

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase Product code : 11355267

Frame	: 364/5TC	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	: 428 kg
Protection degree	: IP55	Moment of inertia (J)	: 0.9798 kgm ²
Design	: B		

Output [HP]	75	60	60	60	75	75	75
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]	174/87.2	88.5	84.9	82.7	106	102	98.7
L. R. Amperes [A]	1116/558	620	637	662	541	571	602
LRC [A]	6.4x(Code G)	7.0x(Code H)	7.5x(Code J)	8.0x(Code J)	5.1x(Code E)	5.6x(Code F)	6.1x(Code G)
No load current [A]	66.0/33.0	33.0	35.0	38.0	33.0	35.0	38.0
Rated speed [RPM]	1780	1480	1480	1485	1470	1475	1480
Slip [%]	1.11	1.33	1.33	1.00	2.00	1.67	1.33
Rated torque [kgfm]	30.6	29.4	29.4	29.3	37.0	36.9	36.8
Locked rotor torque [%]	240	210	240	260	170	200	210
Breakdown torque [%]	260	250	280	310	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	25s (cold) 14s (hot)	18s (cold) 10s (hot)	18s (cold) 10s (hot)	18s (cold) 10s (hot)	18s (cold) 10s (hot)	18s (cold) 10s (hot)	18s (cold) 10s (hot)
Noise level ²	67.0 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%	0.000			0.000		
	50%	94.5	93.7	93.6	93.5	94.5	94.1
	75%	95.0	94.2	94.2	94.2	94.1	94.5
	100%	95.4	94.2	94.4	94.6	93.6	94.5
Power Factor	25%	0.00			0.00		
	50%	0.68	0.68	0.64	0.61	0.75	0.67
	75%	0.78	0.78	0.75	0.73	0.82	0.78
	100%	0.83	0.82	0.81	0.80	0.84	0.82

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

Losses (%)	P1 (0,9;1,0)	4.7	4.7	4.7	4.7	4.7	4.7
	P2 (0,5;1,0)	3.8	3.8	3.8	3.8	3.8	3.8
	P3 (0,25;1,0)	3.5	3.5	3.5	3.5	3.5	3.5
	P4 (0,9;0,5)	2.4	2.4	2.4	2.4	2.4	2.4
	P5 (0,5;0,5)	1.6	1.6	1.6	1.6	1.6	1.6
	P6 (0,5;0,25)	1.1	1.1	1.1	1.1	1.1	1.1
	P7 (0,25;0,25)	0.7	0.7	0.7	0.7	0.7	0.7

Bearing type	: 6314 C3	Non drive end	6314 C3	Foundation loads	
Sealing	: Oil Seal		Oil Seal	Max. traction	: 777 kgf
Lubrication interval	: 12000 h		12000 h	Max. compression	: 1205 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.

Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by				
Date	19/10/2024			

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Three Phase Induction Motor - Squirrel Cage



Customer :

Notes
USABLE @208V 186A SF 1.10 SFA 205A

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LOAD PERFORMANCE CURVE

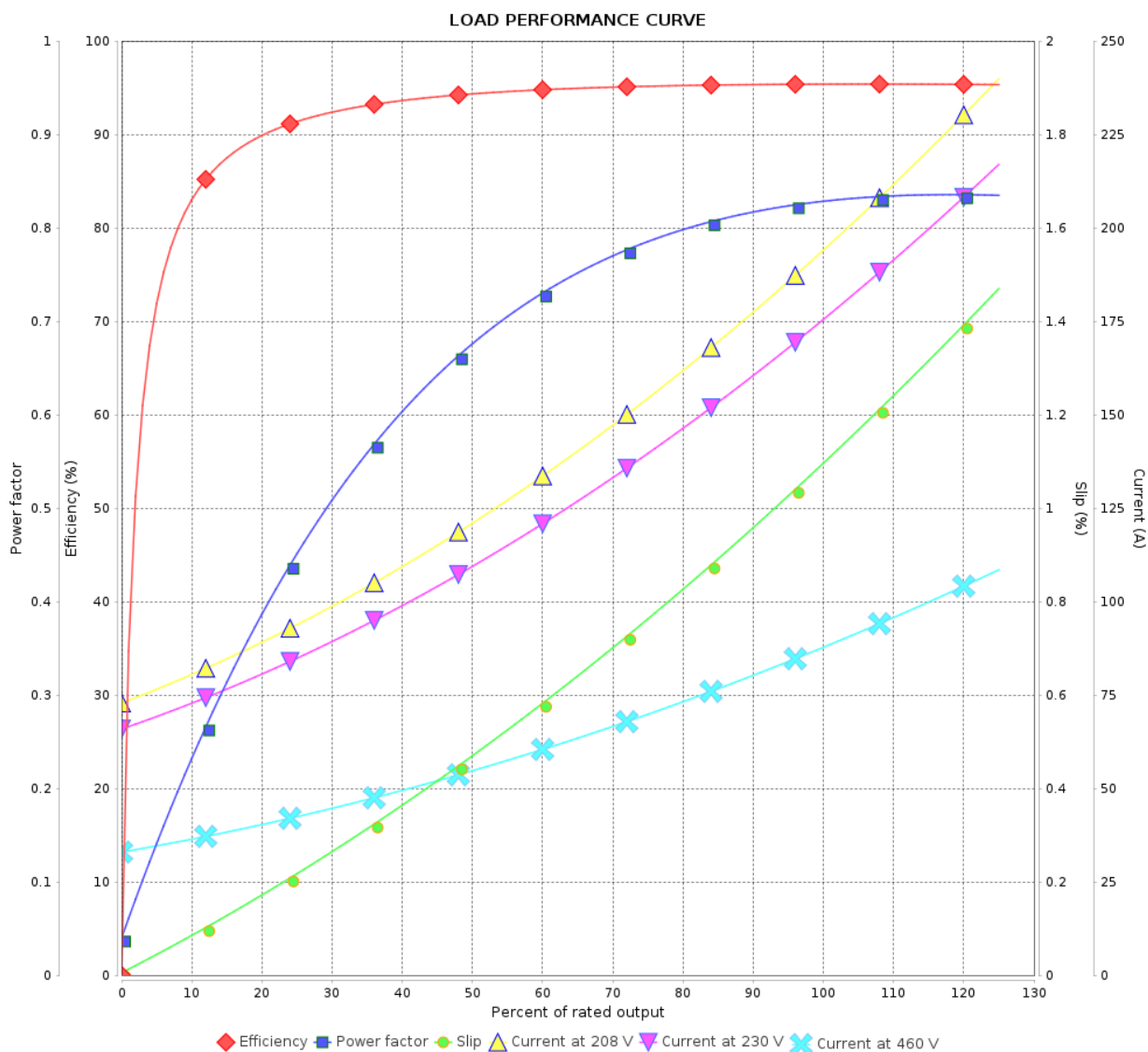
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 11355267



Performance : 230/460 V 60 Hz 4P

Rated current : 174/87.2 A
LRC : 6.4
Rated torque : 30.6 kgfm
Locked rotor torque : 240 %
Breakdown torque : 260 %
Rated speed : 1780 rpm

Moment of inertia (J) : 0.9798 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : B

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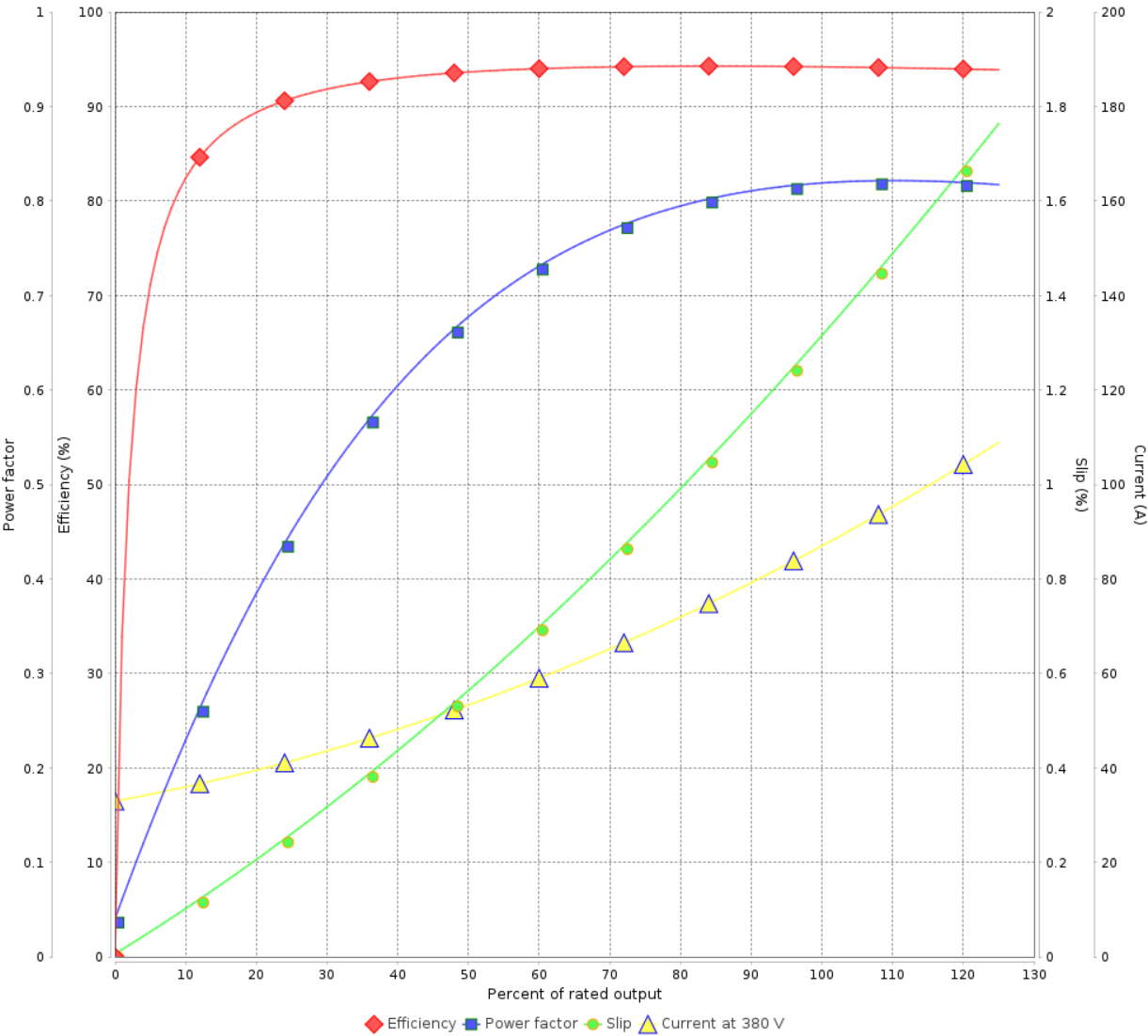
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase Product code : 11355267

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Performance : 380 V 50 Hz 4P IE3			
Rated current	: 88.5 A	Moment of inertia (J)	: 0.9798 kgm ²
LRC	: 7.0	Duty cycle	: Cont.(S1)
Rated torque	: 29.4 kgfm	Insulation class	: F
Locked rotor torque	: 210 %	Service factor	: 1.00
Breakdown torque	: 250 %	Temperature rise	: 80 K
Rated speed	: 1480 rpm	Design	: B

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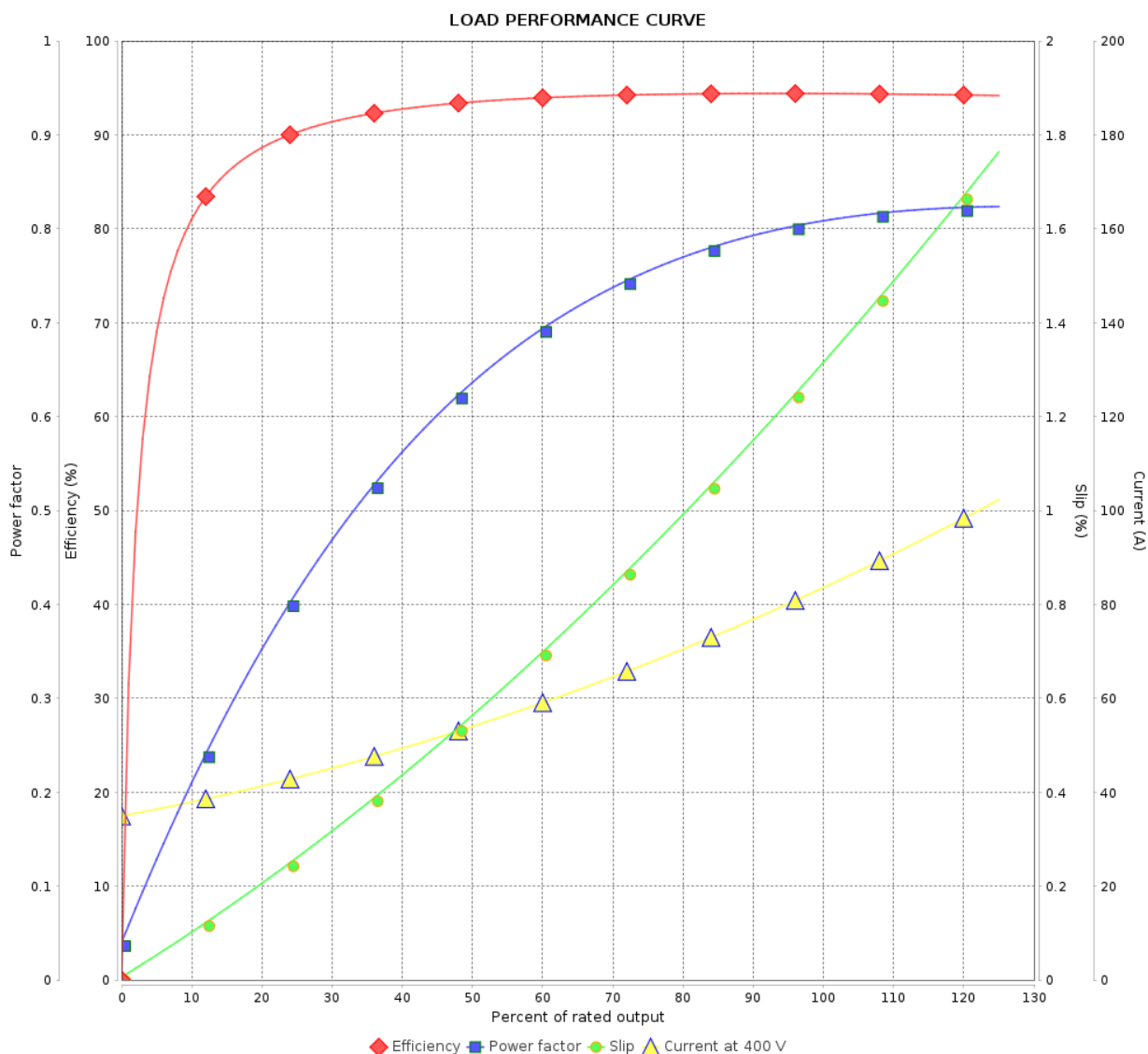
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 11355267



Performance : 400 V 50 Hz 4P IE3

Rated current : 84.9 A
LRC : 7.5
Rated torque : 29.4 kgfm
Locked rotor torque : 240 %
Breakdown torque : 280 %
Rated speed : 1480 rpm

Moment of inertia (J) : 0.9798 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

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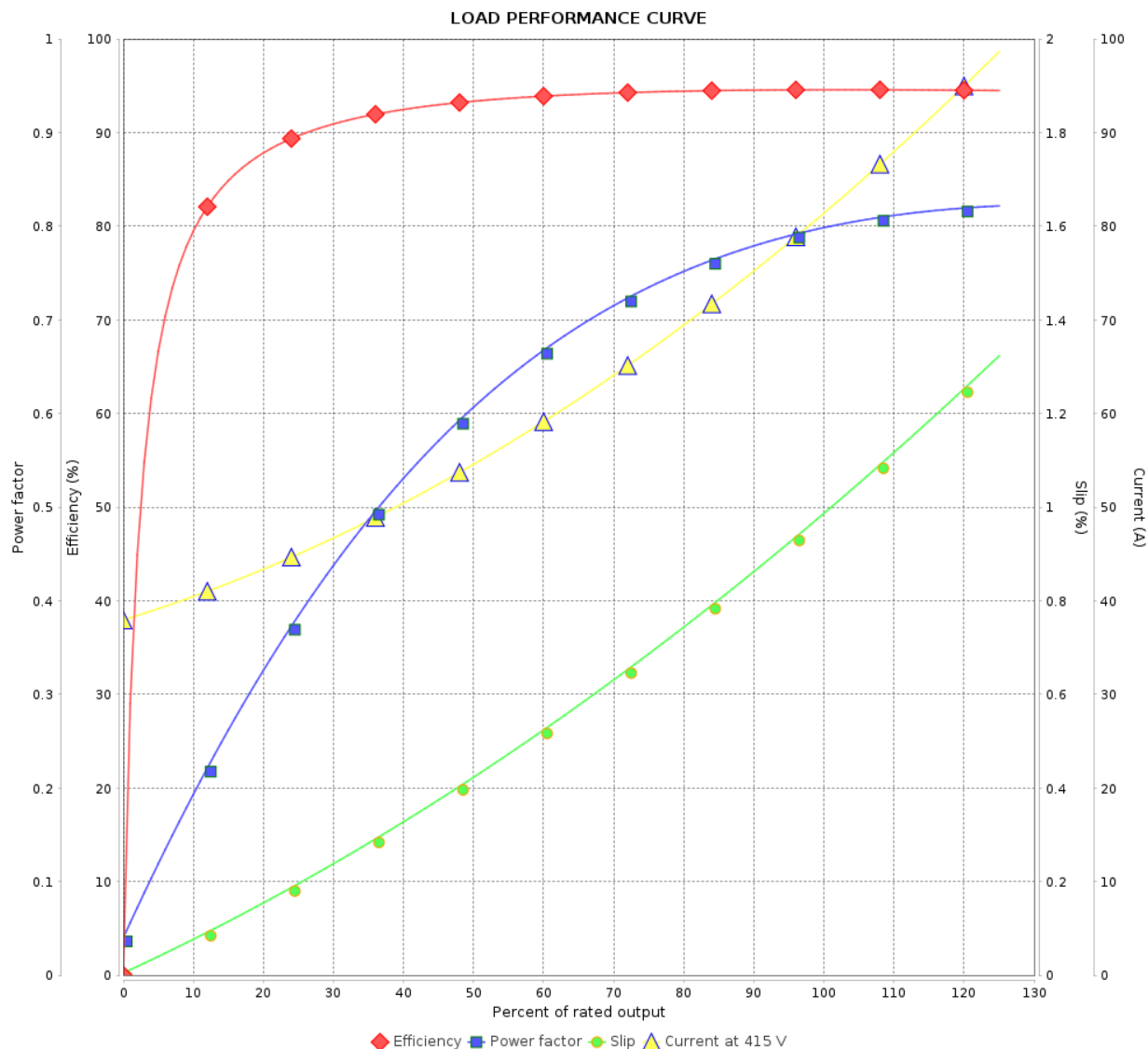
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 11355267



Performance : 415 V 50 Hz 4P IE3

Rated current : 82.7 A
LRC : 8.0
Rated torque : 29.3 kgfm
Locked rotor torque : 260 %
Breakdown torque : 310 %
Rated speed : 1485 rpm

Moment of inertia (J) : 0.9798 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

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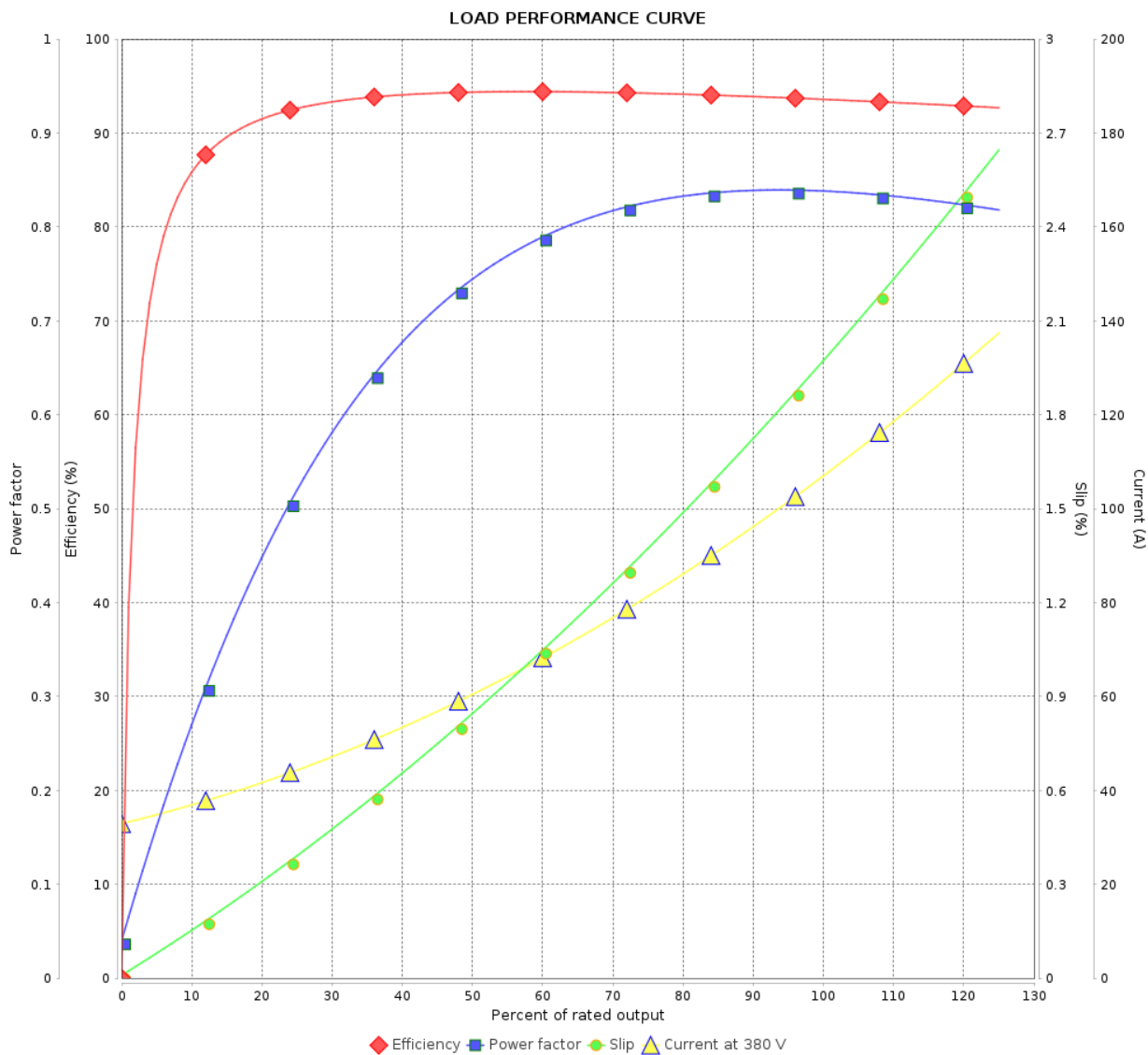
Three Phase Induction Motor - Squirrel Cage



Customer :

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Three-Phase

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Performance : 380 V 50 Hz 4P IE2

Rated current : 106 A
LRC : 5.1
Rated torque : 37.0 kgfm
Locked rotor torque : 170 %
Breakdown torque : 200 %
Rated speed : 1470 rpm

Moment of inertia (J) : 0.9798 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 105 K
Design : B

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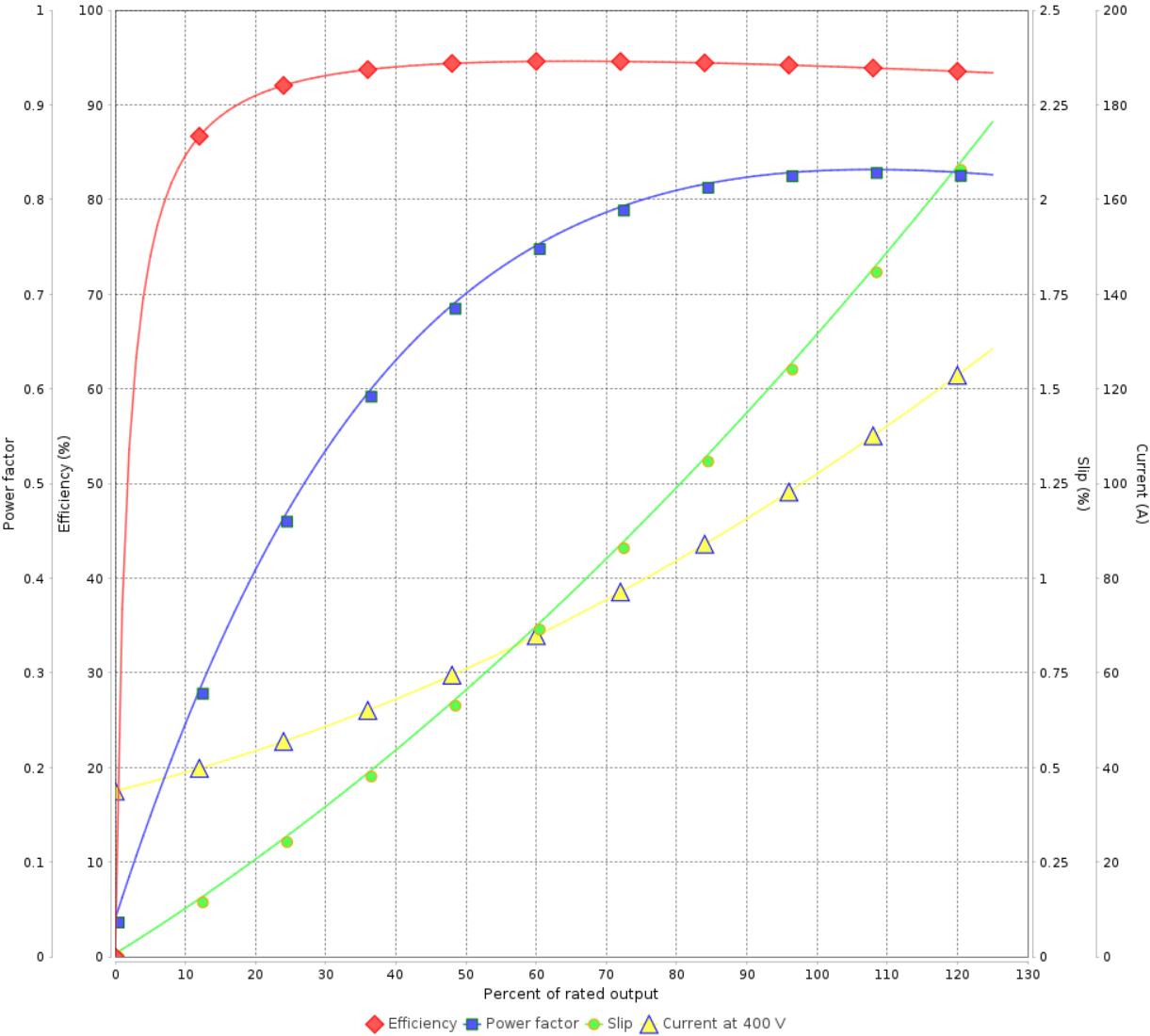
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase Product code : 11355267

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Performance : 400 V 50 Hz 4P IE2			
Rated current	: 102 A	Moment of inertia (J)	: 0.9798 kgm ²
LRC	: 5.6	Duty cycle	: Cont.(S1)
Rated torque	: 36.9 kgfm	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.00
Breakdown torque	: 220 %	Temperature rise	: 105 K
Rated speed	: 1475 rpm	Design	: B

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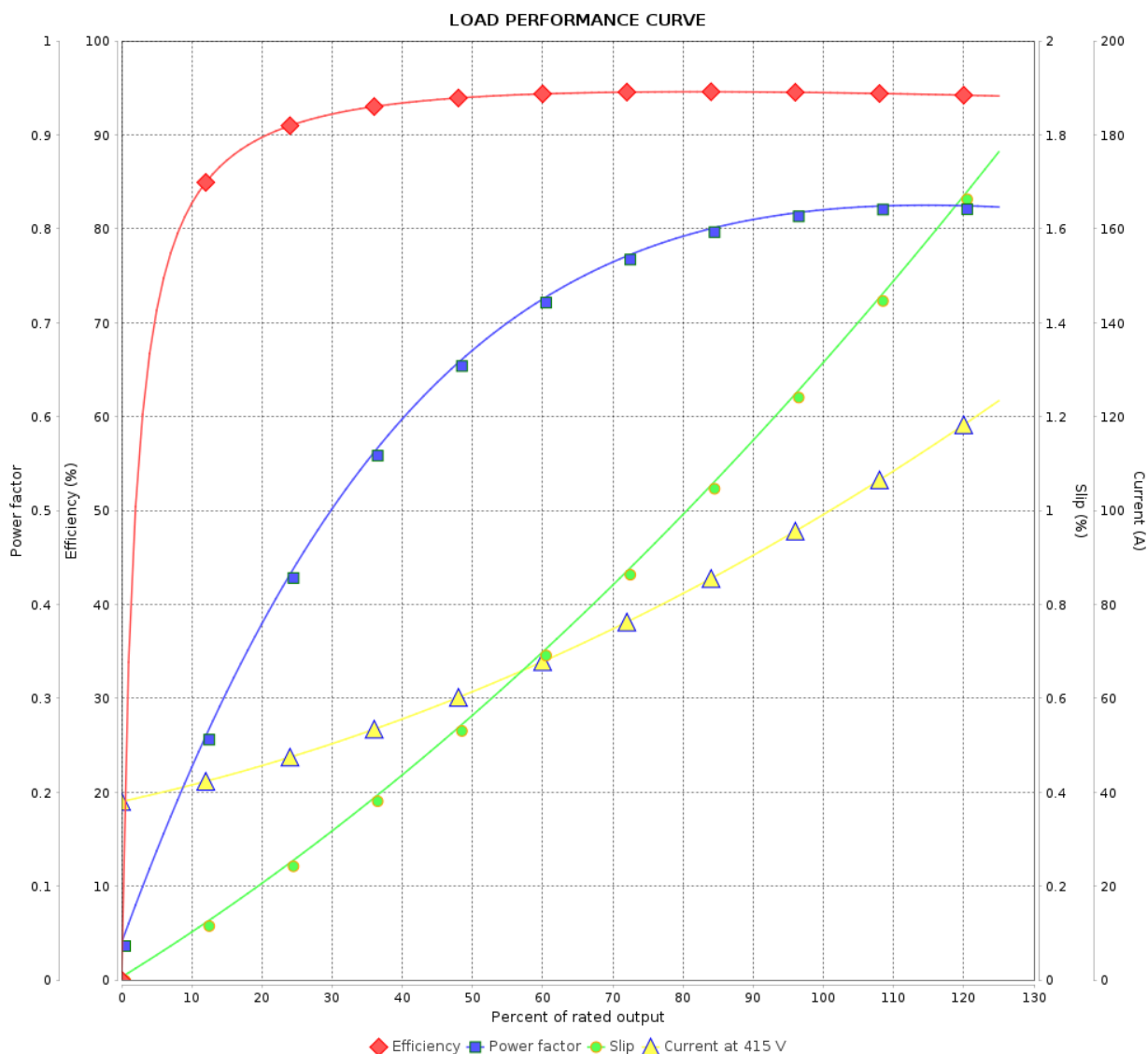
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Three-Phase

Product code : 11355267

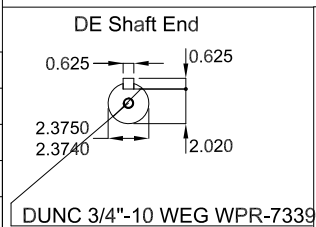
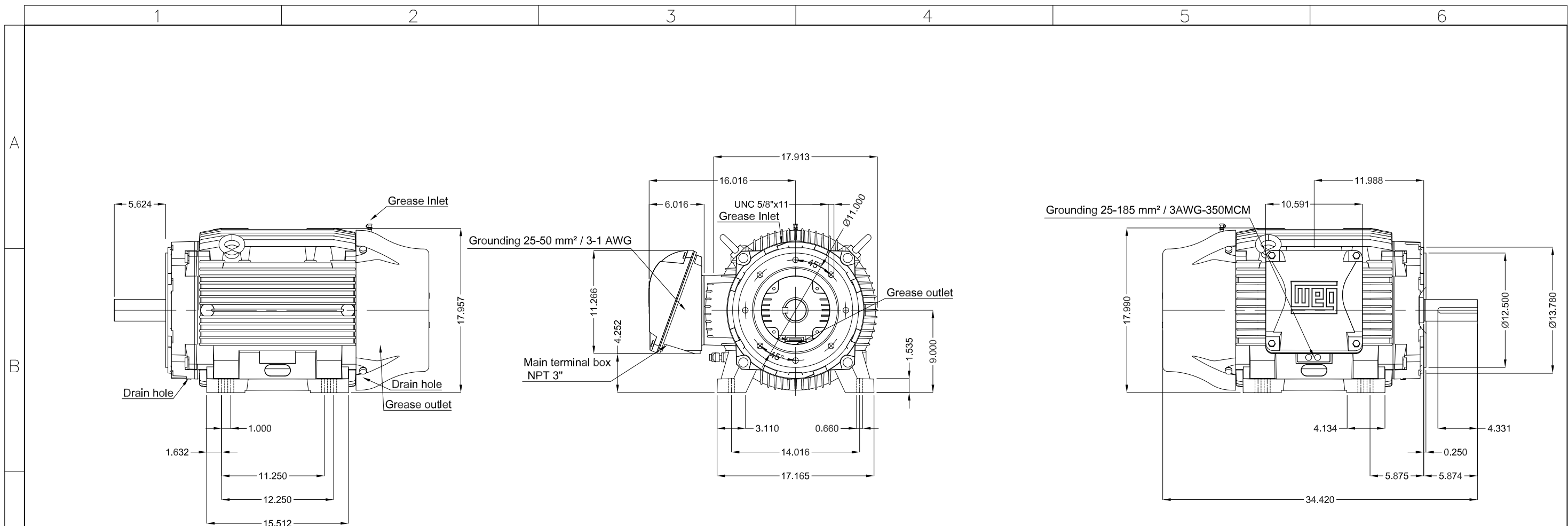


Performance : 415 V 50 Hz 4P IE2

Rated current : 98.7 A
LRC : 6.1
Rated torque : 36.8 kgfm
Locked rotor torque : 210 %
Breakdown torque : 240 %
Rated speed : 1480 rpm

Moment of inertia (J) : 0.9798 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 105 K
Design : B

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75 HP 04 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 364/5TC IP55 TEFC				PREVIEW WDD 00				
CHECKED											
RELEASED											
REL. DATE											
						SHEET		/			