DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer

Product line : JM Pump NEMA Premium Product code: 13173988

Efficiency Three-Phase

Catalog #: 00536ET3E184JMV-S

Frame : 182/4JM Cooling method : IC411 - TEFC

Insulation class Mounting : W-6

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

: 1000 m.a.s.l. Approx. weight³ : 87.8 lb Altitude

: IP55 Moment of inertia (J) : 0.2079 sq.ft.lb

Protection degree

Design		: B		·
Output [HP]		5	5	5
Poles		2	2	2
Frequency [Hz]		60	50	50
Rated voltage [V]		230/460	190/380	220/415
Rated current [A]		11.8/5.90	14.3/7.17	12.8/6.81
L. R. Amperes [A]		92.0/46.0	91.8/45.9	91.2/48.4
LRC [A]		7.8x(Code J)	6.4x(Code G)	7.1x(Code H)
No load current [A]		4.40/2.20	4.34/2.17	4.39/2.33
Rated speed [RPM]	3500	2860	2875
Slip [%]		2.78	4.67	4.17
Rated torque [ft.lb]		7.50	9.18	9.13
Locked rotor torque	€ [%]	220	180	200
Breakdown torque	[%]	300	250	280
Service factor		1.15	1.00	1.00
Temperature rise		80 K	105 K	105 K
Locked rotor time		30s (cold) 17s (hot)	0s (cold) 0s (hot)	0s (cold) 0s (hot)
Noise level ²		68.0 dB(A)	65.0 dB(A)	65.0 dB(A)
	25%	87.2	89.8	89.3
Efficiency (%)	50%	87.5	88.1	88.1
Efficiency (70)	75%	88.5	87.3	87.8
	100%	88.5	85.2	86.2
	25%	0.49	0.55	0.52
Power Factor	50%	0.76	0.82	0.79
I OWEL FACIOI	75%	0.85	0.89	0.87
	100%	0.89	0.92	0.91

Non drive end Foundation loads **Drive** end

Bearing type 6207 ZZ 6205 ZZ Max. traction : 119 lb Sealing V'Ring Without Max. compression : 207 lb

Bearing Seal

Lubrication interval Lubricant amount

Mobil Polyrex EM Lubricant type

Notes

USABLE @208V 13.1A SF 1.00 SFA 13.1A

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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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



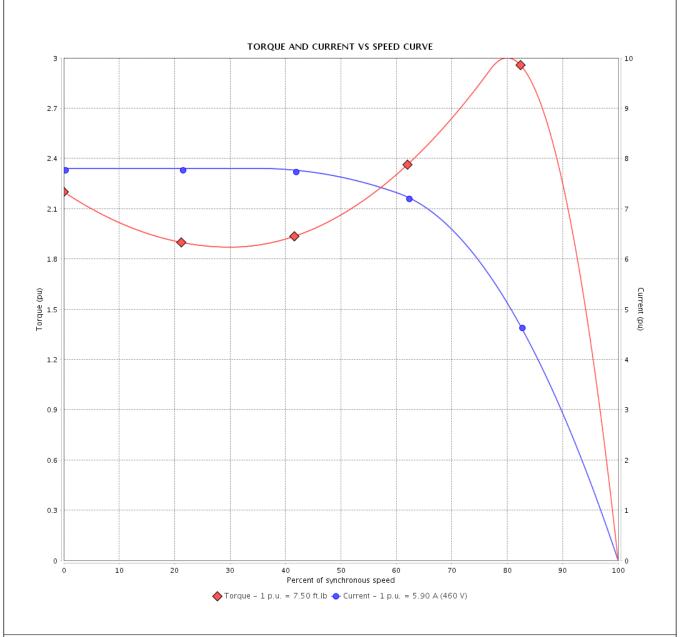
Customer :

Product line : JM Pump NEMA Premium

Efficiency Three-Phase

Product code: 13173988

Catalog #: 00536ET3E184JMV-S



Performance : 230/460 V 60 Hz 2P Rated current : 11.8/5.90 A Moment of inertia (J) : 0.2079 sq.ft.lb **LRC** : 7.8 Duty cycle : Cont.(S1) : F : 7.50 ft.lb Insulation class Rated torque : 220 % Service factor : 1.15 Locked rotor torque Breakdown torque : 300 % Temperature rise : 80 K Rated speed : 3500 rpm Design : B

Locked rotor time : 30s (cold) 17s (hot)

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TORQUE AND CURRENT VS SPEED CURVE



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Three Phase Induction Motor - Squirrel Cage Customer Product line : JM Pump NEMA Premium Product code: 13173988 Efficiency Three-Phase Catalog #: 00536ET3E184JMV-S TORQUE AND CURRENT VS SPEED CURVE 2.7 2.1 1.8 Torque (pu) 1.2 0.6 0.3 Percent of synchronous speed ◆ Torque - 1 p.u. = 9.18 ft.lb ◆ Current - 1 p.u. = 7.17 A (380 V) Performance : 190/380 V 50 Hz 2P Rated current : 14.3/7.17 A Moment of inertia (J) : 0.2079 sq.ft.lb **LRC** : 6.4 Duty cycle : Cont.(S1) Insulation class : F Rated torque : 9.18 ft.lb Locked rotor torque : 180 % Service factor : 1.00 Breakdown torque : 250 % Temperature rise : 105 K Rated speed : 2860 rpm Design : B Locked rotor time : 0s (cold) 0s (hot) Date Rev. **Changes Summary** Performed Checked

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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



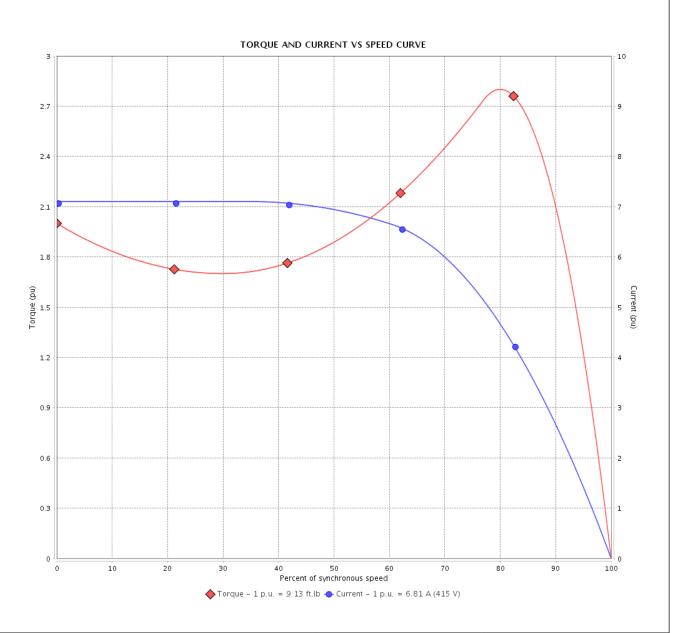
Customer :

Product line : JM Pump NEMA Premium

Efficiency Three-Phase

Product code: 13173988

Catalog #: 00536ET3E184JMV-S



Performance : 220/415 V 50 Hz 2P Rated current : 12.8/6.81 A Moment of inertia (J) : 0.2079 sq.ft.lb **LRC** : 7.1 Duty cycle : Cont.(S1) Insulation class Rated torque : 9.13 ft.lb : F Locked rotor torque : 200 % Service factor : 1.00 Breakdown torque : 280 % Temperature rise : 105 K Rated speed : 2875 rpm Design : B

Locked rotor time : 0s (cold) 0s (hot)

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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



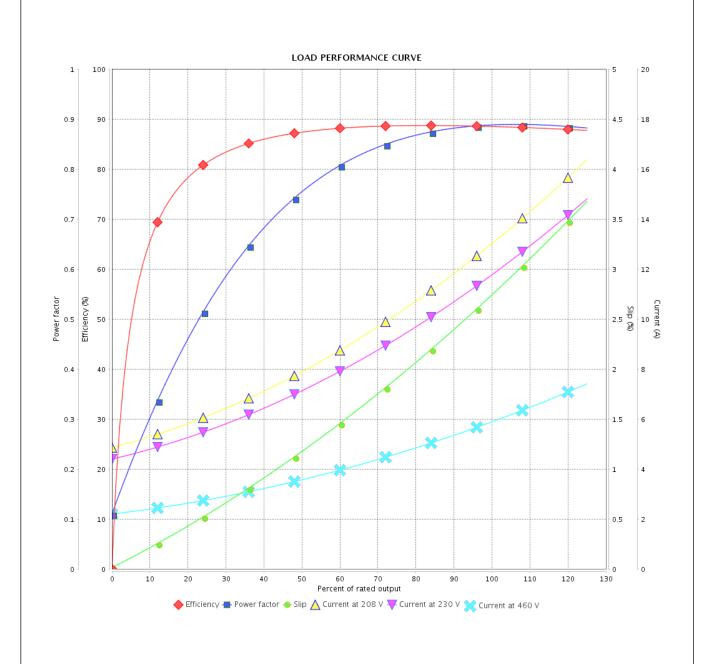
Customer

Product line : JM Pump NEMA Premium

Efficiency Three-Phase

Product code: 13173988

Catalog #: 00536ET3E184JMV-S



Performance	: 2	230/460 V 60 Hz 2P				
Rated current	: .	11.8/5.90 A	Moment o	f inertia (J)	: 0.2079 sq.ft	.lb
LRC	: 7	7.8	Duty cycle	;	: Cont.(S1)	
Rated torque	:	7.50 ft.lb	Insulation	class	: F	
Locked rotor torqu	ie : 2	220 %	Service fa	ctor	: 1.15	
Breakdown torque	: :	300 %	Temperati	ıre rise	: 80 K	
Rated speed	: ;	3500 rpm	Design		: B	
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Three Phase Induction Motor - Squirrel Cage



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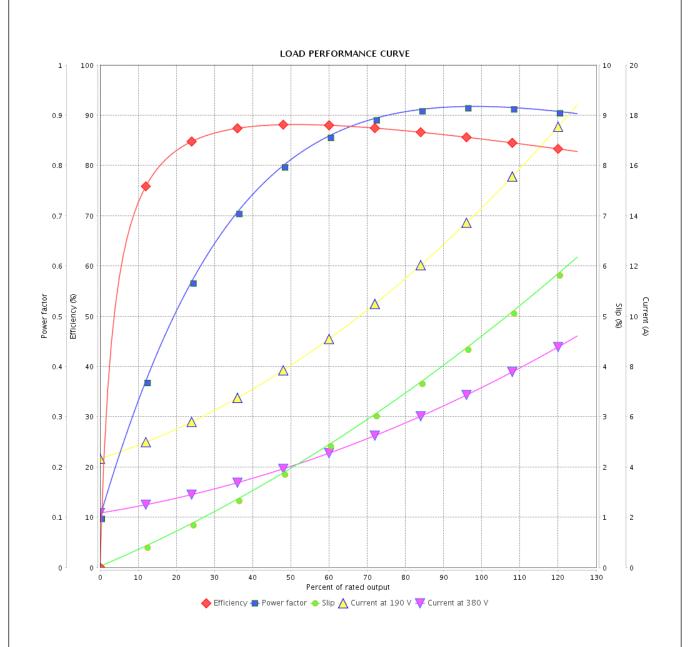
13/04/2022

Product line : JM Pump NEMA Premium

Efficiency Three-Phase

Product code: 13173988

Catalog #: 00536ET3E184JMV-S



Performance : 190/380 V 50 Hz 2P : 14.3/7.17 A Rated current Moment of inertia (J) : 0.2079 sq.ft.lb **LRC** : 6.4 Duty cycle : Cont.(S1) Insulation class Rated torque : 9.18 ft.lb : F Locked rotor torque : 180 % Service factor : 1.00 Breakdown torque : 250 % Temperature rise : 105 K Rated speed : 2860 rpm Design : B Rev. Performed Checked Date **Changes Summary** Performed by

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



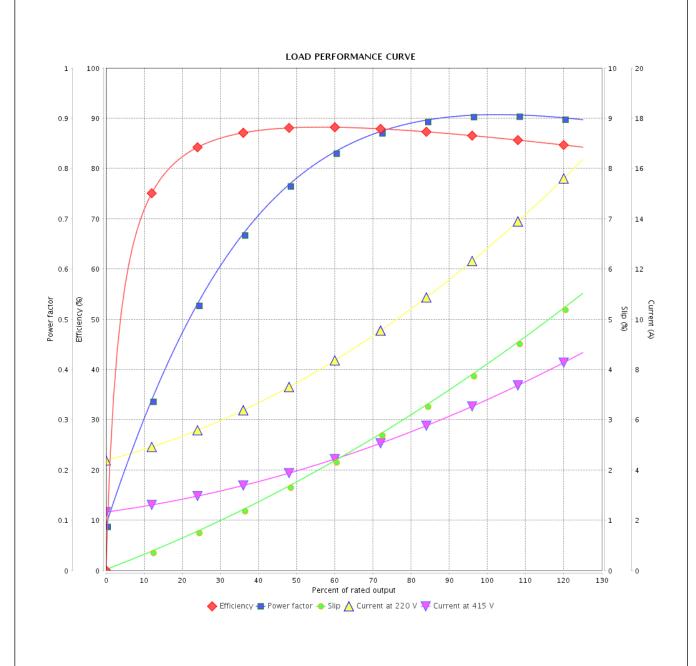
Customer

Product line : JM Pump NEMA Premium

Efficiency Three-Phase

Product code: 13173988

Catalog #: 00536ET3E184JMV-S



Performance	:	220/415 V 50 Hz 2P				
Rated current	:	12.8/6.81 A	Moment o	f inertia (J)	: 0.2079 sq.ft.	.lb
LRC	:	7.1	Duty cycle)	: Cont.(S1)	
Rated torque	:	9.13 ft.lb	Insulation	class	: F	
Locked rotor torque	e :	200 %	Service fa	ctor	: 1.00	
Breakdown torque	:	280 %	Temperati	ıre rise	: 105 K	
Rated speed	:	2875 rpm	Design		: B	
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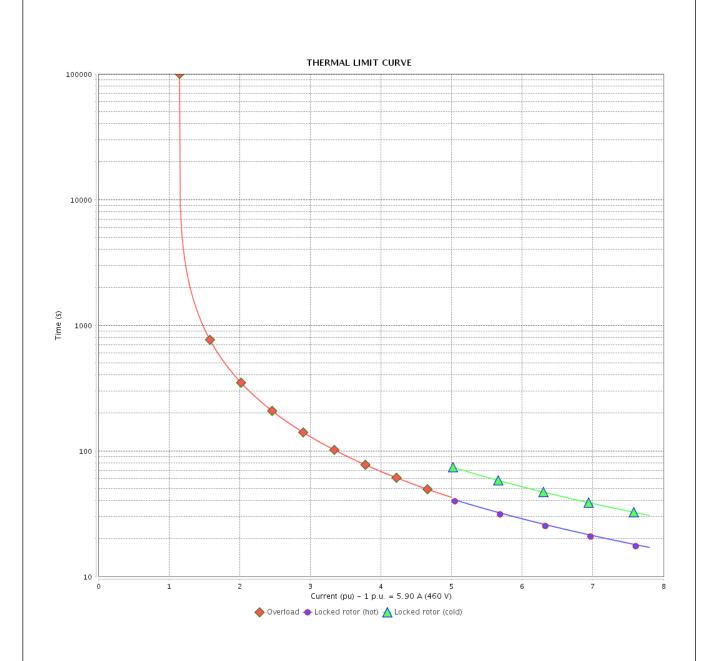


Customer	:					
Product line	:.	JM Pump NEMA Premium	I	Product code :	13173988	
	E	fficiency Three-Phase	(Catalog # :	00536ET3E1	84JMV-S
Performance		30/460 V 60 Hz 2P				
Rated current LRC	: 1′ : 7.	1.8/5.90 A .8	Moment of Duty cycle	f inertia (J)	: 0.2079 sq.ft.l : Cont.(S1)	b
Rated torque	: 7.	.50 ft.lb	Insulation	class	: F	
Locked rotor torque Breakdown torque		20 % 00 %	Service far Temperatu		: 1.15 : 80 K	
Rated speed		500 rpm	Design		: B	
Heating constant						
Cooling constant						
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Three Phase Induction Motor - Squirrel Cage



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Three Phase Induction Motor - Squirrel Cage

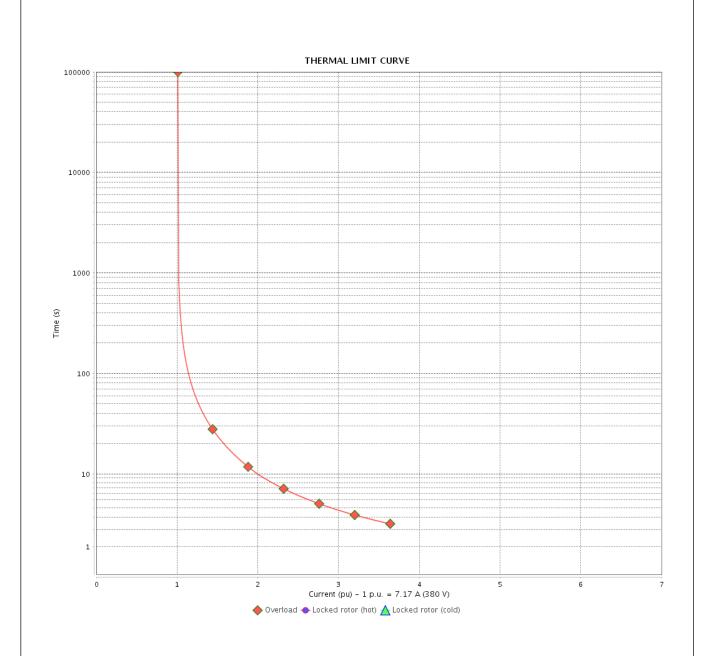


Customer		:				
Product line		: JM Pump NEMA Premium Efficiency Three-Phase		Product code : Catalog # :	13173988 00536ET3E1	84.IMV-S
				Catalog # .	00336E13E1	O4JIVIV-3
Performance	:	190/380 V 50 Hz 2P				
Rated current LRC Rated torque Locked rotor tord Breakdown torqu Rated speed	: que : que :	14.3/7.17 A 6.4 9.18 ft.lb 180 % 250 % 2860 rpm	Moment of Duty cycle Insulation Service fa Temperate Design	class ctor	: 0.2079 sq.ft.l : Cont.(S1) : F : 1.00 : 105 K : B	b
Heating constant Cooling constant						
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Three Phase Induction Motor - Squirrel Cage



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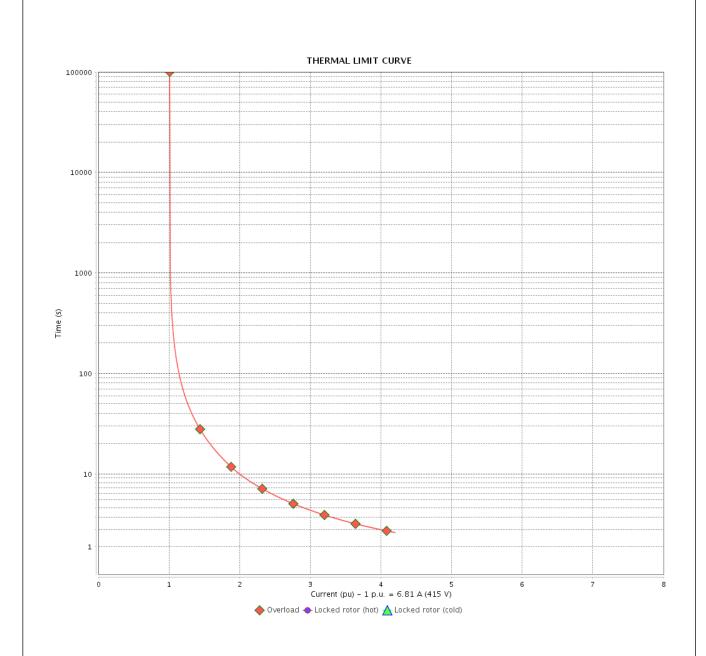


Customer	:					
Product line	: [JM Pump NEMA Premium Efficiency Three-Phase	ı	Product code :	13173988	
	•		(Catalog # :	00536ET3E1	84JMV-S
Performance	: 2	220/415 V 50 Hz 2P				
Rated current		12.8/6.81 A	Moment or		: 0.2079 sq.ft.l	b
LRC Rated torque		7.1 9.13 ft.lb	Duty cycle Insulation		: Cont.(S1) : F	
Locked rotor torq		200 %	Service fa		: 1.00	
Breakdown torqu	e : 2	280 %	Temperatu	ıre rise	: 105 K	
Rated speed		2875 rpm	Design		: B	
Heating constant						
Cooling constant Rev.		Changes Summers		Performed	Checked	Date
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Three Phase Induction Motor - Squirrel Cage



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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



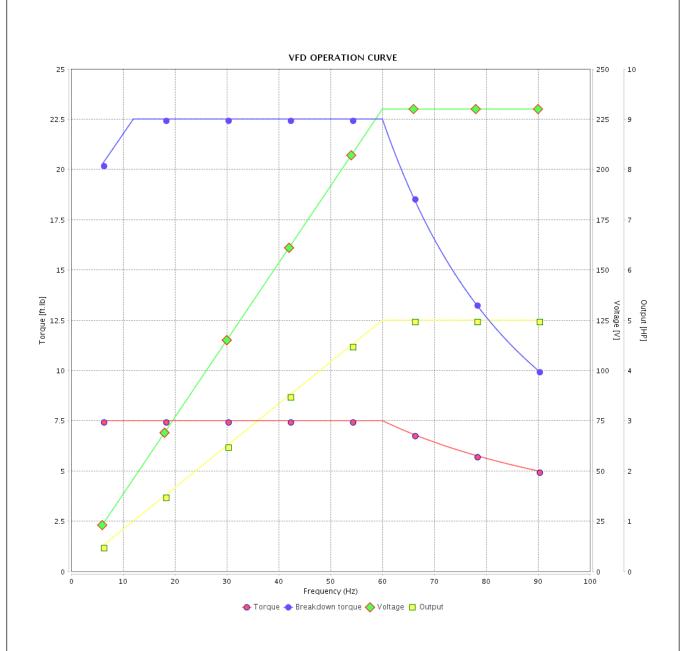
Customer :

Product line : JM Pump NEMA Premium

Efficiency Three-Phase

Product code: 13173988

Catalog #: 00536ET3E184JMV-S



Performance	: 230/460 V 60 Hz 2P					
Rated current	ed current : 11.8/5.90 A Moment of inertia (J)		ertia (J)	: 0.2079 sq.ft.lb		
LRC	: 7.8	Duty cycle		: Cont.(S1)		
Rated torque	: 7.50 ft.lb	Insulation class Service factor		: F : 1.15		
Locked rotor torque	: 220 %					
Breakdown torque	: 300 %	Temperature ri	re rise : 80 K			
Rated speed	: 3500 rpm	Design		: B		
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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



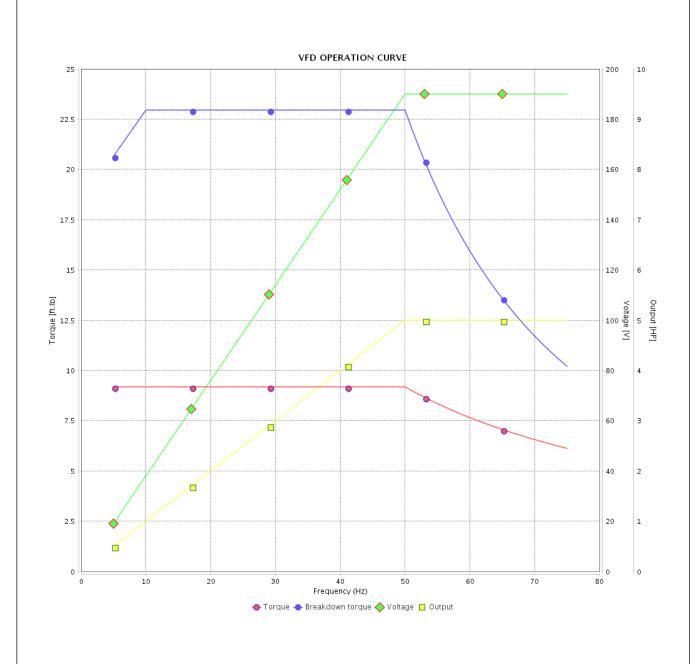
Customer

Product line : JM Pump NEMA Premium

Efficiency Three-Phase

Product code: 13173988

Catalog #: 00536ET3E184JMV-S



Performance	: 190/380 V 50 Hz 2P					
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 14.3/7.17 A : 6.4 : 9.18 ft.lb : 180 % : 250 % : 2860 rpm	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design		: 0.2079 sq.ft.lb : Cont.(S1) : F : 1.00 : 105 K : B		
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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



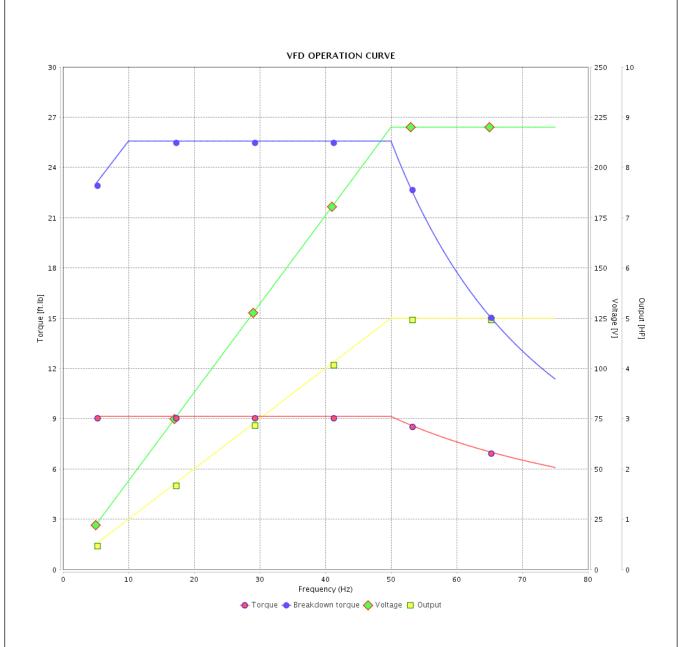
Customer :

Product line : JM Pump NEMA Premium

Efficiency Three-Phase

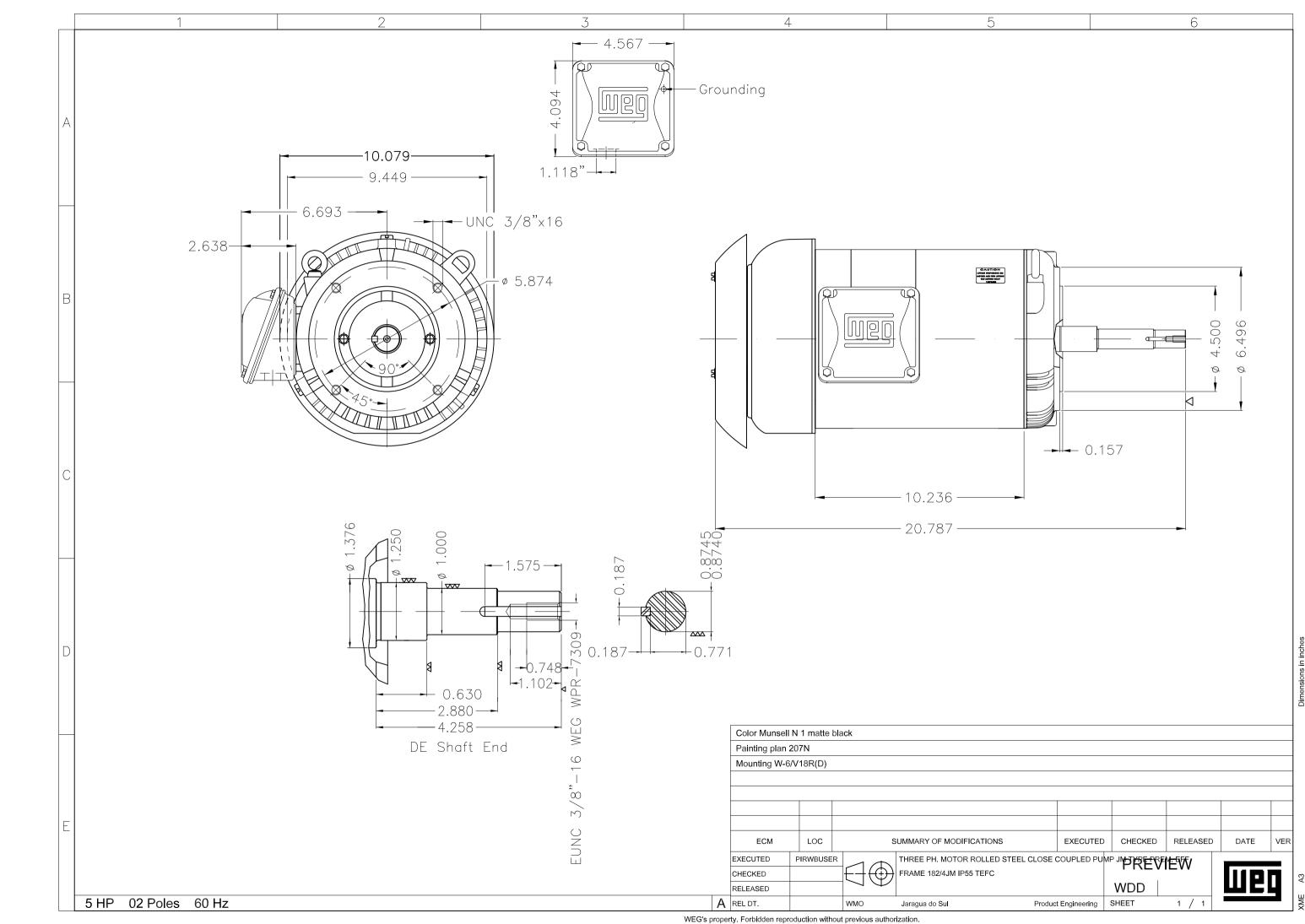
Product code: 13173988

Catalog #: 00536ET3E184JMV-S



Performance : 220/415 V 50 Hz 2P : 12.8/6.81 A Rated current Moment of inertia (J) : 0.2079 sq.ft.lb **LRC** : 7.1 Duty cycle : Cont.(S1) : 9.13 ft.lb Insulation class Rated torque : F Locked rotor torque : 200 % Service factor : 1.00 Breakdown torque : 280 % Temperature rise : 105 K Rated speed : 2875 rpm Design : B

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Class I, Dlv.2, Gr. A.B.C.D - T3 Div 2 Inverter Duty (SF1.00) CT 2:1/VT 1000:1 **Energy Verified** For 60Hz: Class I, Zone 2, 9 ř (VL) US LISTED 3PT9 5.0(3.7)

CC029A

P55 B DES CONT 3500 CODE Z D D RPM

HP(kW)

182/4JM

æ 230/460

H

S/N

28FEV2019

MODEL 00536ET3E184JMV-S

W01.TE0IC0X0N

MAT: 13173988

ENCL 190-220/380-415V SF1.00 40°C 13.1A NEMA NOM, EFF. 88.5% 80K AMB USABLE @ 208V 50Hz 5.0HP

INS CL F AT

SFA 13.6/6.79

11.8/5.90

EFF 85.2% (IE1) r3-org r1-BLU 2860RPM

14.3-12.4/7.17-6.59A

T6

ALTERNATE RATING:

m.a.s.l.

1000

0.89 SF 1.15

IEC 60034-1

T2-WHT T4-YEL T6-GRY T8-RED

SF1.00

15-BLK

L7-PNK

ANY TWO LINE WIRES TO REVERSE THE ROTATION P-BRK RED

NTERCHANGE

For safe area-inverter duty For 60Hz use on VPWM 1000:1 VT, 6205-ZZ ODE 6207-ZZ

WARNING: Motor must be grounded in accordance with local and national MOBIL POLYREX EM electrical codes to prevent serious electrical shocks. Disconnect power AVERTISSEMENT: Le moteur doit être mis à la terre conformément aux codes électriques locaux et nationaux afin d'éviter tout choc source before servicing unit.

électrique grave. Déconnectez l'allmentation avant l'entretien de la machine