DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer

Product line : W21 Explosion Proof NEMA Premium

Product code: 16766514

Efficiency Three-Phase

: 254TC Frame Insulation class : F

Duty cycle : Cont.(S1) Ambient temperature : -20°C to +40°C Altitude : 1000 m.a.s.l.

Starting method Approx. weight³

Cooling method

Mounting

Rotation¹

: F-1 : Both (CW and CCW)

: Direct On Line

: IC411 - TEFC

: 150 kg

No load current [A] 11.0/5.50 5.44 5.77 6.03 Rated speed [RPM] 880 720 725 730 Slip [%] 2.22 4.00 3.33 2.67 Rated torque [kgfm] 4.12 5.04 5.01 4.97 Locked rotor torque [%] 210 160 180 200 Breakdown torque [%] 270 200 229 250 Service factor 1.15 1.00 1.00 1.00 Temperature rise 80 K 80 K 80 K 80 K	/ tititude		. 1000 111.4.5.1.	/ tppiox. weigi	. 100	Ng
Dutput [HP]	Protection degree	е	: IP55	Moment of ine	ertia (J) : 0.14	36 kgm²
Poles	Design		: B			
Frequency [Hz] 60 50 50 50 Rated voltage [V] 230/460 380 400 415 Rated current [A] 15.9/7.93 9.17 8.92 8.73 L. R. Amperes [A] 84.0/42.0 48.6 47.3 46.3 LRC [A] 5.3x(Code H) 5.3x(Code H) 5.3x(Code H) 5.3x(Code H) No load current [A] 11.0/5.50 5.44 5.77 6.03 Rated speed [RPM] 880 720 725 730 Slip [%] 2.22 4.00 3.33 2.67 Rated torque [kgfm] 4.12 5.04 5.01 4.97 Locked rotor torque [%] 210 160 180 200 Breakdown torque [%] 270 200 229 250 Service factor 1.15 1.00 1.00 1.00 Temperature rise 80 K 80 K 80 K 80 K 80 K Locked rotor time 37s (cold) 21s (hot) 37s (cold) 21s (hot) 37s (cold) 21s (hot) 37s (cold) 21s (hot) 83.0 dB(A) Efficiency (%) 50% 84.0 82.5 82.5 82.5 Efficiency (%) 50% 0.46 0.53 0.50 0.47 75% 0.58 0.68 0.65 0.62 0.60 Power Factor 50 0.69	Output [HP]		5	5	5	5
Rated voltage [V] 230/460 380 400 415 Rated current [A] 15.9/7.93 9.17 8.92 8.73 L. R. Amperes [A] 84.0/42.0 48.6 47.3 46.3 LRC [A] 5.3x(Code H) 5.3x(Code H) 5.3x(Code H) 5.3x(Code H) No load current [A] 11.0/5.50 5.44 5.77 6.03 Rated speed [RPM] 880 720 725 730 Slip [%] 2.22 4.00 3.33 2.67 Rated torque [kgfm] 4.12 5.04 5.01 4.97 Locked rotor torque [%] 210 160 180 200 Breakdown torque [%] 270 200 229 250 Service factor 1.15 1.00 1.00 1.00 Temperature rise 80 K 80 K 80 K 80 K Locked rotor time 37s (cold) 21s (hot) 35.0 dB(A) 53.	Poles		8	8	8	8
Rated current [A] 15.9/7.93 9.17 8.92 8.73 L. R. Amperes [A] 84.0/42.0 48.6 47.3 46.3 LRC [A] 5.3x(Code H) 5.3x(Code H) 5.3x(Code H) No load current [A] 11.0/5.50 5.44 5.77 6.03 Rated speed [RPM] 880 720 725 730 Slip [%] 2.22 4.00 3.33 2.67 Rated torque [kgfm] 4.12 5.04 5.01 4.97 Locked rotor torque [%] 210 160 180 200 Breakdown torque [%] 270 200 229 250 Service factor 1.15 1.00 1.00 1.00 Temperature rise 80 K 80 K 80 K 80 K Locked rotor time 37s (cold) 21s (hot) 37s (cold) 21	Frequency [Hz]		60	50	50	50
L. R. Amperes [A] 84.0/42.0 48.6 47.3 46.3 LRC [A] 5.3x(Code H) 5.3x(Code H) 5.3x(Code H) No load current [A] 11.0/5.50 5.44 5.77 6.03 Rated speed [RPM] 880 720 725 730 Slip [%] 2.22 4.00 3.33 2.67 Rated torque [kgfm] 4.12 5.04 5.01 4.97 Locked rotor torque [%] 210 160 180 200 Breakdown torque [%] 270 200 229 250 Service factor 1.15 1.00 1.00 1.00 Temperature rise 80 K 80 K 80 K 80 K Locked rotor time 37s (cold) 21s (hot) 53.0 dB(A) Efficiency (%) 50% 84.0 82.5 82.5 82.5 Power Factor 50% 0.46 0.53 0.50 0.47 75% 0.58 0.65 0.62 0.60 100% 0.67 0.73 0.70 0.69	Rated voltage [V]		230/460	380	400	415
LRC [A] 5.3x(Code H) 5.3x(Code H) 5.3x(Code H) 5.3x(Code H) No load current [A] 11.0/5.50 5.44 5.77 6.03 Rated speed [RPM] 880 720 725 730 Slip [%] 2.22 4.00 3.33 2.67 Rated torque [kgfm] 4.12 5.04 5.01 4.97 Locked rotor torque [%] 210 160 180 200 Breakdown torque [%] 270 200 229 250 Service factor 1.15 1.00 1.00 1.00 Temperature rise 80 K 8	Rated current [A]		15.9/7.93	9.17	8.92	8.73
No load current [A]	L. R. Amperes [A]		84.0/42.0	48.6	47.3	46.3
Rated speed [RPM] 880 720 725 730 Slip [%] 2.22 4.00 3.33 2.67 Rated torque [kgfm] 4.12 5.04 5.01 4.97 Locked rotor torque [%] 210 160 180 200 Breakdown torque [%] 270 200 229 250 Service factor 1.15 1.00 1.00 1.00 Temperature rise 80 K 80 K 80 K 80 K Locked rotor time 37s (cold) 21s (hot)	LRC [A]		5.3x(Code H)	5.3x(Code H)	5.3x(Code H)	5.3x(Code H)
Slip [%] 2.22 4.00 3.33 2.67 Rated torque [kgfm] 4.12 5.04 5.01 4.97 Locked rotor torque [%] 210 160 180 200 Breakdown torque [%] 270 200 229 250 Service factor 1.15 1.00 1.00 1.00 Temperature rise 80 K 80 K 80 K 80 K Locked rotor time 37s (cold) 21s (hot)	No load current [A]		11.0/5.50	5.44	5.77	6.03
Rated torque [kgfm] 4.12 5.04 5.01 4.97 Locked rotor torque [%] 210 160 180 200 Breakdown torque [%] 270 200 229 250 Service factor 1.15 1.00 1.00 1.00 Temperature rise 80 K 82.5 82.5 82.5 82.5 82.5 82.5 82.5 82.5 82.5 84.0 84.0 84.0	Rated speed [RPN	1]	880	720	725	730
Locked rotor torque [%] 210 160 180 200 Breakdown torque [%] 270 200 229 250 Service factor 1.15 1.00 1.00 1.00 Temperature rise 80 K 82.5 82.5 82.5 82.5 82.5 82.5 82.5 82.5 82.5 82.5 82.5 82.	Slip [%]		2.22	4.00	3.33	2.67
Breakdown torque [%] 270 200 229 250 Service factor 1.15 1.00 1.00 1.00 Temperature rise 80 K 80 S 82.5 82.5 82.5 82.5 82.5 82.5 82.5 82.5 82.5 82.5 82.5 84.0 84.0 84.0	Rated torque [kgfn	ո]	4.12	5.04	5.01	4.97
Service factor	Locked rotor torque [%]		210	160	180	200
Temperature rise 80 K 81 S 80 Cold M(A) 53.0 dB(A) 82.5	Breakdown torque	[%]	270	200	229	250
Locked rotor time 37s (cold) 21s (hot) 37s (cold) 2	Service factor		1.15	1.00	1.00	1.00
Noise level² 55.0 dB(A) 53.0 dB(A) 53.0 dB(A) 53.0 dB(A) Efficiency (%) 25% 84.0 82.5 82.5 82.5 75% 86.5 84.0 84.0 84.0 100% 87.5 84.0 85.5 85.5 25% 50% 0.46 0.53 0.50 0.47 75% 0.58 0.65 0.62 0.60 100% 0.67 0.73 0.70 0.69	Temperature rise		80 K	80 K	80 K	80 K
Efficiency (%) 25% 50% 84.0 82.5 82.5 82.5 84.0 84.0 84.0 84.0 84.0 84.0 85.5 85.5 Power Factor 50% 0.46 0.53 0.50 0.47 75% 0.58 0.65 0.62 0.60 100% 0.67 0.73 0.70 0.69	Locked rotor time		37s (cold) 21s (hot)	37s (cold) 21s (hot)	37s (cold) 21s (hot)	37s (cold) 21s (hot)
Efficiency (%)	Noise level ²		55.0 dB(A)	53.0 dB(A)	53.0 dB(A)	53.0 dB(A)
Power Factor (%) 75% 86.5 84.0 84.0 84.0 84.0 84.0 85.5 85.5 85.5 85.5 85.5 85.5 85.5 85		25%				
Power Factor 75% 86.5 84.0 84.0 84.0 84.0 85.5 85.5	Efficiency (%)	50%	84.0	82.5	82.5	82.5
Power Factor	Linciency (70)	75%	86.5	84.0	84.0	84.0
Power Factor 50% 0.46 0.53 0.50 0.47 75% 0.58 0.65 0.62 0.60 100% 0.67 0.73 0.70 0.69			87.5	84.0	85.5	85.5
Power Factor 75% 0.58 0.65 0.62 0.60 100% 0.67 0.73 0.70 0.69						
75% 0.58 0.65 0.62 0.60 100% 0.67 0.73 0.70 0.69	Power Factor		0.46	0.53	0.50	0.47
		75%	0.58	0.65	0.62	0.60
Drive end Non drive end Foundation loads		100%	0.67	0.73	0.70	0.69
			<u>Drive end</u> <u>Non dr</u>	rive end Foundation loa	ads	

Non drive end Drive end Bearing type

6309 6209 2RS C3 2RS C3

Max. traction

: 120 kgf

Sealing Oil Seal Lip Seal Lubrication interval Lubricant amount Lubricant type Mobil Polyrex EM

Max. compression : 270 kgf

USABLE @208V 17.5A SF 1.15 SFA 20.2A

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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Checked by				Page	Revision
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Thermal protection

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

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Three Phase Induction Motor - Squirrel Cage

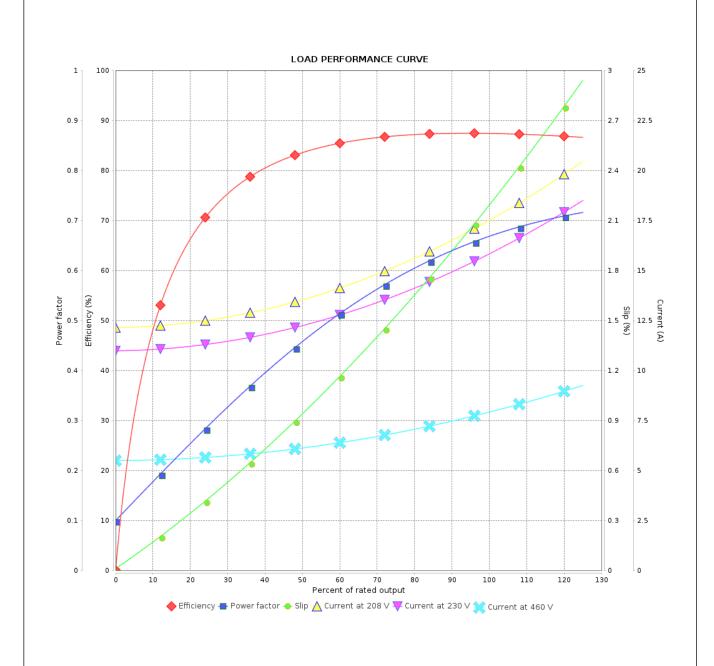


Customer :

Product line : W21 Explosion Proof NEMA Premium

Efficiency Three-Phase

Product code: 16766514



Performance	: 2	230/460 V 60 Hz 8P					
Rated current	: '	15.9/7.93 A	Moment o	f inertia (J)	: 0.1436 kgm²	!	
LRC	: 5	5.3	Duty cycle	;	: Cont.(S1)		
Rated torque	: 4	4.12 kgfm	Insulation	class	: F		
Locked rotor torqu	ue : 2	210 %	Service fa	ctor	: 1.15		
Breakdown torque		270 %	Temperatu	Temperature rise		: 80 K	
Rated speed	: 8	880 rpm	Design		: B		
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Three Phase Induction Motor - Squirrel Cage



Customer :

Checked by

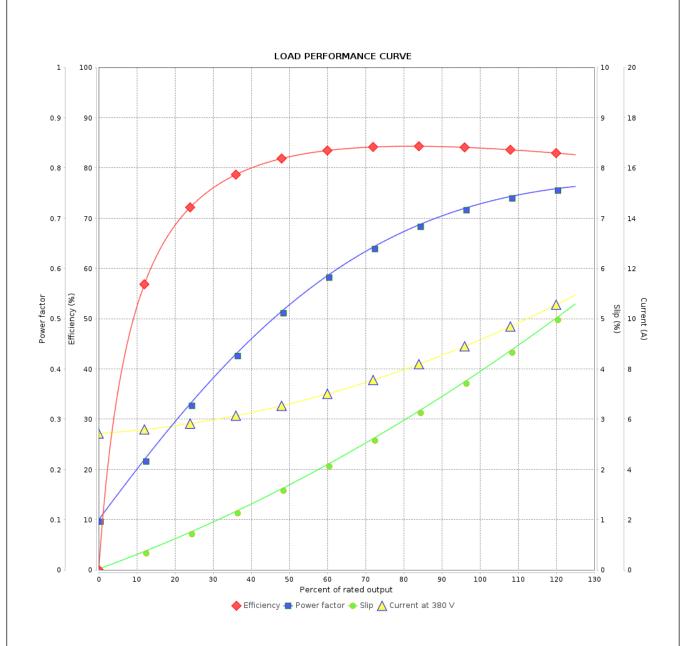
Date

22/10/2023

Product line : W21 Explosion Proof NEMA Premium

Efficiency Three-Phase

Product code: 16766514



Performance	: 3	80 V 50 Hz 8P IE2				
Rated current LRC Rated torque Locked rotor tord Breakdown torqu Rated speed	: 5 : 5 jue : 1 ie : 2	.17 A .3 .04 kgfm 60 % 00 % 20 rpm	Moment of Duty cycle Insulation Service fa Temperate Design	class ctor	: 0.1436 kgm² : Cont.(S1) : F : 1.00 : 80 K : B	
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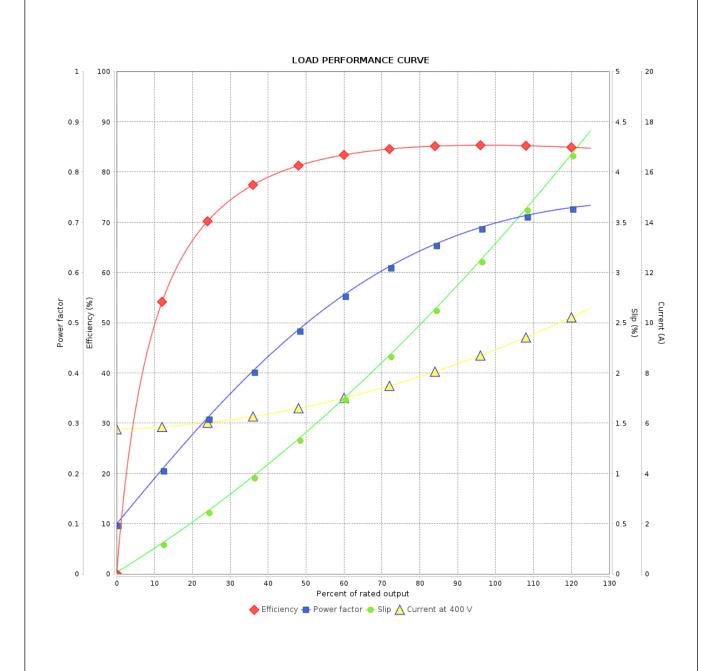


Customer :

Product line : W21 Explosion Proof NEMA Premium

Efficiency Three-Phase

Product code: 16766514



Performance	: 400 V 50 Hz 8P IE3				
Rated current	: 8.92 A Moment of inertia (J) : 0.1436 kgm²		Moment of inertia (J)		2
LRC	: 5.3	Duty cycle	9	: Cont.(S1)	
Rated torque	: 5.01 kgfm	Insulation class		: F	
Locked rotor torque	: 180 %	Service factor		: 1.00	
Breakdown torque	: 229 %	Temperature rise		: 80 K	
Rated speed	: 725 rpm	Design		: B	
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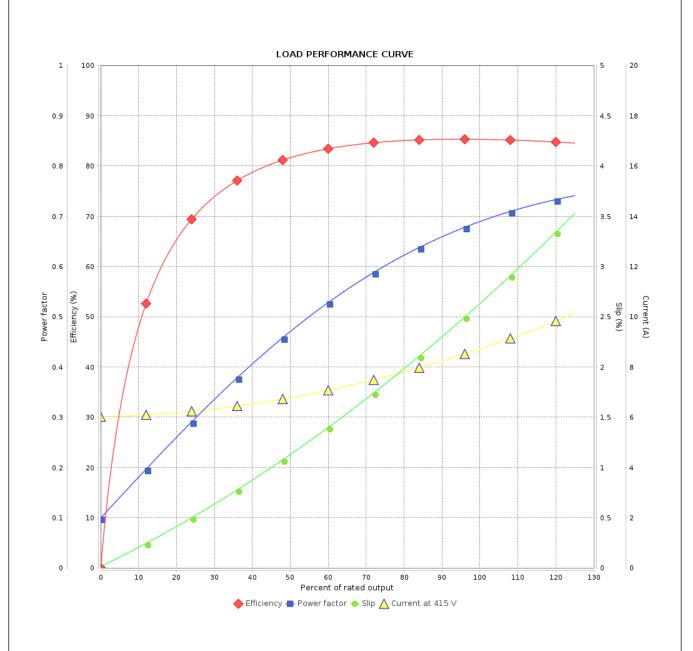


Customer

Product line : W21 Explosion Proof NEMA Premium

Efficiency Three-Phase

Product code: 16766514



Performance	: 415 V 50 Hz 8P IE3				
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed		Moment of ir Duty cycle Insulation cla Service facto Temperature Design	ass or	: 0.1436 kgm ² : Cont.(S1) : F : 1.00 : 80 K : B	2
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Date