DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer

Product line : W40 NEMA Premium Efficiency Three-Product code: 14272518

Frame : 364/5TC Cooling method : 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 : 362 kg Protection degree : IP23 Moment of inertia (J) : 0.7059 kgm²

Design

Design		: B				
Output [HP]		75	75 60		60	
Poles		4	4	4	4	
Frequency [Hz]		60	50	50	50	
Rated voltage [V]		230/460	380	400	415	
Rated current [A]		171/85.5	84.4	82.1	80.1	
L. R. Amperes [A]		1163/581	599	591	609	
LRC [A]		6.8x(Code G)	7.1x(Code H)	7.2x(Code H)	7.6x(Code J)	
No load current [A		61.0/30.5	28.5	33.7	36.1	
Rated speed [RPN	/ []	1780	1480	1482	1484	
Slip [%]		1.11	1.33	1.20	1.07	
Rated torque [kgfn	Rated torque [kgfm]		29.4	29.4	29.3	
Locked rotor torque [%]		220	200	229	250	
Breakdown torque [%]		260	240	260	280	
Service factor		1.25	1.00	1.00	1.00	
Temperature rise	Temperature rise		80 K	80 K	80 K	
Locked rotor time		25s (cold) 14s (hot)	23s (cold) 13s (hot)	23s (cold) 13s (hot)	23s (cold) 13s (hot)	
Noise level ²		69.0 dB(A)				
	25%	94.4	93.7	93.7	93.7	
Efficiency (%)	50%	94.5	93.8	93.8	93.8	
Efficiency (70)	75%	95.0	94.2	94.2	94.2	
	100%	95.0	94.2	94.2	94.2	
	25%	0.48	0.48	0.43	0.40	
Power Factor	50%	0.73	0.73	0.69	0.66	
I OWEI FACIOI	75%	0.82	0.82	0.80	0.77	
	100%	0.85	0.86	0.84	0.83	

Non drive end Drive end Foundation loads

Bearing type 6314 C3 6212 Z C3 Max. traction : 743 kgf Sealing Without Without Max. compression : 1105 kgf

Bearing Seal Bearing Seal 20000 h Lubrication interval 20000 h Lubricant amount 13 g 27 g

Mobil Polyrex EM Lubricant type

Notes

USABLE @208V 189A SF 1.15 SFA 217A

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				Page	Revision
Date	15/01/2024			1/5	

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W40 NEMA Premium Efficiency Three-

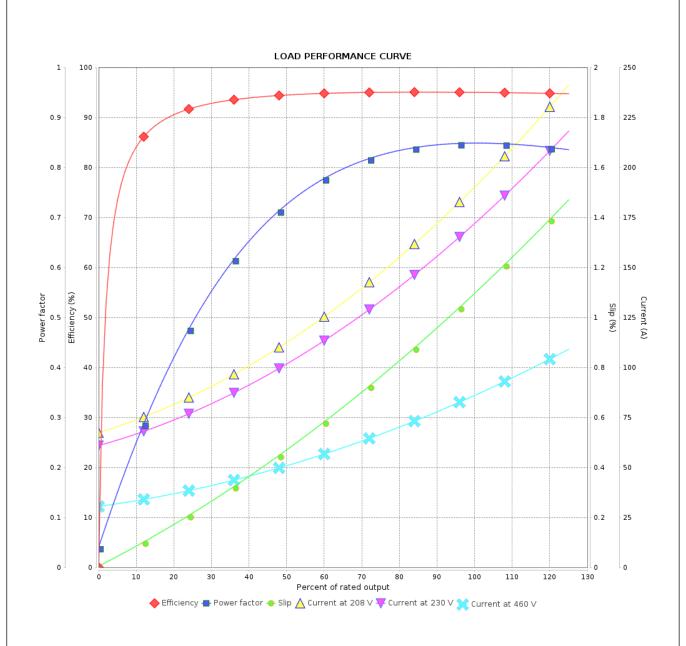
Product code:

14272518



15/01/2024

Date



Performance	: 230/460 V 60 Hz 4P				
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 171/85.5 A : 6.8 : 30.6 kgfm : 220 % : 260 % : 1780 rpm	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design		: 0.7059 kgm² : Cont.(S1) : F : 1.25 : 80 K : B	
Rev.	Changes Summary	l	Performed	Checked	Date
Performed by					
Checked by				Page	Revision

2/5

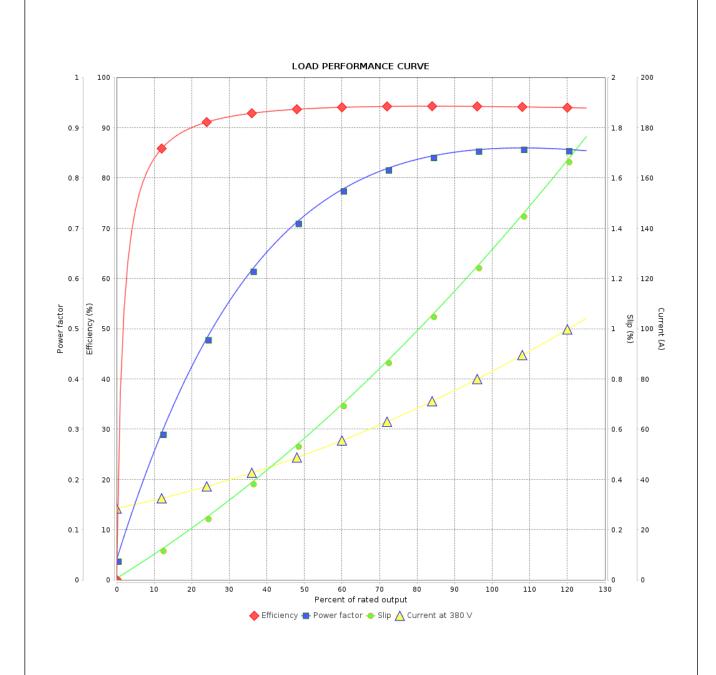
Three Phase Induction Motor - Squirrel Cage



14272518

Customer

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



Performance	: 3	380 V 50 Hz 4P IE3				
Rated current		34.4 A	A Moment of inertia (J)		: 0.7059 kgm²	
LRC		7.1	Duty cycle	Duty cycle		
Rated torque		29.4 kgfm Insulation cla		class	: F	
Locked rotor torque		200 %	Service fa	Service factor		
Breakdown torque		240 %	Temperati	Temperature rise		
Rated speed	: 1	1480 rpm Design			: B	
Rev.		Changes Summa	ry	Performed	Checked	Date
Performed by						
Checked by					Page	Revision
Date	15/01/2024				3/5	

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W40 NEMA Premium Efficiency Three-

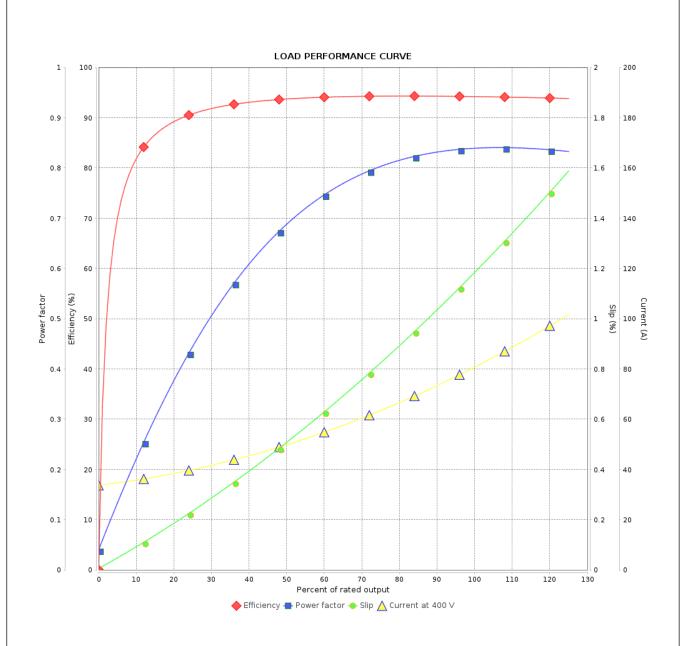
Product code:

14272518



15/01/2024

Date



Dorformana	· 400 \/ 50 H= 4D IF3	*		*	
Performance	: 400 V 50 Hz 4P IE3				
Rated current	: 82.1 A	Moment of inertia (J)		: 0.7059 kgm²	2
LRC	: 7.2	Duty cycle		: Cont.(S1)	
Rated torque	: 29.4 kgfm	Insulation class		: F	
Locked rotor torque	: 229 %	Service factor		: 1.00	
Breakdown torque	: 260 %	Temperature rise		: 80 K	
Rated speed	: 1482 rpm	Design		: B	
Rev.	Changes Summary		Performed	Checked	Date
Performed by					
Checked by				Page	Revision

4/5

Three Phase Induction Motor - Squirrel Cage

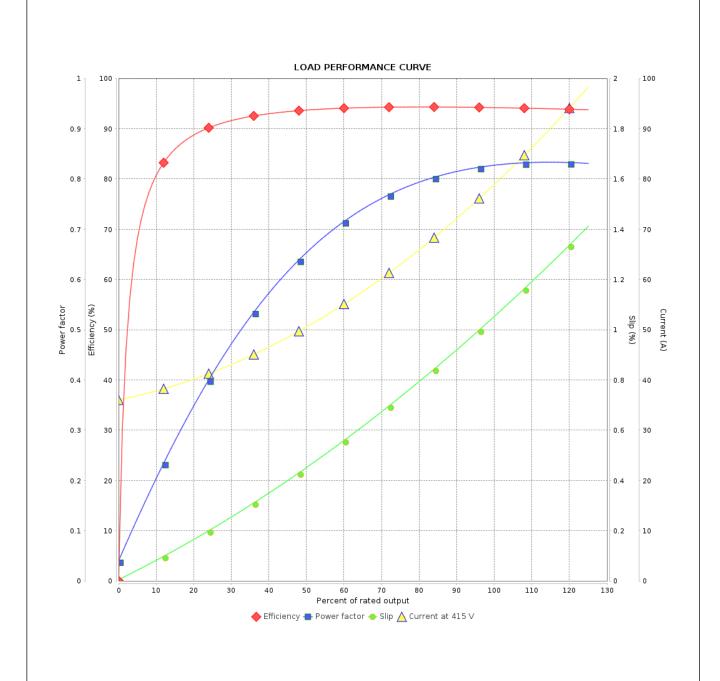


14272518

Customer :

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

Phase



Performance	: 4	: 415 V 50 Hz 4P IE3				
Rated current	: :	80.1 A	Moment of inertia (J)		: 0.7059 kgm²	
LRC	: '	: 7.6 Duty cycle)	: Cont.(S1)	
Rated torque			class	: F		
Locked rotor torque	e ::	250 %	Service fa	ctor	: 1.00	
Breakdown torque	: :	280 %	Temperature rise		: 80 K	
Rated speed		1484 rpm	Design		: B	
Rev.	Changes Summary			Performed	Checked	Date
Performed by						
Checked by					Page	Revision
Date	15/01/2024				5/5	