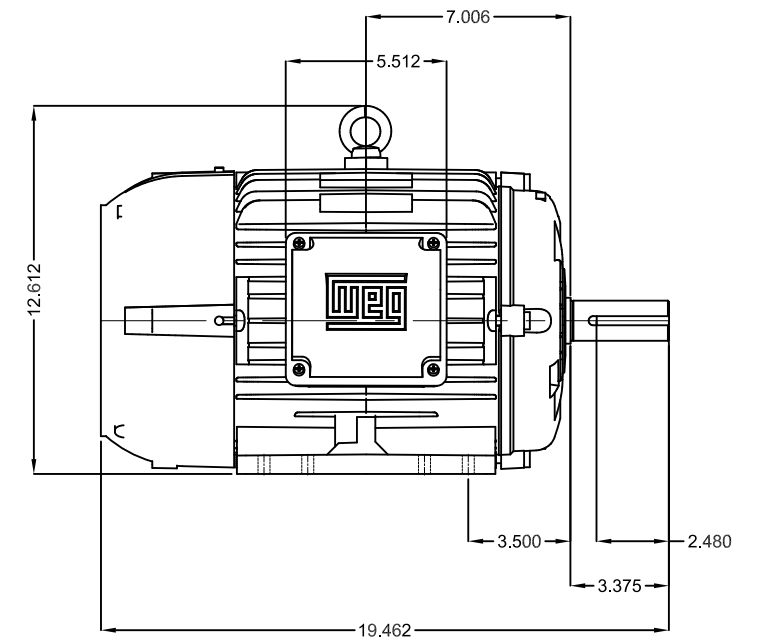
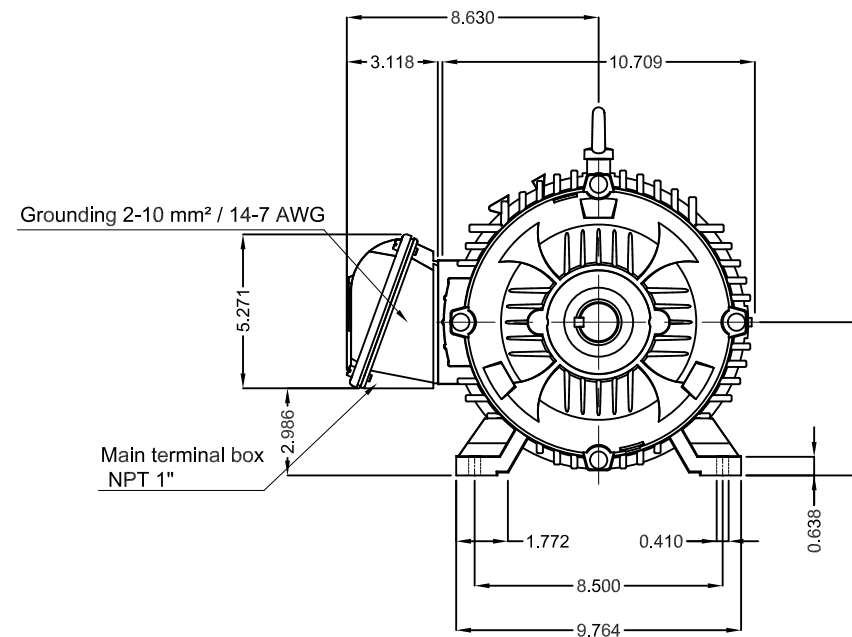
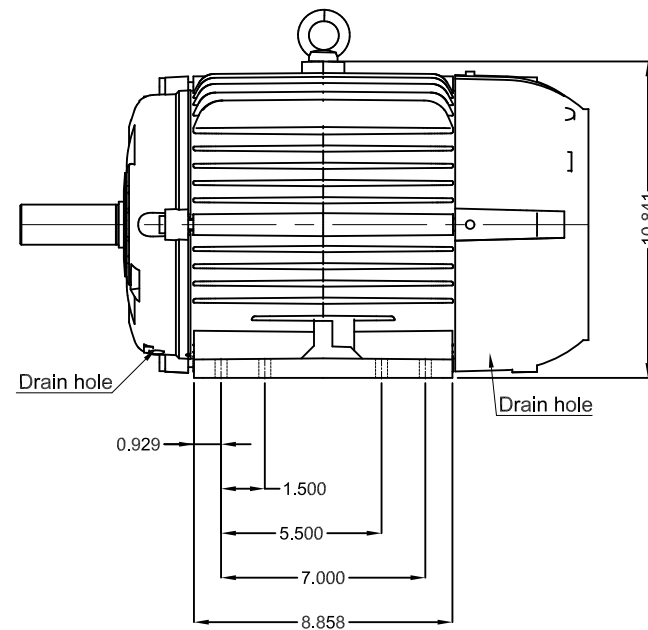


Performance : 415 V 50 Hz 2P IE2

Rated current : 13.1 A
LRC : 6.9
Rated torque : 2.48 kgfm
Locked rotor torque : 200 %
Breakdown torque : 270 %
Rated speed : 2925 rpm

Moment of inertia (J) : 0.0268 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 105 K
Design : B

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Color RAL 5009
Painting plan 207A
Mounting B3R(D)

10 HP 02 Poles 60 Hz										A
				HYBRISUSER					00	
ECM		LOC		SUMMARY OF MODIFICATIONS			EXECUTED		CHECKED	
							RELEASED		DATE	
EXECUTED		HYBRISUSER		 THREE PH. MOTOR W22 NEMA PREM. EFF. FRAME 213/5T IP55 TEFC			PREVIEW WDD 00			
CHECKED										
RELEASED										
REL. DATE										
							SHEET		/	