

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase Product code : 11355727

Frame	: 364/5T	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	: 387 kg
Protection degree	: IP55	Moment of inertia (J)	: 1.22 kgm ²
Design	: B		

Output [HP]	40	30	30	30	40	40	40
Poles	8	8	8	8	8	8	8
Frequency [Hz]	60	50	50	50	50	50	50
Rated voltage [V]	230/460	380	400	415	380	400	415
Rated current [A]	102/50.9	47.8	46.3	45.7	62.9	60.0	58.1
L. R. Amperes [A]	601/300	292	310	324	283	300	320
LRC [A]	5.9x(Code G)	6.1x(Code H)	6.7x(Code J)	7.1x(Code J)	4.5x(Code E)	5.0x(Code F)	5.5x(Code G)
No load current [A]	43.0/21.5	20.7	22.2	23.4	20.7	22.2	23.4
Rated speed [RPM]	882	735	736	737	725	727	730
Slip [%]	2.00	2.00	1.87	1.73	3.33	3.07	2.67
Rated torque [kgfm]	32.9	29.6	29.6	29.5	40.0	39.9	39.8
Locked rotor torque [%]	170	600	210	229	140	160	170
Breakdown torque [%]	210	240	270	300	180	200	210
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	46s (cold) 26s (hot)	81s (cold) 45s (hot)	52s (cold) 29s (hot)	52s (cold) 29s (hot)	32s (cold) 18s (hot)	32s (cold) 18s (hot)	32s (cold) 18s (hot)
Noise level ²	60.0 dB(A)	56.0 dB(A)	56.0 dB(A)	56.0 dB(A)	56.0 dB(A)	56.0 dB(A)	56.0 dB(A)
Efficiency (%)	25%						
	50%	92.4	91.5	91.5	90.9	91.7	91.7
	75%	93.0	91.6	91.9	91.8	91.0	91.7
	100%	92.4	90.9	91.5	91.7	89.5	90.2
Power Factor	25%						
	50%	0.65	0.60	0.55	0.52	0.70	0.66
	75%	0.75	0.71	0.68	0.65	0.78	0.76
	100%	0.80	0.77	0.75	0.73	0.81	0.79

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

Losses (%)	P1 (0,9;1,0)	8.1	8.1	8.1	8.1	8.1	8.1
	P2 (0,5;1,0)	7.1	7.1	7.1	7.1	7.1	7.1
	P3 (0,25;1,0)	6.5	6.5	6.5	6.5	6.5	6.5
	P4 (0,9;0,5)	3.6	3.6	3.6	3.6	3.6	3.6
	P5 (0,5;0,5)	2.6	2.6	2.6	2.6	2.6	2.6
	P6 (0,5;0,25)	1.6	1.6	1.6	1.6	1.6	1.6
	P7 (0,25;0,25)	1.2	1.2	1.2	1.2	1.2	1.2

Bearing type	: 6314 C3	Non drive end	6314 C3	Foundation loads	
Sealing	: WSeal		WSeal	Max. traction	: 745 kgf
Lubrication interval	: 20000 h		20000 h	Max. compression	: 1131 kgf
Lubricant amount	: 27 g		27 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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Checked by				
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Three Phase Induction Motor - Squirrel Cage



Customer :

Notes
USABLE @208V 111A SF 1.10 SFA 122A

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LOAD PERFORMANCE CURVE

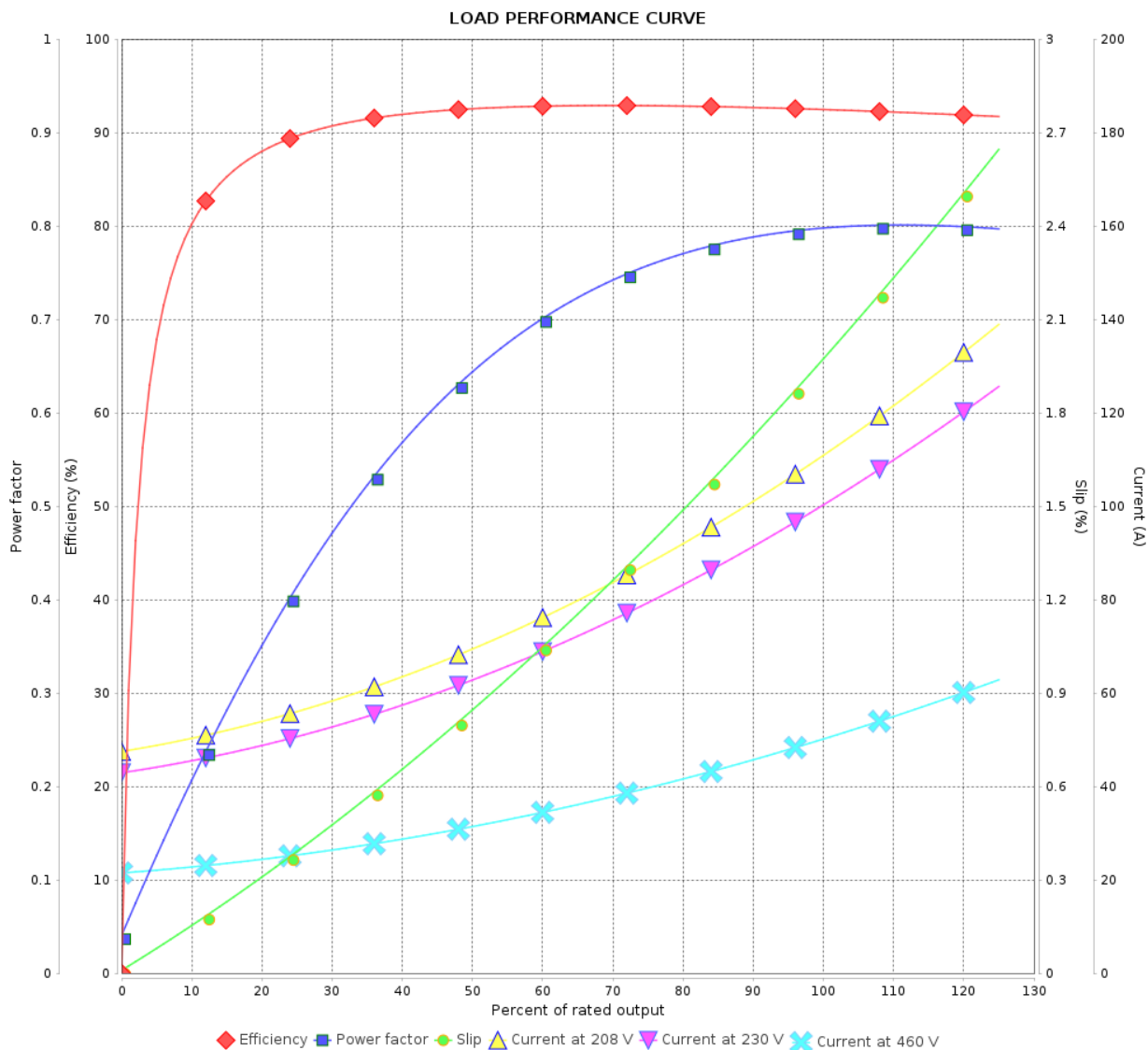
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 11355727



Performance : 230/460 V 60 Hz 8P

Rated current : 102/50.9 A
LRC : 5.9
Rated torque : 32.9 kgfm
Locked rotor torque : 170 %
Breakdown torque : 210 %
Rated speed : 882 rpm

Moment of inertia (J) : 1.22 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : B

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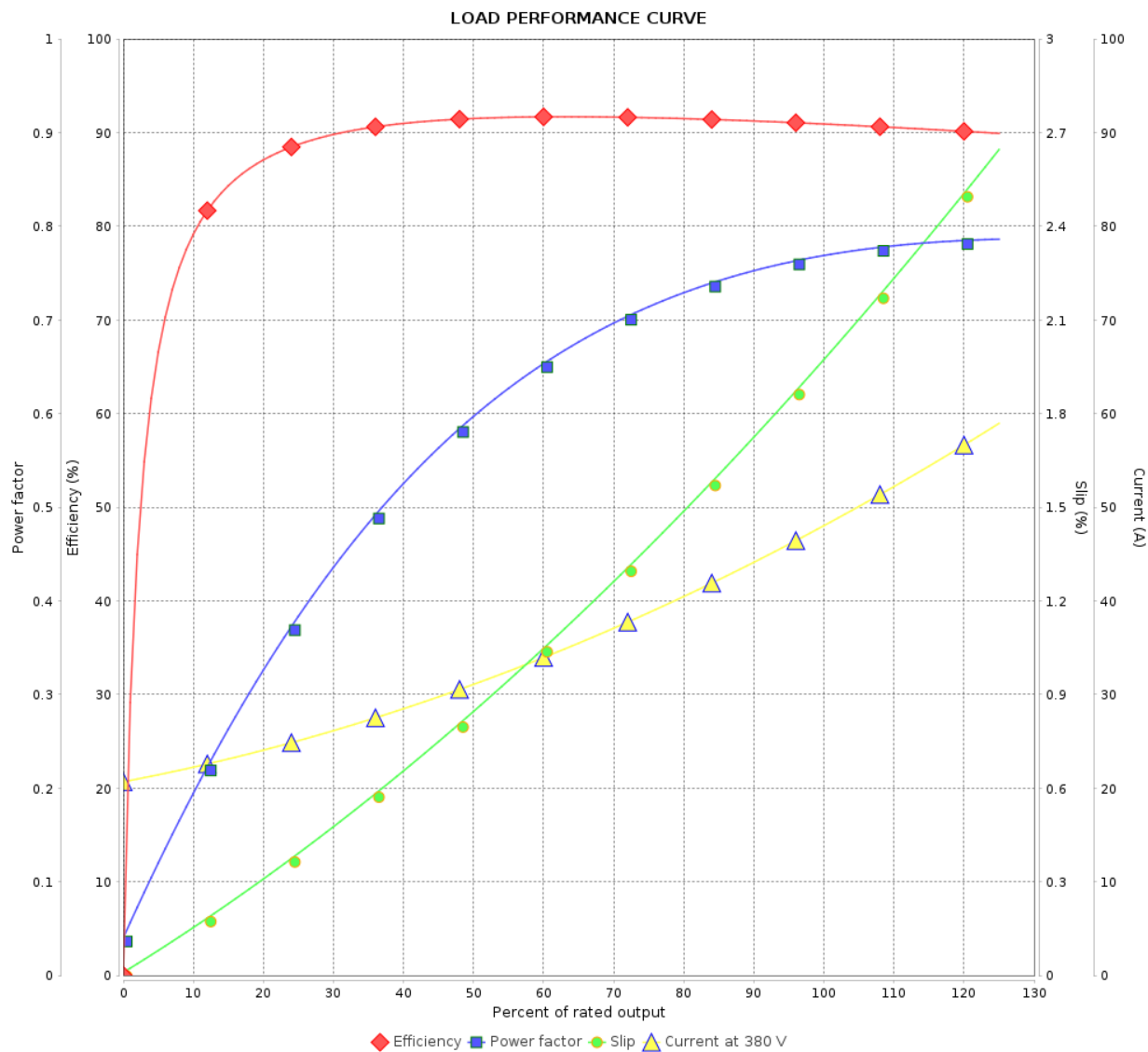
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 11355727



Performance : 380 V 50 Hz 8P IE3

Rated current : 47.8 A
LRC : 6.1
Rated torque : 29.6 kgfm
Locked rotor torque : 600 %
Breakdown torque : 240 %
Rated speed : 735 rpm

Moment of inertia (J) : 1.22 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

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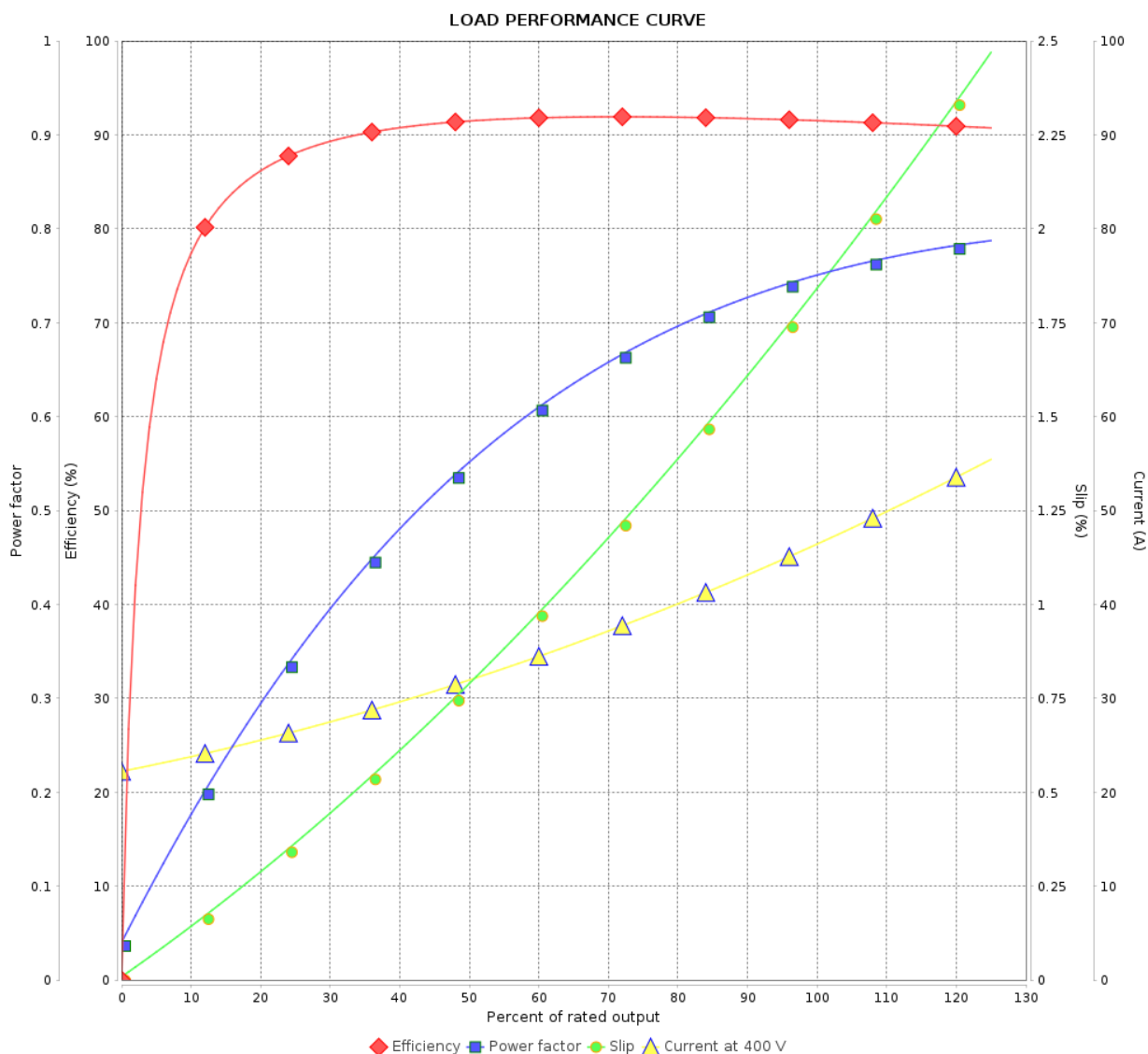
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 11355727



Performance : 400 V 50 Hz 8P IE3

Rated current : 46.3 A
LRC : 6.7
Rated torque : 29.6 kgfm
Locked rotor torque : 210 %
Breakdown torque : 270 %
Rated speed : 736 rpm

Moment of inertia (J) : 1.22 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

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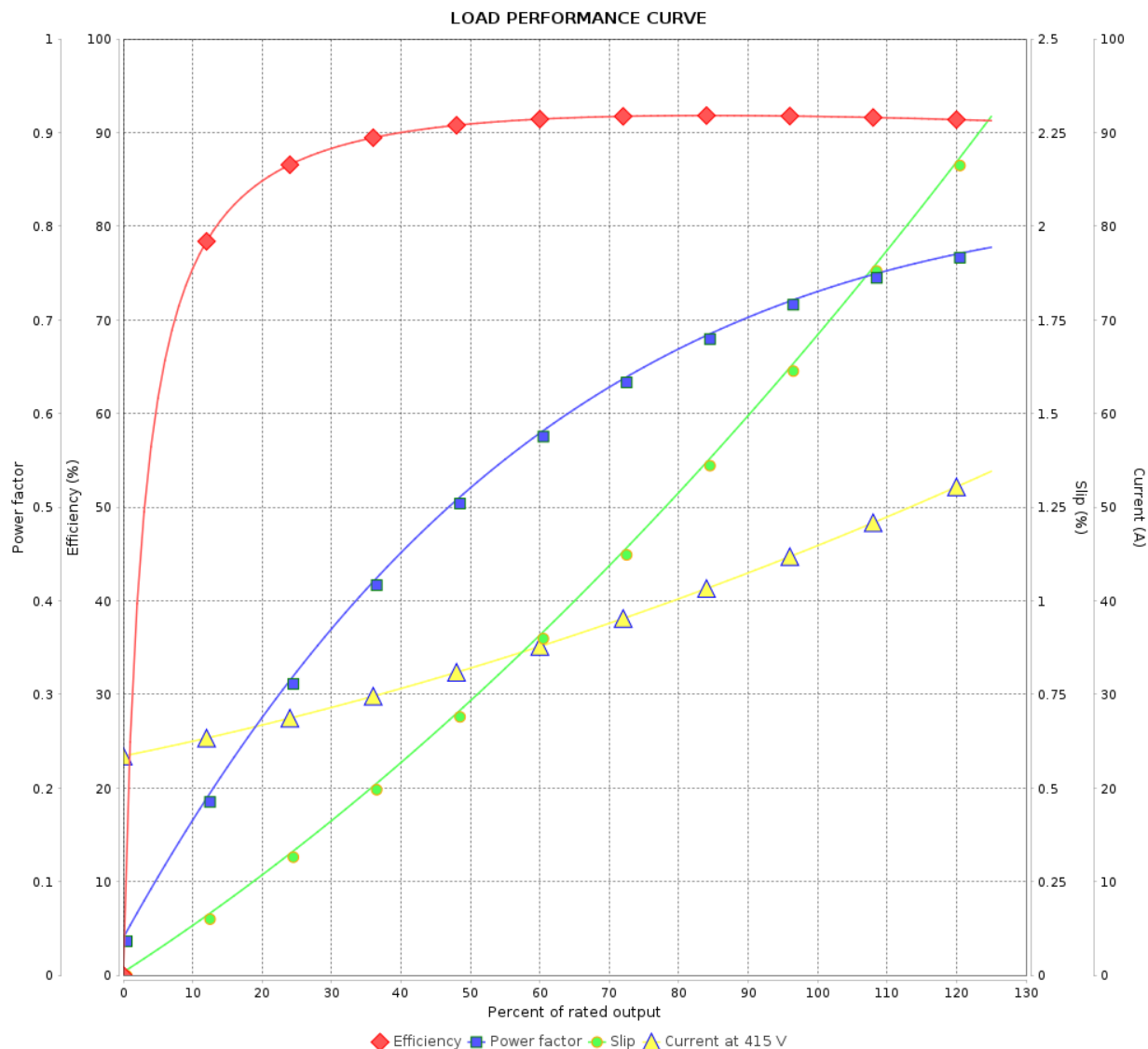
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 11355727



Performance : 415 V 50 Hz 8P IE3

Rated current	: 45.7 A	Moment of inertia (J)	: 1.22 kgm ²
LRC	: 7.1	Duty cycle	: Cont.(S1)
Rated torque	: 29.5 kgfm	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	: 1.00
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 737 rpm	Design	: B

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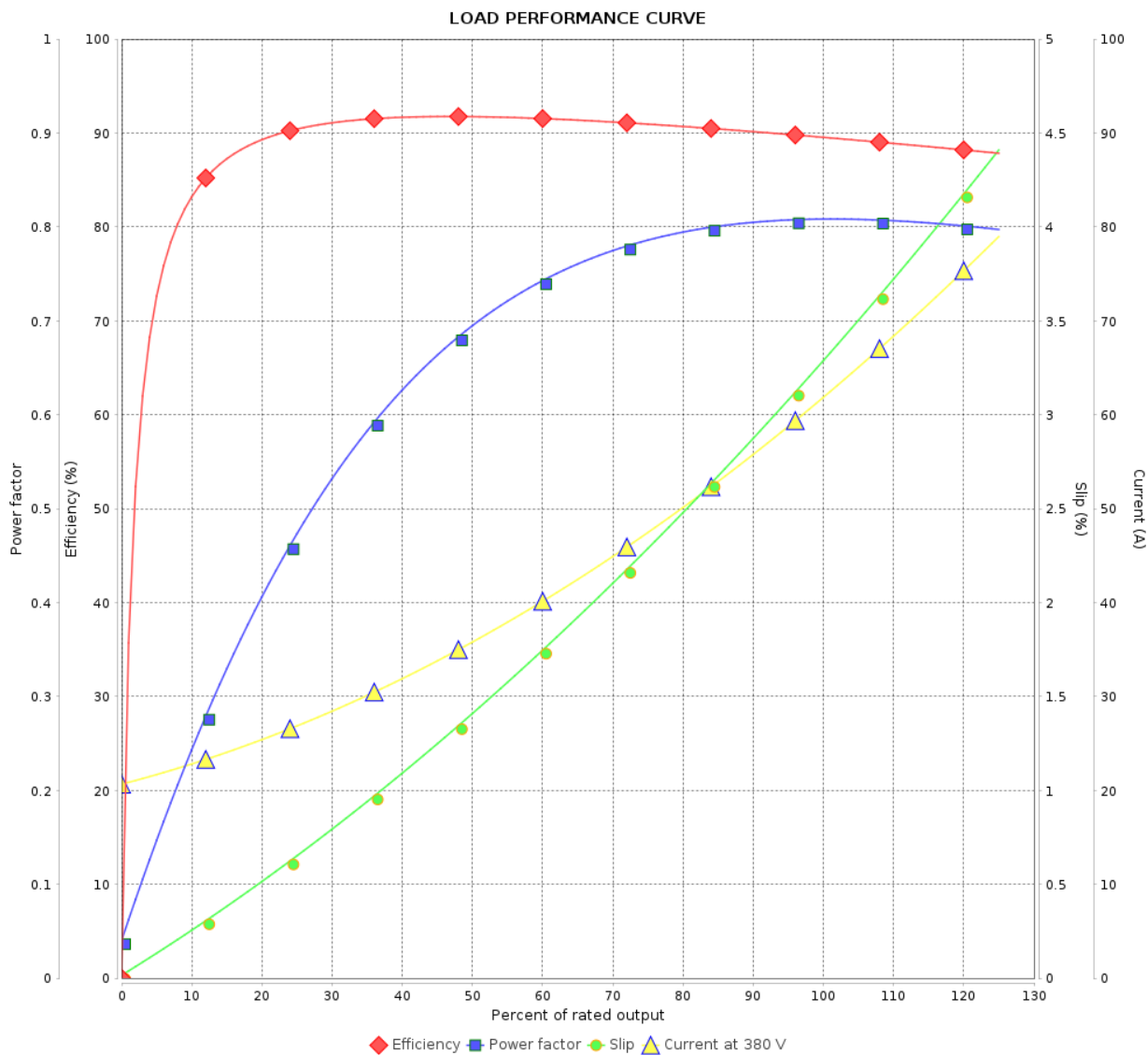
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 11355727



Performance : 380 V 50 Hz 8P IE1

Rated current : 62.9 A
LRC : 4.5
Rated torque : 40.0 kgfm
Locked rotor torque : 140 %
Breakdown torque : 180 %
Rated speed : 725 rpm

Moment of inertia (J) : 1.22 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 105 K
Design : B

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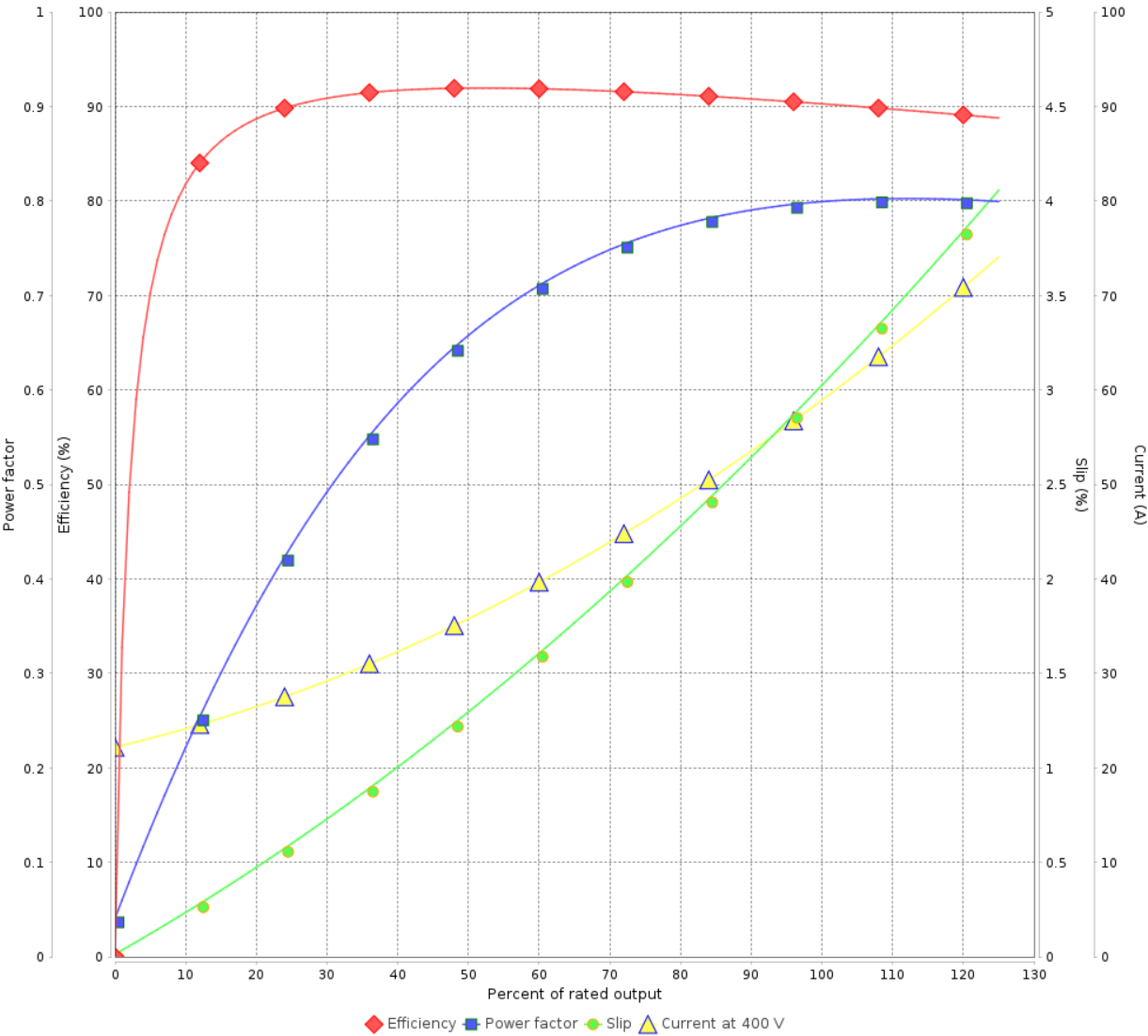
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase Product code : 11355727

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Performance : 400 V 50 Hz 8P IE2

Rated current	: 60.0 A	Moment of inertia (J)	: 1.22 kgm ²
LRC	: 5.0	Duty cycle	: Cont.(S1)
Rated torque	: 39.9 kgfm	Insulation class	: F
Locked rotor torque	: 160 %	Service factor	: 1.00
Breakdown torque	: 200 %	Temperature rise	: 105 K
Rated speed	: 727 rpm	Design	: B

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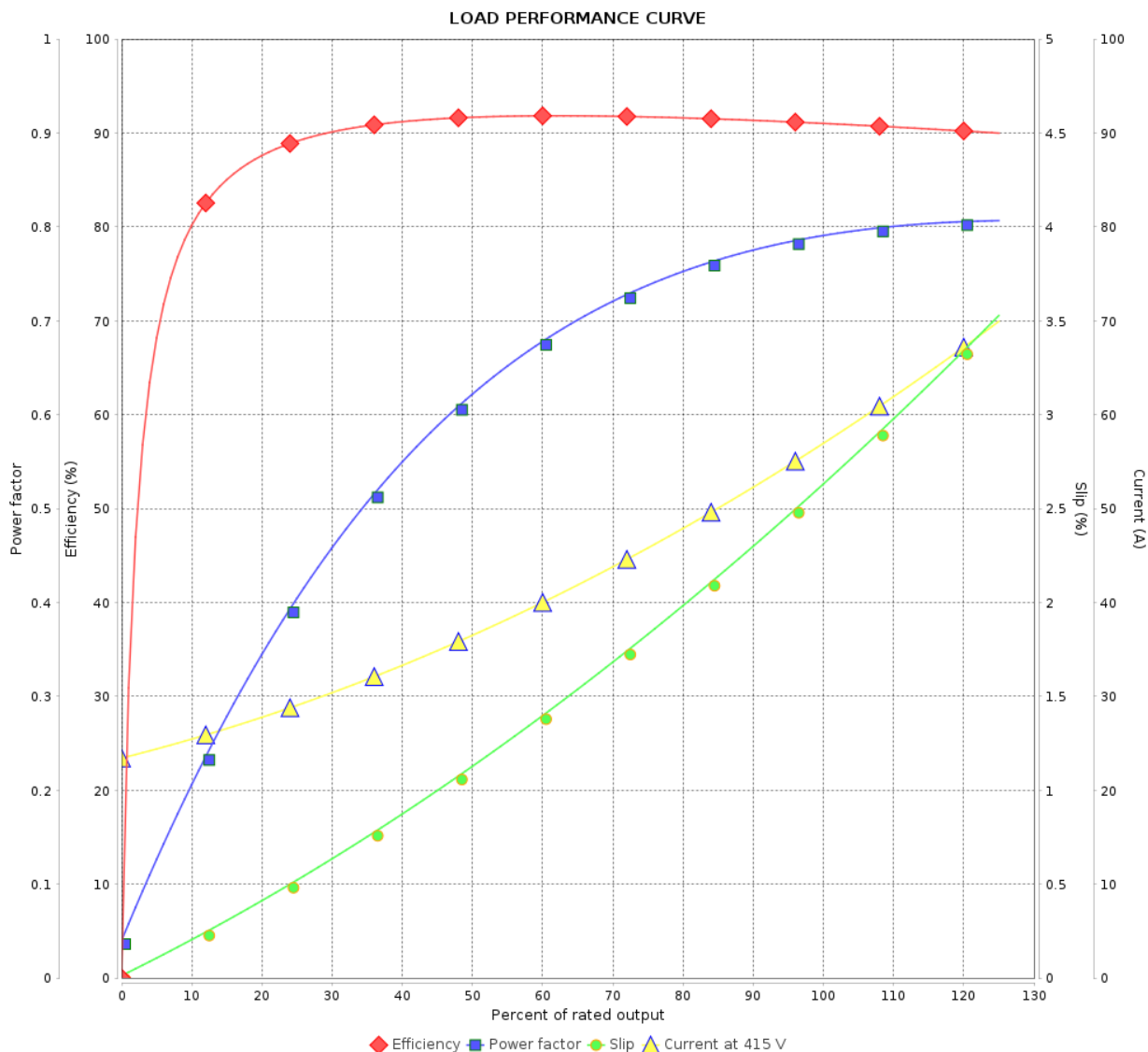
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 11355727

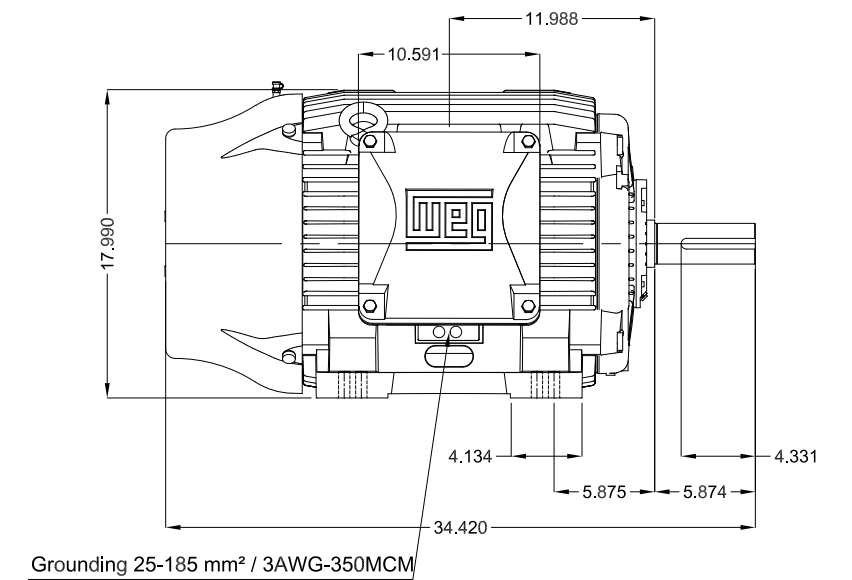
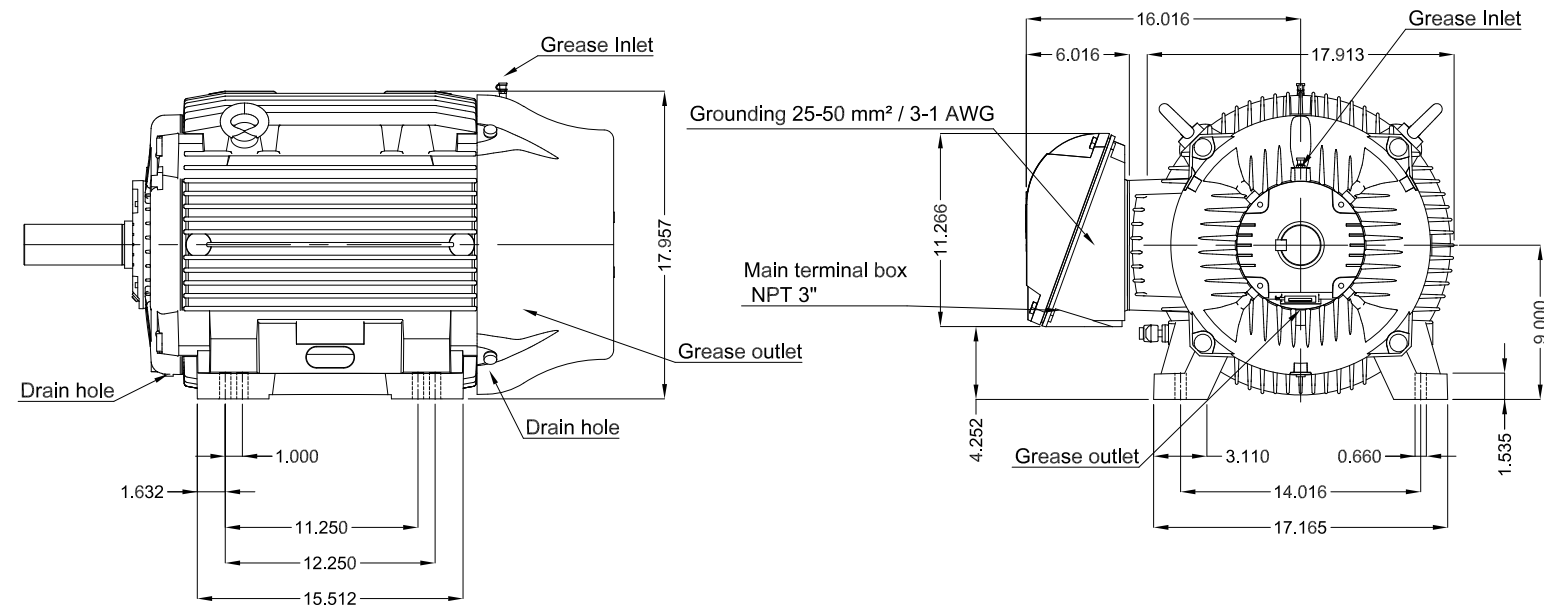


Performance : 415 V 50 Hz 8P IE2

Rated current : 58.1 A
LRC : 5.5
Rated torque : 39.8 kgfm
Locked rotor torque : 170 %
Breakdown torque : 210 %
Rated speed : 730 rpm

Moment of inertia (J) : 1.22 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 105 K
Design : B

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30 HP 6 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 364/5T IP55 TEFC				PREVIEW WDD 00							
CHECKED																	
RELEASED																	
REL. DATE																	
						SHEET				/							

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

DE Shaft End

0.625 10.625

2.3750 2.3740 2.020

DUNC 3/4"-10 WEG WPR-7339