

ABB BALDOR RELIANCE III

Customer information packet

CEWDM4404T

75HP, 1185RPM, 3PH, 60HZ, 405TC, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	405TC
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	75.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1200 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	CSA EEV CCSA US
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Current @ Voltage	174.000 A @ 230.0 V 87.000 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	94.5 %
Enclosure Modification	Severe Duty Features
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	87.0 a
Insulation Class	F
Inverter Code	Inverter Ready
IP Rating	IP55
KVA Code	G

Part Detail

Revision	A
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A40WG0770
Layout	617429-503
Eff. date	10-22-2021
CD Diagram	416820-002
Poles	06
Leads	3#2,6#4
Proprietary	False
Created date	08-29-2019

Motor Lead Quantity/Wire Size	3 @ 2 AWG
Motor Standards	NEMA
Motor Type	A40064M
Mounting Arrangement	F1
Number of Poles	6
Overall Length	38.20 IN
Power Factor	85
Product Family	Washdown Features
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Service Factor	1.15
Shaft Diameter	2.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1185 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None

Nameplate

NP2496L	
MOBIL POLYREX EM	

NP2428L

SPEC NO.	A40-7203-0770			CAT.NO.	CEWDM4404T					FRAME	405TC		
HP	75	VOLTS	230/460		PHASE	3	DESIGN	B	TYPE	P			
RPM	1185	AMPS	174/87		HZ	60	AMB	40	SF	1.15			
DRIVE END BEARING	80BC03JPP30A		DUTY	CONT	INSUL.CLASS			F					
OPP D.E. BEARING	80BC03JPP30A		ENCL	TEFC	CODE	G							
SER.NO.				POWER FACTOR	85	NEMA-NOM-EFFICIENCY					94.5		
					MAX CORR KVAR				15	GUARANTEED EFFICIENCY			93.6
IP55					NEMA NOM/CSA QUOTED EFF								
6:1CT AND 6:1VT ON VPWM INVERT					ER, 1.00SF				MOTOR WEIGHT				

Parts List

Part number	Description	Quantity
SA373561	SA A40-7203-0770	1.000 ea
RA363368	RA A40-7203-0770	1.000 ea
421948032	LABEL, MYLAR	1.000 ea
NP2496L	MOTOR LUBE NAMEPLATE	1.000 ea
000613006PU	N/P (RELEASE QTY 10,000) UL CSA LABEL	1.000 ea
000692000CY	N/P	1.000 ea
000692000VD	LABEL WARNING	1.000 ea
NP2428L	WASHDOWN DUTY MOTOR, SS, CC, CSA-C	1.000 ea
412118006A	DRAIN	2.000 ea
034690005AB	PPLG 3/4 PLATED	1.000 ea
089412501A	BRKT FTMT G400 FIN MACH 6316 89412500WCA	1.000 ea
415072001B	CLAMP	1.000 ea
083198101H	G400 STD FAN COVER MACHINING	1.000 ea
034180012DA	KEY 1X4X1/4X1-1/2 L	1.000 ea
078550001H	FAN KB 120/60 360	1.000 ea
004824015A	GREASE POLYREX EM	0.880 lb
032018020EN	HHCS 5/8-11X2-1/2 304SS.	4.000 ea
032018008CN	HHCS 3/8-16X1 304 SS-360	4.000 ea
032018026CN	HHCS 3/8-16X3-1/4 304S.S	3.000 ea
415045002B	SLGR	1.000 ea
410700000DA	WAVY SPRING WASHER	1.000 ea
423709011C	WASHER	3.000 ea
034001014AF	WSHR 3/8" 304S.S.- 440	4.000 ea
034690001AB	1/8" NPT SQHDPLG	1.000 ea
034690001AB	1/8" NPT SQHDPLG	1.000 ea
034690001AB	1/8" NPT SQHDPLG	1.000 ea
034690002AB	PPLG 1/4" PLTD.	1.000 ea
089412504AL	G400 C-FACE BRKT MCHG 6316 W/ INNER LIP	1.000 ea
032018020EN	HHCS 5/8-11X2-1/2 304SS.	4.000 ea
032018032CN	HHCS 3/8-16X4 304S.S.	3.000 ea
415045002B	SLGR	1.000 ea

415028004BA	SEAL	1.000 ea
423709011C	WASHER	3.000 ea
076708141	CAST IRON 3" LEAD OUTLET	1.000 ea
065776000C	GASKET,MAIN CBOX, 320-400	1.000 ea
076709000A	C/B Cover - 360	1.000 ea
067053000B	GASK 320-400	1.000 ea
032018008AN	HHCS 1/4-20X1 304 S.S.	4.000 ea
032018010CN	HHCS 3/8-16X1-1/4 304S.	4.000 ea
415000115H	T/LUG #2AWG-4/0AWG	1.000 ea
406099000A	PLUG - FAN COVER 320-440	1.000 ea
032018005DL	1/2-13 X 5/8 SILICON BRONZE HHCS	1.000 ea
034000014AF	WSHR 3/8 304 S.S.	4.000 ea
004824003AJF	WILKO781.01 WHITE2 COATS - MG1025W01	0.375 ga
033775004EA	DRSCR #6-1/4 304 S.S.	4.000 ea
033775004EA	DRSCR #6-1/4 304 S.S.	2.000 ea
034180044JA	KEY 3/4X3/4X5-1/2 L	1.000 ea
604797045	STD. 400 FRAME SKID	1.000 ea
032510024D	CARRIAGE BOLT - 444	2.000 ea
034001014AB	FLAT WASHER 3/8"PLATED	2.000 ea
034001016AB	WSHR .562ID 1.375OD .109	2.000 ea
033300014AC	HEX NUT, SHIPPING - 400	2.000 ea
604799003C	PLASTIC BAG 42X32X46	1.000 ea

REL. S.O.	FRAME	HP	TYPE	PHASE/ HERTZ	RPM	VOLTS		
	405TZ	75	P	3/60	1185	230/460		
AMPS	DUTY	AMB °C/ INSUL.	S.F.	NEMA DESIGN	CODE LETTER	ENCL.		
174/87	CONT	40/F	1.15	B	G	TEFC		
E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES. @25 °C OHMS (BETWEEN LINES)				
496234	418142-71-EE	---	---	.0215/.0860				
PERFORMANCE								
LOAD	HP	AMPERES	RPM	% POWER FACTOR	% EFFICIENCY			
NO LOAD	0	31.0	1200	4.76	0			
1/4	18.8	37.3	1197	51.5	91.5			
2/4	37.5	50.8	1193	73.2	94.4			
3/4	56.2	67.8	1190	81.8	94.9			
4/4	75.0	87.0	1186	85.3	94.6			
5/4	93.8	108	1182	86.4	94.1			
SPEED TORQUE								
		RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES			
LOCKED ROTOR		0	166	552	537			
PULL UP		400	158	524	506			
BREAKDOWN		1128	243	808	302			
FULL LOAD		1186	100	332	87.0			
AMPERES SHOWN FOR 460. VOLT CONNECTION. IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE REMARKS: TYPICAL DATA XE MOTOR-TYPICAL DATA-NEMA NOM EFF 94.5 PCT GUARANTEED MIN EFF. 93.6 PCT								
		DR. BY	C.E. JAMISON	A-C MOTOR PERFORMANCE DATA				
		CK. BY	W.L. SMITH					
		APP. BY	C.E. JAMISON					
		DATE	11/04/16					
				A40WG0770-R015 ISSUE DATE 03/29/21				

REL S.O.

RPM 1185

S.F. 1.15

ROTOR 418142-71-EE

FRAME 405TZ

VOLTS 230/460

NEMA DESIGN B

TEST S.O. TYPICAL DATA

HP 75

AMPS 174/87

CODE LETTER G

TEST DATE ---

TYPE P

DUTY CONT

ENCLOSURE TEFC

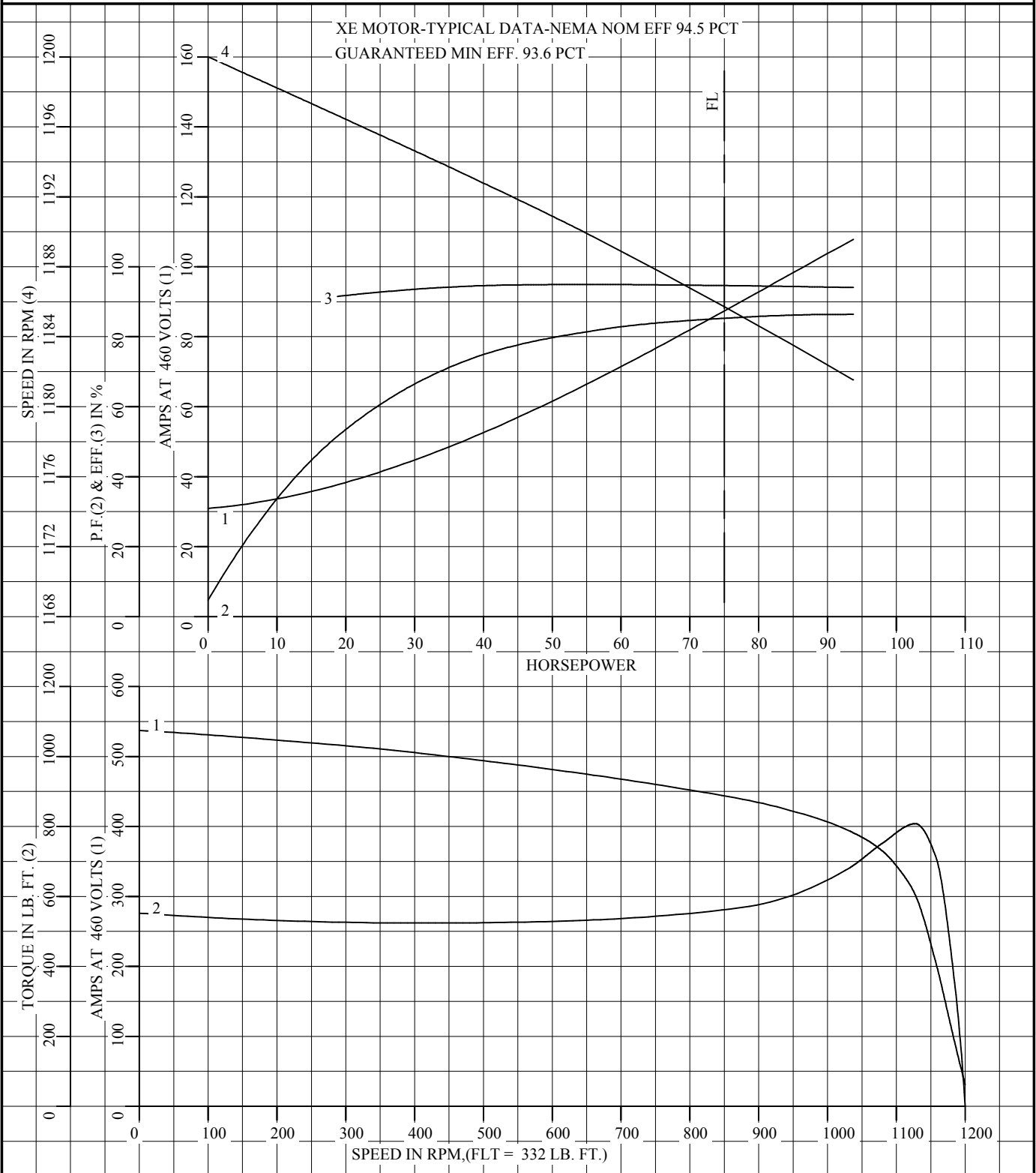
STATOR RES. @ 25 °C .0215/.0860

PHASE/HERTZ 3/60

AMB °C/INSUL 40/F

E/S 496234

OHMS (BETWEEN LINES)



AMPERES SHOWN FOR 460 VOLT CONNECTION, IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.

BALDOR
A MEMBER OF THE ABB GROUP

DR. BY C.E. JAMISON
CK. BY W.L. SMITH
APP. BY C.E. JAMISON
DATE 11/04/16

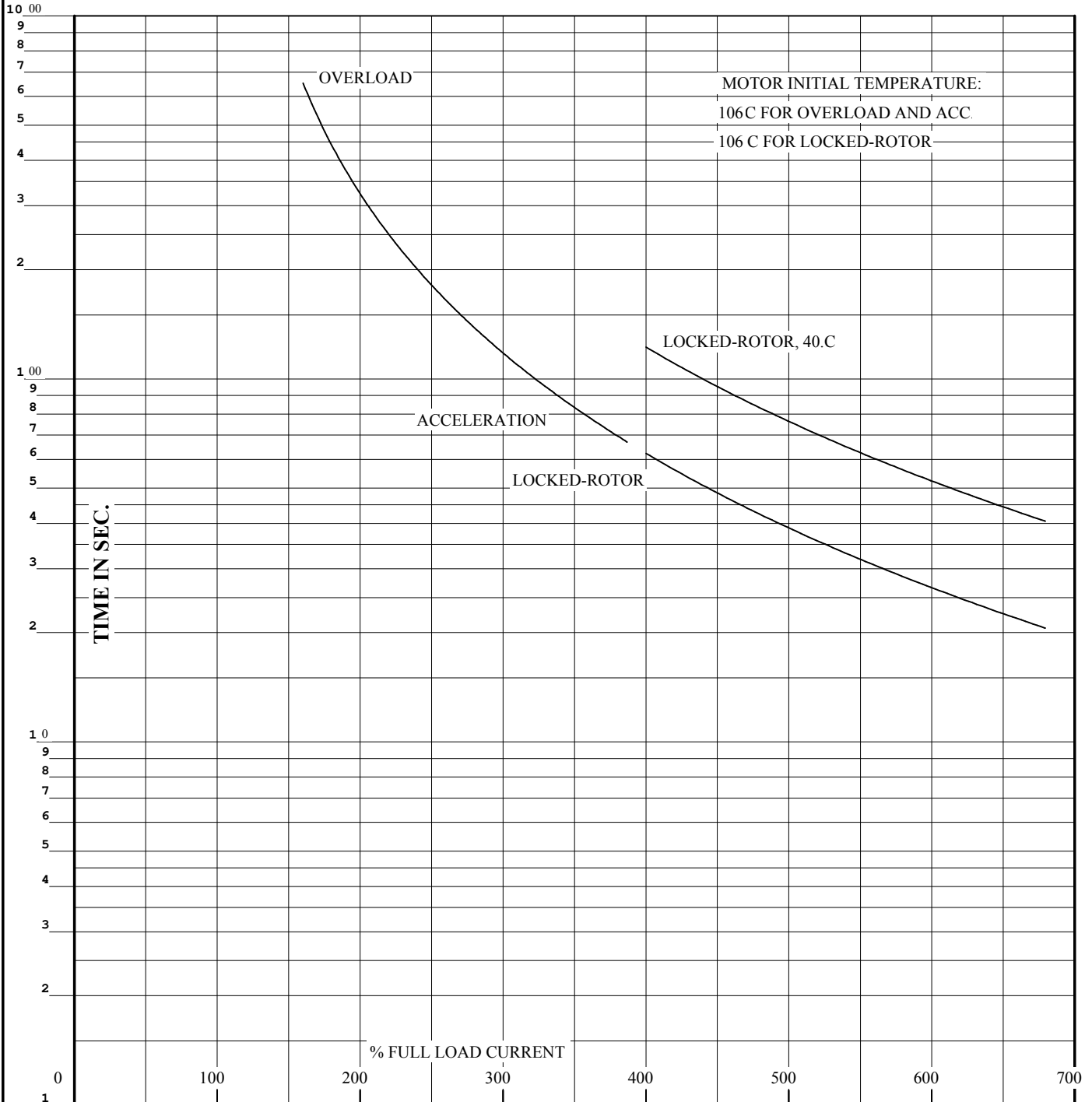
**A-C MOTOR
PERFORMANCE
CURVES**

A40WG0770-R015

ISSUE DATE 03/29/21

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REL. S.O.	RPM 1185	S.F. 1.15	ROTOR 418142-71-EE
FRAME 405TZ	VOLTS 230/460	NEMA DESIGN B	TEST S.O. TYPICAL DATA
HP 75	AMPS 174/87	CODE LETTER G	TEST DATE ---
TYPE P	DUTY CONT	ENCLOSURE TEFC	STATOR RES. @ 25 °C .0215/.0860
PHASE/HERTZ 3/60	AMB °C/INSUL 40/F	E/S 496234	OHMS (BETWEEN LINES)



THERMAL LIMIT CURVE

REMARKS: XE MOTOR-TYPICAL DATA-NEMA NOM EFF 94.5 PCT
GUARANTEED MIN EFF. 93.6 PCT

AMPERES SHOWN FOR 460 VOLT CONNECTION, IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.



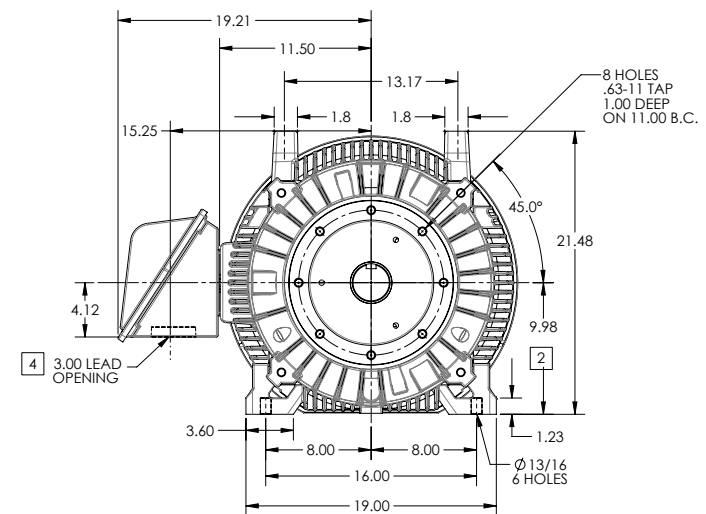
DR. BY	C.E. JAMISON
CK. BY	W.L. SMITH
APP. BY	C.E. JAMISON
DATE	11/04/16

**A-C MOTOR
PERFORMANCE
CURVES**

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ISSUE DATE 03/29/21 Page 10 of 13

SQUIRREL-CAGE INDUCTION

XT/ECP SEVERE DUTY ENCLOSURE



- 5 WEIGHT (LBS): 1370

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT MOTOR PERFORMANCE IS SUITABLE IN THE APPLICATION.

G405TC/404TC STD – FOOTED – XT/ECP SEVERE DUTY ENCLOSURE

DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

ENCLOSURE: TOTALLY ENCLOSED

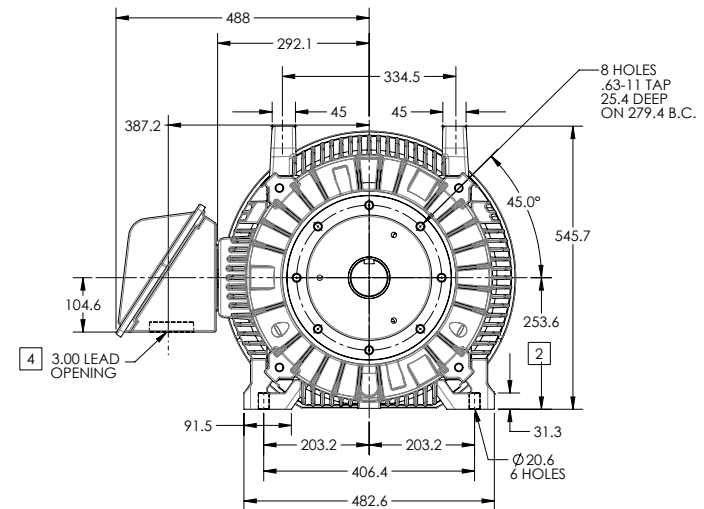
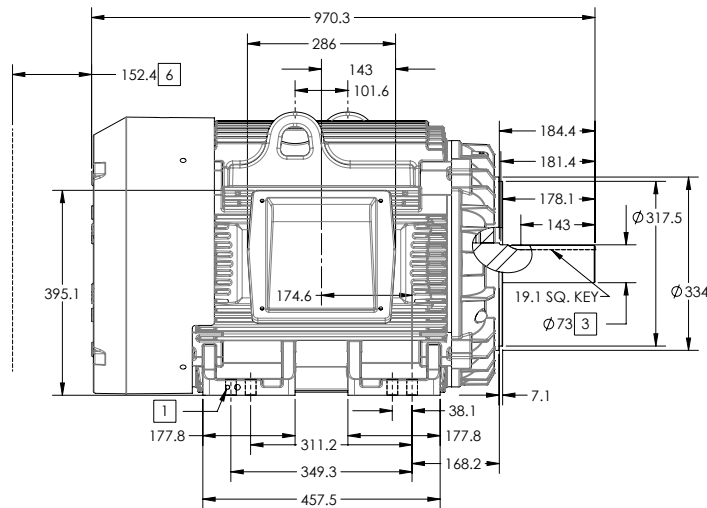
FRAME G405TC ABOVE NEMA RATINGS

COOLING: FAN COOLED

MOUNTING: FOOT

INCLUDES 404TC FRAME MOUNTING HOLES

XT/ECP SEVERE DUTY ENCLOSURE



1. GROUND HOLES QTY 1 1/2-13 TAP; QTY 1 3/8-16 TAP
2. VARIES +0,-1.5
3. VARIES +.00,-.03
4. ON STANDARD MOTORS THIS IS CONDUIT SIZE. ON XT AND CORROSION PROOF MOTOR THIS IS PIPE TAP.
5. MOTOR WEIGHTS MAY VARY BY 15% DEPENDING ON RATING.
6. OBSTRUCTION MUST NOT ENCR OACH ON AIR INLET
7. MAX FACE RUNOUT AND FIT ECCENTRICITY = 0.178 T.I.R.

CONDUIT BOX LOCATED ON OPPOSITE SIDE WHEN F-2.
IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY.
MAXIMUM PERMISSIBLE SHAFT EXTENSION IS .08 MM T.I.R. TO 127 MM DIA.

[5] WEIGHT (KGS): 630

DIMENSIONS ARE IN MILLIMETERS; SEE SHEET 1 FOR DIMENSIONS IN INCHES

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT MOTOR PERFORMANCE IS SUITABLE IN THE APPLICATION.

 SHEET NUMBER
2 OF 2

105-627-119

REV. DESC: CHANGE BA FROM 6.76 TO 6.62

REV: B	VERSION: 02	REVISED: 01-18-01 04/14/2014	TDR: 000000848770
MODEL NO. 617429-503		REF:	
BY: MGHUMZ2		Material:	

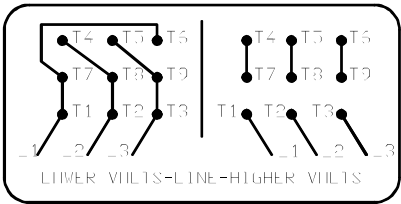
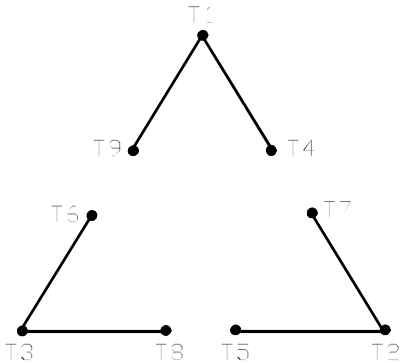
BALDOR

G405TC/404TC STD - FOOTED - XT/ECP SEVERE DUTY ENCLOSURE

617429-503

416820-002

A-C MOTOR
CONNECTION DIAGRAM
STANDARD 9 LEAD DELTA-CONNECTED



(N.P. 1575-B)

REV. DESC: FONT CHANGE FOR PDF SEARCHABLE		
REV. LTR: A	VERSION: 01	TDR: 000001009382
FILE: \MGA\00000\661	REVISED: 02:46:19 02/13/2020	BY: MGHMTT
MTL: —		

BALDOR - RELIANCE®

CONN DIAG — STANDARD 9 LEAD, DELTA-CONNECTED
SH 1 of 1

416820-002