

BALDOR® • RELIANCE

Product Information Packet

SUM73006-4

30HP, 1175RPM, 3PH, 60HZ, 320TY, TENV, FOOTLE

Part Detail							
Revision:	-	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Prod. Type:		Elec. Spec:	W01309-A-A002	CD Diagram:	
Enclosure:	TENV	Mfg Plant:		Mech. Spec:		Layout:	066930-018
Frame:	320TY	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	NO. <input type="text"/>
CLASS II GROUP	X X X	
OPERATING TEMP CODE	T3C	

Nameplate 000613007MN									
CAT NO	SUM73006-4	SPEC NO.	P32G2700						
HP	30	AMPS	40.7	VOLTS	460	DESIGN	B		
FRAME SIZE	X0320TY	RPM	1175	HZ	60	AMB	40	SF	1.15
D.E. BRG.	85BJ33J30X	PH	3	DUTY	*	INSUL	F		
O.D.E. BRG.	50BC03JPG30A	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	865	LBS.					
	*15 MIN IN AIR ;SUB.IN								
	WATER/SEWAGE ONLY SEE MANUAL								
	FOR MAXDEPTH								

Nameplate 000613007MR									
CAT NO	SUM73006-4		SPEC NO.	P32G2700					
HP	30	AMPS	40.7	VOLTS	460		DESIGN	B	
FRAME SIZE	X0320TY		RPM	1175		HZ	60	AMB	40
D.E. BRG.	85BJ33J30X			PH	3		DUTY	*	
O.D.E. BRG.	50BC03JPG30A			TYPE	P		ENCL	TENV	
				POWER FACTOR			NEMA-NOM-EFF		
				MAX CORR KVAR			GUARANTEED EFFICIENCY		
				NEMA NOM/CSA QUOTED EFF @			100% LOAD		
SER.NO.				MOTOR WEIGHT	865		LBS.		
	*15 MIN IN AIR ;SUB.IN								
	WATER/SEWAGE ONLY SEE MANUAL								
	FOR MAXDEPTH								

Parts List		
Part Number	Description	Quantity
SA297300	SA P32G2700	1.000 EA
RA283516	RA P32G2700	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
032018016EG	HHCS 5/8-11X2 316S.S.	6.000 EA
032130016DD	SHSCS 1/2-13X2L 316 S.S.	6.000 EA
032620020JD	HSSS 10-24X5/8L 304S.S.	2.000 EA
034141275AC	RETAINING RING	1.000 EA
034141300AC	RETAINING RING	1.000 EA
064262018F	SEAL 320 SUBMERSIBLE	1.000 EA
064262018G	SEAL SUBMERSIBLE	1.000 EA
413412004C	SUBM MOISTURE PROBE	2.000 EA
413412005Y	LEAD WIRE ASSY(BLANKET)	1.000 EA
413480001R	RESISTOR ASSEMBLY-BLANKET	1.000 EA
421900192FU	ORING	1.000 EA
421900208FU	ORING	1.000 EA
603762053B	SLINGER BLKT	1.000 EA
802076002A	BRKT,DE,320SUB	1.000 EA
802077002A	MTGPLT 320 802077001WCA	1.000 EA

Parts List (continued)		
Part Number	Description	Quantity
032018006BM	HHCS 5/16-18X3/4 PLTGRN.	1.000 EA
032018016EG	HHCS 5/8-11X2 316S.S.	4.000 EA
421900124FU	ORING	1.000 EA
700385014AC	CCA #6 25' 320/360	1.000 EA
033775004EA	DRSCR #6-1/4 304 S.S.	6.000 EA
034180024GD	KEY 1/2X1/2X3L 303 S.S.	1.000 EA
421900208FU	ORING	1.000 EA
802075002A	BRKT,ODE,320SUB	1.000 EA
004824018AF	SHELL ROTELLA OIL 10W	3.000 LB
032018010CG	HHCS 3/8-16X1-1/4L 316SS	3.000 EA
032018016EG	HHCS 5/8-11X2 316S.S.	6.000 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
	320TY	30	P	3/60	1175	460
AMPS	DUTY	AMB °C/ INSUL.	S.F.	NEMA DESIGN	CODE LETTER	ENCL.
40.7	*	40/F	1.15	B	G	SUB
E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES. @25 °C (OHMS BETWEEN LINES)		
489499	418140-75VE	---	---	.364		

PERFORMANCE


LOAD	HP	AMPERES	RPM	INPUT KW	% POWER FACTOR	% EFFICIENCY
NO LOAD	0	18.9	1200	1.18	7.85	0
1/4	7.51	21.4	1194	6.86	40.3	81.7
2/4	15.0	26.3	1189	12.7	60.7	88.2
3/4	22.5	32.9	1183	18.7	71.3	89.7
4/4	30.0	40.7	1177	24.9	76.8	89.7
5/4	37.5	49.3	1170	31.4	80.0	89.0

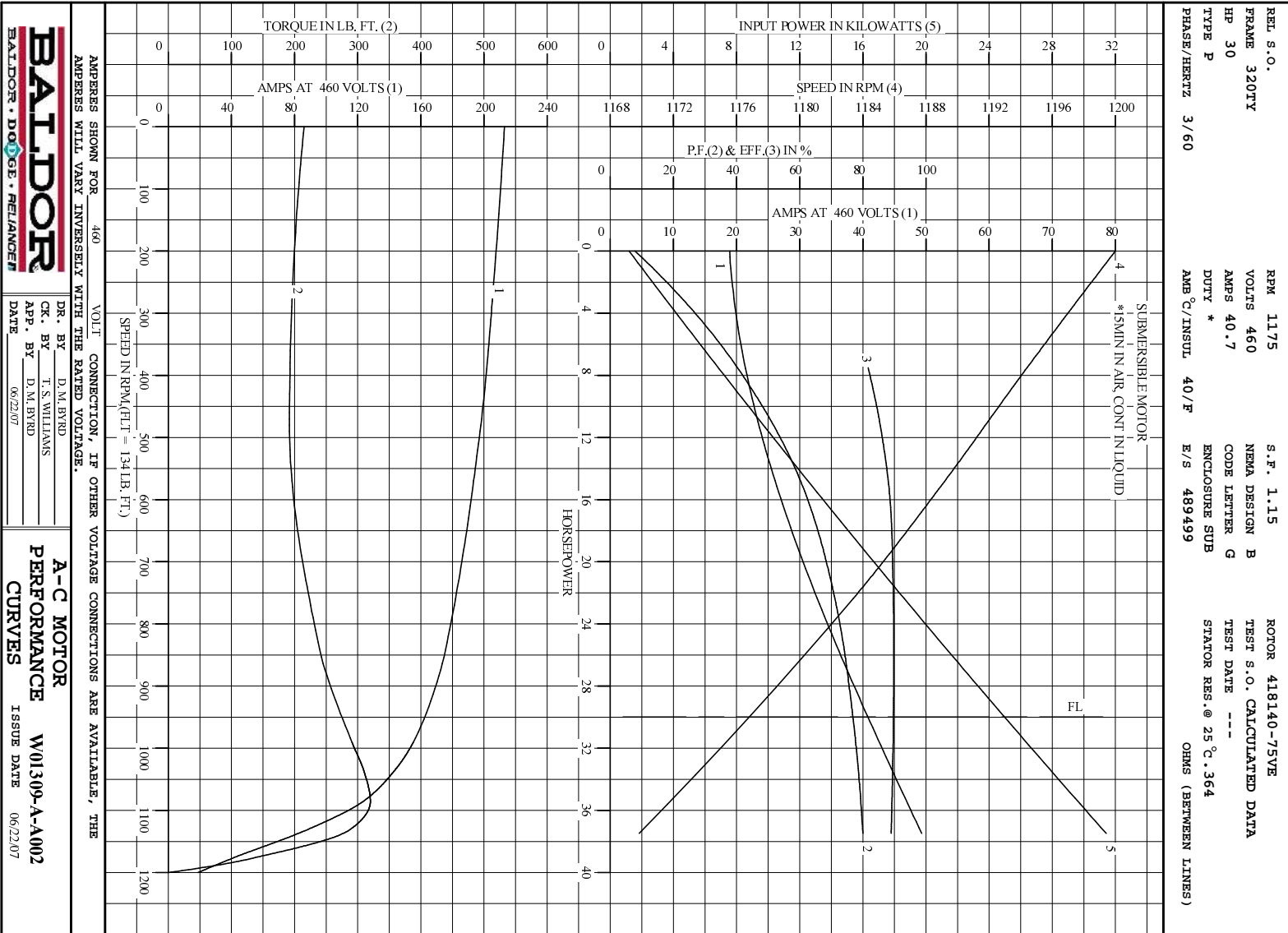
SPEED TORQUE

	RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES
LOCKED ROTOR	0	161	215	213
PULL UP	480	143	192	198
BREAKDOWN	1086	239	320	123
FULL LOAD	1177	100	134	40.7

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	A-C MOTOR PERFORMANCE DATA W01309-A-A002 ISSUE DATE 06/22/07
	CK. BY T. S. WILLIAMS APP. BY D. M. BYRD DATE 06/22/07	



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066930-018

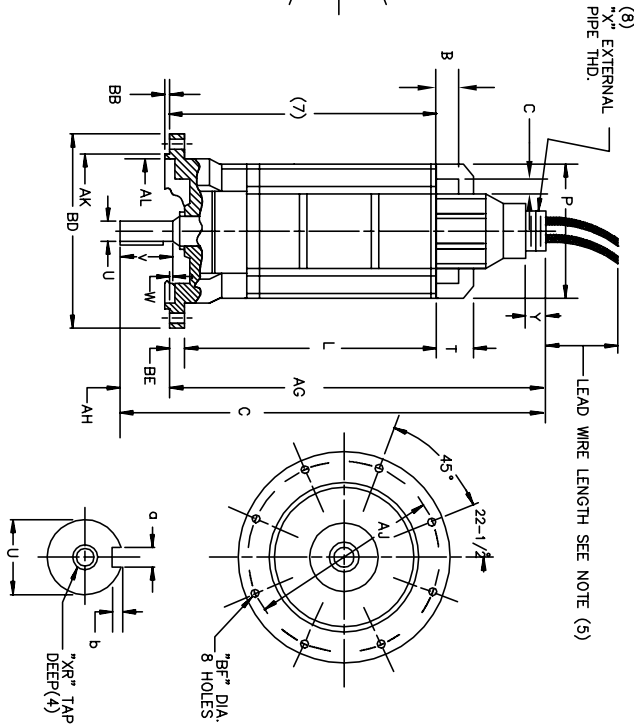
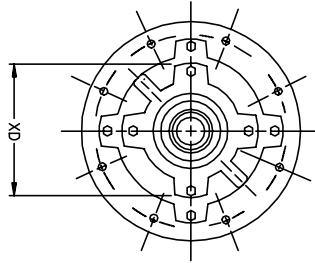
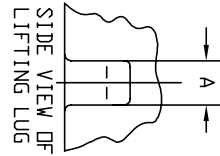
DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION
ENCLOSURE: TOTALLY ENCLOSED

SUBMERSIBLE

FRAMES 210TY THRU 320TY

066930-018



(8) "X" EXTERNAL PIPE THD.
LEAD WIRE LENGTH SEE NOTE (5)

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	
	LEADING DIMENSIONS														
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	b	LENGTH	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.
FACE RUNOUT AND ECCENTRICITY .008 MAX. T.I.R.
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

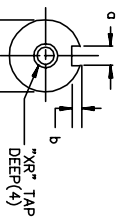
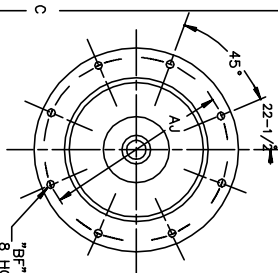
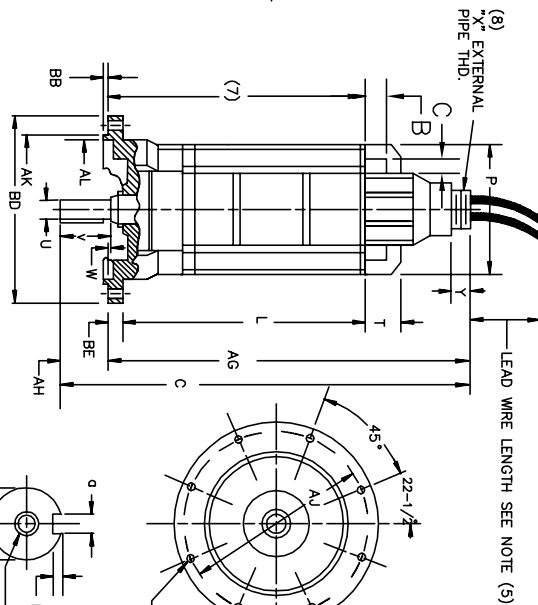
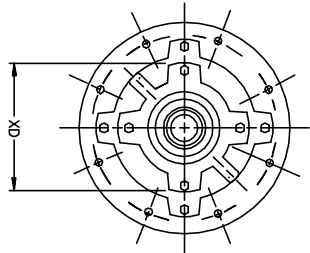
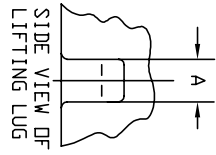
066930-018

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	LEADING 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	XD	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	476.25	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.
- FACE RUNOUT AND ECCENTRICITY .20 MAX. T.I.R.
PROTECTIVE CONDUIT FURNISHED BY CUSTOMER.
(8) 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