

**BALDOR® • RELIANCE** 

**Product Information Packet**

**SUM70304SM**

**3HP, 1750RPM, 3PH, 60HZ, 180TY, TENV, FOOTLES**

Part Detail							
Revision:	-	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	E02260K AR016	CD Diagram:	416820-001	Mfg Plant:	
Mech. Spec:		Layout:	066930-501	Poles:	04	Created Date:	04-09-2015
Base:		Eff. Date:	04-13-2015	Leads:			

Specs			
Catalog Number:	SUM70304SM	Duty Rating:	15 MIN
Enclosure:	XPNV	Heater Indicator:	No Heater
Frame:	180TY	Insulation Class:	F
Frame Material:	Iron	Inverter Code:	Inverter Ready
Output @ Frequency:	3.000 @ 60 HZ	KVA Code:	J
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:	P-Base
	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:	4.40 A @ 460 V	Motor Standards:	NEMA
	8.80 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	

<b>Nameplate 000613007MN</b>									
<b>CAT NO</b>	SUM70304SM		<b>SPEC NO.</b>	P18G2794					
<b>HP</b>	3	<b>AMPS</b>	8.80/4.40		<b>VOLTS</b>	230/ 460		<b>DESIGN</b>	B
<b>FRAME SIZE</b>	X180TY	<b>RPM</b>	1750		<b>HZ</b>	60	<b>AMB</b>	40	
<b>D.E. BRG.</b>	50BC02JPP30A		<b>PH</b>	3		<b>DUTY</b>	*		
<b>O.D.E. BRG.</b>	25BC02JPG30A		<b>TYPE</b>	P		<b>ENCL</b>	TENV		
			<b>POWER FACTOR</b>						
			<b>MAX CORR KVAR</b>						
			<b>NEMA NOM/CSA QUOTED EFF @</b>						
<b>SER.NO.</b>			<b>MOTOR WEIGHT</b>	225		<b>LBS.</b>		<b>GUARANTEED EFFICIENCY</b>	
								<b>100% LOAD</b>	
	*15 MIN IN AIR ;SUB.IN								
	WATER/SEWAGE FINAL CONN@230V								
	SEE MANUAL FOR MAXDEPTH;								

<b>Nameplate 000613007MR</b>										
<b>CAT NO</b>	SUM70304SM		<b>SPEC NO.</b>	P18G2794						
<b>HP</b>	3	<b>AMPS</b>	8.80/4.40		<b>VOLTS</b>	230/ 460		<b>DESIGN</b>	B	
<b>FRAME SIZE</b>	X180TY	<b>RPM</b>	1750		<b>HZ</b>	60	<b>AMB</b>	40	<b>SF</b>	1.15
<b>D.E. BRG.</b>	50BC02JPP30A		<b>PH</b>	3	<b>DUTY</b>	*		<b>INSUL</b>	F	
<b>O.D.E. BRG.</b>	25BC02JPG30A		<b>TYPE</b>	P	<b>ENCL</b>	TENV		<b>CODE</b>	J	
			<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>	225	<b>LBS.</b>			
	*15 MIN IN AIR ;SUB.IN									
	WATER/SEWAGE FINAL CONN@230V									
	SEE MANUAL FOR MAXDEPTH;									

Parts List		
Part Number	Description	Quantity
SA297457	SA P18G2794	1.000 EA
RA284426	RA P18G2794	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
424476003WB	WIRING DIAGRAM MEDIUMA	1.000 EA
034692002AE	HCSPP 1/4" 304 S.S.	1.000 EA
004824015A	GREASE POLYREX EM	0.100 LB
032018010CG	HHCS 3/8-16X1-1/4L 316SS V2T23	4.000 EA
032130008CC	SHSCS 3/8-16 X 1.00" L	4.000 EA
032620020JD	HSSS 10-24X5/8L 304S.S.	1.000 EA
047174005B	SNAP RING	1.000 EA
047174005C	SNAP RING	1.000 EA
064262012B	SEAL	1.000 EA
064262012C	SEAL	1.000 EA
088204001AA	BRKT,DE,180SUB 88204-1WA	1.000 EA
088205002A	SUB PLT 180 88205-2WCB	1.000 EA
413412004A	SUBM MOISTURE PROBE	2.000 EA
413412005R	LEAD WIRE ASSY(BLANKET	1.000 EA
413480001R	RESISTOR ASSEMBLY-BLANKET	1.000 EA
421900124FU	ORING	1.000 EA

<b>Parts List (continued)</b>		
<b>Part Number</b>	<b>Description</b>	<b>Quantity</b>
421900124FU	ORING	1.000 EA
603760001AA	LABYRINTH	1.000 EA
032018006BM	HHCS 5/16-18X3/4 PLTGRN.	1.000 EA
032018006BM	HHCS 5/16-18X3/4 PLTGRN.	1.000 EA
032018008BG	HHCS 5/16-18X1 BRASS-447	4.000 EA
032080003JB	HWHMS 10-24X3/8L PLTED	4.000 EA
032080003LB	HWHMS 1/4-20X3/8L PLTED	4.000 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	4.000 EA
421900072FU	ORING	1.000 EA
609181014D	HEAT SHRINK TUBING 3/4	8.000 EA
700385014E	CCA #14 25' 180	1.000 EA
004824007K	SPECIAL PAINT	0.100 EA
033775004EA	DRSCR #6-1/4 304 S.S.	4.000 EA
034180008CD	3/16 SQ. X 1IN. KEY	1.000 EA
088203001AB	BRKT,ODE,180SUB 88203-1WB	1.000 EA
421900124FU	ORING	1.000 EA
004824018AF	SHELL ROTELLA OIL 10W	1.500 LB
032018006AG	HHCS 1/4-20X3/4L 316 SS	3.000 EA
032018010CG	HHCS 3/8-16X1-1/4L 316SS V2T23	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

S/O	FRAME	HP	TYPE	PHASE/ HERTZ	RPM	VOLTS
	182T	3	P	3/60	1750	230/460
AMPS	DUTY	AMB %C/ INSUL	S.F.	NEMA DESIGN	CODE LETTER	ENCLOSURE
8.8/4.4	*	40/F	1.0	B	J	SUB
E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES. @25 °C OHMS (BETWEEN LINES)		
573966	418424-31TE	---	---	1.17/4.68		

**PERFORMANCE**


LOAD	HP	AMPERES	RPM	INPUT KW	% POWER FACTOR	% EFFICIENCY
NO LOAD	0	2.0	1800	.412	26.2	0
1/4	.75	2.3	1784	.987	52.7	56.6
2/4	1.50	2.9	1773	68.7	68.7	70.5
3/4	2.25	3.6	1761	2.21	77.2	75.9
4/4	3.00	4.4	1748	81.7	81.7	78.1
5/4	3.75	5.3	1733	3.55	84.7	78.7

**SPEED TORQUE**

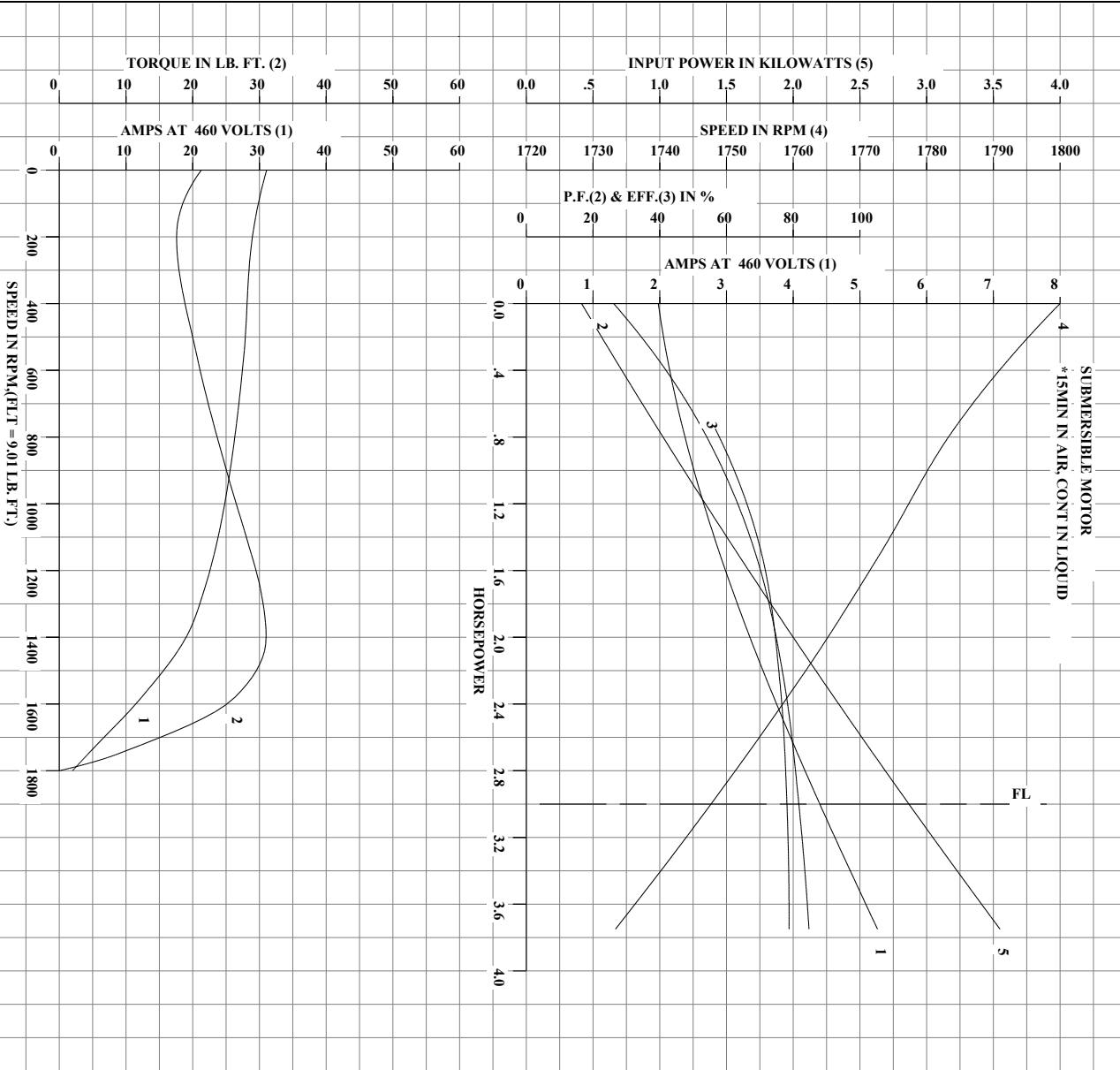
	RPM	% TORQUE FULL LOAD	TORQUE LB.-FT.	AMPERES
LOCKED ROTOR	0	236	21.3	31.1
PULL UP	200	195	17.6	28.9
BREAKDOWN	1400	344	31.0	19.0
FULL LOAD	1748	100	9.01	4.4

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

TYPICAL DATA  
SUBMERSIBLE MOTOR  
\*15MIN IN AIR, CONTIN LIQUID

	DRAWN BY: <b>D. M. BYRD</b>	AC MOTOR PERFORMANCE DATA	<b>E02260-KAR016</b>
	CHECKED BY: <b>T.S. WILLIAMS</b> APPROVED BY: <b>D. M. BYRD</b> DATE: <b>06/30/04</b>	DATE ISSUED <b>06/30/04</b>	

REL.S.O.	182T	RPM	1750	S.F.	1.0	ROTOR	418424-31TE
FRAME	3	VOLTS	230/460	NEMA DESIGN	B	TEST S.O.	TYPICAL DATA
HP	3	AMPS	8.8/4.4	CODE LETTER	J	TEST DATE	--
TYPE	P	DUTY *		ENCLOSURE	SUB	STATOR RES. @ 25°C	1.17/4.68
PHASE/HERTZ	3/60	AMB °C/INSUL.	40/F	E/S	573966	OHMS (BETWEEN LINES)	

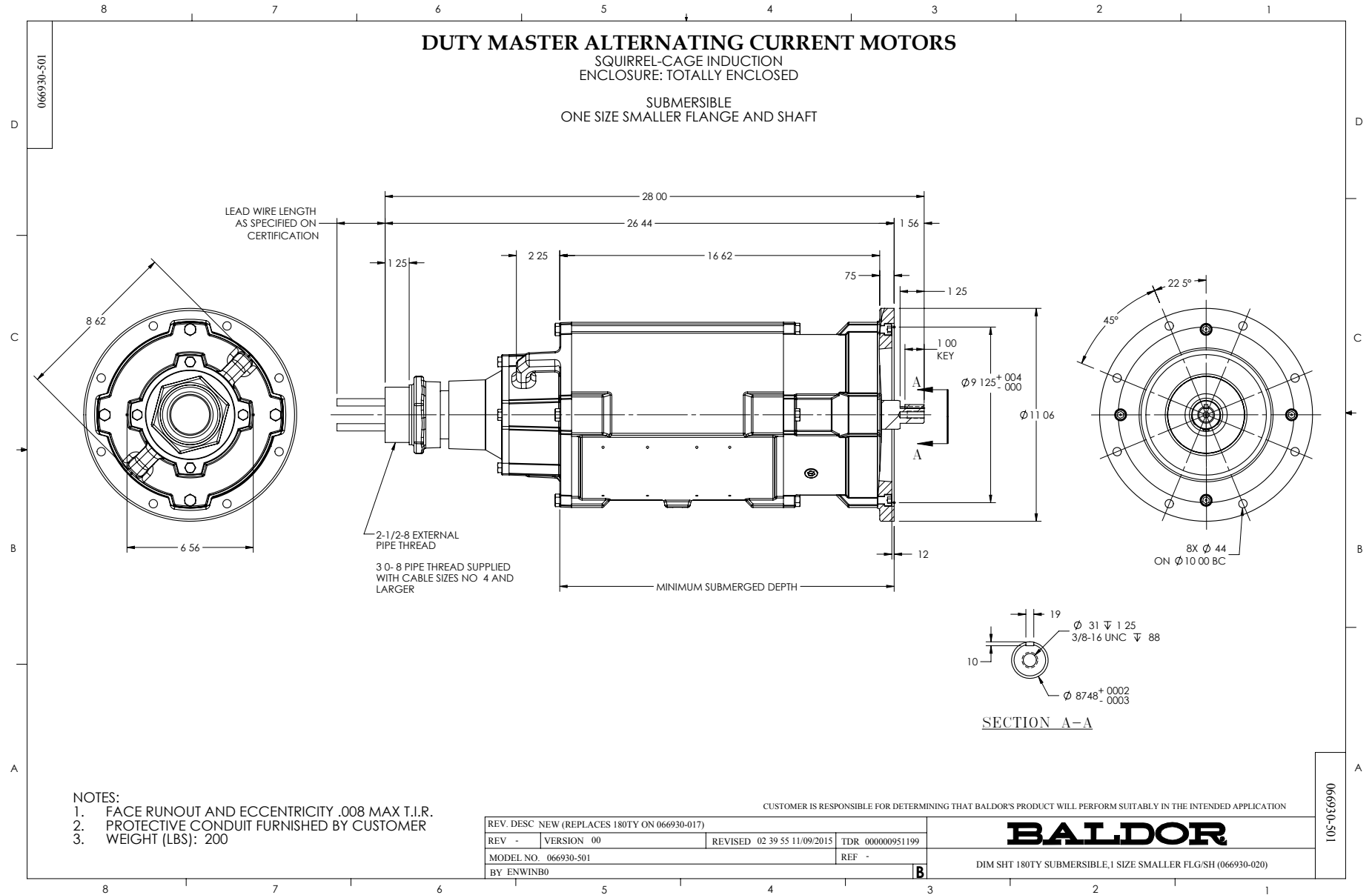


AMPERES SHOWN FOR 230/460 VOLT CONNECTION. IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.

	DRAWN BY: D. M. BYRD	AC MOTOR PERFORMANCE DATA	E02260-KAR016
	CHECKED BY: T. S. WILLIAMS APPROVED BY: D. M. BYRD DATE: 06/30/04		

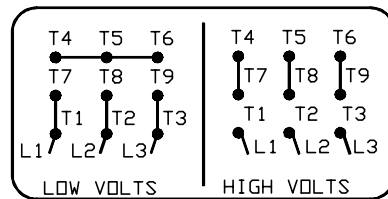
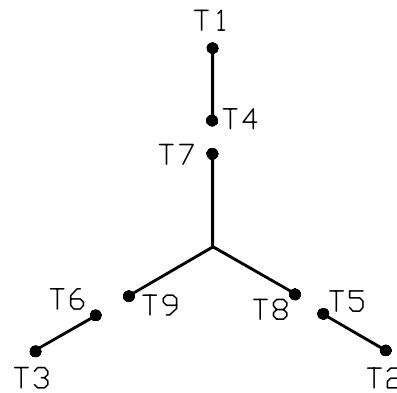
uszawol

Printed on 03/13/2018 1:13 PM



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: -	Ⓢ □	

**BALDOR**

CONN DIAG - STANDARD 9 LEAD, Y CONNECTED

SH 1 of 1