

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W21 Explosion Proof NEMA Premium Efficiency Three-Phase Product code : 12408987

Frame	: 404/5TC	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	: 568 kg
Protection degree	: IP55	Moment of inertia (J)	: 1.11 kgm ²
Design	: B		

Output [HP]	100	75	75	75
Poles	4	4	4	4
Frequency [Hz]	60	50	50	50
Rated voltage [V]	230/460	380	400	415
Rated current [A]	226/113	103	100	98.7
L. R. Amperes [A]	1627/814	773	840	898
LRC [A]	7.2x(Code H)	7.5x(Code H)	8.4x(Code J)	9.1x(Code K)
No load current [A]	78.0/39.0	39.0	42.0	45.0
Rated speed [RPM]	1780	1480	1485	1485
Slip [%]	1.11	1.33	1.00	1.00
Rated torque [kgfm]	40.8	36.8	36.7	36.7
Locked rotor torque [%]	270	270	300	320
Breakdown torque [%]	280	310	360	370
Service factor	1.15	1.00	1.00	1.00
Temperature rise	80 K	80 K	80 K	80 K
Locked rotor time	23s (cold) 13s (hot)	21s (cold) 12s (hot)	21s (cold) 12s (hot)	21s (cold) 12s (hot)
Noise level ²	75.0 dB(A)	70.0 dB(A)	70.0 dB(A)	70.0 dB(A)
Efficiency (%)	25%			
	50%	94.5	94.0	93.6
	75%	95.0	94.5	94.5
	100%	95.4	94.5	94.5
Power Factor	25%			
	50%	0.72	0.69	0.65
	75%	0.82	0.80	0.77
	100%	0.87	0.86	0.84

	<u>Drive end</u>	<u>Non drive end</u>	Foundation loads	
Bearing type	: 6217 C3	6314 C3	Max. traction	: 1055 kgf
Sealing	: Oil Seal	Lip Seal	Max. compression	: 1614 kgf
Lubrication interval	: 9149 h	9789 h		
Lubricant amount	: 21 g	27 g		
Lubricant type	: Mobil Polyrex EM			

Notes

USABLE @208V 250A SF 1.00 SFA 250A

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.

Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by				
Date	19/03/2024			
			Page	Revision
			1 / 6	

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Customer :

Thermal protection

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

Rev.	Changes Summary		Performed	Checked	Date
Performed by				Page 2 / 6Revision	
Checked by					
Date	19/03/2024				

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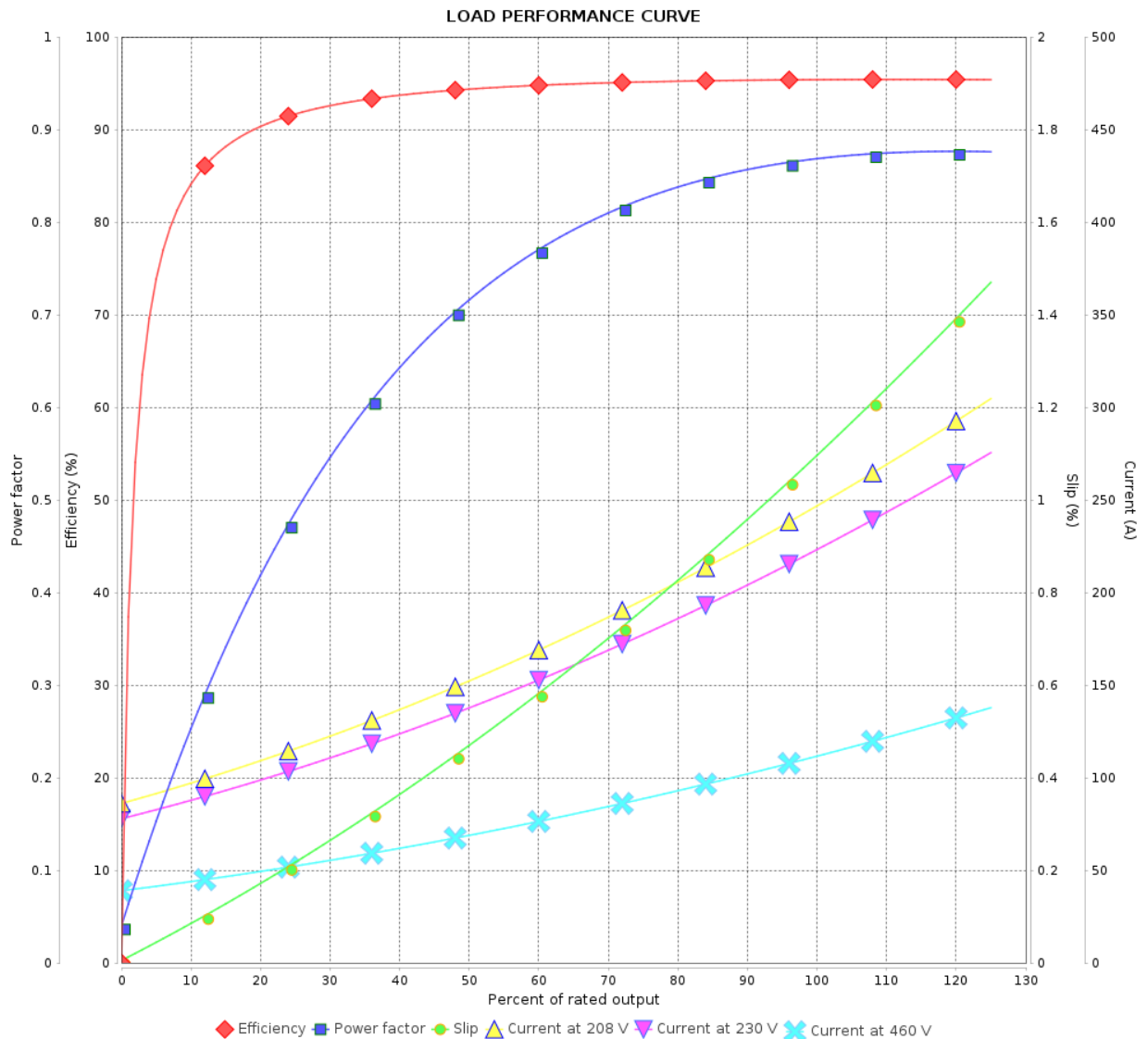
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 12408987



Performance : 230/460 V 60 Hz 4P

Rated current : 226/113 A
LRC : 7.2
Rated torque : 40.8 kgfm
Locked rotor torque : 270 %
Breakdown torque : 280 %
Rated speed : 1780 rpm

Moment of inertia (J) : 1.11 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 80 K
Design : B

Rev.	Changes Summary		Performed	Checked	Date
Performed by				Page 3 / 6Revision	
Checked by					
Date	19/03/2024				

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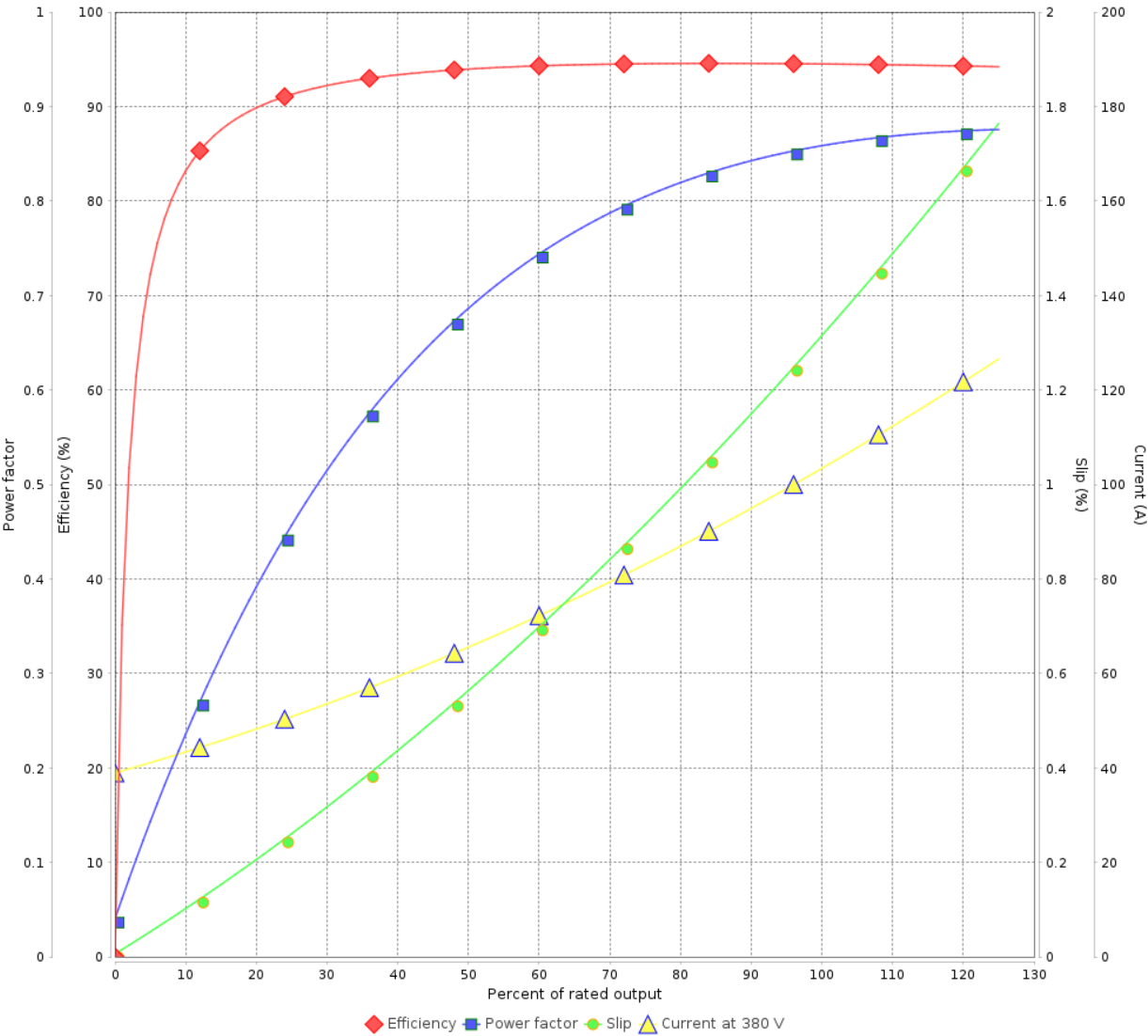
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W21 Explosion Proof NEMA Premium Efficiency Three-Phase Product code : 12408987

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Performance : 380 V 50 Hz 4P IE2			
Rated current	: 103 A	Moment of inertia (J)	: 1.11 kgm ²
LRC	: 7.5	Duty cycle	: Cont.(S1)
Rated torque	: 36.8 kgfm	Insulation class	: F
Locked rotor torque	: 270 %	Service factor	: 1.00
Breakdown torque	: 310 %	Temperature rise	: 80 K
Rated speed	: 1480 rpm	Design	: B

Rev.	Changes Summary		Performed	Checked	Date
Performed by				Page 4 / 6	Revision
Checked by					
Date	19/03/2024				

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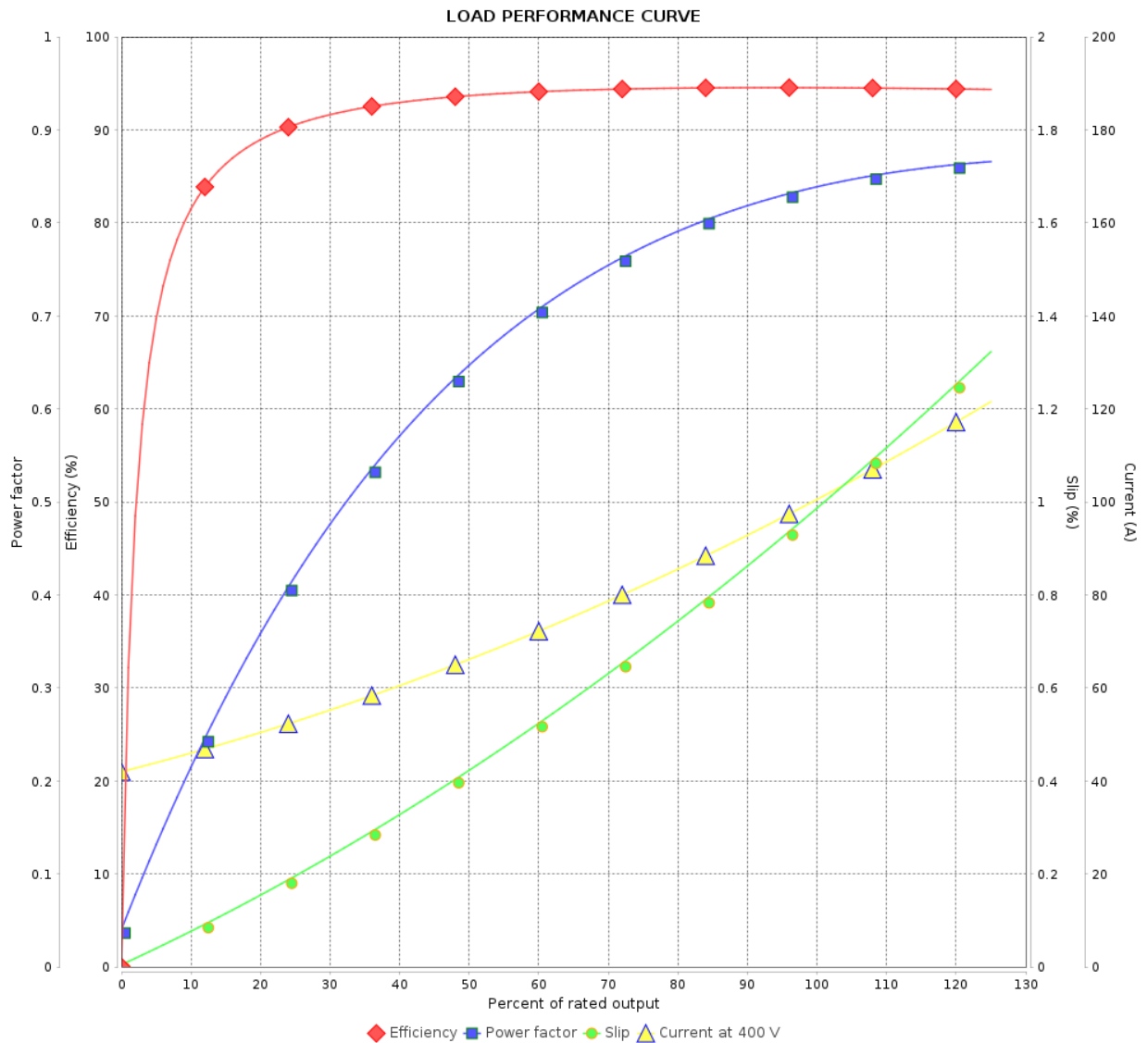
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 12408987



Performance : 400 V 50 Hz 4P IE2

Rated current : 100 A
LRC : 8.4
Rated torque : 36.7 kgfm
Locked rotor torque : 300 %
Breakdown torque : 360 %
Rated speed : 1485 rpm

Moment of inertia (J) : 1.11 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page 5 / 6Revision		
Checked by				
Date	19/03/2024			

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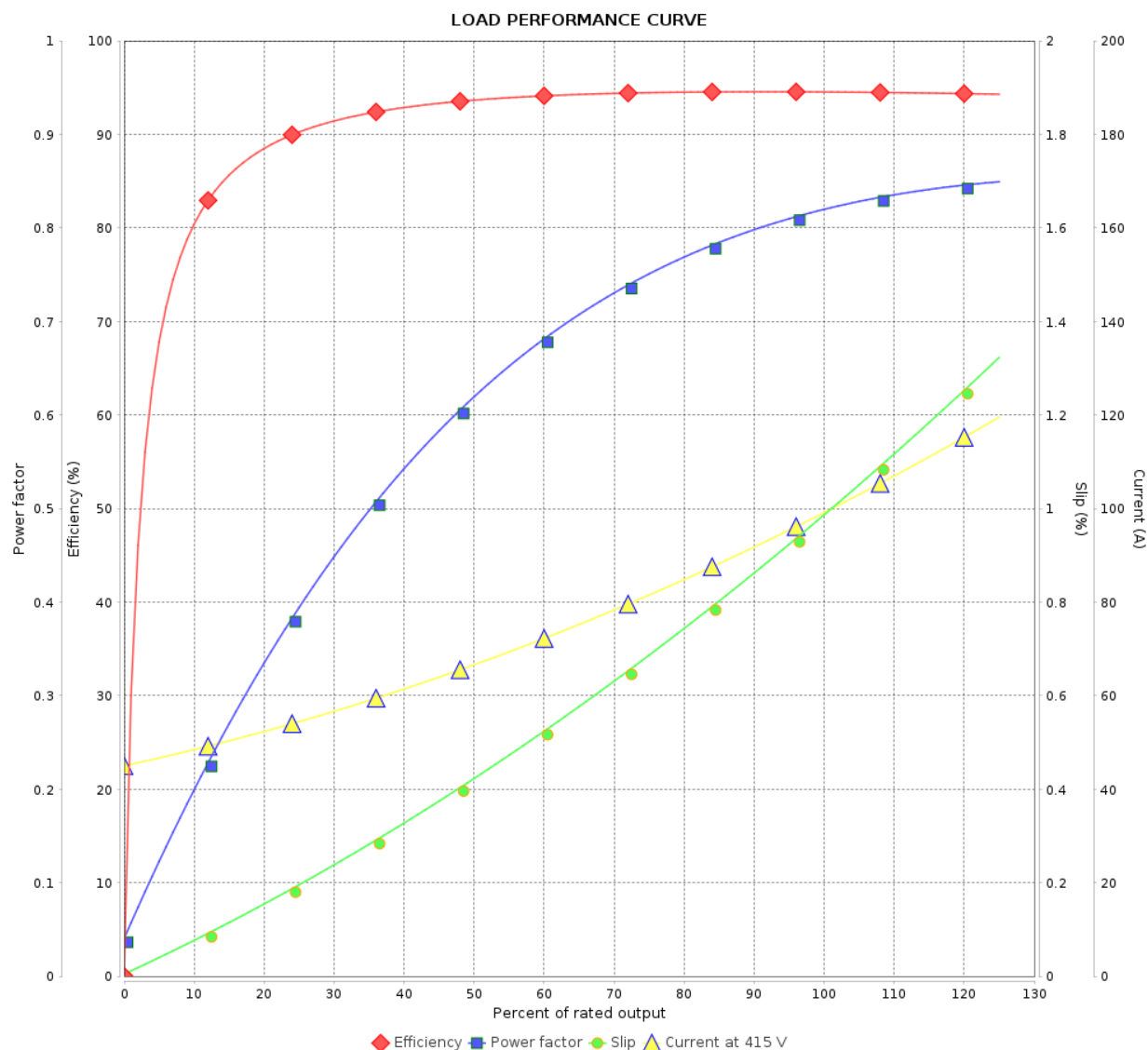
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 12408987



Performance : 415 V 50 Hz 4P IE2

Rated current : 98.7 A
LRC : 9.1
Rated torque : 36.7 kgfm
Locked rotor torque : 320 %
Breakdown torque : 370 %
Rated speed : 1485 rpm

Moment of inertia (J) : 1.11 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

Rev.	Changes Summary		Performed	Checked	Date
Performed by				Page	Revision
Checked by				6 / 6	
Date					