

BALDOR® • RELIANCE 

Product Information Packet

SUM71004-4

10HP,1755RPM,3PH,60HZ,210TY,TENV,FOOTLE

Part Detail							
Revision:	A	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	E02263L AW017	CD Diagram:	416820-001	Mfg Plant:	
Mech. Spec:		Layout:	066930-018	Poles:	04	Created Date:	04-09-2015
Base:		Eff. Date:	11-07-2018	Leads:			

Specs			
Catalog Number:	SUM71004-4	Duty Rating:	15 MIN
Enclosure:	TEXP	Heater Indicator:	No Heater
Frame:	210TY	Insulation Class:	F
Frame Material:	Iron	Inverter Code:	Not Inverter
Output @ Frequency:	10.000 @ 60 HZ	KVA Code:	G
Voltage @ Frequency:	230 V @ 60 HZ	Lifting Lugs:	Standard Lifting Lugs
	460 V @ 60 HZ	Motor Type:	M
XP Class and Group:	None	Mounting Arrangement:	V1
XP Division:	Not Applicable	Product Family:	Other
Agency Approvals:	CCSA US	Pulley End Bearing Type:	Ball
	CSA	Pulley Face Code:	Standard
	UL	Shaft Rotation:	Reversible
Base Indicator:	Rigid	Shaft Slinger Indicator:	No Slinger
Bearing Grease Type:	Polyrex EM (-20F +300F)	Speed Code:	Single Speed
Current @ Voltage:	13.0 A @ 460 V	Motor Standards:	NEMA
	26.0 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	NO. <input type="text"/>
CLASS II GROUP	X X X	
OPERATING TEMP CODE	T3C	

Nameplate 000613007MN										
CAT NO	SUM71004-4		SPEC NO.	P21G2702						
HP	10	AMPS	26.0/13.0		VOLTS	230/460		DESIGN	B	
FRAME SIZE	X0210TY		RPM	1755	HZ	60	AMB	40	SF	1.15
D.E. BRG.	60BC02JPP30A		PH	3	DUTY	15MIN		INSUL	F	
O.D.E. BRG.	30BC02JPG30A		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			LBS.		
	FINAL CONN@ 460V *15 MIN IN									
	AIR ;SUB. IN SEWAGE / WATER									
	ONLY ONLY MAXDEPTH IN MANUAL									

Nameplate 000613007MR										
CAT NO	SUM71004-4	SPEC NO.	P21G2702							
HP	10	AMPS	26.0/13.0		VOLTS	230/460		DESIGN	B	
FRAME SIZE	X0210TY	RPM	1755		HZ	60	AMB	40	SF	1.15
D.E. BRG.	60BC02JPP30A		PH	3	DUTY	15MIN		INSUL	F	
O.D.E. BRG.	30BC02JPG30A		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			LBS.		
	FINAL CONN@ 460V *15 MIN IN									
	AIR ;SUB. IN SEWAGE / WATER									
	ONLY ONLY MAXDEPTH IN MANUAL									

Parts List		
Part Number	Description	Quantity
SA297409	SA P21G2702	1.000 EA
RA284378	RA P21G2702	1.000 EA
424476003WB	WIRING DIAGRAM MEDIUMA	1.000 EA
424476003WB	WIRING DIAGRAM MEDIUMA	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
001575000A	WIRING DIAGRAM	1.000 EA
034692002AE	HCSPP 1/4" 304 S.S.	1.000 EA
004824015A	GREASE POLYREX EM	0.100 LB
032018012DG	HHCS 1/2-13X1-1/2 316S.S	4.000 EA
032130010DC	HSHCS 1/2-13X1-1/4 304SS	4.000 EA
032620020JD	HSSS 10-24X5/8L 304S.S.	1.000 EA
034692003AE	PPLG 3/8" 304 S.S.	2.000 EA
047174005C	SNAP RING	1.000 EA
047174005D	SNAP RING	1.000 EA
064262012C	SEAL	1.000 EA
064262012D	SEAL	1.000 EA
088207001AA	BRKT,DE,210SUB 88207-1WA	1.000 EA
088208001AA	MTG PLATE EX210Y SUBMERSIBLE 088208001WB	1.000 EA
413412004A	SUBM MOISTURE PROBE	2.000 EA
413412005S	LEAD WIRE ASSY(BLANKET	1.000 EA

Parts List (continued)		
Part Number	Description	Quantity
413480001R	RESISTOR ASSEMBLY-BLANKET	1.000 EA
421900144FU	ORING	1.000 EA
421900144FU	ORING	1.000 EA
004824018AF	SHELL ROTELLA OIL 10W	4.569 LB
603761001AA	LABYRINTH	1.000 EA
032018006BM	HHCS 5/16-18X3/4 PLTGRN.	1.000 EA
032018006BM	HHCS 5/16-18X3/4 PLTGRN.	1.000 EA
032018006BM	HHCS 5/16-18X3/4 PLTGRN.	1.000 EA
032018010CG	HHCS 3/8-16X1-1/4L 316SS V2T23	4.000 EA
032080003JB	HWHMS 10-24X3/8L PLTED	4.000 EA
032080003LB	HWHMS 1/4-20X3/8L PLTED	6.000 EA
034036013AB	LCKW 5/16 EXT.TOOTH LCKW	1.000 EA
034036013AB	LCKW 5/16 EXT.TOOTH LCKW	1.000 EA
047024003AH	T/LUG AMP 34112	4.000 EA
047024003B	T/LUG AMP 33218	9.000 EA
415031017A	NUT W/WASHER 10-24 C.PLT	4.000 EA
415031017B	NUT W/WASHER1/4-20 C.P	6.000 EA
421900092FU	ORING	1.000 EA
609181014D	HEAT SHRINK TUBING 3/4	10.000 EA
700385014M	CCA #8 25' 210/250	1.000 EA
004824007K	SPECIAL PAINT	0.100 EA
033775004EA	DRSCR #6-1/4 304 S.S.	4.000 EA
034180009FD	KEY 3/8X3/8X1-1/8 303 SS	1.000 EA
088206001AB	BRKT,ODE,210SUB 88206-1WB	1.000 EA

Product Information Packet: SUM71004-4 - 10HP,1755RPM,3PH,60HZ,210TY,TENV,FOOTLE

421900144FU	ORING	1.000 EA
032018008BG	HHCS 5/16-18X1 BRASS-447	3.000 EA
032018012DG	HHCS 1/2-13X1-1/2 316S.S	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
	210TY	10	P	3/60	1755	230/460
AMPS	DUTY	AMB °C/ INSUL.	S.F.	NEMA DESIGN	CODE LETTER	ENCL.
26/13	*	40/F	1.15	B	G	SUB
E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES (25 °C OHMS (BETWEEN LINES))		
534499	418425-43FE	---	---	.339/1.35		

PERFORMANCE


LOAD	HP	AMPERES	RPM	INPUT KW	POWER FACTOR	% EFFICIENCY
NO LOAD	0	4.8	1800	.609	15.9	0
1/4	2.51	5.8	1789	2.52	54.2	74.2
2/4	5.00	7.8	1779	4.50	72.8	83.0
3/4	7.50	10.2	1768	6.56	80.6	85.3
4/4	10.0	13.0	1756	8.71	84.1	85.6
5/4	12.5	16.1	1742	11.0	85.4	84.8

SPEED TORQUE

	RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES
LOCKED ROTOR	0	184	55.0	76.0
PULL UP	180	174	52.0	74.7
BREKDOWN	1561	254	76.0	44.8
FULL LOAD	1756	100	29.9	13.0

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

 <p>A MEMBER OF THE ABB GROUP</p>	DR. BY	D. M. BYRD	<p>A-C MOTOR PERFORMANCE DATA</p> <p>E02263-LAW017 ISSUE DATE 01/28/05</p>
	CR. BY	T. S. WILLIAMS	
	APP. BY	D. M. BYRD	
	DATE	01/28/05	

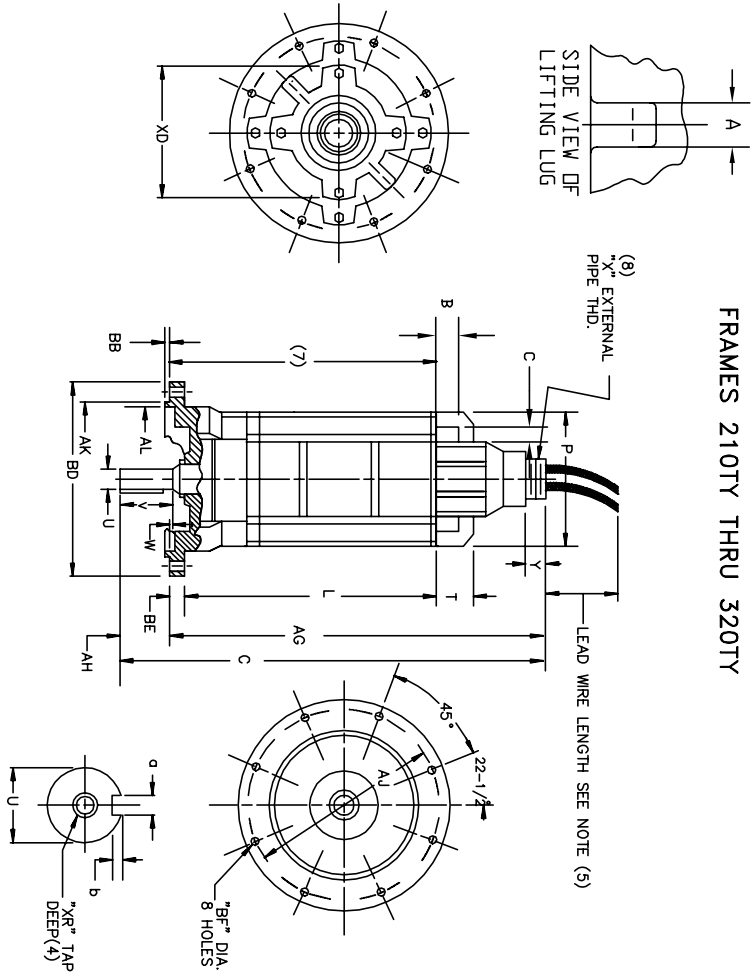
066930-018

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
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
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
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

FRAME	BD(2)	BE	BF	XR(4)	X (8)	Y	XD	BB	B	LEAD WIRE DIMENSIONS	WEIGHT	
210TY	15.250	.75	.56	5/8-11	2-1/2-8	1.25	7.75	.25	.375	.19	1.12	315
250TY	17.000	.88	.69	5/8-11	2-1/2-8	1.25	7.75	.25	.375	.19	2.25	750
320TY	18.750	.88	.69	3/4-10	3-8	1.25	10.88	.25	.500	.25	3.00	1150

- (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: —		

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DIMENSION SHEET DUTY MASTER A/C MOTORS

SH 1 of 2

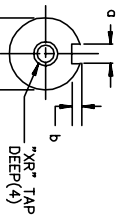
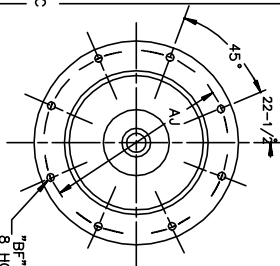
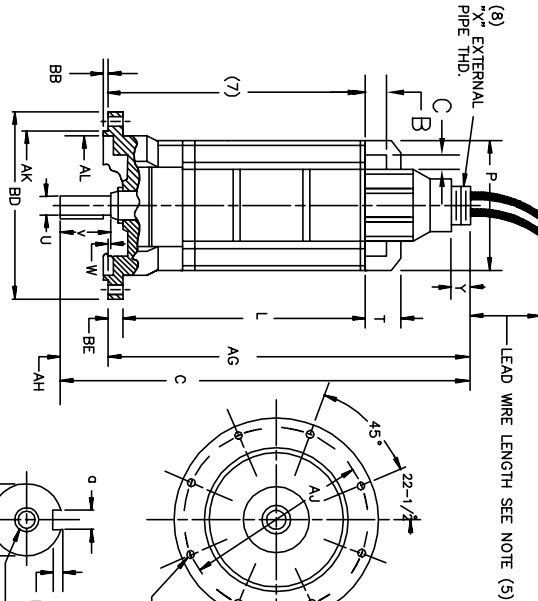
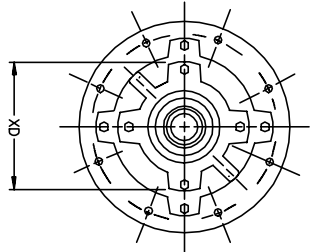
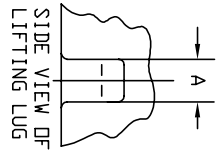
066930-018

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	2921.5	571.1	36.525	50.8	11.2	765.0	39.6	358.6	333.38	304.8	22.3	36.1
250TY	948.4	600.2	323.8	88.9	44.45	84.1	7.1	871.5	77.0	406.4	381.00	35.6	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	38.73	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	198.8	6.4	9.52	4.8
250TY	431.80	22.4	17.5	5/8-11	2-1/2-8	31.7	198.8	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.
- (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: —		

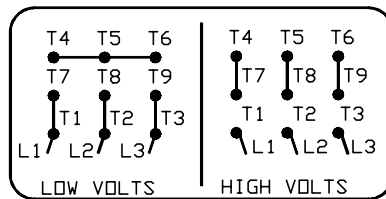
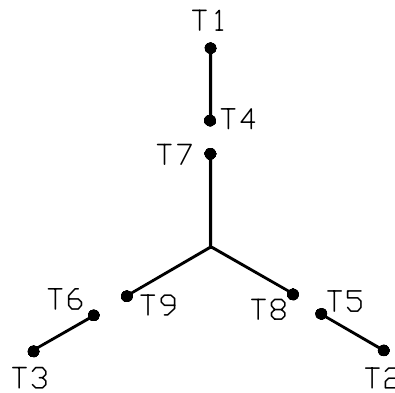
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DIMENSION SHEET DUTY MASTER A/C MOTORS

SH 2 of 2

416820-001

A-C MOTOR
 CONNECTION DIAGRAM
 STANDARD 9 LEAD Y CONNECTED



< N. P. 1575-A >

416820-001

REV. DESC: FONT CHANGE FOR PDF SEARCHABLE		
REV. LTR: A	VERSION: 01	TDR: 000001009382
FILE: \MGA\00000\659	REVISED: 10: 33: 07 12/21/2016	BY: MGHMTT
MTL: -	⊙ □	

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CONN DIAG - STANDARD 9 LEAD, Y CONNECTED

SH 1 of 1

Marketing maintained PDF of MN414:

<http://www.baldor.com/support/Literature/Load.ashx/MN414?ManNumber=MN414>

