

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W21 Explosion Proof NEMA Premium Efficiency Three-Phase Product code : 12387996

Frame : 586/7TS	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 : 1889 kg
Protection degree : IP55	Moment of inertia (J) : 5.17 kgm ²
Design : B	

Output [HP]	300	250	250	250
Poles	2	2	2	2
Frequency [Hz]	60	50	50	50
Rated voltage [V]	230/460	380	400	415
Rated current [A]	655/328	335	318	305
L. R. Amperes [A]	4323/2162	2077	2226	2318
LRC [A]	6.6x(Code G)	6.2x(Code F)	7.0x(Code G)	7.6x(Code H)
No load current [A]	100/50.0	50.0	53.0	56.0
Rated speed [RPM]	3580	2980	2980	2983
Slip [%]	0.56	0.67	0.67	0.57
Rated torque [kgfm]	60.8	60.9	60.9	60.8
Locked rotor torque [%]	130	110	120	130
Breakdown torque [%]	220	210	229	250
Service factor	1.15	1.00	1.00	1.00
Temperature rise	80 K	80 K	80 K	80 K
Locked rotor time	61s (cold) 34s (hot)	72s (cold) 40s (hot)	72s (cold) 40s (hot)	72s (cold) 40s (hot)
Noise level ²	85.0 dB(A)	81.0 dB(A)	81.0 dB(A)	81.0 dB(A)
Efficiency (%)	25%			
	50%	94.5	94.5	94.5
	75%	95.4	95.4	95.4
	100%	95.8	95.4	95.8
Power Factor	25%			
	50%	0.86	0.86	0.84
	75%	0.87	0.87	0.86
	100%	0.88	0.88	0.88

	<u>Drive end</u>	<u>Non drive end</u>	Foundation loads
Bearing type :	6314 C3	6314 C3	Max. traction : 96 kgf
Sealing :	Oil Seal	Lip Seal	Max. compression : 1985 kgf
Lubrication interval :	3604 h	3604 h	
Lubricant amount :	27 g	27 g	
Lubricant type :	Mobil Polyrex EM		

Notes
USABLE @208V 724A SF 1.00 SFA 724A

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.
(4) At 100% of full load.

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 :

Thermal protection

ID	Application	Type	Quantity	Sensing Temperature
1	Winding	Thermostat - 2 wires	1 x Phase	155 °C

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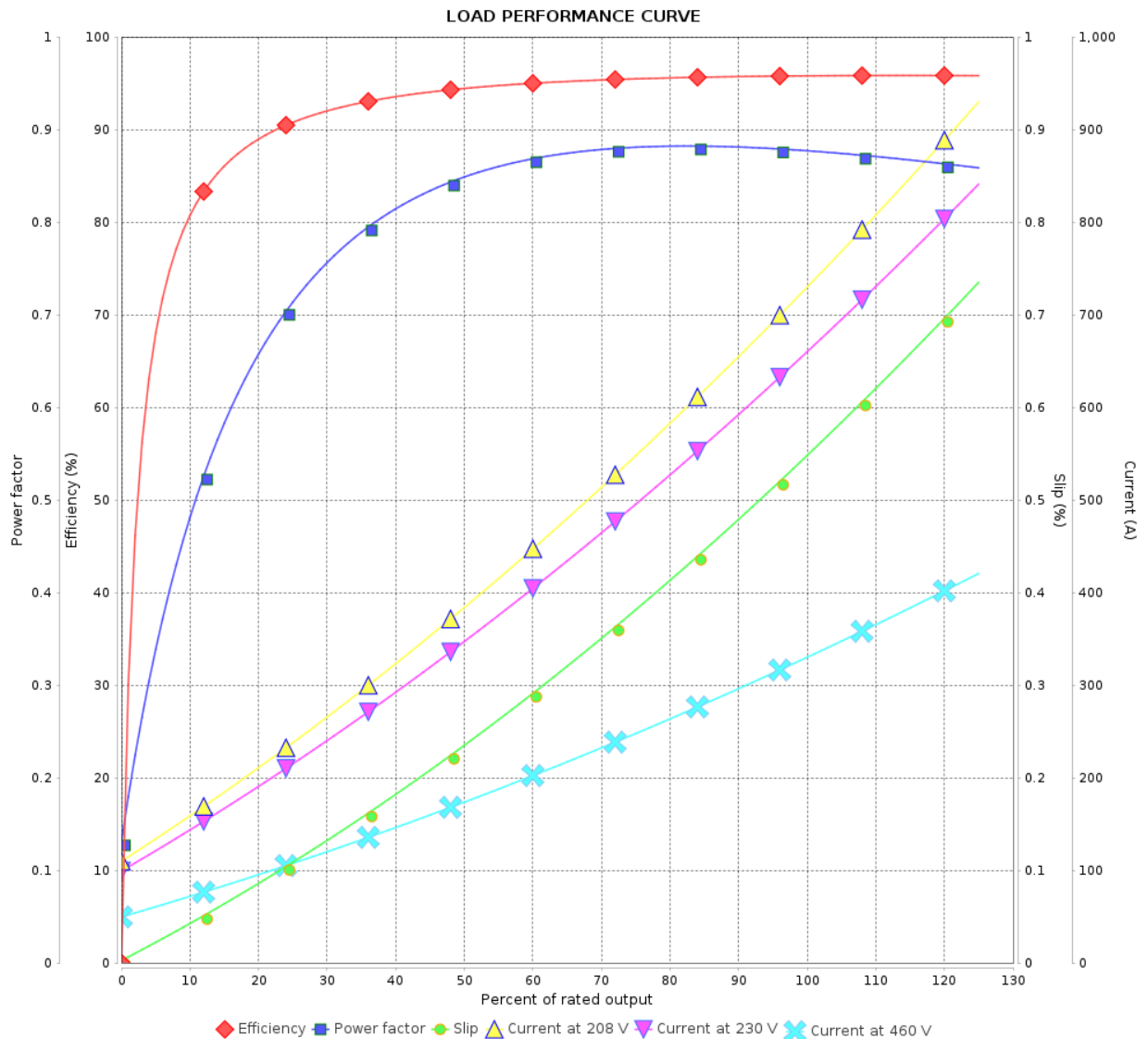
Three Phase Induction Motor - Squirrel Cage



Customer :

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Premium Efficiency Three-Phase

Product code : 12387996



Performance : 230/460 V 60 Hz 2P

Rated current : 655/328 A
LRC : 6.6
Rated torque : 60.8 kgfm
Locked rotor torque : 130 %
Breakdown torque : 220 %
Rated speed : 3580 rpm

Moment of inertia (J) : 5.17 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 80 K
Design : B

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Three Phase Induction Motor - Squirrel Cage

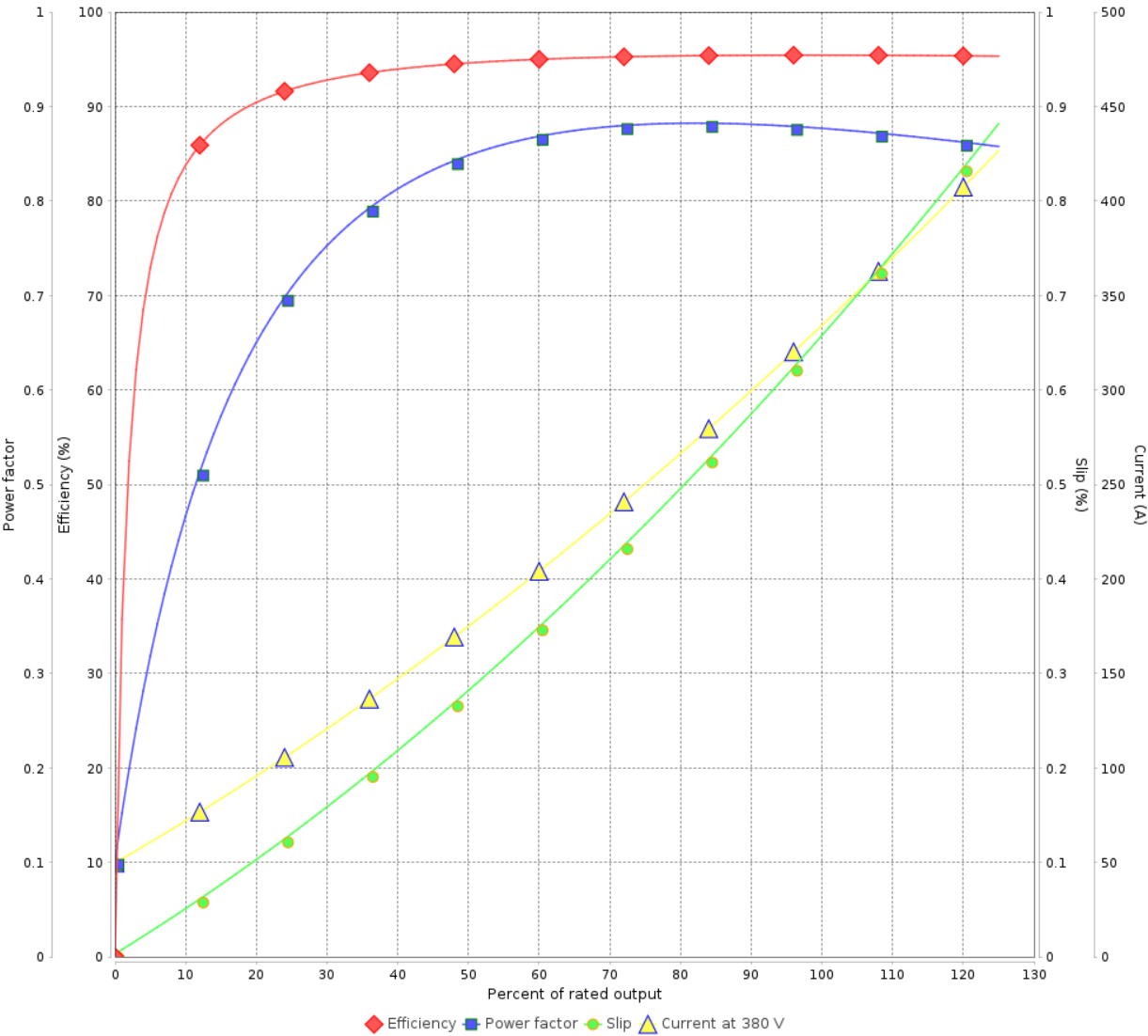


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Performance : 380 V 50 Hz 2P IE2

Rated current	: 335 A	Moment of inertia (J)	: 5.17 kgm ²
LRC	: 6.2	Duty cycle	: Cont.(S1)
Rated torque	: 60.9 kgfm	Insulation class	: F
Locked rotor torque	: 110 %	Service factor	: 1.00
Breakdown torque	: 210 %	Temperature rise	: 80 K
Rated speed	: 2980 rpm	Design	: B

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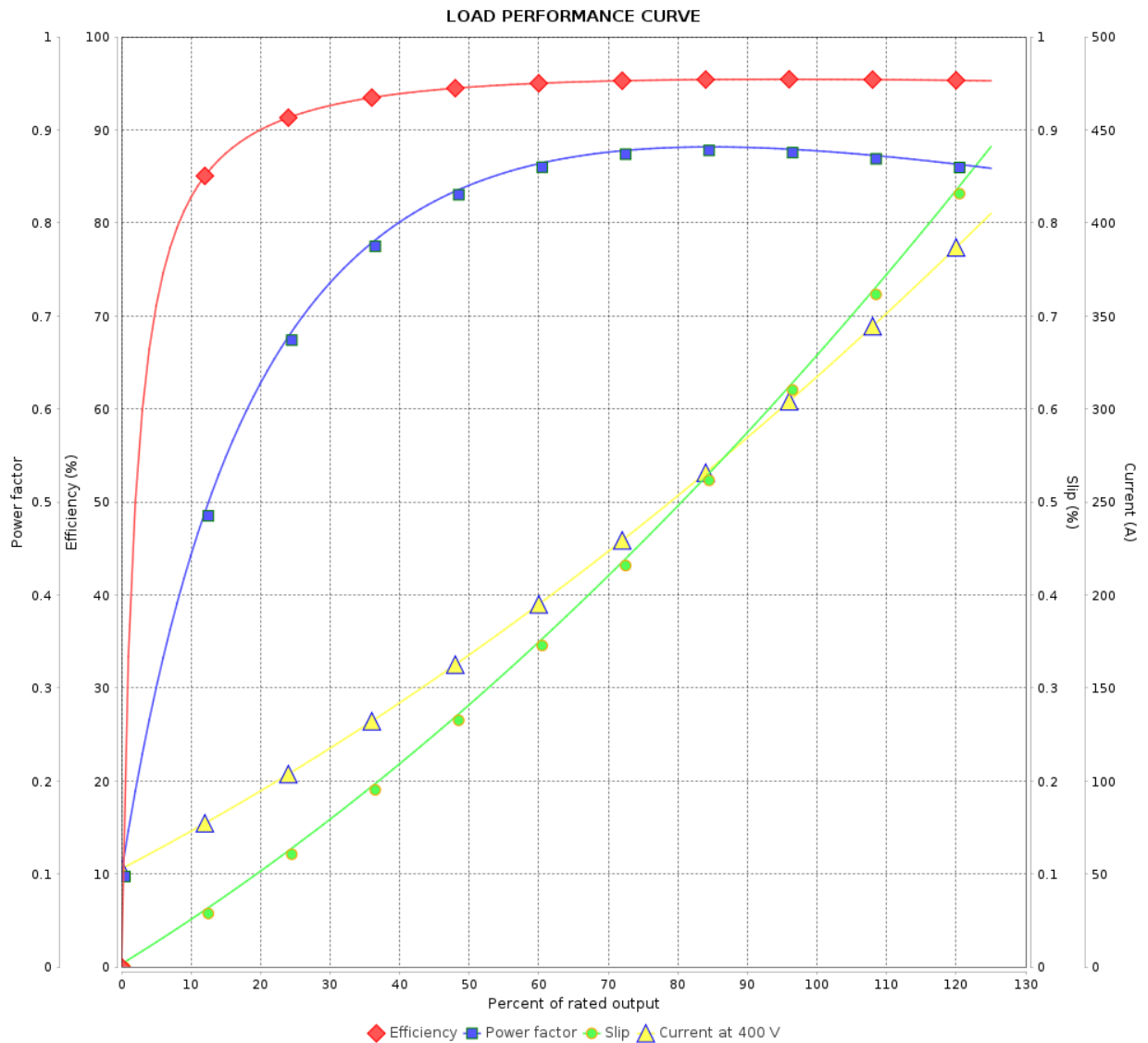
Three Phase Induction Motor - Squirrel Cage



Customer :

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Product code : 12387996



Performance : 400 V 50 Hz 2P IE2

Rated current : 318 A
LRC : 7.0
Rated torque : 60.9 kgfm
Locked rotor torque : 120 %
Breakdown torque : 229 %
Rated speed : 2980 rpm

Moment of inertia (J) : 5.17 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

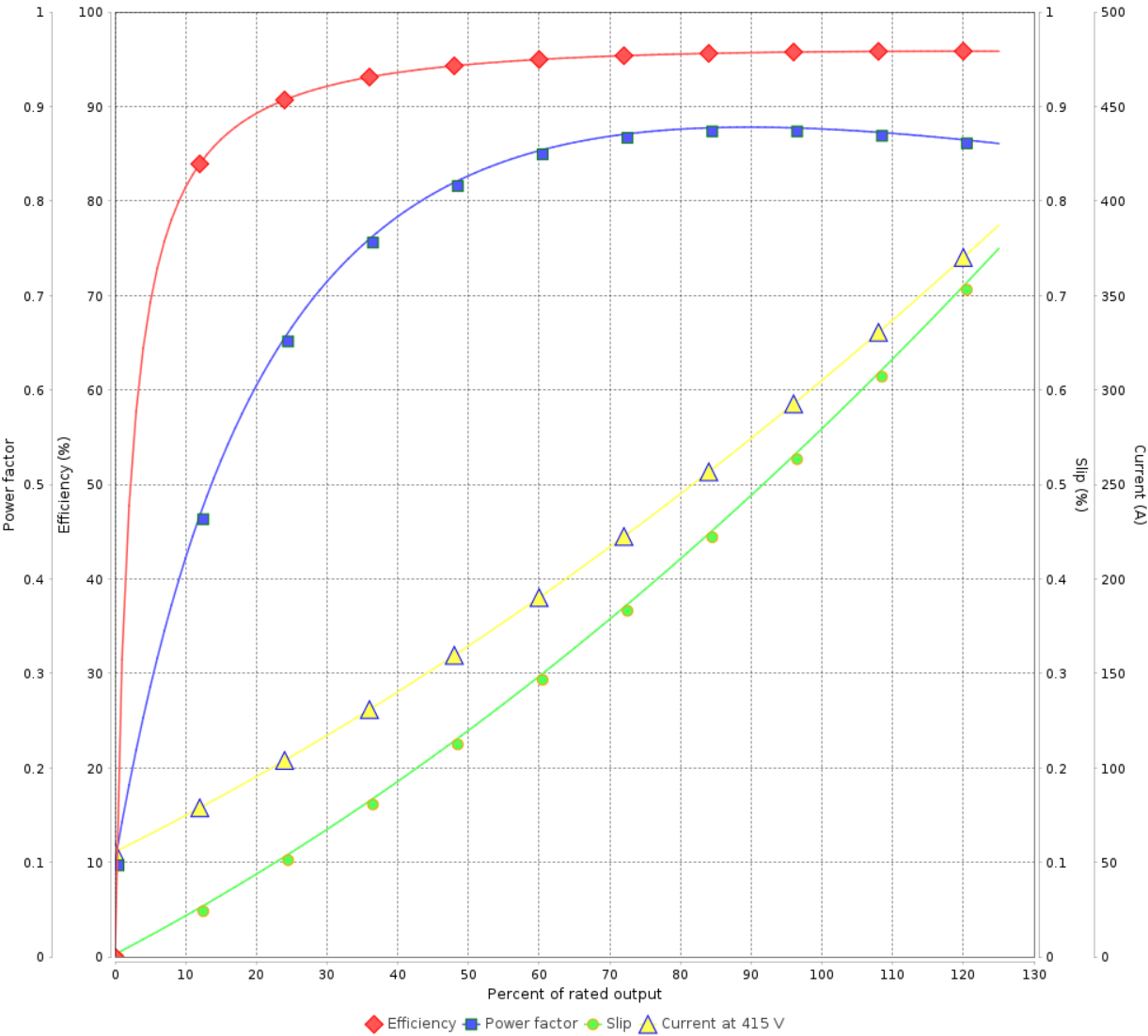


Customer :

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Performance : 415 V 50 Hz 2P IE3

Rated current	: 305 A	Moment of inertia (J)	: 5.17 kgm ²
LRC	: 7.6	Duty cycle	: Cont.(S1)
Rated torque	: 60.8 kgfm	Insulation class	: F
Locked rotor torque	: 130 %	Service factor	: 1.00
Breakdown torque	: 250 %	Temperature rise	: 80 K
Rated speed	: 2983 rpm	Design	: B

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