

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase
Product code : 14284353

Frame : 444/5TSC	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 : 755 kg
Protection degree : IP55	Moment of inertia (J) : 1.41 kgm ²
Design : B	

Output [HP]	125	100	100	100	125	125	125
Poles	2	2	2	2	2	2	2
Frequency [Hz]	60	50	50	50	50	50	50
Rated voltage [V]	230/460	380	400	415	380	400	415
Rated current [A]	268/134	135	128	124	163	154	148
L. R. Amperes [A]	1769/884	878	909	955	848	878	918
LRC [A]	6.6x(Code G)	6.5x(Code G)	7.1x(Code G)	7.7x(Code H)	5.2x(Code D)	5.7x(Code E)	6.2x(Code F)
No load current [A]	68.0/34.0	33.6	36.0	37.9	33.6	36.0	37.9
Rated speed [RPM]	3570	2970	2970	2975	2960	2965	2970
Slip [%]	0.83	1.00	1.00	0.83	1.33	1.17	1.00
Rated torque [kgfm]	25.4	24.4	24.4	24.4	30.6	30.6	30.5
Locked rotor torque [%]	200	200	210	240	160	170	190
Breakdown torque [%]	250	250	280	300	200	220	240
Service factor	1.15	1.00	1.00	1.00	1.00	1.00	1.00
Temperature rise	80 K	80 K	80 K	80 K	80 K	80 K	80 K
Locked rotor time	52s (cold) 29s (hot)	36s (cold) 20s (hot)	36s (cold) 20s (hot)	36s (cold) 20s (hot)	36s (cold) 20s (hot)	36s (cold) 20s (hot)	36s (cold) 20s (hot)
Noise level ²	81.0 dB(A)	77.0 dB(A)	77.0 dB(A)	77.0 dB(A)	77.0 dB(A)	77.0 dB(A)	77.0 dB(A)
Efficiency (%)	25%						
	50%	93.6	93.2	93.2	92.8	94.0	94.0
	75%	94.5	94.3	94.3	94.3	94.5	94.5
	100%	95.0	94.7	94.7	94.8	94.5	94.5
Power Factor	25%						
	50%	0.82	0.79	0.77	0.75	0.85	0.84
	75%	0.87	0.87	0.87	0.85	0.88	0.88
	100%	0.89	0.89	0.89	0.89	0.89	0.89

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

Losses (%)	P1 (0,9;1,0)	4.8	4.8	4.8	4.8	4.8	4.8
	P2 (0,5;1,0)	3.0	3.0	3.0	3.0	3.0	3.0
	P3 (0,25;1,0)	2.5	2.5	2.5	2.5	2.5	2.5
	P4 (0,9;0,5)	3.1	3.1	3.1	3.1	3.1	3.1
	P5 (0,5;0,5)	1.4	1.4	1.4	1.4	1.4	1.4
	P6 (0,5;0,25)	1.1	1.1	1.1	1.1	1.1	1.1
	P7 (0,25;0,25)	0.5	0.5	0.5	0.5	0.5	0.5

Bearing type : Sealing : Lubrication interval : Lubricant amount : Lubricant type :	Drive end	Non drive end	Foundation loads Max. traction : 263 kgf Max. compression : 1018 kgf
	6314 C3	6314 C3	
	WSeal	WSeal	
	4000 h	4000 h	
	27 g	27 g	
	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			Page	Revision
Date	15/01/2024		1 / 9	

DATA SHEET

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Notes
USABLE @208V 296A SF 1.00 SFA 296A

Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	15/01/2024		2 / 9	

LOAD PERFORMANCE CURVE

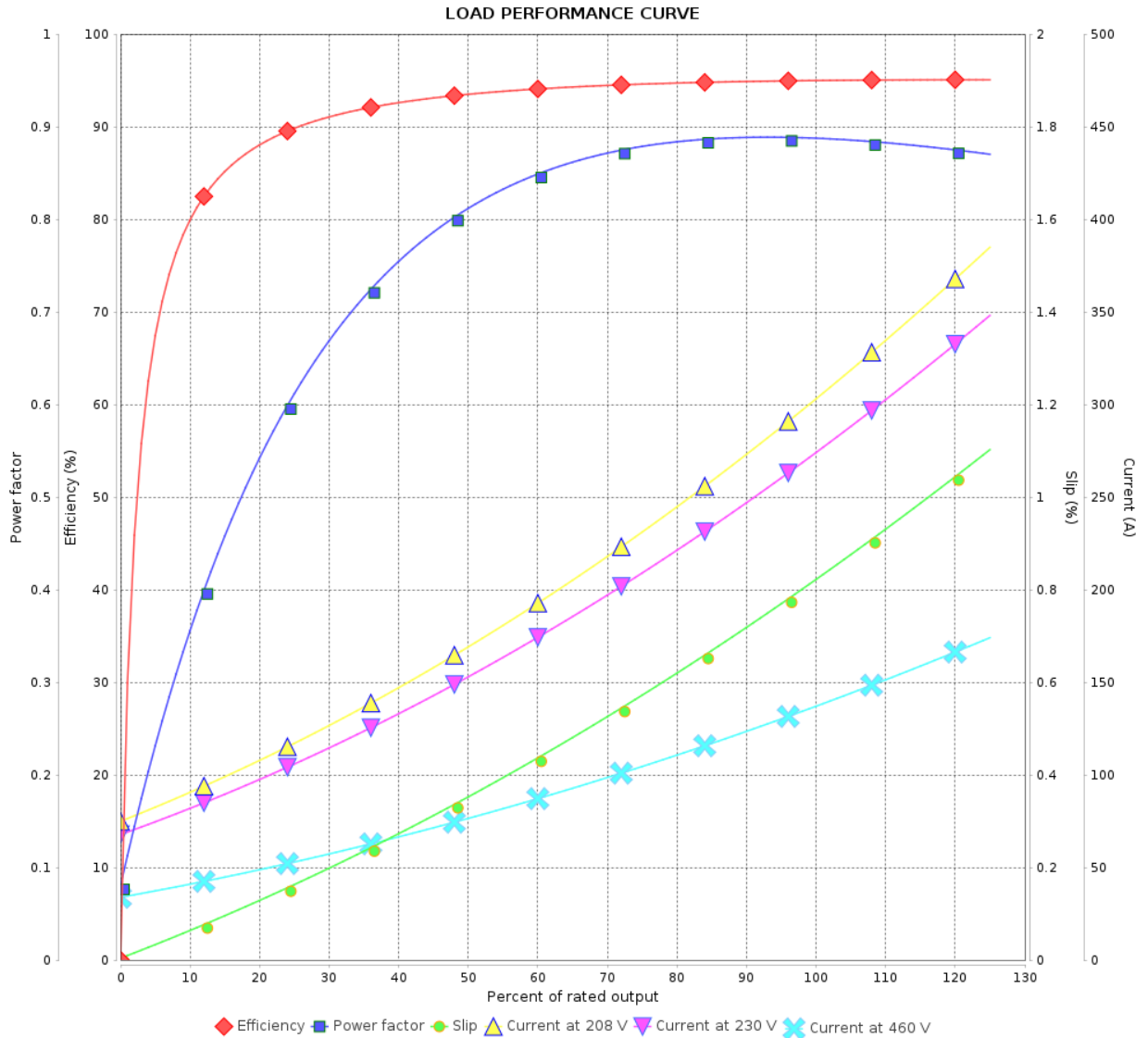
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 14284353



Performance : 230/460 V 60 Hz 2P

Rated current : 268/134 A
 LRC : 6.6
 Rated torque : 25.4 kgfm
 Locked rotor torque : 200 %
 Breakdown torque : 250 %
 Rated speed : 3570 rpm

Moment of inertia (J) : 1.41 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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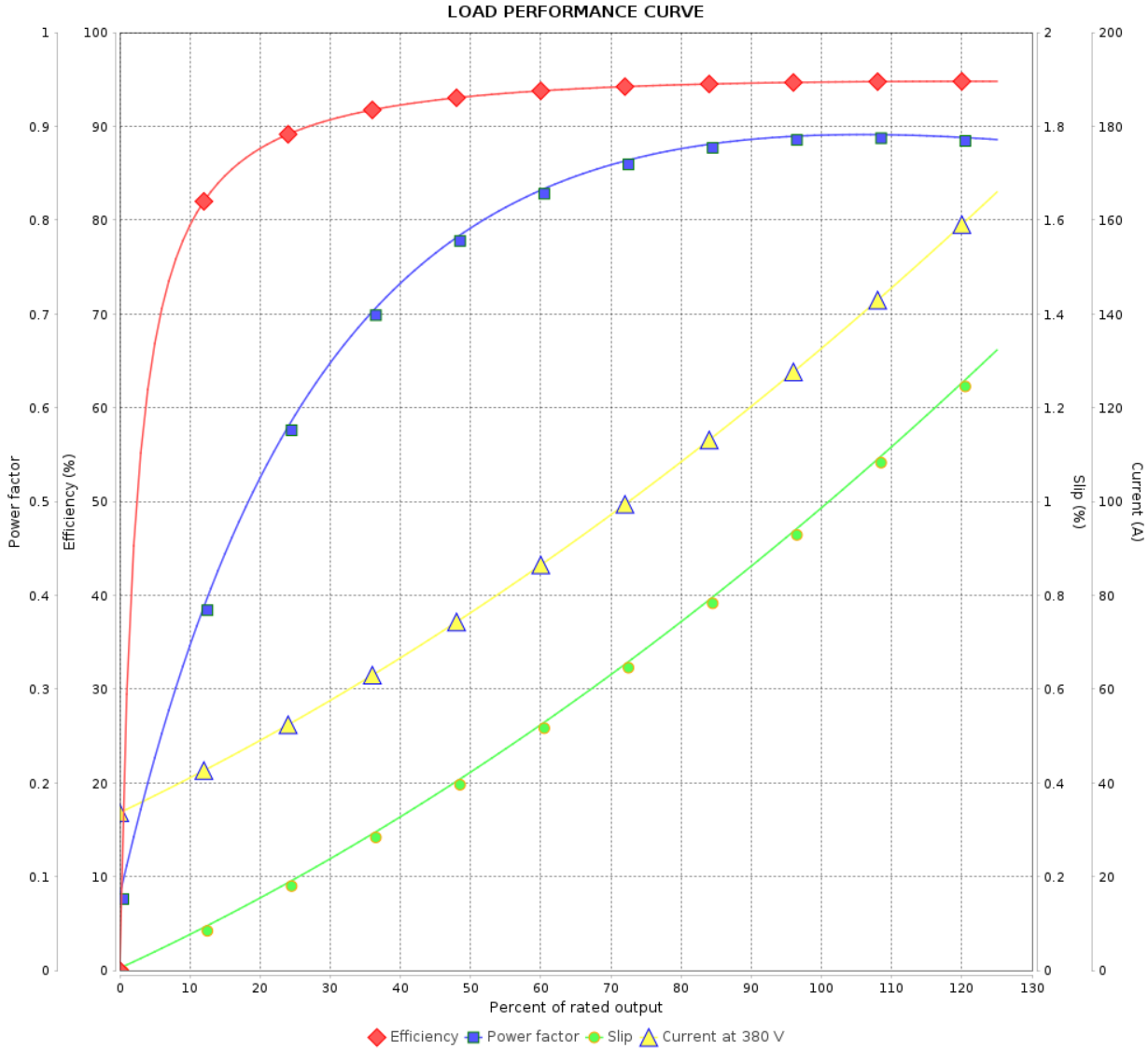
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 14284353



Performance : 380 V 50 Hz 2P IE3

Rated current : 135 A
 LRC : 6.5
 Rated torque : 24.4 kgfm
 Locked rotor torque : 200 %
 Breakdown torque : 250 %
 Rated speed : 2970 rpm

Moment of inertia (J) : 1.41 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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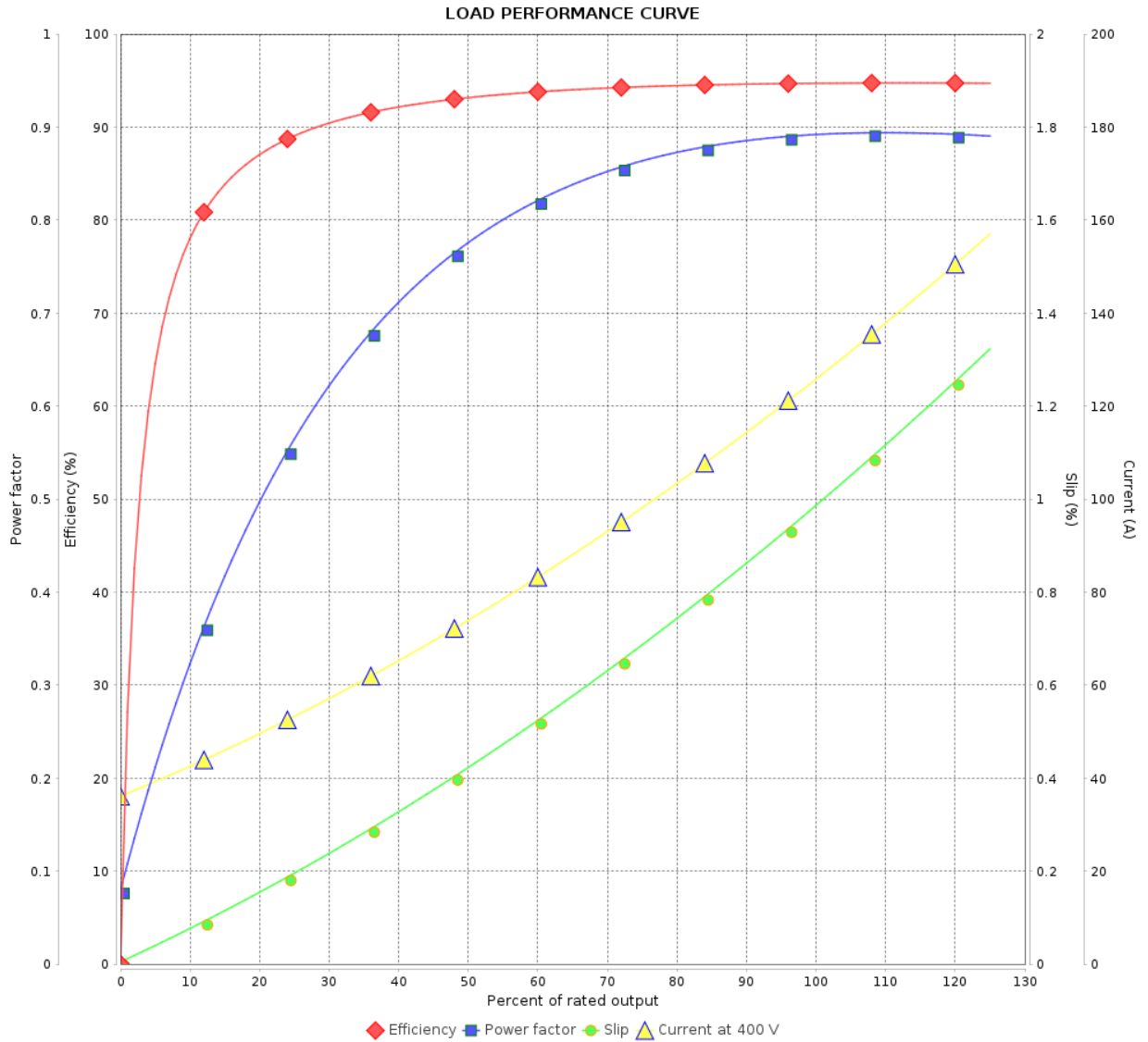
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 14284353



Performance : 400 V 50 Hz 2P IE3

Rated current : 128 A
 LRC : 7.1
 Rated torque : 24.4 kgfm
 Locked rotor torque : 210 %
 Breakdown torque : 280 %
 Rated speed : 2970 rpm

Moment of inertia (J) : 1.41 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				
			5 / 9	

LOAD PERFORMANCE CURVE

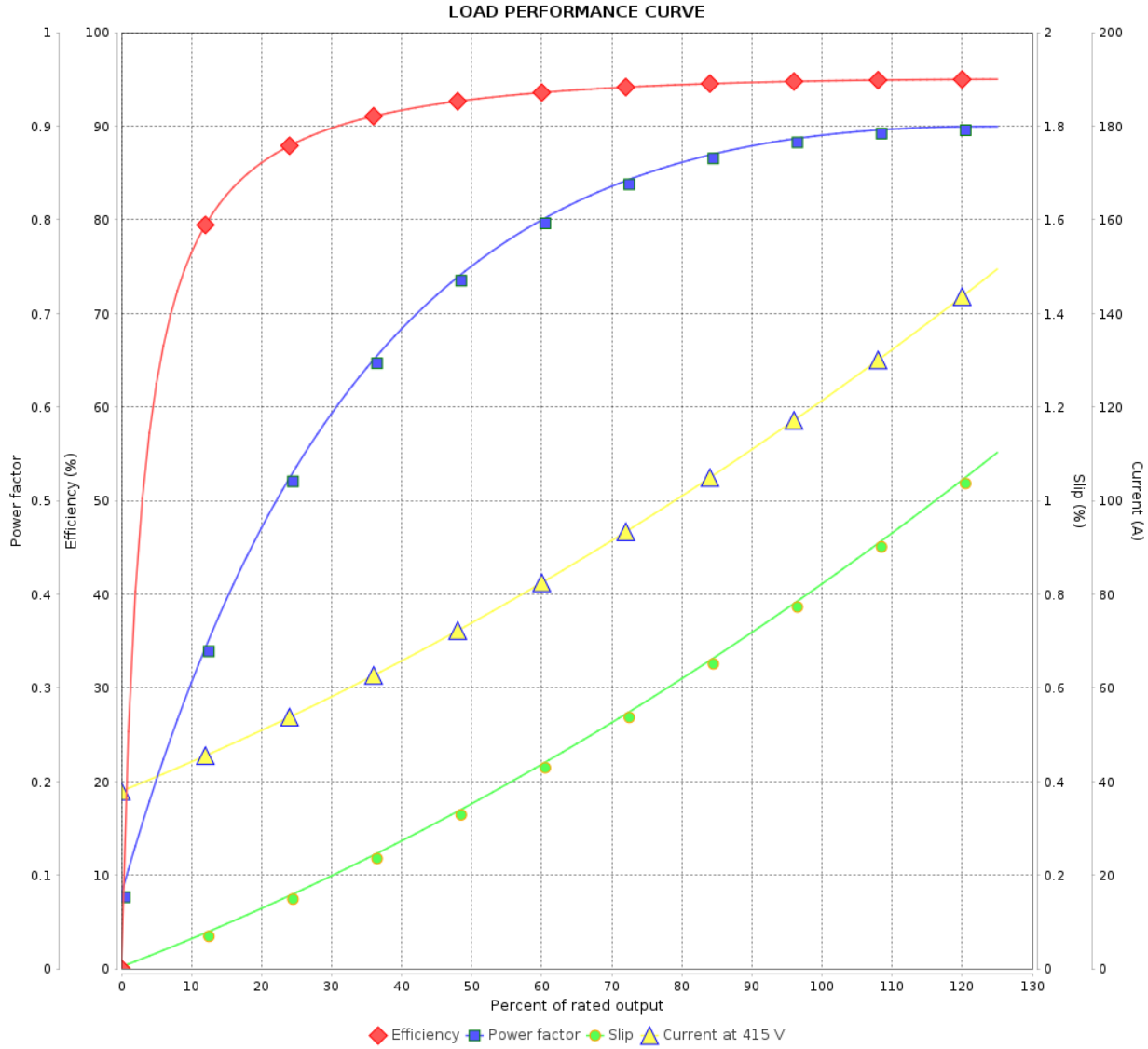
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 14284353



Performance : 415 V 50 Hz 2P IE3

Rated current : 124 A
 LRC : 7.7
 Rated torque : 24.4 kgfm
 Locked rotor torque : 240 %
 Breakdown torque : 300 %
 Rated speed : 2975 rpm

Moment of inertia (J) : 1.41 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 6 / 9	Revision
Checked by				
Date	15/01/2024			

LOAD PERFORMANCE CURVE

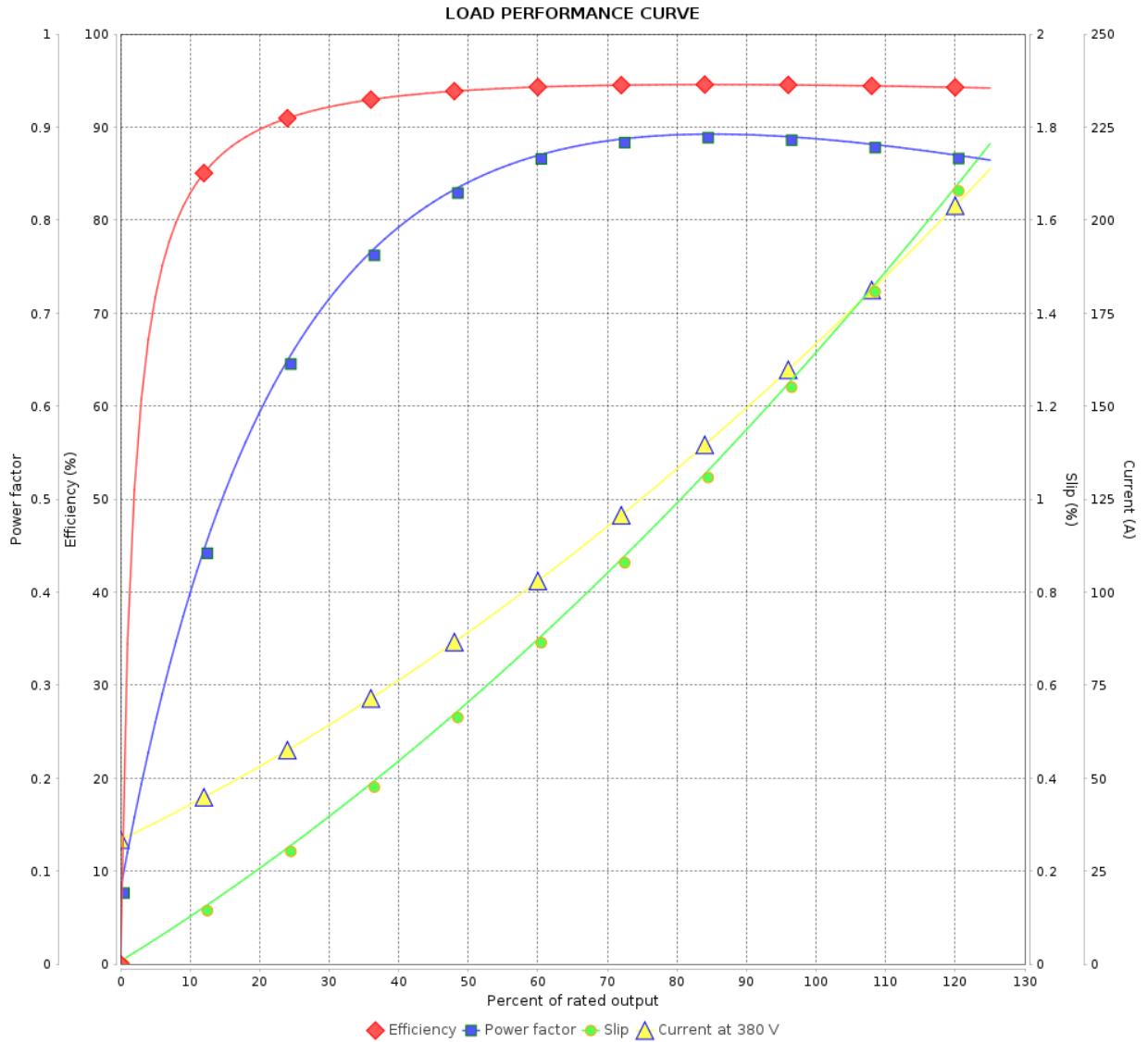
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 14284353



Performance : 380 V 50 Hz 2P IE2

Rated current : 163 A
 LRC : 5.2
 Rated torque : 30.6 kgfm
 Locked rotor torque : 160 %
 Breakdown torque : 200 %
 Rated speed : 2960 rpm

Moment of inertia (J) : 1.41 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				
Checked by				
Date				
		Page	Revision	
		7 / 9		

LOAD PERFORMANCE CURVE

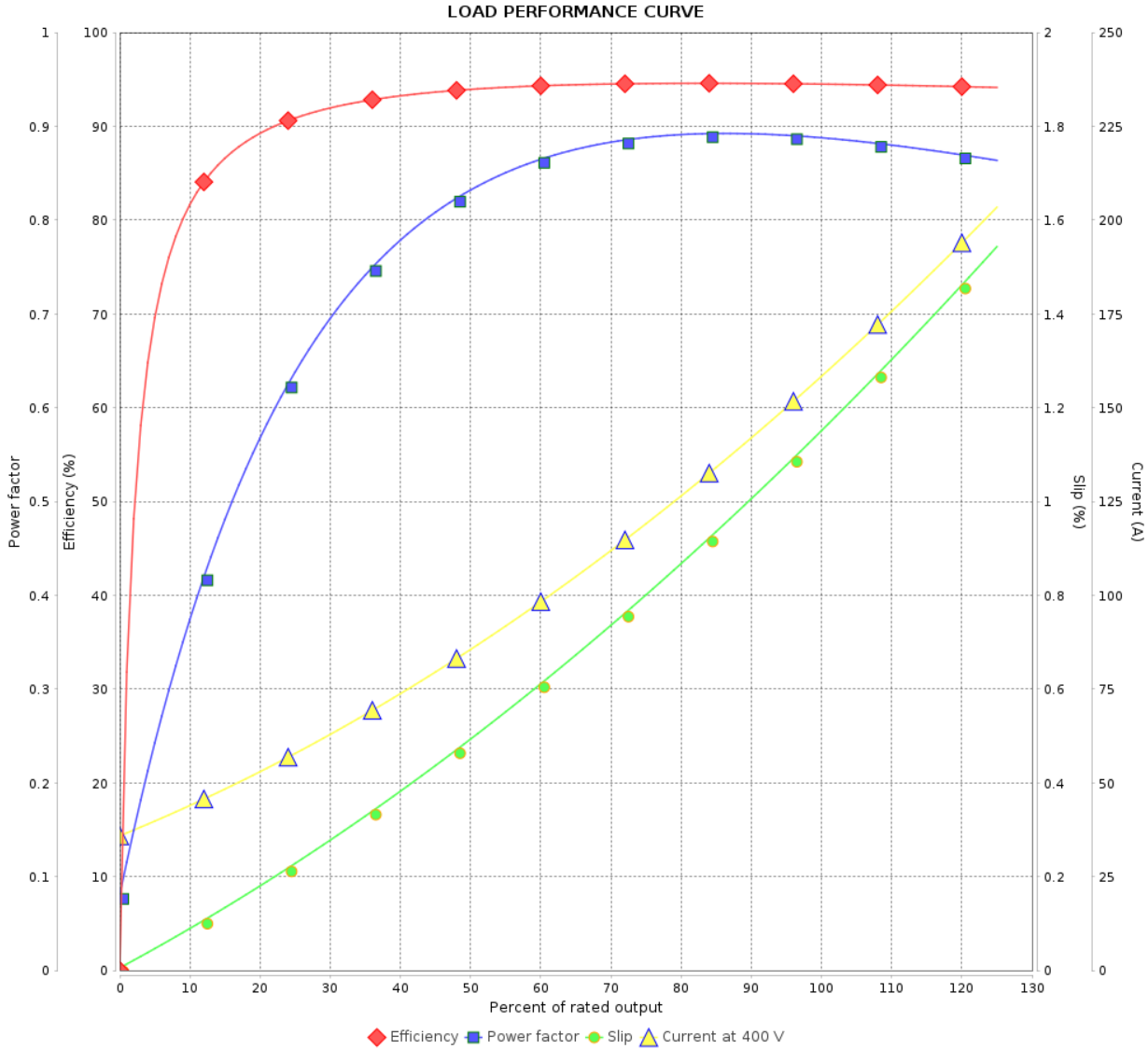
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 14284353



Performance : 400 V 50 Hz 2P IE2

Rated current	: 154 A	Moment of inertia (J)	: 1.41 kgm ²
LRC	: 5.7	Duty cycle	: Cont.(S1)
Rated torque	: 30.6 kgfm	Insulation class	: F
Locked rotor torque	: 170 %	Service factor	: 1.00
Breakdown torque	: 220 %	Temperature rise	: 80 K
Rated speed	: 2965 rpm	Design	: B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 8 / 9	Revision
Checked by				
Date	15/01/2024			

LOAD PERFORMANCE CURVE

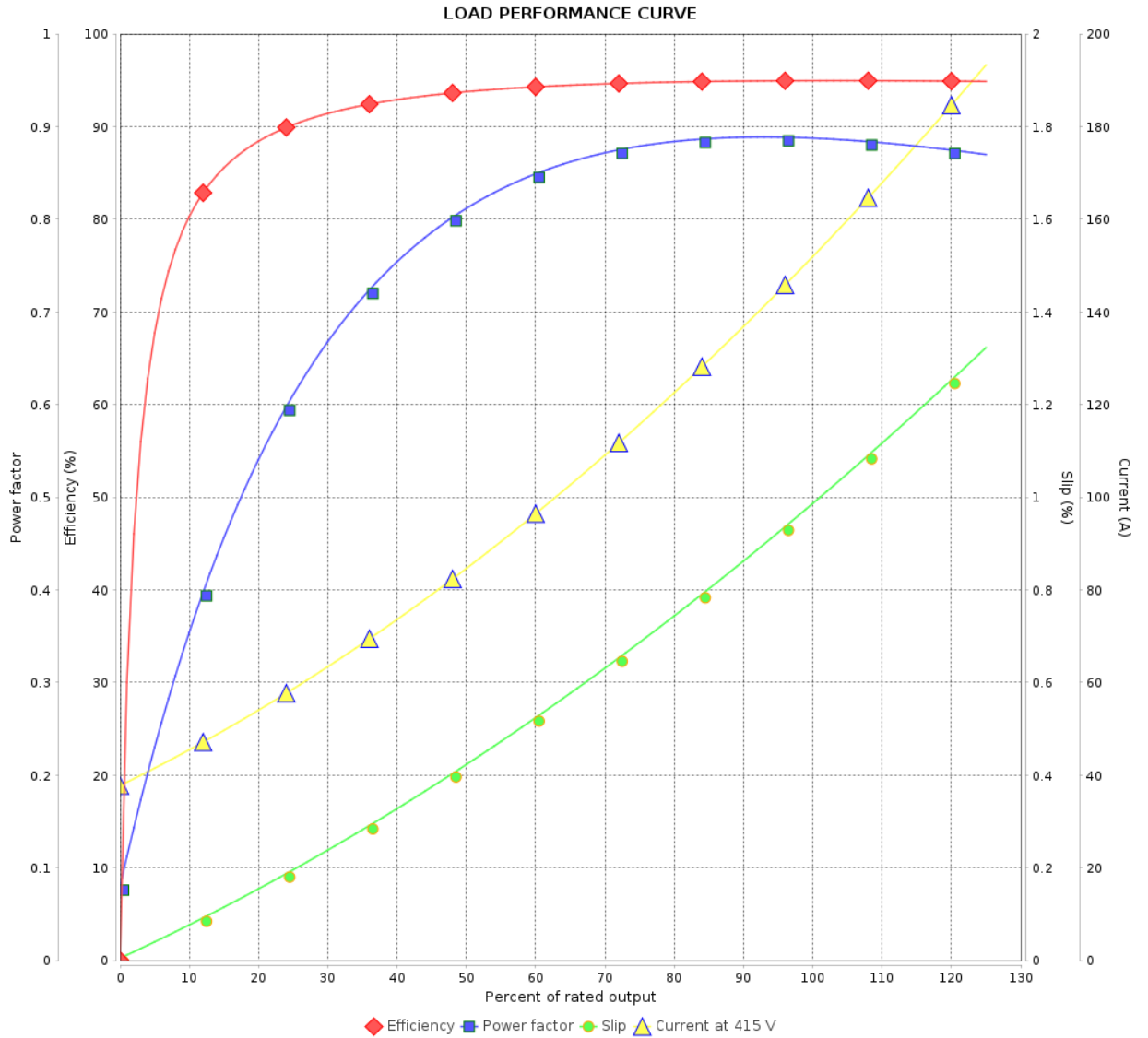
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 14284353



Performance : 415 V 50 Hz 2P IE3

Rated current : 148 A
 LRC : 6.2
 Rated torque : 30.5 kgfm
 Locked rotor torque : 190 %
 Breakdown torque : 240 %
 Rated speed : 2970 rpm

Moment of inertia (J) : 1.41 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				