DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer

Product line : W40 NEMA Premium Efficiency Three-Product code: 14448479

Cooling method Frame : 404/5T : IC01 - ODP Insulation class Mounting : F : F-1

Duty cycle : Cont.(S1) Rotation¹ : Both (CW and CCW) Ambient temperature : -20°C to +40°C Starting method : Direct On Line

Altitude : 1000 m.a.s.l. Approx. weight³ : 444 kg Protection degree : IP23 Moment of inertia (J) : 0.9245 kgm²

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]		230/115	103	97.5	96.2	
L. R. Amperes [A]		1564/782	742	683	750	
LRC [A]		6.8x(Code G)	7.2x(Code H)	7.0x(Code H)	7.8x(Code J)	
No load current [A]	79.4/39.7	33.0	36.5	40.0	
Rated speed [RPN	/ 1]	1780	1482	1484	1485	
Slip [%]		1.11	1.20	1.07	1.00	
Rated torque [kgfm]		40.8	36.7	36.7	36.7	
Locked rotor torque [%]		200	220	240	270	
Breakdown torque [%]		250	250	280	300	
Service factor		1.25	1.00	1.00	1.00	
Temperature rise		80 K	80 K	80 K	80 K	
Locked rotor time		21s (cold) 12s (hot)	23s (cold) 13s (hot)	21s (cold) 12s (hot)	25s (cold) 14s (hot)	
Noise level ²		69.0 dB(A)				
	25%					
Efficiency (%)	50%	95.0	91.9	92.0	92.0	
Liliciency (70)	75%	95.4	92.9	92.9	92.9	
	100%	95.4	94.7	94.7	94.7	
	25%					
Power Factor	50%	0.75	0.73	0.72	0.70	
I OWELL ACTOL	75%	0.83	0.82	0.80	0.80	
	100%	0.86	0.86	0.86	0.84	

Non drive end Foundation loads Drive end

Bearing type NU-316 C3 6314 C3 Max. traction : 860 kgf Sealing Without Without Max. compression : 1304 kgf

Bearing Seal Bearing Seal Lubrication interval 20000 h 20000 h Lubricant amount 34 g 27 g

Mobil Polyrex EM Lubricant type

Notes

USABLE @208V 254A SF 1.15 SFA 292A

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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Three Phase Induction Motor - Squirrel Cage



Customer

Product line : W40 NEMA Premium Efficiency Three-

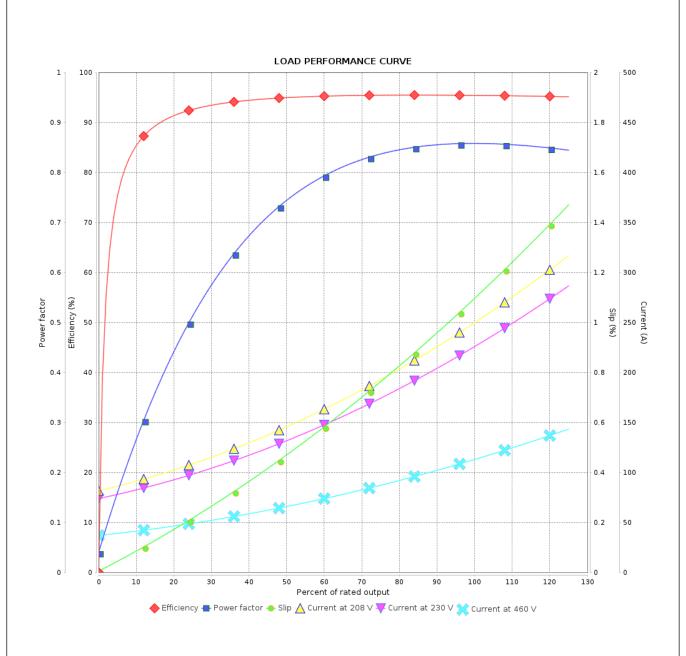
Product code:

14448479

Phase

15/01/2024

Date



Performance	: 230/460 V 60 Hz 4P			
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 230/115 A : 6.8 : 40.8 kgfm : 200 % : 250 % : 1780 rpm	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design	: 0.9245 kgm² : Cont.(S1) : F : 1.25 : 80 K : B	
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Three Phase Induction Motor - Squirrel Cage



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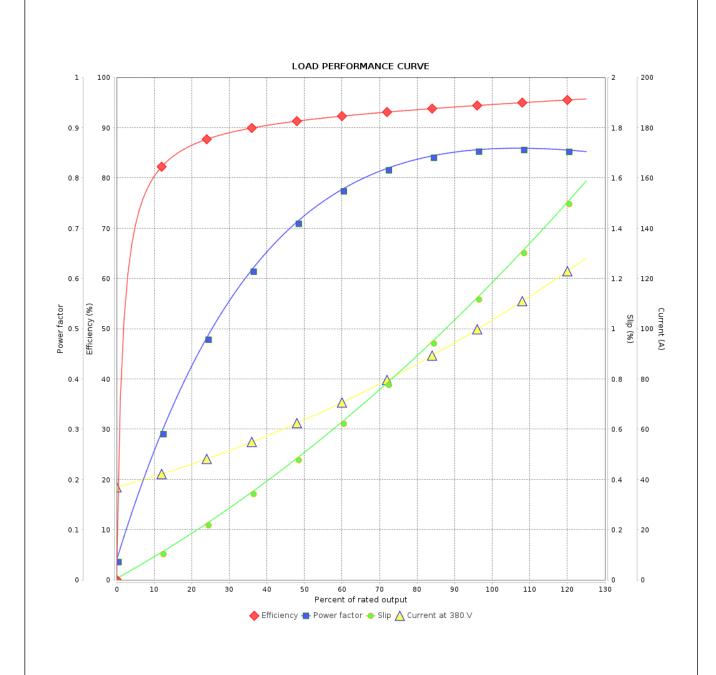
Customer :

Product line : W40 NEMA Premium Efficiency Three- Product code :

Phase

15/01/2024

Date



Performance	: 380 V 50 Hz 4P IE3			
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 103 A : 7.2 : 36.7 kgfm : 220 % : 250 % : 1482 rpm	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design	: 0.9245 kgm² : Cont.(S1) : F : 1.00 : 80 K : B	
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Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W40 NEMA Premium Efficiency Three-

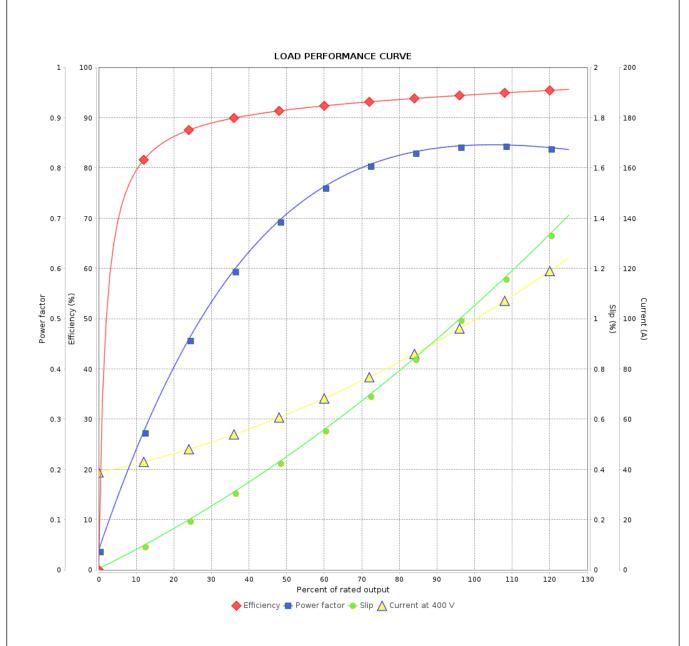
Product code:

14448479



15/01/2024

Date



Performance	: 400 V 50 Hz 4P IE3				
renomance	. 400 V 50 HZ 4F IES				
Rated current	: 97.5 A	Moment of inertia (J)	: 0.9245 kgm²	: 0.9245 kgm²	
LRC	: 7.0	Duty cycle	: Cont.(S1)	: Cont.(S1)	
Rated torque	: 36.7 kgfm	Insulation class	: F	* *	
Locked rotor torque	: 240 %	Service factor	: 1.00	: 1.00	
Breakdown torque	: 280 %	Temperature rise	: 80 K	: 80 K	
Rated speed	: 1484 rpm	Design	: B		
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Checked by			Page	Revision	

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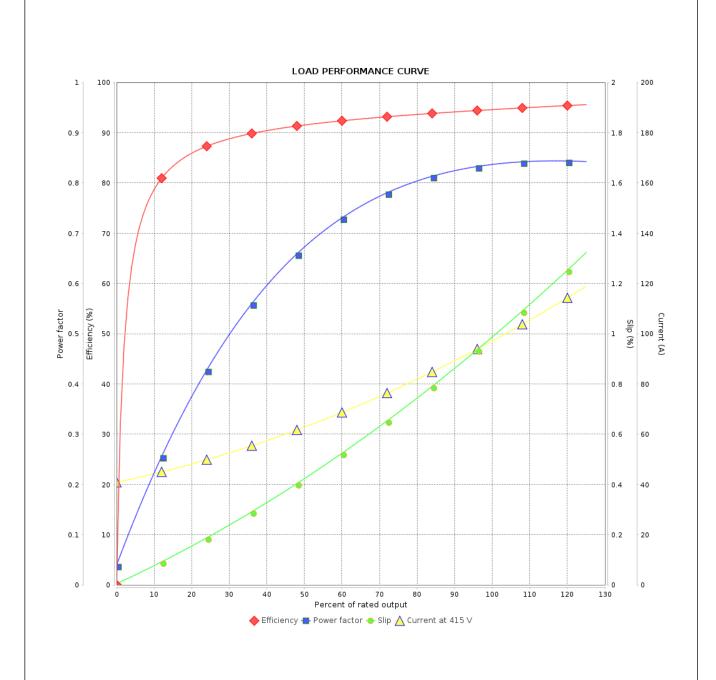
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W40 NEMA Premium Efficiency Three- Product code : 14448479

Phase



Performance : 415 V 50 Hz 4P IE3						
Rated current LRC Rated torque Locked rotor torq Breakdown torqu	: 7. : 36 ue : 2	Moment of inertia (J) Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise		: 0.9245 kgm² : Cont.(S1) : F : 1.00 : 80 K		
Rated speed	: 14	485 rpm Design			: B	
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