

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :					
Product line	: W22 IEEE 841 NEMA Premium Efficiency Three-Phase	Product code :	12373794		
Frame	: 182/4TC	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	: 46.9 kg		
Protection degree	: IP56	Moment of inertia (J)	: 0.0143 kgm ²		
Design	: B				
Output [HP]	3	3	3	3	
Poles	4	4	4	4	
Frequency [Hz]	60	50	50	50	
Rated voltage [V]	460	380	400	415	
Rated current [A]	3.91	4.78	4.54	4.43	
L. R. Amperes [A]	31.7	30.1	32.2	33.7	
LRC [A]	8.1x(Code K)	6.3x(Code H)	7.1x(Code J)	7.6x(Code K)	
No load current [A]	2.00	2.00	2.10	2.25	
Rated speed [RPM]	1760	1445	1450	1455	
Slip [%]	2.22	3.67	3.33	3.00	
Rated torque [kgfm]	1.24	1.51	1.50	1.50	
Locked rotor torque [%]	220	220	220	240	
Breakdown torque [%]	330	250	290	320	
Service factor	1.25	1.25	1.25	1.25	
Temperature rise	80 K	80 K	80 K	80 K	
Locked rotor time	41s (cold) 23s (hot)	32s (cold) 18s (hot)	32s (cold) 18s (hot)	32s (cold) 18s (hot)	
Noise level ²	56.0 dB(A)	56.0 dB(A)	56.0 dB(A)	56.0 dB(A)	
Efficiency (%)	25%	86.4	87.2	87.3	87.3
	50%	87.5	87.5	87.5	87.5
	75%	88.5	87.5	87.5	87.5
	100%	89.5	87.5	87.5	87.5
Power Factor	25%	0.36	0.43	0.39	0.36
	50%	0.61	0.68	0.64	0.61
	75%	0.71	0.77	0.75	0.73
	100%	0.79	0.80	0.80	0.79
Losses at normative operating points (speed;torque), in percentage of rated output power					
Losses (%)	P1 (0,9;1,0)	11.0	13.4	13.4	13.4
	P2 (0,5;1,0)	8.9	10.8	10.8	10.8
	P3 (0,25;1,0)	8.8	10.7	10.7	10.7
	P4 (0,9;0,5)	6.1	7.4	7.4	7.4
	P5 (0,5;0,5)	4.0	4.9	4.9	4.9
	P6 (0,5;0,25)	3.0	3.6	3.6	3.6
	P7 (0,25;0,25)	2.1	2.6	2.6	2.6
Bearing type	: Drive end : 6207 C3 Non drive end : 6206 C3	Foundation loads			
Sealing	: Inpro/Seal Inpro/Seal	Max. traction : 77 kgf			
Lubrication interval	: 20000 h 20000 h	Max. compression : 123 kgf			
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). (3) Approximate weight subject to changes after manufacturing process.			These are average values based on tests with sinusoidal power supply, subject to the tolerances stipulated in NEMA MG-1.		
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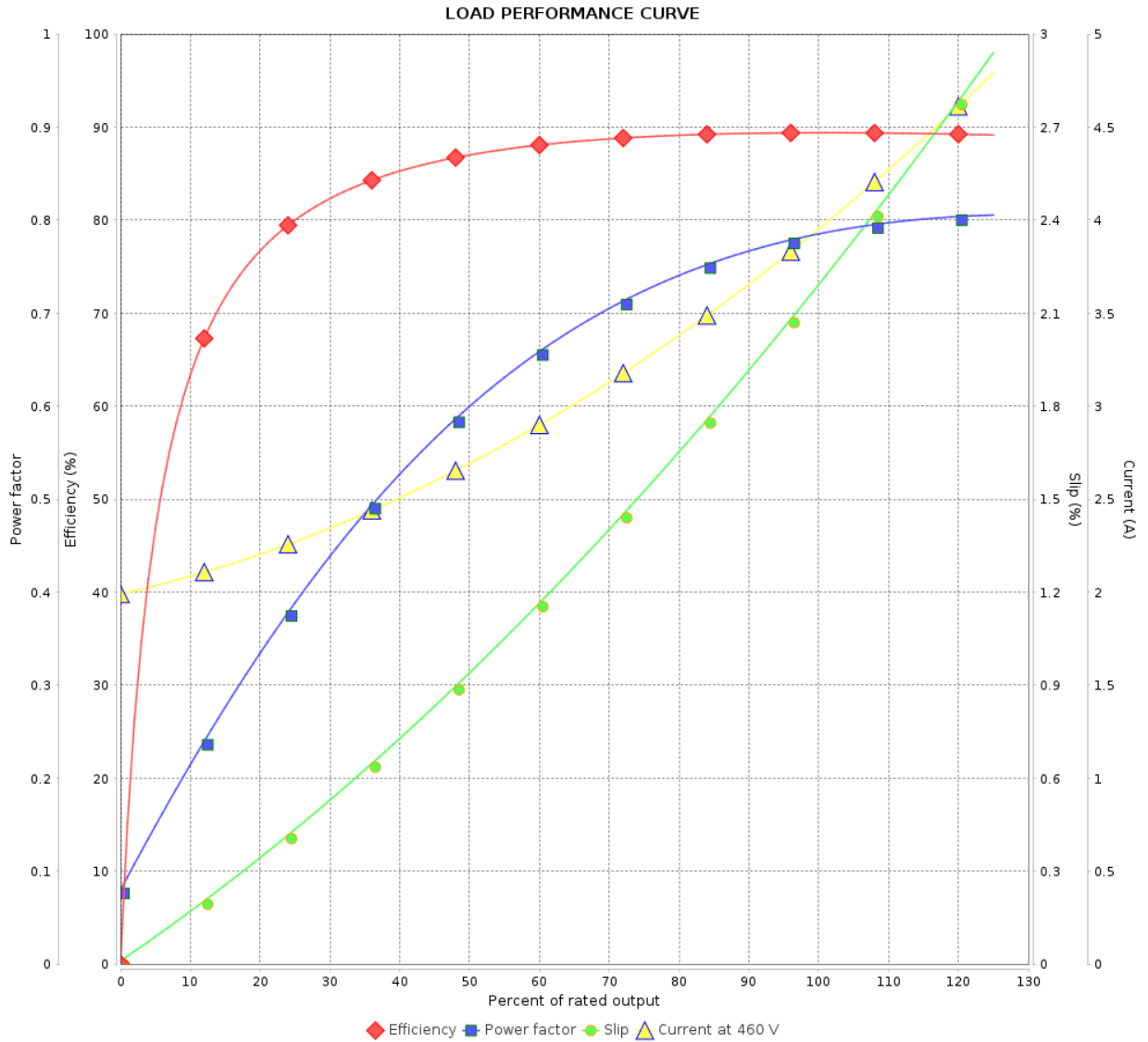
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 12373794



Performance : 460 V 60 Hz 4P

Rated current : 3.91 A
 LRC : 8.1
 Rated torque : 1.24 kgfm
 Locked rotor torque : 220 %
 Breakdown torque : 330 %
 Rated speed : 1760 rpm

Moment of inertia (J) : 0.0143 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

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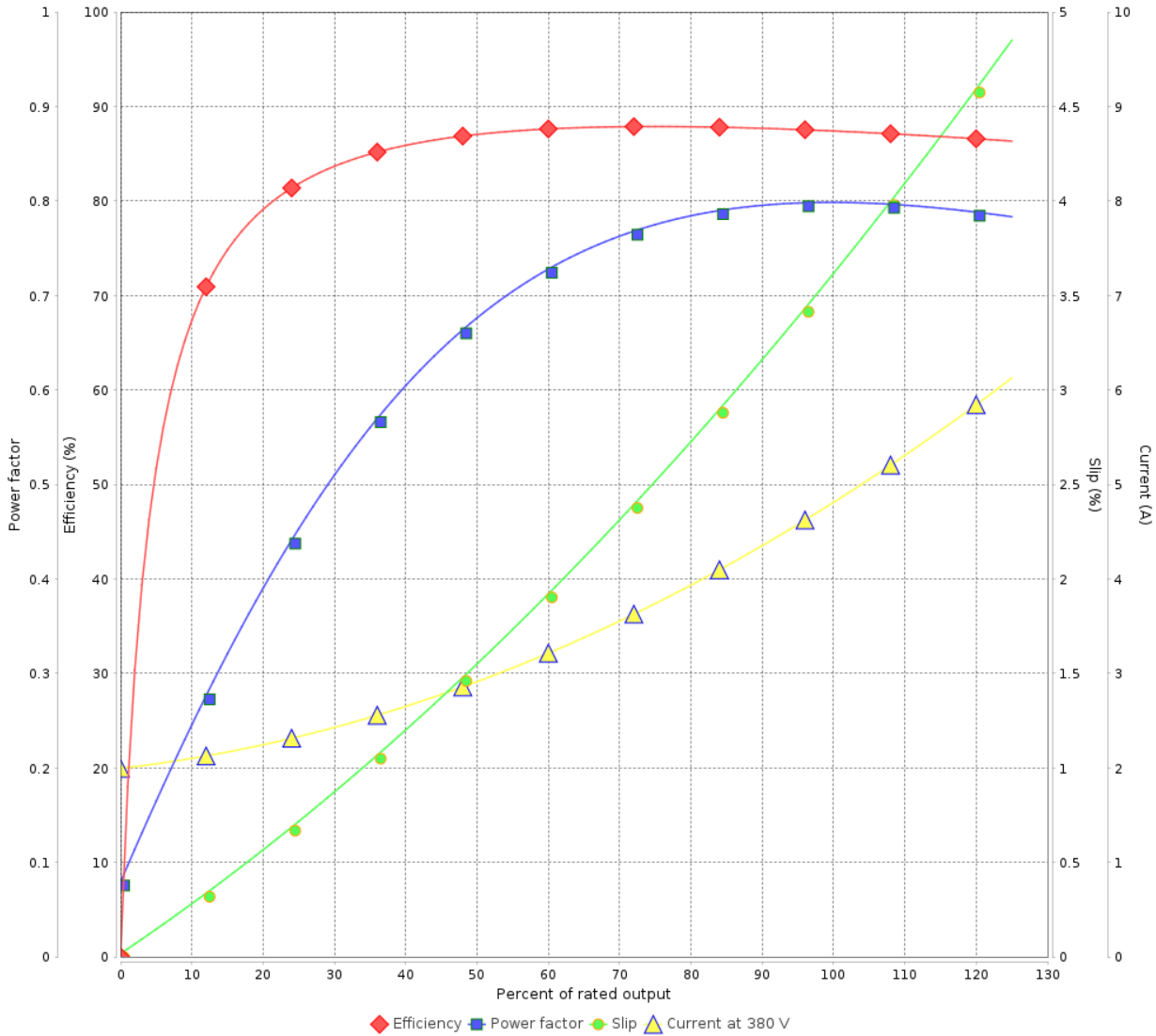
Three Phase Induction Motor - Squirrel Cage



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Performance : 380 V 50 Hz 4P IE3

Rated current	: 4.78 A	Moment of inertia (J)	: 0.0143 kgm ²
LRC	: 6.3	Duty cycle	: Cont.(S1)
Rated torque	: 1.51 kgfm	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.25
Breakdown torque	: 250 %	Temperature rise	: 80 K
Rated speed	: 1445 rpm	Design	: B

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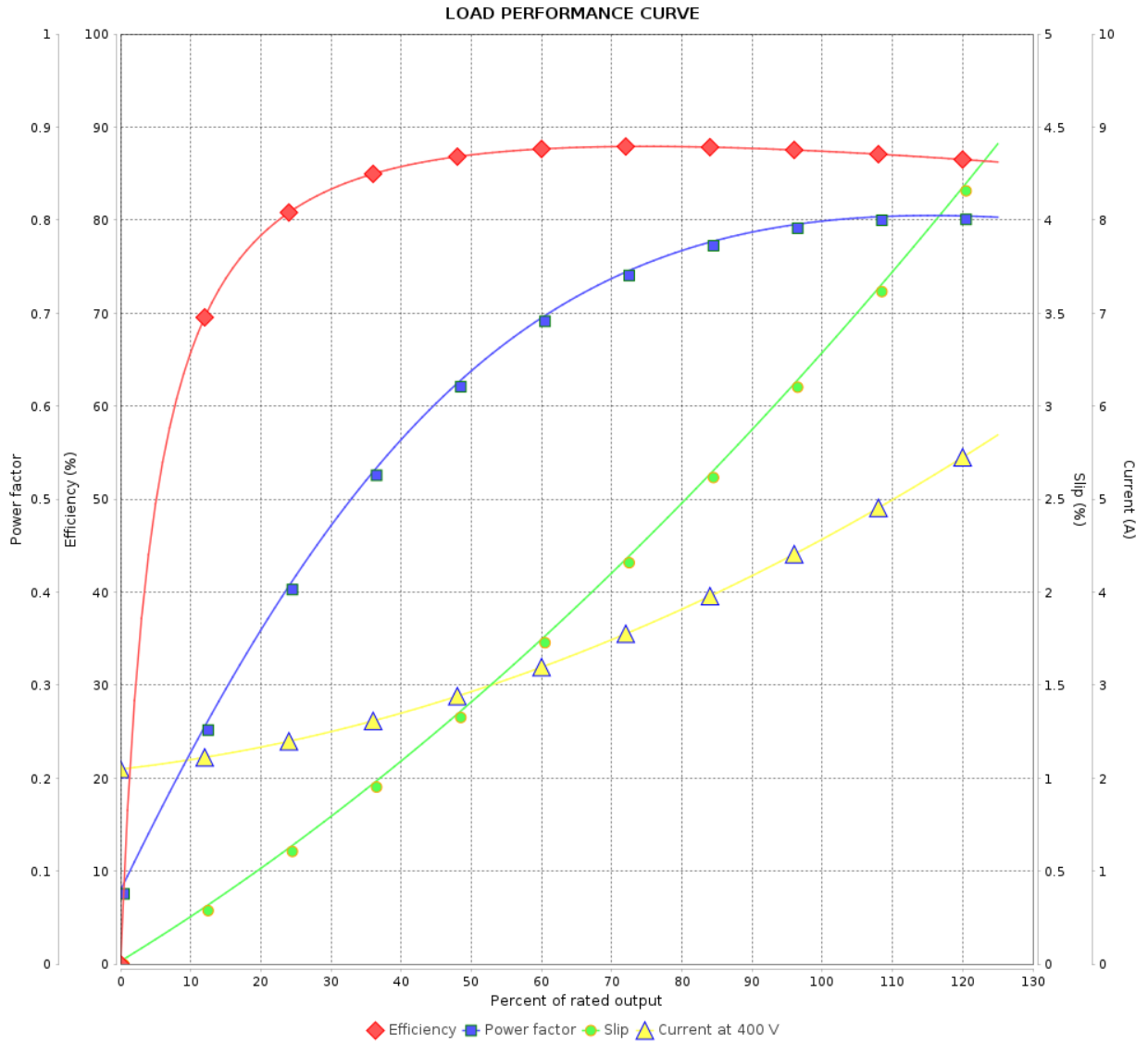
Three Phase Induction Motor - Squirrel Cage



Customer :

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

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Performance : 400 V 50 Hz 4P IE3

Rated current : 4.54 A
 LRC : 7.1
 Rated torque : 1.50 kgfm
 Locked rotor torque : 220 %
 Breakdown torque : 290 %
 Rated speed : 1450 rpm

Moment of inertia (J) : 0.0143 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

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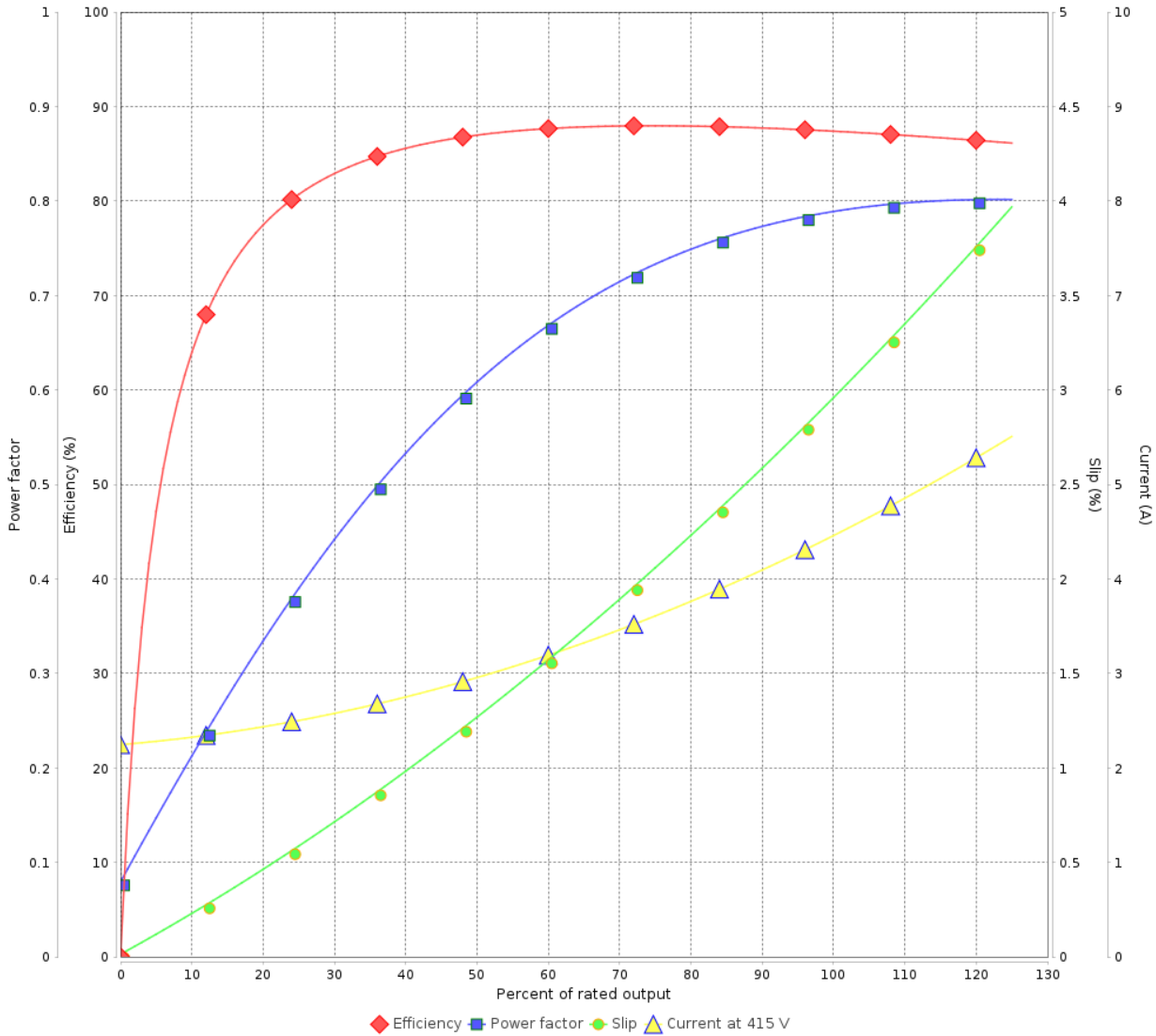
Three Phase Induction Motor - Squirrel Cage



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Performance : 415 V 50 Hz 4P IE3

Rated current	: 4.43 A	Moment of inertia (J)	: 0.0143 kgm ²
LRC	: 7.6	Duty cycle	: Cont.(S1)
Rated torque	: 1.50 kgfm	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.25
Breakdown torque	: 320 %	Temperature rise	: 80 K
Rated speed	: 1455 rpm	Design	: B

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