

BALDOR® • RELIANCE 

Product Information Packet

ZDVSM4408T-4

250HP, 1790-2685RPM, 3PH, 60-90HZ, 449T, A441

Part Detail							
Revision:	H	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	A44WG0225	CD Diagram:	416820-036	Mfg Plant:	
Mech. Spec:		Layout:	617427-070	Poles:	04	Created Date:	08-27-2012
Base:		Eff. Date:	02-25-2019	Leads:	3#2/0 (02 per group)		

Specs			
Catalog Number:	ZDVSM4408T-4	Duty Rating:	CONT
Enclosure:	TEFC	Feedback Device:	ENCODER
Frame:	449T	Heater Indicator:	No Heater
Frame Material:	Iron	Insulation Class:	F
Output @ Frequency:	250.000 HP @ 90 HZ	Inverter Code:	Inverter Duty
	250.000 HP @ 60 HZ	KVA Code:	L
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	Lifting Lugs:	Standard Lifting Lugs
Voltage @ Frequency:	460.0 V @ 60 HZ	Motor Lead Quantity/Wire Size:	6 @ 2/0 AWG
	460.0 V @ 90 HZ	Motor Type:	A44128M
XP Class and Group:	None	Mounting Arrangement:	F1
XP Division:	Not Applicable	Power Factor:	87
Agency Approvals:	CCSA US	Pulley End Bearing Type:	Ball
Auxillary Box:	No Auxillary Box	Pulley Face Code:	Standard
Base Indicator:	Rigid	Shaft Ground Indicator:	No Shaft Grounding
Bearing Grease Type:	Polyrex EM (-20F +300F)	Shaft Rotation:	Reversible
Constant Torque Speed Range:	1000:1	Shaft Slinger Indicator:	No Slinger
Current @ Voltage:	272.000 A @ 460.0 V	Speed Code:	Single Speed
	277.000 A @ 460.0 V	Motor Standards:	NEMA

Design Code:	A	Starting Method:	Direct on line
Drip Cover:	No Drip Cover	Thermal Device - Bearing:	None
		Thermal Device - Winding:	Normally Closed Thermostat

Nameplate 000613007HV										
CAT NO	ZDVSM4408T-4			SPEC NO.	P44G4016					
SER.NO.				FRAME	449T					
	HP	RPM	VOLTS	AMPS	HZ	TYPE	P			
BASE	250	1790	460	277	60	SF	1.00			
MAX	250	2685	460	272	90	INSUL.CLASS	F			
DRIVE END BEARING	90BC03J30X			CONSTANT TORQUE	DUTY	CONT	AMB 40			
OPP D.E. BEARING	6318C3VL0241			1000:1	ENCL	TEFC	PHASE 3			
DESIGN NO.	A44WG0225-R001			FLUX AMPS	83.3					
MAX SPEED/RPM	3600			OVERTEMP PROT	2	WK2	84.1		POLES 4	WEIGHT

Parts List		
Part Number	Description	Quantity
SA254363	SA P44G4016	1.000 EA
RA241171	RA P44G4016	1.000 EA
000692000FF	N/P	1.000 EA
000692000VD	LABEL WARNING	1.000 EA
000613007HV	N/P BALDOR VSMMASTER	1.000 EA
421948051	LABEL, MYLAR	1.000 EA
004824015A	GREASE POLYREX EM	1.160 LB
032018008CK	HHCS 3/8-16X1L PLATED	4.000 EA
032018020FK	HHCS 3/4-10X2-1/2 PLTD.	4.000 EA
032018030DK	HHCS 1/2-13X3-3/4 PLTD.	3.000 EA
032620016LA	SOCKET SET SCREW-449	3.000 EA
032018030DK	HHCS 1/2-13X3-3/4 PLTD.	3.000 EA
034017014AB	LCKW 3/8 STD. PLATED	4.000 EA
034180014DA	KEY 1/4X1/4X1-3/4 L	1.000 EA
034530072AB	P/NIP 1/8X9"L Threaded both ends	1.000 EA
035000001A	ALFTG 1/8" 1610-BL	1.000 EA
034690002AB	PPLG 1/4" PLTD.	1.000 EA
034690005AB	PPLG 3/4 PLATED	2.000 EA
034690001AB	1/8" NPT SQHDPLG	1.000 EA
089490099A	G28 BRKT 089490098WCA KB	1.000 EA
702618004T	FAN KB 182/70 (112) 440	1.000 EA
083199082RA	G28 SHORT FAN COVER W/BAFFLE ASSEMBLY	1.000 EA
089490099A	G28 BRKT 089490098WCA KB	1.000 EA
410700004A	WSHR	1.000 EA

Parts List (continued)		
Part Number	Description	Quantity
415072001B	CLAMP	1.000 EA
415096002A	CPLG 1/8 HEX TYPE	1.000 EA
032018004BK	HHCS 5/16-18X1/2 PLATED	3.000 EA
032018006BK	HHCS 5/16-18X3/4 PLATED	3.000 EA
702623022A	G28 AIR DEFLECTOR DRIVE END -- PLASTIC	1.000 EA
032018020FK	HHCS 3/4-10X2-1/2 PLTD.	4.000 EA
034017013AB	LCKW 5/16 STD. PLATED	3.000 EA
034530072AB	P/NIP 1/8X9"L Threaded both ends	1.000 EA
035000001A	ALFTG 1/8" 1610-BL	1.000 EA
034690002AB	PPLG 1/4" PLTD.	1.000 EA
034690001AB	1/8" NPT SQHDPLG	1.000 EA
415096002A	CPLG 1/8 HEX TYPE	1.000 EA
418151014G	RETAIN RING	1.000 EA
702623013A	THERMAL BARRIER -- G28 -- BRACKET MTD	1.000 EA
032018008DK	HHCS 1/2-13X1 PLATED	4.000 EA
415915007G	GASK, LAC	1.000 FT
033512004LB	HHTTS 1/4-20X1/2 PLTD.	1.000 EA
033512006LB	HHTTS 1/4-20X3/4 PLTD.	8.000 EA
406056008A	GASKET, TERBD 440	1.000 EA
406099000A	PLUG - FAN COVER 320-440	1.000 EA
415000103D	T/LUG #4AWG-1/0AWG W/HOLE FOR .250 BOLT	1.000 EA
418153001A	GASK 440	1.000 EA
702658001B	+C/BOX, PAINTED 440	1.000 EA
702658002A	+C/BOX CVR, PAINTED 440	1.000 EA

Product Information Packet: ZDVSM4408T-4 - 250HP,1790-2685RPM,3PH,60-90HZ,449T,A441

611712053RY	TACH & HARDWARE KIT	1.000 EA
033775004EA	DRSCR #6-1/4 304 S.S.	2.000 EA
034180054KA	7/8 SQ X 6.75 KEY	1.000 EA
N424001803DBF	LEAD SET 1-1 AWG 6-DB 447/9 FR 102 IN	2.000 EA
MG1025N19	WILKO 778.50 BLUE GREEN - 55 GAL DRUMS	0.500 GA
604799003C	PLASTIC BAG 42X32X46	1.000 EA
033300014AC	HEX NUT, SHIPPING - 400	2.000 EA
034001016AB	WSHR .562ID 1.375OD .109	2.000 EA
034001014AB	FLAT WASHER 3/8"PLATED	2.000 EA
032510026D	CARRIAGE BOLT - 440	2.000 EA
604797032	447/449 WIDE SHIPPING SKID	1.000 EA

REL. S. O. - 449T
 FRAME 449T
 HP 250
 BASE SPEED 1790
 PHASE/HERTZ 3/60

VOLTS 460
 AMPS 277
 DUTY CONT
 S.F. 1.00
 AMB °C/INSUL 40/F

ENCLOSURE 277
 MAX SAFE RPM 3600
 IM (AMPS) 83.3
 P.F. @NL/FL .061/.881
 WK² (LB-FT²) 84.1

TEFC
 WYE CONN EQ CKT OHMS PER PHASE (AT BASE RATING, 25 °C)
 R1 .00598 X1 .0788
 R2 .00435 X2 .0795
 XM 2.72

RATED FULL LOAD DATA

	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
BASE SPEED	1790	250	733	460	60	277
MAX SPEED	2684	250	489	460	90	272
MIN SPEED	0	0	733	5.90	.332	277


LOAD PERFORMANCE AT BASE SPEED

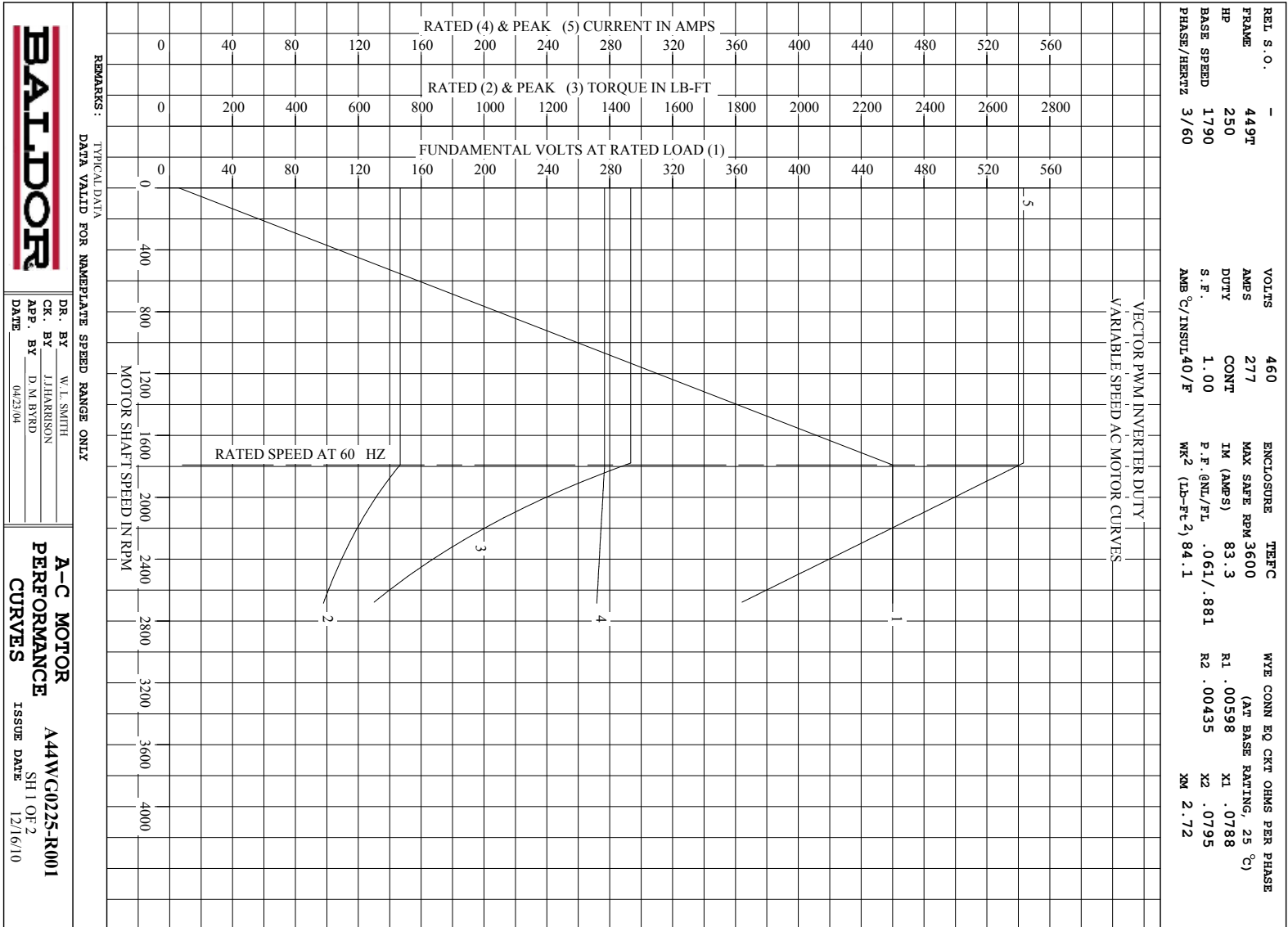
	RPM	HP	TORQUE LB-FT	FUND VOLTS	FREQ-HZ	AMPS
NO LOAD	1800	0	0	460	60	83.3
1/4	1798	62.5	183	460	60	117
1/2	1795	125	366	460	60	163
3/4	1793	187	549	460	60	217
FULL LOAD	1790	250	733	460	60	277
O/L	1778	497	1467	460	60	543

BLOWER DATA

VOLTS	PH/HZ	FL AMPS	LR AMPS	FRAME	CFM

REMARKS: TYPICAL DATA
 VECTOR PWM INVERTER DUTY

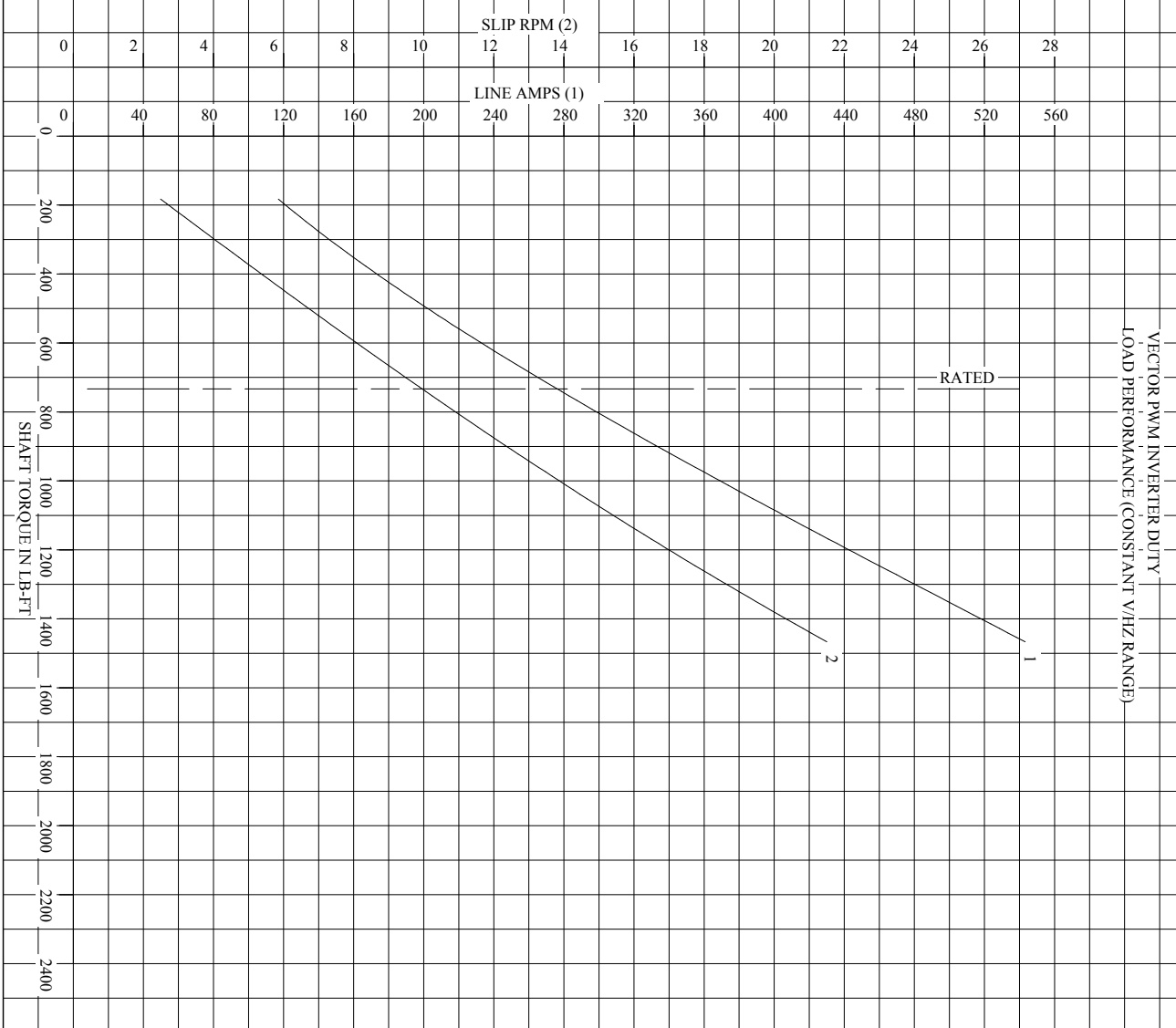
	DR. BY	M. L. SMITH	A-C MOTOR PERFORMANCE DATA
	CK. BY	J. J. HARRISON	
	APP. BY	D. M. BYRD	A44WG0225-R001 ISSUE DATE 12/16/10
	DATE	04/23/04	



DR. BY W. L. SMITH
 CK. BY J. HARRISON
 APP. BY D. M. BYRD
 DATE 04/23/04

A-C MOTOR PERFORMANCE CURVES
 A44WG0225-R001
 SH 1 OF 2
 ISSUE DATE 12/16/10

REL. S. O.	-	VOLTS	460	ENCLOSURE	TIEFC	WYE CONN EQ CKT OHMS PER PHASE
FRAME	449T	AMPS	277	MAX SAFE RPM	3600	(AT BASE RATING, 25 °C)
HP	250	DUTY	CONT	IM (AMPS)	83.3	X1 .0788
BASE SPEED	1790	S.F.	1.00	P.F. @NL/FL	.061/.881	R1 .00598 X2 .0795
PHASE/HERTZ	3/60	AMB C/INSUL	40/F	WK ² (LB-FT ²)	84.1	XM 2.72



REMARKS: TYPICAL DATA
DATA VALID FOR NAMEPLATE SPEED RANGE ONLY



DR. BY W. L. SMITH
CK. BY J. HARRISON
APP. BY D. M. BYRD
DATE 04/23/04

A-C MOTOR
PERFORMANCE
CURVES
A44WG0225-R001
SH 2 OF 2
ISSUE DATE 12/16/10

DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

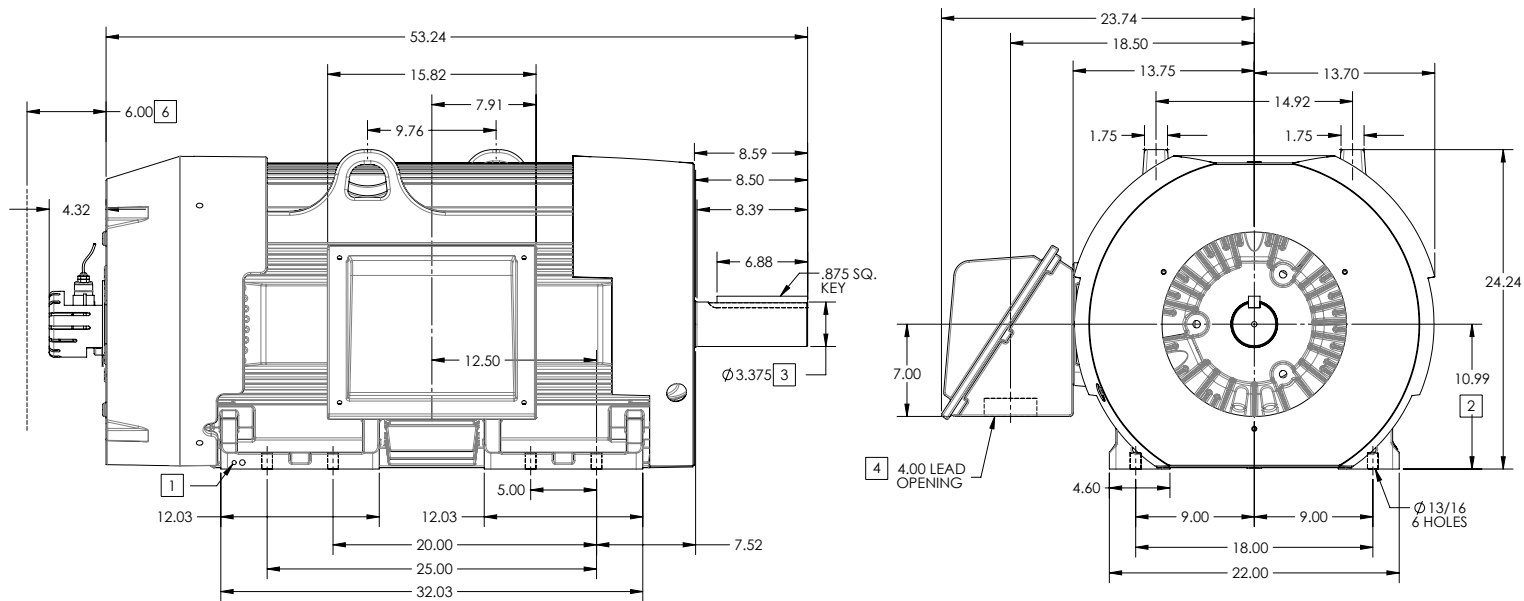
ENCLOSURE: TOTALLY ENCLOSED

FRAME 449T ABOVE NEMA RATINGS (1800 RPM MAX)

COOLING: FAN COOLED

MOUNTING: FOOT

INCLUDES 447T FRAME MOUNTING HOLES
WITH BEI HS-35 ENCODER



1. GROUND HOLES QTY 1 1/2-13 TAP; QTY 1 3/8-16 TAP
2. VARIES +.00,-.06
3. VARIES +.00,-.001
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 NO ENCROACH 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.

5 WEIGHT (LBS): 3080

DRIVE END AIR DEFLECTOR IS ONLY INCLUDED WHEN NECESSARY.

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

0107-1747-19

REV. DESC: INITIAL RELEASE	REVISED: 03-24-08/24-2012	TDR: 00000761412
REV: -	VERSION: 00	
MODEL NO. 617427-070		
BY: MGHM22		

BALDOR

G449T-447T STD - FOOTED - SIDE-CENTER C/B BEI HS-35 ENCODER

DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

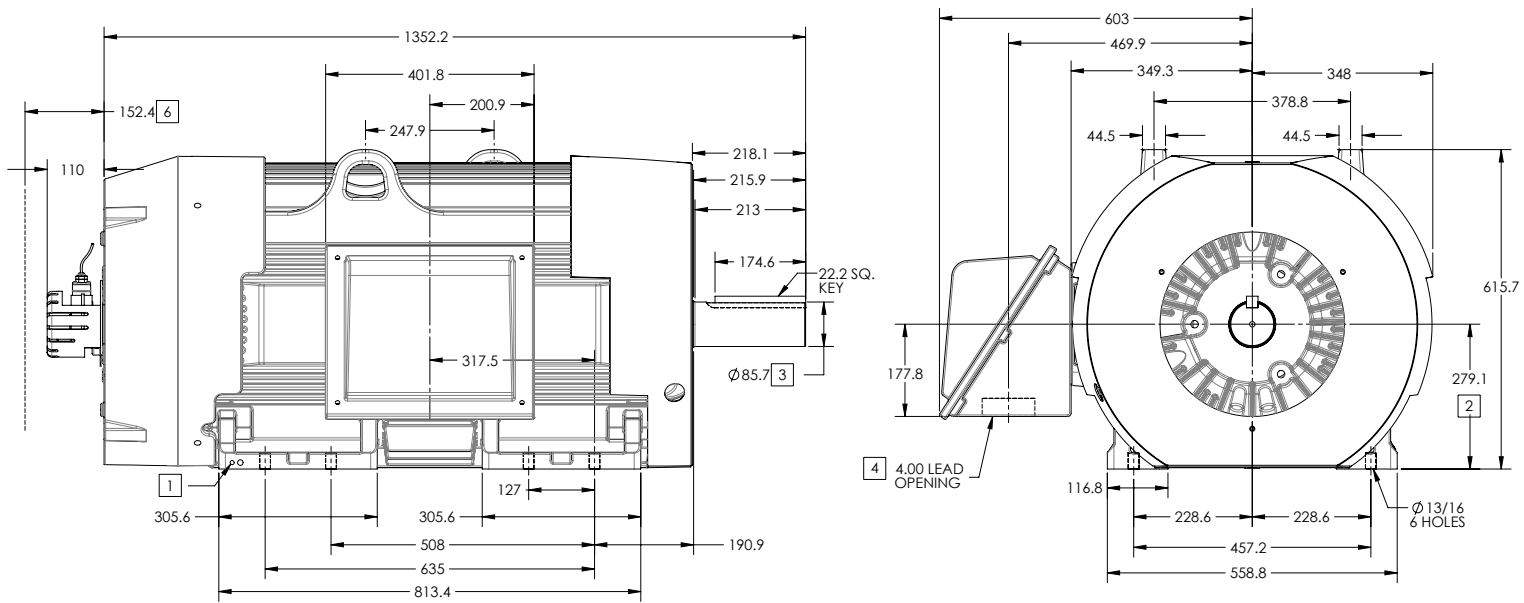
ENCLOSURE: TOTALLY ENCLOSED

FRAME 449T ABOVE NEMA RATINGS (1800 RPM MAX)

COOLING: FAN COOLED

MOUNTING: FOOT

INCLUDES 447T FRAME MOUNTING HOLES
WITH BEI HS-35 ENCODER



1. GROUND HOLES QTY 1 1/2-13 TAP; QTY 1 3/8-16 TAP
2. VARIES +.00,-.06
3. VARIES +.00,-.001
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 NO ENCROACH 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; 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

0107-1747-119

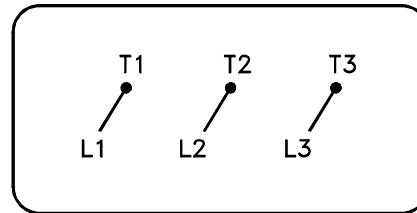
REV. DESC: INITIAL RELEASE	VERSION: 00	REVISED: 03-24-08/24-2012	TDR: 00000761412
MODEL NO. 617427-070			
BY: MGHMZZ			

BALDOR

G449T-447T STD - FOOTED - SIDE-CENTER C/B BEI HS-35 ENCODER

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