

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 11943559

Frame : 404/5TSC	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) : 0.5561 kgm ²
Design : B	

Output [HP]	100	75	75	75
Poles	2	2	2	2
Frequency [Hz]	60	50	50	50
Rated voltage [V]	460	380/380	400/400	415/415
Rated current [A]	112	99.6/99.6	94.6/94.6	92.2/92.2
L. R. Amperes [A]	728	677/677	719/719	756/756
LRC [A]	6.5x(Code G)	6.8x(Code G)	7.6x(Code H)	8.2x(Code J)
No load current [A]	26.0	25.7/25.7	27.5/27.5	29.1/29.1
Rated speed [RPM]	3545	2955	2960	2965
Slip [%]	1.53	1.50	1.33	1.17
Rated torque [kgfm]	20.5	18.4	18.4	18.4
Locked rotor torque [%]	240	250	280	300
Breakdown torque [%]	260	280	310	330
Service factor	1.25	1.00	1.00	1.00
Temperature rise	80 K	80 K	80 K	80 K
Locked rotor time	25s (cold) 14s (hot)	18s (cold) 10s (hot)	18s (cold) 10s (hot)	18s (cold) 10s (hot)
Noise level ²	79.0 dB(A)	74.0 dB(A)	74.0 dB(A)	74.0 dB(A)
Efficiency (%)	25%	0.000		
	50%	93.0		93.5
	75%	94.1	93.8	94.0
	100%	94.1	94.3	94.3
Power Factor	25%	0.00		
	50%	0.83	0.82	0.78
	75%	0.88	0.88	0.85
	100%	0.89	0.89	0.88

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

Losses (%)	P1 (0,9;1,0)	5.9	5.9	5.9	5.9
	P2 (0,5;1,0)	4.6	4.6	4.6	4.6
	P3 (0,25;1,0)	4.4	4.4	4.4	4.4
	P4 (0,9;0,5)	2.8	2.8	2.8	2.8
	P5 (0,5;0,5)	1.6	1.6	1.6	1.6
	P6 (0,5;0,25)	0.9	0.9	0.9	0.9
	P7 (0,25;0,25)	0.5	0.5	0.5	0.5

	<u>Drive end</u>	<u>Non drive end</u>	Foundation loads
Bearing type :	6314 C3	6314 C3	Max. traction : 596 kgf
Sealing :	Taconite	Taconite	Max. compression : 596 kgf
	Labyrinth	Labyrinth	
Lubrication interval :	4000 h	4000 h	
Lubricant amount :	27 g	27 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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Customer :

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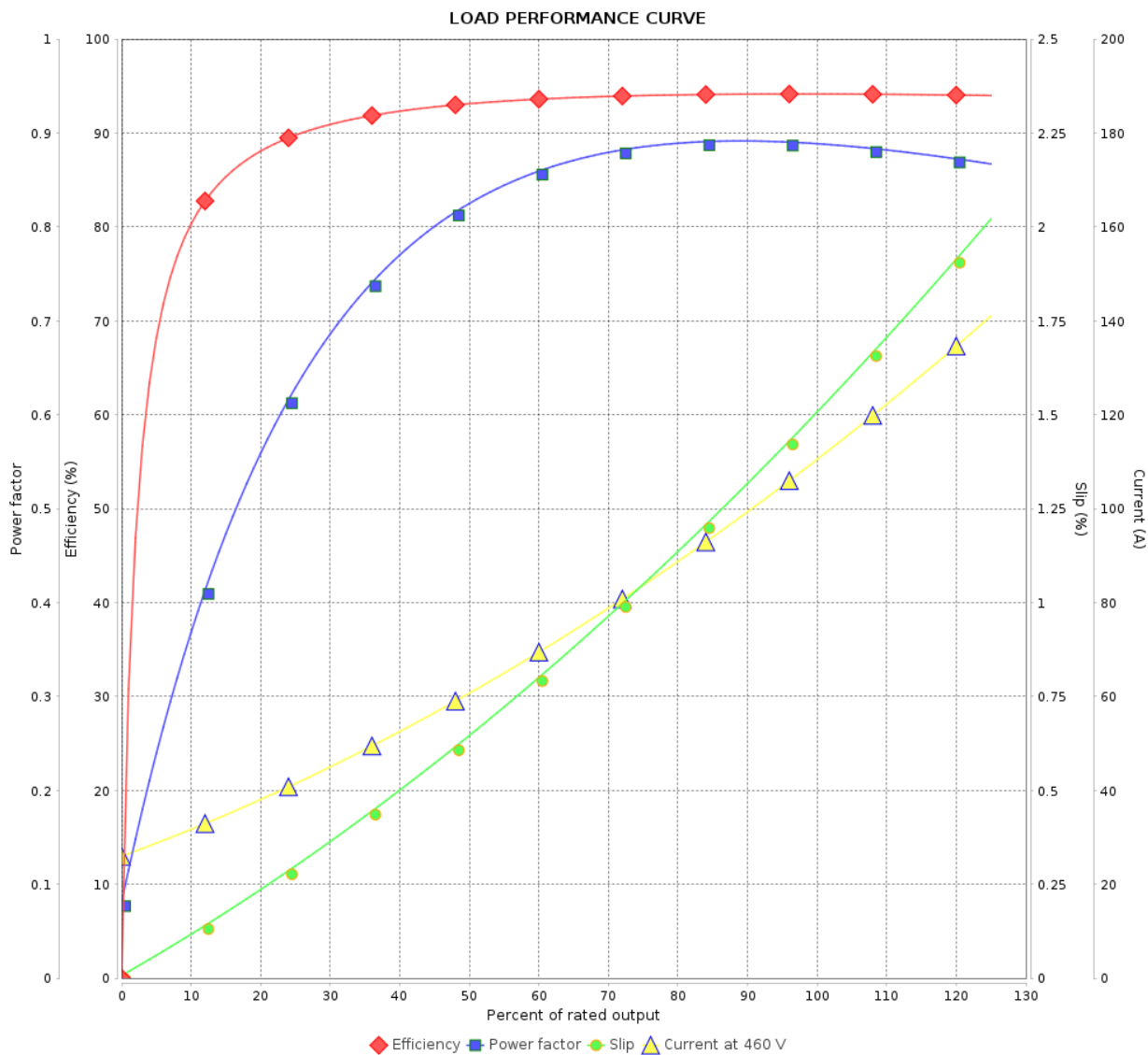
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 11943559



Performance : 460 V 60 Hz 2P

Rated current : 112 A
LRC : 6.5
Rated torque : 20.5 kgfm
Locked rotor torque : 240 %
Breakdown torque : 260 %
Rated speed : 3545 rpm

Moment of inertia (J) : 0.5561 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : B

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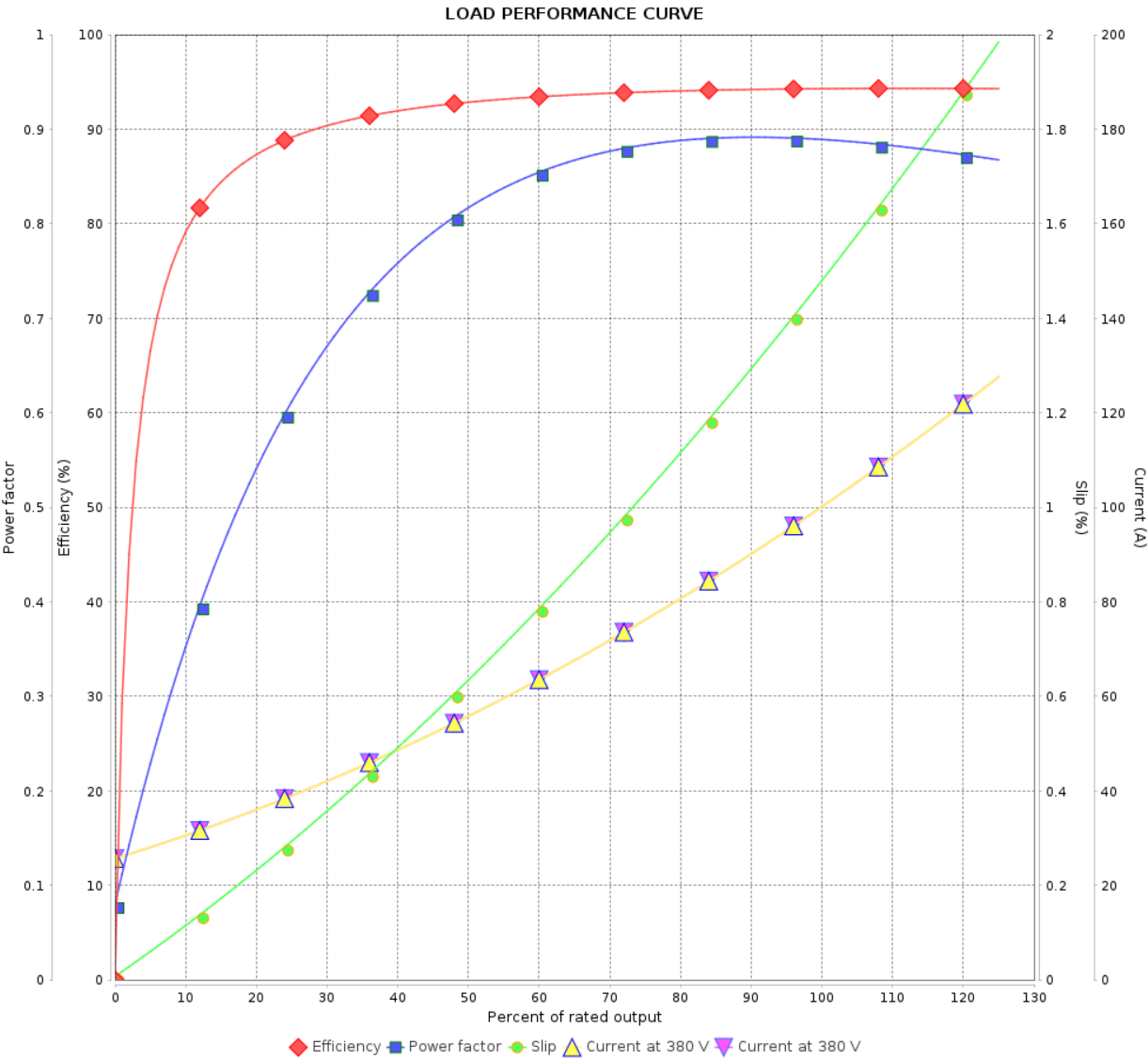
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Three Phase Induction Motor - Squirrel Cage



Customer :

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Performance : 380/380 V 50 Hz 2P IE3

Rated current : 99.6/99.6 A
LRC : 6.8
Rated torque : 18.4 kgfm
Locked rotor torque : 250 %
Breakdown torque : 280 %
Rated speed : 2955 rpm

Moment of inertia (J) : 0.5561 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

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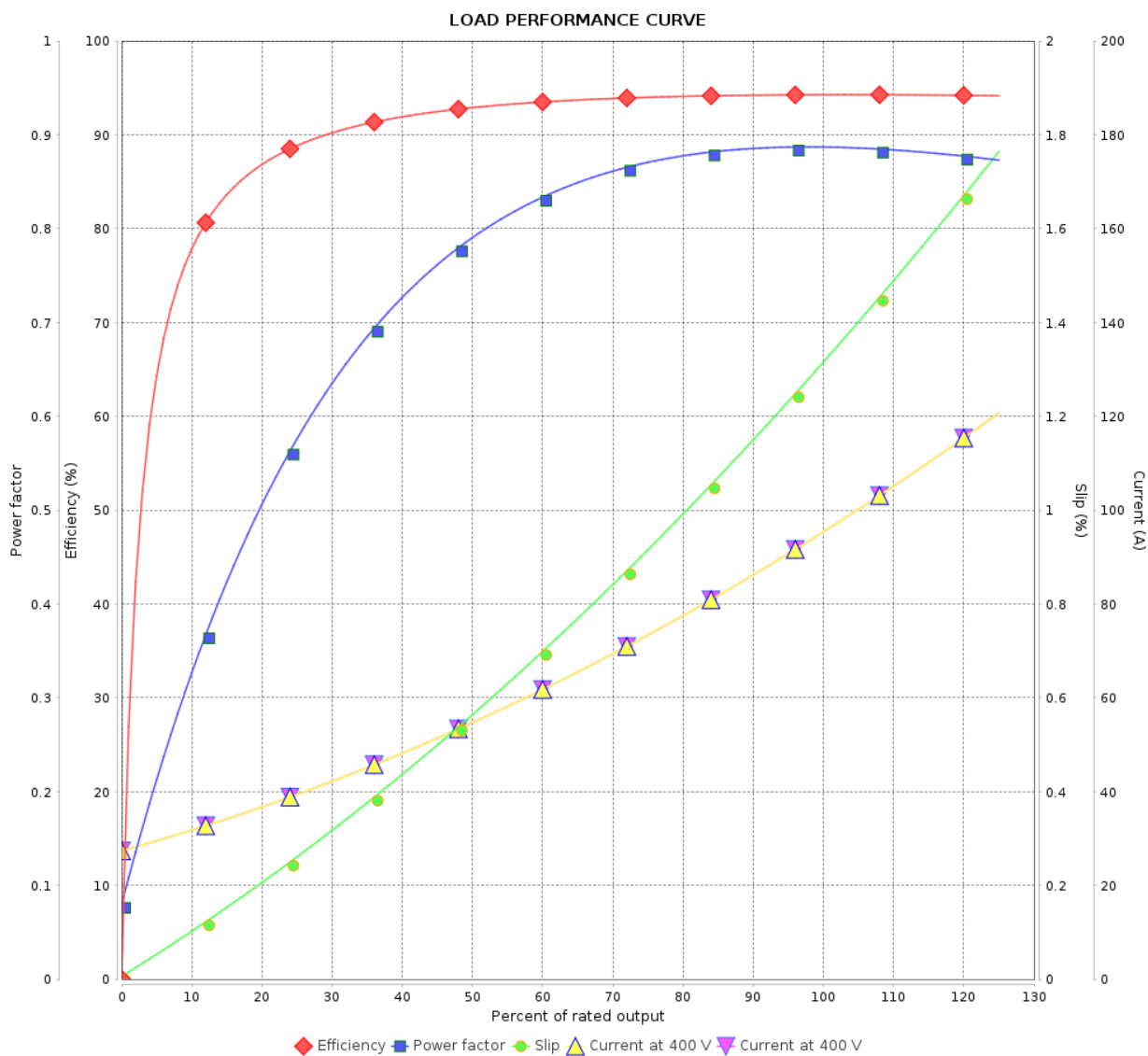
Three Phase Induction Motor - Squirrel Cage



Customer :

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Performance : 400/400 V 50 Hz 2P IE3

Rated current : 94.6/94.6 A
LRC : 7.6
Rated torque : 18.4 kgfm
Locked rotor torque : 280 %
Breakdown torque : 310 %
Rated speed : 2960 rpm

Moment of inertia (J) : 0.5561 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

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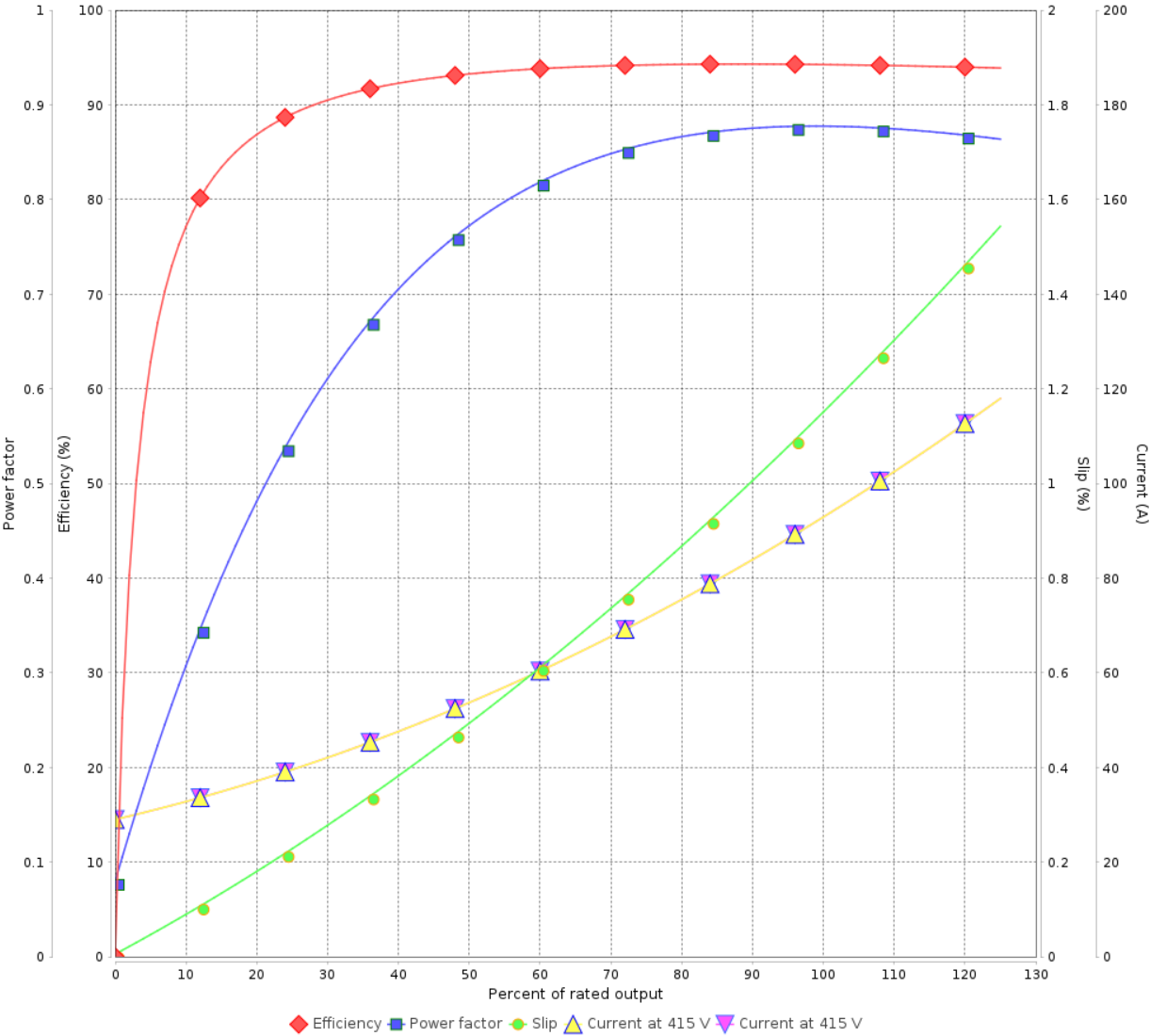
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Performance : 415/415 V 50 Hz 2P IE3			
Rated current	: 92.2/92.2 A	Moment of inertia (J)	: 0.5561 kgm ²
LRC	: 8.2	Duty cycle	: Cont.(S1)
Rated torque	: 18.4 kgfm	Insulation class	: F
Locked rotor torque	: 300 %	Service factor	: 1.00
Breakdown torque	: 330 %	Temperature rise	: 80 K
Rated speed	: 2965 rpm	Design	: B

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