

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase Product code : 11165648

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	: 407 kg
Protection degree	: IP55	Moment of inertia (J)	: 1.36 kgm ²
Design	: B		

Output [HP]	50	40	40	40	50	50	50
Poles	6	6	6	6	6	6	6
Frequency [Hz]	60	50	50	50	50	50	50
Rated voltage [V]	230/460	380	400	415	380	400	415
Rated current [A]	115/57.4	57.7	55.5	53.5	71.3	67.2	65.5
L. R. Amperes [A]	735/367	358	377	396	349	370	400
LRC [A]	6.4x(Code G)	6.2x(Code G)	6.8x(Code H)	7.4x(Code J)	4.9x(Code E)	5.5x(Code F)	6.1x(Code G)
No load current [A]	40.0/20.0	20.0	21.5	22.5	20.5	21.5	22.5
Rated speed [RPM]	1183	983	985	985	975	979	980
Slip [%]	1.42	1.70	1.50	1.50	2.50	2.10	2.00
Rated torque [kgfm]	30.7	29.5	29.5	29.5	37.2	37.1	37.0
Locked rotor torque [%]	200	200	229	250	160	180	200
Breakdown torque [%]	240	240	260	290	190	210	229
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	80 K	80 K
Locked rotor time	32s (cold) 18s (hot)	27s (cold) 15s (hot)	27s (cold) 15s (hot)	27s (cold) 15s (hot)	27s (cold) 15s (hot)	27s (cold) 15s (hot)	27s (cold) 15s (hot)
Noise level ²	66.0 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%	93.6	92.7	92.7	92.6	93.0	93.0
	75%	94.1	92.8	93.1	93.1	92.4	93.0
	100%	94.1	92.9	92.9	92.9	91.7	92.4
Power Factor	25%						
	50%	0.74	0.72	0.70	0.66	0.77	0.74
	75%	0.83	0.82	0.80	0.79	0.84	0.83
	100%	0.86	0.85	0.84	0.84	0.86	0.85

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

Losses (%)	P1 (0,9;1,0)	6.2	6.2	6.2	6.2	6.2	6.2
	P2 (0,5;1,0)	5.2	5.2	5.2	5.2	5.2	5.2
	P3 (0,25;1,0)	4.6	4.6	4.6	4.6	4.6	4.6
	P4 (0,9;0,5)	2.8	2.8	2.8	2.8	2.8	2.8
	P5 (0,5;0,5)	1.9	1.9	1.9	1.9	1.9	1.9
	P6 (0,5;0,25)	1.2	1.2	1.2	1.2	1.2	1.2
	P7 (0,25;0,25)	0.8	0.8	0.8	0.8	0.8	0.8

Bearing type	Drive end	Non drive end	Foundation loads
	: 6314 C3	: 6314 C3	
	Sealing	WSeal	
	: WSeal	: WSeal	
	Lubrication interval	17000 h	
Lubricant amount	: 17000 h	: 17000 h	Max. traction : 753 kgf
	: 27 g	: 27 g	
	: 27 g	: 27 g	
Lubricant type		Mobil Polyrex EM	Max. compression : 1160 kgf

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.

Rev.	Changes Summary			Performed	Checked	Date
Performed by						
Checked by						
Date	21/10/2024				Page 1 / 9	Revision

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Notes
USABLE @208V 127A SF 1.10 SFA 140A

Rev.	Changes Summary		Performed	Checked	Date
Performed by			Page 2 / 9		Revision
Checked by					
Date	21/10/2024				

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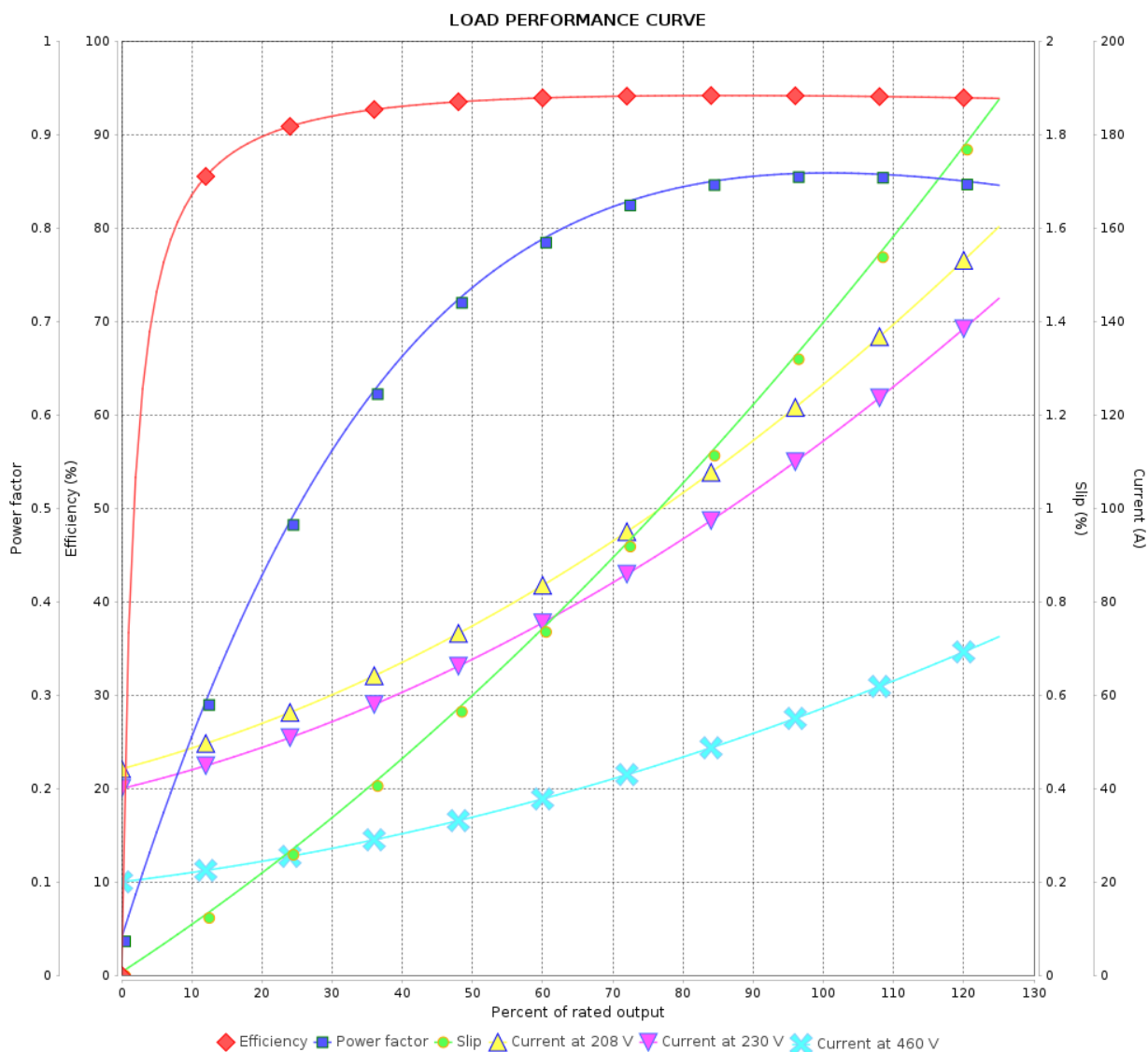
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 11165648



Performance : 230/460 V 60 Hz 6P

Rated current : 115/57.4 A
LRC : 6.4
Rated torque : 30.7 kgfm
Locked rotor torque : 200 %
Breakdown torque : 240 %
Rated speed : 1183 rpm

Moment of inertia (J) : 1.36 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : B

Rev.	Changes Summary		Performed	Checked	Date
Performed by				Page 3 / 9	Revision
Checked by					
Date	21/10/2024				

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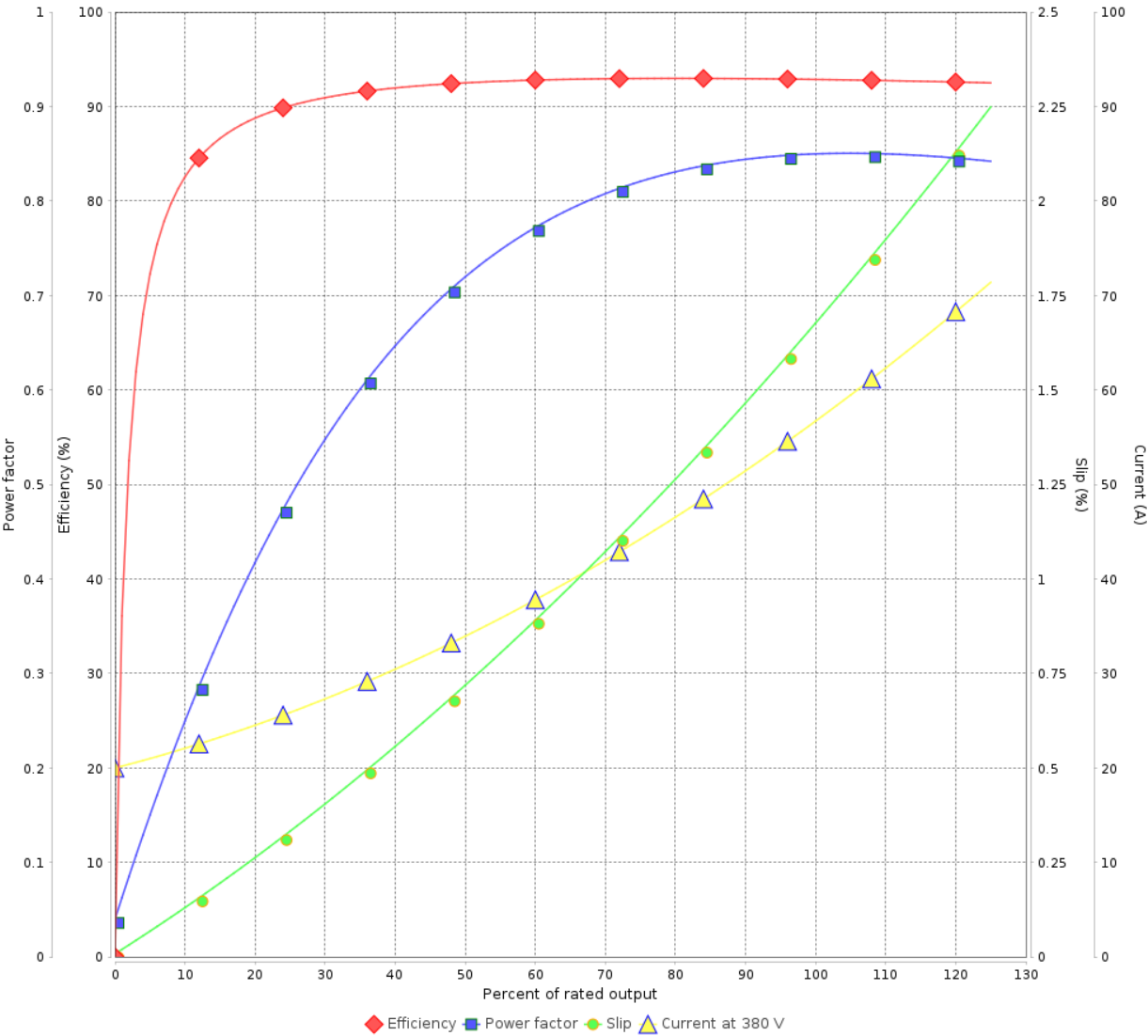
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase Product code : 11165648

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Performance : 380 V 50 Hz 6P IE3

Rated current	: 57.7 A	Moment of inertia (J)	: 1.36 kgm ²
LRC	: 6.2	Duty cycle	: Cont.(S1)
Rated torque	: 29.5 kgfm	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.00
Breakdown torque	: 240 %	Temperature rise	: 80 K
Rated speed	: 983 rpm	Design	: B

Rev.	Changes Summary		Performed	Checked	Date
Performed by		Page 4 / 9Revision			
Checked by					
Date	21/10/2024				

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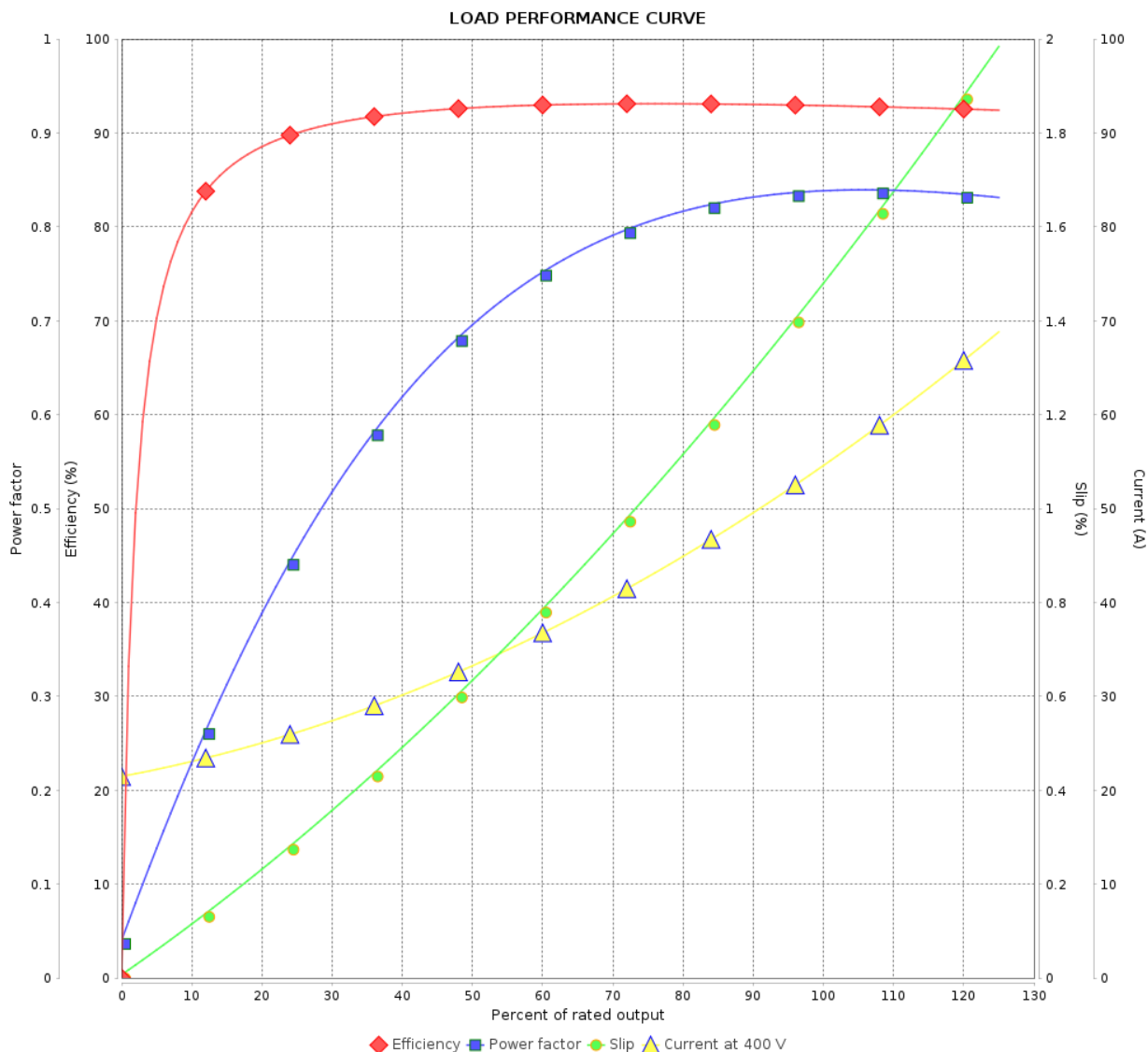
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 11165648



Performance : 400 V 50 Hz 6P IE3

Rated current : 55.5 A
LRC : 6.8
Rated torque : 29.5 kgfm
Locked rotor torque : 229 %
Breakdown torque : 260 %
Rated speed : 985 rpm

Moment of inertia (J) : 1.36 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page 5 / 9Revision		
Checked by				
Date	21/10/2024			

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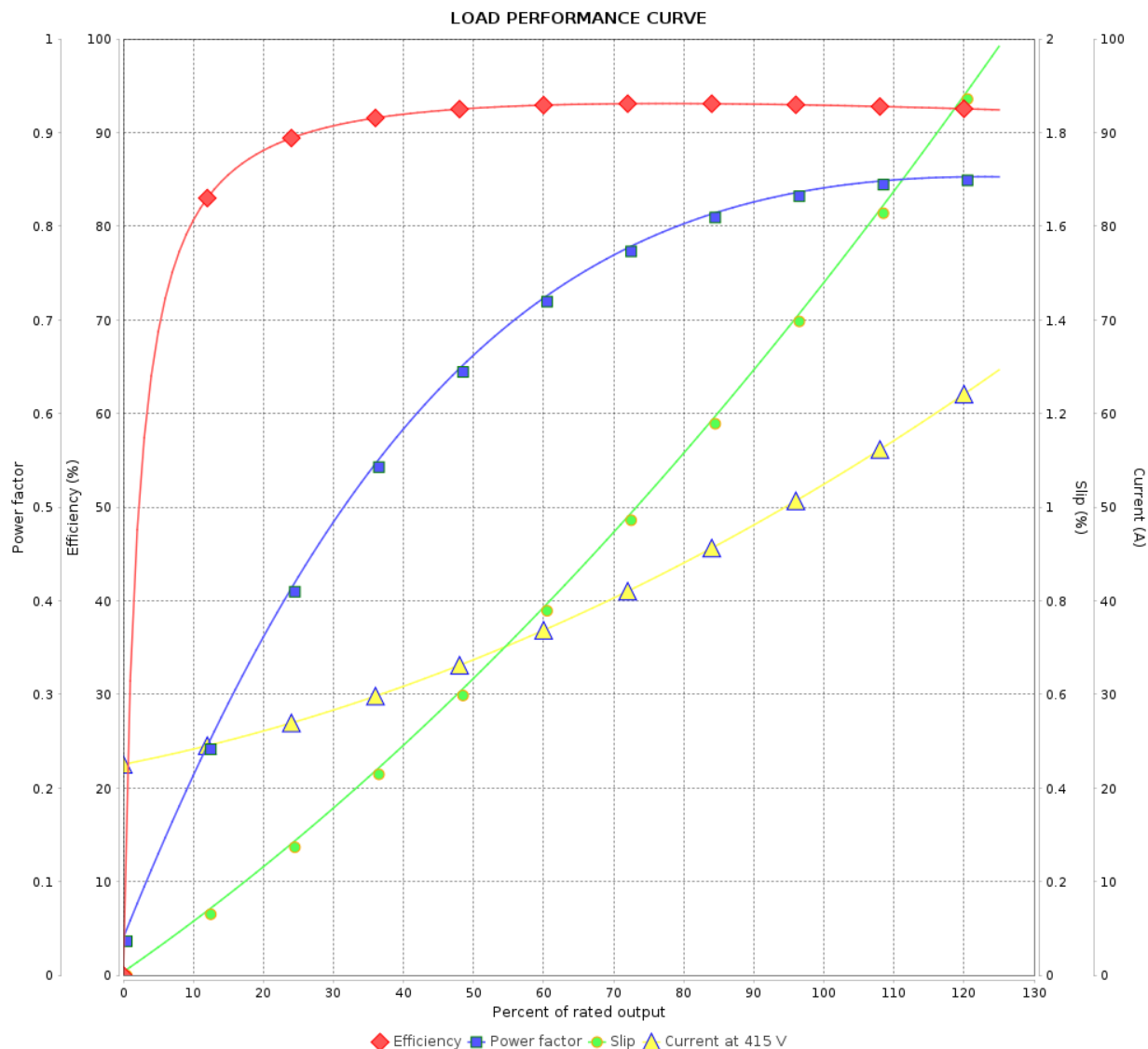
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 11165648



Performance : 415 V 50 Hz 6P IE3

Rated current : 53.5 A
LRC : 7.4
Rated torque : 29.5 kgfm
Locked rotor torque : 250 %
Breakdown torque : 290 %
Rated speed : 985 rpm

Moment of inertia (J) : 1.36 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

Rev.	Changes Summary		Performed	Checked	Date
Performed by				Page	Revision
Checked by				6 / 9	
Date					

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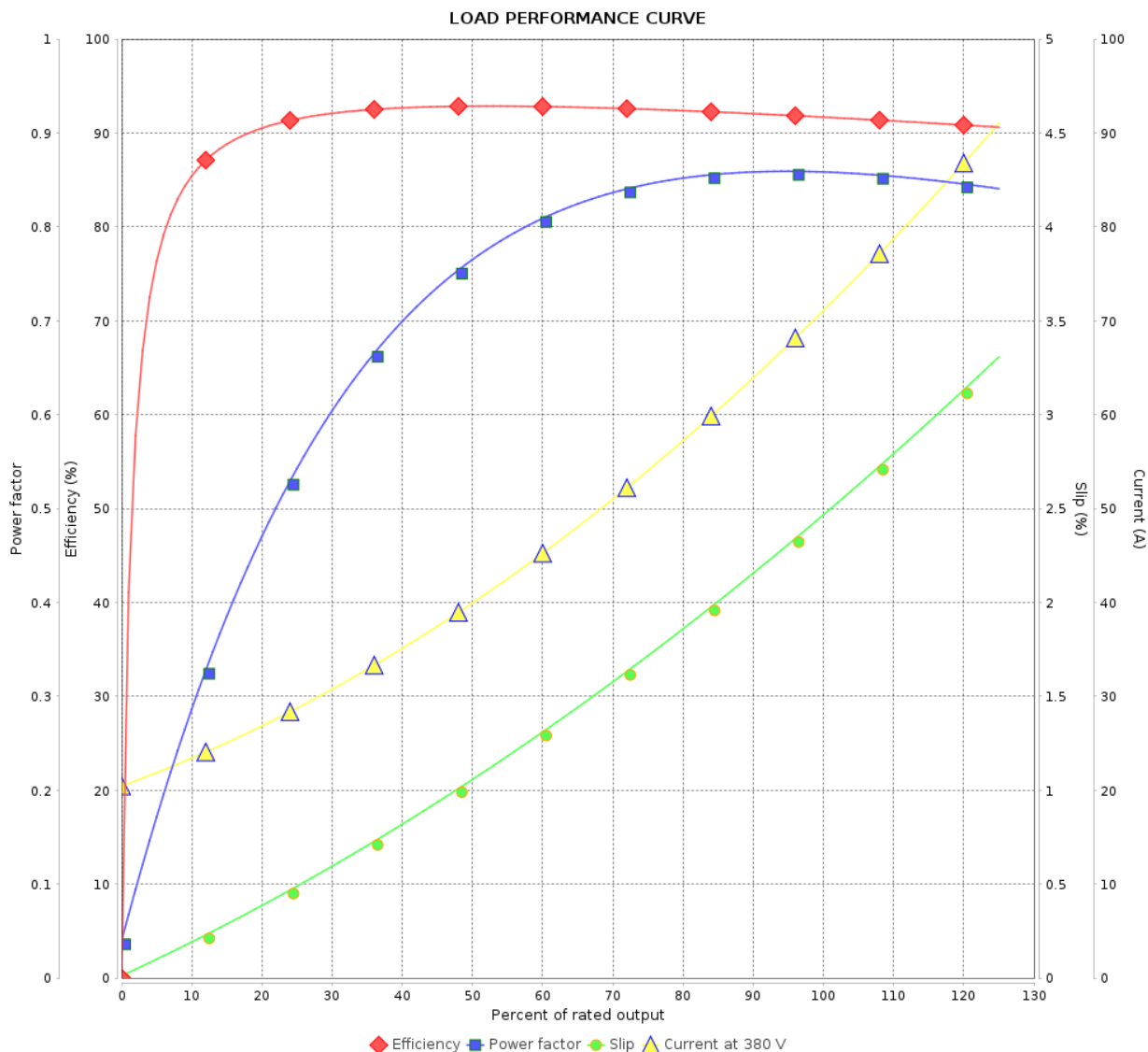
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 11165648



Performance : 380 V 50 Hz 6P IE1

Rated current : 71.3 A
LRC : 4.9
Rated torque : 37.2 kgfm
Locked rotor torque : 160 %
Breakdown torque : 190 %
Rated speed : 975 rpm

Moment of inertia (J) : 1.36 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 105 K
Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page 7 / 9Revision		
Checked by				
Date	21/10/2024			

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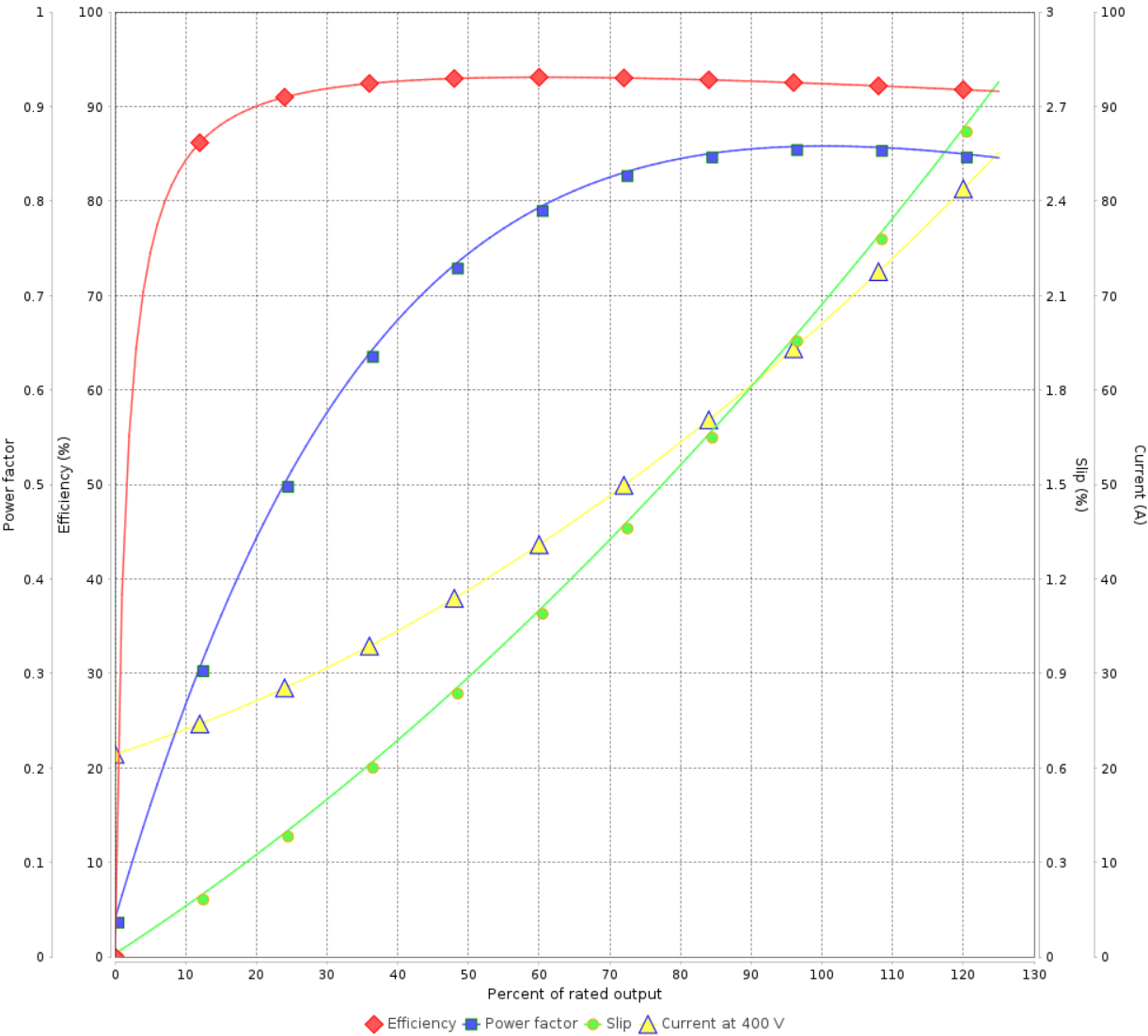
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase Product code : 11165648

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Performance : 400 V 50 Hz 6P IE2

Rated current	: 67.2 A	Moment of inertia (J)	: 1.36 kgm ²
LRC	: 5.5	Duty cycle	: Cont.(S1)
Rated torque	: 37.1 kgfm	Insulation class	: F
Locked rotor torque	: 180 %	Service factor	: 1.00
Breakdown torque	: 210 %	Temperature rise	: 80 K
Rated speed	: 979 rpm	Design	: B

Rev.	Changes Summary		Performed	Checked	Date
Performed by				Page 8 / 9	Revision
Checked by					
Date	21/10/2024				

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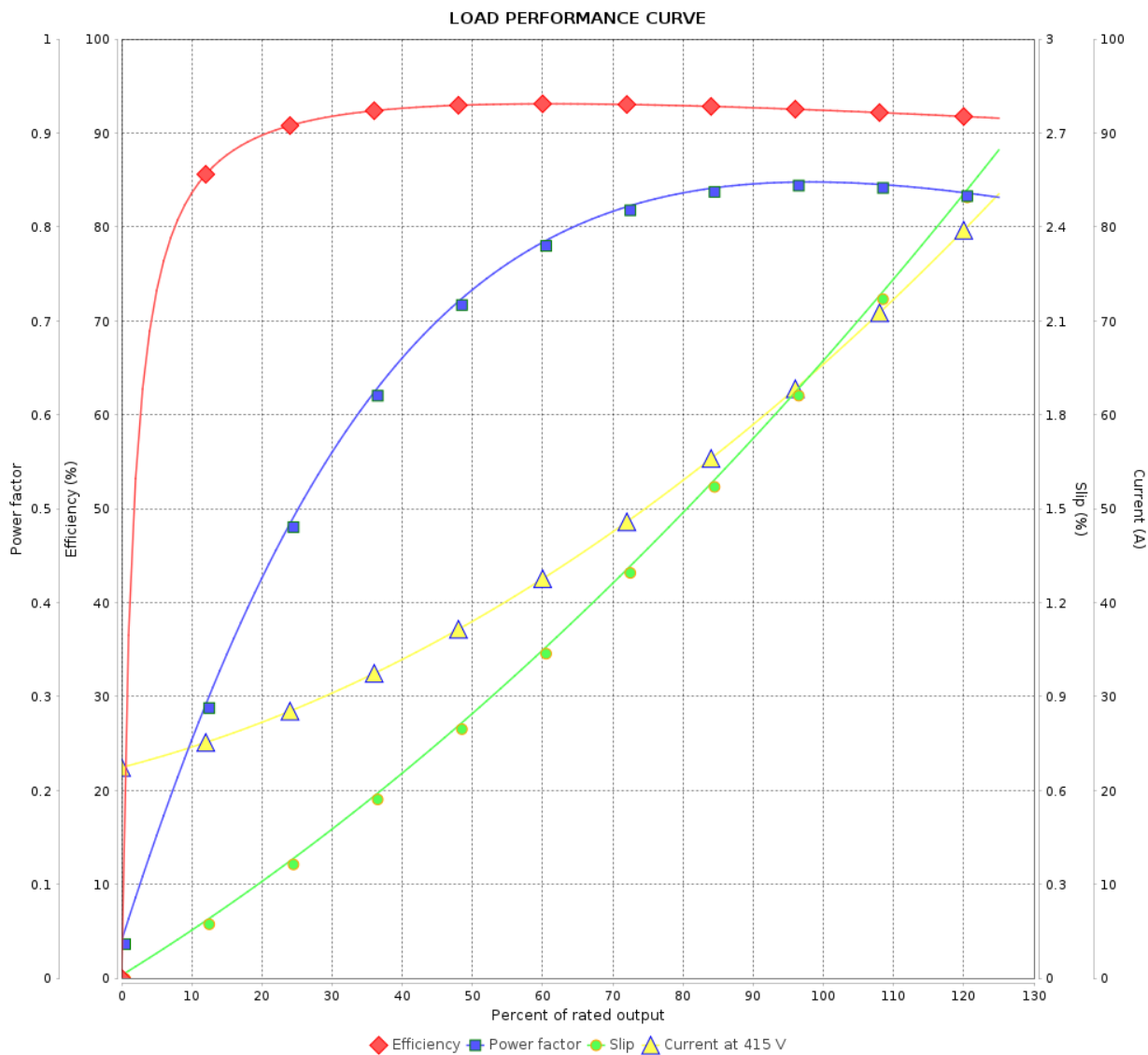
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 11165648

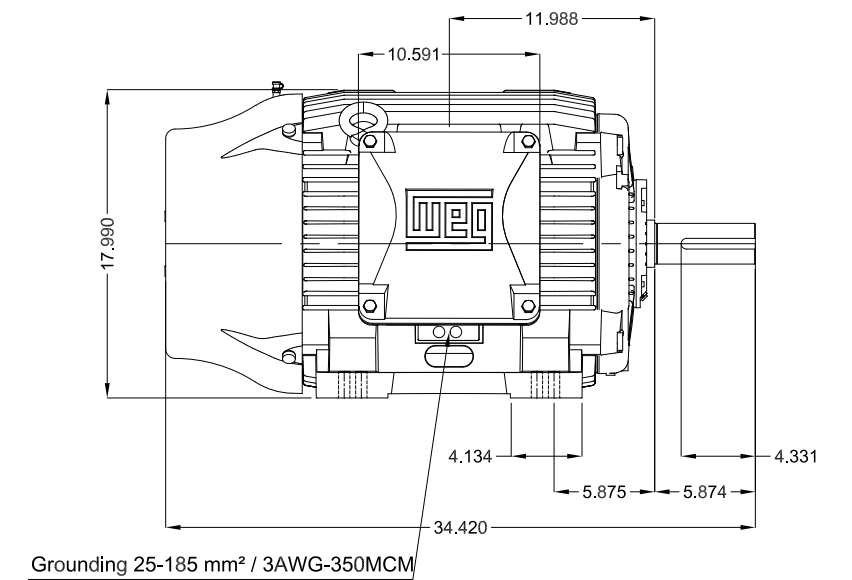
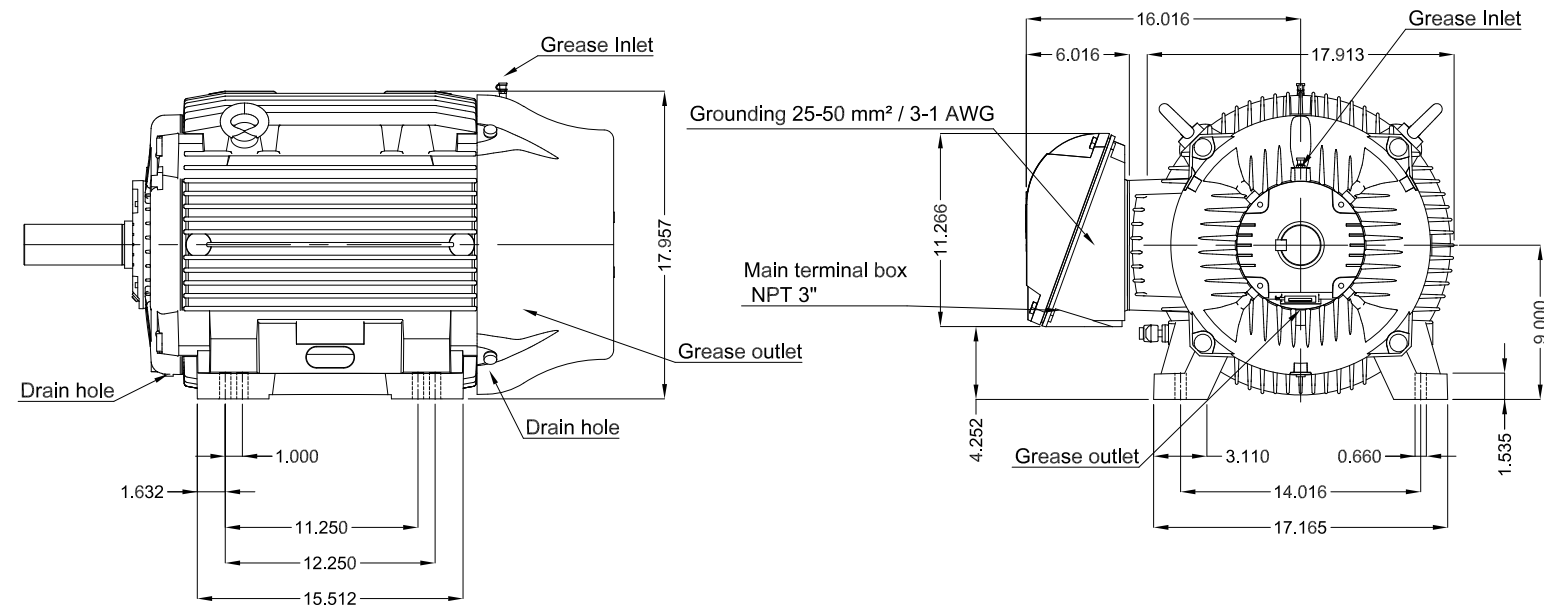


Performance : 415 V 50 Hz 6P IE2

Rated current : 65.5 A
LRC : 6.1
Rated torque : 37.0 kgfm
Locked rotor torque : 200 %
Breakdown torque : 229 %
Rated speed : 980 rpm

Moment of inertia (J) : 1.36 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

Rev.	Changes Summary		Performed	Checked	Date
Performed by				Page 9 / 9	Revision
Checked by					
Date	21/10/2024				



50 HP 06 Poles 60 Hz										A
				HYBRISUSER						
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										
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REL. DATE							SHEET		/	