

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W21 Explosion Proof NEMA Premium Efficiency Three-Phase Product code : 14296383

Frame	: 143/5TC	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 ³	: 34.3 kg
Protection degree	: IP55	Moment of inertia (J)	: 0.0023 kgm ²
Design	: B		

Output [HP]	2	2	2	2
Poles	2	2	2	2
Frequency [Hz]	60	50	50	50
Rated voltage [V]	230/460	380	400	415
Rated current [A]	5.38/2.69	3.25	3.09	3.05
L. R. Amperes [A]	49.5/24.7	22.8	23.2	24.4
LRC [A]	9.2x(Code L)	7.0x(Code J)	7.5x(Code K)	8.0x(Code K)
No load current [A]	2.40/1.20	1.10	1.20	1.30
Rated speed [RPM]	3495	2860	2880	2890
Slip [%]	2.92	4.67	4.00	3.67
Rated torque [kgfm]	0.415	0.508	0.504	0.502
Locked rotor torque [%]	370	270	310	340
Breakdown torque [%]	420	290	330	360
Service factor	1.15	1.00	1.00	1.00
Temperature rise	80 K	80 K	80 K	80 K
Locked rotor time	27s (cold) 15s (hot)	37s (cold) 21s (hot)	37s (cold) 21s (hot)	37s (cold) 21s (hot)
Noise level ²	68.0 dB(A)	62.0 dB(A)	62.0 dB(A)	62.0 dB(A)
Efficiency (%)	25%	78.4	81.1	82.1
	50%	80.0	81.5	82.5
	75%	84.0	82.5	84.5
	100%	85.5	82.5	84.5
Power Factor	25%	0.41	0.47	0.43
	50%	0.64	0.70	0.66
	75%	0.76	0.81	0.78
	100%	0.82	0.85	0.83

	<u>Drive end</u>	<u>Non drive end</u>	Foundation loads	
Bearing type	: 6205 2RS	6204 2RS	Max. traction	: 34 kgf
Sealing	: Oil Seal	Lip Seal	Max. compression	: 68 kgf
Lubrication interval	: -	-		
Lubricant amount	: -	-		
Lubricant type	: Mobil Polyrex EM			

Notes
USABLE @208V 5.95A SF 1.15 SFA 6.84A

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	15/01/2024		Page 1 / 6	Revision

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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	15/01/2024				

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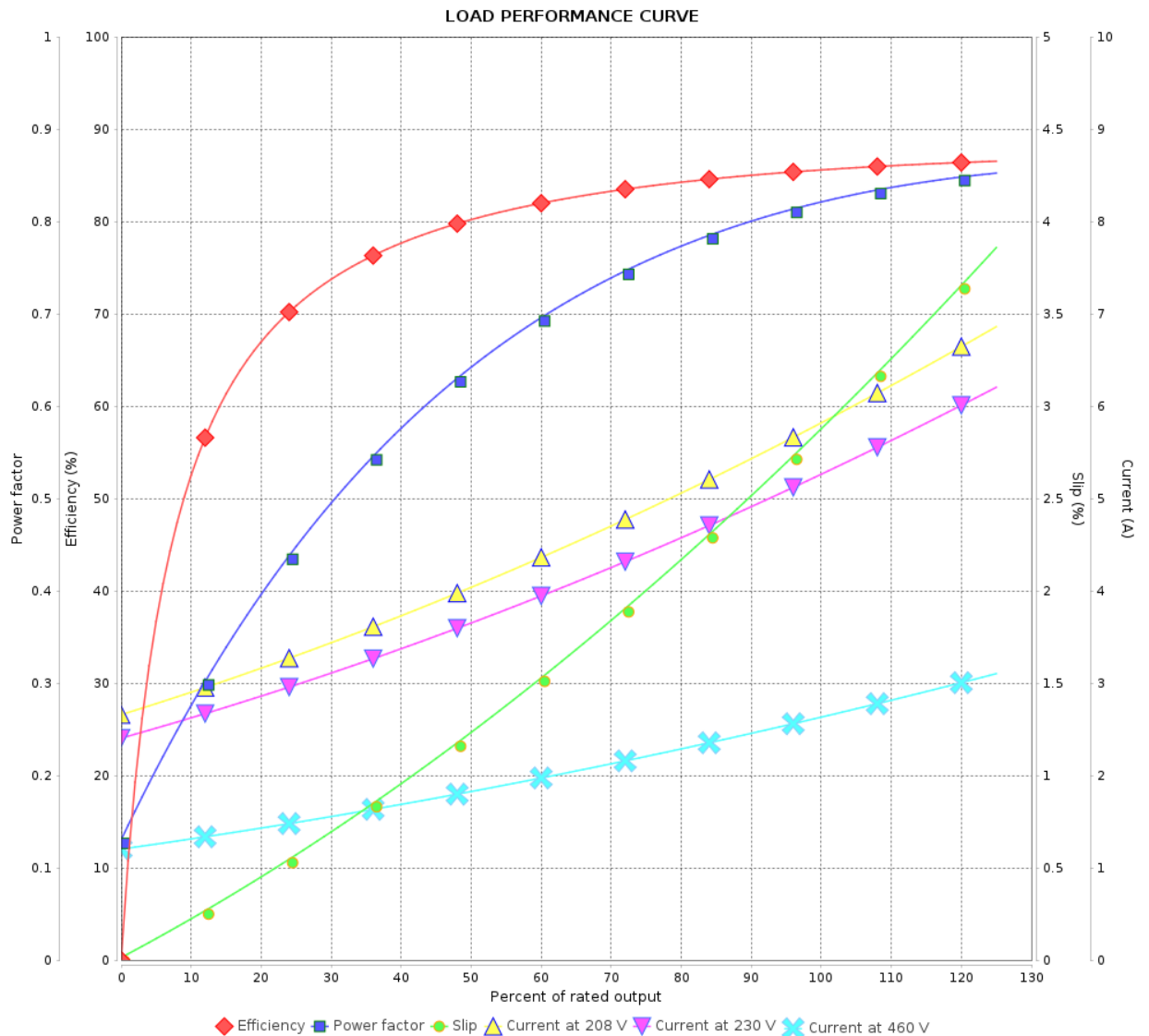
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Customer :

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Efficiency Three-Phase

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Performance : 230/460 V 60 Hz 2P

Rated current : 5.38/2.69 A
LRC : 9.2
Rated torque : 0.415 kgfm
Locked rotor torque : 370 %
Breakdown torque : 420 %
Rated speed : 3495 rpm

Moment of inertia (J) : 0.0023 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	Revision
Checked by				3 / 6	
Date					

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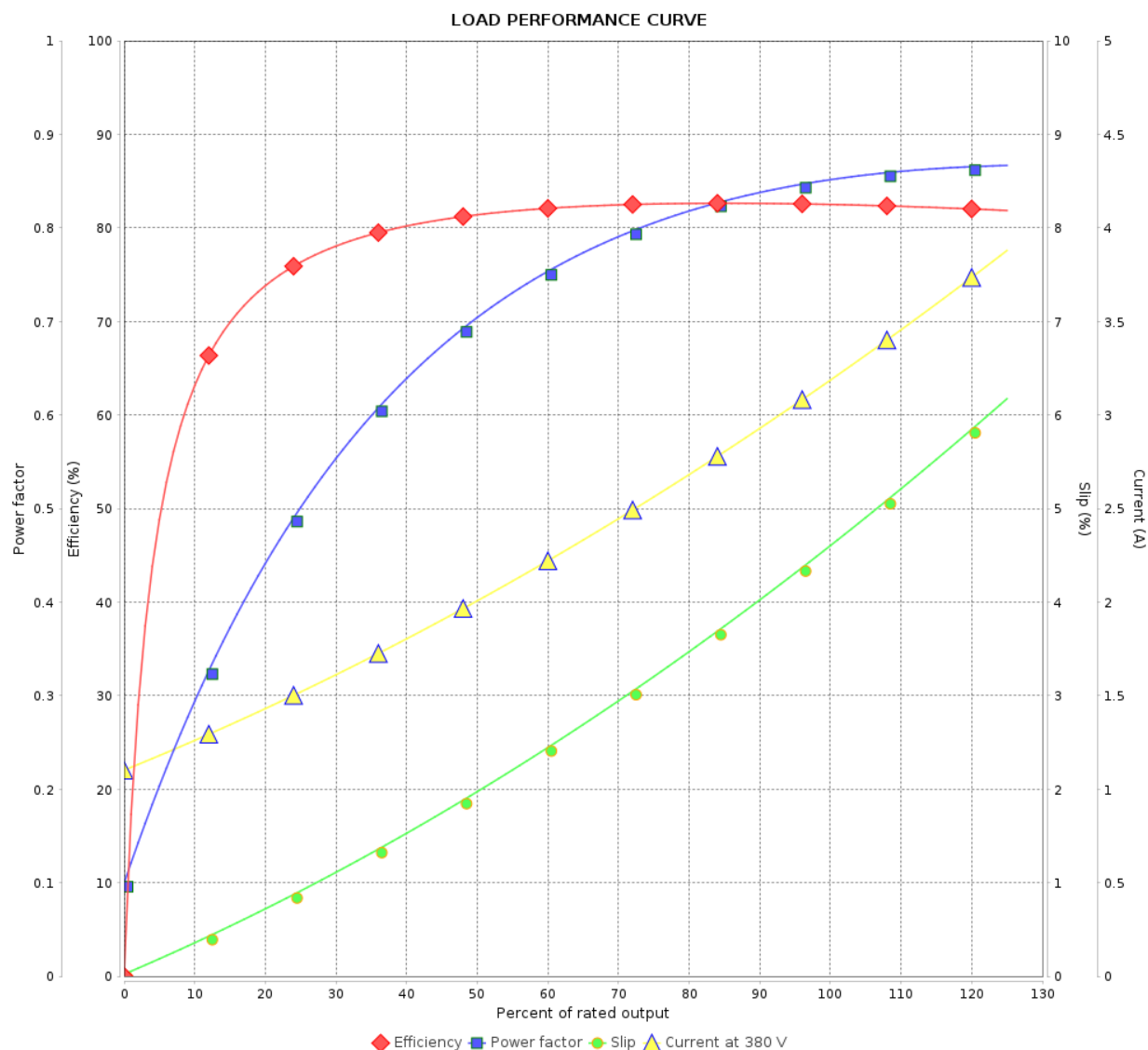
Three Phase Induction Motor - Squirrel Cage



Customer :

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Performance : 380 V 50 Hz 2P IE2

Rated current : 3.25 A
LRC : 7.0
Rated torque : 0.508 kgfm
Locked rotor torque : 270 %
Breakdown torque : 290 %
Rated speed : 2860 rpm

Moment of inertia (J) : 0.0023 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				4 / 6	
Date					

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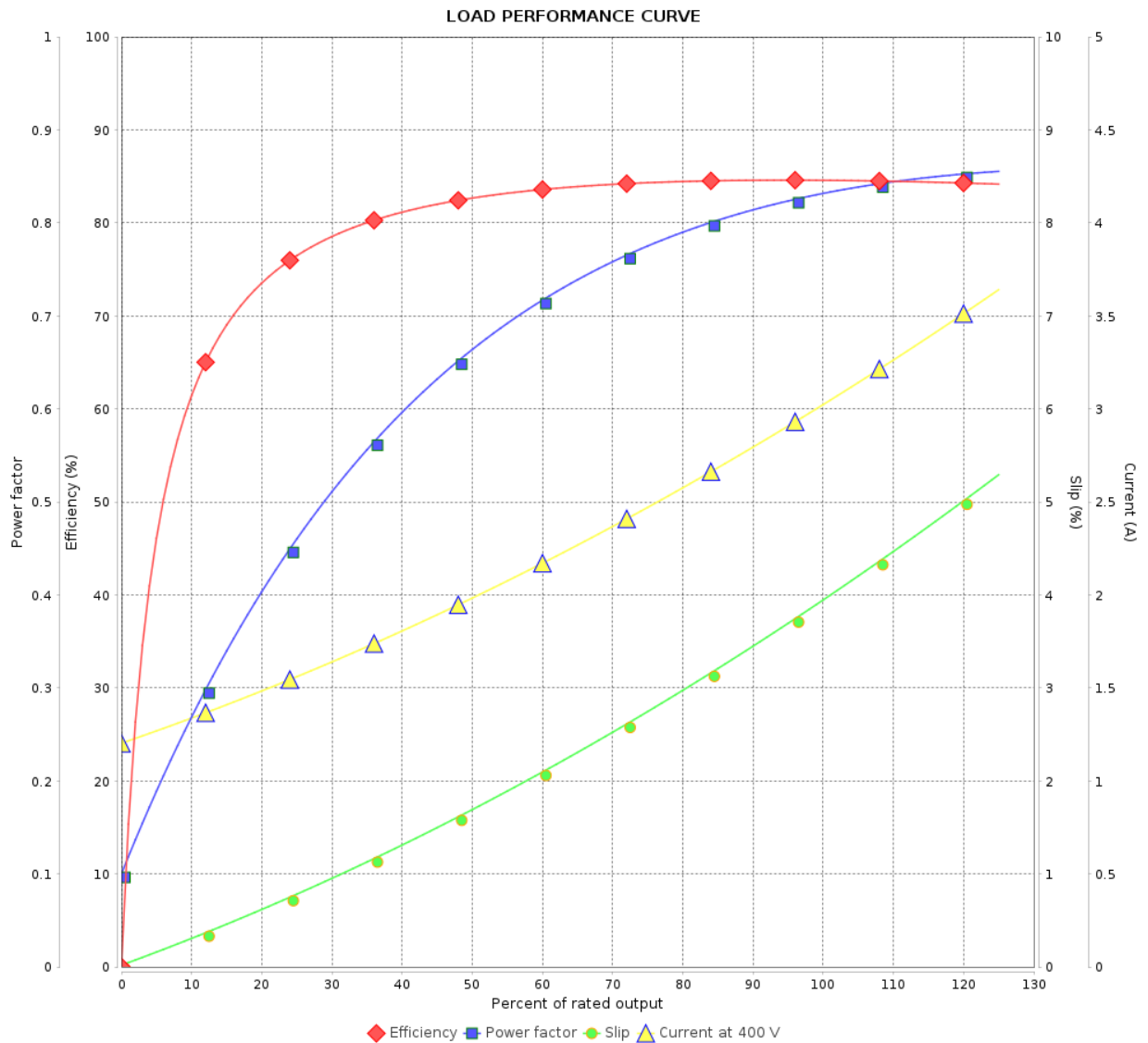
Three Phase Induction Motor - Squirrel Cage



Customer :

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Performance : 400 V 50 Hz 2P IE3

Rated current	: 3.09 A	Moment of inertia (J)	: 0.0023 kgm ²
LRC	: 7.5	Duty cycle	: Cont.(S1)
Rated torque	: 0.504 kgfm	Insulation class	: F
Locked rotor torque	: 310 %	Service factor	: 1.00
Breakdown torque	: 330 %	Temperature rise	: 80 K
Rated speed	: 2880 rpm	Design	: B

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page 5 / 6Revision		
Checked by				
Date	15/01/2024			

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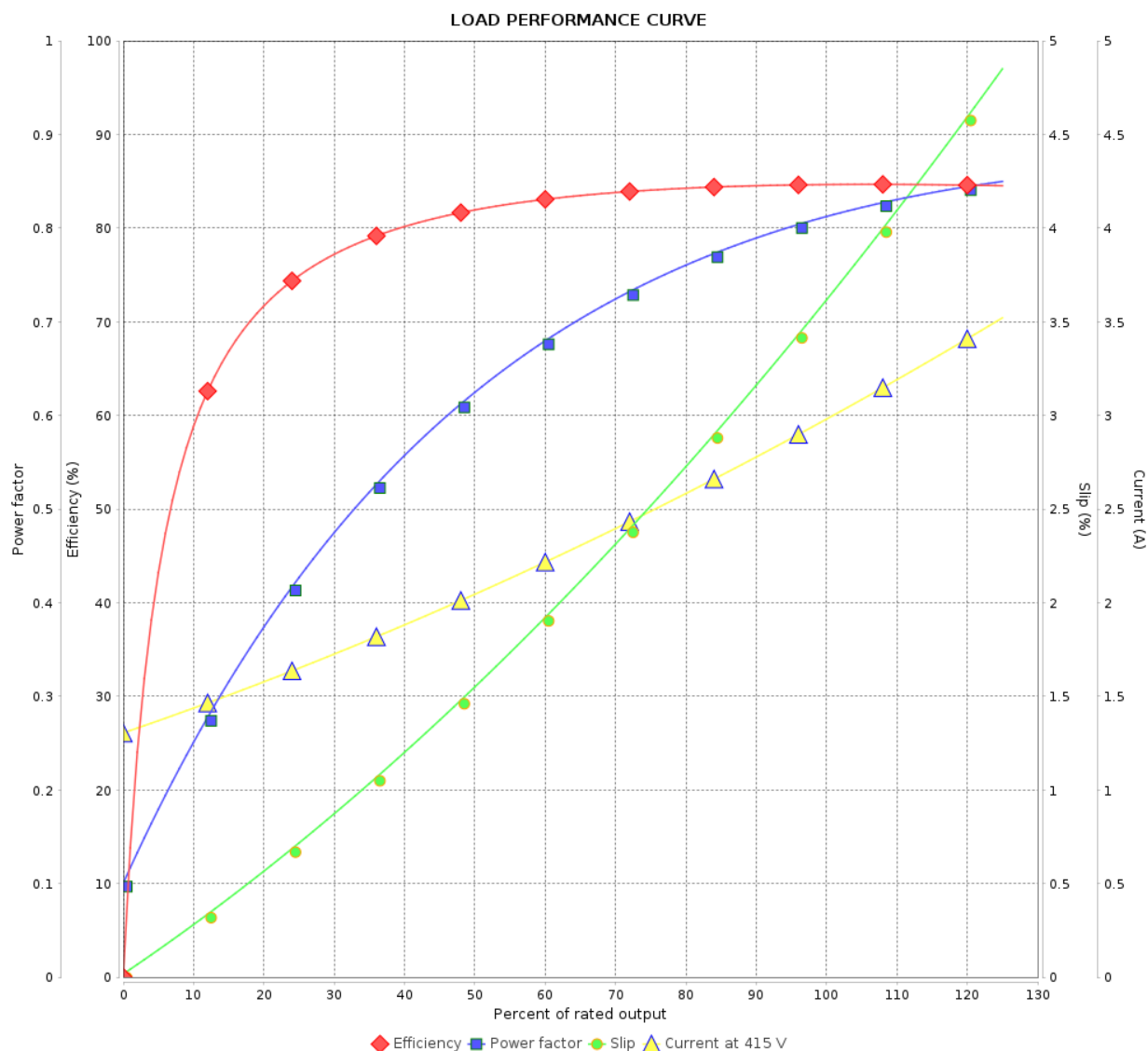
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Performance : 415 V 50 Hz 2P IE3

Rated current : 3.05 A
LRC : 8.0
Rated torque : 0.502 kgfm
Locked rotor torque : 340 %
Breakdown torque : 360 %
Rated speed : 2890 rpm

Moment of inertia (J) : 0.0023 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 6 / 6 Revision		
Checked by				
Date	15/01/2024			