

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 11941734

Frame : 284TC	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 : 185 kg
Protection degree : IP55	Moment of inertia (J) : 0.2153 kgm ²
Design : B	

Output [HP]	25	25	25	25
Poles	4	4	4	4
Frequency [Hz]	60	50	50	50
Rated voltage [V]	460	380	400	415
Rated current [A]	29.5	35.9	34.3	33.2
L. R. Amperes [A]	183	190	189	196
LRC [A]	6.2x(Code G)	5.3x(Code F)	5.5x(Code F)	5.9x(Code G)
No load current [A]	11.0	11.0	11.7	12.4
Rated speed [RPM]	1770	1455	1460	1465
Slip [%]	1.67	3.00	2.67	2.33
Rated torque [kgfm]	10.3	12.5	12.4	12.4
Locked rotor torque [%]	240	180	200	220
Breakdown torque [%]	270	210	240	260
Service factor	1.25	1.00	1.00	1.00
Temperature rise	80 K	105 K	105 K	105 K
Locked rotor time	43s (cold) 24s (hot)	25s (cold) 14s (hot)	25s (cold) 14s (hot)	25s (cold) 14s (hot)
Noise level ²	63.0 dB(A)	61.0 dB(A)	61.0 dB(A)	61.0 dB(A)
Efficiency (%)	25%			
	50%	92.4	92.4	92.4
	75%	93.0	91.7	92.4
	100%	93.6	91.0	92.4
Power Factor	25%			
	50%	0.70	0.76	0.70
	75%	0.80	0.84	0.80
	100%	0.84	0.86	0.84

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

Losses (%)	P1 (0,9;1,0)	6.8	6.8	6.8	6.8
	P2 (0,5;1,0)	5.8	5.8	5.8	5.8
	P3 (0,25;1,0)	5.3	5.3	5.3	5.3
	P4 (0,9;0,5)	3.1	3.1	3.1	3.1
	P5 (0,5;0,5)	2.2	2.2	2.2	2.2
	P6 (0,5;0,25)	1.4	1.4	1.4	1.4
	P7 (0,25;0,25)	1.0	1.0	1.0	1.0

	<u>Drive end</u>	<u>Non drive end</u>	Foundation loads
Bearing type :	6311 C3	6211 C3	Max. traction : 368 kgf
Sealing :	Taconite	Taconite	Max. compression : 553 kgf
	Labyrinth	Labyrinth	
Lubrication interval :	20000 h	20000 h	
Lubricant amount :	18 g	11 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.

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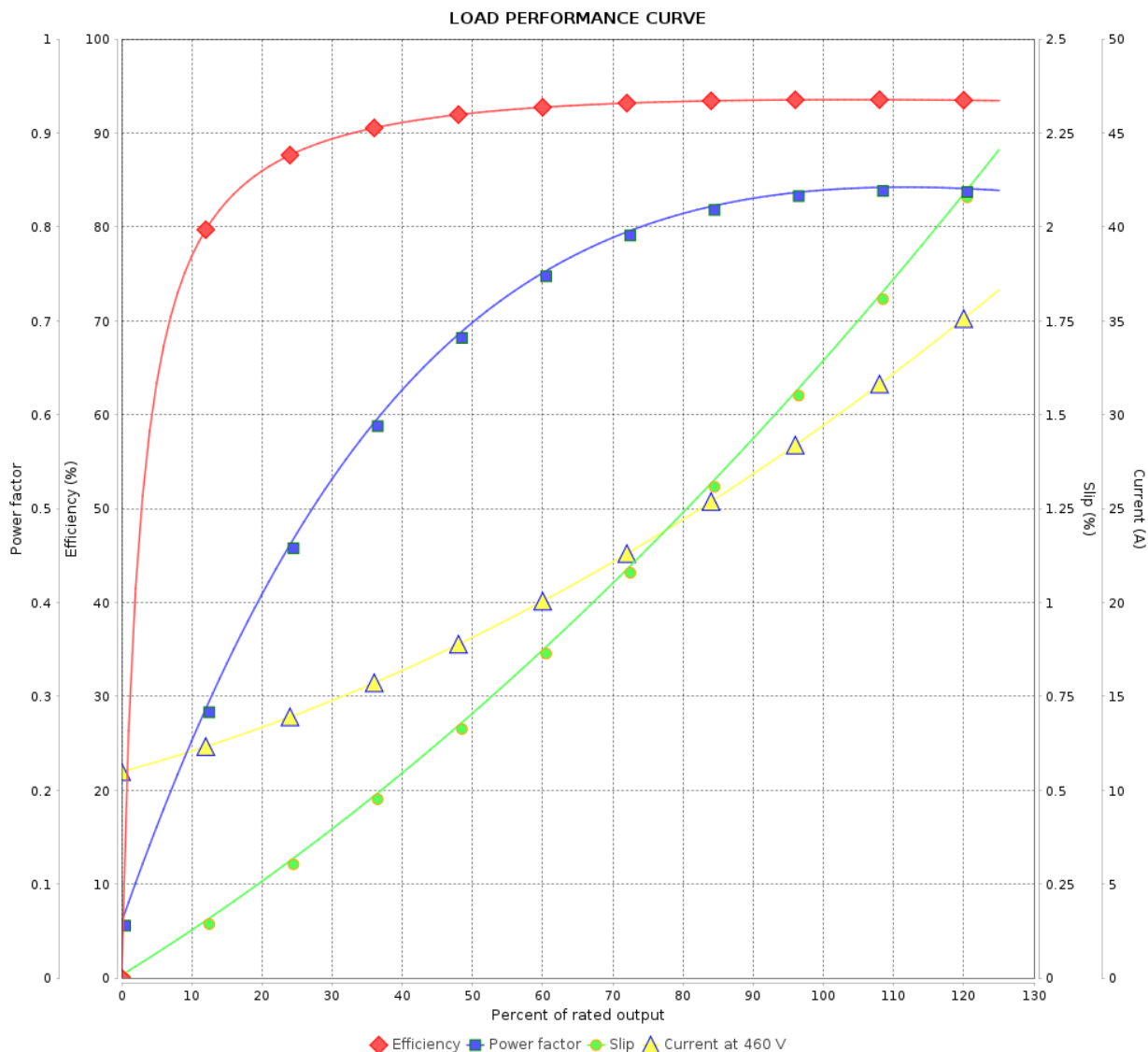
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Customer :

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Efficiency Three-Phase

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Performance : 460 V 60 Hz 4P

Rated current : 29.5 A
LRC : 6.2
Rated torque : 10.3 kgfm
Locked rotor torque : 240 %
Breakdown torque : 270 %
Rated speed : 1770 rpm

Moment of inertia (J) : 0.2153 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : B

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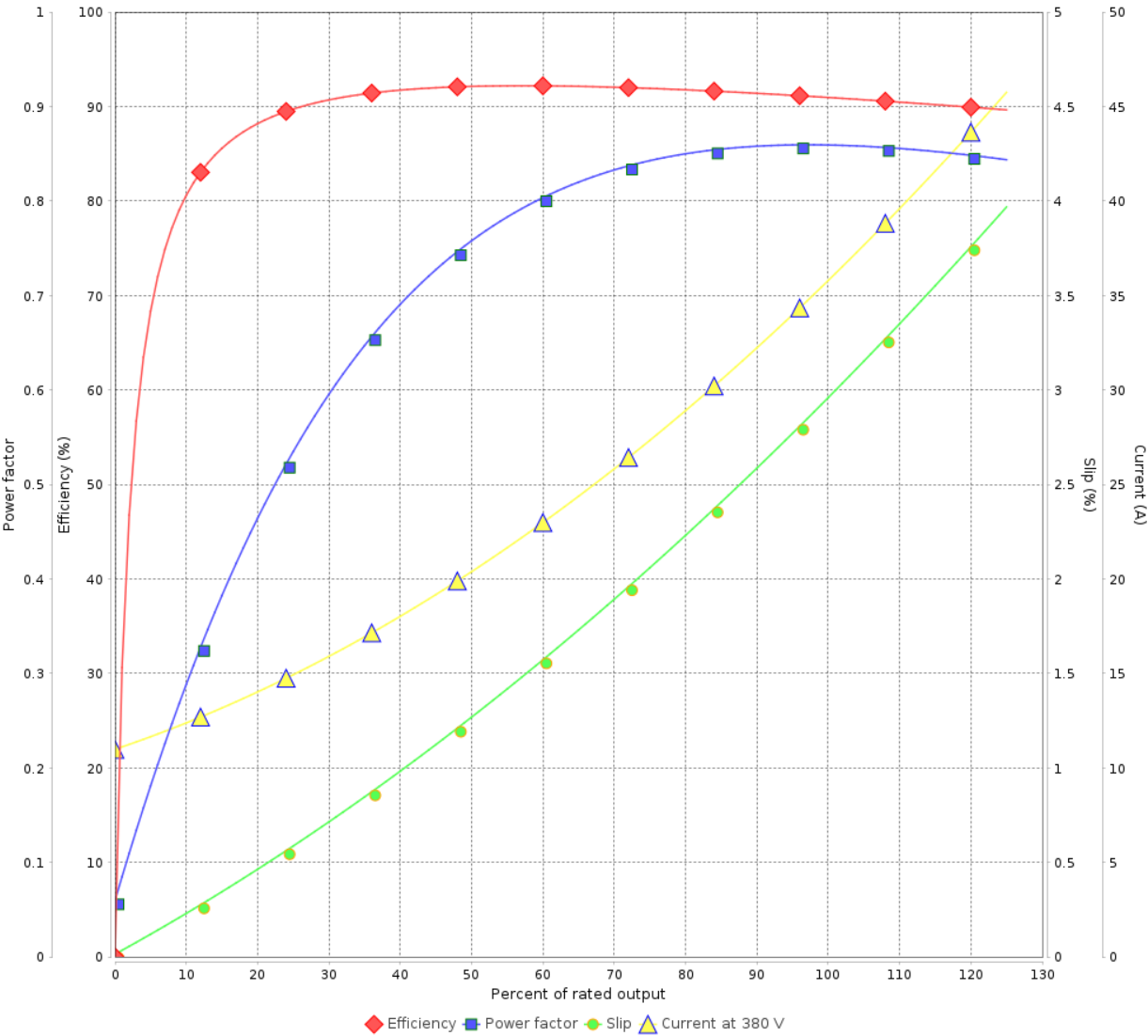
Three Phase Induction Motor - Squirrel Cage



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Performance : 380 V 50 Hz 4P IE1			
Rated current	: 35.9 A	Moment of inertia (J)	: 0.2153 kgm²
LRC	: 5.3	Duty cycle	: Cont.(S1)
Rated torque	: 12.5 kgfm	Insulation class	: F
Locked rotor torque	: 180 %	Service factor	: 1.00
Breakdown torque	: 210 %	Temperature rise	: 105 K
Rated speed	: 1455 rpm	Design	: B

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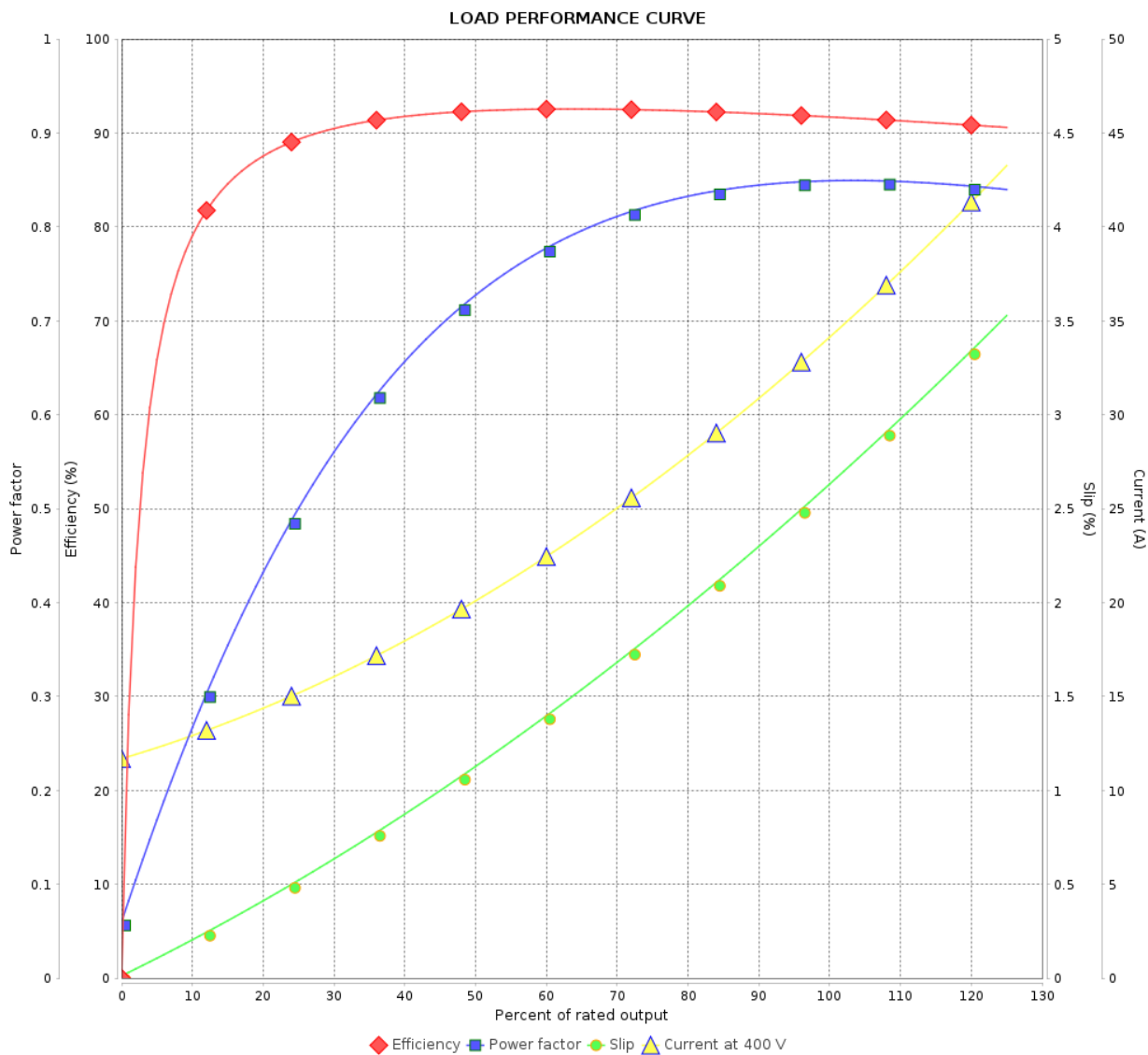
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Customer :

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Performance : 400 V 50 Hz 4P IE2

Rated current : 34.3 A
LRC : 5.5
Rated torque : 12.4 kgfm
Locked rotor torque : 200 %
Breakdown torque : 240 %
Rated speed : 1460 rpm

Moment of inertia (J) : 0.2153 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 105 K
Design : B

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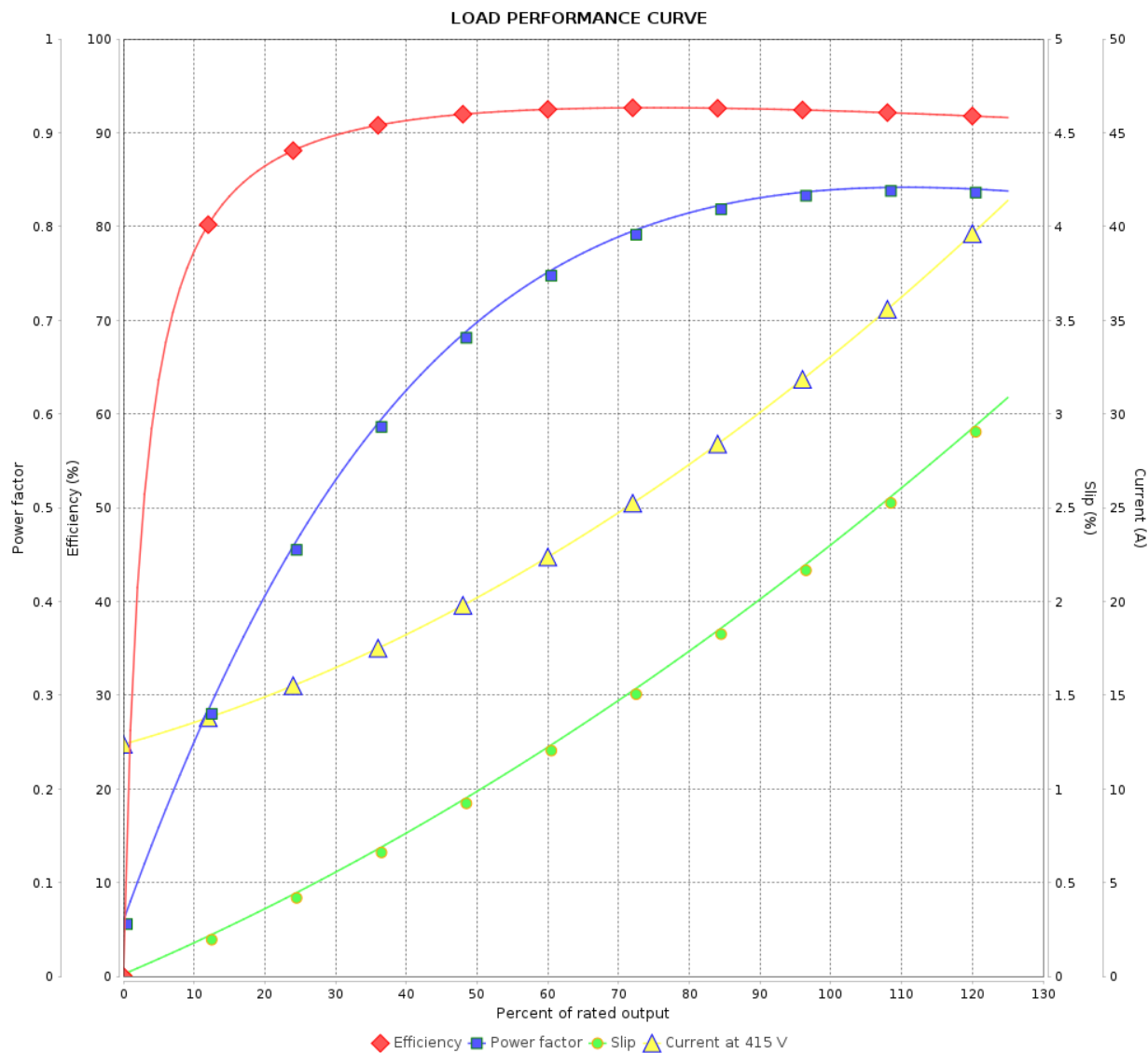
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Performance : 415 V 50 Hz 4P IE2

Rated current : 33.2 A
LRC : 5.9
Rated torque : 12.4 kgfm
Locked rotor torque : 220 %
Breakdown torque : 260 %
Rated speed : 1465 rpm

Moment of inertia (J) : 0.2153 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 105 K
Design : B

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