DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : JM Pump NEMA Premium Product code : 12687687

Efficiency Three-Phase

Catalog #: 01518OT3E254JM-SG

Frame : 254/6JM Cooling method : IC01 - ODP

Insulation class : F Mounting : 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 : 203 lb

Design : B Moment of inertia (J) : 1.82 sq.ft.lb

Output [HP]		15	15	15	
Poles		4	4	4	
Frequency [Hz]		60	50	50	
Rated voltage [V]		230/460	190/380	220/415	
Rated current [A]		37.2/18.6	43.8/21.9	40.0/21.2	
L. R. Amperes [A]		249/125	237/118	236/125	
LRC [A]		6.7x(Code H)	5.4x(Code F)	5.9x(Code G)	
No load current [A]	19.0/9.50	17.3/8.67	18.3/9.68	
Rated speed [RPN	/ []	1775	1465	1470	
Slip [%]		1.39	2.33	2.00	
Rated torque [ft.lb]		44.4	53.8	53.6	
Locked rotor torque [%]		240	170	200	
Breakdown torque [%]		300	220	250	
Service factor		1.15	1.15	1.15	
Temperature rise		80 K	80 K	80 K	
Locked rotor time		30s (cold) 17s (hot)	0s (cold) 0s (hot)	0s (cold) 0s (hot)	
Noise level ²		64.0 dB(A)	62.0 dB(A)	62.0 dB(A)	
	25%	91.0	92.3	91.4	
Efficiency (%)	50%	91.7	91.3	90.8	
Efficiency (%)	75%	92.4	91.0	91.1	
	100%	93.0	89.7	90.2	
	25%	0.36	0.45	0.40	
Power Factor	50%	0.62	0.71	0.66	
FOWEI FACIOI	75%	0.73	0.81	0.78	
	100%	0.80	0.85	0.83	

<u>Drive end</u> <u>Non drive end</u> Foundation loads

Bearing type : 6309 Z C3 6208 Z C3 Max. traction : 541 lb Sealing : Without Without Max. compression : 744 lb

Bearing Seal Bearing Seal

Lubrication interval:20000 h20000 hLubricant amount:13 g8 gLubricant type:Mobil Polyrex EM

Notes

USABLE @208V 41.1A SF 1.00 SFA 41.1A

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



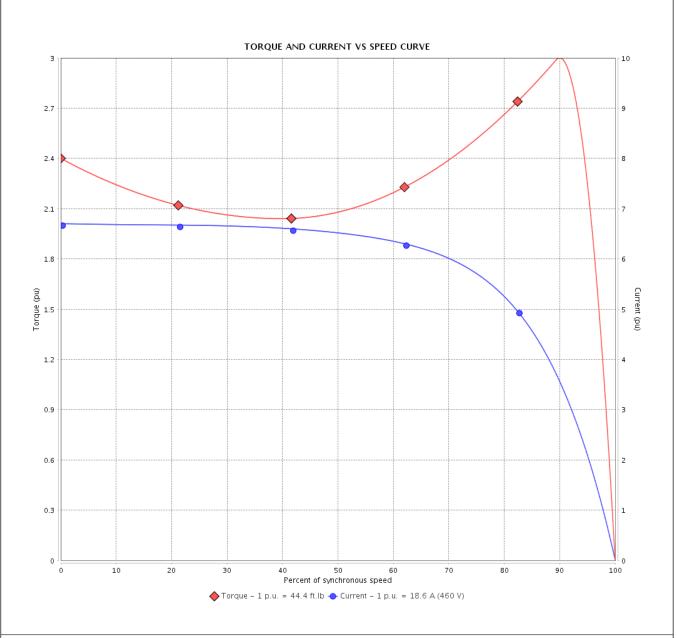
Customer :

Product line : JM Pump NEMA Premium

Efficiency Three-Phase

Product code: 12687687

Catalog #: 01518OT3E254JM-SG



Performance : 230/460 V 60 Hz 4P Rated current : 37.2/18.6 A Moment of inertia (J) : 1.82 sq.ft.lb **LRC** : 6.7 Duty cycle : Cont.(S1) : 44.4 ft.lb Insulation class Rated torque : F : 240 % Service factor Locked rotor torque : 1.15 Breakdown torque : 300 % Temperature rise : 80 K Rated speed : 1775 rpm Design : B

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

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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



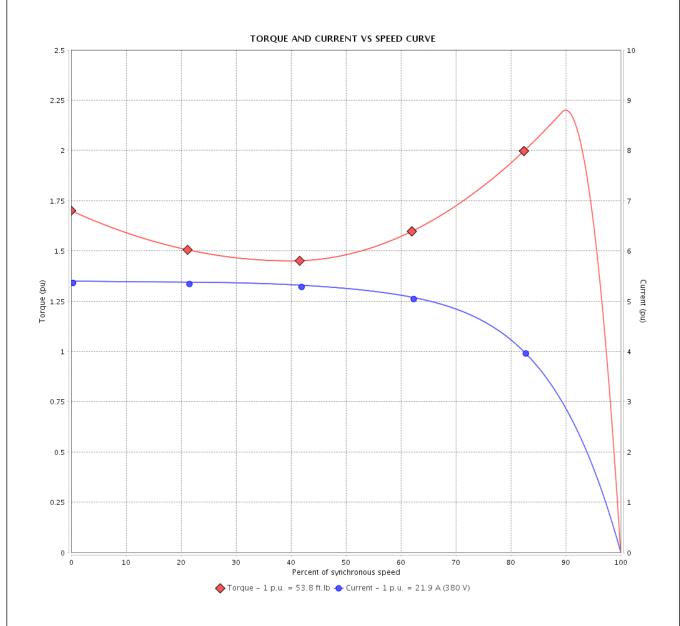
Customer

Product line : JM Pump NEMA Premium

Efficiency Three-Phase

Product code: 12687687

Catalog #: 01518OT3E254JM-SG



Performance : 190/380 V 50 Hz 4P Rated current : 43.8/21.9 A Moment of inertia (J) : 1.82 sq.ft.lb **LRC** : 5.4 Duty cycle : Cont.(S1) Rated torque : 53.8 ft.lb Insulation class : F : 170 % Service factor Locked rotor torque : 1.15 Breakdown torque : 220 % Temperature rise : 80 K : B Rated speed : 1465 rpm Design

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

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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



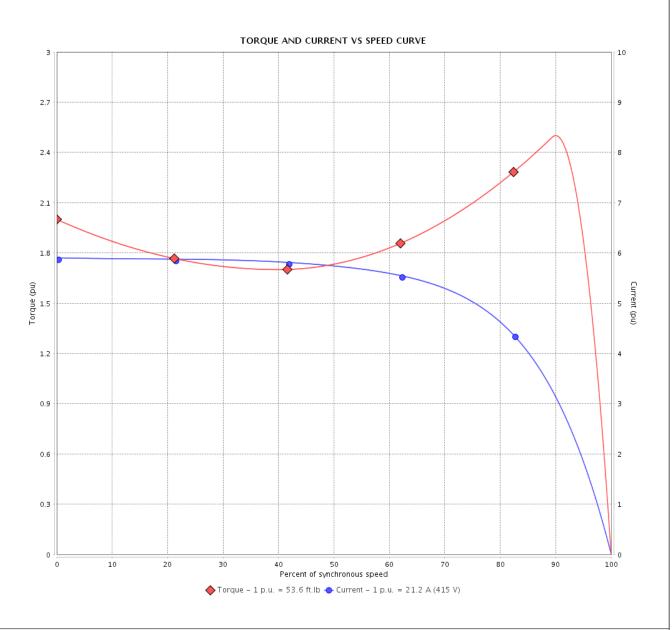
Customer :

Product line : JM Pump NEMA Premium

Efficiency Three-Phase

Product code: 12687687

Catalog #: 01518OT3E254JM-SG



Performance : 220/415 V 50 Hz 4P Rated current : 40.0/21.2 A Moment of inertia (J) : 1.82 sq.ft.lb **LRC** : 5.9 Duty cycle : Cont.(S1) Insulation class Rated torque : 53.6 ft.lb : F Service factor Locked rotor torque : 200 % : 1.15 Breakdown torque : 250 % Temperature rise : 80 K Rated speed : 1470 rpm Design : B

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

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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



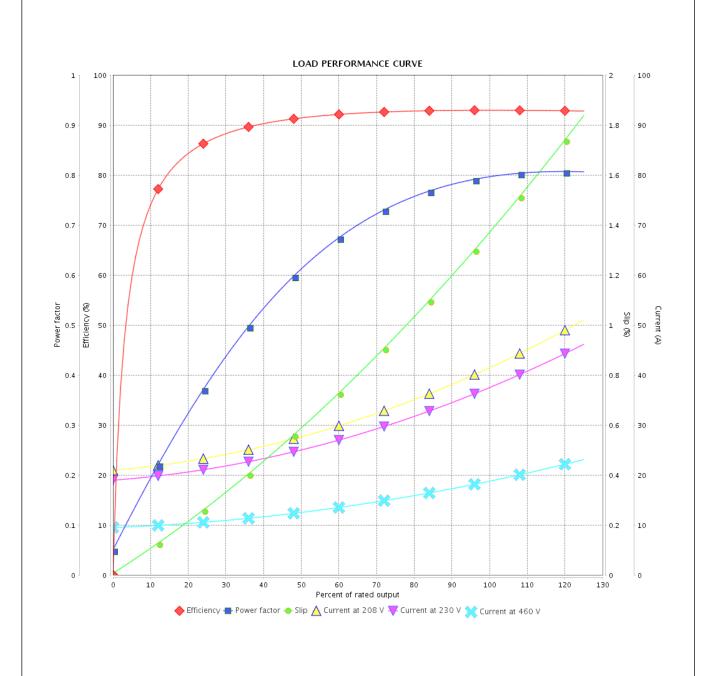
Customer

Product line : JM Pump NEMA Premium

Efficiency Three-Phase

Product code: 12687687

Catalog #: 01518OT3E254JM-SG



Performance : 230/460 V 60		30/460 V 60 Hz 4P				
Rated current	: 3	7.2/18.6 A	Moment o	Moment of inertia (J)		
LRC	: 6	.7	Duty cycle)	: Cont.(S1)	
Rated torque	: 4	4.4 ft.lb	Insulation	class	: F	
Locked rotor tord	que : 24	40 %	Service fa	ctor	: 1.15	
Breakdown torqu	ie : 30	00 % Temperatu		emperature rise :		
Rated speed	: 1	775 rpm	Design		: B	
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LOAD PERFORMANCE CURVE

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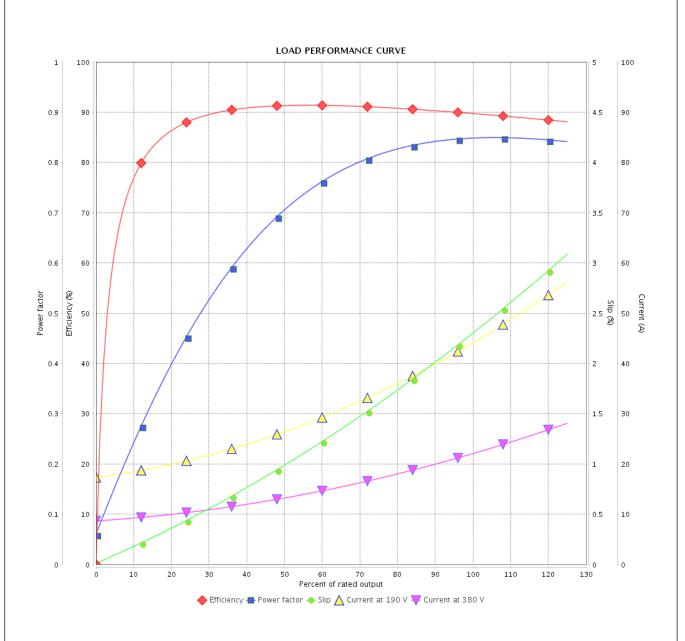
Customer :

Product line : JM Pump NEMA Premium

Efficiency Three-Phase

Product code: 12687687

Catalog #: 01518OT3E254JM-SG



Performance	: 190/380 V 50 Hz 4P				
Rated current	: 43.8/21.9 A	Moment of ine	rtia (J)	: 1.82 sq.ft.lb	
LRC	: 5.4	Duty cycle		: Cont.(S1)	
Rated torque	: 53.8 ft.lb	Insulation clas	s	: F	
Locked rotor torque	: 170 %	Service factor		: 1.15	
Breakdown torque	: 220 %	Temperature rise		: 80 K	
Rated speed	: 1465 rpm	Design		: B	
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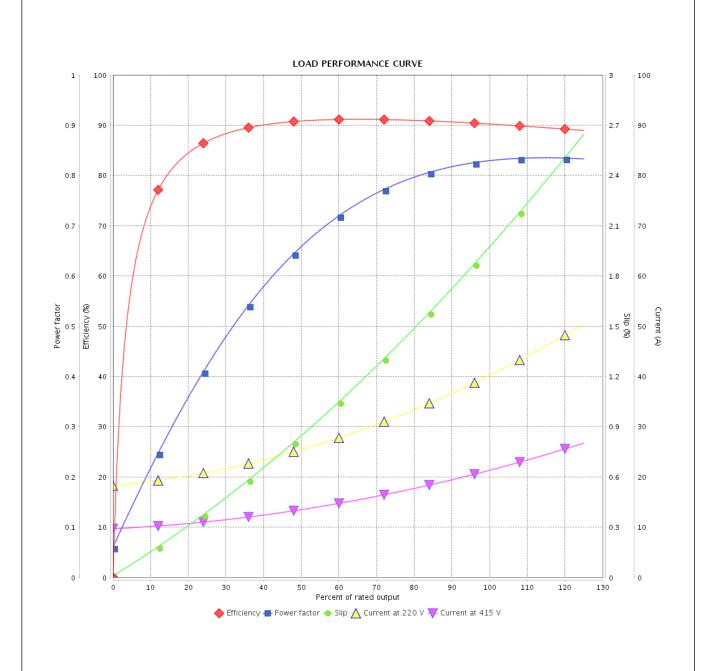
Customer

Product line : JM Pump NEMA Premium

Efficiency Three-Phase

Product code: 12687687

Catalog #: 01518OT3E254JM-SG



Performance	: 2	: 220/415 V 50 Hz 4P				
Rated current	: 4	0.0/21.2 A	Moment o	f inertia (J)	: 1.82 sq.ft.lb	
LRC	: 5	5.9	Duty cycle)	: Cont.(S1)	
Rated torque	: 5	3.6 ft.lb	Insulation	class	: F	
Locked rotor tord	que : 2	.00 %	Service fa	ctor	: 1.15	
Breakdown torqu	ıe : 2	250 %	Temperature rise		: 80 K	
Rated speed	: 1	470 rpm	Design		: B	
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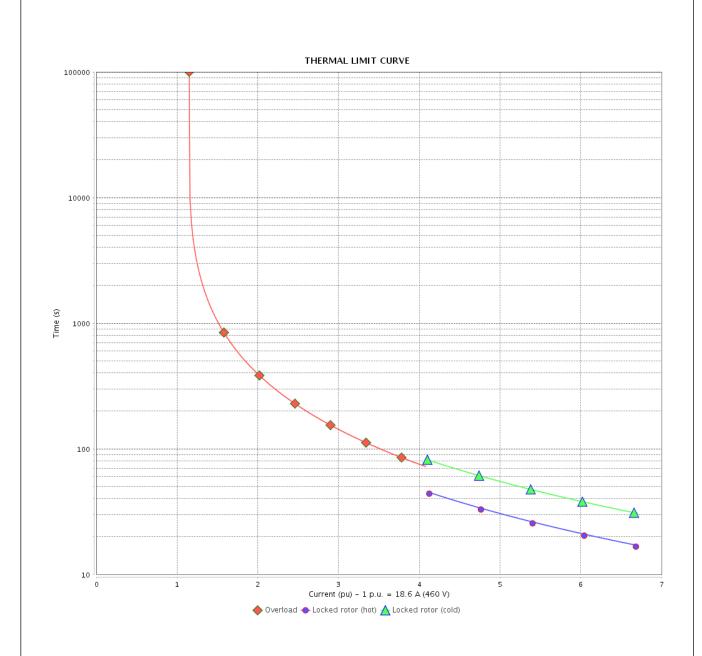


Customer		:				
Product line		: JM Pump NEMA Premium Efficiency Three-Phase		Product code :	12687687	
		Elliciency Three-Friase		Catalog # :	01518OT3E2	54JM-SG
Performance		: 230/460 V 60 Hz 4P				
Rated current	:	: 37.2/18.6 A	Moment o	of inertia (J)	: 1.82 sq.ft.lb	
LRC		: 6.7	Duty cycle	9	: Cont.(S1)	
Rated torque Locked rotor tord		: 44.4 ft.lb : 240 %	Insulation Service fa		: F : 1.15	
Breakdown torqu	ue :	: 300 %	Temperat		: 80 K	
Rated speed	•	: 1775 rpm	Design		: B	
Heating constan						
Cooling constant	t	Observe O		D	Oh I I	D :
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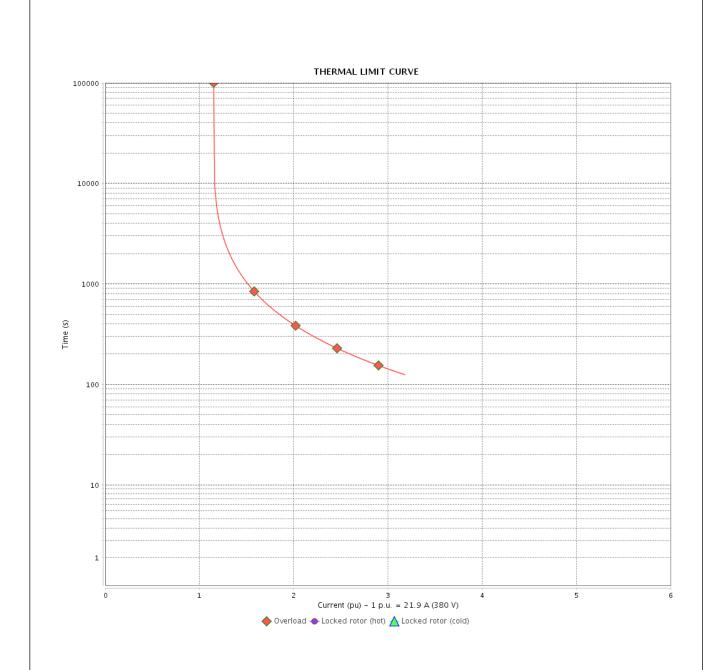


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Product line	: JM Pump NEMA Premium Efficiency Three-Phase	Product code :	12687687	IM SC
		Catalog # :	01518OT3E254	JIVI-SG
- ·	400/000 1/ 50 11 40			
Performance	: 190/380 V 50 Hz 4P	Moment of inartic (1)	. 1 00 4 11-	
Rated current LRC	: 43.8/21.9 A : 5.4	Moment of inertia (J) Duty cycle	: 1.82 sq.ft.lb : Cont.(S1)	
Rated torque	: 53.8 ft.lb	Insulation class	: F	
Locked rotor torque	: 170 % : 220 %	Service factor	: 1.15 : 80 K	
Breakdown torque Rated speed	: 220 % : 1465 rpm	Temperature rise Design	: B	
Heating constant	·	-		
Cooling constant				
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Customer :



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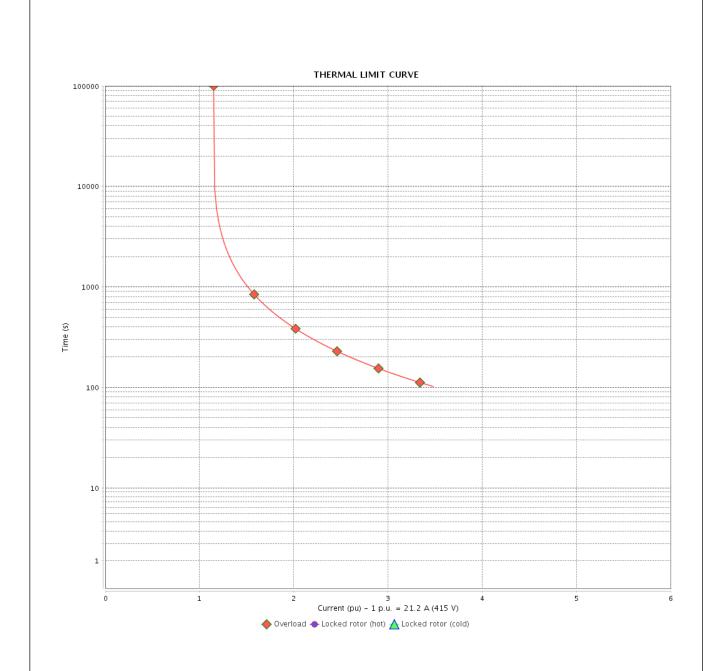


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Product line		JM Pump NEMA Premium	1	Product code :	12687687	
		Efficiency Three-Phase		Catalog # :	01518OT3E2	54JM-SG
					0101001022	710111 00
Performance		20/415 V 50 Hz 4P	Mamanta	finantia (I)	. 1 00 on fills	
Rated current LRC	: 40 : 5.	0.0/21.2 A 9	Duty cycle	f inertia (J)	: 1.82 sq.ft.lb : Cont.(S1)	
Rated torque		3.6 ft.lb	Insulation	class	: F	
		200 % Service fa 250 % Temperat			: 1.15 : 80 K	
Rated speed		470 rpm	Design		: B	
Heating constant	<u> </u>					
Cooling constant						
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Three Phase Induction Motor - Squirrel Cage



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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



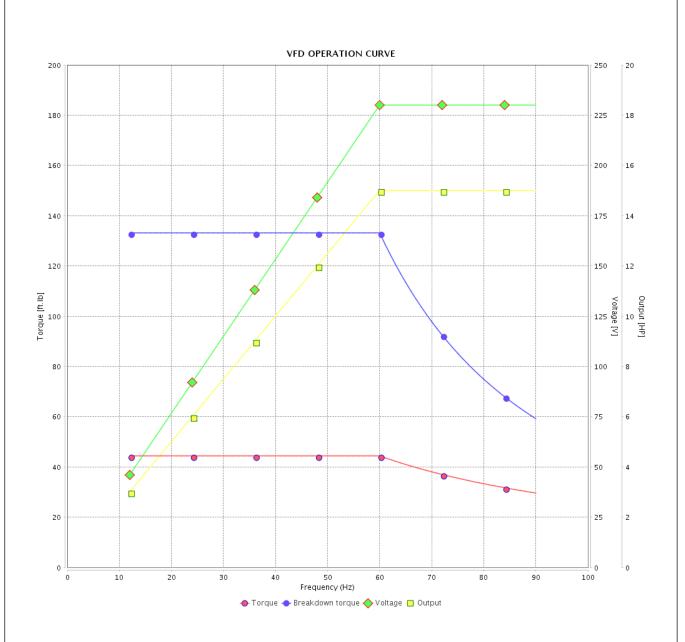
Customer :

Product line : JM Pump NEMA Premium

Efficiency Three-Phase

Product code: 12687687

Catalog #: 01518OT3E254JM-SG



Performance		: 230/460 V 60 Hz 4P						
Rated current LRC Rated torque Locked rotor tord Breakdown torqu Rated speed	: 6 : 2 que : 2 ue : 3	37.2/18.6 A 5.7 14.4 ft.lb 240 % 300 % 1775 rpm	Duty cycle Insulation Service fa	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design		: 1.82 sq.ft.lb : Cont.(S1) : F : 1.15 : 80 K : B		
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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



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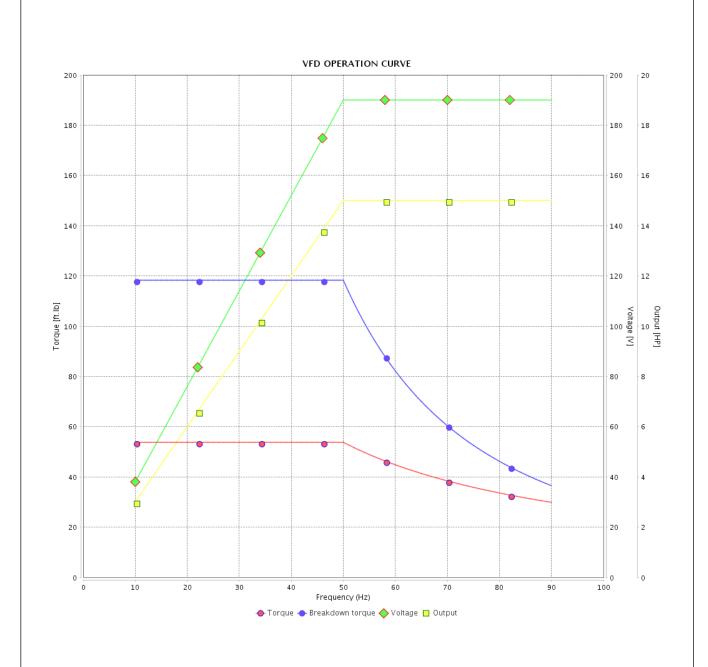
13/04/2022

Product line : JM Pump NEMA Premium

Efficiency Three-Phase

Product code: 12687687

Catalog #: 01518OT3E254JM-SG



Performance : 190/380 V 50 Hz 4P Rated current : 43.8/21.9 A Moment of inertia (J) : 1.82 sq.ft.lb **LRC** : 5.4 Duty cycle : Cont.(S1) : 53.8 ft.lb Insulation class : F Rated torque Locked rotor torque : 170 % Service factor : 1.15 Breakdown torque : 220 % Temperature rise : 80 K Rated speed : 1465 rpm Design : B Rev. Performed Checked Date **Changes Summary** Performed by

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Checked by

Date

13/04/2022

Product line : JM Pump NEMA Premium

Efficiency Three-Phase

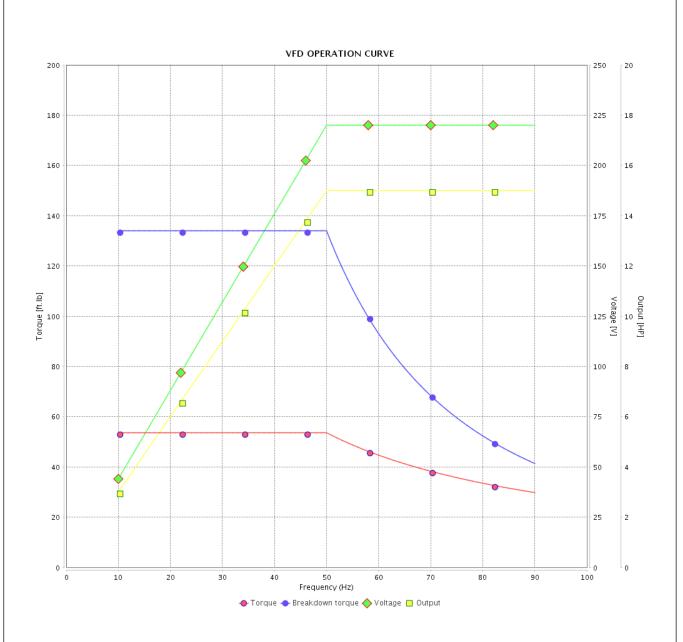
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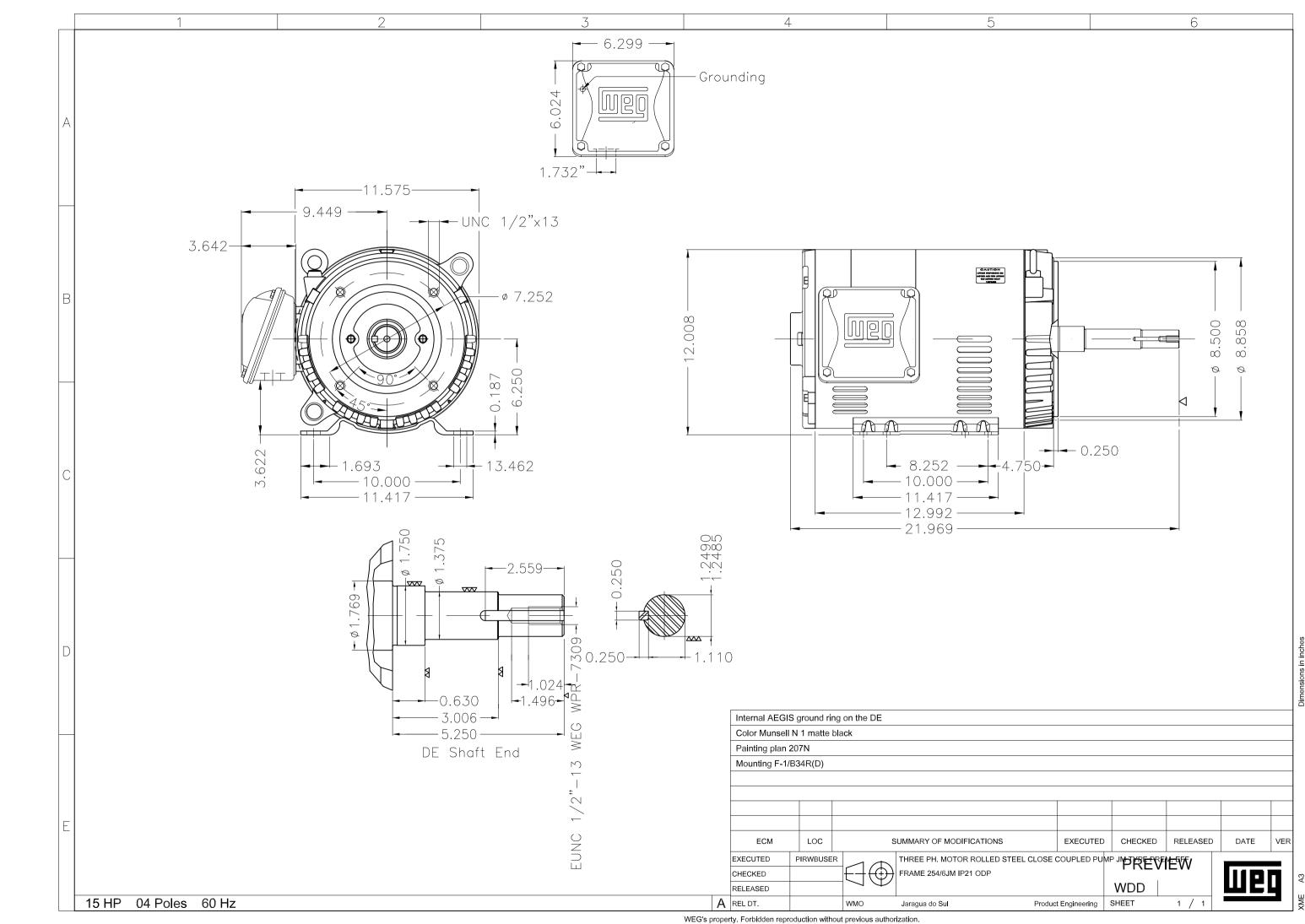
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Performance		: 220/415 V 50 I	Hz 4P				
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed		: 40.0/21.2 A : 5.9 : 53.6 ft.lb : 200 % : 250 % : 1470 rpm		Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design		: 1.82 sq.ft.lb : Cont.(S1) : F : 1.15 : 80 K : B	
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12687687

MADE IN MÉXICO

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Energy Verifi

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MODEL 015180T3E254JM-SG 9 S/N ¥ 5MAR2022

DES 1000 m.a.s.l F AT 80K 254/6JM CONT 20°C 900

2000

37.2/18.6

.15

230/460

15HP CODE SABLE @ 208V 41.1A LTERNATE RATING:

SF1.00 NCL 2

ZPM 3FA 냃 쌆

93.0%

NOM EFF 1485RPM 50 Hz 6208-Z-C3

13.8-39.4/21.9-20.9A

IEC 60034-1 2000bh

E 1

SF1.15

190-220/380-415V

ago

8309-Z-C3

牌

Inverter duty motor For 80Hz use on VPWM 1000:1 VT, 5:1 CT MOBIL POLYREX EM **EFF 89.7%**

T11 OT12

T4-YEL

T2-WH

71-BLU

нон

MOT

13-ORG F5-BLK L7-PNK





NTERCHANGE ANY TWO LINE WIRES TO REVERSE THE ROTATION WARNING: Motor must be grounded in accordance with local

777

F11-GRN T12-VLT T8-RED T9-BRK RED T10-CURRY

> shocks. Disconnect power source before servicing unit. ind national electrical codes to prevent serious electrical



choc électrique grave. Déconnectez l'alimentation ayant l'entretien de la machine.