### **DATA SHEET**

#### Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Rolled Steel NEMA Premium Efficiency

Three-Phase

Product code: 12677332

Catalog #: 00318ET3ER182TC-S

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

Insulation class : F Mounting : W-6

Duty cycle : Cont.(S1) Rotation<sup>1</sup> : Both (CW and CCW)

Ambient temperature : -20°C to +40°C Starting method : Direct On Line

Altitude : 1000 m.a.s.l. Approx. weight<sup>3</sup> : 86.3 lb

Protection degree : IP55 | Moment of inertia (J) : 0.4017 sq.ft.lb

Design		: B		·
Output [HP]		3	3	3
Poles		4	4	4
Frequency [Hz]		60	50	50
Rated voltage [V]		230/460	190-220/380	415
Rated current [A]		7.62/3.81	9.08-7.84/4.54	4.32
L. R. Amperes [A]		67.1/33.5	60.8-52.5/30.4	34.6
LRC [A]		8.8x(Code K)	6.7x(Code H)	8.0x(Code K)
No load current [A]		4.00/2.00	3.95-3.41/1.97	2.23
Rated speed [RPM	1]	1765	1455	1465
Slip [%]		1.94	3.00	2.33
Rated torque [ft.lb]		8.93	10.8	10.8
Locked rotor torque	e [%]	220	170	220
Breakdown torque [%]		300	260	320
Service factor		1.15	1.15	1.15
Temperature rise		80 K	80 K	80 K
Locked rotor time		32s (cold) 18s (hot)	45s (cold) 25s (hot)	37s (cold) 21s (hot)
Noise level <sup>2</sup>		56.0 dB(A)	53.0 dB(A)	53.0 dB(A)
	25%	86.4	88.2	87.2
Efficiency (%)	50%	87.5	87.5	86.9
Elliciency (70)	75%	88.5	87.7	88.0
	100%	89.5	86.7	87.4
	25%	0.36	0.42	0.36
Power Factor	50%	0.61	0.68	0.62
I OWEI FACIOI	75%	0.74	0.79	0.74
	100%	0.81	0.85	0.81

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

Bearing type : 6206 ZZ 6205 ZZ Max. traction : 177 lb Sealing : V'Ring Without Max. compression : 263 lb

Bearing Seal

Lubrication interval : - - Lubricant amount : - Lubricant type : Mobil Polyrex EM

Notes

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.

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### TORQUE AND CURRENT VS SPEED CURVE

#### Three Phase Induction Motor - Squirrel Cage



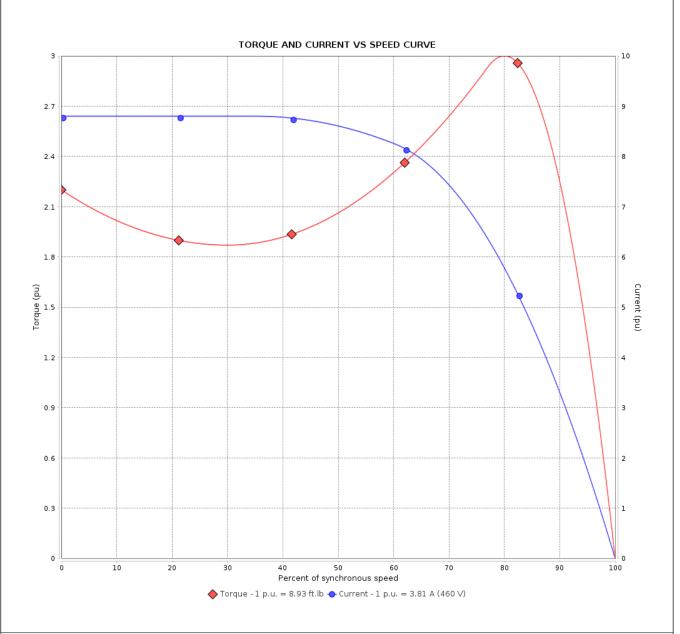
Customer :

Product line : Rolled Steel NEMA Premium Efficiency

Three-Phase

Product code: 12677332

Catalog #: 00318ET3ER182TC-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) : F : 8.93 ft.lb Insulation class Rated torque Service factor Locked rotor torque : 220 % : 1.15 Breakdown torque : 300 % Temperature rise : 80 K Rated speed : 1765 rpm Design : B

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

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## TORQUE AND CURRENT VS SPEED CURVE

### Three Phase Induction Motor - Squirrel Cage



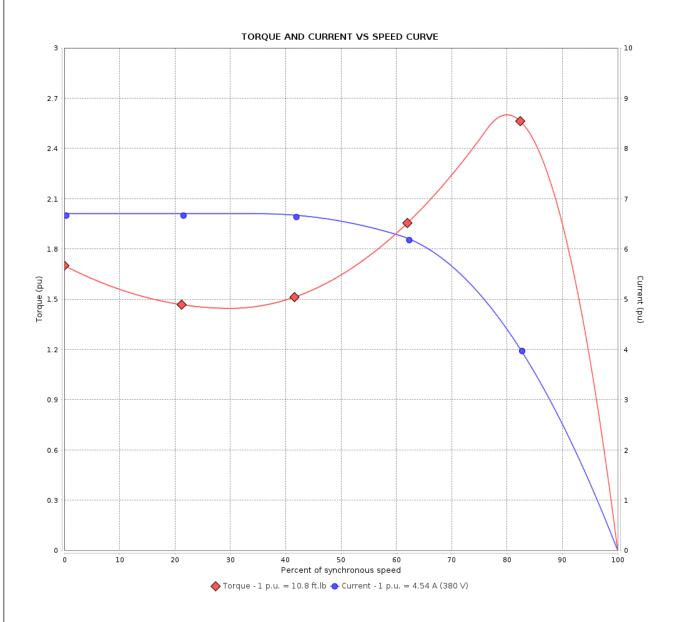
Customer :

Product line : Rolled Steel NEMA Premium Efficiency

Three-Phase

Product code: 12677332

Catalog #: 00318ET3ER182TC-S



Performance	: 190-220/380 V 50 Hz 4P		
Rated current	: 9.08-7.84/4.54 A	Moment of inertia (J)	: 0.4017 sq.ft.lb
LRC	: 6.7	Duty cycle	: Cont.(S1)
Rated torque	: 10.8 ft.lb	Insulation class	: F
Locked rotor torque	: 170 %	Service factor	: 1.15
Breakdown torque	: 260 %	Temperature rise	: 80 K
Rated speed	: 1455 rpm	Design	: B
Locked rotor time	: 45s (cold) 25s (hot)	l	

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### TORQUE AND CURRENT VS SPEED CURVE

#### Three Phase Induction Motor - Squirrel Cage



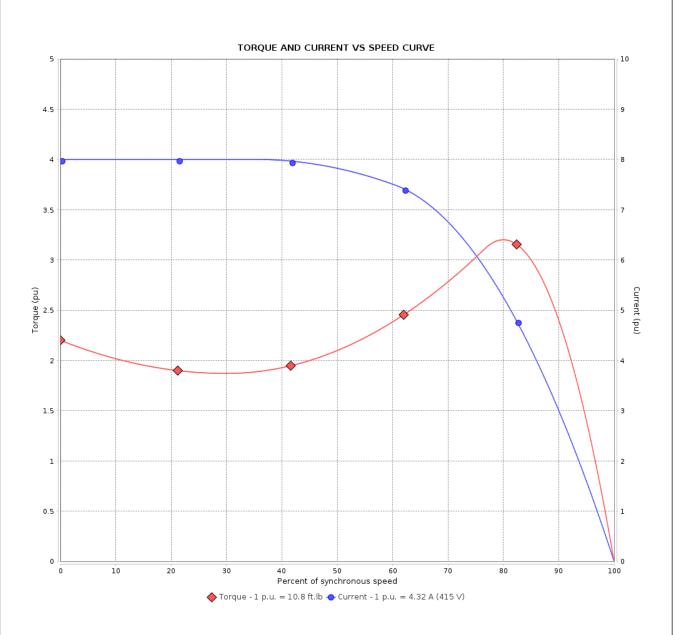
Customer

Product line : Rolled Steel NEMA Premium Efficiency

Three-Phase

Product code: 12677332

Catalog #: 00318ET3ER182TC-S



Performance : 415 V 50 Hz 4P Rated current : 4.32 A Moment of inertia (J) : 0.4017 sq.ft.lb **LRC** : 8.0 Duty cycle : Cont.(S1) : F : 10.8 ft.lb Insulation class Rated torque Service factor Locked rotor torque : 220 % : 1.15 Breakdown torque : 320 % Temperature rise : 80 K Rated speed : 1465 rpm Design : B

Locked rotor time : 37s (cold) 21s (hot)

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# LOAD PERFORMANCE CURVE

### Three Phase Induction Motor - Squirrel Cage



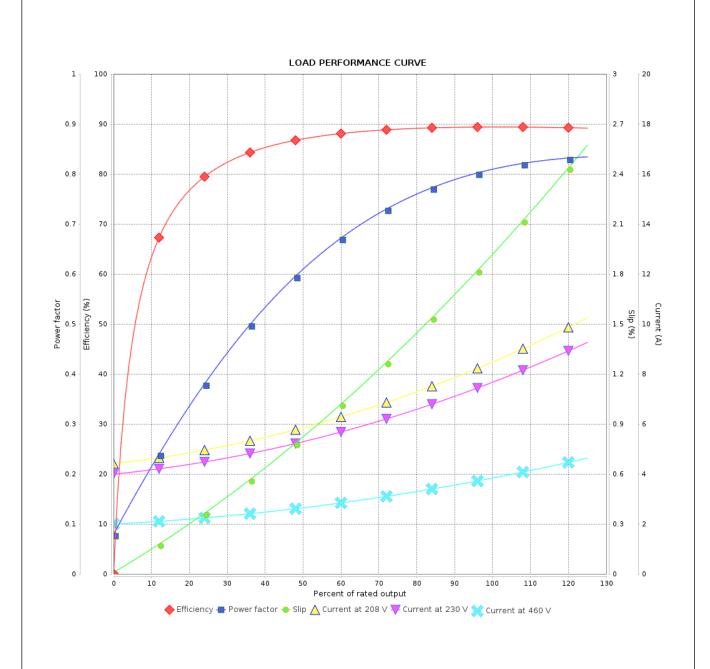
Customer :

Product line : Rolled Steel NEMA Premium Efficiency

Three-Phase

Product code: 12677332

Catalog #: 00318ET3ER182TC-S



Performance	: 2	30/460 V 60 Hz 4P	1			
Rated current	: 7	7.62/3.81 A	2/3.81 A Moment of inertia (J)		: 0.4017 sq.ft.	.lb
LRC	: 8	8.8	Duty cycle	Э	: Cont.(S1)	
Rated torque	: 8	.93 ft.lb	Insulation	class	: F	
Locked rotor torqu	ıe : 2	20 %	Service fa	actor	: 1.15	
Breakdown torque	e : 3	00 %	Temperature rise		: 80 K	
Rated speed	: 1	765 rpm	Design		: B	
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# LOAD PERFORMANCE CURVE

### Three Phase Induction Motor - Squirrel Cage



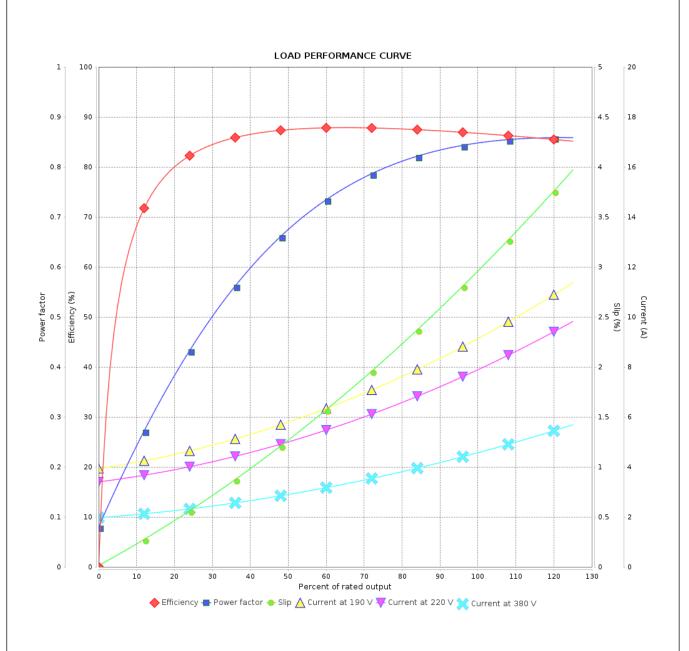
Customer

Product line : Rolled Steel NEMA Premium Efficiency

Three-Phase

Product code: 12677332

Catalog #: 00318ET3ER182TC-S



Performance	: 190-220/380 V 50 Hz 4P				
Rated current	: 9.08-7.84/4.54 A	Moment of inertia (J)		: 0.4017 sq.ft.lb	
LRC	: 6.7	Duty cycle	Э	: Cont.(S1)	
Rated torque	: 10.8 ft.lb	Insulation class		: F ` ´	
Locked rotor torque	: 170 %	Service fa	ictor	: 1.15	
Breakdown torque	: 260 %	Temperature rise		: 80 K	
Rated speed	: 1455 rpm	Design		: B	
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# LOAD PERFORMANCE CURVE

### Three Phase Induction Motor - Squirrel Cage

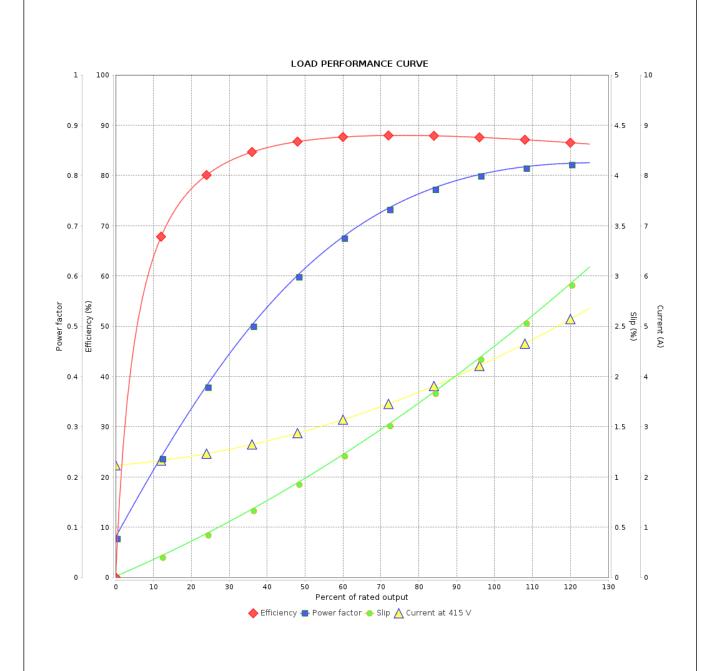


Customer

Product line : Rolled Steel NEMA Premium Efficiency

Product code: 12677332

00318ET3ER182TC-S Catalog #:



Performance	: 4	15 V 50 Hz 4P				
Rated current	: 4.	.32 A	2 A Moment of inertia (J)		: 0.4017 sq.ft	.lb
LRC	: 8.	.0	Duty cycle	e	: Cont.(S1)	
Rated torque	: 10	0.8 ft.lb	Insulation	class	: F	
Locked rotor torqu	ue : 22	20 %	Service fa	ictor	: 1.15	
Breakdown torque	e : 32	20 %	Temperature rise		: 80 K	
Rated speed	: 14	465 rpm	Design		: B	
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#### Three Phase Induction Motor - Squirrel Cage

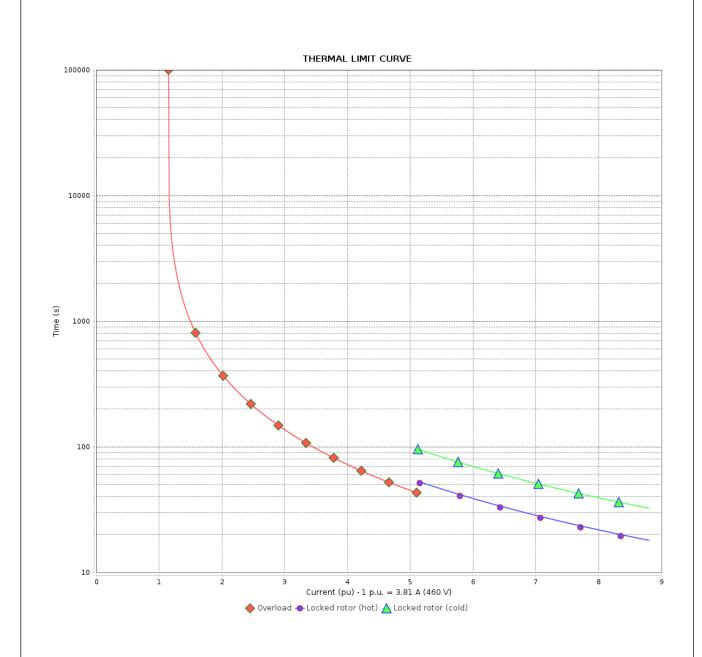


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Customer	:					
Product line	: Rolled S Three-Pha	teel NEMA Premium Efficie ase		Product code :	12677332	7400TC C
				Catalog # :	00318ET3E	R1821U-S
Performance	. 2	30/460 V 60 Hz 4P				
Rated current		.62/3.81 A	Moment o	f inertia (J)	: 0.4017 sq.ft.	lb
LRC	: 8	.8	Duty cycle	)	: Cont.(S1)	
Rated torque Locked rotor tord		.93 ft.lb 20 %	Insulation Service fa		: F : 1.15	
Breakdown torqu	.ie : 3	00 %	Temperati		: 80 K	
Rated speed		765 rpm	Design		: B	
Heating constan						
Cooling constan Rev.	t	Changes Summary		Performed	Checked	Date
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## Three Phase Induction Motor - Squirrel Cage



Customer



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### Three Phase Induction Motor - Squirrel Cage

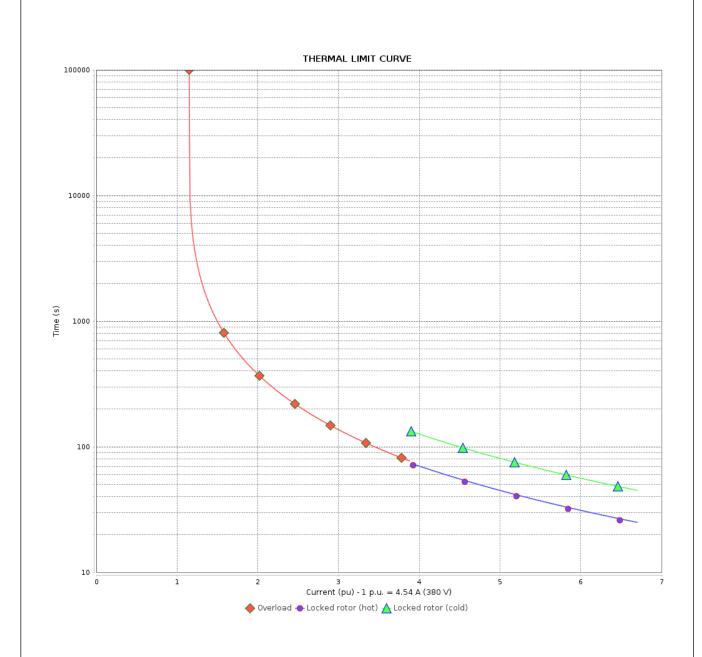


Customer	:				
Product line	: Rolled Steel NEMA Premium Efficier	ncy I	Product code :	12677332	
	Three-Phase	(	Catalog # :	00318ET3EF	R182TC-S
Performance	: 190-220/380 V 50 Hz 4P : 9.08-7.84/4.54 A	Moment	finartia ( I)	. 0 4047 00 41	h
Rated current LRC	: 6.7	Duty cycle	f inertia (J)	: 0.4017 sq.ft.l : Cont.(S1)	U
Rated torque Locked rotor torque	: 10.8 ft.lb : 170 %	Insulation Service fa	class	: F : 1.15	
Breakdown torque	: 260 %	Temperatu		: 80 K	
Rated speed	: 1455 rpm	Design		: B	
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## Three Phase Induction Motor - Squirrel Cage



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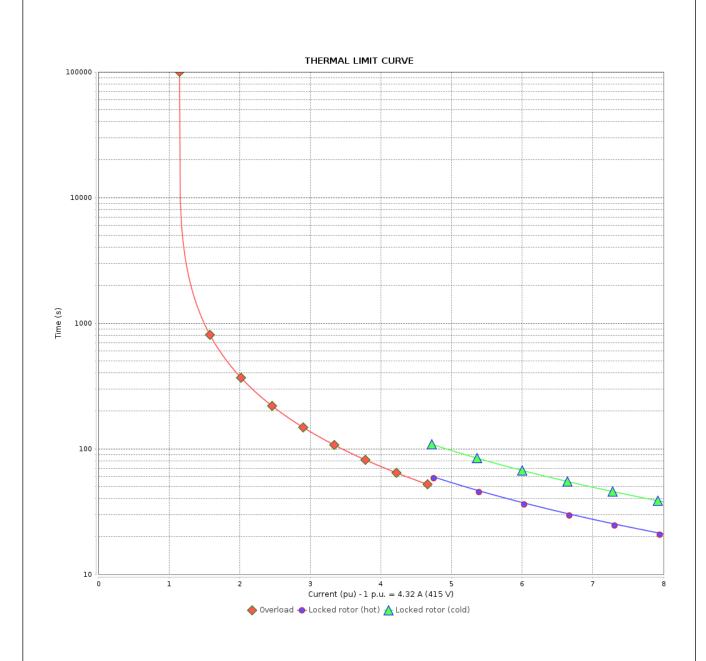


Customer	:			
Product line	: Rolled Steel NEMA Premium Efficien Three-Phase		12677332 00318ET3ER	192TC S
		Catalog # :	00318E13ER	18216-8
Performance	: 415 V 50 Hz 4P			
Rated current		Moment of inertia (J)	: 0.4017 sq.ft.lk	)
LRC	: 8.0	Duty cycle	: Cont.(S1)	
Rated torque Locked rotor torque	: 10.8 ft.lb : 220 %	Insulation class Service factor	: F : 1.15	
Breakdown torque	: 320 %	Temperature rise	: 80 K	
Rated speed	: 1465 rpm	Design	: B	
Heating constant				
Cooling constant				
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## Three Phase Induction Motor - Squirrel Cage



Customer :



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# VFD OPERATION CURVE

### Three Phase Induction Motor - Squirrel Cage



Customer :

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Date

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Product line : Rolled Steel NEMA Premium Efficiency

Three-Phase

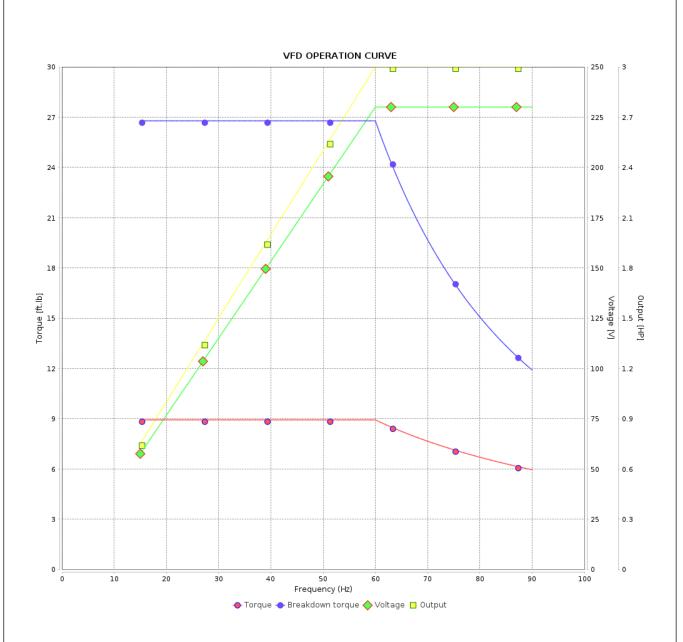
Product code: 12677332

Catalog #: 00318ET3ER182TC-S

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Performance	: 230/460 V 60 Hz 4P	: 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.lb : Cont.(S1) : F : 1.15 : 80 K : B			
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# VFD OPERATION CURVE

### Three Phase Induction Motor - Squirrel Cage



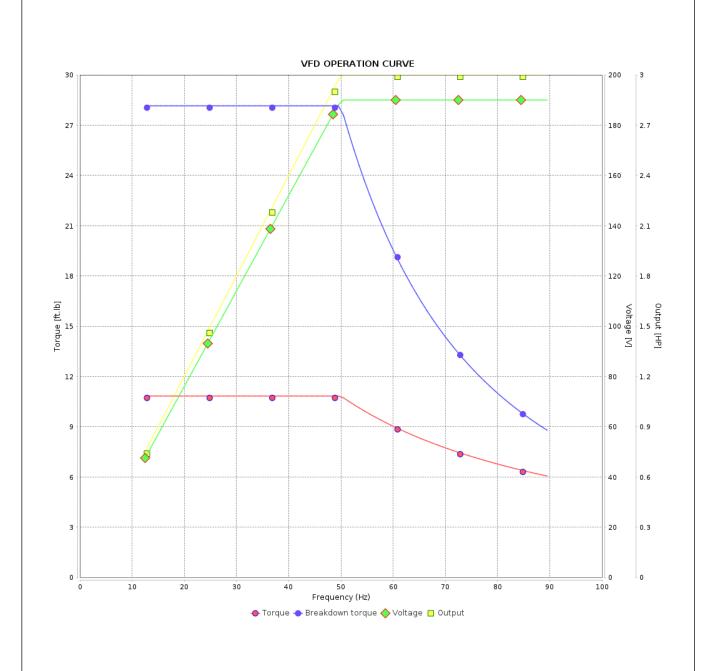
Customer :

Product line : Rolled Steel NEMA Premium Efficiency

Three-Phase

Product code: 12677332

Catalog #: 00318ET3ER182TC-S



Performance		: 190-220/380 V 50 Hz 4P					
Rated current		08-7.84/4.54 A	Moment of	Moment of inertia (J) : 0.4017 sq.ft.lb		.lb	
LRC		7	Duty cycle	Duty cycle		: Cont.(S1)	
Rated torque	: 10	0.8 ft.lb	Insulation class		:F		
Locked rotor torque		70 %	Service fa	Service factor		: 1.15	
Breakdown torqu	ie : 20	60 %	Temperat	Temperature rise		: 80 K	
Rated speed	: 14	455 rpm Design		: B			
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# VFD OPERATION CURVE

#### Three Phase Induction Motor - Squirrel Cage



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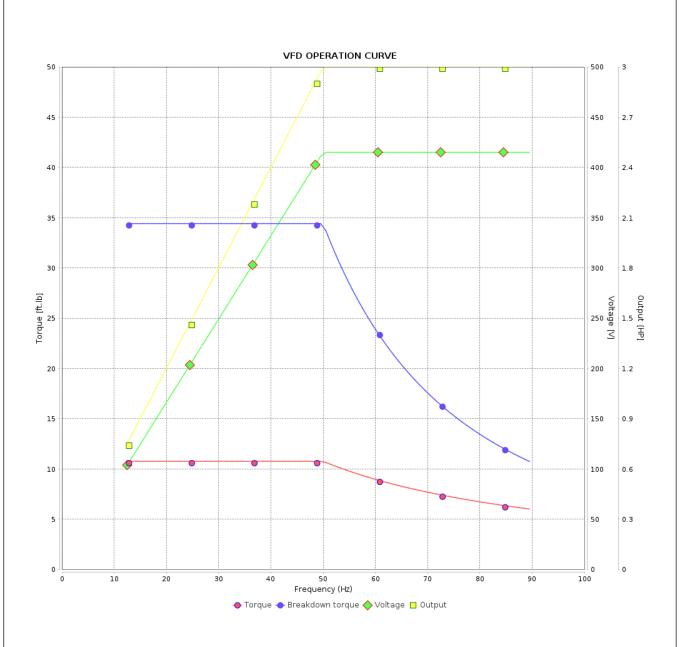
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Product line : Rolled Steel NEMA Premium Efficiency

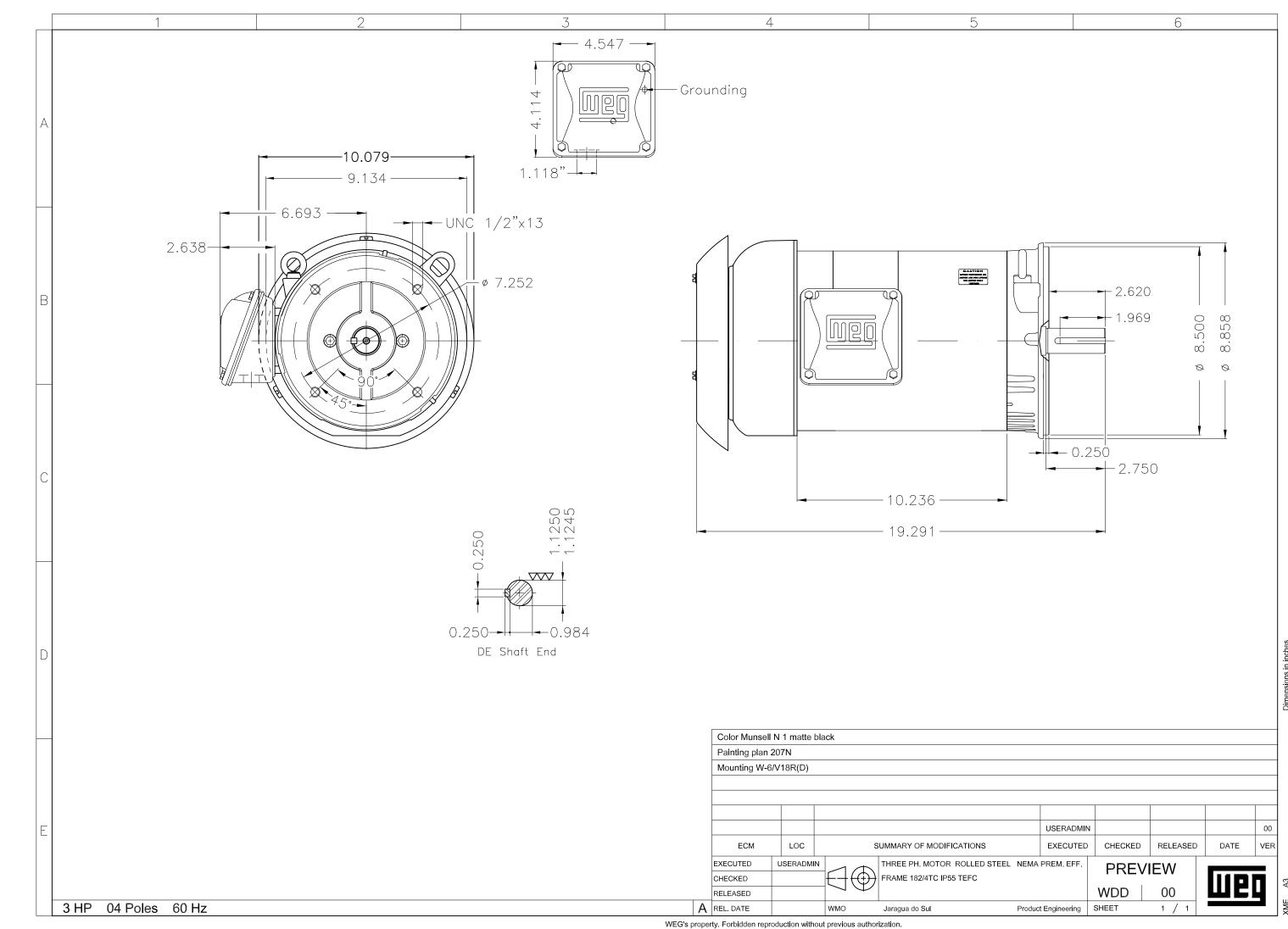
Three-Phase

Product code: 12677332

Catalog #: 00318ET3ER182TC-S



Performance : 415 V 50 Hz 4P Rated current : 4.32 A Moment of inertia (J) : 0.4017 sq.ft.lb **LRC** : 8.0 Duty cycle : Cont.(S1) : 10.8 ft.lb Insulation class Rated torque : F Locked rotor torque : 220 % Service factor : 1.15 Breakdown torque : 320 % Temperature rise : 80 K Rated speed : 1465 rpm Design : B Rev. Performed Checked Date **Changes Summary** Performed by





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Energy Verifi

W01.TEOICOXON 12677332

For 60Hz: Class I, Zone 2, IIC Class I, DIv.2, Gr. A,B,C,D - T3 CT 2:1/VT 1000:1 Div 2 Inverter Duty (SF1.00)

> MODEL 00318ET3ER182TC-S 9 걒 182/4TC

P55 CODE SH

1000 m.a.s.l

CONT

F AT 80K

NSC INC.

WB

TEFC 2°04

3.76/4.38 7.62/3.81 230/460

1.15

3.0HP ALTERNATE RATING:

89.5%

NEMA

SPM 3FA 냃 쌆

9.08-8.15/4.54-4.32A

For safe area-Inverter duty motor For 60Hz use on VPWM 1000:1 VT. 4:1 CT NOM EFF 1455RPM 50 Hz ODE 8205-22

IEC 60034-1

SF1.15

190-220/380-415V

MOBIL POLYREX EM

8206-ZZ

牌

**EFF 88.7%** 

T2-WHT

T4-YEL

HEIH

MOT

r3-org 1-BLU 15-BLK





WARNING: Motor must be grounded in accordance with local and national electrical codes to prevent serious electrical

shocks. Disconnect power source before servicing unit. AVERTISSEMENT: Le moteur doit être mis à la terre choc électrique grave. Déconnectez l'alimentation ayant l'entretien de la machine.

conformément aux codes électriques locaux et nationaux afin d'éviter tout

T8-RED T9-RED 7-PNK