

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 11937251

Frame : 182/4T	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 : 0.0 kg
Protection degree : IP55	Moment of inertia (J) : 0.0243 kgm ²
Design : B	

Output [HP]	1.5	1.5	1.5	1.5
Poles	8	8	8	8
Frequency [Hz]	60	50	50	50
Rated voltage [V]	460	380	400	415
Rated current [A]	2.84	3.10	3.13	3.11
L. R. Amperes [A]	16.8	15.5	17.2	18.7
LRC [A]	5.9x(Code K)	5.0x(Code H)	5.5x(Code J)	6.0x(Code K)
No load current [A]	2.10	2.00	2.30	2.50
Rated speed [RPM]	860	700	705	710
Slip [%]	4.44	6.67	6.00	5.33
Rated torque [kgfm]	1.27	1.56	1.54	1.53
Locked rotor torque [%]	229	210	240	260
Breakdown torque [%]	290	220	240	270
Service factor	1.25	1.00	1.00	1.00
Temperature rise	80 K	80 K	80 K	80 K
Locked rotor time	30s (cold) 17s (hot)	30s (cold) 17s (hot)	30s (cold) 17s (hot)	30s (cold) 17s (hot)
Noise level ²	50.0 dB(A)	46.0 dB(A)	46.0 dB(A)	46.0 dB(A)
Efficiency (%)	25%			
	50%	76.0	74.0	73.5
	75%	78.0	76.0	76.0
	100%	78.5	77.0	76.9
Power Factor	25%			
	50%	0.43	0.51	0.44
	75%	0.54	0.62	0.55
	100%	0.62	0.70	0.64

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

Losses (%)	P1 (0,9;1,0)	25.9	28.3	28.4	28.4
	P2 (0,5;1,0)	20.5	22.4	22.5	22.5
	P3 (0,25;1,0)	18.6	20.3	20.4	20.4
	P4 (0,9;0,5)	18.4	20.1	20.2	20.2
	P5 (0,5;0,5)	13.2	14.4	14.4	14.4
	P6 (0,5;0,25)	11.6	12.7	12.8	12.8
	P7 (0,25;0,25)	8.8	9.6	9.7	9.7

	<u>Drive end</u>	<u>Non drive end</u>	Foundation loads
Bearing type :	6207 C3	6206 C3	Max. traction : 86 kgf
Sealing :	Taconite	Taconite	Max. compression : 86 kgf
	Labyrinth	Labyrinth	
Lubrication interval :	20000 h	20000 h	
Lubricant amount :	7 g	5 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				
Date	22/10/2024		Page 1 / 6	Revision

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Notes

Rev.	Changes Summary		Performed	Checked	Date
Performed by			Page		Revision
Checked by					
Date	22/10/2024				

LOAD PERFORMANCE CURVE

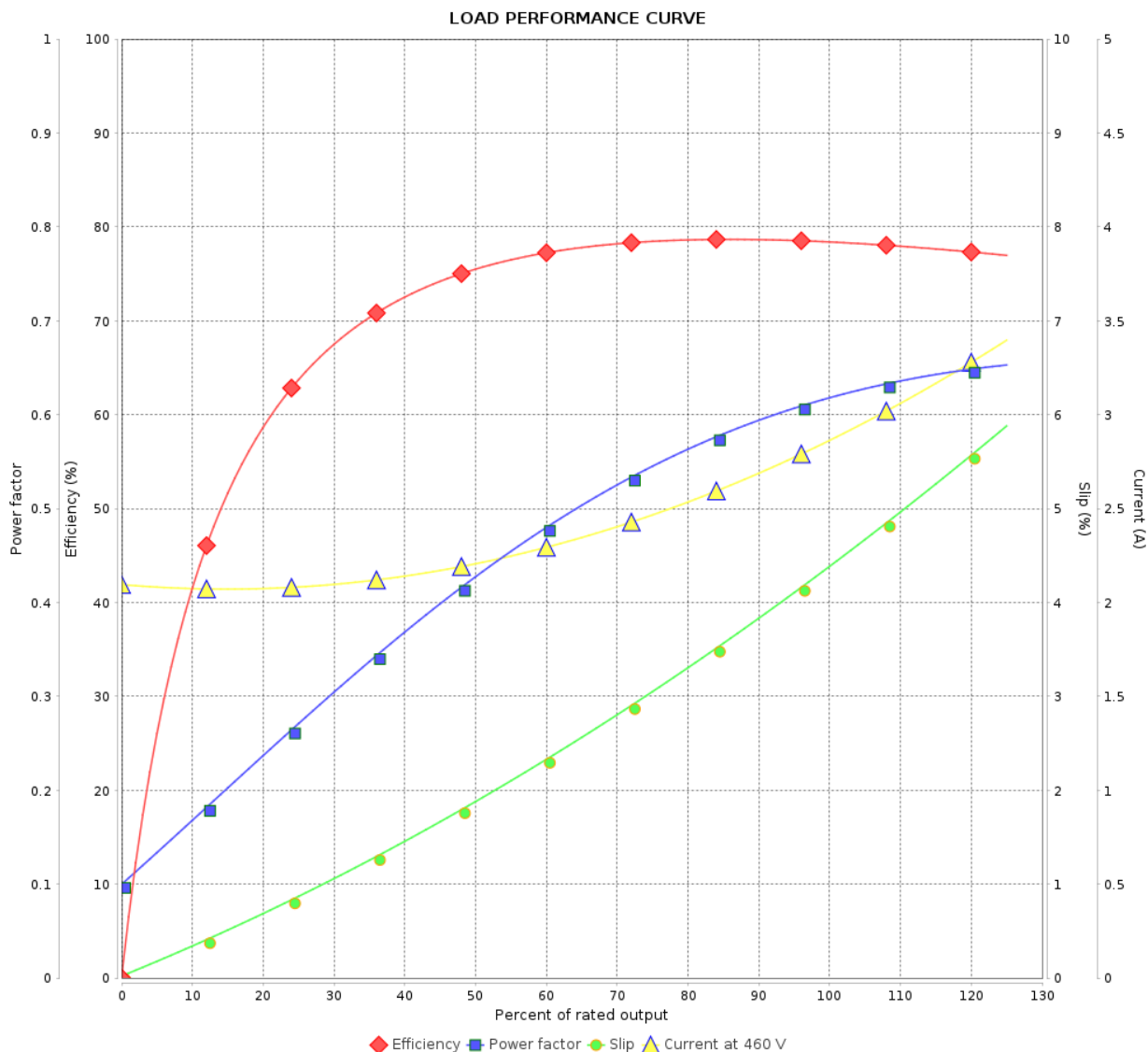
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 11937251



Performance : 460 V 60 Hz 8P

Rated current : 2.84 A
LRC : 5.9
Rated torque : 1.27 kgfm
Locked rotor torque : 229 %
Breakdown torque : 290 %
Rated speed : 860 rpm

Moment of inertia (J) : 0.0243 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 / 6Revision		
Checked by				
Date	22/10/2024			

LOAD PERFORMANCE CURVE

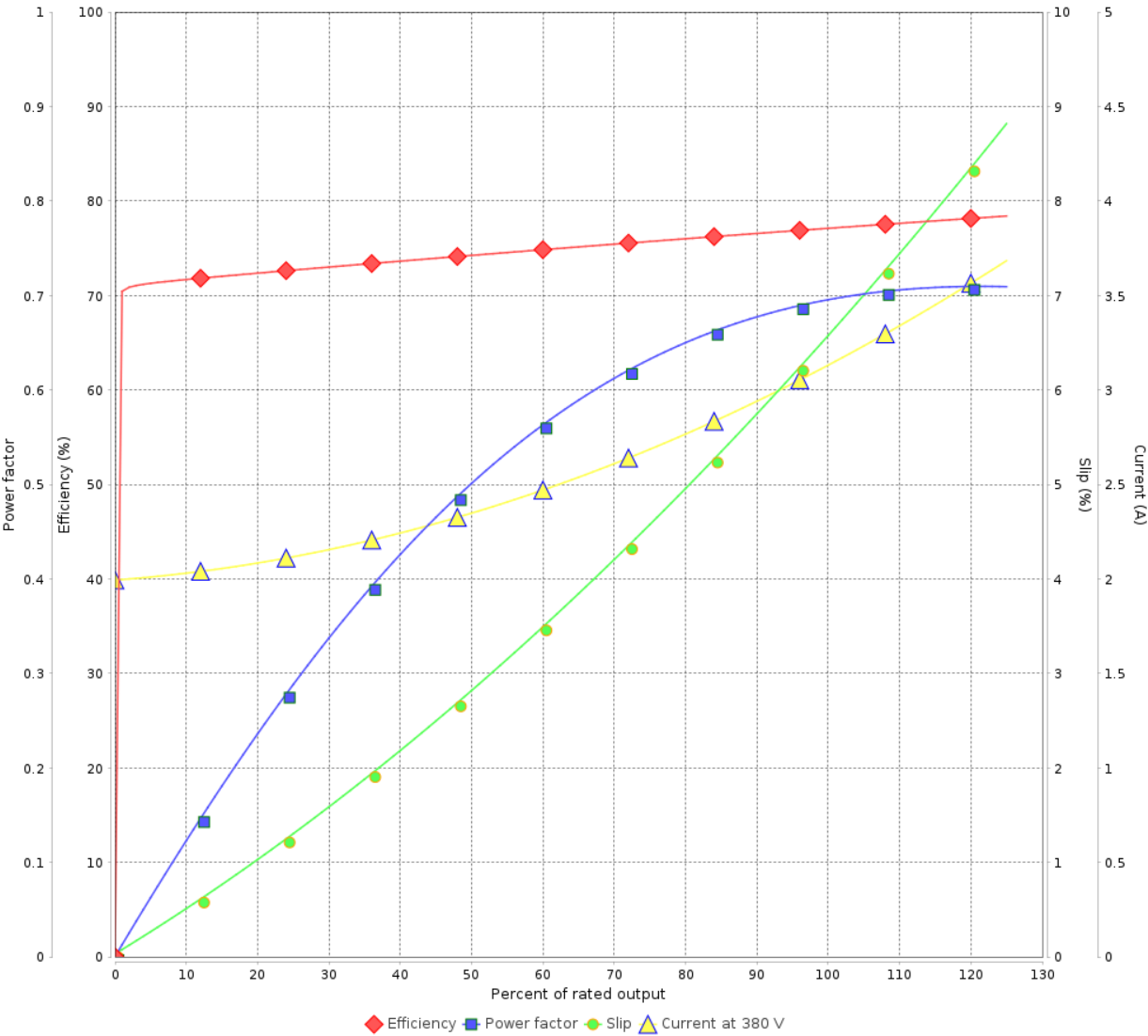
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 11937251

LOAD PERFORMANCE CURVE



Performance : 380 V 50 Hz 8P IE2

Rated current	: 3.10 A	Moment of inertia (J)	: 0.0243 kgm ²
LRC	: 5.0	Duty cycle	: Cont.(S1)
Rated torque	: 1.56 kgfm	Insulation class	: F
Locked rotor torque	: 210 %	Service factor	: 1.00
Breakdown torque	: 220 %	Temperature rise	: 80 K
Rated speed	: 700 rpm	Design	: B

Rev.	Changes Summary		Performed	Checked	Date
Performed by		Page 4 / 6Revision			
Checked by					
Date	22/10/2024				

LOAD PERFORMANCE CURVE

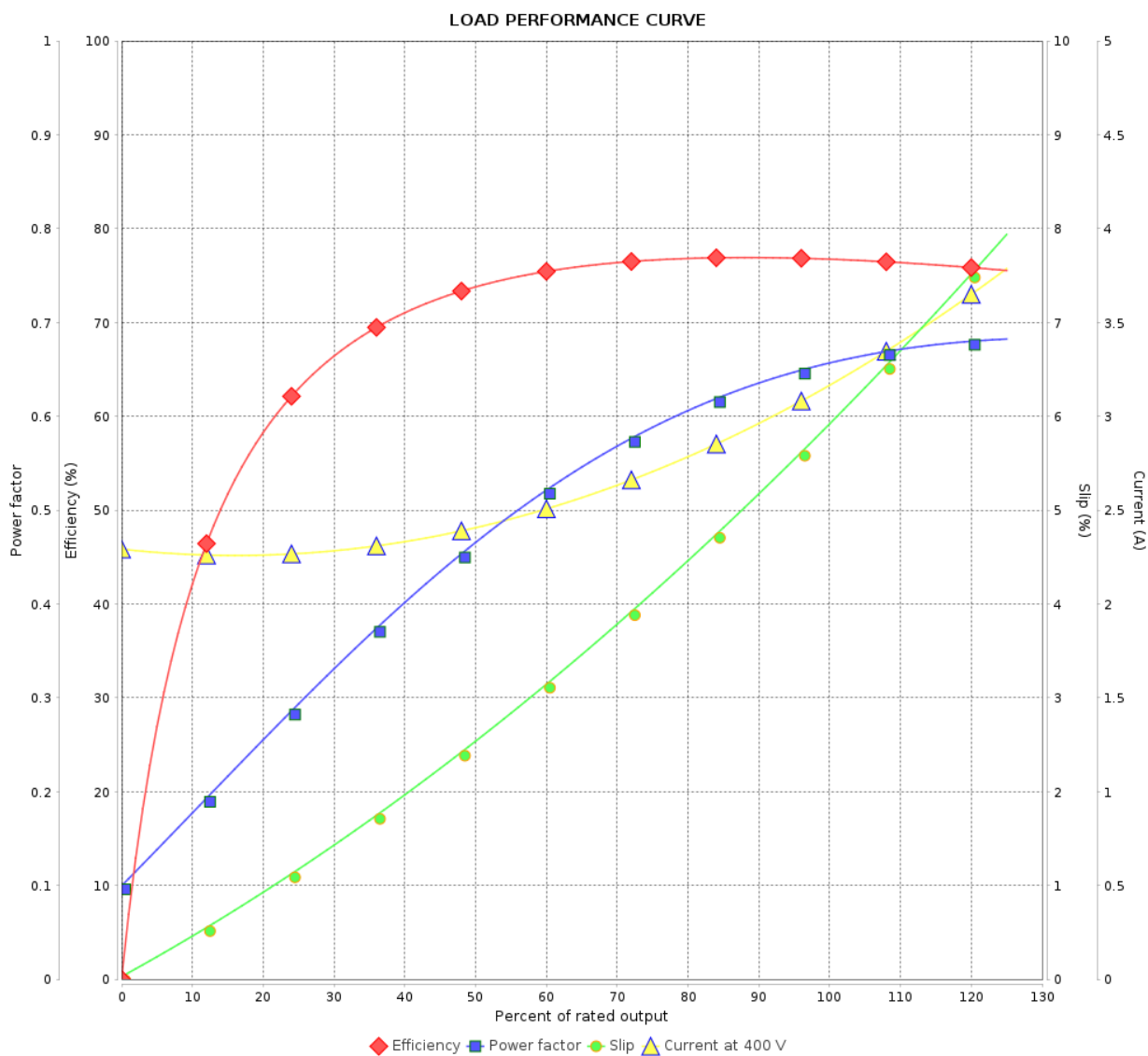
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 11937251



Performance : 400 V 50 Hz 8P IE2

Rated current : 3.13 A
LRC : 5.5
Rated torque : 1.54 kgfm
Locked rotor torque : 240 %
Breakdown torque : 240 %
Rated speed : 705 rpm

Moment of inertia (J) : 0.0243 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 5 / 6Revision		
Checked by				
Date	22/10/2024			

LOAD PERFORMANCE CURVE

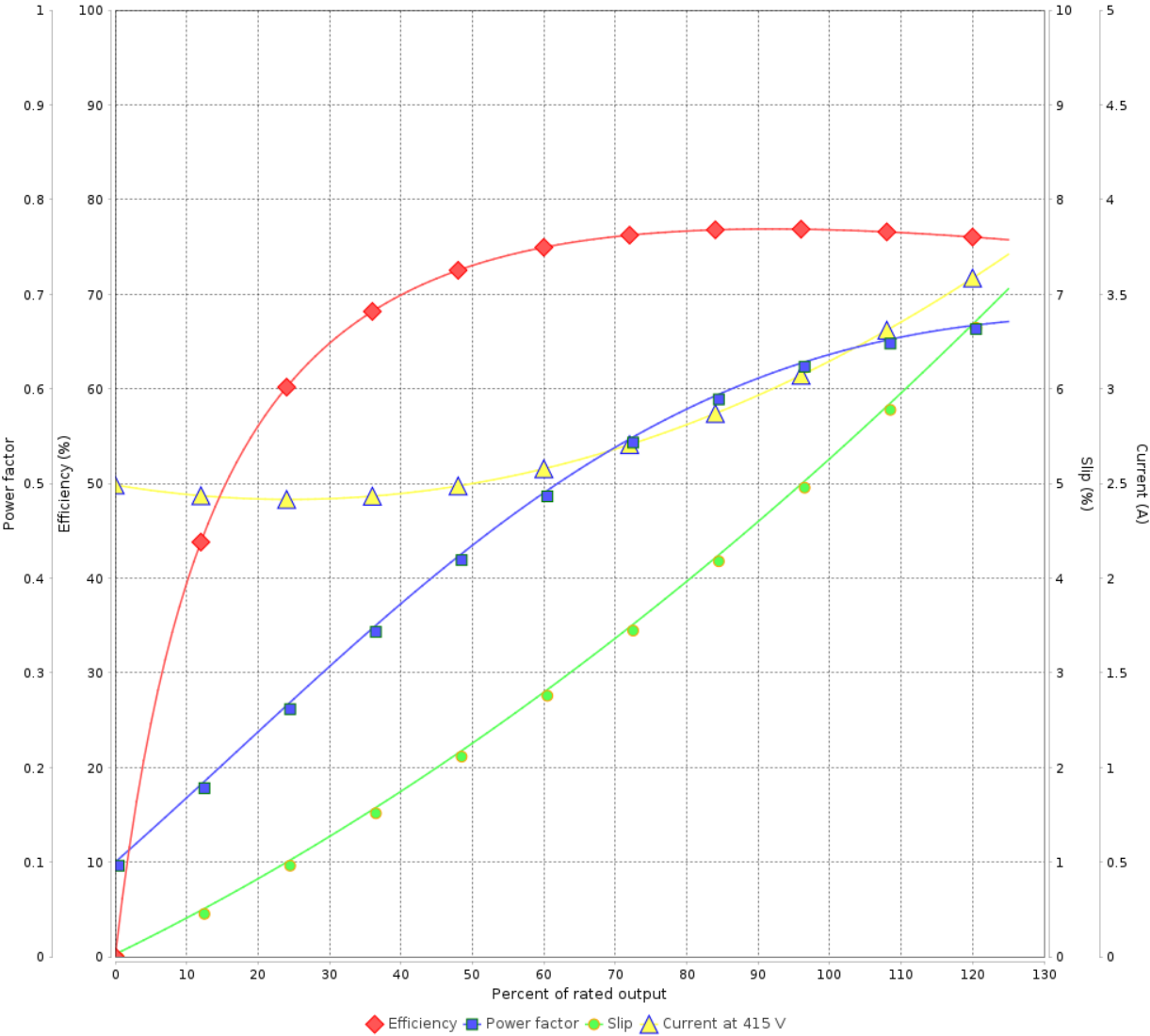
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 11937251

LOAD PERFORMANCE CURVE



Performance : 415 V 50 Hz 8P IE2			
Rated current	: 3.11 A	Moment of inertia (J)	: 0.0243 kgm²
LRC	: 6.0	Duty cycle	: Cont.(S1)
Rated torque	: 1.53 kgfm	Insulation class	: F
Locked rotor torque	: 260 %	Service factor	: 1.00
Breakdown torque	: 270 %	Temperature rise	: 80 K
Rated speed	: 710 rpm	Design	: B

Rev.	Changes Summary		Performed	Checked	Date
Performed by				Page	Revision
Checked by				6 / 6	
Date					
	22/10/2024				

