ABB BALDOR RELIANCE

Customer information packet

EM7087T-I

75//60HP, 1185//985RPM, 3PH, 60//50HZ, 405T
Class - CLI GP C,D
Division - Division I

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11/19/2026 2:14:51 AM

Specifications

Enclosure	TEFC
Frame	405T
Frame Material	Iron
Frequency	50.00 Hz
	60.00 Hz
Haz Area Class and Group	CLI GP C,D
Haz Area Division	Division I
Motor Letter Type	Three Phase
Output @ Frequency	75.000 HP @ 60 HZ
	60.000 HP @ 50 HZ
Phase	3
Synchronous Speed @ Frequency	1000 RPM @ 50 HZ
Voltage @ Frequency	190.0 V @ 50 HZ
	230.0 V @ 60 HZ
	380.0 V @ 50 HZ
	460.0 V @ 60 HZ
Agency Approvals	CSA EEV
	CCSA US
	CSA
	UL
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Current @ Voltage	84.200 A @ 460.0 V
	82.000 A @ 380.0 V
	168.000 A @ 230.0 V
	164.000 A @ 190.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	94.5 %

Part Detail

Revision	J
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A40WG0493
Layout	617433-513
Eff. date	05-06-2024
CD Diagram	416820-002
Poles	06
Leads	3#4,6#6
Proprietary	False
Created date	04-27-2015

Feedback Device	NO FEEDBACK
Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	82.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Motor Lead Quantity/Wire Size	3 @ 4 AWG
Motor Standards	NEMA
Motor Type	A40072M
Mounting Arrangement	F1
Number of Poles	6
Overall Length	38.21 IN
Power Factor	88
Product Family	General Industrial
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Service Factor	1.15
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1185 rpm
	985 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	Normally Closed Thermostat

Nameplate

NP2496L
MOBIL POLYREX EM

000613006PC			
CLASS I GROUP	C D X	**NO.**	
CLASS II GROUP	X X X		
OPERATING TEMP CODE	T3C		

NP2293L									
CAT.NO.	EM7087T-I			**SPEC NO.**	A40-6593-0493			**FRAME**	405T
HP	75//60	**PHASE**	3	**DESIGN**	B	**TYPE**	P		
RPM	1185//985	**HZ**	60//50	**AMB**	40	**SF**	1.15		
VOLTS	230/460//190/380			**DUTY**	CONT	**INSUL.CLASS**		F	
AMPS	168/84.2//164/82			**ENCL**	TEFC	**CODE**		G	
DRIVE END BEARING	80BC03J30X			**NEMA-NOM-EFFICIENCY**		94.5			
OPP D.E. BEARING	80BC03J30X								
SER.NO.		NEMA MG-1 PT 5, IP55							
	SUITABLE FOR 55C AMB @ 1.0 SF						**MOTOR WEIGHT**		

REL. S.O.	FRAME	HP	TYPE	PHASE/ HERTZ	RPM	VOLTS
	405T	75	P	3/60	1185	230/460

AMPS	DUTY	AMB °C/ INSUL.	S.F.	NEMA DESIGN	CODE LETTER	ENCL.
168/84.2	CONT	40/F	1.15	B	G	XPFC

E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES.@25 °C OHMS (BETWEEN LINES)
596180	418142073DE	---	---	.0241/.0964

PERFORMANCE

LOAD	HP	AMPERES	RPM	% POWER FACTOR	% EFFICIENCY
NO LOAD	0	24.7	1200	5.02	0
1/4	18.8	31.9	1196	59.5	92.6
2/4	37.5	46.8	1193	79.3	94.8
3/4	56.2	64.5	1189	85.9	95.0
4/4	75.0	84.2	1184	88.3	94.5
5/4	93.8	105	1180	88.8	93.8

SPEED TORQUE

	RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES
LOCKED ROTOR	0	168	557	537
PULL UP	180	142	471	513
BREAKDOWN	1117	250	832	312
FULL LOAD	1184	100	333	84.2

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

REMARKS: TYPICAL DATA
NEMA PREMIUM - 94.5 PCT NOMINAL EFFICIENCY

BALDOR

DR. BY W. L. SMITH
CK. BY J.J.HARRISON
APP. BY W. L. SMITH
DATE 08/25/10

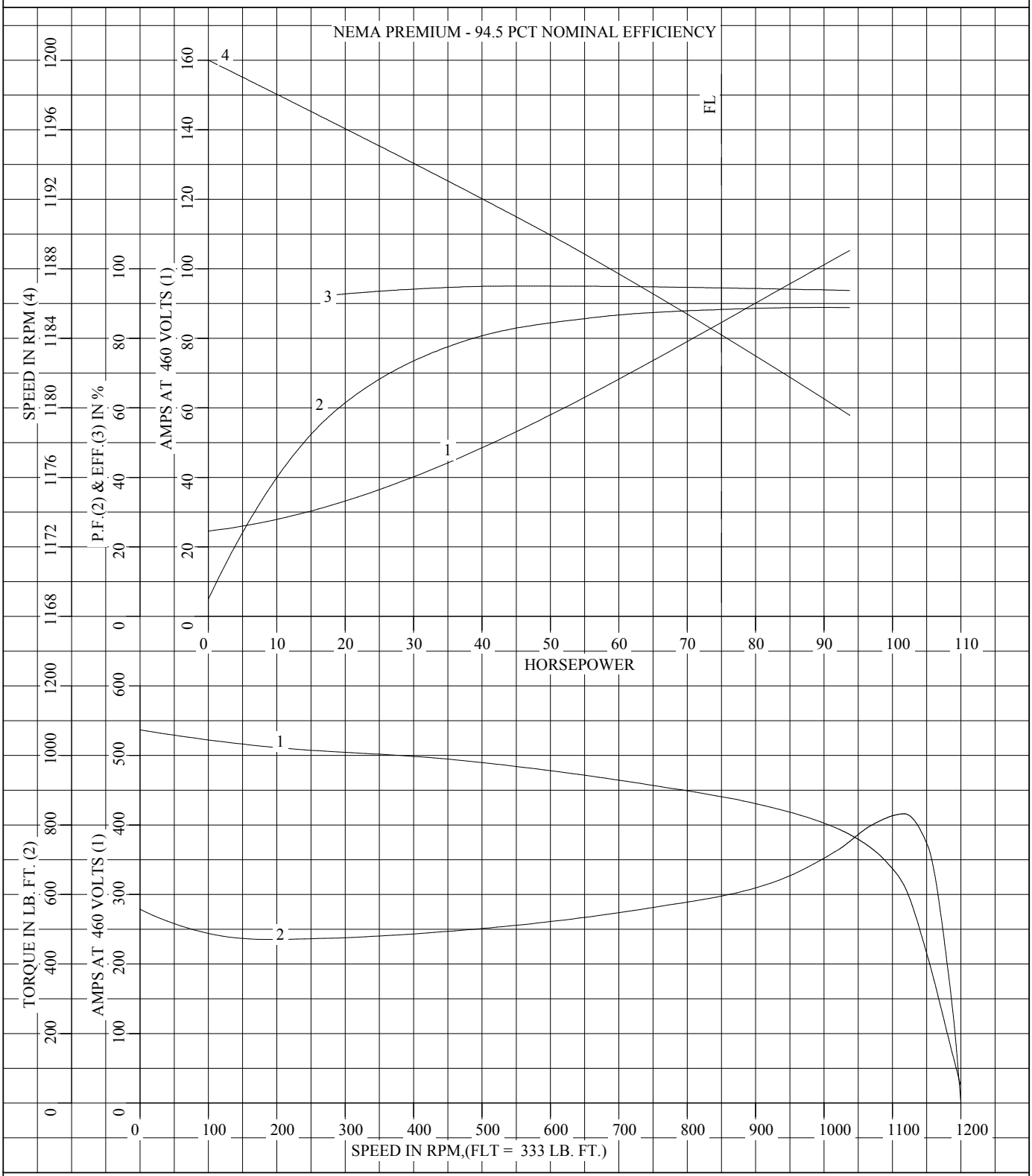
A-C MOTOR PERFORMANCE DATA

A40WG0493-R001
ISSUE DATE 01/07/11

ABB BALDOR RELIANCE

CUSTOMER INFORMATION PACKET EM7087T-I - 75//60HP, 1185//985RPM, 3PH, 60//50HZ, 405T

FRAME 405T	RPM 1185	S.F. 1.15	ROTOR 418142073DE
HP 75	VOLTS 230/460	NEMA DESIGN B	TEST S.O. TYPICAL DATA
TYPE P	AMPS 168/84.2	CODE LETTER G	TEST DATE ---
PHASE/HERTZ 3/60	DUTY CONT	ENCLOSURE XPFC	STATOR RES.@ 25 ℃ .0241/.0964
	AMB ℃/INSUL 40/F	E/S 596180	OHMS (BETWEEN LINES)



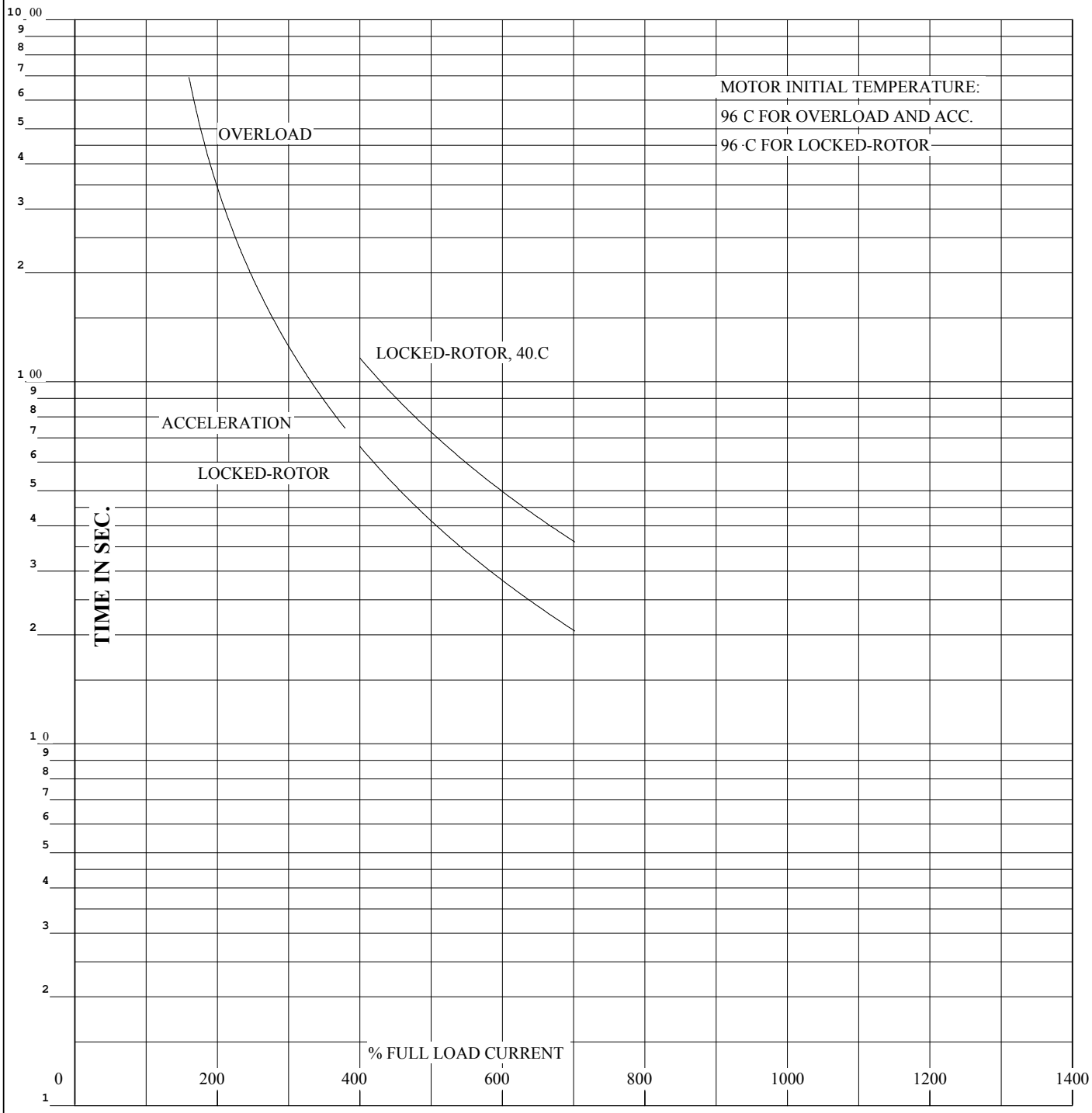
AMPERES SHOWN FOR 460 VOLT CONNECTION, IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.

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DATE	08/25/10

A–C MOTOR PERFORMANCE CURVES A40WG0493-R001 ISSUE DATE 01/07/11

REL. S.O.	RPM 1185	S.F. 1.15	ROTOR 418142073DE
FRAME 405T	VOLTS 230/460	NEMA DESIGN B	TEST S.O. TYPICAL DATA
HP 75	AMPS 168/84.2	CODE LETTER G	TEST DATE ---
TYPE P	DUTY CONT	ENCLOSURE XPFC	STATOR RES.@ 25 °C.0241/.0964
PHASE/HERTZ 3/60	AMB °C/INSUL 40/F	E/S 596180	OHMS (BETWEEN LINES)



THERMAL LIMIT CURVE

REMARKS: NEMA PREMIUM - 94.5 PCT NOMINAL EFFICIENCY

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

BALDOR

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DATE	08/25/10

A-C MOTOR PERFORMANCE CURVES A40WG0493-R001 ISSUE DATE 01/07/11

617433-513

DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

ENCLOSURE: X/P, UNDERWRITERS LISTED

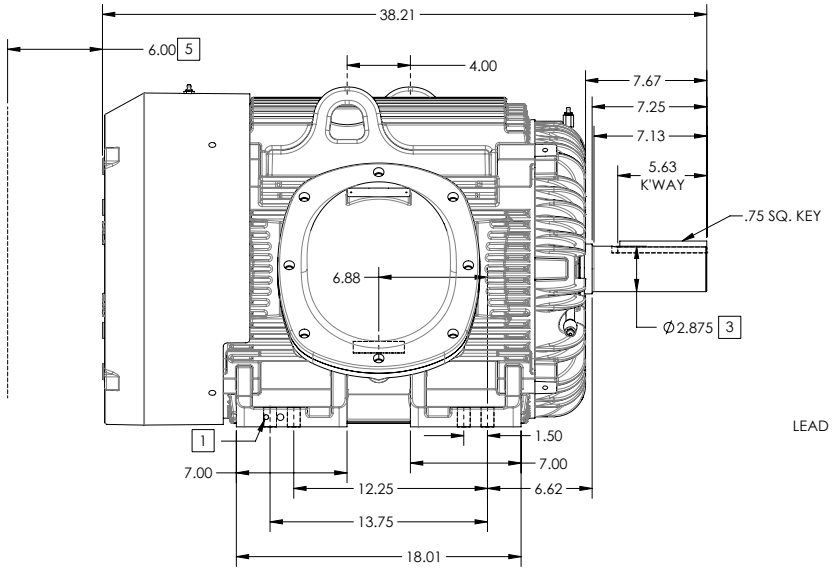
FRAME G405T

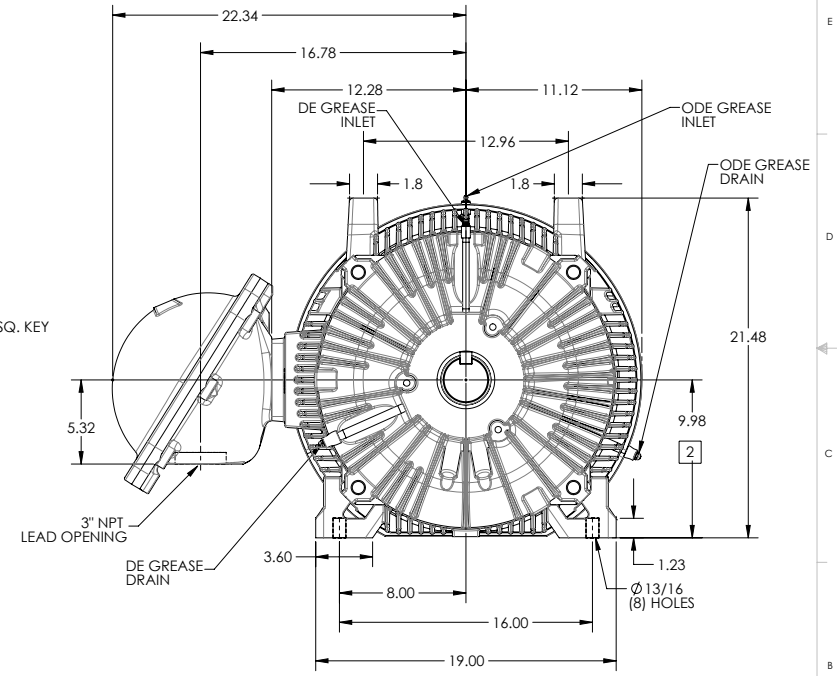
COOLING: FAN COOLED

MOUNTING: FOOT

INCLUDES 404T 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 +.00,-.06
3. VARIES +.000,-.001
4. MOTOR WEIGHTS MAY VARY BY 15% DEPENDING ON RATING.
5. OBSTRUCTION MUST NOT ENCROACH ON AIR INLET

4 WEIGHT (LBS): 1400

CONDUIT BOX LOCATED ON OPPOSITE SIDE WHEN F-2.
IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY.
MAXIMUM PERMISSIBLE SHAFT RUNOUT WHEN MEASURED AT END OF STANDARD SHAFT EXTENSION IS .003" T.I.R. TO 5 INCH DIA.

DIMENSIONS ARE IN INCHES; SEE SHEET 2 FOR DIMENSIONS IN MILLIMETERS

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

SHEET NUMBER 1 OF 2

617433-513

REV. DESC: NEW			
REV: -	VERSION: 00	REVISED: 08:51:52 11/20/2015	TDR: 000000926001
MODEL NO. 617433-513			REF:
BY: RAGTBM	Material:		C

BALDOR

G405T/404T XP TEFC,FOOT,DRILL RIG DUTY,16CB1001A01 BOX

617433-513

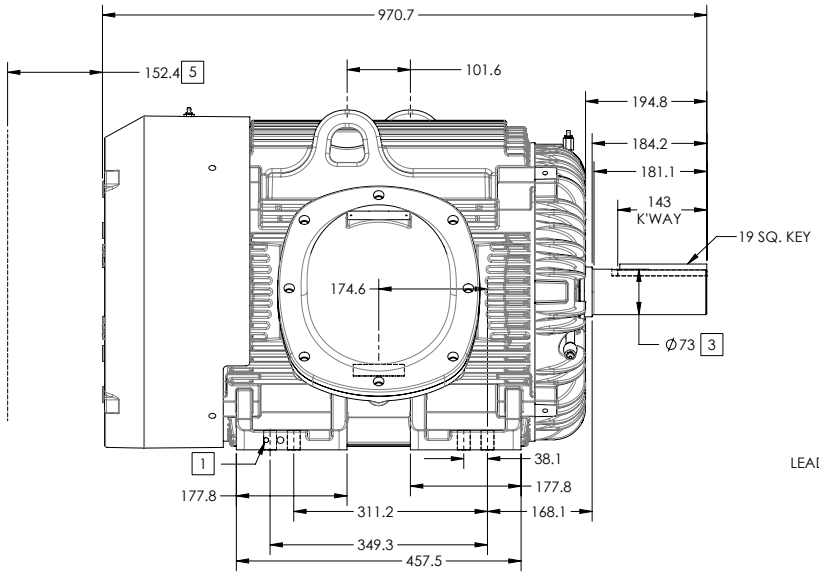
617433-513

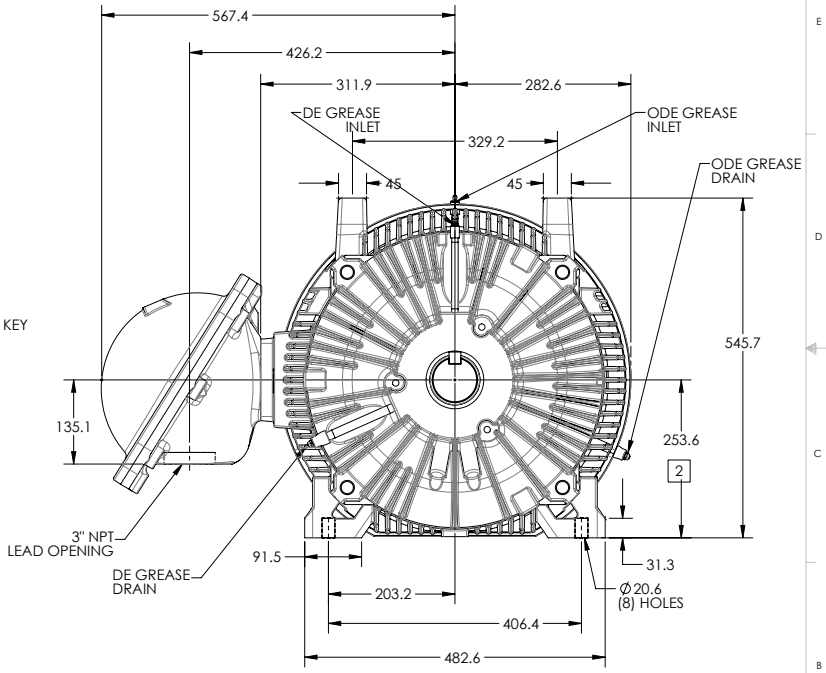
DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

ENCLOSURE: X/P, UNDERWRITERS LISTED | FRAME G405T | COOLING: FAN COOLED

MOUNTING: FOOT | INCLUDES 404T 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 +.00,-1.5MM
3. VARIES +.000,-.025MM
4. MOTOR WEIGHTS MAY VARY BY 15% DEPENDING ON RATING.
5. OBSTRUCTION MUST NOT ENCROACH ON AIR INLET

6 MASS (KGS): 635

CONDUIT BOX LOCATED ON OPPOSITE SIDE WHEN F-2.
IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY.
MAXIMUM PERMISSIBLE SHAFT RUNOUT WHEN MEASURED AT END OF STANDARD SHAFT EXTENSION IS .076MM T.I.R. TO 130MM DIA.

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

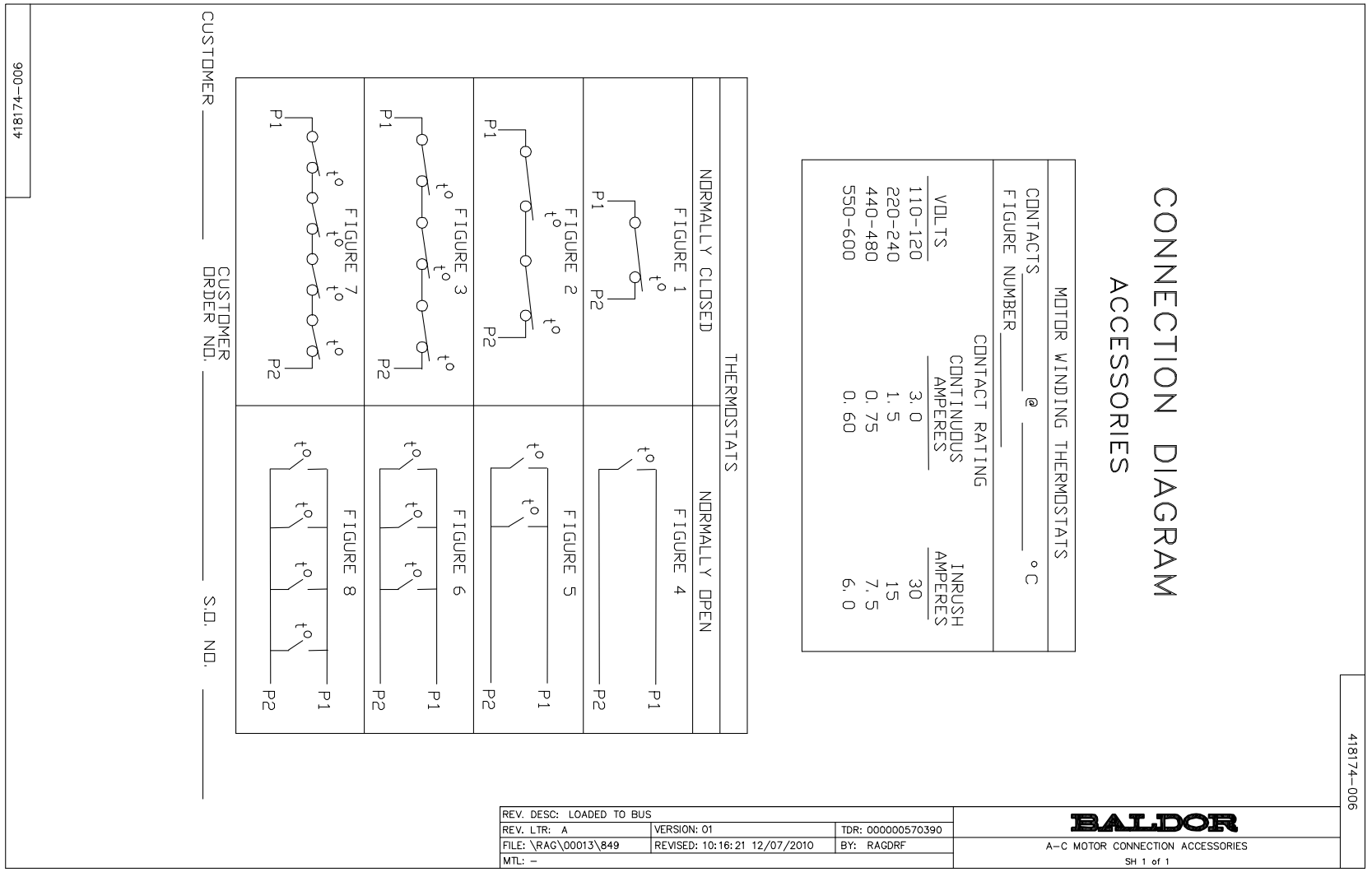
617433-513

REV. DESC: NEW			
REV: -	VERSION: 00	REVISED: 08:51:52 11/20/2015	TDR: 000000926001
MODEL NO. 617433-513			REF:
BY: RAGTBM	Material:	C	

BALDOR

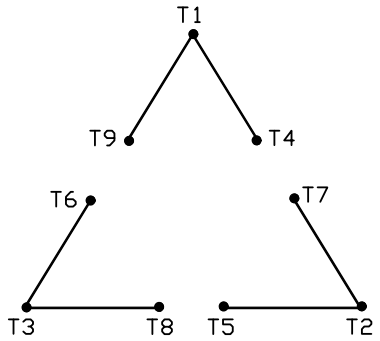
G405T/404T XP TEFC,FOOT,DRILL RIG DUTY,16CB1001A01 BOX

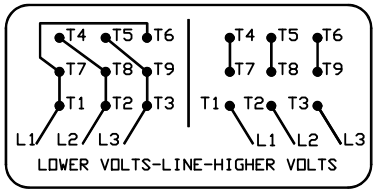
617433-513


CONNECTION DIAGRAM
ACCESSORIES
MOTOR WINDING THERMOSTATS
CONTACTS @ °C
FIGURE NUMBER
CONTACT RATING
VOLTS
CONTINUOUS AMPERES
INRUSH AMPERES
110-120 3.0 30
220-240 1.5 15
440-480 0.75 7.5
550-600 0.60 6.0
THERMOSTATS
NORMALLY CLOSED
NORMALLY OPEN
FIGURE 1
FIGURE 2
FIGURE 3
FIGURE 4
FIGURE 5
FIGURE 6
FIGURE 7
FIGURE 8
P1
P2
CUSTOMER
CUSTOMER ORDER NO.
S.O. NO.
418174-006
418174-006
REV. DESC: LOADED TO BUS
REV. LTR: A
VERSION: 01
TDR: 000000570390
FILE: \RAG\00013\849
REVISED: 10:16:21 12/07/2010
BY: RAGDRF
MTL: -
BALDOR
A-C MOTOR CONNECTION ACCESSORIES
SH 1 of 1

416820-002

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





(N. P. 1575-B)

REV. DESC: ADJUST TEXT DARKNESS		
REV. LTR: B	VERSION: 02	TDR: 000001285318
FILE: \RAG\00022\453	REVISED: 09:36:26 09/24/2026	BY: USJOSUL
MTL: –		

ABB

CONN DIAG – STANDARD 9 LEAD, DELTA-CONNECTED

SH1 of 1

416820-002