

**BALDOR® • RELIANCE** 

**Product Information Packet**

**SUM72506-4**

**25HP, 1160RPM, 3PH, 60HZ, 250TY, TENV, FOOTLE**

Part Detail							
Revision:	-	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	W01308A A 004	CD Diagram:	416820-002	Mfg Plant:	
Mech. Spec:		Layout:	066930-018	Poles:	06	Created Date:	04-09-2015
Base:		Eff. Date:	04-13-2015	Leads:			

Specs			
Catalog Number:	SUM72506-4	Duty Rating:	15 MIN
Enclosure:	XPNV	Heater Indicator:	No Heater
Frame:	250TY	Insulation Class:	F
Frame Material:	Iron	Inverter Code:	Inverter Ready
Output @ Frequency:	25.000 @ 60 HZ	KVA Code:	G
Voltage @ Frequency:	230 V @ 60 HZ	Lifting Lugs:	Vertical Lifting Lugs
	460 V @ 60 HZ	Motor Type:	M
XP Class and Group:	CLI GP C,D	Mounting Arrangement:	V1
XP Division:	Division I	Product Family:	Other
Agency Approvals:	CCSA US	Pulley End Bearing Type:	Ball
	CSA	Pulley Face Code:	D-Flange
	UL	Shaft Rotation:	Reversible
Base Indicator:	No Mounting	Shaft Slinger Indicator:	No Slinger
Bearing Grease Type:	Polyrex EM (-20F +300F)	Speed Code:	Single Speed
Current @ Voltage:	35.2 A @ 460 V	Motor Standards:	NEMA
	70.4 A @ 230 V	Starting Method:	Direct on line
Design Code:	B	Thermal Device - Winding:	Normally Closed Thermostat
Drip Cover:	No Drip Cover	XP Temp Code:	T3C

Nameplate 000613007AC	
CLASS I GROUP	C D X
CLASS II GROUP	X X X
OPERATING TEMP CODE	T3C
NO.	

<b>Nameplate 000613007MN</b>										
<b>CAT NO</b>	SUM72506-4		<b>SPEC NO.</b>	P25G2712						
<b>HP</b>	25	<b>AMPS</b>	70.4/35.2		<b>VOLTS</b>	230/ 460		<b>DESIGN</b>	B	
<b>FRAME SIZE</b>	X0250TY	<b>RPM</b>	1160		<b>HZ</b>	60	<b>AMB</b>	40	<b>SF</b>	1.15
<b>D.E. BRG.</b>	60BC03JPP30A		<b>PH</b>	3	<b>DUTY</b>	*		<b>INSUL</b>	F	
<b>O.D.E. BRG.</b>	40BC02JPG30A		<b>TYPE</b>	P	<b>ENCL</b>	TENV		<b>CODE</b>	G	
			<b>POWER FACTOR</b>			<b>NEMA-NOM-EFF</b>				
			<b>MAX CORR KVAR</b>			<b>GUARANTEED EFFICIENCY</b>				
					<b>NEMA NOM/CSA QUOTED EFF @</b>			<b>100% LOAD</b>		
<b>SER.NO.</b>					<b>MOTOR WEIGHT</b>	510	<b>LBS.</b>			
	*15 MIN IN AIR ;SUB.IN									
	WATER/SEWAGE ONLY; FINAL CONN									
	AT 460V SEE MANUAL FOR									

<b>Nameplate 000613007MR</b>										
<b>CAT NO</b>	SUM72506-4		<b>SPEC NO.</b>	P25G2712						
<b>HP</b>	25	<b>AMPS</b>	70.4/35.2		<b>VOLTS</b>	230/ 460		<b>DESIGN</b>	B	
<b>FRAME SIZE</b>	X0250TY	<b>RPM</b>	1160		<b>HZ</b>	60	<b>AMB</b>	40	<b>SF</b>	1.15
<b>D.E. BRG.</b>	60BC03JPP30A		<b>PH</b>	3	<b>DUTY</b>	*		<b>INSUL</b>	F	
<b>O.D.E. BRG.</b>	40BC02JPG30A		<b>TYPE</b>	P	<b>ENCL</b>	TENV		<b>CODE</b>	G	
			<b>POWER FACTOR</b>			<b>NEMA-NOM-EFF</b>				
			<b>MAX CORR KVAR</b>			<b>GUARANTEED EFFICIENCY</b>				
					<b>NEMA NOM/CSA QUOTED EFF @</b>			<b>100% LOAD</b>		
<b>SER.NO.</b>					<b>MOTOR WEIGHT</b>	510	<b>LBS.</b>			
	*15 MIN IN AIR ;SUB.IN									
	WATER/SEWAGE ONLY; FINAL CONN									
	AT 460V SEE MANUAL FOR									

Nameplate 000692000MB	
MAXDEPTH	

Nameplate 000692000MB	
MAXDEPTH	

Parts List		
Part Number	Description	Quantity
SA297361	SA P25G2712	1.000 EA
RA283650	RA P25G2712	1.000 EA
000613007AC	UL NAMEPLATE FOR HAZARDOUS LOCATIONS	1.000 EA
000613007MN	NP,MEDIUM AC,NO CERT,STD INDUSTRIAL	1.000 EA
000613007MR	NP, MEDIUM AC, CSA, STD INDUSTRIAL	1.000 EA
000692000EJ	NAME PLATE	1.000 EA
000901001AA	LABEL WARNING	1.000 EA
034692002AE	HCSPP 1/4" 304 S.S.	1.000 EA
004824015A	GREASE POLYREX EM	1.000 LB
032018014DG	HHCS1/2-13X1-3/4 3165SS	4.000 EA
032130010DC	HSCHS 1/2-13X1-1/4 304SS	4.000 EA
032620020JD	HSSS 10-24X5/8L 304S.S.	1.000 EA
034141225AC	RING, RETAINING	1.000 EA
034692003AE	PPLG 3/8" 304 S.S.	2.000 EA
047174005D	SNAP RING	1.000 EA
064262012D	SEAL	1.000 EA
064262012E	SEAL	1.000 EA
088210001AB	BRKT,DE,250SUB 88210-1WB	1.000 EA
088211001AA	PLTE 250 88211-1WB	1.000 EA
413412004A	SUBM MOISTURE PROBE	2.000 EA
413412005T	LEAD WIRE ASSY (BLANKE	1.000 EA
413480001R	RESISTOR ASSEMBLY-BLANKET	1.000 EA
421900168FU	ORING	1.000 EA
421900168FU	ORING	1.000 EA



<b>Parts List (continued)</b>		
<b>Part Number</b>	<b>Description</b>	<b>Quantity</b>
603762001AA	LABRYNTH BLKT	1.000 EA
001575000B	WIRING DIAGRAM	1.000 EA
032018006BM	HHCS 5/16-18X3/4 PLTGRN.	1.000 EA
032018010CG	HHCS 3/8-16X1-1/4L 316SS	4.000 EA
421900092FU	ORING	1.000 EA
424476003WA	WIRING DIAGRAM MEDIUMA	1.000 EA
700385014P	CCA #2 25' 210/250	1.000 EA
033775004EA	DRSCR #6-1/4 304 S.S.	4.000 EA
034180018FD	KEY 3/8X3/8X2-1/4L 303SS	1.000 EA
000692000MB	BALDOR RELIANCE MOTOR DATA NAMEPLATE	1.000 EA
000692000MB	BALDOR RELIANCE MOTOR DATA NAMEPLATE	1.000 EA
088209001AB	BRKT,DE,250SUB 88209-1WCD	1.000 EA
421900168FU	ORING	1.000 EA
004824018AF	SHELL ROTELLA OIL 10W	3.500 LB
032018008BG	HHCS 5/16-18X1 BRASS-447	3.000 EA
032018014DG	HHCS1/2-13X1-3/4 316SS	4.000 EA
000901001AA	LABEL WARNING	1.000 EA
B3630-9	SUBM THERMOSTAT TAG	1.000 EA
B-3664002	TAG, (NON REGREASABLE)	1.000 EA

REL. S.O.	FRAME	HP	TYPE	PHASE/HERTZ	RPM	VOLTS
	250TY	25	P	3/60	1160	230/460
AMPS	DUTY	AMB °C/ INSUL.	S.F.	NEMA DESIGN	CODE LETTER	ENCL.
70.4/35.2	*	40/F	1.15	B	G	SUB
E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES. @25 °C (BETWEEN LINES)		
424656	418138074RE	---	---	.139/.559		

PERFORMANCE


LOAD	HP	AMPERES	RPM	INPUT KW	% POWER FACTOR	% EFFICIENCY
NO LOAD	0	17.0	1200	1.10	8.10	0
1/4	6.25	18.8	1191	5.85	39.1	79.8
2/4	12.5	22.7	1182	10.8	59.9	86.3
3/4	18.7	28.3	1172	16.0	71.0	87.4
4/4	25.0	35.2	1161	21.5	76.6	86.7
5/4	31.2	43.2	1147	27.4	79.6	85.1

SPEED TORQUE

	RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES
LOCKED ROTOR	0	172	194	182
PULL UP	240	170	193	178
BREAKDOWN	1024	250	283	109
FULL LOAD	1161	100	113	35.2

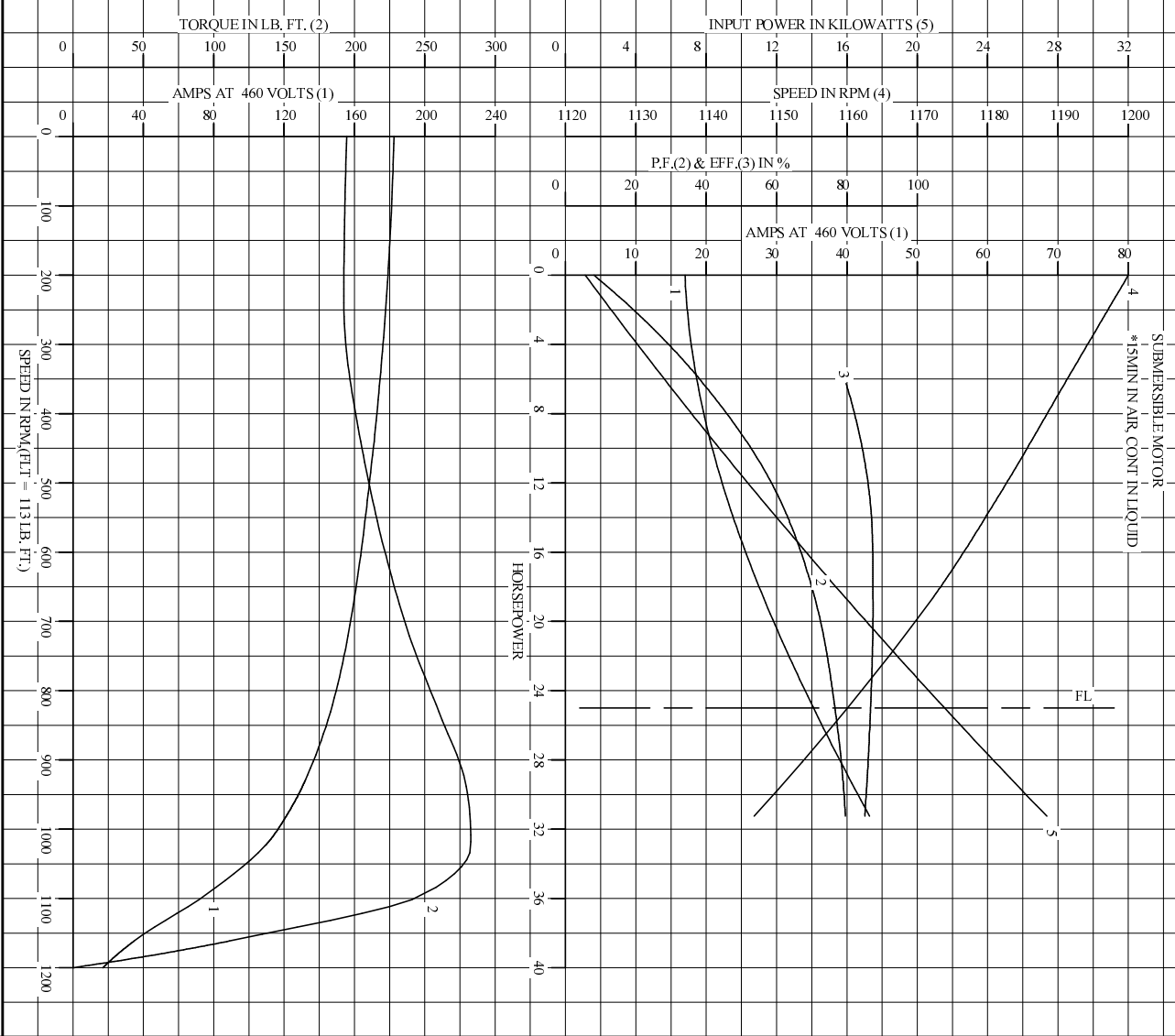
AMPERES SHOWN FOR 460. VOLT CONNECTION. IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE

REMARKS: CALCULATED DATA  
SUBMERSIBLE MOTOR  
\*15MIN IN AIR, CONT IN LIQUID

	DR. BY D. M. BYRD	<b>A-C MOTOR</b> <b>PERFORMANCE DATA</b> W01308-A-A004 ISSUE DATE 07/25/07
	CK. BY T. S. WILLIAMS APP. BY D. M. BYRD DATE 07/25/07	

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REL. S.O.	250TY	RPM 1160	S.F. 1.15	ROTOR 418138074RE
FRAME	250TY	VOLTS 230/460	NEMA DESIGN B	TEST S.O. CALCULATED DATA
HP	25	AMPS 70.4/35.2	CODE LETTER G	TEST DATE ---
TYPE	P	DUTY *	ENCLOSURE SUB	STATOR RES. @ 25 °C .139/.559
PHASE/HERTZ	3/60	AMB °C/INSUL 40/F	E/S 424656	OHMS (BETWEEN LINES)



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

	DR. BY D.M.BRAD	<b>A-C MOTOR</b> <b>PERFORMANCE</b> <b>CURVES</b>	<b>W01308-A-A004</b> ISSUE DATE 07/25/07
	CK. BY T.S.WILLIAMS APP. BY D.M.BRAD DATE 07/25/07		

Printed on 11/20/07 16:07 @ umghengdev1

066930-018

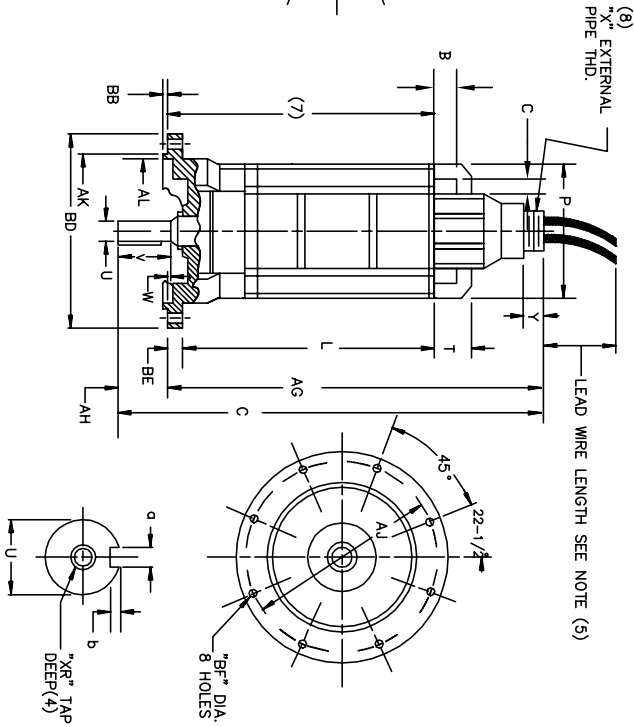
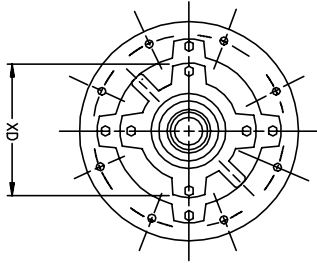
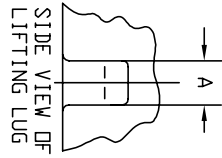
# DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION  
ENCLOSURE: TOTALLY ENCLOSED

SUBMERSIBLE

FRAMES 210TY THRU 320TY

066930-018



DIMENSIONS ARE IN INCHES. SEE SHEET 2 FOR MILLIMETERS.

FRAME	C	L	P	T	U(3)	V	W	AG	AH	AJ	AK (6)	AL	A	B	C
210TY	31.69	21.12	11.50	2.25	1.4380	2.00	.44	30.12	1.56	14.12	13.125	12.00	.88	1.50	1.75
250TY	37.34	23.63	12.75	3.50	1.7500	3.31	.28	34.31	3.03	16.00	15.000	14.00	.75	2.25	2.12
320TY	43.12	24.69	15.75	4.25	2.500	3.19	2.12	37.81	5.31	17.25	16.000	15.25	1.25	2.25	1.50

FRAME	BD(2)	BE	BF	XR(4)	X (8)	Y	XD	BB	B	LENGTH	WEIGHT
210TY	15.250	.75	.56	5/8-11	2-1/2-8	1.25	7.75	.25	.375	.19	1.12
250TY	17.000	.88	.69	5/8-11	2-1/2-8	1.25	7.75	.25	.375	.19	2.25
320TY	18.750	.88	.69	3/4-10	3-8	1.25	10.88	.25	.500	.25	3.00

- (1) SPECIAL DIMENSIONS ON THIS LINE.
- (2) "BD" VARIES ±.010.
- (3) "U" VARIES — UP TO 1.625 DIA. +.0000, —.0005  
1.625 DIA. AND LARGER +.000, —.001.
- (4) TAP DEPTH ON 210TY THRU 250TY IS 1.38"  
TAP DEPTH ON 320TY IS 1.50"
- (5) LEAD WIRE LENGTH AS SPECIFIED ON CERTIFICATION
- (6) "AK" VARIES +.000, —.002
- (7) MINIMUM SUBMERGED DEPTH.

FACE RUNOUT AND ECCENTRICITY .008 MAX. T.I.R.  
PROTECTIVE CONDUIT FURNISHED BY CUSTOMER.  
(8) 3" — 8 PIPE THREAD SUPPLIED WITH CABLE  
SIZES NO. 4 AND LARGER.

FRAME \_\_\_\_\_ TYPE \_\_\_\_\_ CERTIFIED FOR \_\_\_\_\_ RPM \_\_\_\_\_ PH \_\_\_\_\_ HZ \_\_\_\_\_ VOLTS \_\_\_\_\_  
ORDER \_\_\_\_\_ ITEM \_\_\_\_\_ HP \_\_\_\_\_ APPROVED BY \_\_\_\_\_ DATE \_\_\_\_\_  
RELIANCE SALES ORDER \_\_\_\_\_

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

REV. LTR: D	VERSION: 04	TDR: 000000876933
FILE: \RGG\00006\320	REVISED: 08:13:18 10/21/2014	BY: RGGWT
MTL: —		

**BALDOR**

DIMENSION SHEET DUTY MASTER A/C MOTORS

SH 1 of 2

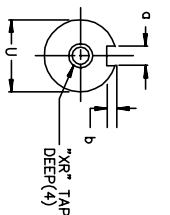
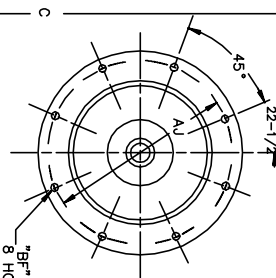
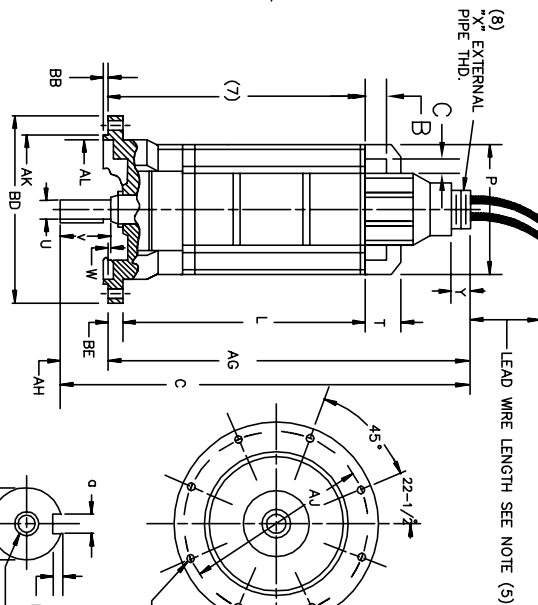
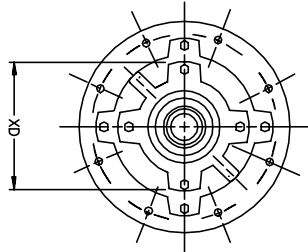
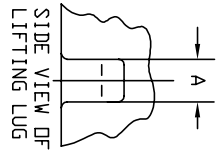
066930-018

**DUTY MASTER ALTERNATING CURRENT MOTORS**

SQUIREL-CAGE INDUCTION  
ENCLOSURE: TOTALLY ENCLOSED  
SUBMERSIBLE

FRAMES 210TY THRU 320TY

066930-018



DIMENSIONS ARE IN MILLIMETERS. SEE SHEET 1 FOR INCHES.

FRAME	C	L	P	T	U(3)	V	W	AG	AH	AJ	AK (6)	AL	LINE DIMENSIONS
210TY	804.9	536.4	292.1	57.1	36.525	50.8	11.2	765.0	39.6	358.6	333.38	304.8	22.3 36.1 44.4
250TY	948.4	600.2	323.8	88.9	44.45	84.1	7.1	871.5	77.0	406.4	381.00	355.6	19.0 57.1 53.8
320TY	1095.2	627.1	400.0	108.0	63.50	81.0	53.8	960.4	134.9	438.1	406.40	387.3	31.7 57.1 38.1

FRAME	BD(2)	BE	BF	YR(4,9)	X (6,9)	Y	X0	BB	KEYWAY	WEIGHT (KG)
210TY	387.35	18.0	14.2	5/8-11	2-1/2-8	31.7	198.8	6.4	9.52 4.8	143
250TY	431.80	22.4	17.5	5/8-11	2-1/2-8	31.7	198.8	6.4	9.52 4.8	340
320TY	476.29	22.4	17.5	3/4-10	3-8	31.7	276.4	6.4	12.70 6.4	521

- (1) SPECIAL DIMENSIONS ON THIS LINE.
- (2) "BD" VARIES ±25
- (3) "U" VARIES — [IP TO 41.28 DIA. +.000, -.013  
41.28 DIA. AND LARGER +.000, -.025.
- (4) TAP DEPTH ON 210TY THRU 250TY IS 35MM.  
TAP DEPTH ON 320TY IS 38MM.
- (5) LEAD WIRE LENGTH AS SPECIFIED ON CERTIFICATION
- (6) "AK" VARIES +.000, -.050
- (7) MINIMUM SUBMERGED DEPTH.
- (8) FACE RUNOUT AND ECCENTRICITY .20 MAX. T.I.R.  
PROTECTIVE CONDUIT FURNISHED BY CUSTOMER.
- (9) 3" — 8 PIPE THREAD SUPPLIED WITH CABLE  
SIZES NO. 4 AND LARGER.
- (9) DIMENSIONS IN INCHES.

sh2

FRAME— TYPE— CERTIFIED FOR—  
 ORDER— ITEM— HP— RPM— PH— HZ— VOLTS—  
 RELIANCE SALES ORDER— APPROVED BY— DATE—

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

REV. DESC: MOVE V DIM. TO CORRECT POSITION (SH1)		
REV. LTR: D	VERSION: 04	TDR: 000000876933
FILE: \RGG\00006\320	REVISED: 08:13:18 10/21/2014	BY: RGGWT
MTL: —		

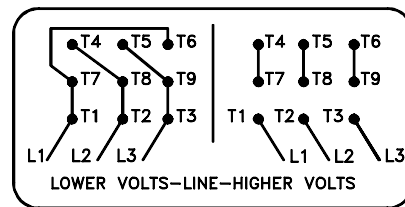
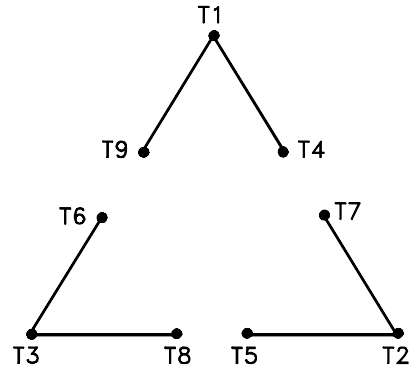
**BALDOR**

DIMENSION SHEET DUTY MASTER A/C MOTORS

SH 2 of 2

416820-002

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



(N.P. 1575-B)

416820-002

REV. DESC: LOADED TO BUS, C/R 335225		
REV. LTR: -	VERSION: 00	TDR: 000000538207
FILE: \MGA\00000\661	REVISED: 10: 47: 51 04/30/2010	
MTL: -	BY: RAGRA	

**BALDOR**

CONN DIAG - STANDARD 9 LEAD, DELTA-CONNECTED

SH 1 of 1