

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 11941857

Frame	: 284/6TS	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	: 181 kg
Protection degree	: IP55	Moment of inertia (J)	: 0.1419 kgm ²
Design	: B		

Output [HP]	30	25	25	25	30	30	30
Poles	2	2	2	2	2	2	2
Frequency [Hz]	60	50	50	50	50	50	50
Rated voltage [V]	460	380	400	415	380	400	415
Rated current [A]	34.6	34.6	33.2	32.4	42.0	40.0	38.2
L. R. Amperes [A]	218	215	232	233	206	220	237
LRC [A]	6.3x(Code G)	6.2x(Code G)	7.0x(Code H)	7.2x(Code H)	4.9x(Code E)	5.5x(Code F)	6.2x(Code G)
No load current [A]	9.90	9.40	10.0	10.6	9.40	10.0	10.6
Rated speed [RPM]	3540	2935	2945	2950	2910	2930	2935
Slip [%]	1.67	2.17	1.83	1.67	3.00	2.33	2.17
Rated torque [kgfm]	6.15	6.18	6.16	6.15	7.48	7.43	7.42
Locked rotor torque [%]	240	220	260	229	180	200	220
Breakdown torque [%]	250	229	270	290	200	220	240
Service factor	1.25	1.00	1.00	1.00	1.00	1.00	1.00
Temperature rise	80 K	80 K	80 K	80 K	105 K	105 K	105 K
Locked rotor time	27s (cold) 15s (hot)	21s (cold) 12s (hot)	21s (cold) 12s (hot)	21s (cold) 12s (hot)	21s (cold) 12s (hot)	21s (cold) 12s (hot)	21s (cold) 12s (hot)
Noise level ²	72.0 dB(A)	67.0 dB(A)	67.0 dB(A)	67.0 dB(A)	67.0 dB(A)	67.0 dB(A)	67.0 dB(A)
Efficiency (%)	25%						
	50%	91.7	91.0	91.1	91.2	89.0	91.0
	75%	91.7	91.5	91.5	91.8	89.5	91.0
	100%	91.7	92.4	92.4	92.4	89.5	91.0
Power Factor	25%						
	50%	0.77	0.80	0.76	0.74	0.83	0.78
	75%	0.85	0.86	0.84	0.82	0.88	0.85
	100%	0.87	0.88	0.87	0.86	0.89	0.88

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

Losses (%)	P1 (0,9;1,0)	8.7	8.7	8.7	8.7	8.7	8.7
	P2 (0,5;1,0)	7.0	7.0	7.0	7.0	7.0	7.0
	P3 (0,25;1,0)	6.1	6.1	6.1	6.1	6.1	6.1
	P4 (0,9;0,5)	4.3	4.3	4.3	4.3	4.3	4.3
	P5 (0,5;0,5)	2.6	2.6	2.6	2.6	2.6	2.6
	P6 (0,5;0,25)	1.6	1.6	1.6	1.6	1.6	1.6
	P7 (0,25;0,25)	1.0	1.0	1.0	1.0	1.0	1.0

Bearing type	: Drive end 6311 C3 Non drive end 6211 C3	Foundation loads Max. traction : 164 kgf Max. compression : 345 kgf
Sealing	: Taconite Labyrinth Labyrinth	
Lubrication interval	: 14000 h 17000 h	
Lubricant amount	: 18 g 11 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

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Notes

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

LOAD PERFORMANCE CURVE

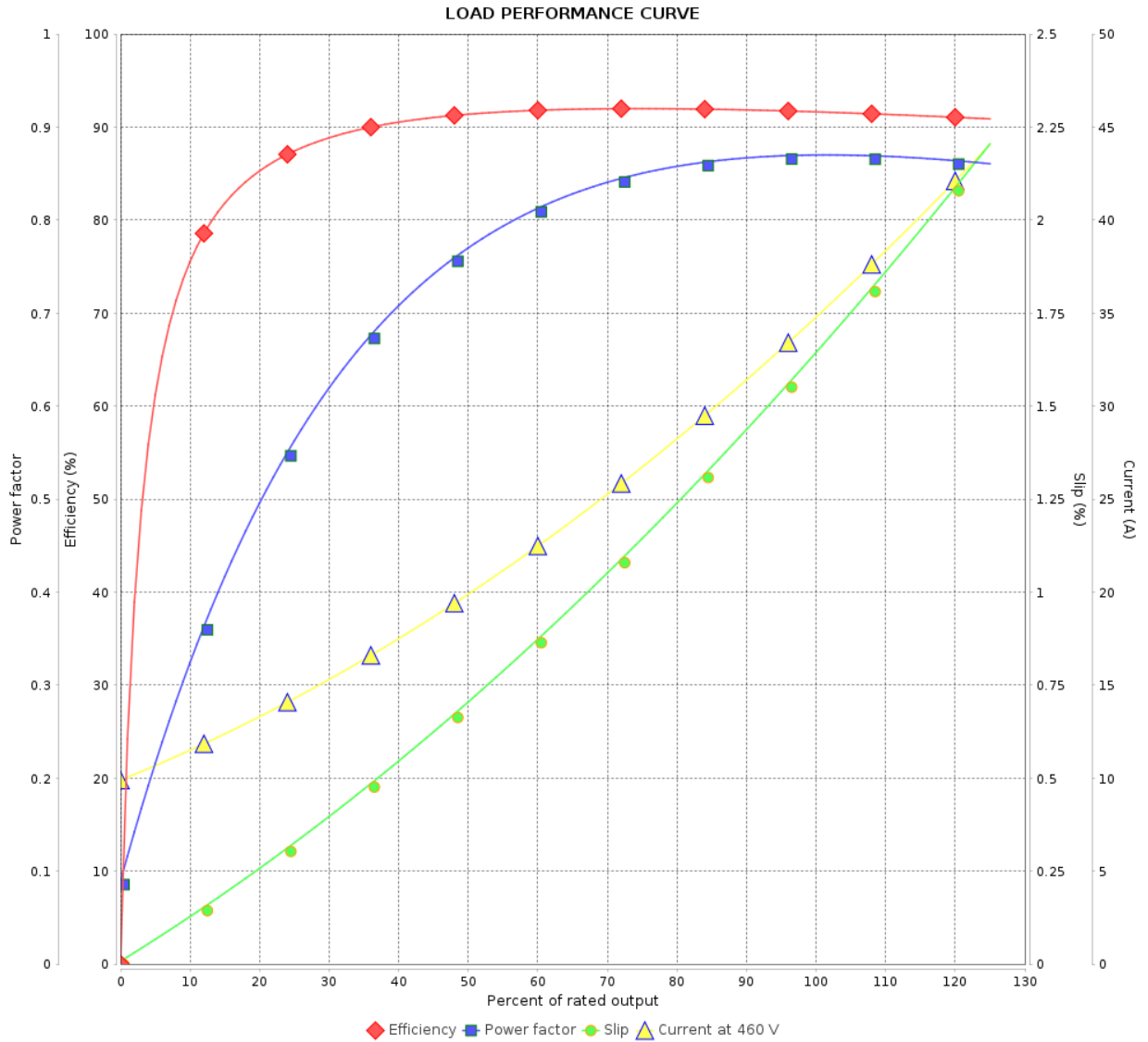
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 11941857



Performance : 460 V 60 Hz 2P

Rated current : 34.6 A
 LRC : 6.3
 Rated torque : 6.15 kgfm
 Locked rotor torque : 240 %
 Breakdown torque : 250 %
 Rated speed : 3540 rpm

Moment of inertia (J) : 0.1419 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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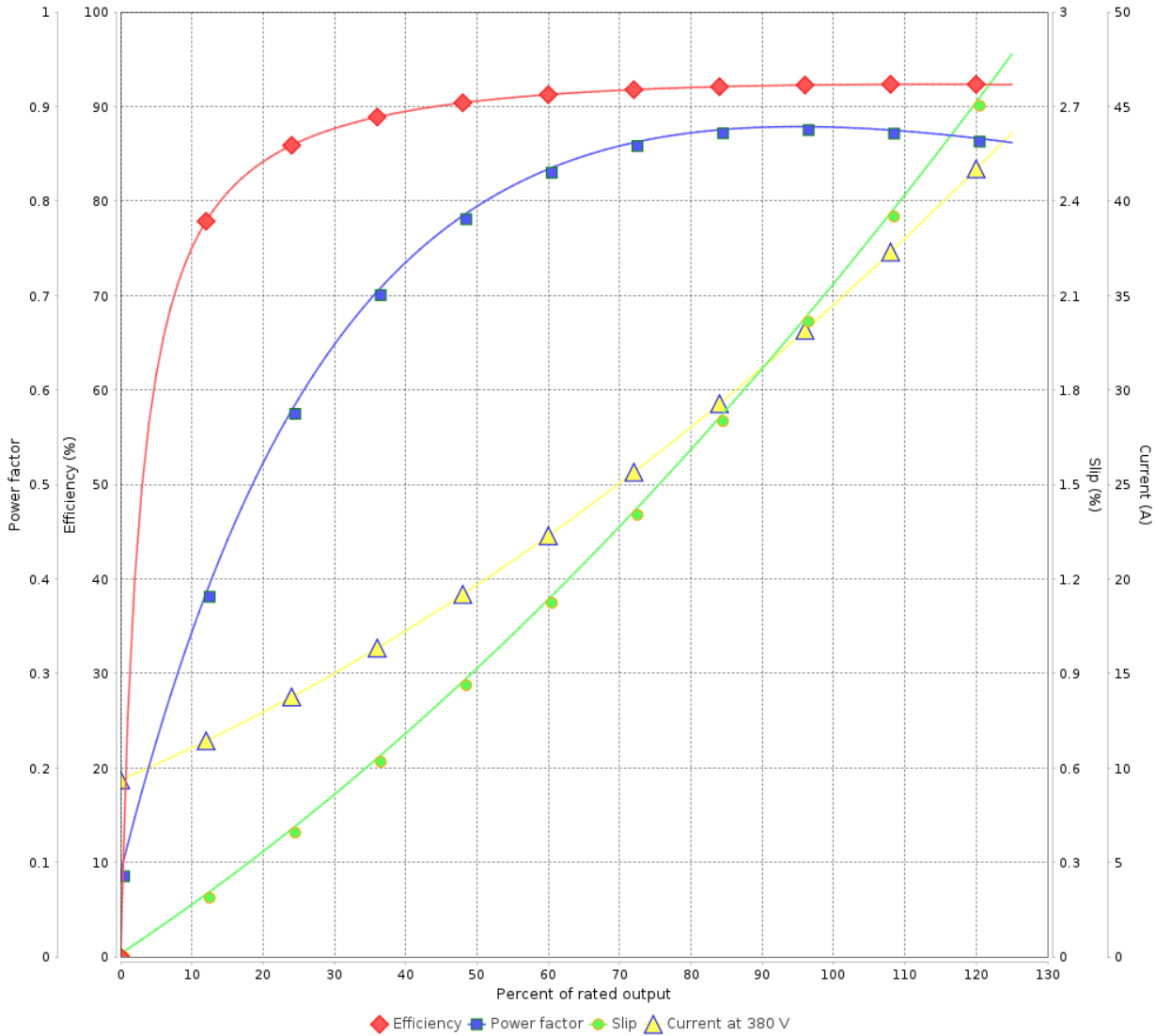
Three Phase Induction Motor - Squirrel Cage



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Performance : 380 V 50 Hz 2P IE3

Rated current	: 34.6 A	Moment of inertia (J)	: 0.1419 kgm ²
LRC	: 6.2	Duty cycle	: Cont.(S1)
Rated torque	: 6.18 kgfm	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.00
Breakdown torque	: 229 %	Temperature rise	: 80 K
Rated speed	: 2935 rpm	Design	: B

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

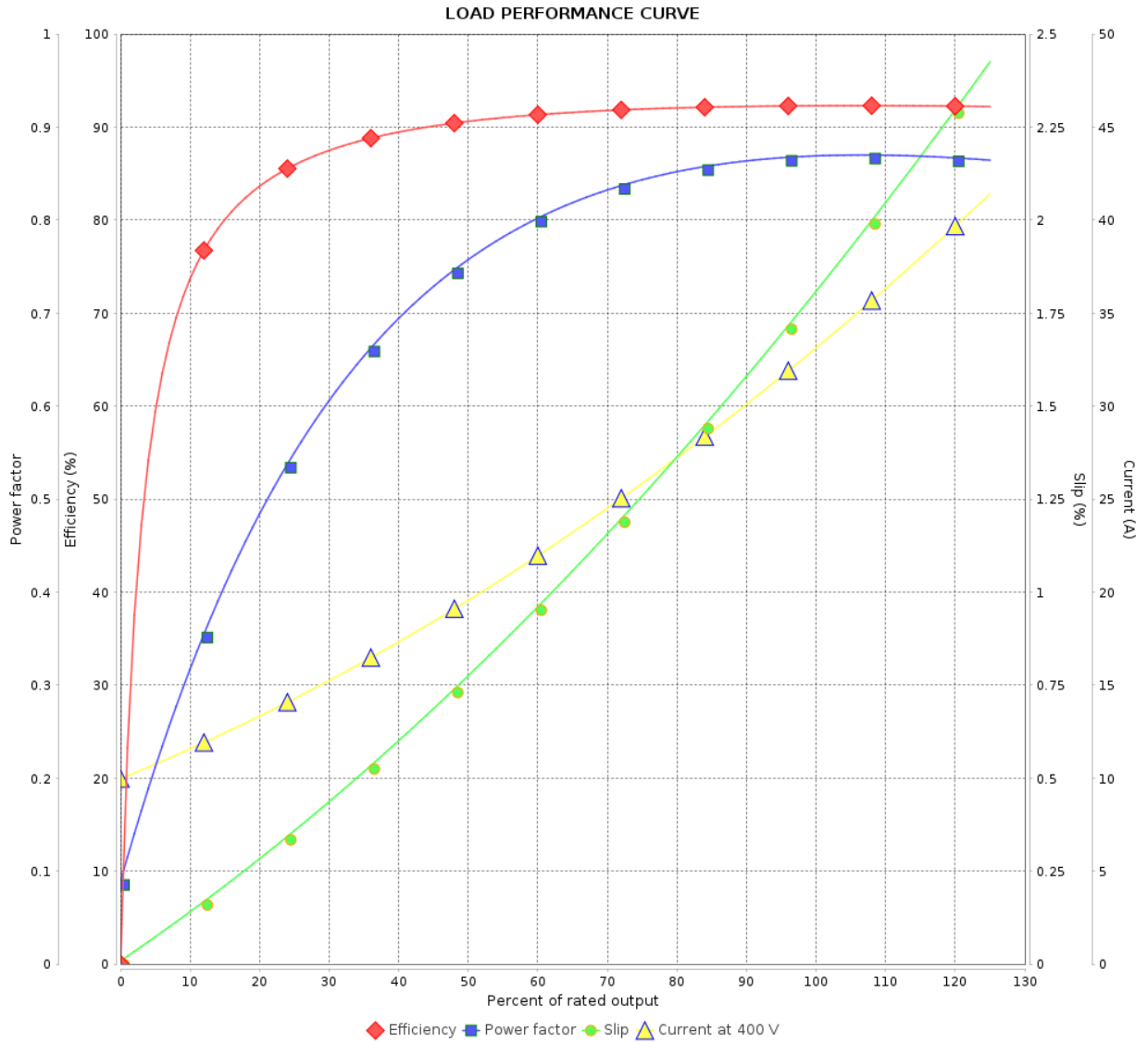
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Three Phase Induction Motor - Squirrel Cage



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Performance : 400 V 50 Hz 2P IE3

Rated current	: 33.2 A	Moment of inertia (J)	: 0.1419 kgm ²
LRC	: 7.0	Duty cycle	: Cont.(S1)
Rated torque	: 6.16 kgfm	Insulation class	: F
Locked rotor torque	: 260 %	Service factor	: 1.00
Breakdown torque	: 270 %	Temperature rise	: 80 K
Rated speed	: 2945 rpm	Design	: B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 5 / 9	Revision
Checked by				
Date	13/01/2024			

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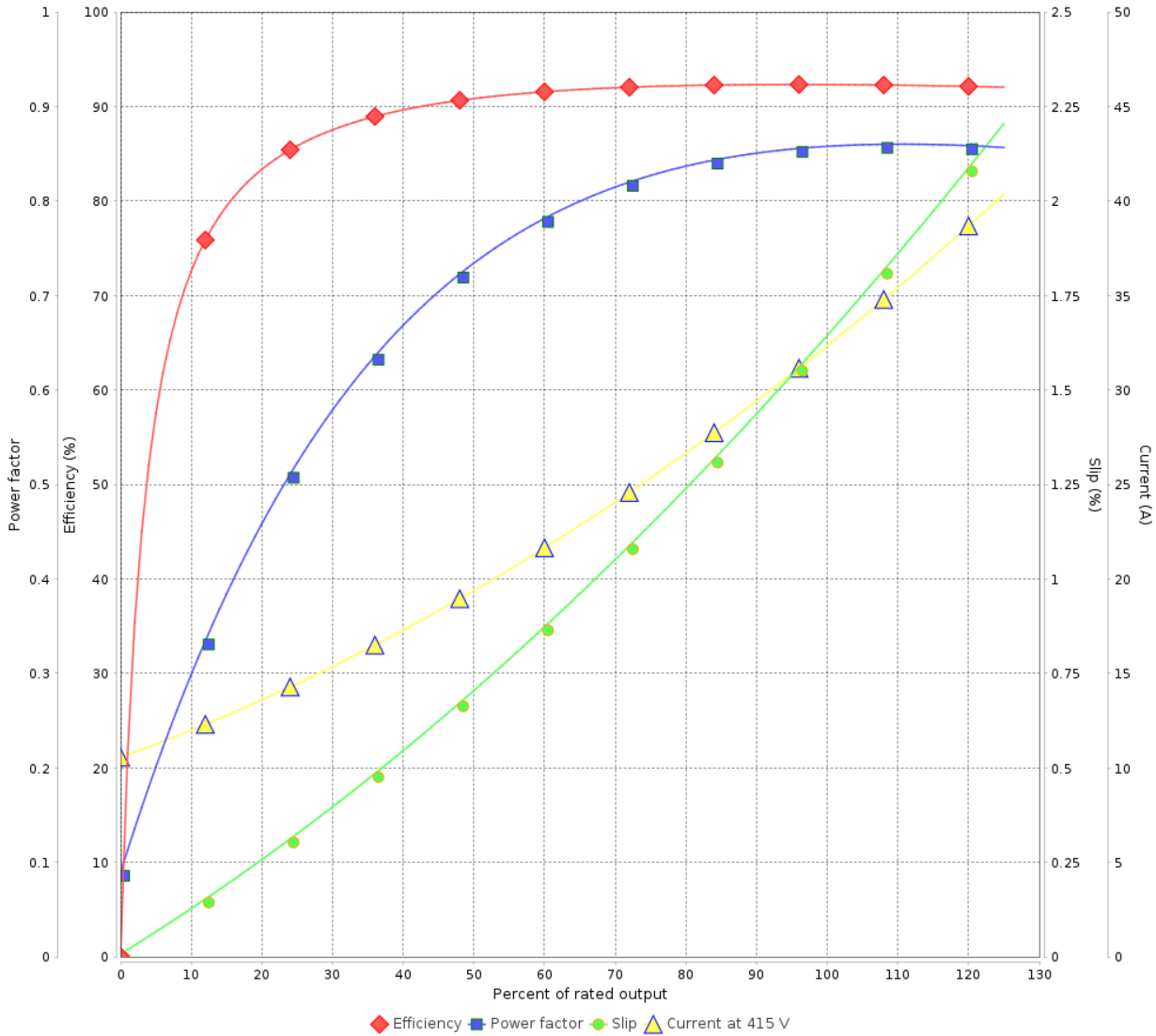
Three Phase Induction Motor - Squirrel Cage



Customer :

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Performance : 415 V 50 Hz 2P IE3

Rated current	: 32.4 A	Moment of inertia (J)	: 0.1419 kgm ²
LRC	: 7.2	Duty cycle	: Cont.(S1)
Rated torque	: 6.15 kgfm	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	: 1.00
Breakdown torque	: 290 %	Temperature rise	: 80 K
Rated speed	: 2950 rpm	Design	: B

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

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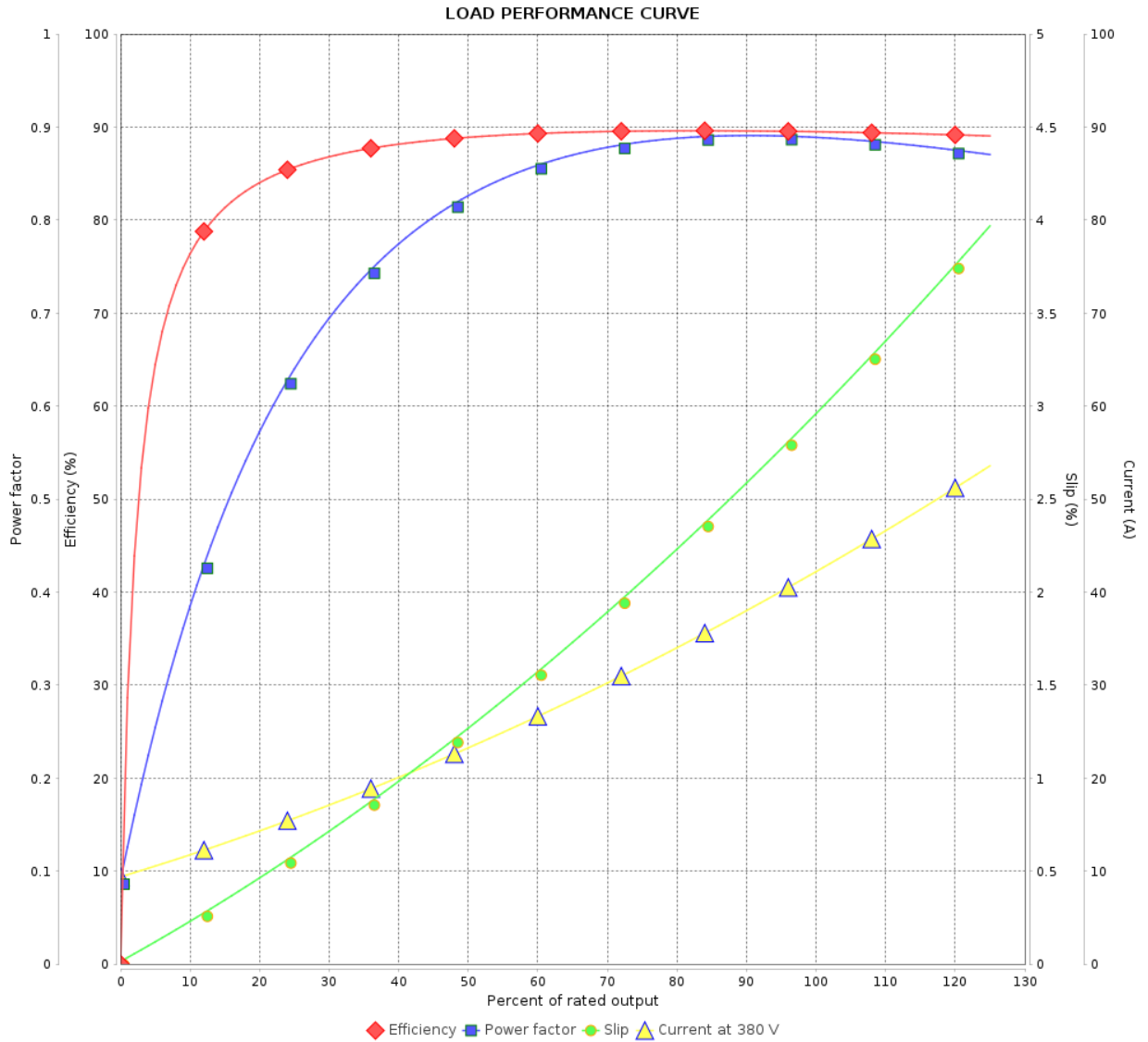
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 11941857



Performance : 380 V 50 Hz 2P

Rated current : 42.0 A
 LRC : 4.9
 Rated torque : 7.48 kgfm
 Locked rotor torque : 180 %
 Breakdown torque : 200 %
 Rated speed : 2910 rpm

Moment of inertia (J) : 0.1419 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 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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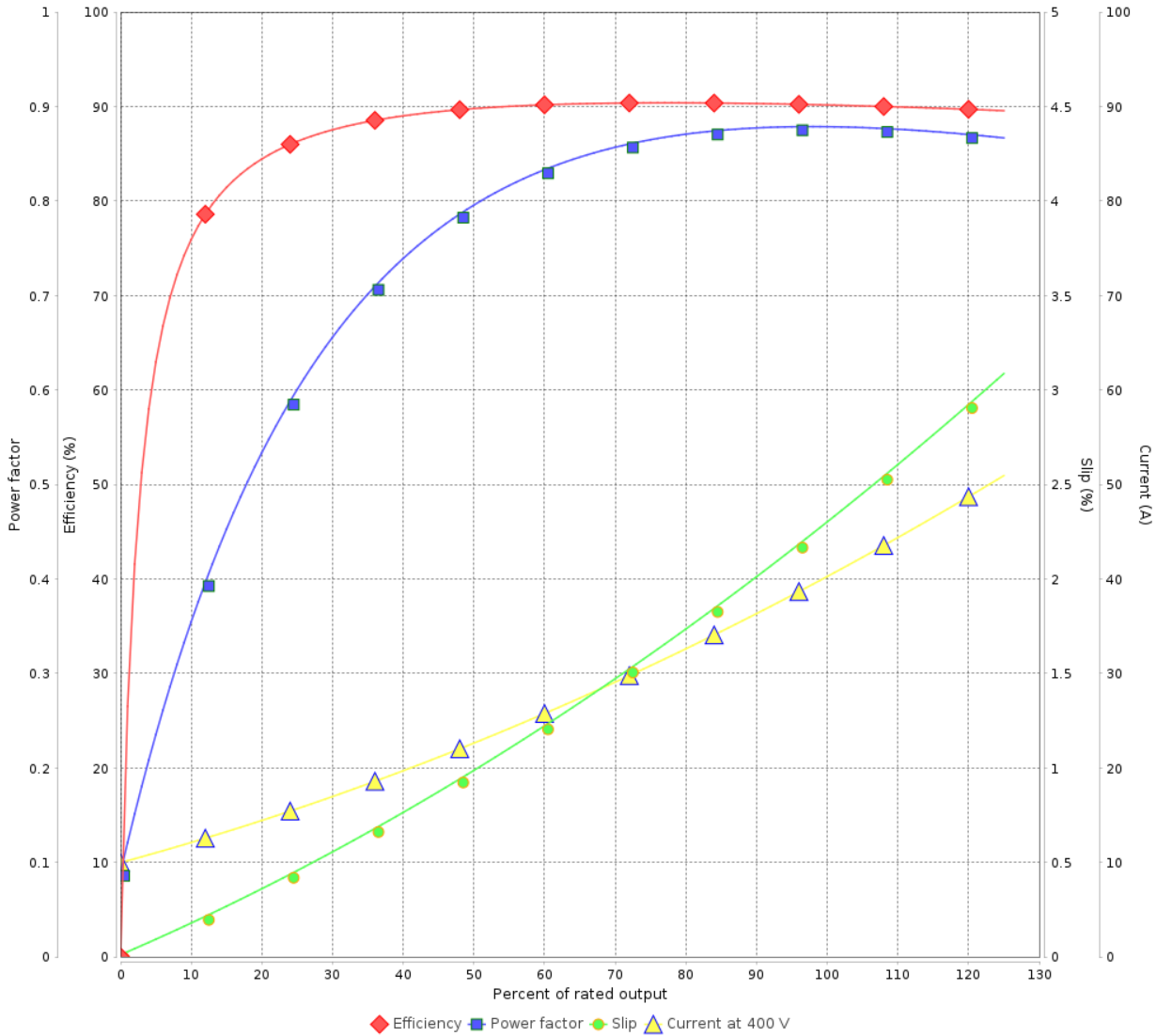
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Performance : 400 V 50 Hz 2P IE1

Rated current	: 40.0 A	Moment of inertia (J)	: 0.1419 kgm ²
LRC	: 5.5	Duty cycle	: Cont.(S1)
Rated torque	: 7.43 kgfm	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.00
Breakdown torque	: 220 %	Temperature rise	: 105 K
Rated speed	: 2930 rpm	Design	: B

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

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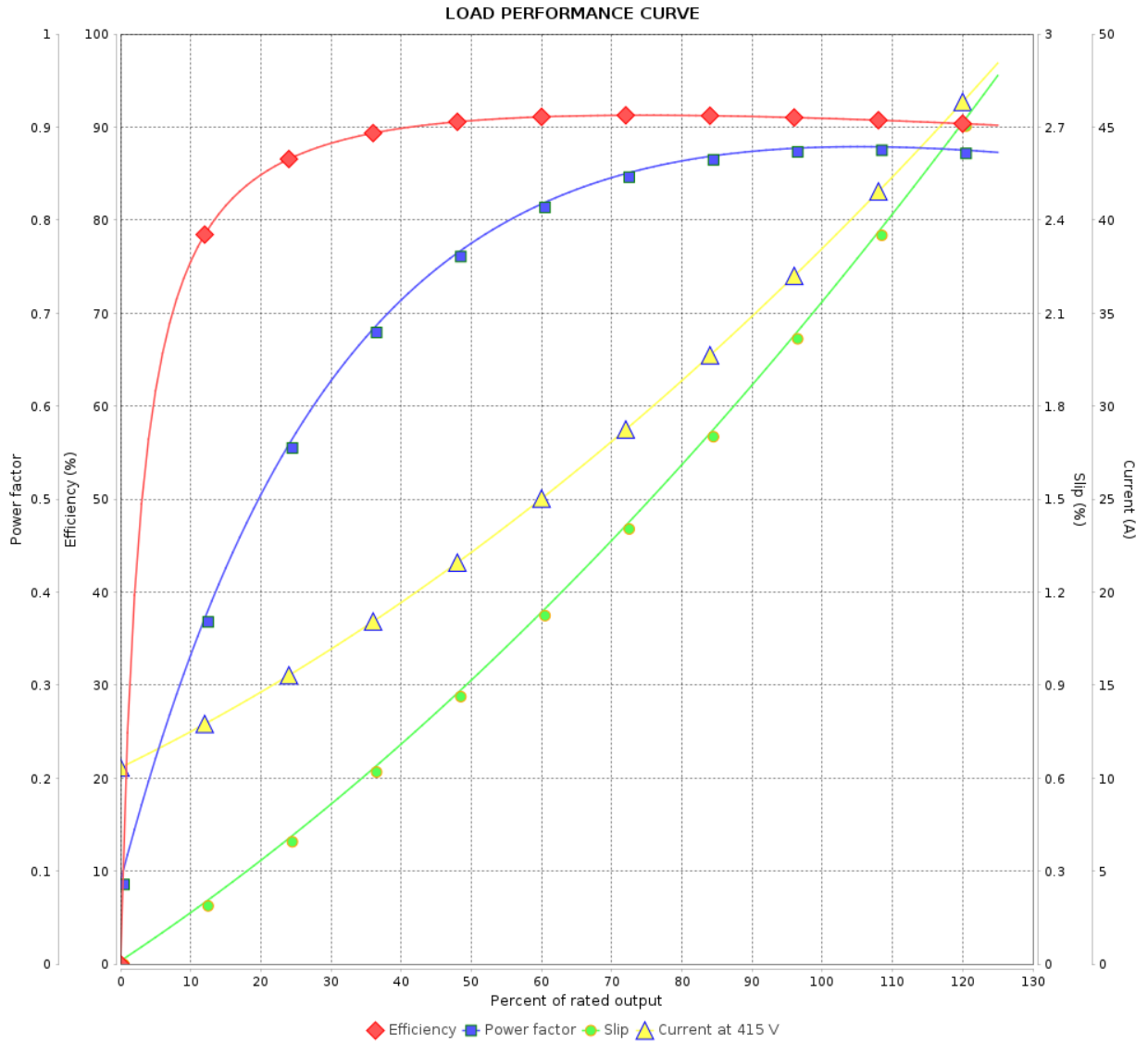
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 11941857



Performance : 415 V 50 Hz 2P IE1

Rated current : 38.2 A
 LRC : 6.2
 Rated torque : 7.42 kgfm
 Locked rotor torque : 220 %
 Breakdown torque : 240 %
 Rated speed : 2935 rpm

Moment of inertia (J) : 0.1419 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : B

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