

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : W40 NEMA Premium Efficiency Three-Phase Product code : 14786493
Catalog # : 01512OT3H284TC-W40

Frame	: 284TC	Locked rotor time	: 28s (cold) 16s (hot)
Output	: 15 HP (11 kW)	Temperature rise	: 80 K
Poles	: 6	Duty cycle	: Cont.(S1)
Frequency	: 60 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 575 V	Altitude	: 1000 m.a.s.l.
Rated current	: 14.7 A	Protection degree	: IP23
L. R. Amperes	: 92.7 A	Cooling method	: IC01 - ODP
LRC	: 6.3x(Code G)	Mounting	: F-1
No load current	: 6.24 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 1180 rpm	Noise level ²	: 59.0 dB(A)
Slip	: 1.67 %	Starting method	: Direct On Line
Rated torque	: 66.8 ft.lb	Approx. weight ³	: 322 lb
Locked rotor torque	: 260 %		
Breakdown torque	: 260 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 4.80 sq.ft.lb		
Design	: B		

Output	25%	50%	75%	100%	Foundation loads
Efficiency (%)	90.8	91.0	91.7	91.7	Max. traction
Power Factor	0.42	0.67	0.77	0.82	Max. compression

	<u>Drive end</u>	<u>Non drive end</u>
Bearing type	: 6311 Z C3	6211 Z C3
Sealing	: Without Bearing Seal	Without Bearing Seal
Lubrication interval	: 20000 h	20000 h
Lubricant amount	: 18 g	11 g
Lubricant type	: Mobil Polyrex EM	

Notes

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



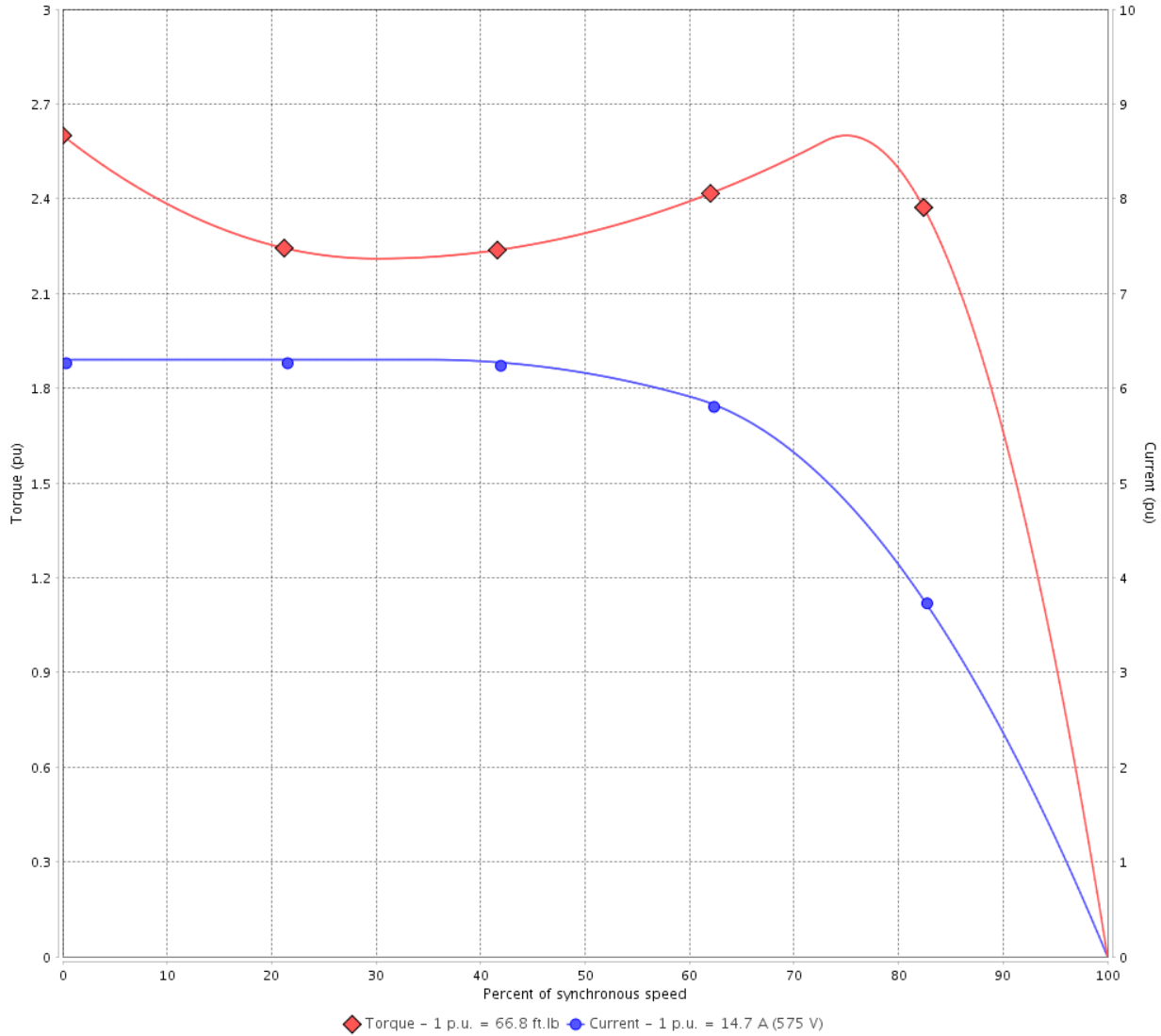
Customer :

Product line : W40 NEMA Premium Efficiency
Three-Phase

Product code : 14786493

Catalog # : 015120T3H284TC-W40

TORQUE AND CURRENT VS SPEED CURVE



Performance : 575 V 60 Hz 6P

Rated current	: 14.7 A	Moment of inertia (J)	: 4.80 sq.ft.lb
LRC	: 6.3	Duty cycle	: Cont.(S1)
Rated torque	: 66.8 ft.lb	Insulation class	: F
Locked rotor torque	: 260 %	Service factor	: 1.25
Breakdown torque	: 260 %	Temperature rise	: 80 K
Rated speed	: 1180 rpm	Design	: B

Locked rotor time : 28s (cold) 16s (hot)

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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

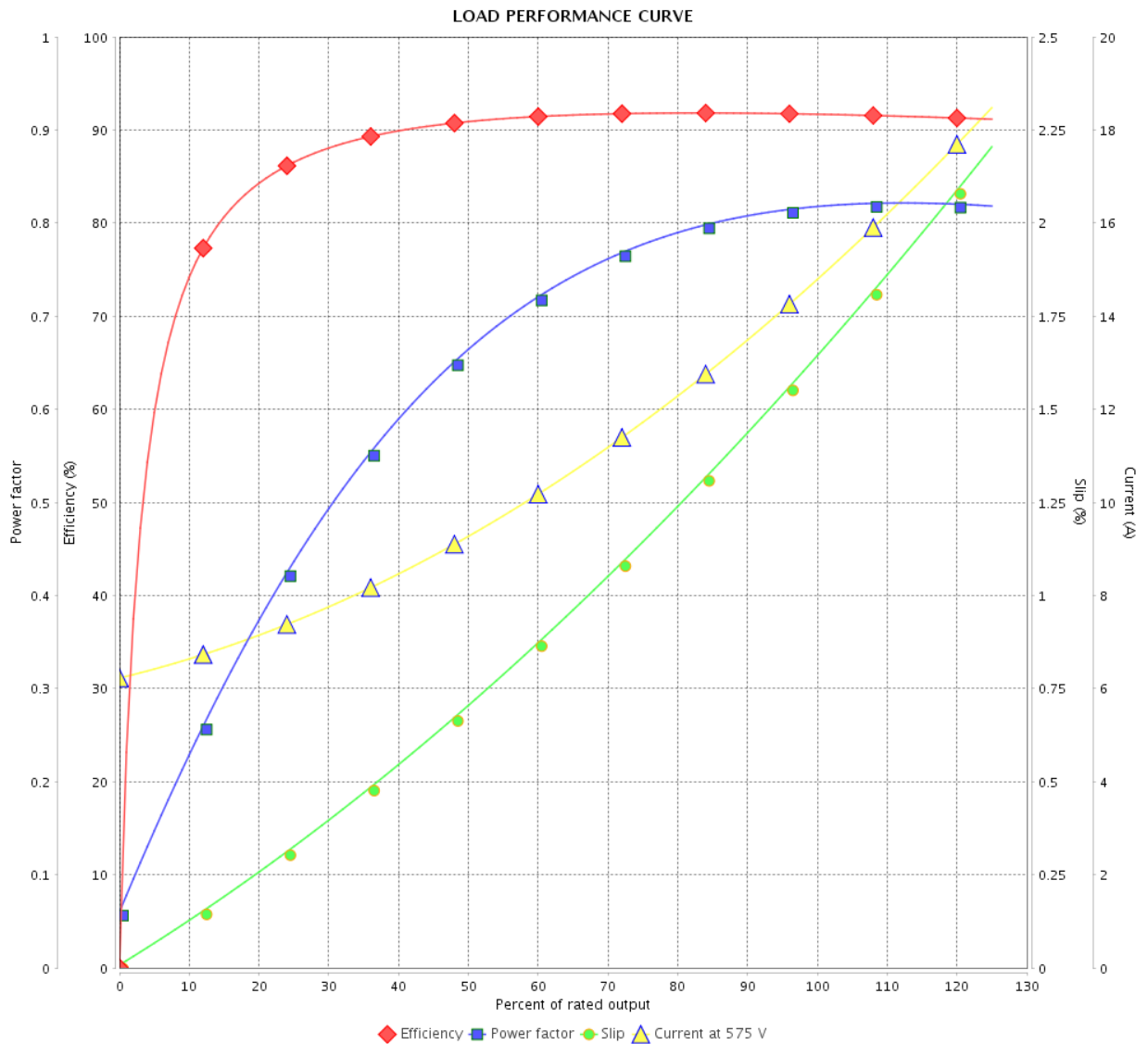


Customer :

Product line : W40 NEMA Premium Efficiency Three-Phase

Product code : 14786493

Catalog # : 015120T3H284TC-W40



Performance : 575 V 60 Hz 6P

Rated current : 14.7 A
 LRC : 6.3
 Rated torque : 66.8 ft.lb
 Locked rotor torque : 260 %
 Breakdown torque : 260 %
 Rated speed : 1180 rpm

Moment of inertia (J) : 4.80 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

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THERMAL LIMIT CURVE



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Breakdown torque	: 260 %	Temperature rise	: 80 K
Rated speed	: 1180 rpm	Design	: B

Heating constant

Cooling constant

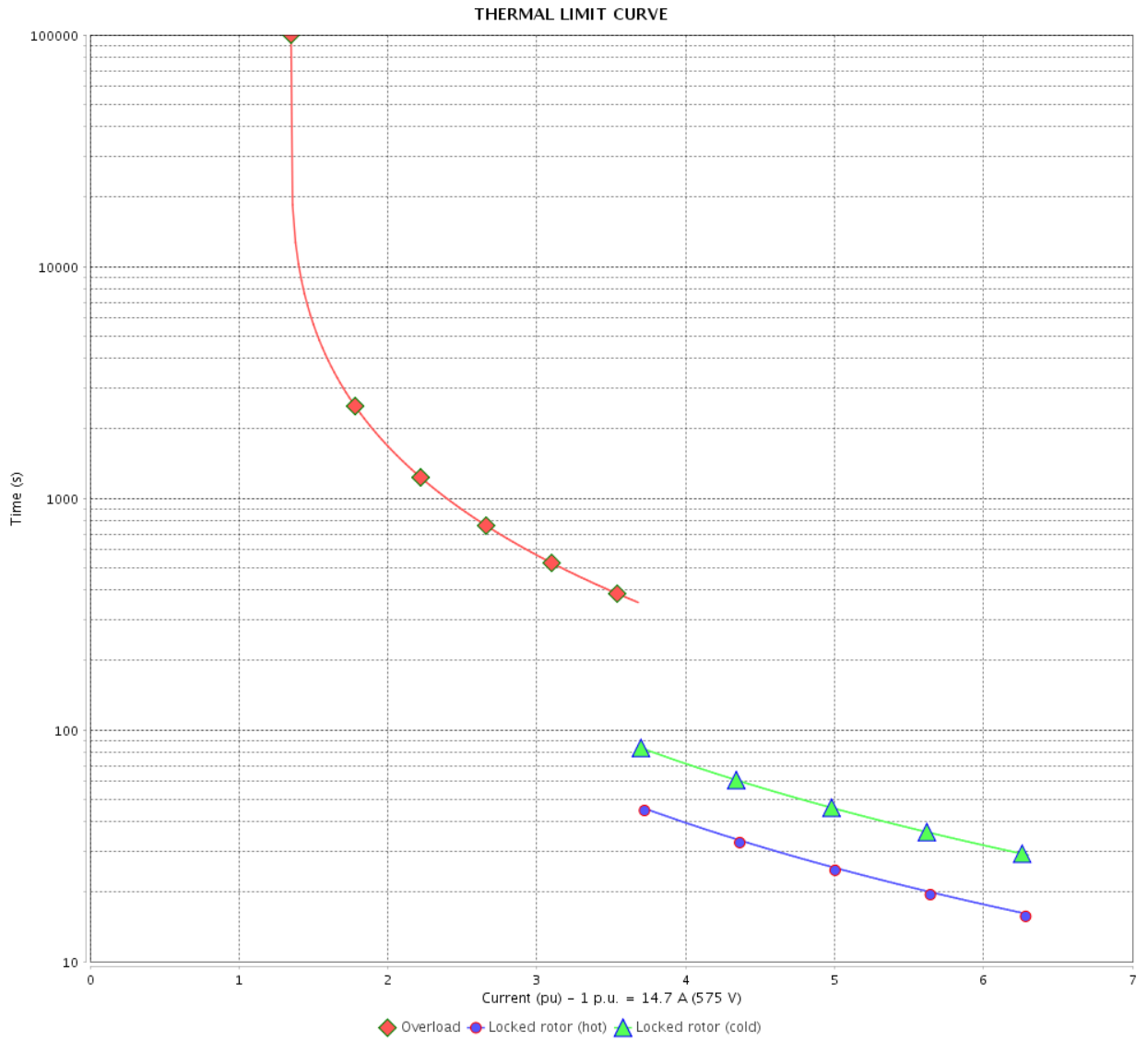
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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



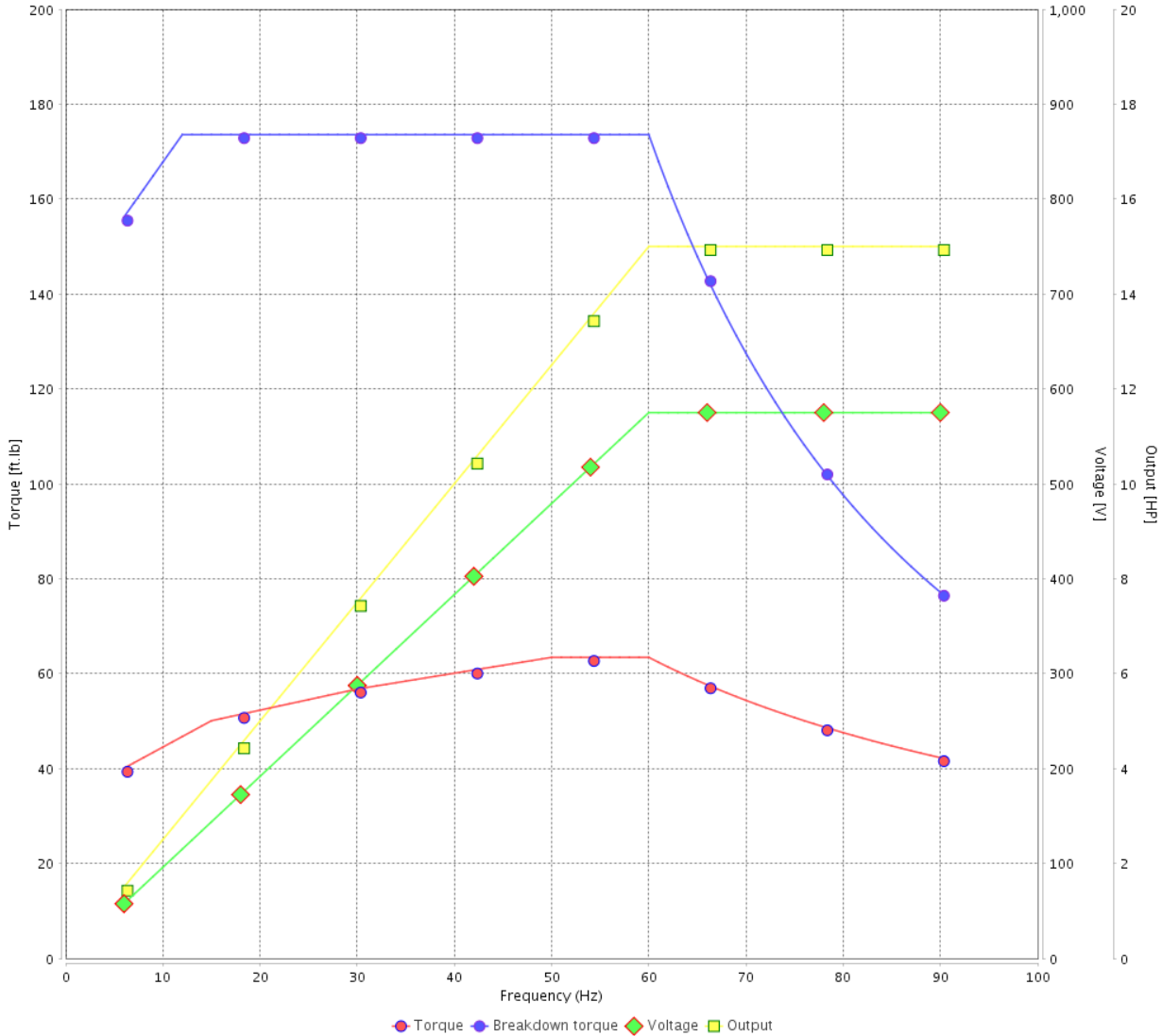
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VFD OPERATION CURVE

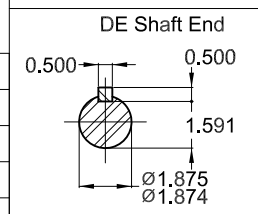
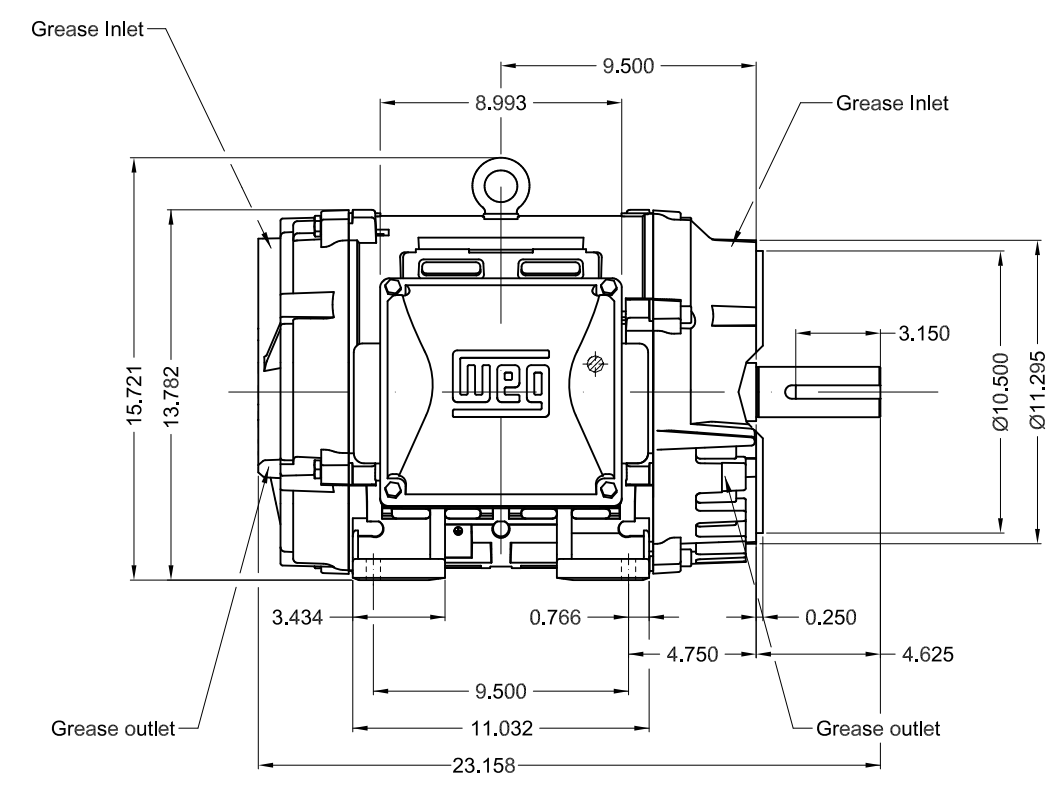
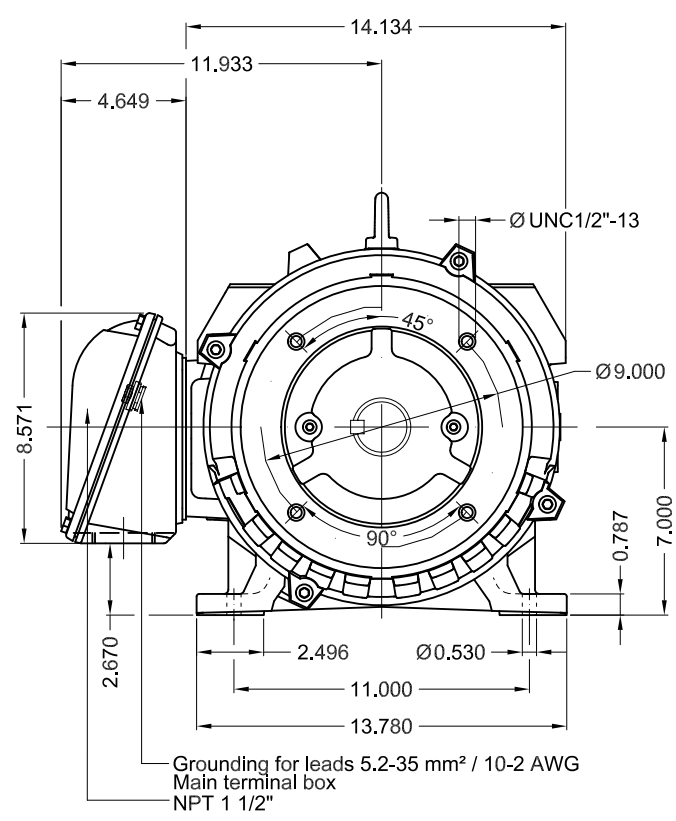


Performance : 575 V 60 Hz 6P

Rated current : 14.7 A
 LRC : 6.3
 Rated torque : 66.8 ft.lb
 Locked rotor torque : 260 %
 Breakdown torque : 260 %
 Rated speed : 1180 rpm

Moment of inertia (J) : 4.80 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
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Bearing cap
Color RAL 5009
Painting plan 203A
Mounting NEMA F-1
Mounting B34R(D)

15 HP 06 Poles 60 Hz A

1:7

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	THREE PH. MOTOR W40 PREM. EFF.					
CHECKED		FRAME 284TC IP23 ODP					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering	SHEET	1 / 1		

PREVIEW
WDD



MODEL 015120T3H284TC-W40
MADE IN BRAZIL
14786493

WEG **W40 NEMA**
CC029A Premium
Inverter Duty Motor

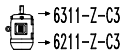
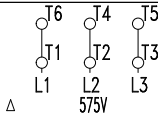


IEC 60034-1
MOD.T01#FOXON



For use on PWM, VT 1000:1, CT 3:1, 1.0SF

PH 3	FR 284TC	HP(kW) 15(11)		Hz 60
V 575		A 14.7		IP23
NEMA NOM EFF		91.7	%	RPM 1180
ENCL ODP	DUTY CONT.		INS. CL. F Δ T 80 K	
PF 0.82		DES B	CODE G	AMB. 40°C
SF 1.25		SFA 18.4		ALT 1000 m.a.s.l.



→ 6311-Z-C3
→ 6211-Z-C3

MOBIL POLYREX EM
18 g 20000 h

322 Lbs