### **DATA SHEET**

#### Three Phase Induction Motor - Squirrel Cage



Customer Product line : Rolled Steel NEMA Premium Product code: 14593691 Efficiency Three-Phase Catalog #: 00318ET3EBMR182TC-S Frame : 182/4TC Locked rotor time : 32s (cold) 18s (hot) Output : 3 HP (2.2 kW) Temperature rise : 80 K Poles Duty cycle : Cont.(S1) : -20°C to +40°C Frequency : 60 Hz Ambient temperature Rated voltage : 230/460 V : 1000 m.a.s.l. Altitude Rated current : 7.62/3.81 A Protection degree : IP55 : 67.1/33.5 A L. R. Amperes Cooling method : IC411 - TEFC LRC : 8.8x(Code K) Mounting : F-1 No load current : 4.00/2.00 A Rotation<sup>1</sup> : Both (CW and CCW) Rated speed : 1765 rpm Noise level<sup>2</sup> : 56.0 dB(A) Starting method Slip : 1.94 % : Direct On Line Rated torque : 8.93 ft.lb Approx. weight<sup>3</sup> : 103 lb Locked rotor torque : 220 % Breakdown torque : 300 % Insulation class : F Service factor : 1.15 Moment of inertia (J) : 0.4017 sq.ft.lb Design : B 50% 75% 100% Output Foundation loads 87.5 88.5 : 168 lb Efficiency (%) 89.5 Max. traction : 271 lb Power Factor 0.74 0.81 0.61 Max. compression Drive end Non drive end Bearing type 6206 ZZ 6205 ZZ Sealing V'Ring V'Ring Lubrication interval Lubricant amount

Mobil Polyrex EM

Notes

Lubricant type

USABLE @208V 8.43A SF 1.00 SFA 8.43A

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	10/04/2020			1/7	

## DATA SHEET

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Three Pha	Three Phase Induction Motor - Squirrel Cage				<u> ШЕЧ</u>
Customer	:				
Voltage: 208-230 Brake Torque: 14	0/460//190/380 V 4.8 ft.lb	Brake information	1		
Rev.		Changes Summary	Performed	Checked	Date
Performed by Checked by		-		Page	Revision

2/7

10/04/2020

Date

### TORQUE AND CURRENT VS SPEED CURVE

### Three Phase Induction Motor - Squirrel Cage



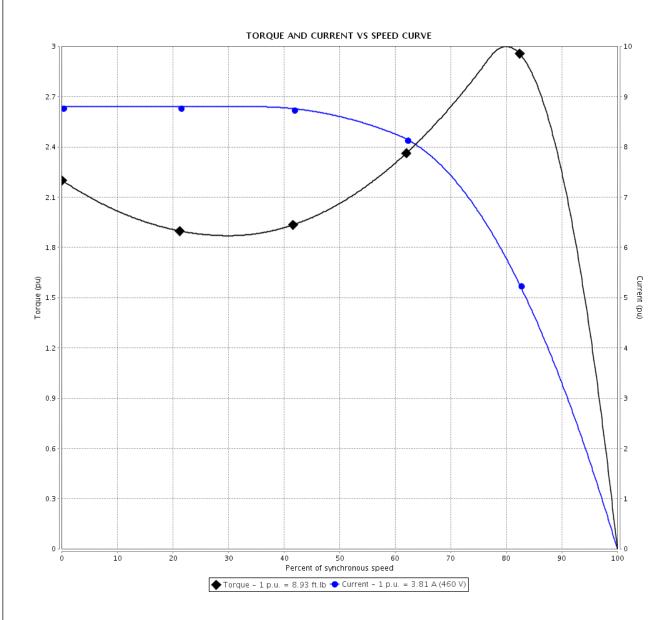
Customer :

Product line : Rolled Steel NEMA Premium

Efficiency Three-Phase

Product code: 14593691

Catalog #: 00318ET3EBMR182TC-S



Performance	: 230/460 V 60 Hz 4P			
Rated current	: 7.62/3.81 A	Moment of inertia (J)	: 0.4017 sq.ft.lb	
LRC	: 8.8	Duty cycle	: Cont.(S1)	
Rated torque	: 8.93 ft.lb	Insulation class	:F	
Locked rotor torque	: 220 %	Service factor	: 1.15	
Breakdown torque	: 300 %	Temperature rise	: 80 K	
Rated speed	: 1765 rpm	Design	: B	

Locked rotor time : 32s (cold) 18s (hot)

Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	10/04/2020			3/7	

### LOAD PERFORMANCE CURVE

### Three Phase Induction Motor - Squirrel Cage



Customer :

Checked by

Date

10/04/2020

Product line : Rolled Steel NEMA Premium

Efficiency Three-Phase

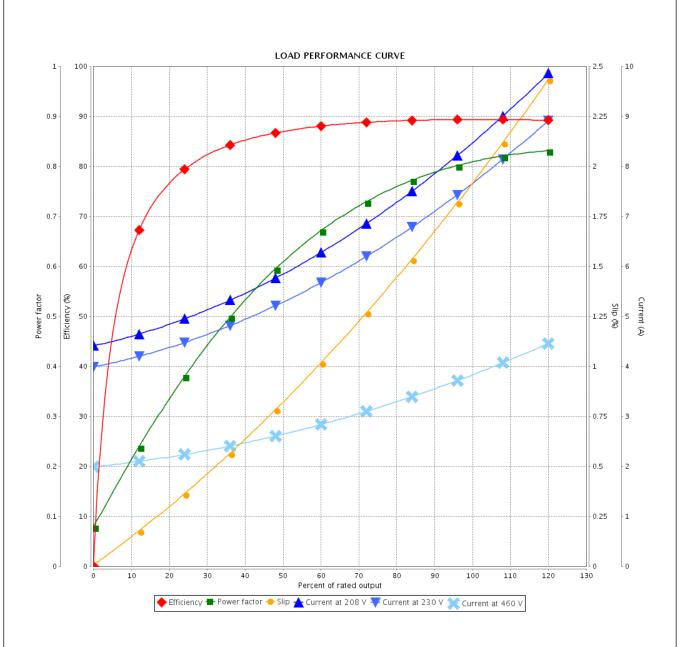
Product code: 14593691

Catalog #: 00318ET3EBMR182TC-S

Page

4/7

Revision



Performance		: 230/460 V 60 H	lz 4P				
Rated current LRC Rated torque Locked rotor tord Breakdown torqu Rated speed	ue e	: 7.62/3.81 A : 8.8 : 8.93 ft.lb : 220 % : 300 % : 1765 rpm		Moment of Duty cycle Insulation Service fac Temperatu Design	class ctor	: 0.4017 sq.ft. : Cont.(S1) : F : 1.15 : 80 K : B	lb
Rev.		Changes Su	mmary		Performed	Checked	Date
Performed by							

# THERMAL LIMIT CURVE

### Three Phase Induction Motor - Squirrel Cage



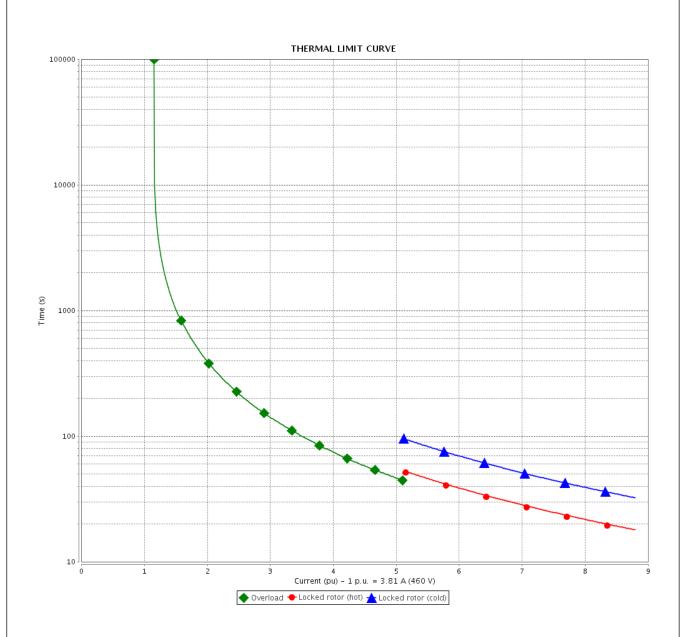
Customer		:				
Product line		: Rolled Steel NEMA Premium Efficiency Three-Phase		Product code :	14593691	
		•		Catalog # :	00318ET3E	BMR182TC
		220/400 M 20 Hz 45				
		230/460 V 60 Hz 4P 7.62/3.81 A	Moment o	of inertia (J)	: 0.4017 sq ft	lb
Performance Rated current	:	7.62/3.81 A 8.8	Duty cycle		: 0.4017 sq.ft. : Cont.(S1)	lb
Rated current RC Rated torque	: :	7.62/3.81 A 8.8 8.93 ft.lb	Duty cycle Insulation	e class	: Cont.(S1) : F	lb
ated current RC ated torque ocked rotor tor	: : que :	7.62/3.81 A 8.8 8.93 ft.lb 220 %	Duty cycle Insulation Service fa	e class ictor	: Cont.(S1) : F : 1.15	lb
ated current RC ated torque ocked rotor tor reakdown torq	: : : que : ue :	7.62/3.81 A 8.8 8.93 ft.lb	Duty cycle Insulation	e class ictor	: Cont.(S1) : F	lb
Rated current RC Rated torque ocked rotor tor Freakdown torq Rated speed	que :	7.62/3.81 A 8.8 8.93 ft.lb 220 % 300 %	Duty cycle Insulation Service fa Temperatu	e class ictor	: Cont.(S1) : F : 1.15 : 80 K	lb
lated current RC lated torque ocked rotor tor reakdown torquated speed leating constantooling co	que :	7.62/3.81 A 8.8 8.93 ft.lb 220 % 300 % 1765 rpm	Duty cycle Insulation Service fa Temperatu	e class actor ure rise	: Cont.(S1) : F : 1.15 : 80 K : B	
lated current RC lated torque ocked rotor tor reakdown torq lated speed	que :	7.62/3.81 A 8.8 8.93 ft.lb 220 % 300 %	Duty cycle Insulation Service fa Temperatu	e class ictor	: Cont.(S1) : F : 1.15 : 80 K	lb Date
lated current RC Lated torque ocked rotor tor- reakdown torquated speed leating constant cooling constant Rev.	que :	7.62/3.81 A 8.8 8.93 ft.lb 220 % 300 % 1765 rpm	Duty cycle Insulation Service fa Temperatu	e class actor ure rise	: Cont.(S1) : F : 1.15 : 80 K : B	
ated current RC ated torque ocked rotor tor reakdown torq ated speed eating constan ooling constan	que :	7.62/3.81 A 8.8 8.93 ft.lb 220 % 300 % 1765 rpm	Duty cycle Insulation Service fa Temperatu	e class actor ure rise	: Cont.(S1) : F : 1.15 : 80 K : B	

# THERMAL LIMIT CURVE

### Three Phase Induction Motor - Squirrel Cage



Customer :



Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	10/04/2020	1		6/7	

## VFD OPERATION CURVE

### Three Phase Induction Motor - Squirrel Cage



Customer

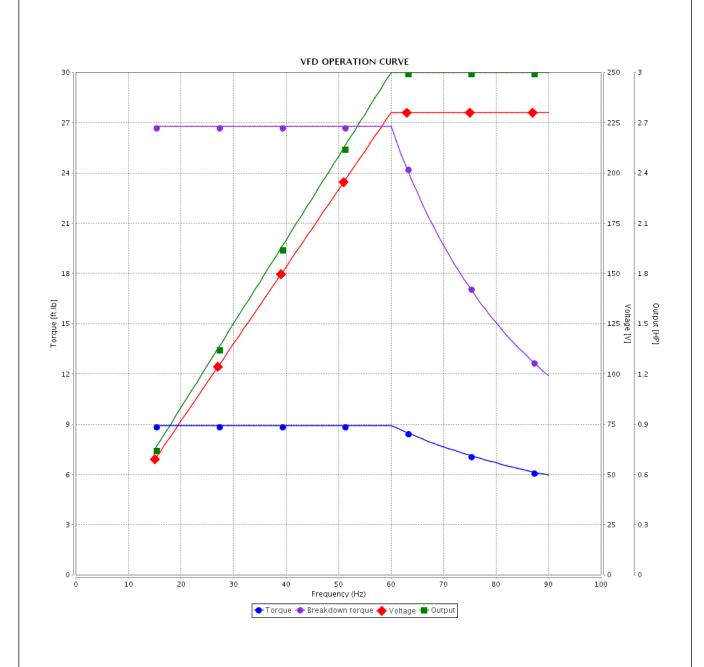
Product line : Rolled Steel NEMA Premium

Efficiency Three-Phase

Product code: 14593691

Catalog #: 00318ET3EBMR182TC-S

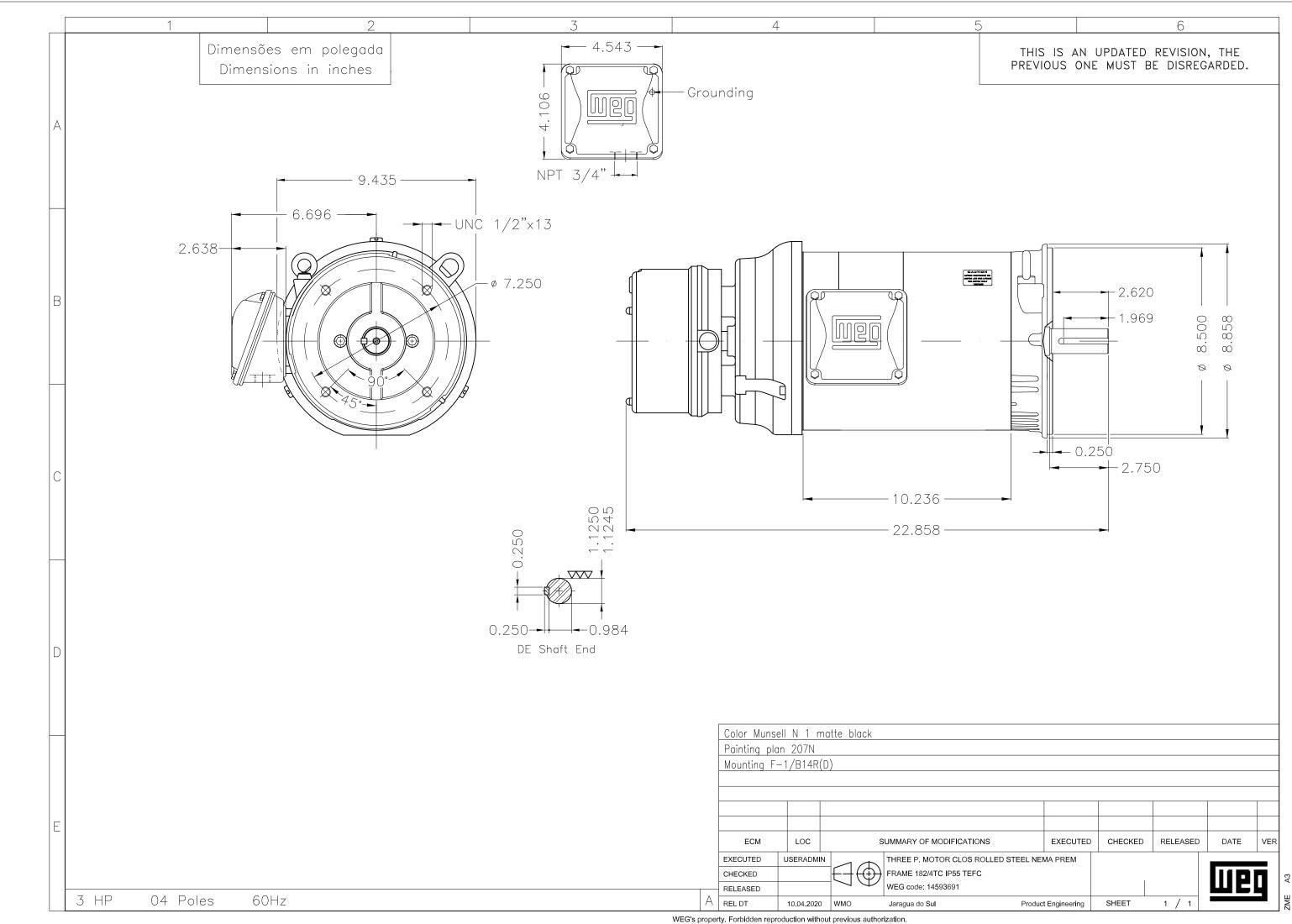
7/7



Performance	: 230/460 V 60 Hz 4P			
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 7.62/3.81 A : 8.8 : 8.93 ft.lb : 220 % : 300 % : 1765 rpm	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design	: 0.4017 sq.ft. : Cont.(S1) : F : 1.15 : 80 K : B	lb
Rev.	Changes Summary	Performe		Date
Performed by				
Checked by			Page	Revision

10/04/2020

Date





(**()** 3PT9

Class I, Dlv.2, Gr. A.B.C.D - T3 Div 2 Inverter Duty (SF1.00) CT 2:1/VT 1000:1 **Energy Verified** P55 For 60Hz: Class I, Zone 2, 9 B ř CONT 1765

MODEL 00318ET3EBMR182TC-S

W01.TE0IC0X0N

MAT: 14593691

S

19FEV2020

182/4TC

FR 230/460

PH 3

CC029A

ENCL 190-220/380-415V DES SF1.00 40°C CODE 8.43A PUTY **N**dS |HP(kW) 3.0(2.2)

INS CL F AT

SFA 8.76/4.38

7.62/3.81

EFF 86.7% (IE3) NEMA NOM, EFF. 89.5% 80K AMB

3.0HP

ALTERNATE RATING:

m.a.s.l.

1000

8.0 SF 1.15

9.08-8.15/4.54-4.32A

T5 T6

r3-ORG r1-BLU USABLE @ 208V 50Hz 1455RPM

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

IEC 60034-1

SF1.15

15-BI K

L7-PNK

P-BRK RFD

safe area-inverter duty motor For 60Hz use on VPWM 1000:1 VT, 4:1 CT INTERCHANGE ANY TWO LINE WIRES TO REVERSE THE ROTATION 6205-ZZ ODE 5206-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.

