

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :					
Product line	: W22 IEEE 841 NEMA Premium Efficiency Three-Phase	Product code :	11514036		
Frame	: 254/6T	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 ²	: 131 kg		
Protection degree	: IP55	Moment of inertia (J)	: 0.1867 kgm ²		
Design	: B				
Output [HP]	10	10	10	10	
Poles	6	6	6	6	
Frequency [Hz]	60	50	50	50	
Rated voltage [V]	460	380	400	415	
Rated current [A]	12.9	15.4	14.8	14.4	
L. R. Amperes [A]	80.0	73.9	79.9	83.5	
LRC [A]	6.2x(Code H)	4.8x(Code E)	5.4x(Code F)	5.8x(Code G)	
No load current [A]	6.00	4.90	6.30	6.60	
Rated speed [RPM]	1175	965	970	975	
Slip [%]	2.08	3.50	3.00	2.50	
Rated torque [kgfm]	6.18	7.52	7.48	7.44	
Locked rotor torque [%]	220	160	190	210	
Breakdown torque [%]	270	210	229	250	
Service factor	1.25	1.00	1.15	1.15	
Temperature rise	80 K	105 K	105 K	80 K	
Locked rotor time	46s (cold) 26s (hot)	39s (cold) 22s (hot)	39s (cold) 22s (hot)	39s (cold) 22s (hot)	
Noise level ²	59.0 dB(A)	57.0 dB(A)	57.0 dB(A)	57.0 dB(A)	
Efficiency (%)	25%				
	50%	90.2	90.2	89.5	
	75%	91.0	89.5	90.2	
	100%	91.0	89.1	89.5	
Power Factor	25%				
	50%	0.63	0.70	0.66	
	75%	0.74	0.79	0.77	
	100%	0.80	0.83	0.82	
Losses at normative operating points (speed;torque), in percentage of rated output power					
Losses (%)	P1 (0,9;1,0)	10.9	13.6	13.0	13.0
	P2 (0,5;1,0)	9.4	12.1	11.5	11.5
	P3 (0,25;1,0)	8.9	11.6	11.0	11.0
	P4 (0,9;0,5)	5.6	6.8	6.5	6.5
	P5 (0,5;0,5)	4.0	5.0	4.8	4.8
	P6 (0,5;0,25)	2.9	3.6	3.4	3.4
	P7 (0,25;0,25)	2.0	2.7	2.5	2.5
Bearing type	: Drive end : 6309 C3	Non drive end : 6209 C3	Foundation loads		
Sealing	: Taconite	Taconite	Max. traction	: 227 kgf	
	Labyrinth	Labyrinth	Max. compression	: 358 kgf	
Lubrication interval	: 20000 h	20000 h			
Lubricant amount	: 13 g	9 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. (2) Measured at 1m and with tolerance of +3dB(A).			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	13/01/2024			1 / 6	

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 / 6	

LOAD PERFORMANCE CURVE

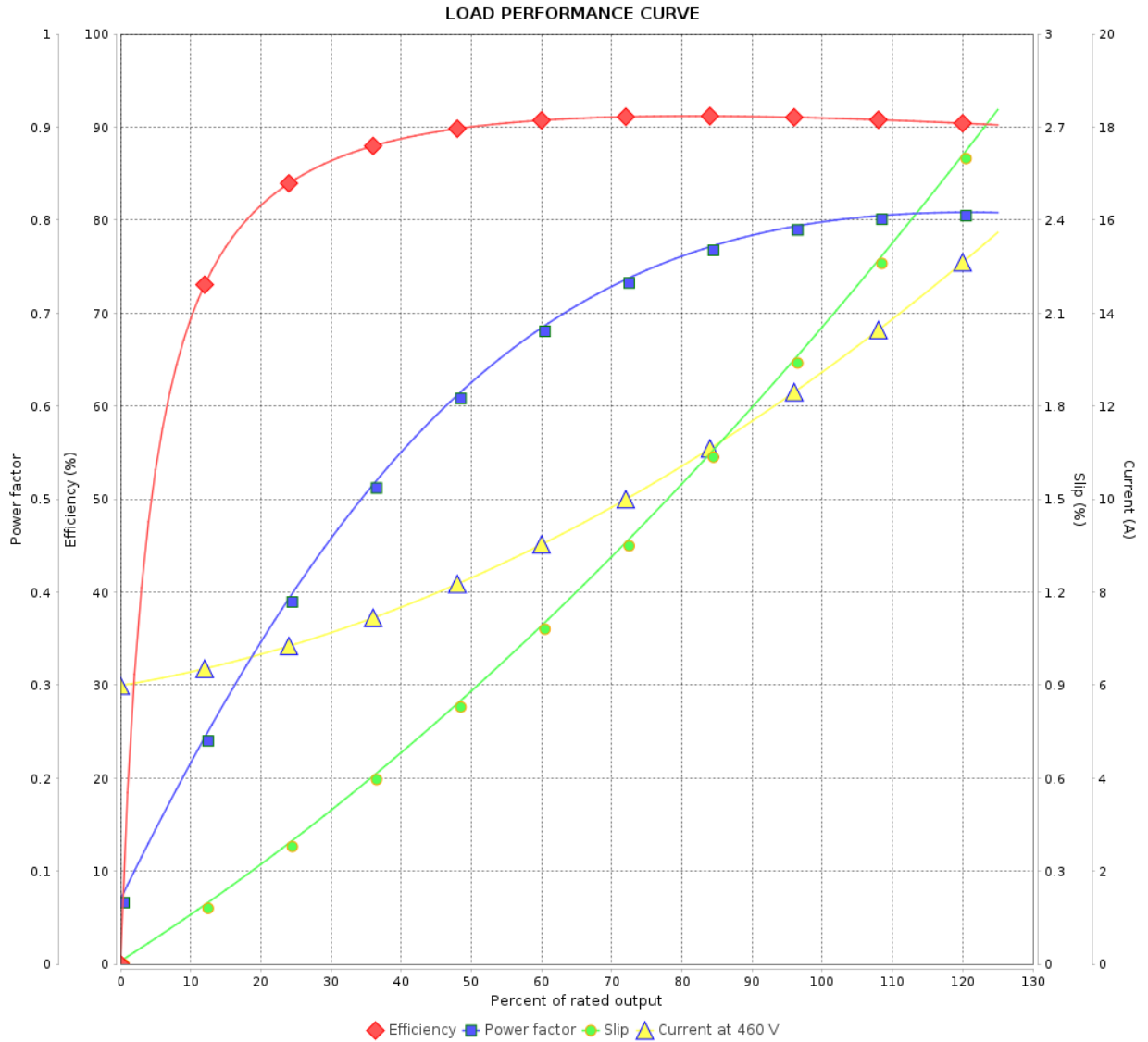
Three Phase Induction Motor - Squirrel Cage



Customer : _____

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

Product code : 11514036



Performance : 460 V 60 Hz 6P

Rated current : 12.9 A
 LRC : 6.2
 Rated torque : 6.18 kgfm
 Locked rotor torque : 220 %
 Breakdown torque : 270 %
 Rated speed : 1175 rpm

Moment of inertia (J) : 0.1867 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				

LOAD PERFORMANCE CURVE

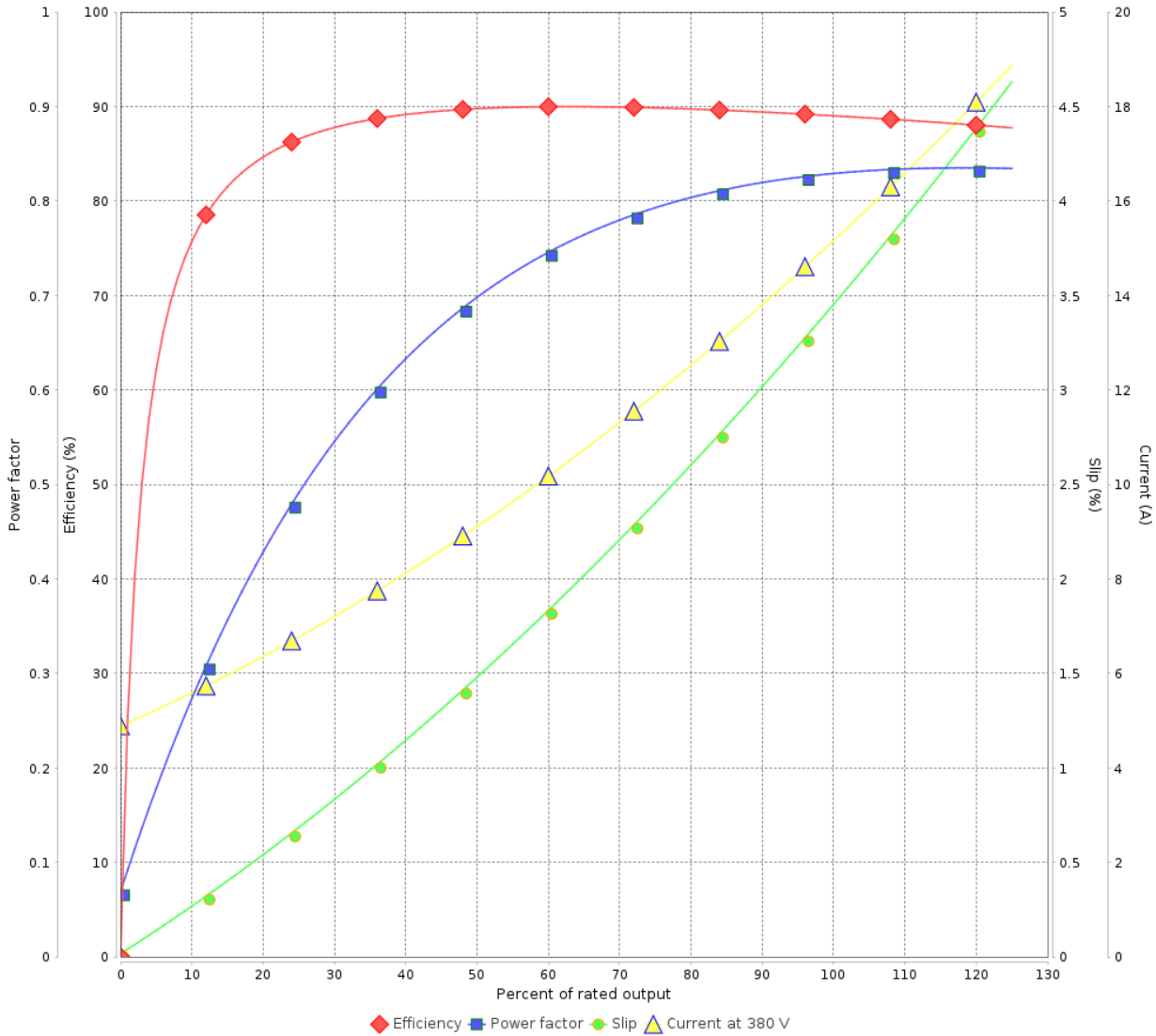
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 11514036

LOAD PERFORMANCE CURVE



Performance : 380 V 50 Hz 6P IE3

Rated current	: 15.4 A	Moment of inertia (J)	: 0.1867 kgm ²
LRC	: 4.8	Duty cycle	: Cont.(S1)
Rated torque	: 7.52 kgfm	Insulation class	: F
Locked rotor torque	: 160 %	Service factor	: 1.00
Breakdown torque	: 210 %	Temperature rise	: 105 K
Rated speed	: 965 rpm	Design	: B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 4 / 6	Revision
Checked by				
Date	13/01/2024			

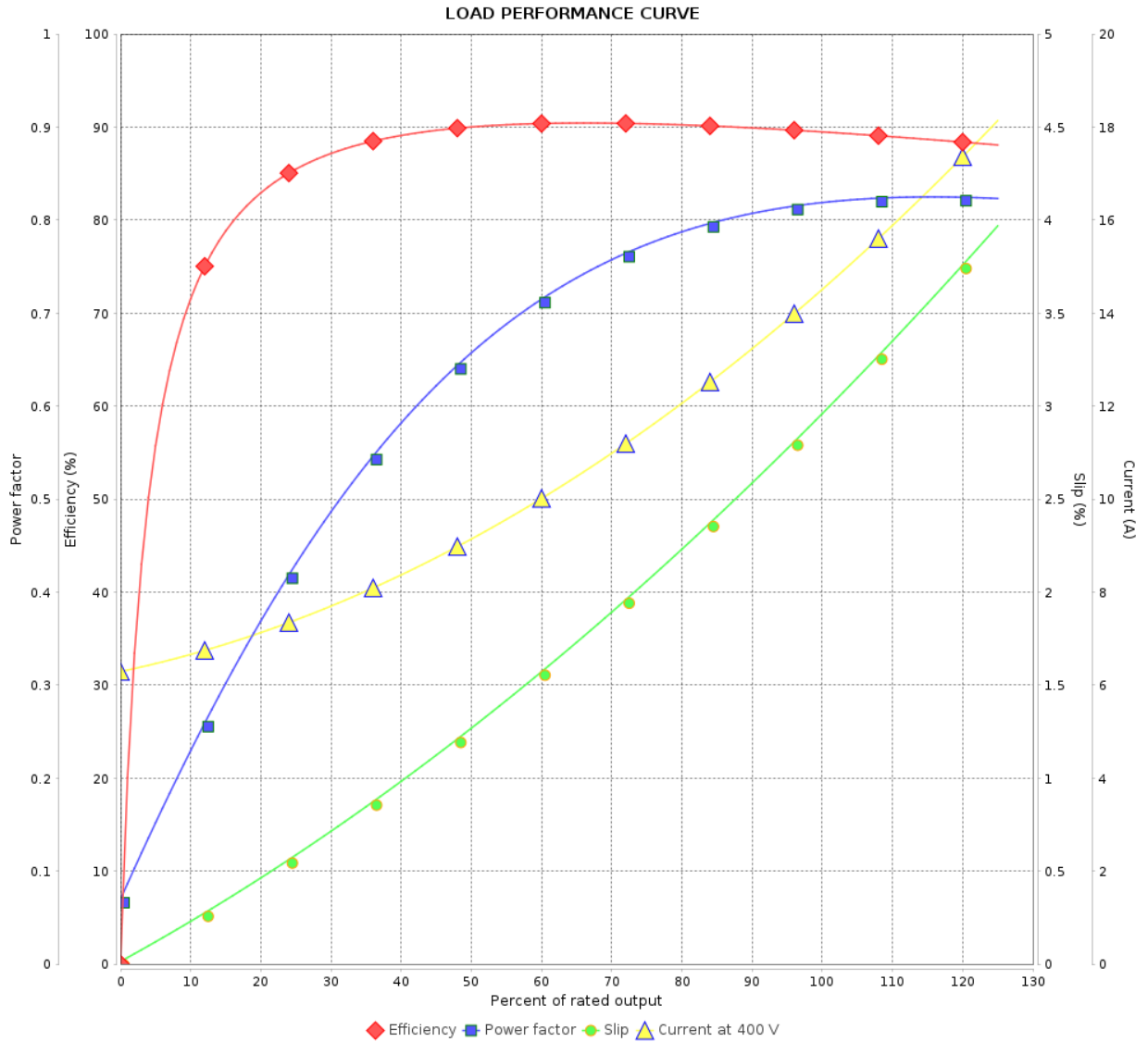
LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 11514036



Performance : 400 V 50 Hz 6P IE3

Rated current	: 14.8 A	Moment of inertia (J)	: 0.1867 kgm ²
LRC	: 5.4	Duty cycle	: Cont.(S1)
Rated torque	: 7.48 kgfm	Insulation class	: F
Locked rotor torque	: 190 %	Service factor	: 1.15
Breakdown torque	: 229 %	Temperature rise	: 105 K
Rated speed	: 970 rpm	Design	: B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 5 / 6	Revision
Checked by				
Date	13/01/2024			

LOAD PERFORMANCE CURVE

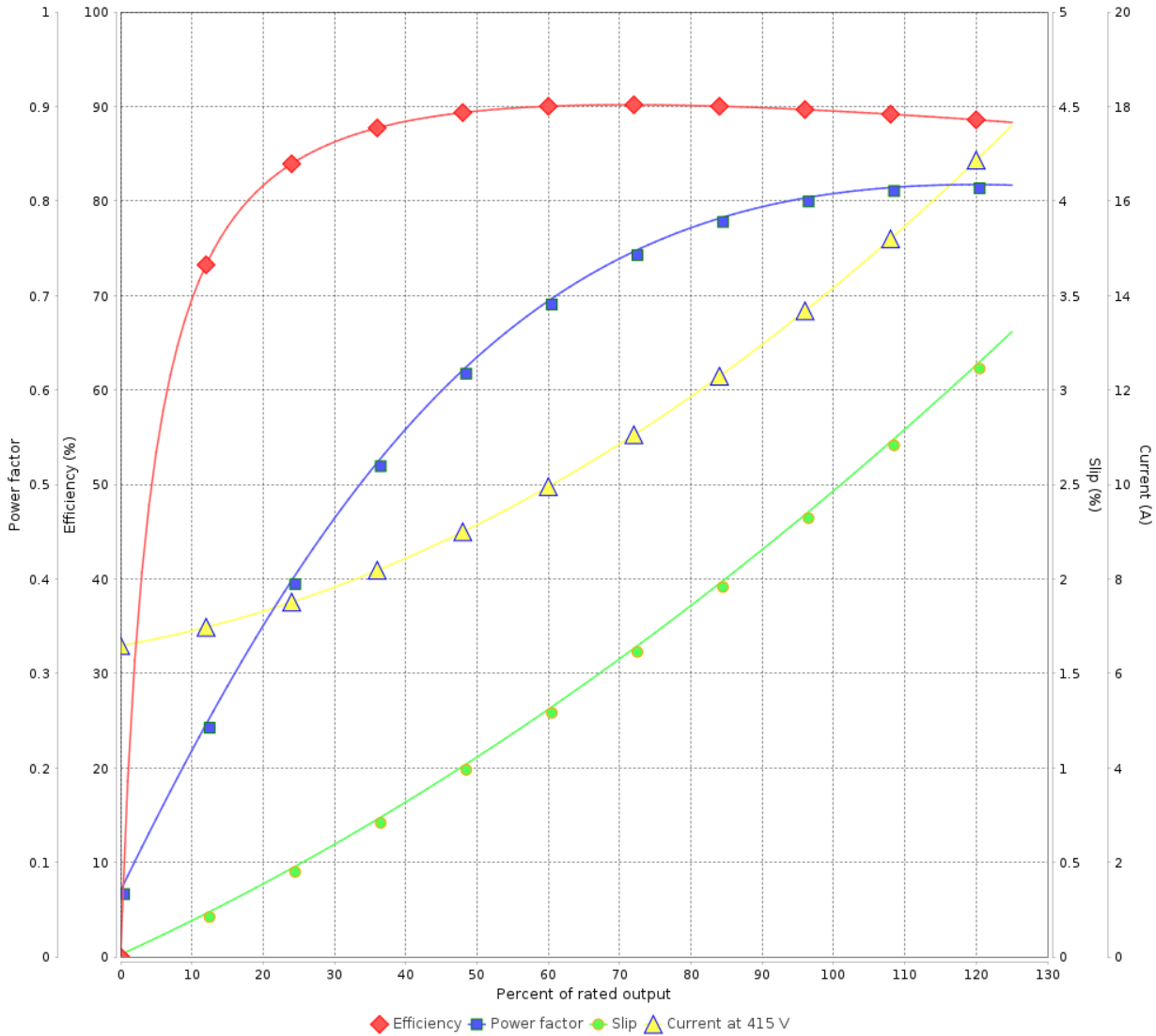
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 11514036

LOAD PERFORMANCE CURVE



Performance : 415 V 50 Hz 6P IE3

Rated current	: 14.4 A	Moment of inertia (J)	: 0.1867 kgm ²
LRC	: 5.8	Duty cycle	: Cont.(S1)
Rated torque	: 7.44 kgfm	Insulation class	: F
Locked rotor torque	: 210 %	Service factor	: 1.15
Breakdown torque	: 250 %	Temperature rise	: 80 K
Rated speed	: 975 rpm	Design	: B

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