

# **BALDOR® • RELIANCE**

## **Product Information Packet**

# **SUM75004SM-4**

**50HP, 1770RPM, 3PH, 60HZ, 320TY, TENV, FOOTLE**

Part Detail							
Revision:	-	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Prod. Type:		Elec. Spec:	W00883-C-J015	CD Diagram:	
Enclosure:	TENV	Mfg Plant:		Mech. Spec:		Layout:	066930-028
Frame:	320TY	Mounting:	V1	Poles:	04	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	SUM75004SM-4	SPEC NO.	P32G2724						
HP	50	AMPS	64.3	VOLTS	460	DESIGN	B		
FRAME SIZE	X0320TY	RPM	1770	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	880	LBS.					
	*15 MIN IN AIR ;SUB.IN								
	WATER/SEWAGE ONLY SEE MANUAL								
	FOR MAXDEPTH								

Nameplate 000613007MR									
CAT NO	SUM75004SM-4	SPEC NO.	P32G2724						
HP	50	AMPS	64.3	VOLTS	460	DESIGN	B		
FRAME SIZE	X0320TY	RPM	1770	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	880	LBS.					
	*15 MIN IN AIR ;SUB.IN								
	WATER/SEWAGE ONLY SEE MANUAL								
	FOR MAXDEPTH								

Parts List		
Part Number	Description	Quantity
SA297294	SA P32G2724	1.000 EA
RA283504	RA P32G2724	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	0.400 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
802077004A	MTG PLATE 320 802077-3WCA	1.000 EA

<b>Parts List (continued)</b>		
<b>Part Number</b>	<b>Description</b>	<b>Quantity</b>
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
700385014AE	CCA #4 25' 320/360	1.000 EA
004824007K	SPECIAL PAINT	0.200 EA
033775004EA	DRSCR #6-1/4 304 S.S.	6.000 EA
034180016FD	KEY 3/8X3/8X2L 303S.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	50	P	3/60	1770	460
AMPS	DUTY	AMB °C/ INSUL.	S.F.	NEMA DESIGN	CODE LETTER	ENCL.
64.3	*	40/F	1.15	B	G	SUB
E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES. @25 °C (OHMS BETWEEN LINES)		
890070	418140036TE	---	---	.149		

PERFORMANCE


LOAD	HP	AMPERES	RPM	INPUT KW	% POWER FACTOR	% EFFICIENCY
NO LOAD	0	24.3	1800	1.81	9.31	0
1/4	12.5	29.7	1793	11.3	47.5	82.9
2/4	25.0	38.7	1786	20.9	67.9	89.3
3/4	37.5	50.7	1778	30.8	76.2	90.9
4/4	50.0	64.3	1770	40.9	79.8	91.1
5/4	62.5	79.1	1761	51.4	81.6	90.7

SPEED TORQUE

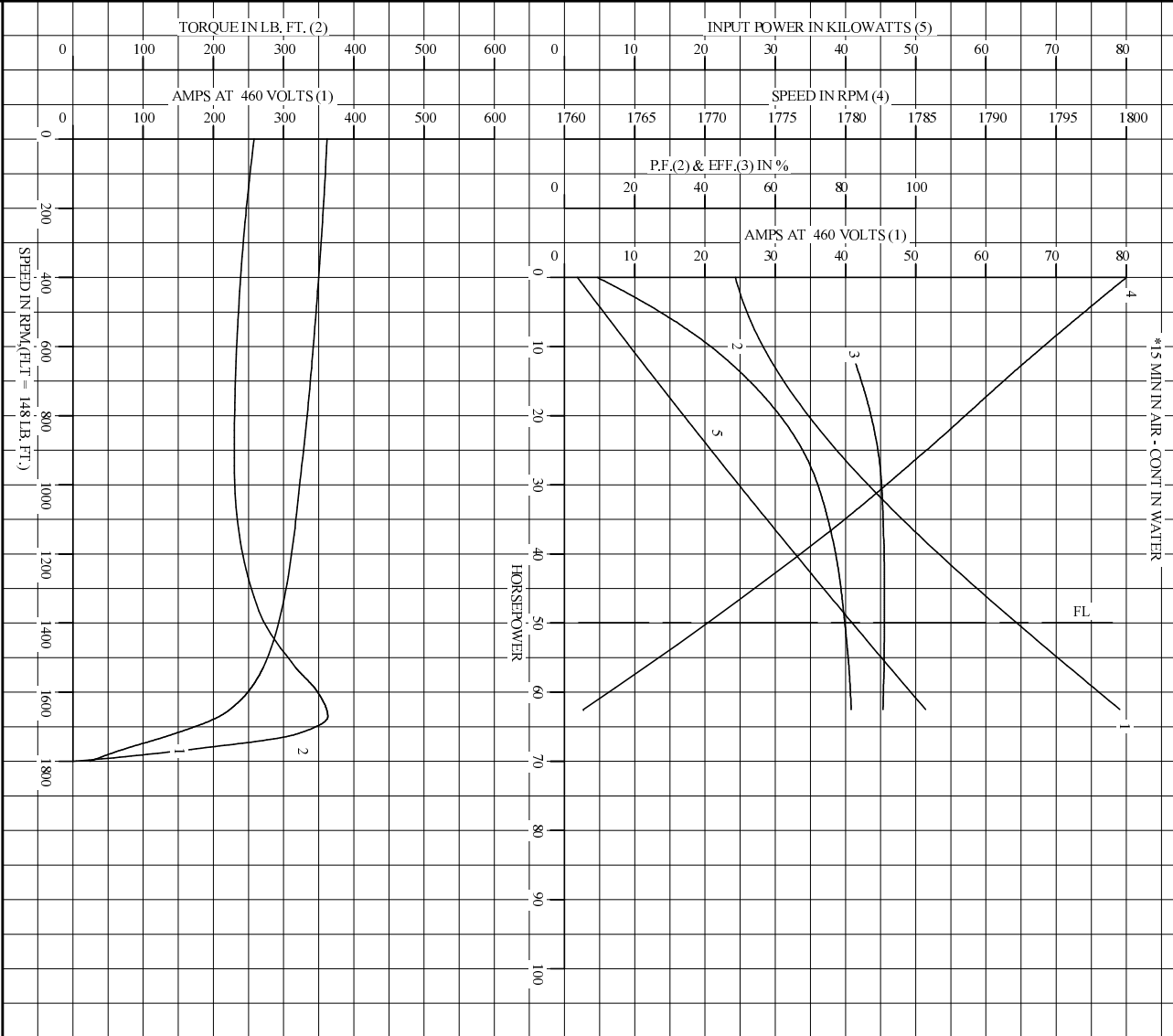
	RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES
LOCKED ROTOR	0	174	258	362
PULL UP	925	155	230	327
BREAKDOWN	1671	245	363	208
FULL LOAD	1770	100	148	64.3

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

REMARKS: TYPICAL DATA  
\*15 MIN IN AIR - CONT IN WATER

	DR. BY D. M. BYRD	<b>A-C MOTOR</b> <b>PERFORMANCE DATA</b> W00883-C-J015 ISSUE DATE 07/21/04
	CK. BY T. S. WILLIAMS APP. BY D. M. BYRD DATE 07/21/04	

RET. S.O.	FRAME 320TY	RPM 1770	S.F. 1.15	ROTOR 418140036TE
HP 50	TYPE P	VOLTS 460	NEMA DESIGN B	TEST S.O. TYPICAL DATA
PHASE/HERTZ 3/60	DUTY *	AMPS 64.3	CODE LETTER G	TEST DATE ---
	AMB °C/INSUL 40/F		ENCLOSURE SUB	STATOR RES. @ 25 °C .149
			E/S 890070	OHMS (BETWEEN LINES)



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

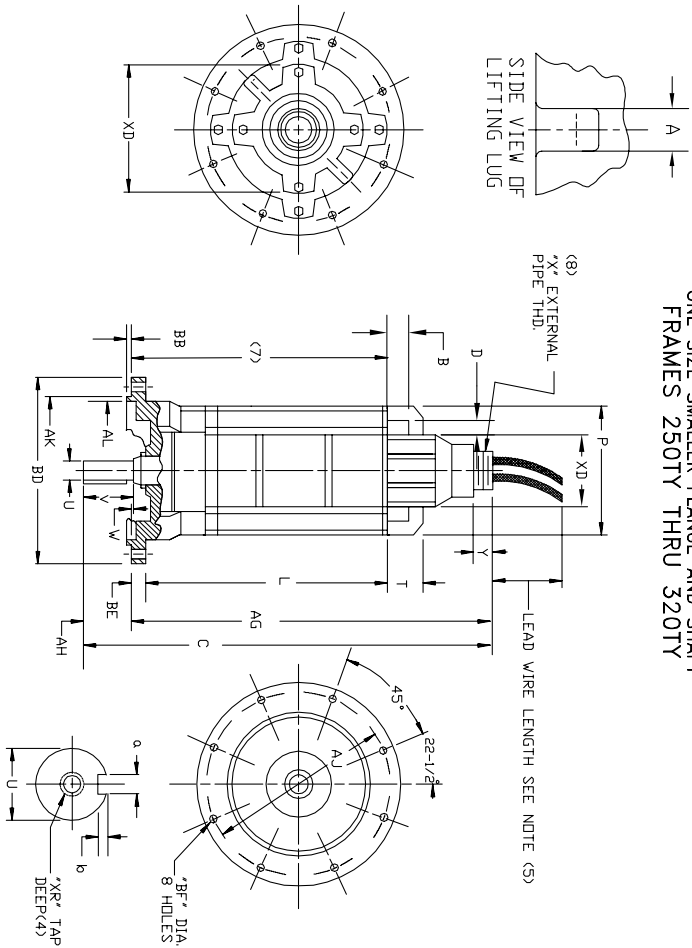
	DR. BY	D.M.BRAD	<b>A-C MOTOR</b> <b>PERFORMANCE</b> <b>CURVES</b>	<b>W00883-C-1015</b> ISSUE DATE 07/21/04
	CK. BY	T.S.WILLIAMS		
	APP. BY	D.M.BRAD		
	DATE	07/21/04		

Printed on 11/19/07 18:01 @ umghengdev1

066930-028

# DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIREL-CAGE INDUCTION  
ENCLOSURE: TOTALLY ENCLOSED  
SUBMERSIBLE  
ONE SIZE SMALLER FLANGE AND SHAFT  
FRAMES 250TY THRU 320TY



DIMENSIONS ARE IN INCHES

FRAME	C	L	P	T	UC(3)	V	W	AG	AH	AJ	AK (6)	AL	LIFTING LUG DIMENSIONS	
(1)													A	B
250TY	37.06	23.62	12.75	3.50	1.438	2.00	.25	35.50	1.56	14.12	13.125	12.00	.75	2.25
320TY	44.60	26.37	16.00	4.25	1.750	3.31	.27	41.56	3.04	16.00	15.000	14.25	1.25	2.25
													1.25	1.50

FRAME	BD(2)	BE	BF	XR(4)	X (6)	Y	XD	BB	o	b	LENGTH	WEIGHT
(1)												
250TY	15.25	1.00	.56	5/8-11	2-1/2-8	1.25	7.75	.25	.375	.19	11.2	7.50
320TY	17.00	.88	.69	5/8-11	3-8	1.25	10.88	.25	.375	.19	12.5	11.50

- (1) SPECIAL DIMENSIONS ON THIS LINE.
- (2) 'BD' VARIES ± .010
- (3) 'U' VARIES —  $\frac{1}{16}$  TO  $1/8$  DIA. +.0000, -.0005  
1.625 DIA. AND LARGER +.000, -.001
- (4) TAP DEPTH ON 250TY IS 1.38"  
TAP DEPTH ON 320TY IS 1.38"
- (5) LEAD WIRE LENGTH AS SPECIFIED ON CERTIFICATION
- (6) 'AK' VARIES +.000, -.002
- (7) MINIMUM SUBMERGED DEPTH,  
FACE RUNDOUT AND ECCENTRICITY .008 MAX. TLR  
PROTECTIVE CONDUIT FURNISHED BY CUSTOMER.
- (8) 3" - 8 PIPE THREAD SUPPLIED WITH CABLE  
SIZES NO. 4 AND LARGER.

820-066990

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

REV. DESC: CORRECT "L" DIMENSION	VERSION: 03	TDR: 000000974505
REV. LTR: C	REVISED: 11:00:52 04/07/2016	BY: RGGWT
FILE: \RGG\00024\997		
MTL: -		

**BALDOR**  
DIM SHT,250TY THRU 320TY,SUBMERSIBLE,SMALLER SHAFT & FLG  
SH 1 of 1