

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase Product code : 11443945

Frame : 284/6T	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 : 198 kg
Protection degree : IP55	Moment of inertia (J) : 0.2467 kgm ²
Design : B	

Output [HP]	30	25	25	25	30	30	30
Poles	4	4	4	4	4	4	4
Frequency [Hz]	60	50	50	50	50	50	50
Rated voltage [V]	230/460	380	400	415	380	400	415
Rated current [A]	70.2/35.1	35.7	34.3	33.9	43.1	41.1	39.7
L. R. Amperes [A]	428/214	214	230	247	228	247	238
LRC [A]	6.1x(Code G)	6.0x(Code G)	6.7x(Code H)	7.3x(Code J)	5.3x(Code F)	6.0x(Code G)	6.0x(Code G)
No load current [A]	24.6/12.3	12.2	13.1	13.8	12.2	13.1	13.8
Rated speed [RPM]	1770	1465	1470	1475	1455	1460	1465
Slip [%]	1.67	2.33	2.00	1.67	3.00	2.67	2.33
Rated torque [kgfm]	12.3	12.4	12.3	12.3	15.0	14.9	14.9
Locked rotor torque [%]	240	200	229	260	170	190	220
Breakdown torque [%]	240	229	260	280	200	220	240
Service factor	1.25	1.00	1.00	1.00	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	36s (cold) 20s (hot)	27s (cold) 15s (hot)	27s (cold) 15s (hot)	27s (cold) 15s (hot)	23s (cold) 13s (hot)	23s (cold) 13s (hot)	21s (cold) 12s (hot)
Noise level ²	63.0 dB(A)	61.0 dB(A)	61.0 dB(A)	61.0 dB(A)	61.0 dB(A)	61.0 dB(A)	61.0 dB(A)
Efficiency (%)	25%	0.000			0.000		
	50%	93.0	92.1	92.1	91.6	90.0	91.2
	75%	93.0	92.5	92.8	92.5	90.2	91.7
	100%	93.6	92.6	92.7	92.6	90.2	91.7
Power Factor	25%	0.00			0.00		
	50%	0.70	0.70	0.67	0.64	0.76	0.70
	75%	0.80	0.81	0.79	0.76	0.83	0.80
	100%	0.84	0.85	0.84	0.82	0.86	0.84

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

Losses (%)	P1 (0,9;1,0)	6.8	6.8	6.8	6.8	6.8	6.8
	P2 (0,5;1,0)	5.8	5.8	5.8	5.8	5.8	5.8
	P3 (0,25;1,0)	5.2	5.2	5.2	5.2	5.2	5.2
	P4 (0,9;0,5)	3.1	3.1	3.1	3.1	3.1	3.1
	P5 (0,5;0,5)	2.2	2.2	2.2	2.2	2.2	2.2
	P6 (0,5;0,25)	1.4	1.4	1.4	1.4	1.4	1.4
	P7 (0,25;0,25)	0.9	0.9	0.9	0.9	0.9	0.9

	<u>Drive end</u>	<u>Non drive end</u>	Foundation loads
Bearing type :	6311 C3	6211 C3	Max. traction : 411 kgf
Sealing :	V'Ring	V'Ring	Max. compression : 609 kgf
Lubrication interval :	20000 h	20000 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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Three Phase Induction Motor - Squirrel Cage



Customer :

Notes
USABLE @208V 77.6A SF 1.15 SFA 89.3A

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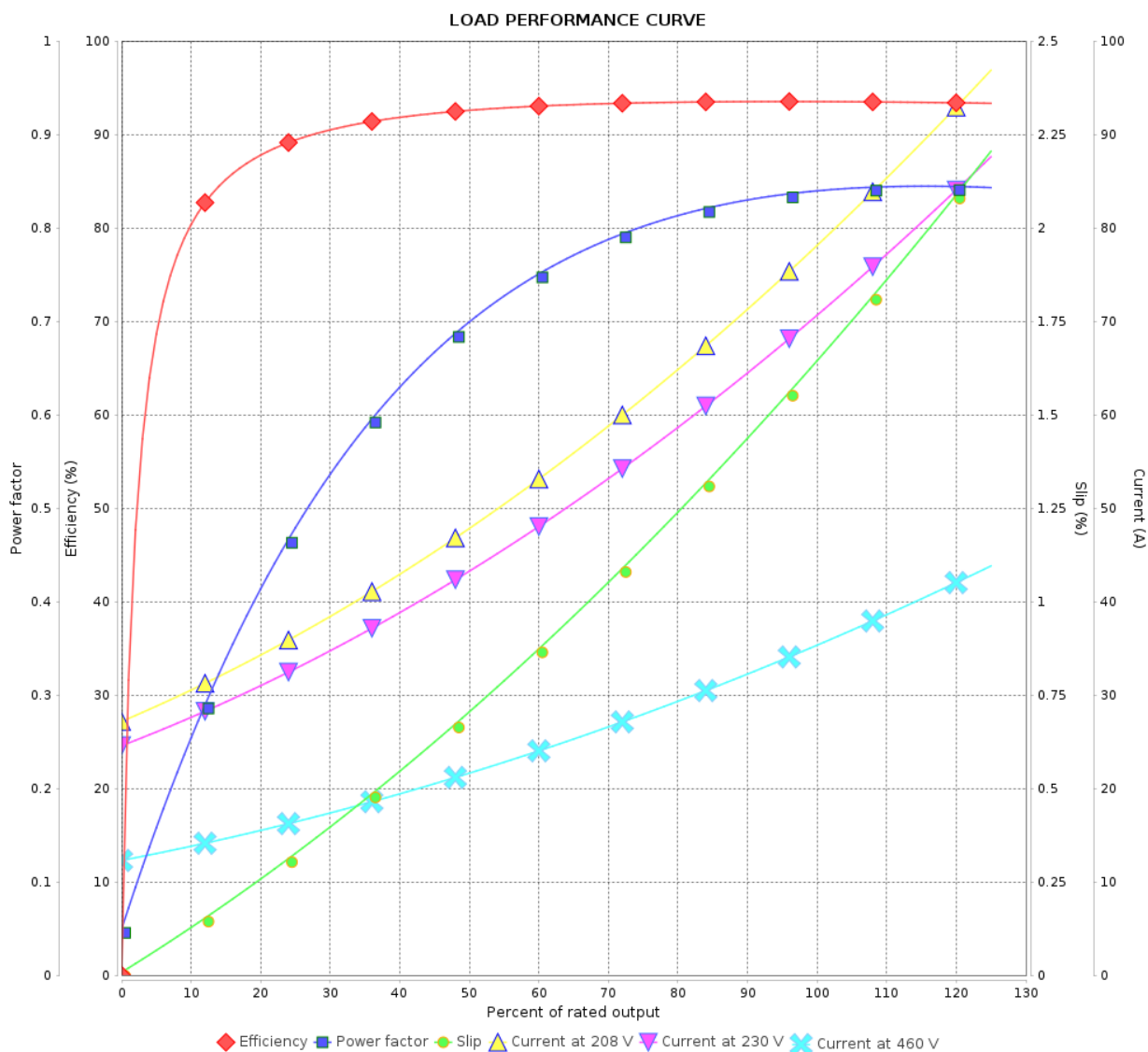
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 11443945



Performance : 230/460 V 60 Hz 4P

Rated current : 70.2/35.1 A
LRC : 6.1
Rated torque : 12.3 kgfm
Locked rotor torque : 240 %
Breakdown torque : 240 %
Rated speed : 1770 rpm

Moment of inertia (J) : 0.2467 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : B

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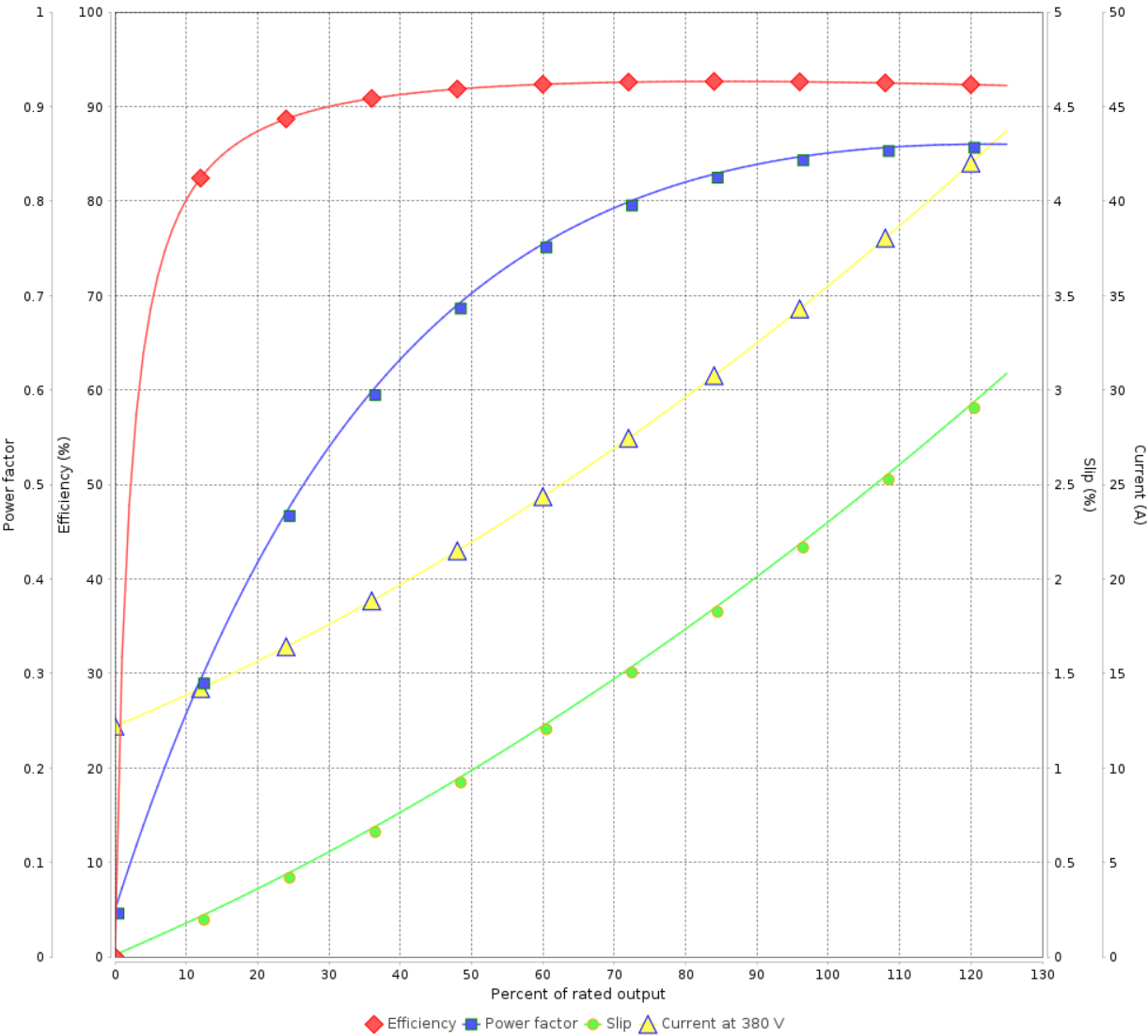
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase Product code : 11443945

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Performance : 380 V 50 Hz 4P IE3			
Rated current	: 35.7 A	Moment of inertia (J)	: 0.2467 kgm²
LRC	: 6.0	Duty cycle	: Cont.(S1)
Rated torque	: 12.4 kgfm	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.00
Breakdown torque	: 229 %	Temperature rise	: 80 K
Rated speed	: 1465 rpm	Design	: B

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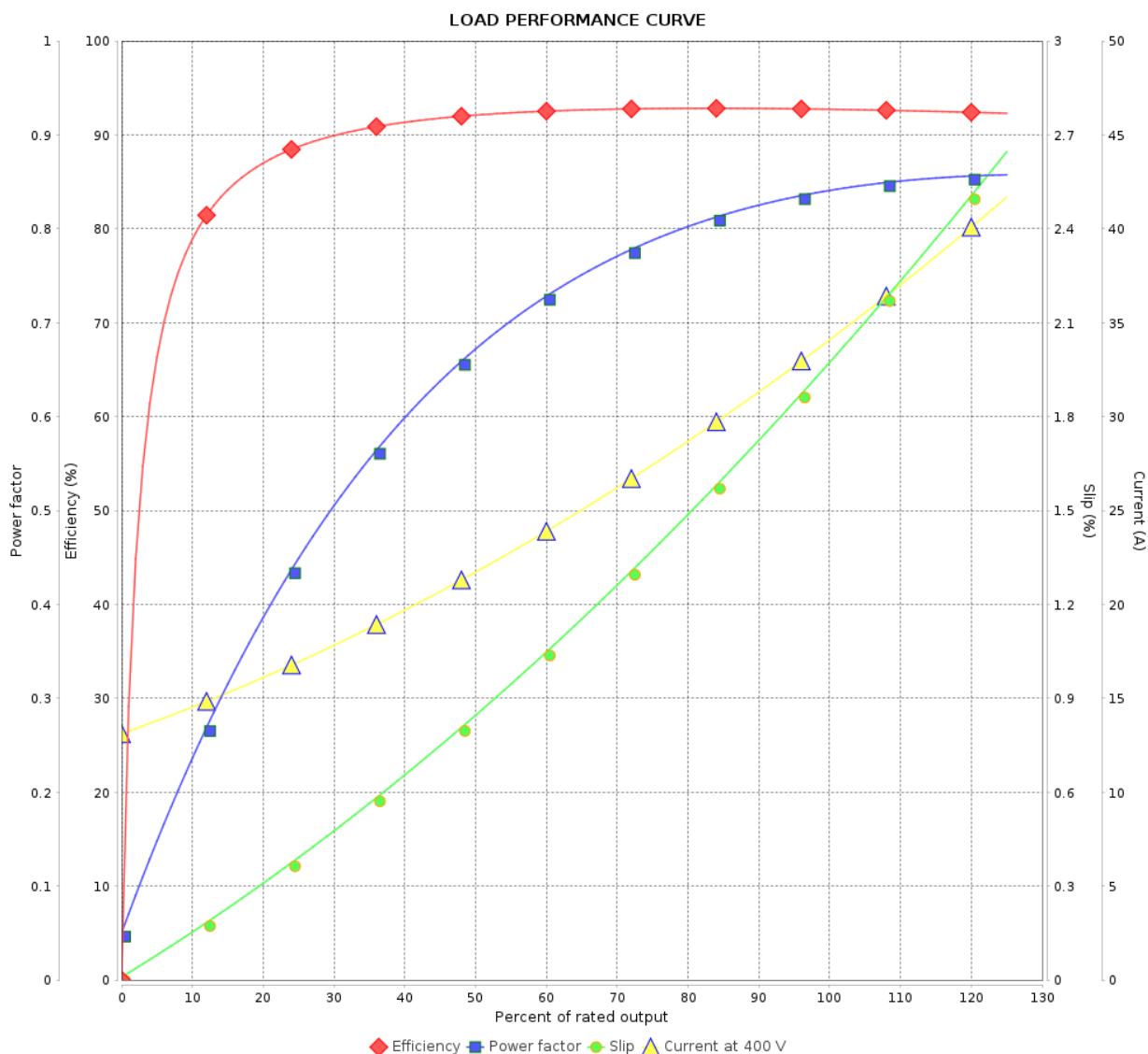
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 11443945



Performance : 400 V 50 Hz 4P IE3

Rated current : 34.3 A
LRC : 6.7
Rated torque : 12.3 kgfm
Locked rotor torque : 229 %
Breakdown torque : 260 %
Rated speed : 1470 rpm

Moment of inertia (J) : 0.2467 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

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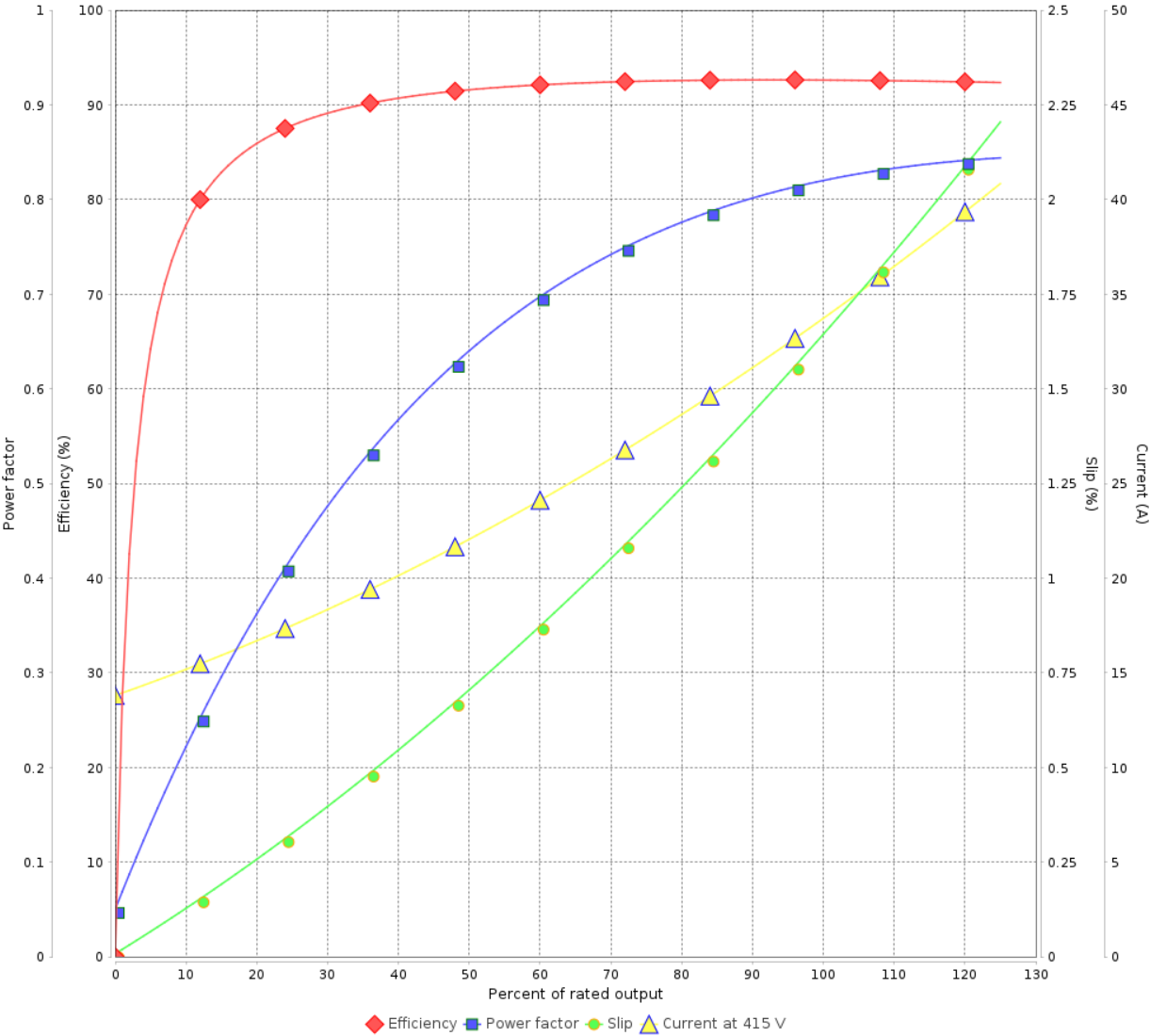
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase Product code : 11443945

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Performance : 415 V 50 Hz 4P IE3			
Rated current	: 33.9 A	Moment of inertia (J)	: 0.2467 kgm ²
LRC	: 7.3	Duty cycle	: Cont.(S1)
Rated torque	: 12.3 kgfm	Insulation class	: F
Locked rotor torque	: 260 %	Service factor	: 1.00
Breakdown torque	: 280 %	Temperature rise	: 80 K
Rated speed	: 1475 rpm	Design	: B

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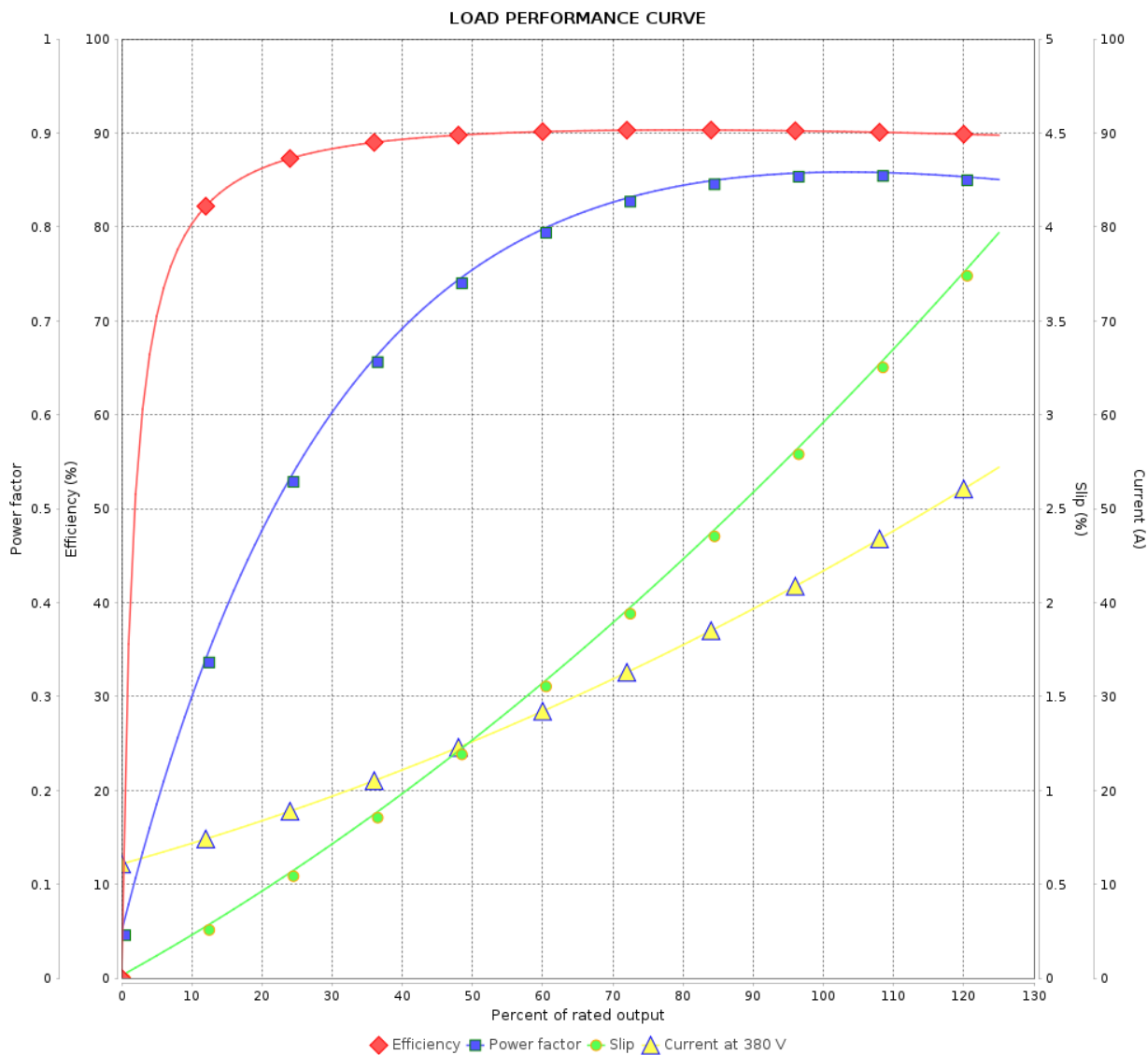
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 11443945



Performance : 380 V 50 Hz 4P IE1

Rated current : 43.1 A
LRC : 5.3
Rated torque : 15.0 kgfm
Locked rotor torque : 170 %
Breakdown torque : 200 %
Rated speed : 1455 rpm

Moment of inertia (J) : 0.2467 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 105 K
Design : B

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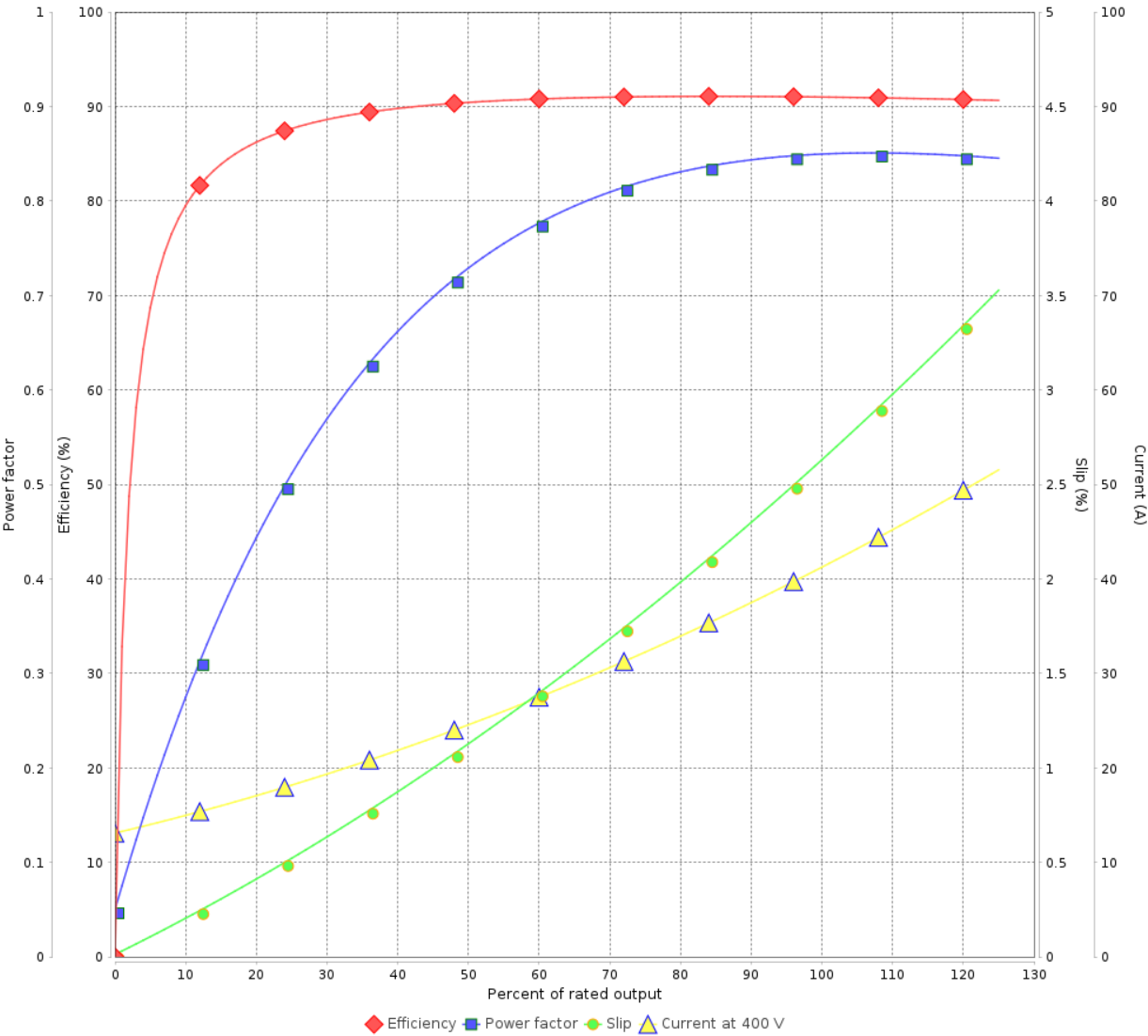
Three Phase Induction Motor - Squirrel Cage



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Product line : W22 NEMA Premium Efficiency Three-Phase Product code : 11443945

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Performance : 400 V 50 Hz 4P IE1

Rated current	: 41.1 A	Moment of inertia (J)	: 0.2467 kgm ²
LRC	: 6.0	Duty cycle	: Cont.(S1)
Rated torque	: 14.9 kgfm	Insulation class	: F
Locked rotor torque	: 190 %	Service factor	: 1.00
Breakdown torque	: 220 %	Temperature rise	: 105 K
Rated speed	: 1460 rpm	Design	: B

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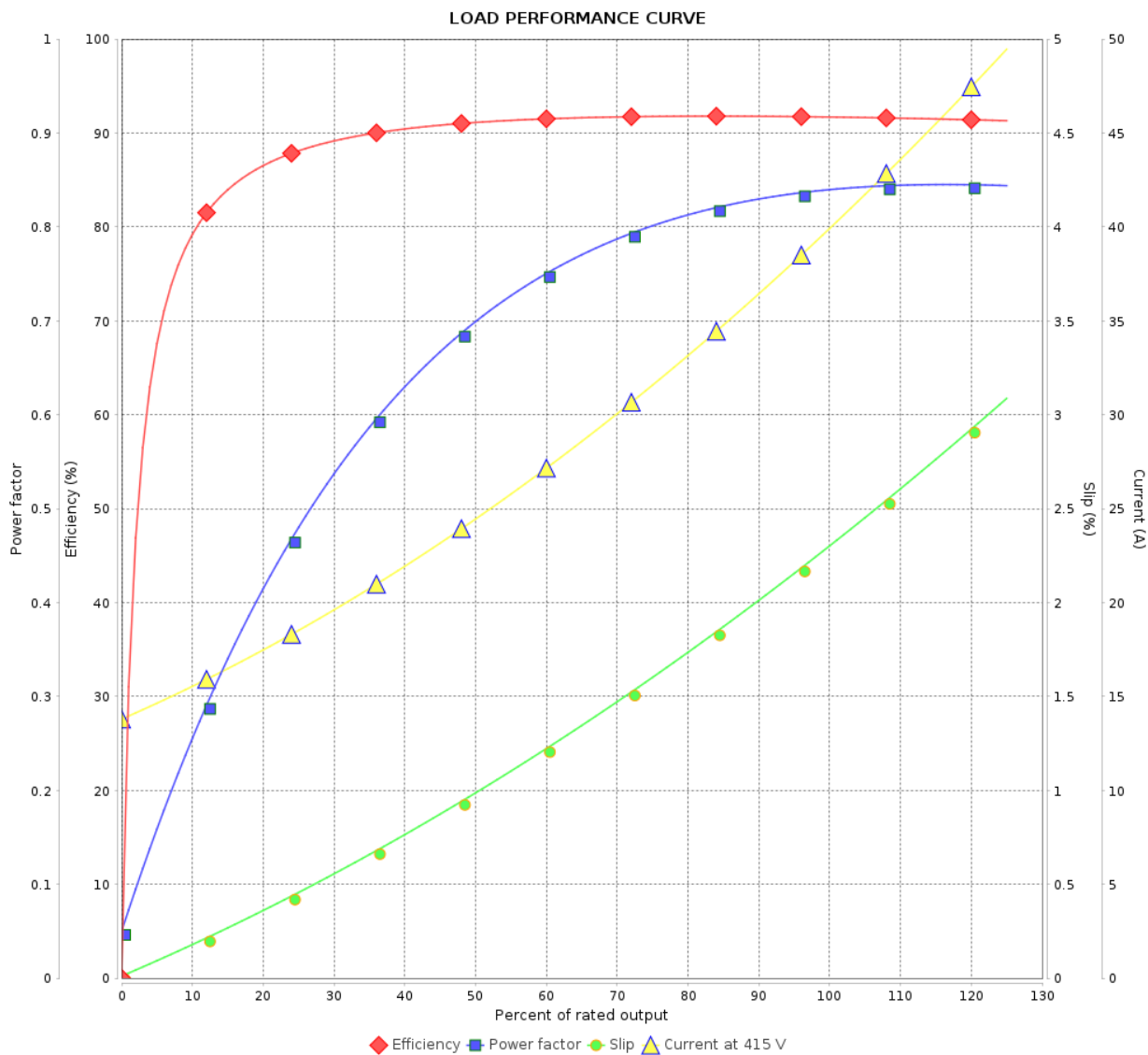
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 11443945



Performance : 415 V 50 Hz 4P IE2

Rated current : 39.7 A
LRC : 6.0
Rated torque : 14.9 kgfm
Locked rotor torque : 220 %
Breakdown torque : 240 %
Rated speed : 1465 rpm

Moment of inertia (J) : 0.2467 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 105 K
Design : B

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