

BALDOR® • ***RELIANCE***

Product Information Packet

SUM72006-4

20HP, 1160RPM, 3PH, 60HZ, 250TY, TENV, FOOTLE

Part Detail							
Revision:	-	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Prod. Type:		Elec. Spec:	W01279-A-A007	CD Diagram:	416820-2
Enclosure:	TENV	Mfg Plant:		Mech. Spec:		Layout:	066930-018
Frame:	250TY	Mounting:	V1	Poles:	06	Created Date:	04-09-2015
Base:		Rotation:	R	Insulation:	F	Eff. Date:	04-13-2015
Leads:						Replaced By:	
Literature:		Elec. Diagram:					

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

Nameplate 000613007MN										
CAT NO	SUM72006-4	SPEC NO.	P25G2710							
HP	20	AMPS	54.8/27.4		VOLTS	230/ 460		DESIGN	B	
FRAME SIZE	X0250TY	RPM	1160		HZ	60	AMB	40	SF	1.15
D.E. BRG.	60BC03JPP30A		PH	3	DUTY	*		INSUL	F	
O.D.E. BRG.	40BC02JPG30A		TYPE	P	ENCL	TENV		CODE	G	
			POWER FACTOR		NEMA-NOM-EFF					
			MAX CORR KVAR		GUARANTEED EFFICIENCY					
					NEMA NOM/CSA QUOTED EFF @				100% LOAD	
SER.NO.					MOTOR WEIGHT	505		LBS.		
	*15 MIN IN AIR ;SUB.IN									
	WATER/SEWAGE ONLY; FINAL CONN									
	AT 460V SEE MANUAL FOR									

Nameplate 000613007MR										
CAT NO	SUM72006-4		SPEC NO.	P25G2710						
HP	20	AMPS	54.8/27.4		VOLTS	230/ 460		DESIGN	B	
FRAME SIZE	X0250TY	RPM	1160		HZ	60	AMB	40	SF	1.15
D.E. BRG.	60BC03JPP30A		PH	3	DUTY	*		INSUL	F	
O.D.E. BRG.	40BC02JPG30A		TYPE	P	ENCL	TENV		CODE	G	
			POWER FACTOR			NEMA-NOM-EFF				
			MAX CORR KVAR			GUARANTEED EFFICIENCY				
					NEMA NOM/CSA QUOTED EFF @			100% LOAD		
SER.NO.					MOTOR WEIGHT	505	LBS.			
	*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
SA297362	SA P25G2710	1.000 EA
RA283652	RA P25G2710	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	HSHCS 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

Parts List (continued)		
Part Number	Description	Quantity
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
700385014N	CCA #6 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 3165SS	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	20	P	3/60	1160	230/460
AMPS	DUTY	AMB °C/ INSUL.	S.F.	NEMA DESIGN	CODE LETTER	ENCL.
54.8/27.4	*	40/F	1.15	B	G	SUB
E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES. @25 °C (BETWEEN LINES)		
424884	418138074KE	---	---	.186/.745		

PERFORMANCE

LOAD	HP	AMPERES	RPM	INPUT KW	POWER FACTOR	% EFFICIENCY
NO LOAD	0	10.6	1200	.826	9.74	0
1/4	5.00	12.5	1191	4.63	46.4	80.6
2/4	10.0	16.2	1182	8.61	66.6	86.7
3/4	15.0	21.3	1172	12.8	75.4	87.6
4/4	20.0	27.4	1160	17.2	78.8	86.7
5/4	25.0	34.3	1146	22.0	80.5	84.9

SPEED TORQUE

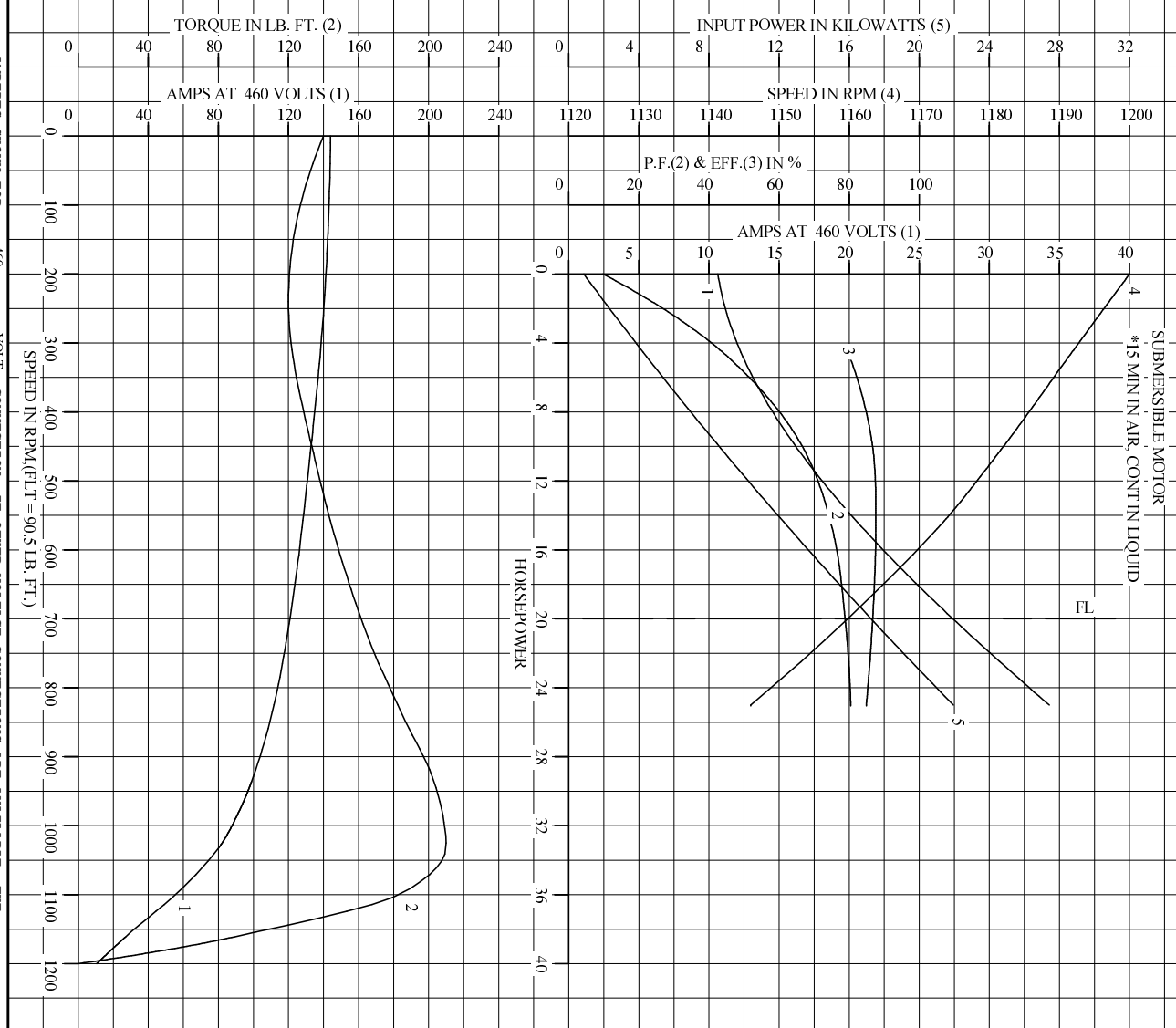
	RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES
LOCKED ROTOR	0	155	140	144
PULL UP	240	133	120	140
BREAKDOWN	1031	232	210	80.5
FULL LOAD	1160	100	90.5	27.4

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
*15 MIN IN AIR, CONT IN LIQUID

BALDOR	DR. BY D. M. BYRD	A-C MOTOR
	CK. BY T. S. WILLIAMS	
	APP. BY D. M. BYRD	PERFORMANCE DATA
	DATE 09/02/04	W01279-A-A007
		ISSUE DATE 09/02/04

REL. S.O. _____ RPM 1160 S.F. 1.15 ROTOR 41813807AKE
 FRAME 250TY VOLTS 230/460 NEMA DESIGN B TEST S.O. CALCULATED DATA
 HP 20 AMPS 54.8/27.4 CODE LETTER G TEST DATE ---
 TYPE P DUTY * ENCLOSURE SUB STATOR RES. @ 25 °C .186/.745
 PHASE/HERTZ 3/60 AMB °C/INSUL 40/F E/S 424884 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.BYRD
 CK. BY T.S.WILLIAMS
 APP. BY D.M.BYRD
 DATE 09/02/04

A-C MOTOR PERFORMANCE CURVES W01279-A-A007
 ISSUE DATE 09/02/04

Printed on 4/21/10 7:57 @ r99

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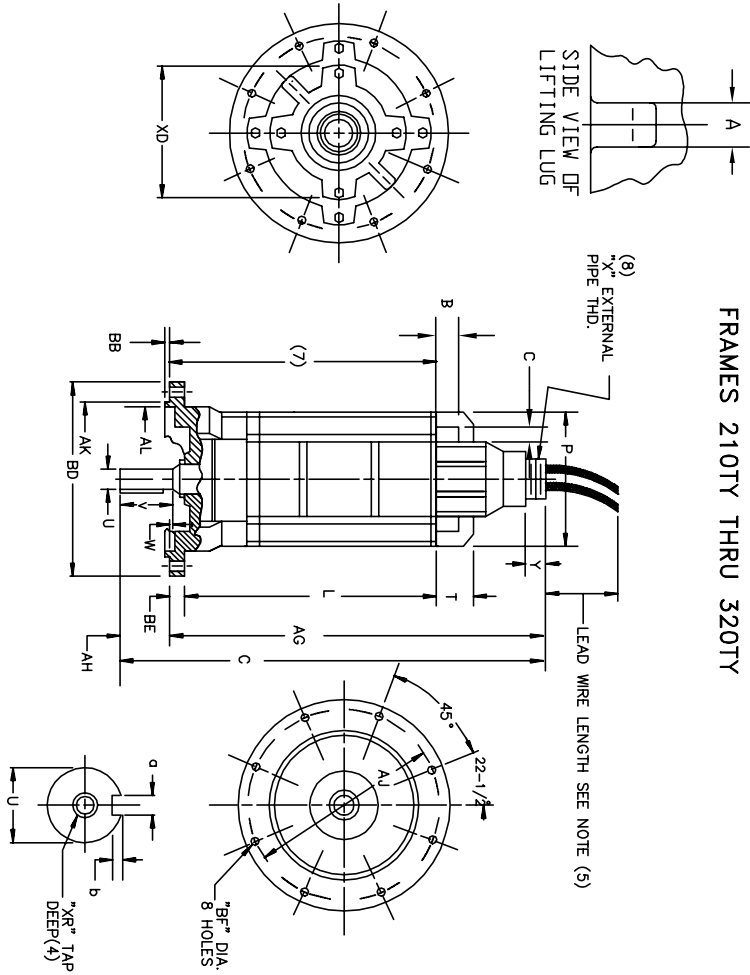
DUTY MASTER ALTERNATING CURRENT MOTORS

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	
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	1.750	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	BE(2)	BF	XR(4)	X (8)	Y	XD	BB	B	KEYWAY	WEIGHT	
210TY	15.250	.75	5/8-11	2-1/2-8	1.25	7.75	.25	.375	.19	1.12	315
250TY	17.000	.88	5/8-11	2-1/2-8	1.25	7.75	.25	.375	.19	2.25	750
320TY	18.750	.88	5/8-11	3-8	1.25	10.88	.25	.500	.25	3.00	1150

- (1) SPECIAL DIMENSIONS ON THIS LINE:
- (2) "BP" 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.
- (8) 3" — 8 PIPE THREAD SUPPLIED WITH CABLE
PROTECTIVE CONDUIT FURNISHED BY CUSTOMER.
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. DESC: MOVE V DIM. TO CORRECT POSITION (SH1)	VERSION: 04	TDR: 000000876933
REV. LTR: D	REVISED: 08:13:18 10/21/2014	BY: RGGWT
FILE: \RGG\00006\320		
MTL: —		

BALDOR

DIMENSION SHEET DUTY MASTER A/C MOTORS

SH 1 of 2

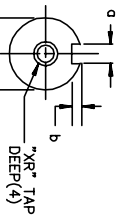
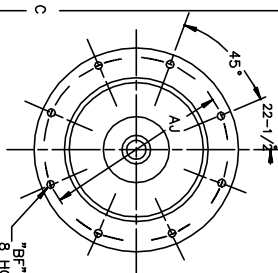
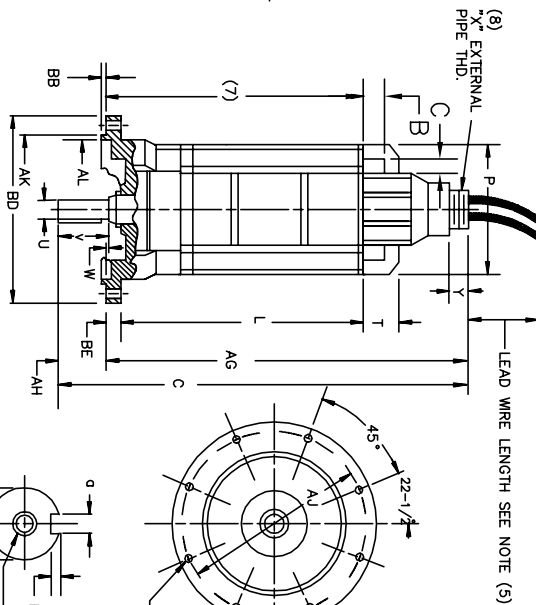
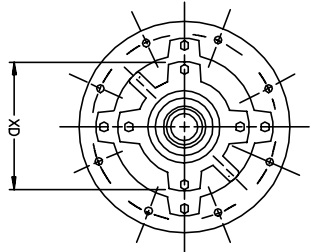
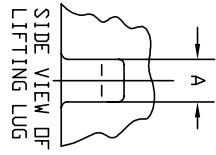
066930-018

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 LUG 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
250TY	948.4	602.2	323.8	88.9	44.45	84.1	7.1	871.5	77.0	406.4	381.00	355.6	19.0
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

FRAME	BD(2)	BE	BF	YR(4)	X (6,9)	Y	X0	BB	KEYWAY	WEIGHT
210TY	387.35	18.0	14.2	5/8-11	2-1/2-8	31.7	196.8	6.4	9.52	4.8
250TY	451.80	22.4	17.5	5/8-11	2-1/2-8	31.7	196.8	6.4	9.52	4.8
320TY	476.29	22.4	17.5	3/4-10	3-8	31.7	276.4	6.4	12.70	6.4

- (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.

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