

ABB BALDOR RELIANCE III

Customer information packet

EM44302T-4

300HP, 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	300.000 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	324.000 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	324.0 a
Insulation Class	F
Inverter Code	Not Inverter
IP Rating	NONE
KVA Code	G
Motor Lead Quantity/Wire Size	6 @ 2/0 AWG
Motor Standards	NEMA
Motor Type	A44128M
Mounting Arrangement	F1

Part Detail

Revision	C
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A44WG4563
Layout	617427-445
Eff. date	11-06-2020
CD Diagram	416820-036
Poles	02
Leads	3#2/0 (02 per group)
Proprietary	False
Created date	04-09-2015

Number of Poles	2
Overall Length	49.47 IN
Power Factor	90
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

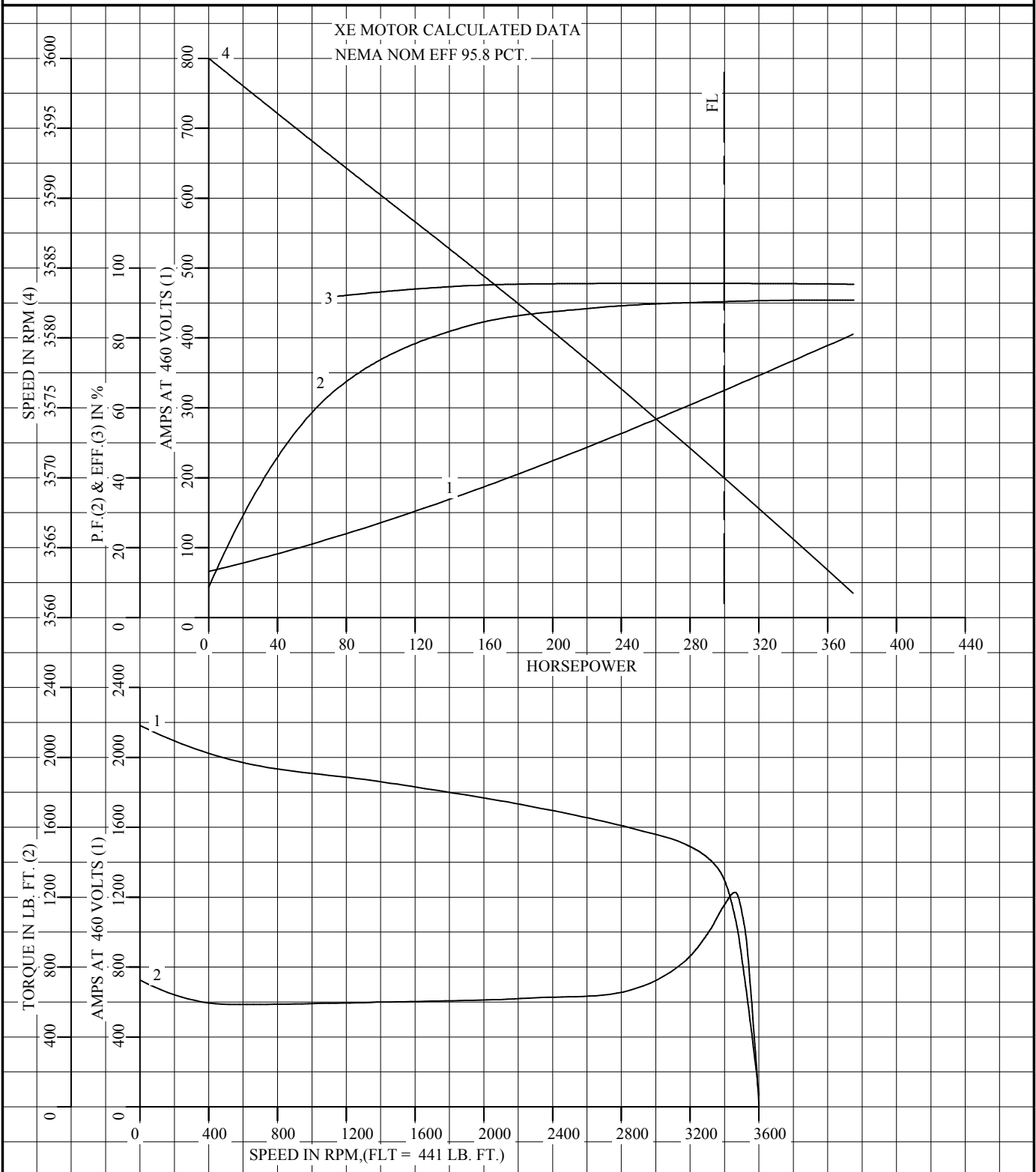
NP2496L	
MOBIL POLYREX EM	

NP2349L

SPEC NO.	A44-7108-4563			CAT.NO.	EM44302T-4				FRAME	449TS	
HP	300	VOLTS	460	PHASE	3	DESIGN	B	TYPE	P		
RPM	3570	AMPS	324	HZ	60	AMB	40	SF	1.15		
DRIVE END BEARING	65BC03J30X		DUTY	CONT	INSUL.CLASS		F				
OPP D.E. BEARING	65BC03J30X		ENCL	TEFC	CODE	G					
SER.NO.				POWER FACTOR	90	NEMA-NOM-EFFICIENCY				95.8	
						MAX CORR KVAR	34	GUARANTEED EFFICIENCY		95	
						NEMA NOM/CSA QUOTED EFF					
						MOTOR WEIGHT				2593	

REL. S.O.	FRAME	HP	TYPE	PHASE/ HERTZ	RPM	VOLTS
	449TS	300	P	3/60	3570	460
AMPS	DUTY	AMB °C/ INSUL.	S.F.	NEMA DESIGN	CODE LETTER	ENCL.
324	CONT	40/F	1.15	B	G	TEFC
E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES. @25 °C OHMS (BETWEEN LINES)		
833407	418143-015-YE	---	---	.00875		
PERFORMANCE						
LOAD	HP	AMPERES	RPM	% POWER FACTOR	% EFFICIENCY	
NO LOAD	0	65.9	3600	8.68	0	
1/4	75.0	116	3593	65.6	91.9	
2/4	150	178	3585	83.3	94.9	
3/4	225	249	3578	88.6	95.6	
4/4	300	325	3570	90.4	95.6	
5/4	375	405	3562	90.8	95.4	
SPEED TORQUE						
		RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES	
LOCKED ROTOR		0	164	725	2182	
PULL UP		540	133	586	1984	
BREAKDOWN		3462	278	1228	1081	
FULL LOAD		3570	100	441	325	
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 CALCULATED DATA NEMA NOM EFF 95.8 PCT.						
		DR. BY G. R. WEBB		A-C MOTOR PERFORMANCE DATA A44WG4563-R002 ISSUE DATE 12/22/20		
		CK. BY W. L. SMITH				
		APP. BY W. L. SMITH				
		DATE 04/01/14				
					Page 6 of 6	

REL S.O.	RPM 3570	S.F. 1.15	ROTOR 418143-015-YE
FRAME 449TS	VOLTS 460	NEMA DESIGN B	TEST S.O. TYPICAL DATA
HP 300	AMPS 324	CODE LETTER G	TEST DATE ---
TYPE P	DUTY CONT	ENCLOSURE TEFC	STATOR RES. @ 25 °C .00875
PHASE/HERTZ 3/60	AMB °C/INSUL 40/F	E/S 833407	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 G. R. WEBB
 CK. BY W. L. SMITH
 APP. BY W. L. SMITH
 DATE 04/01/14

**A-C MOTOR
PERFORMANCE
CURVES**

A44WG4563-R002
 ISSUE DATE 12/22/20

REL. S.O.

 FRAME **449TS**

 HP **300**

 TYPE **P**

 PHASE/HERTZ **3/60**

 RPM **3570**

 VOLTS **460**

 AMPS **324**

 DUTY **CONT**

 AMB °C/INSUL **40/F**

 S.F. **1.15**

 NEMA DESIGN **B**

 CODE LETTER **G**

 ENCLOSURE **TEFC**

 E/S **833407**

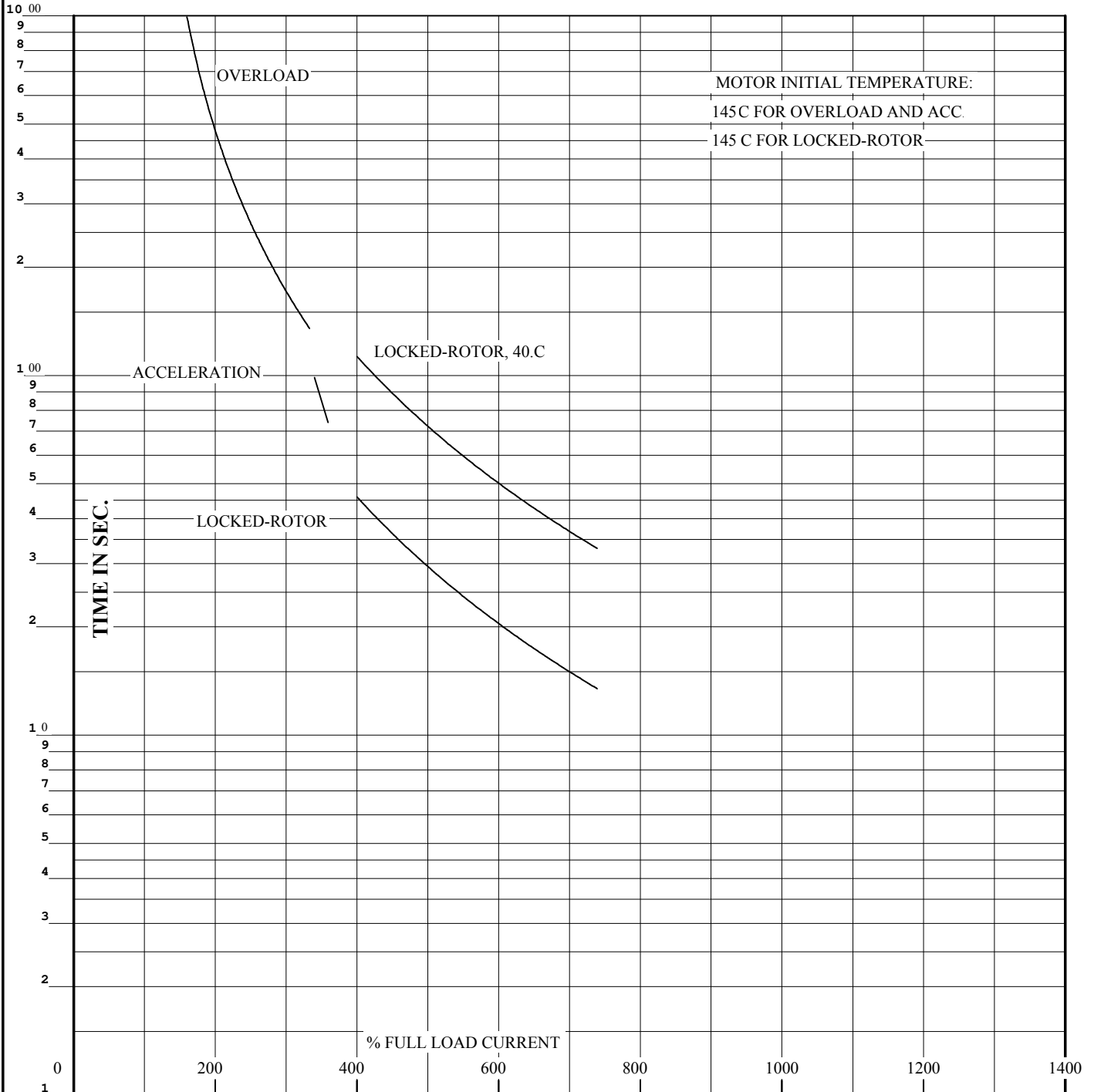
 ROTOR **418143-015-YE**

 TEST S.O. **TYPICAL DATA**

 TEST DATE **---**

 STATOR RES. @ 25 °C **.00875**

OHMS (BETWEEN LINES)



THERMAL LIMIT CURVE

REMARKS:

XE MOTOR CALCULATED DATA

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.


DR. BY	G. R. WEBB
CK. BY	W. L. SMITH
APP. BY	W. L. SMITH
DATE	04/01/14

**A-C MOTOR
PERFORMANCE
CURVES**

A44WG4563-R002

ISSUE DATE 12/22/20 Page 8 of 11

DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

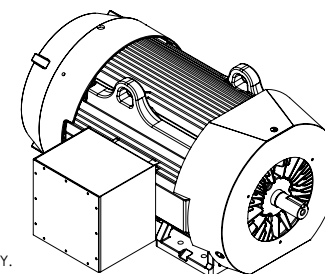
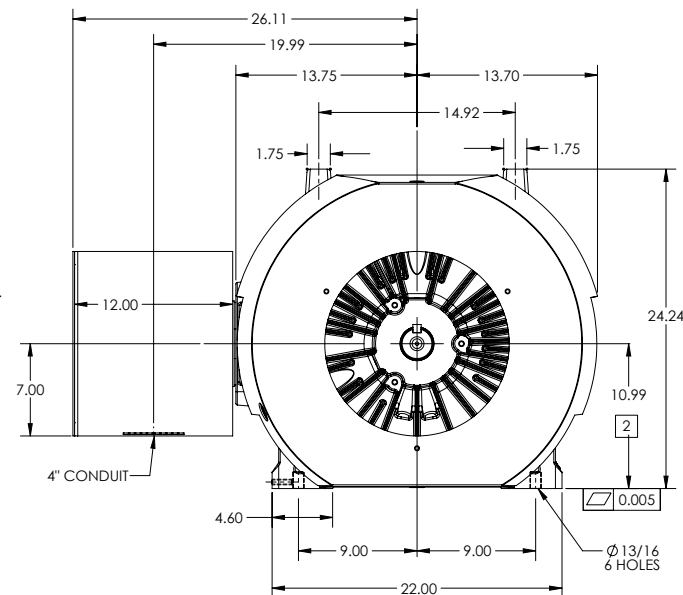
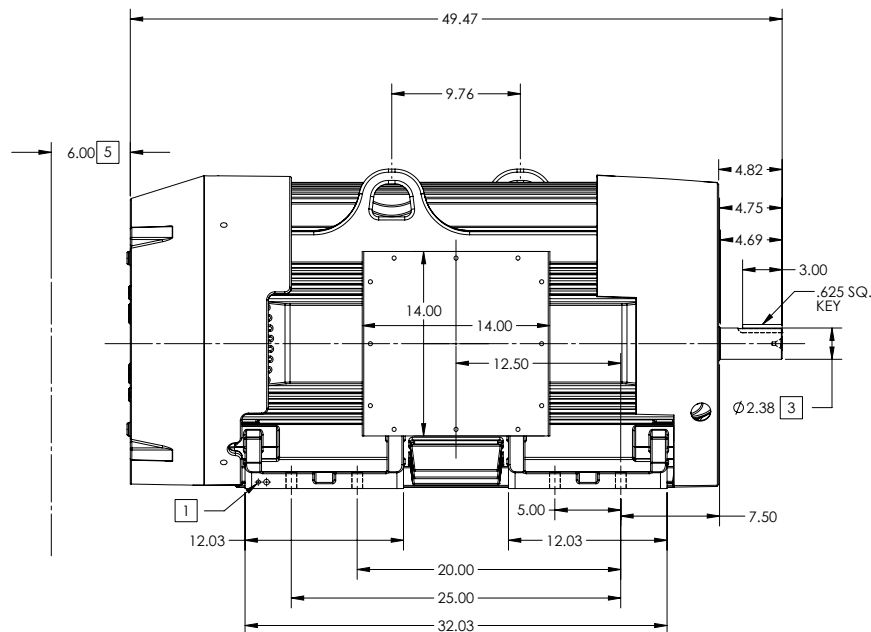
ENCLOSURE: TOTALLY ENCLOSED

FRAME 449TS ABOVE NEMA RATINGS (3600 RPM MAX)

COOLING: FAN COOLED

MOUNTING: FOOT

INCLUDES 447TS FRAME MOUNTING HOLES



[4] WEIGHT (LBS): 3080

DRIVE END AIR DEFLECTOR IS ONLY INCLUDED WHEN NECESSARY.

DIMENSIONS ARE IN INCHES

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

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 1.5% DEPENDING ON RATING.
5. OBSTRUCTION MUST NOT ENCR OACH ON AIR INLET

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.

SHEET NUMBER
1 OF 2

617427-445

REV. DESC: NEW DRAWING
REV: - VERSION: 00
MODEL NO. 617427-445
BY: RAGEC

REVISED: 11-13-38 04/02/2015

TDR: 00000918312

BALDOR

G449TS/447TS-FOOTED-SIDE/CENTER CONDUIT BOX-14X14X12

617427-445

DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

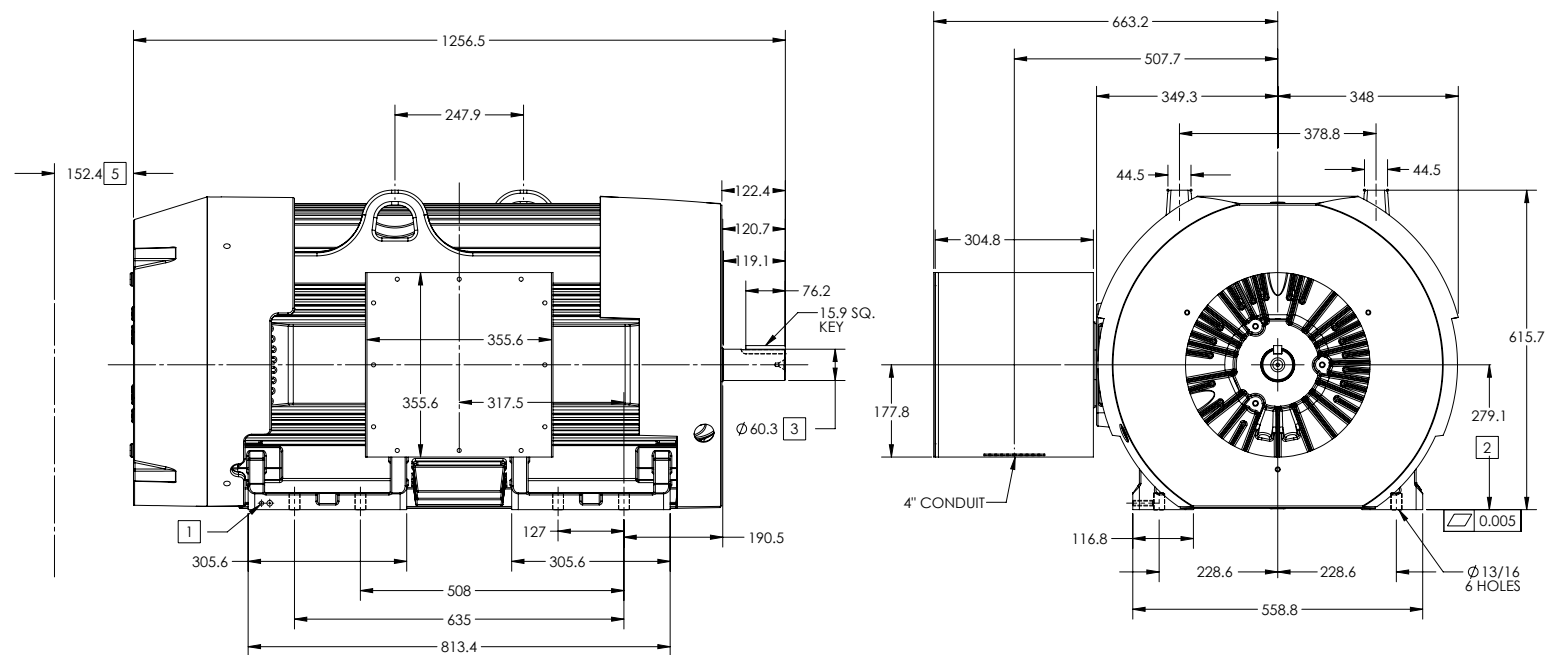
ENCLOSURE: TOTALLY ENCLOSED

FRAME 449TS ABOVE NEMA RATINGS (3600 RPM MAX)

COOLING: FAN COOLED

MOUNTING: FOOT

INCLUDES 447TS FRAME MOUNTING HOLES



1. GROUND HOLES QTY 1 1/2-13 TAP; QTY 1 3/8-16 TAP
2. VARIES +0.1-1.5
3. VARIES +.00-.03
4. MOTOR WEIGHTS MAY VARY BY 15% DEPENDING ON RATING.
5. OBSTRUCTION MUST NO ENCR OACH ON AIR INLET

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 .08 MM T.I.R. TO 127 MM DIA.

5 WEIGHT (KGS): 1400

DRIVE END AIR DEFLECTOR IS ONLY INCLUDED WHEN NECESSARY.

DIMENSIONS ARE IN MILLIMETERS

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

SHEET NUMBER
2 OF 2

5117-17427-445

REV. DESC: NEW DRAWING
REV: - VERSION: 00
MODEL NO. 617427-445
BY: RAGEC

REVISED: 11-13-38 04/02/2015

TDR: 00000918312

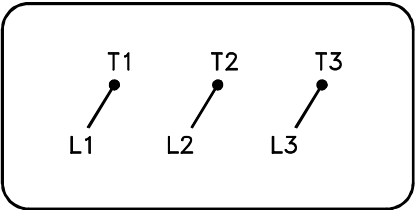
BALDOR

G449TS/447TS-FOOTED-SIDE/CENTER CONDUIT BOX-14X14X12

617427-445

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