

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase Product code : 11442886

Frame : 324/6T	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 : 268 kg
Protection degree : IP55	Moment of inertia (J) : 0.5561 kgm ²
Design : B	

Output [HP]	30	25	25	25	30	30	30
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]	72.4/36.2	36.9	36.2	35.4	43.7	41.7	40.7
L. R. Amperes [A]	449/224	214	228	237	214	225	236
LRC [A]	6.2x(Code G)	5.8x(Code G)	6.3x(Code H)	6.7x(Code H)	4.9x(Code E)	5.4x(Code F)	5.8x(Code G)
No load current [A]	29.0/14.5	14.0	15.0	16.0	14.0	15.0	16.0
Rated speed [RPM]	1180	975	980	980	970	975	980
Slip [%]	1.67	2.50	2.00	2.00	3.00	2.50	2.00
Rated torque [kgfm]	18.5	18.5	18.5	18.4	22.4	22.3	22.2
Locked rotor torque [%]	220	190	220	240	160	180	200
Breakdown torque [%]	240	229	260	280	200	220	240
Service factor	1.25	1.00	1.15	1.15	1.00	1.15	1.15
Temperature rise	80 K	80 K	80 K	80 K	80 K	80 K	80 K
Locked rotor time	37s (cold) 21s (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	62.0 dB(A)	60.0 dB(A)	60.0 dB(A)	60.0 dB(A)	60.0 dB(A)	60.0 dB(A)	60.0 dB(A)
Efficiency (%)	25%	91.5	91.2	91.2	90.4	92.1	91.3
	50%	91.7	91.3	91.3	90.7	91.7	91.0
	75%	93.0	91.8	92.2	91.9	91.7	92.4
	100%	93.0	91.7	92.1	92.0	91.0	91.7
Power Factor	25%	0.41	0.41	0.39	0.36	0.48	0.41
	50%	0.65	0.64	0.61	0.58	0.71	0.65
	75%	0.76	0.76	0.74	0.71	0.80	0.76
	100%	0.82	0.83	0.80	0.79	0.84	0.82

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

Losses (%)	P1 (0,9;1,0)	7.3	7.3	7.3	7.3	7.3	7.3
	P2 (0,5;1,0)	6.2	6.2	6.2	6.2	6.2	6.2
	P3 (0,25;1,0)	6.0	6.0	6.0	6.0	6.0	6.0
	P4 (0,9;0,5)	3.5	3.5	3.5	3.5	3.5	3.5
	P5 (0,5;0,5)	2.4	2.4	2.4	2.4	2.4	2.4
	P6 (0,5;0,25)	1.6	1.6	1.6	1.6	1.6	1.6
	P7 (0,25;0,25)	1.1	1.1	1.1	1.1	1.1	1.1

Bearing type	: Drive end 6312 C3 Non drive end 6212 C3	Foundation loads Max. traction : 537 kgf Max. compression : 805 kgf
Sealing	: V'Ring V'Ring	
Lubrication interval	: 20000 h 20000 h	
Lubricant amount	: 21 g 13 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			Page	Revision
Checked by			1 / 9	
Date	13/01/2024			

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Notes
USABLE @208V 79.2A SF 1.15 SFA 91.0A

Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	13/01/2024		2 / 9	

LOAD PERFORMANCE CURVE

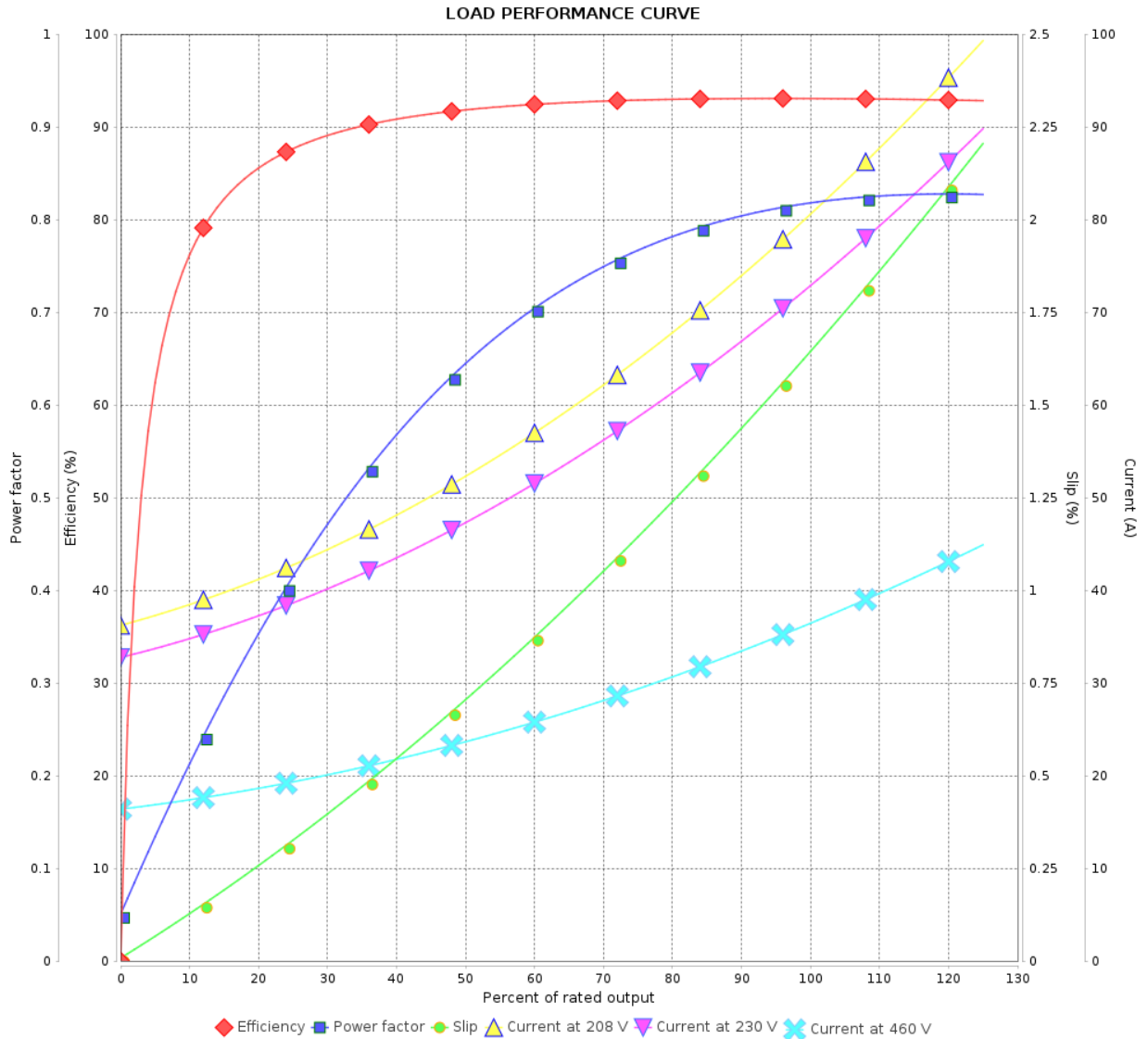
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11442886



Performance : 230/460 V 60 Hz 6P

Rated current : 72.4/36.2 A
 LRC : 6.2
 Rated torque : 18.5 kgfm
 Locked rotor torque : 220 %
 Breakdown torque : 240 %
 Rated speed : 1180 rpm

Moment of inertia (J) : 0.5561 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	Revision
Checked by				
Date				

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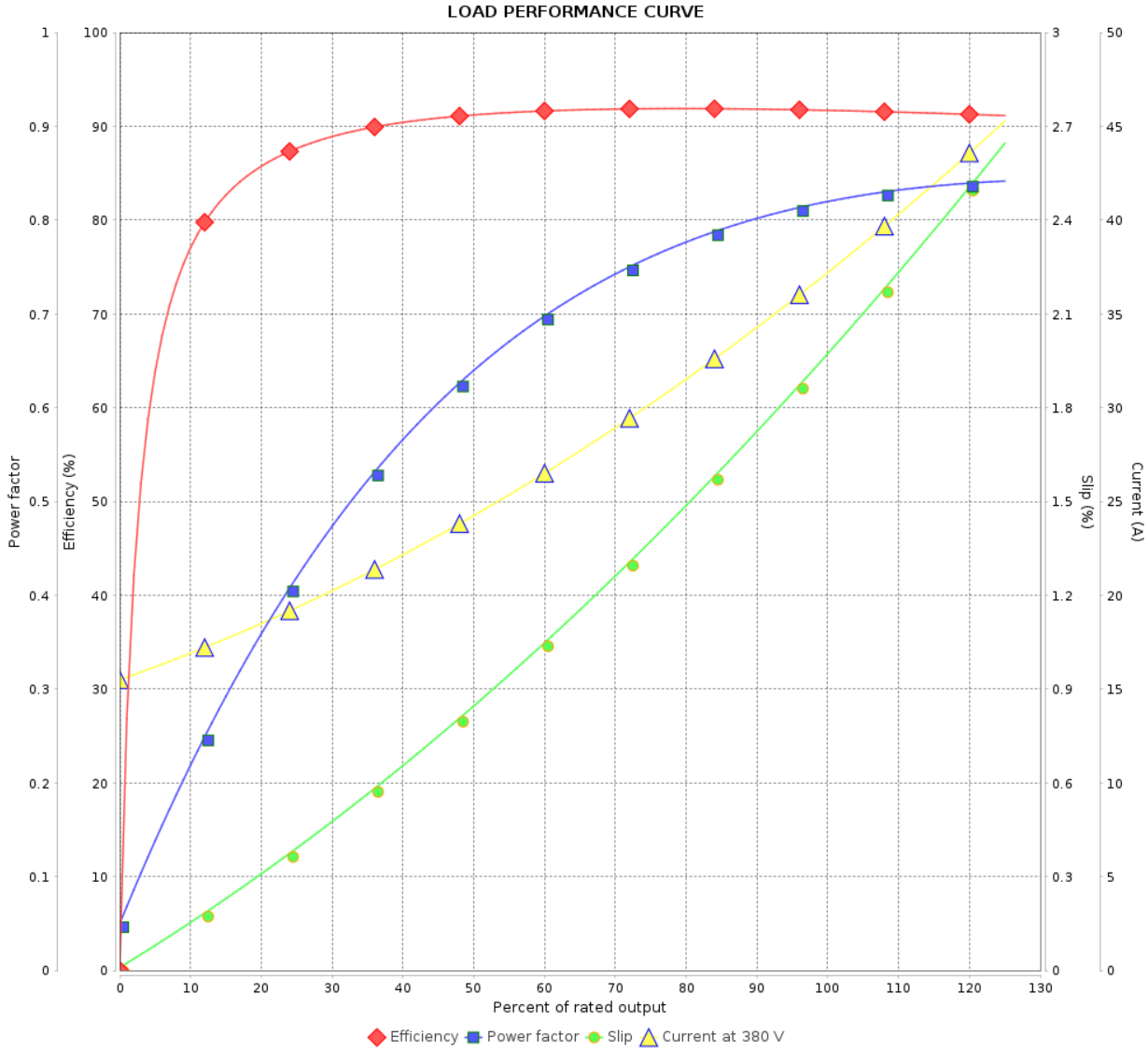
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11442886



Performance : 380 V 50 Hz 6P IE3

Rated current : 36.9 A
 LRC : 5.8
 Rated torque : 18.5 kgfm
 Locked rotor torque : 190 %
 Breakdown torque : 229 %
 Rated speed : 975 rpm

Moment of inertia (J) : 0.5561 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				
Date				

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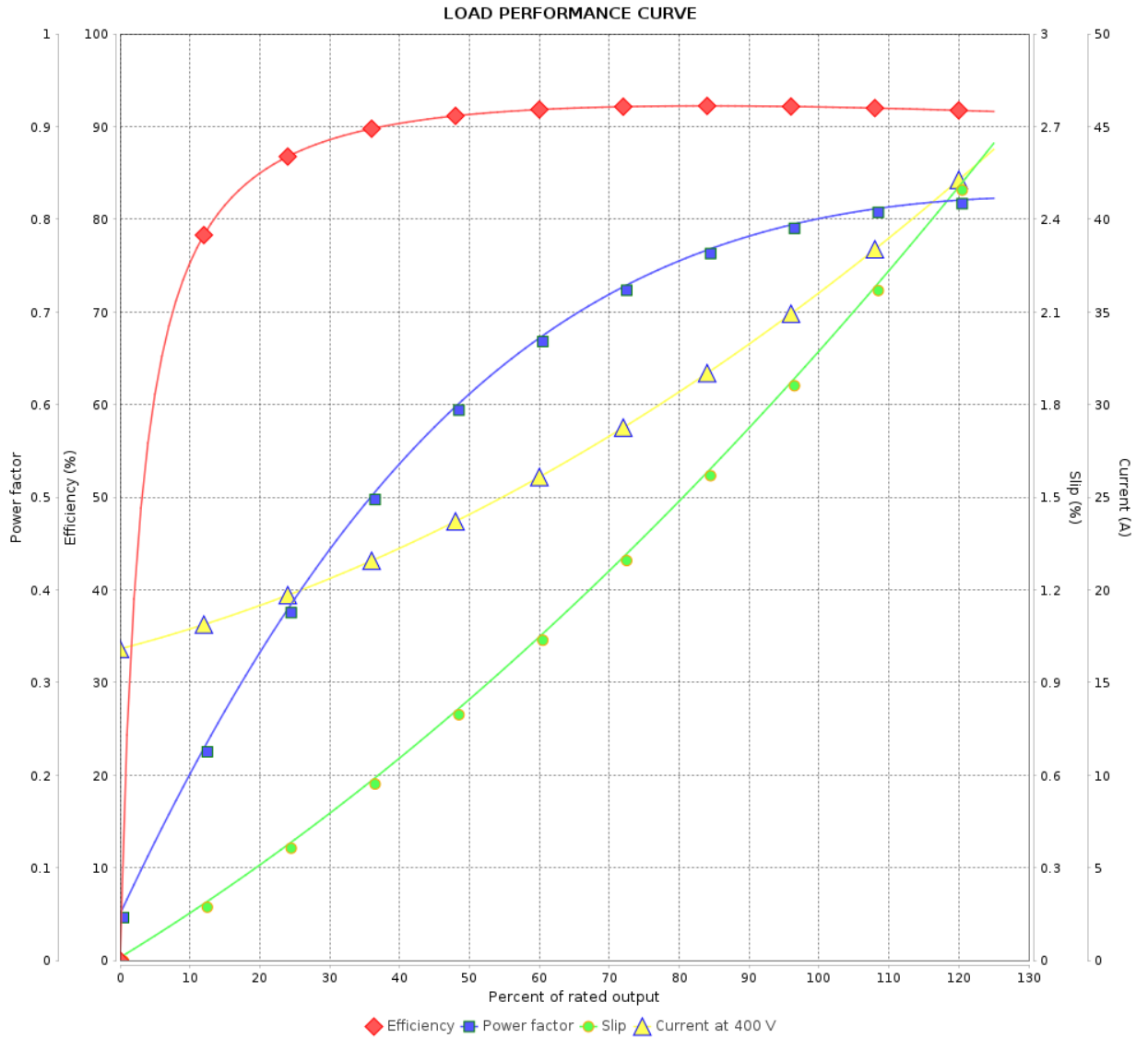
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11442886



Performance : 400 V 50 Hz 6P IE3

Rated current : 36.2 A
 LRC : 6.3
 Rated torque : 18.5 kgfm
 Locked rotor torque : 220 %
 Breakdown torque : 260 %
 Rated speed : 980 rpm

Moment of inertia (J) : 0.5561 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page	Revision
Checked by				
Date				

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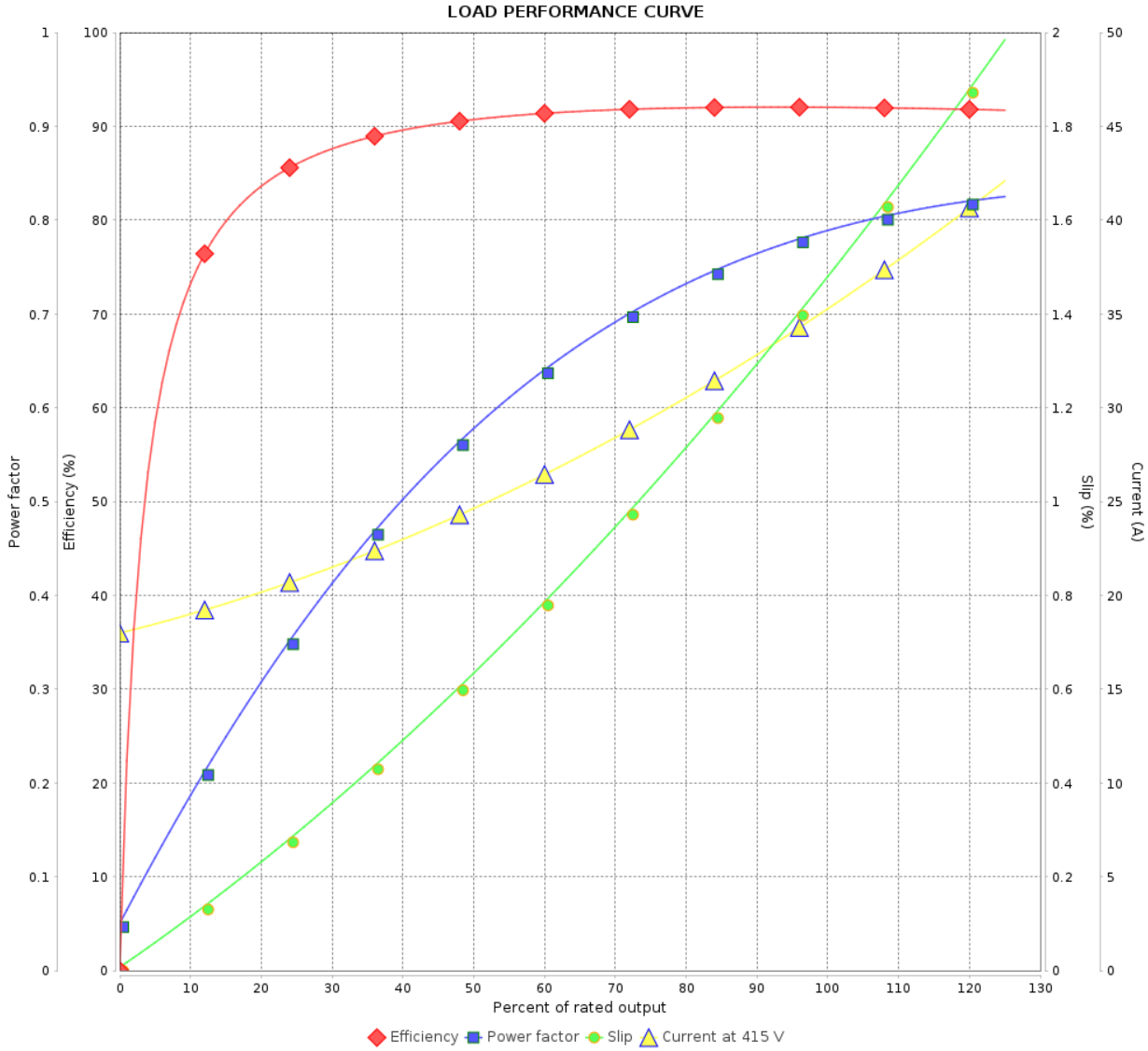
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11442886



Performance : 415 V 50 Hz 6P IE3

Rated current : 35.4 A
 LRC : 6.7
 Rated torque : 18.4 kgfm
 Locked rotor torque : 240 %
 Breakdown torque : 280 %
 Rated speed : 980 rpm

Moment of inertia (J) : 0.5561 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page	Revision
Checked by				
Date				

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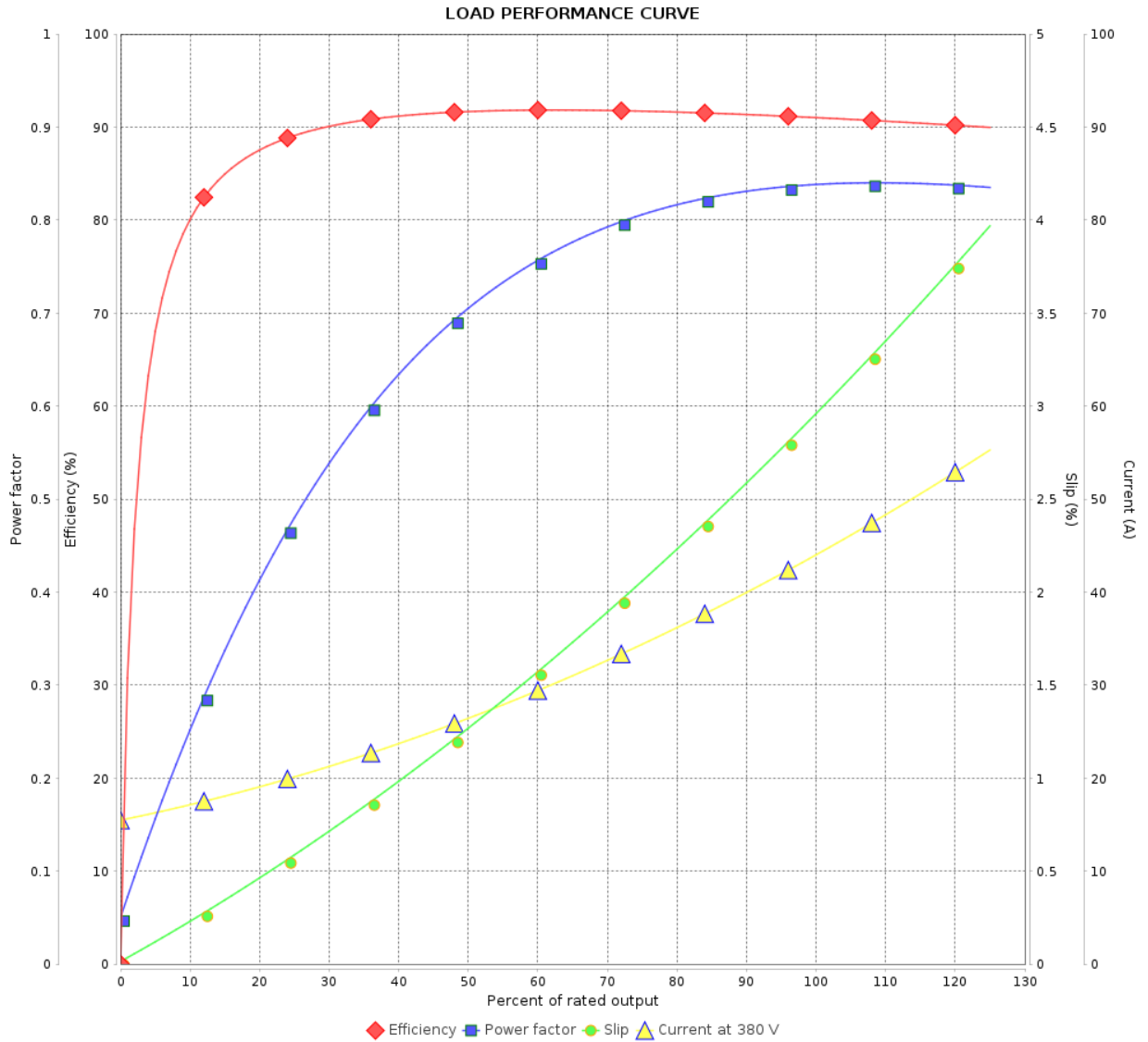
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11442886



Performance : 380 V 50 Hz 6P IE2

Rated current : 43.7 A
 LRC : 4.9
 Rated torque : 22.4 kgfm
 Locked rotor torque : 160 %
 Breakdown torque : 200 %
 Rated speed : 970 rpm

Moment of inertia (J) : 0.5561 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		7 / 9		
Date		13/01/2024		

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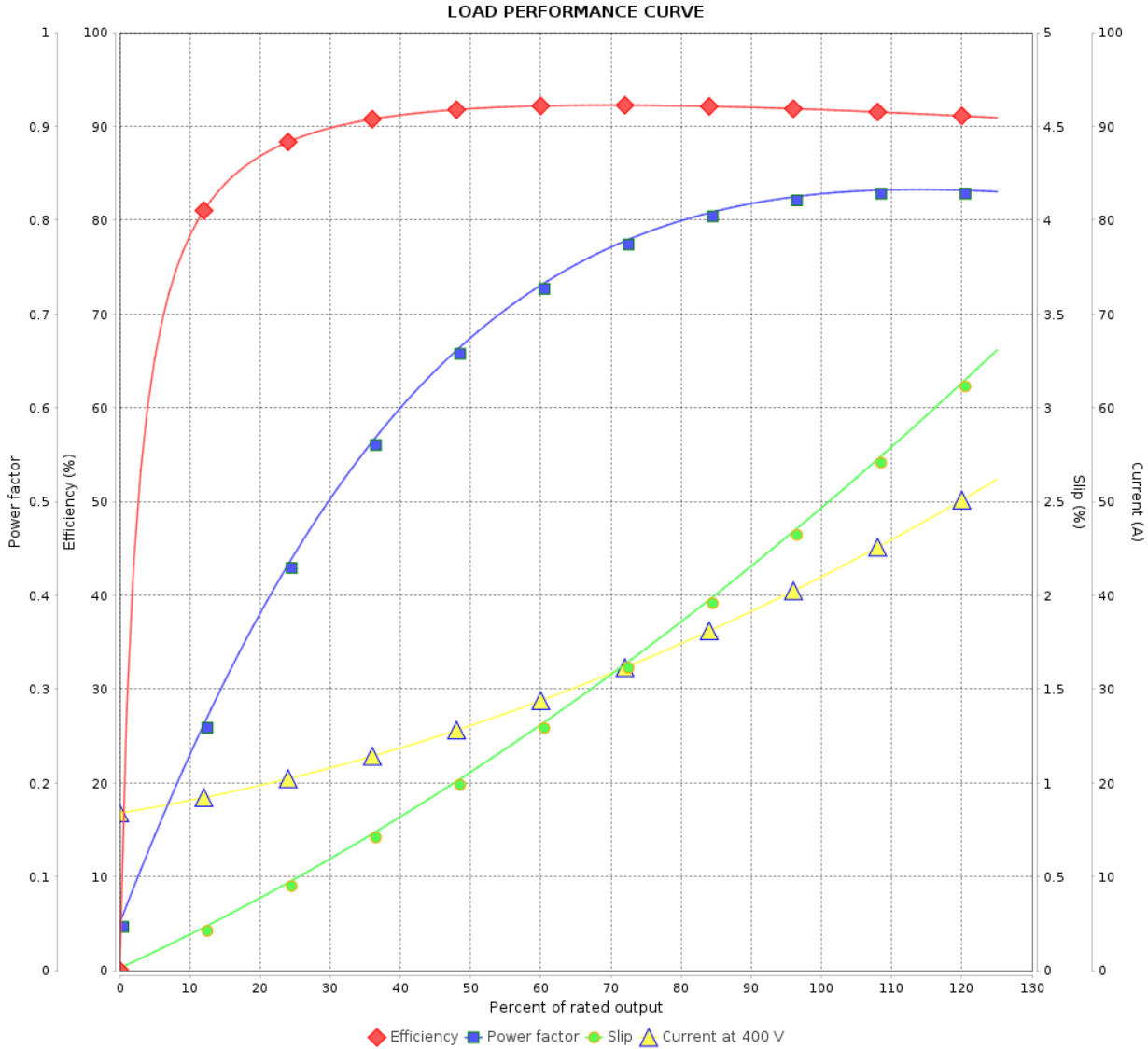
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11442886



Performance : 400 V 50 Hz 6P IE2

Rated current : 41.7 A
 LRC : 5.4
 Rated torque : 22.3 kgfm
 Locked rotor torque : 180 %
 Breakdown torque : 220 %
 Rated speed : 975 rpm

Moment of inertia (J) : 0.5561 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 8 / 9	Revision
Checked by				
Date	13/01/2024			

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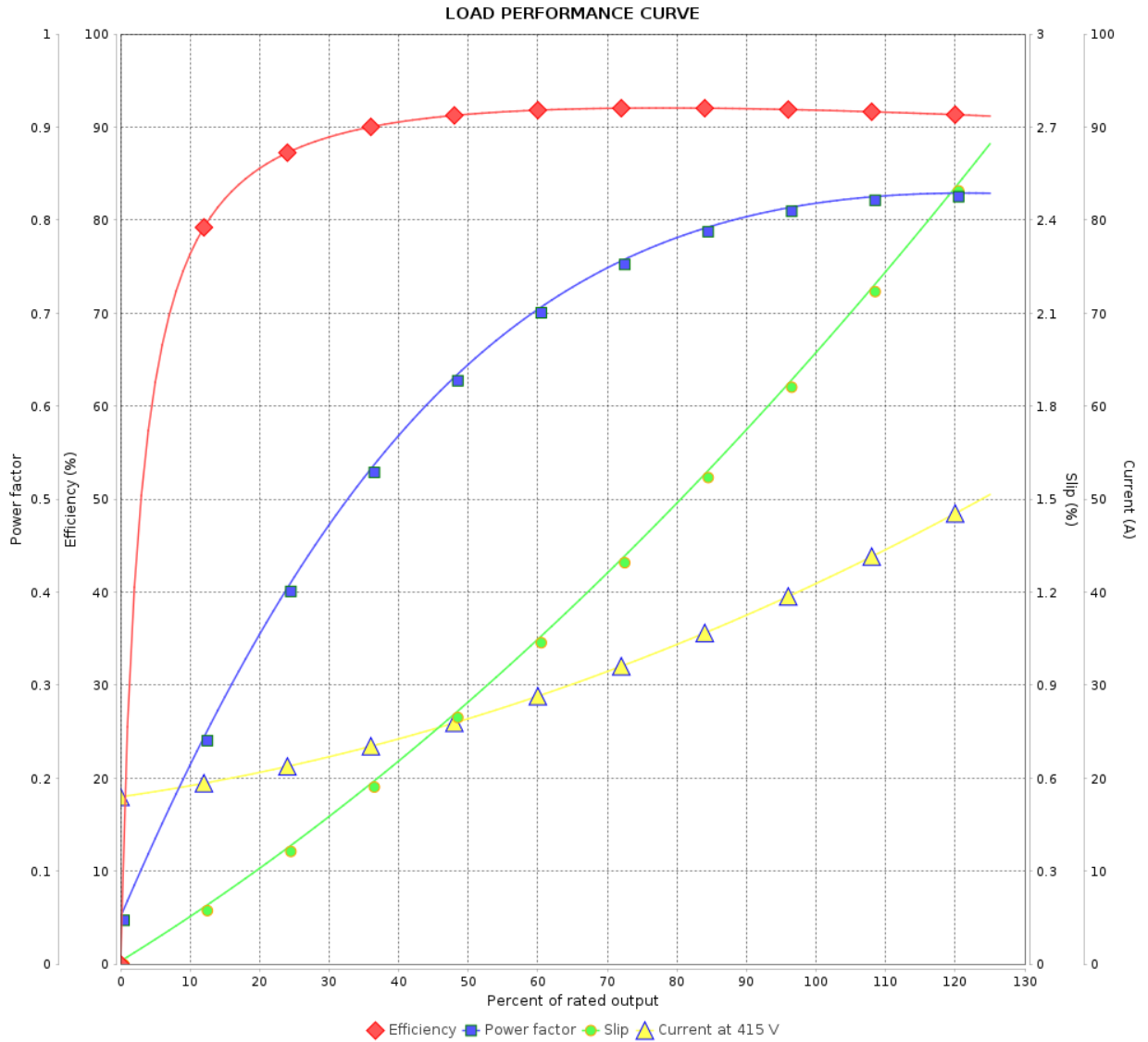
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11442886



Performance : 415 V 50 Hz 6P IE2

Rated current : 40.7 A
 LRC : 5.8
 Rated torque : 22.2 kgfm
 Locked rotor torque : 200 %
 Breakdown torque : 240 %
 Rated speed : 980 rpm

Moment of inertia (J) : 0.5561 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		9 / 9		
Date		13/01/2024		