

ABB BALDOR RELIANCE III

Customer information packet

EM44252T-4

250HP, 3570RPM, 3PH, 60HZ, 449TS, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	449TS
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	250.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
Agency Approvals	CURUSEEV
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Current @ Voltage	268.000 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	95.8 %
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	268.0 a
Insulation Class	F
Inverter Code	Not Inverter
IP Rating	NONE
KVA Code	F
Motor Lead Quantity/Wire Size	6 @ 3/0 AWG
Motor Standards	NEMA
Motor Type	A44128M
Mounting Arrangement	F1

Part Detail

Revision	E
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A44WG2749
Layout	617427-460
Eff. date	09-25-2025
CD Diagram	416820-036
Poles	02
Leads	3#3/0 (02 per group)
Proprietary	False
Created date	04-02-2015

Number of Poles	2
Overall Length	49.71 IN
Power Factor	91
Product Family	General Industrial
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Service Factor	1.15
Shaft Diameter	2.375 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	3570 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None

Nameplate

NP2496L	
MOBIL POLYREX EM	

NP2349L

SPEC NO.	A44-7088-2749			CAT.NO.	EM44252T-4				FRAME	449TS	
HP	250	VOLTS	460	PHASE	3	DESIGN	B	TYPE	P		
RPM	3570	AMPS	268	HZ	60	AMB	40	SF	1.15		
DRIVE END BEARING	65BC03J30X		DUTY	CONT	INSUL.CLASS		F				
OPP D.E. BEARING	65BC03J30X		ENCL	TEFC	CODE	F					
SER.NO.			POWER FACTOR		91	NEMA-NOM-EFFICIENCY			95.8		
						MAX CORR KVAR	24	GUARANTEED EFFICIENCY		95	
						NEMA NOM/CSA QUOTED EFF					
						MOTOR WEIGHT					

Parts List

Part number	Description	Quantity
SA296091	SA A44-7088-2749	1.000 ea
RA282142	RA A44-7088-2749	1.000 ea
421948051	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
000692000FF	N/P	1.000 ea
000692000VD	LABEL WARNING	1.000 ea
NP2349L	SUPER-E ,SS, CURUS EEV, CC, LASER	1.000 ea
412118006A	DRAIN	2.000 ea
089490097A	BRKT 089490102WCA	1.000 ea
415072001B	CLAMP	1.000 ea
083199126RA	G28 MOLDED FAN COVER W/BAFFLE ASSEMBLY	1.000 ea
034180014DA	KEY 1/4X1/4X1-3/4 L	1.000 ea
078548001R	FAN KB 234/150 (84) 400	1.000 ea
004824015A	GREASE POLYREX EM	0.540 lb
032018020FK	HHCS 3/4-10X2-1/2 PLTD.	4.000 ea
032018008CK	HHCS 3/8-16X1L PLATED	4.000 ea
032018022CK	HHCS 3/8-16X2-3/4 PLTD	3.000 ea
415096002A	CPLG 1/8 HEX TYPE	1.000 ea
410700004F	WSHR	1.000 ea
034017014AB	LCKW 3/8 STD. PLATED	4.000 ea
034530072AB	P/NIP 1/8X9"L Threaded both ends	1.000 ea
034690005AB	PPLG 3/4 PLATED	1.000 ea
034630002AB	CPLG 1/4" PLATED	1.000 ea
034690002AB	PPLG 1/4" PLTD.	1.000 ea
034530072BB	PIPE NIPPLE,DE - 440-BS	1.000 ea
032620016LA	SOCKET SET SCREW-449	3.000 ea
034630002AB	CPLG 1/4" PLATED	1.000 ea
034530072BB	PIPE NIPPLE,DE - 440-BS	1.000 ea
034690002AB	PPLG 1/4" PLTD.	1.000 ea
702623012A	THERMAL BARRIER, G28	1.000 ea

032018004BK	HHCS 5/16-18X1/2 PLATED	3.000 ea
034000013AB	WSHR 5/16" PLATED-440	3.000 ea
089490097A	BRKT 089490102WCA	1.000 ea
032018020FK	HHCS 3/4-10X2-1/2 PLTD.	4.000 ea
032018022CK	HHCS 3/8-16X2-3/4 PLTD	3.000 ea
034530072AB	P/NIP 1/8X9"L Threaded both ends	1.000 ea
415096002A	CPLG 1/8 HEX TYPE	1.000 ea
032018006BK	HHCS 5/16-18X3/4 PLATED	3.000 ea
034017013AB	LCKW 5/16 STD. PLATED	3.000 ea
702623022A	G28 AIR DEFLECTOR DRIVE END -- PLASTIC	1.000 ea
034001013AB	FLTW BAFFLE	3.000 ea
415000115H	T/LUG #2AWG-4/0AWG	1.000 ea
032018005DL	1/2-13 X 5/8 SILICON BRONZE HHCS	1.000 ea
415915007K	GASK, 26" LAC	1.000 ea
702658001B	+C/BOX, PAINTED 440	1.000 ea
702658002A	+C/BOX CVR, PAINTED 440	1.000 ea
406056008A	GASKET, TERBD 440	1.000 ea
418153001A	GASK 440	1.000 ea
418150003A	GREASE FITTING CAP	1.000 ea
MG1025Y17	WILKOFAS, 789.701, SUPER E PEARL GOLD	0.500 ga
032018008DK	HHCS 1/2-13X1 PLATED	4.000 ea
035000001A	ALFTG 1/8" 1610-BL	1.000 ea
033512006LB	HHTTS 1/4-20X3/4 PLTD.	8.000 ea
406099000A	PLUG - FAN COVER 320-440	1.000 ea
035000001A	ALFTG 1/8" 1610-BL	1.000 ea
418150003A	GREASE FITTING CAP	1.000 ea
033775004EA	DRSCR #6-1/4 304 S.S.	2.000 ea
034180024HA	KEY 5/8X5/8X3 L	1.000 ea
604797056	400-447 FRAME 60 X 42	1.000 ea
032510026D	CARRIAGE BOLT - 440	2.000 ea
034001016AB	WSHR .562ID 1.375OD .109	2.000 ea
034001014AB	FLAT WASHER 3/8"PLATED	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
	449TS	250	P	3/60	3570	460
AMPS	DUTY	AMB °C/ INSUL.	S.F.	NEMA DESIGN	CODE LETTER	ENCL.
268	CONT	40/F	1.15	B	F	TEFC
E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES. @25 °C OHMS (BETWEEN LINES)		
433537	418143-13-NE	---	---	.00996		
PERFORMANCE						
LOAD	HP	AMPERES	RPM	% POWER FACTOR	% EFFICIENCY	
NO LOAD	0	52.6	3600	8.53	0	
1/4	62.5	82.6	3593	76.7	92.4	
2/4	125	138	3587	89.3	95.3	
3/4	188	200	3580	91.4	95.9	
4/4	250	268	3572	91.0	95.9	
5/4	312	337	3564	90.8	95.7	
SPEED TORQUE						
		RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES	
LOCKED ROTOR		0	191	702	1651	
PULL UP		2550	169	620	1371	
BREAKDOWN		3472	227	835	831	
FULL LOAD		3572	100	368	268	
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 NOM EFF = 95.8 PCT.						
		DR. BY W. L. SMITH		A-C MOTOR PERFORMANCE DATA A44WG2749-R006 ISSUE DATE 09/22/17 Page 8 of 12		
		CK. BY J. J. HARRISON				
		APP. BY W. L. SMITH				
		DATE 07/26/07				

REL S.O.

RPM 3570

S.F. 1.15

ROTOR 418143-13-NE

FRAME 449TS

VOLTS 460

NEMA DESIGN B

TEST S.O. TYPICAL DATA

HP 250

AMPS 268

CODE LETTER F

TEST DATE ---

TYPE P

DUTY CONT

ENCLOSURE TEFC

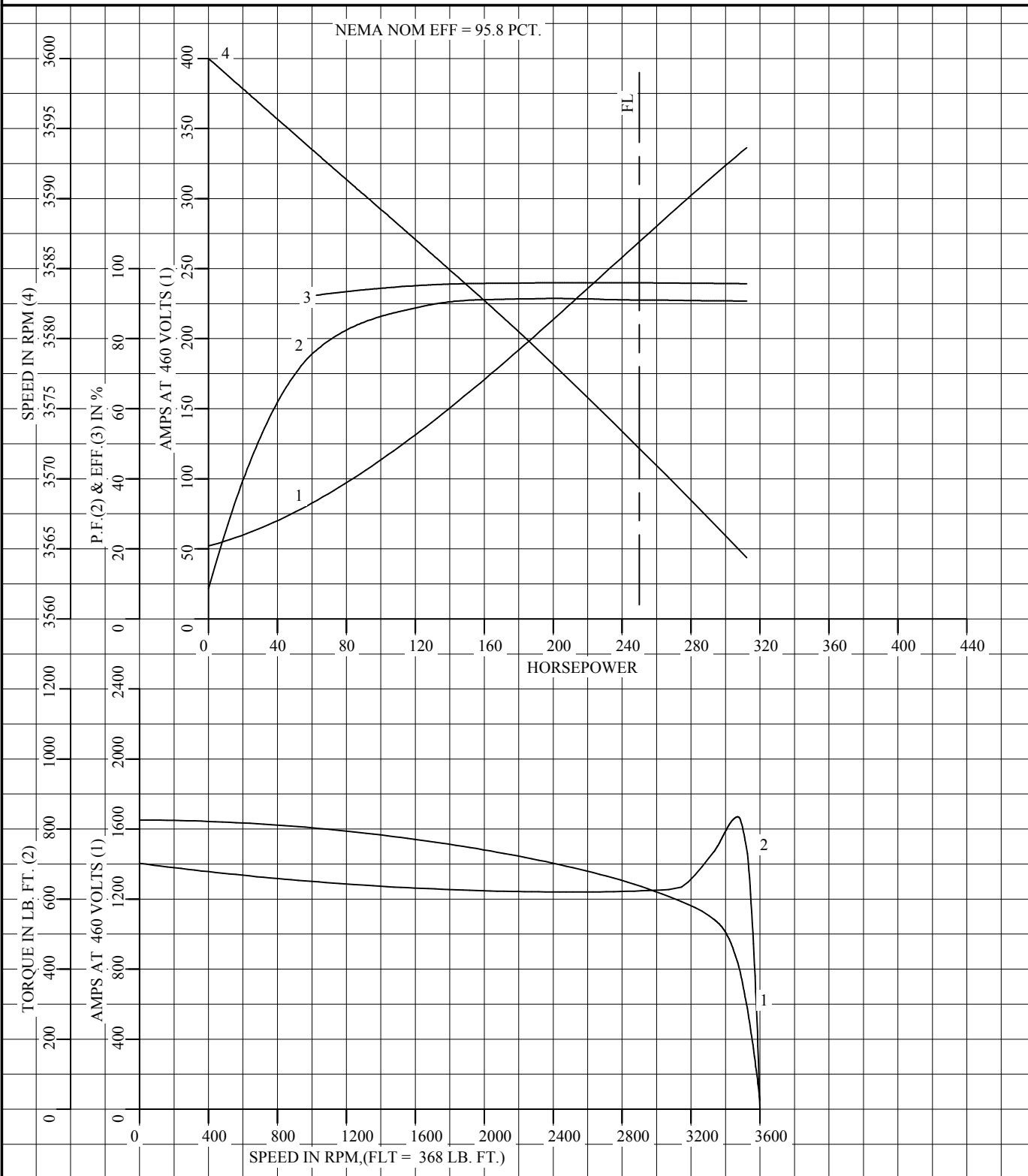
STATOR RES. @ 25 °C .00996

PHASE/HERTZ 3/60

AMB °C/INSUL 40/F

E/S 433537

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 W. L. SMITH
CK. BY J. J. HARRISON
APP. BY W. L. SMITH
DATE 07/26/07

**A-C MOTOR
PERFORMANCE
CURVES**

A44WG2749-R006
ISSUE DATE 09/22/17

Page 9 of 12

REL. S.O.

 RPM **3570**

 S.F. **1.15**

 ROTOR **418143-13-NE**

 FRAME **449TS**

 VOLTS **460**

 NEMA DESIGN **B**

 TEST S.O. **TYPICAL DATA**

 HP **250**

 AMPS **268**

 CODE LETTER **F**

 TEST DATE **---**

 TYPE **P**

 DUTY **CONT**

 ENCLOSURE **TEFC**

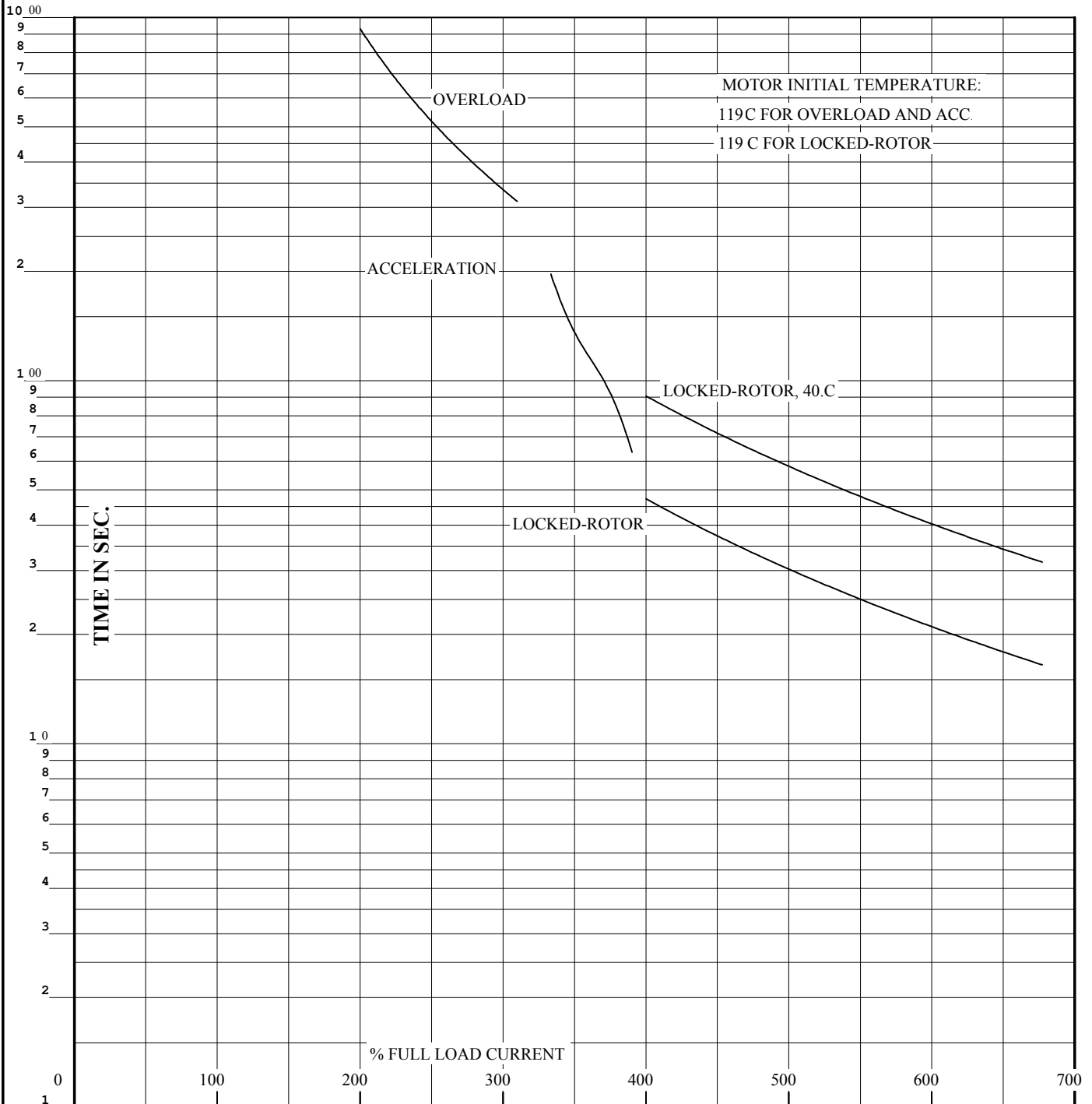
 STATOR RES. @ 25 °C **.00996**

 PHASE/HERTZ **3/60**

 AMB °C/INSUL **40/F**

 E/S **433537**

OHMS (BETWEEN LINES)



THERMAL LIMIT CURVE

REMARKS:

NEMA NOM EFF = 95.8 PCT.

 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 W.L. SMITH
 CK. BY J.J. HARRISON
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 DATE 07/26/07
**A-C MOTOR
PERFORMANCE
CURVES**
A44WG2749-R006

 ISSUE DATE 09/22/17 Page 10 of 12

617427-460

COOLING: FAN COOLED



IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY.
MAX PERMISSIBLE SHAFT RUNOUT WHEN MEASURED AT END OF STANDARD SHAFT EXTENSION IS .003" T.I.R.

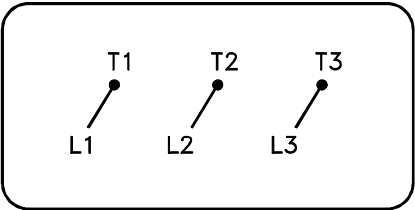
BALDOR

G449/447TS TEFC F1 FOOT SIDE/CENTER STEEL CONDUIT BOX

G449/447TS TEFC F1 FOOT SIDE/CENTER STEEL CONDUIT BOX

416820-036

A-C MOTOR
CONNECTION DIAGRAM
STANDARD 3 LEAD CONNECTED



(N.P. 1575-BA)

416820-036

REV. DESC: LOADED TO BUS, C/R 335225		
REV. LTR: -	VERSION: 00	TDR: 000000538207
FILE: \MGA\00000\682	REVISED: 11: 54: 06 04/30/2010	
MTL: -	BY: RAGRA	

BALDOR

CONN DIAG - STANDARD 3 LEAD
SH 1 of 1