

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 11941735

Frame : 324T	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 ² : 0.0 kg
Protection degree : IP55	Moment of inertia (J) : 0.4843 kgm ²
Design : B	

Output [HP]	25	20	20	20	25	25	25
Poles	6	6	6	6	6	6	6
Frequency [Hz]	60	50	50	50	50	50	50
Rated voltage [V]	460	380	400	415	380	400	415
Rated current [A]	30.4	30.0	29.4	28.6	36.3	35.1	34.2
L. R. Amperes [A]	182	174	185	194	171	183	192
LRC [A]	6.0x(Code G)	5.8x(Code G)	6.3x(Code H)	6.8x(Code H)	4.7x(Code D)	5.2x(Code F)	5.6x(Code F)
No load current [A]	12.5	12.3	13.3	14.2	12.3	13.3	14.2
Rated speed [RPM]	1175	970	975	980	965	970	975
Slip [%]	2.08	3.00	2.50	2.00	3.50	3.00	2.50
Rated torque [kgfm]	15.4	15.0	14.9	14.8	18.8	18.7	18.6
Locked rotor torque [%]	210	200	229	250	160	180	190
Breakdown torque [%]	250	240	280	300	190	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	46s (cold) 26s (hot)	32s (cold) 18s (hot)	32s (cold) 18s (hot)	32s (cold) 18s (hot)	32s (cold) 18s (hot)	32s (cold) 18s (hot)	32s (cold) 18s (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%						
	50%	91.7	91.1	91.1	91.1	91.7	91.7
	75%	93.0	91.8	92.2	92.2	91.7	92.4
	100%	93.0	91.6	92.2	92.2	91.0	91.7
Power Factor	25%						
	50%	0.65	0.63	0.60	0.57	0.71	0.68
	75%	0.77	0.76	0.74	0.71	0.81	0.79
	100%	0.82	0.83	0.80	0.79	0.85	0.83

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

Losses (%)	P1 (0,9;1,0)	8.2	10.1	9.3	9.3	10.9	9.9	9.9
	P2 (0,5;1,0)	6.8	8.6	7.8	7.8	9.4	8.5	8.5
	P3 (0,25;1,0)	6.3	8.1	7.3	7.3	8.9	7.9	7.9
	P4 (0,9;0,5)	4.4	5.2	4.9	4.9	5.6	5.2	5.2
	P5 (0,5;0,5)	3.0	3.7	3.4	3.4	4.0	3.7	3.7
	P6 (0,5;0,25)	2.2	2.7	2.5	2.5	2.9	2.6	2.6
	P7 (0,25;0,25)	1.5	1.9	1.7	1.7	2.0	1.8	1.8

Bearing type	: Drive end 6312 C3 Non drive end 6212 C3	Foundation loads Max. traction : 562 kgf Max. compression : 562 kgf
Sealing	: Taconite Labyrinth Labyrinth	
Lubrication interval	: 20000 h 20000 h	
Lubricant amount	: 21 g 13 g	
Lubricant type	: Mobil Polyrex EM	

Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	13/01/2024		1 / 9	

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer : _____

Notes

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

LOAD PERFORMANCE CURVE

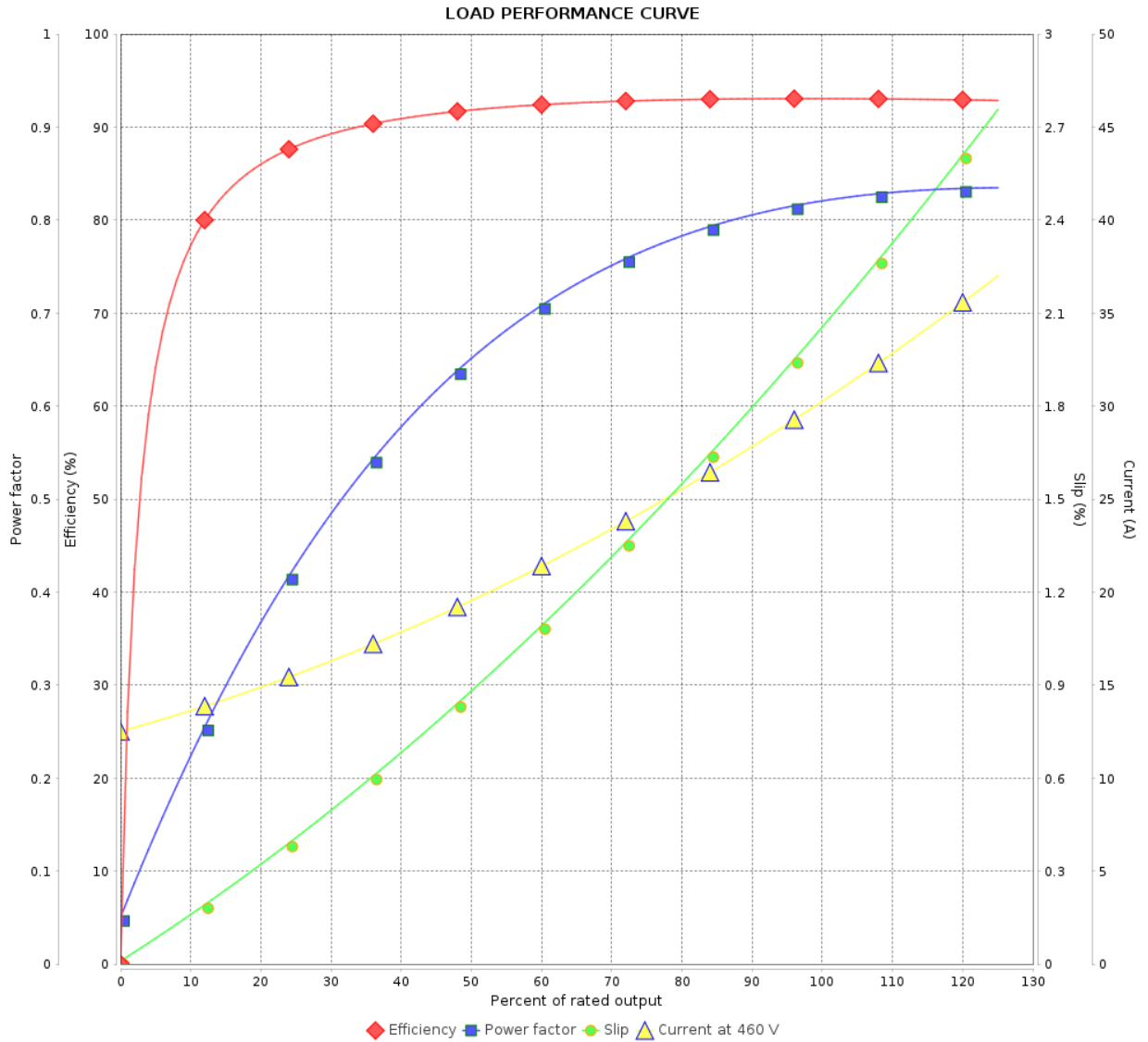
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase

Product code : 11941735



Performance : 460 V 60 Hz 6P

Rated current : 30.4 A
 LRC : 6.0
 Rated torque : 15.4 kgfm
 Locked rotor torque : 210 %
 Breakdown torque : 250 %
 Rated speed : 1175 rpm

Moment of inertia (J) : 0.4843 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	13/01/2024			

LOAD PERFORMANCE CURVE

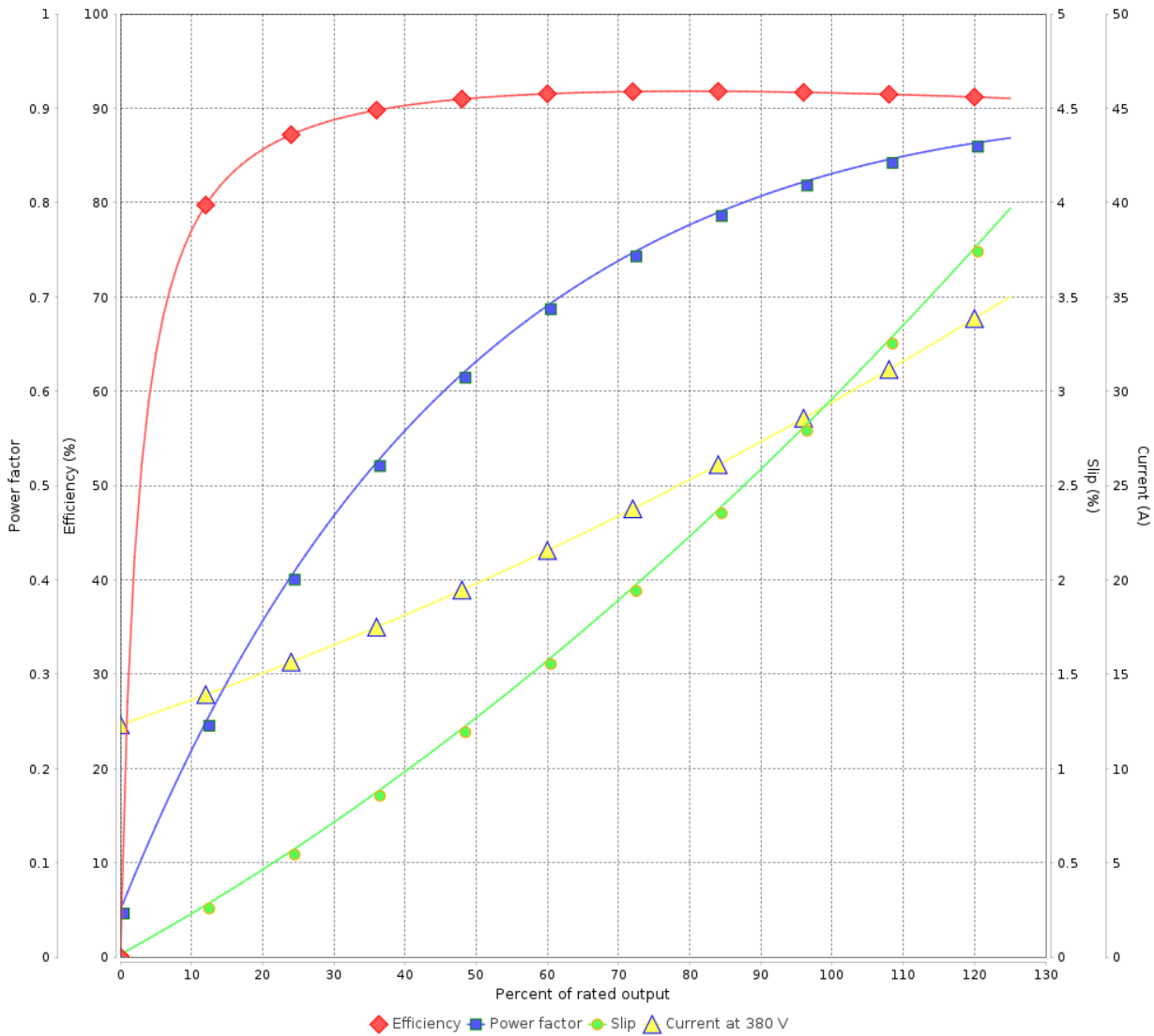
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 11941735

LOAD PERFORMANCE CURVE



Performance : 380 V 50 Hz 6P IE3

Rated current	: 30.0 A	Moment of inertia (J)	: 0.4843 kgm ²
LRC	: 5.8	Duty cycle	: Cont.(S1)
Rated torque	: 15.0 kgfm	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.00
Breakdown torque	: 240 %	Temperature rise	: 80 K
Rated speed	: 970 rpm	Design	: B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 4 / 9	Revision
Checked by				
Date	13/01/2024			

LOAD PERFORMANCE CURVE

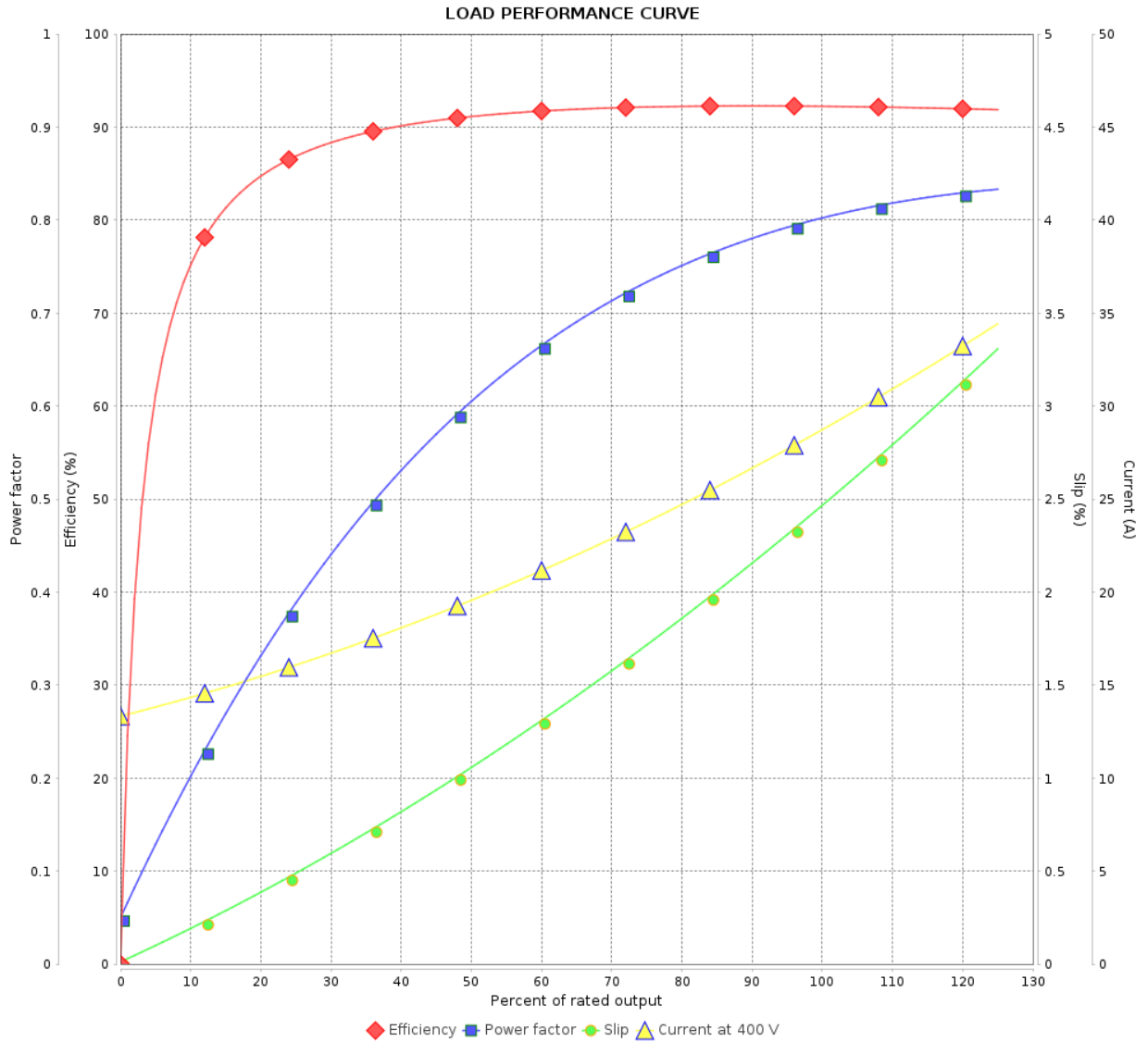
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase

Product code : 11941735



Performance : 400 V 50 Hz 6P IE3

Rated current : 29.4 A
 LRC : 6.3
 Rated torque : 14.9 kgfm
 Locked rotor torque : 229 %
 Breakdown torque : 280 %
 Rated speed : 975 rpm

Moment of inertia (J) : 0.4843 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		5 / 9		
Date		13/01/2024		

LOAD PERFORMANCE CURVE

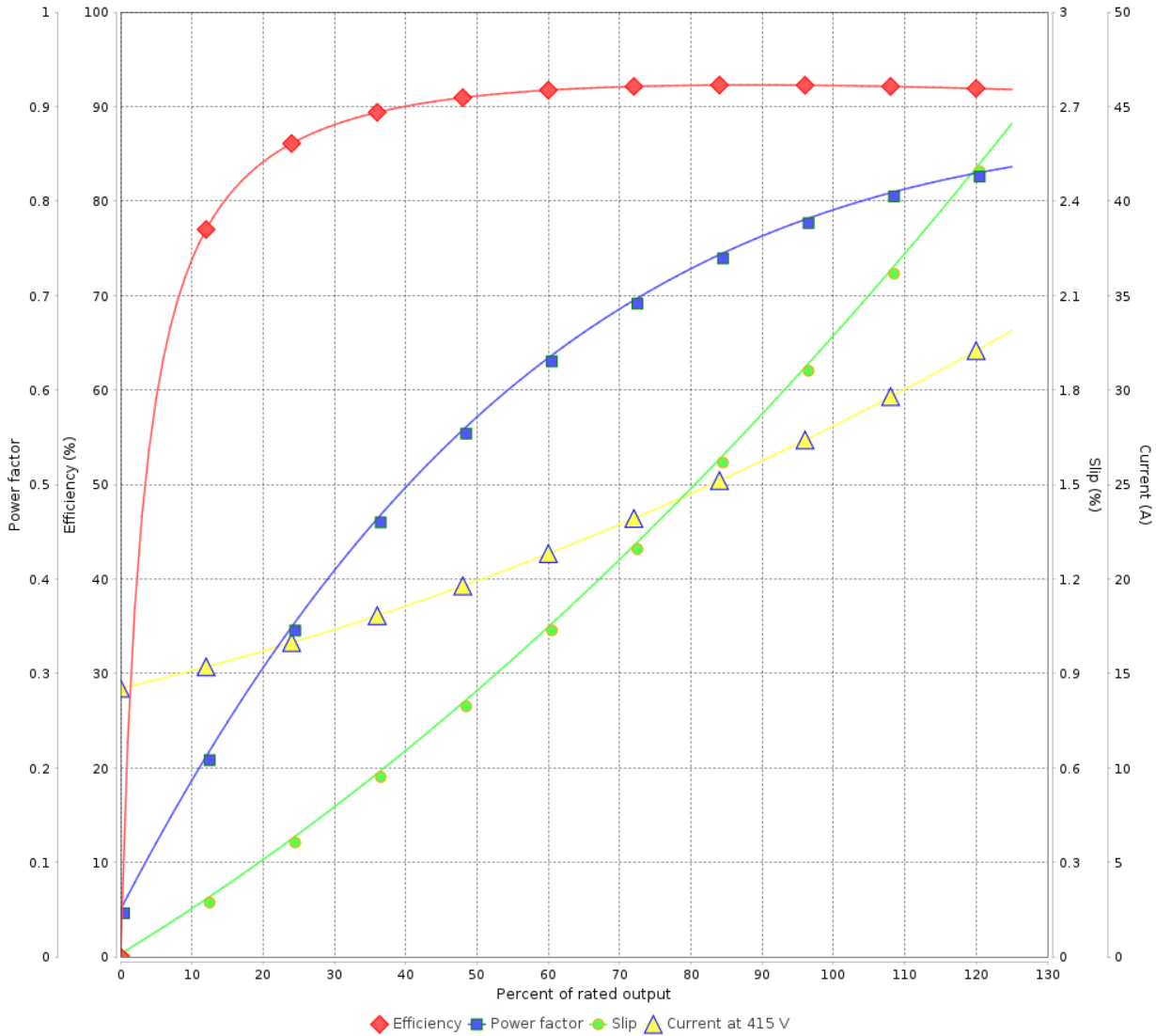
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 11941735

LOAD PERFORMANCE CURVE



Performance : 415 V 50 Hz 6P IE3

Rated current	: 28.6 A	Moment of inertia (J)	: 0.4843 kgm ²
LRC	: 6.8	Duty cycle	: Cont.(S1)
Rated torque	: 14.8 kgfm	Insulation class	: F
Locked rotor torque	: 250 %	Service factor	: 1.15
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 980 rpm	Design	: B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 6 / 9	Revision
Checked by				
Date	13/01/2024			

LOAD PERFORMANCE CURVE

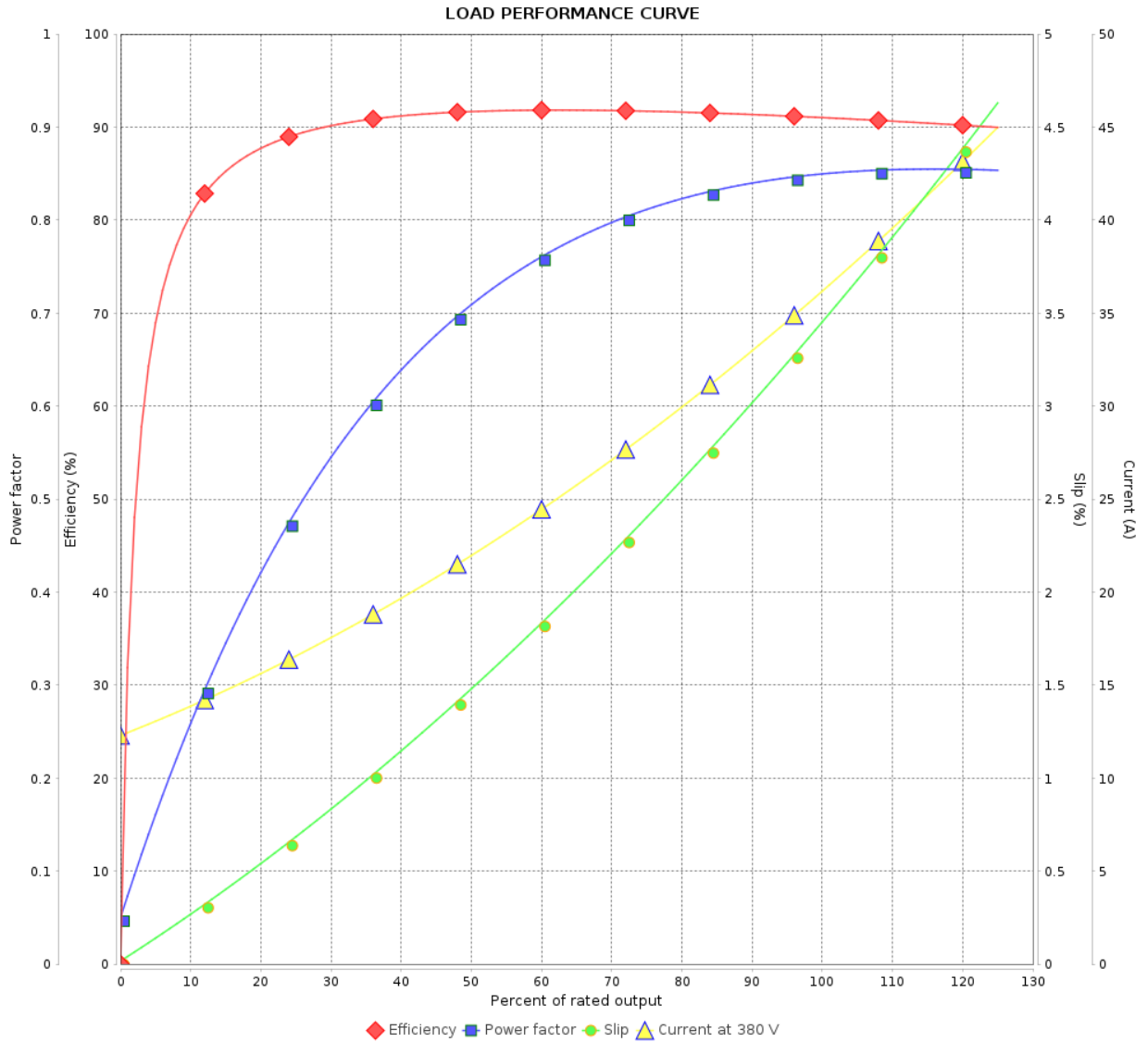
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase

Product code : 11941735



Performance : 380 V 50 Hz 6P IE2

Rated current : 36.3 A
 LRC : 4.7
 Rated torque : 18.8 kgfm
 Locked rotor torque : 160 %
 Breakdown torque : 190 %
 Rated speed : 965 rpm

Moment of inertia (J) : 0.4843 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				

LOAD PERFORMANCE CURVE

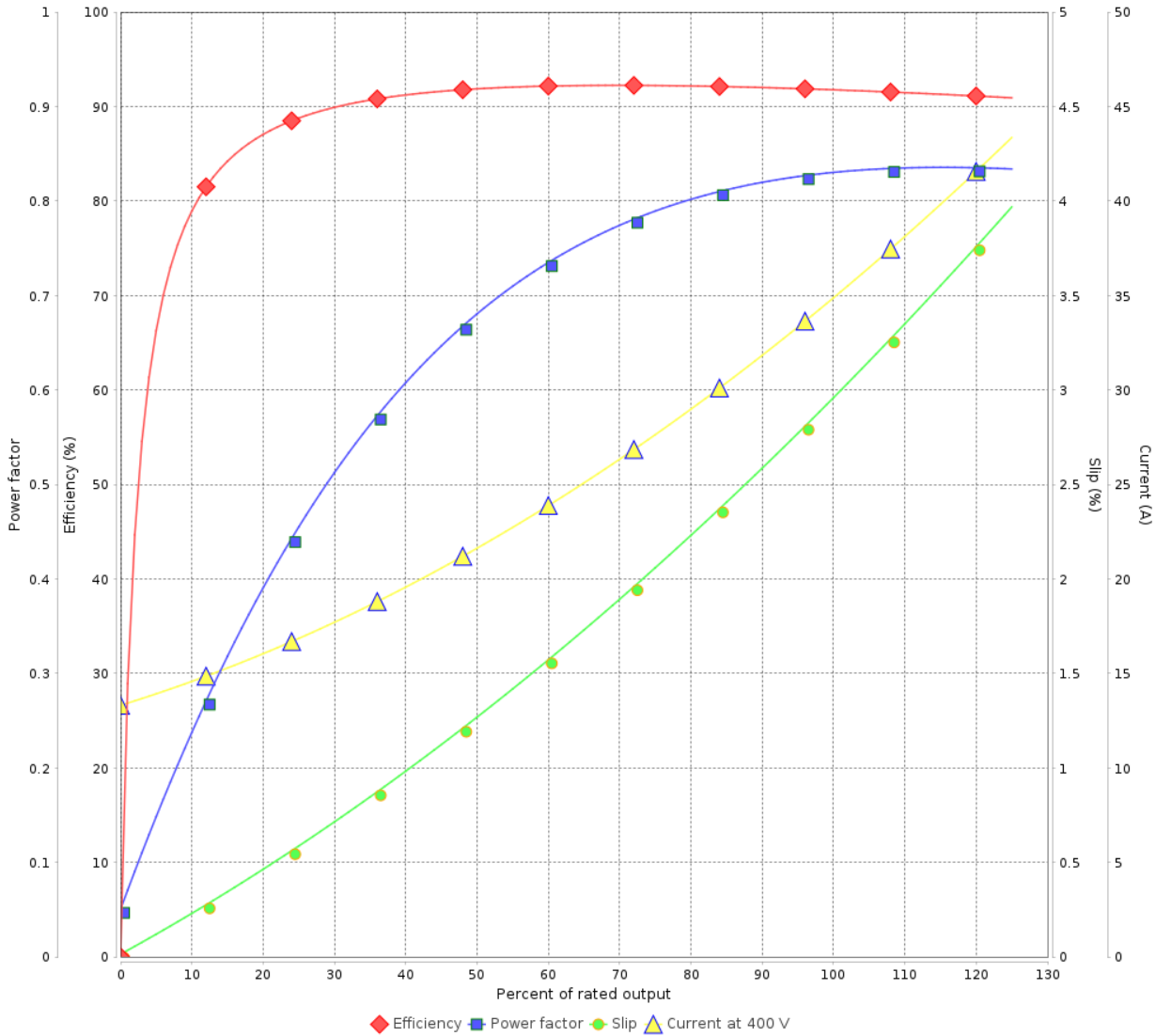
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 11941735

LOAD PERFORMANCE CURVE



Performance : 400 V 50 Hz 6P IE3

Rated current	: 35.1 A	Moment of inertia (J)	: 0.4843 kgm ²
LRC	: 5.2	Duty cycle	: Cont.(S1)
Rated torque	: 18.7 kgfm	Insulation class	: F
Locked rotor torque	: 180 %	Service factor	: 1.15
Breakdown torque	: 220 %	Temperature rise	: 80 K
Rated speed	: 970 rpm	Design	: B

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

LOAD PERFORMANCE CURVE

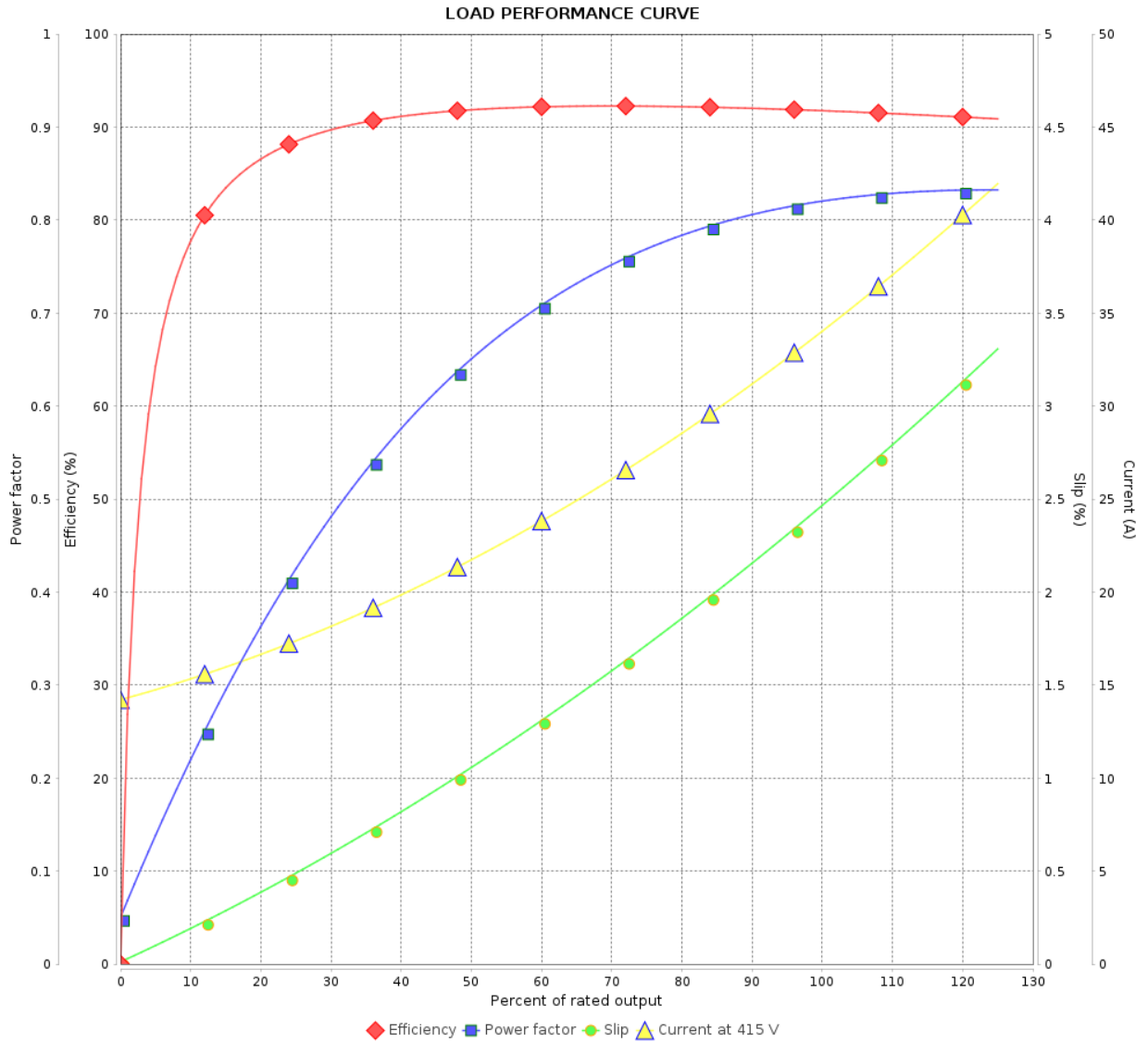
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase

Product code : 11941735



Performance : 415 V 50 Hz 6P IE3

Rated current : 34.2 A
 LRC : 5.6
 Rated torque : 18.6 kgfm
 Locked rotor torque : 190 %
 Breakdown torque : 240 %
 Rated speed : 975 rpm

Moment of inertia (J) : 0.4843 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				