

BALDOR® • RELIANCE 

Product Information Packet

SUM70104SM

1HP,1745RPM,3PH,60HZ,180TY,TENV,FOOTLES

Part Detail							
Revision:	A	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	E02322H AG008	CD Diagram:	416820-001	Mfg Plant:	
Mech. Spec:		Layout:	066930-701	Poles:	04	Created Date:	04-09-2015
Base:		Eff. Date:	04-09-2020	Leads:			

Specs			
Catalog Number:	SUM70104SM	Duty Rating:	15 MIN
Enclosure:	TEXP	Heater Indicator:	No Heater
Frame:	180TY	Insulation Class:	F
Frame Material:	Iron	Inverter Code:	Inverter Ready
Output @ Frequency:	1.000 @ 60 HZ	KVA Code:	M
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:	1.70 A @ 460 V	Motor Standards:	NEMA
	3.40 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	SUM70104SM		SPEC NO.	P18G2784						
HP	1	AMPS	3.40/1.70		VOLTS	230/460		DESIGN	B	
FRAME SIZE	X0180TY		RPM	1745	HZ	60	AMB	40	SF	1.15
D.E. BRG.	50BC02JPP30A		PH	3	DUTY	15MIN		INSUL	F	
O.D.E. BRG.	25BC02JPG30A		TYPE	P	ENCL	TENV		CODE	M	
			POWER FACTOR		NEMA-NOM-EFF					
			MAX CORR KVAR		GUARANTEED EFFICIENCY					
					NEMA NOM/CSA QUOTED EFF @	100% LOAD				
SER.NO.					MOTOR WEIGHT			LBS.		
	*15 MIN IN AIR ;SUB. IN									
	SEWAGE / WATER ONLY ONLY;									
	FINAL CONN AT 230V MAXDEPTH									

Nameplate 000613007MR										
CAT NO	SUM70104SM		SPEC NO.	P18G2784						
HP	1	AMPS	3.40/1.70		VOLTS	230/460		DESIGN	B	
FRAME SIZE	X0180TY		RPM	1745	HZ	60	AMB	40	SF	1.15
D.E. BRG.	50BC02JPP30A		PH	3	DUTY	15MIN		INSUL	F	
O.D.E. BRG.	25BC02JPG30A		TYPE	P	ENCL	TENV		CODE	M	
			POWER FACTOR		NEMA-NOM-EFF					
			MAX CORR KVAR		GUARANTEED EFFICIENCY					
					NEMA NOM/CSA QUOTED EFF @	100% LOAD				
SER.NO.					MOTOR WEIGHT			LBS.		
	*15 MIN IN AIR ;SUB. IN									
	SEWAGE / WATER ONLY ONLY;									
	FINAL CONN AT 230V MAXDEPTH									

Parts List		
Part Number	Description	Quantity
SA297467	SA P18G2784	1.000 EA
RA284436	RA P18G2784	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
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	HSHCS 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

Parts List (continued)		
Part Number	Description	Quantity
421900124FU	ORING	1.000 EA
421900124FU	ORING	1.000 EA
004824018AF	SHELL ROTELLA OIL 10W	2.741 LB
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
034036013AB	LCKW 5/16 EXT.TOOTH LCKW	1.000 EA
034017013AC	LCKW 5/16" 316 S.S.	2.000 EA
047024003AH	T/LUG AMP 34112	4.000 EA
032018008BG	HHCS 5/16-18X1 BRASS-447	4.000 EA
032080003LB	HWHMS 1/4-20X3/8L PLTED	4.000 EA
032080003JB	HWHMS 10-24X3/8L PLTED	4.000 EA
415031017A	NUT W/WASHER 10-24 C.PLT	4.000 EA
032677003BG	5/16-18 X 3/8 DHFHBHCS	2.000 EA
047024003B	T/LUG AMP 33218	9.000 EA
603766501A	MACH,CAST,EX180Y,EX1,7BY	1.000 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
802386003R	PAIGE INTERNAL MOTOR POWER PLUG	1.000 EA
802386002R	PAIGE INTERNAL MOTOR CONTROL PLUG	1.000 EA
613425013E	12" SAFETY CABLE	2.000 EA
613425013S	FERRULE, SAFETY CABLE	2.000 EA
802386103R	PAIGE POWER CABLE SOCKET	1.000 EA

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802386102R	PAIGE CONTROL CABLE SOCKET	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
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

REL. S.O.	FRAME	HP	TYPE	PHASE/HERTZ	RPM	VOLTS
	180TY	1	P	3/60	1745	230/460
AMPS	DUTY	AMB °C/ INSUL.	S.F.	NEMA DESIGN	CODE LETTER	ENCL.
3.4/1.7	*	40/F	1.15	B	M	SUB
E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES (25 °C OHMS (BETWEEN LINES))		
536217	418424-33CE	---	---	3.25/13.0		

PERFORMANCE


LOAD	HP	AMPERES	RPM	INPUT KW	POWER FACTOR	% EFFICIENCY
NO LOAD	0	.70	1800	.346	61.6	0
1/4	.25	1.0	1777	.544	68.5	34.3
2/4	.50	1.2	1767	.747	77.5	50.0
3/4	.75	1.4	1757	.956	83.0	58.5
4/4	1.00	1.7	1746	1.17	86.4	63.5
5/4	1.25	2.0	1734	1.40	88.9	66.5

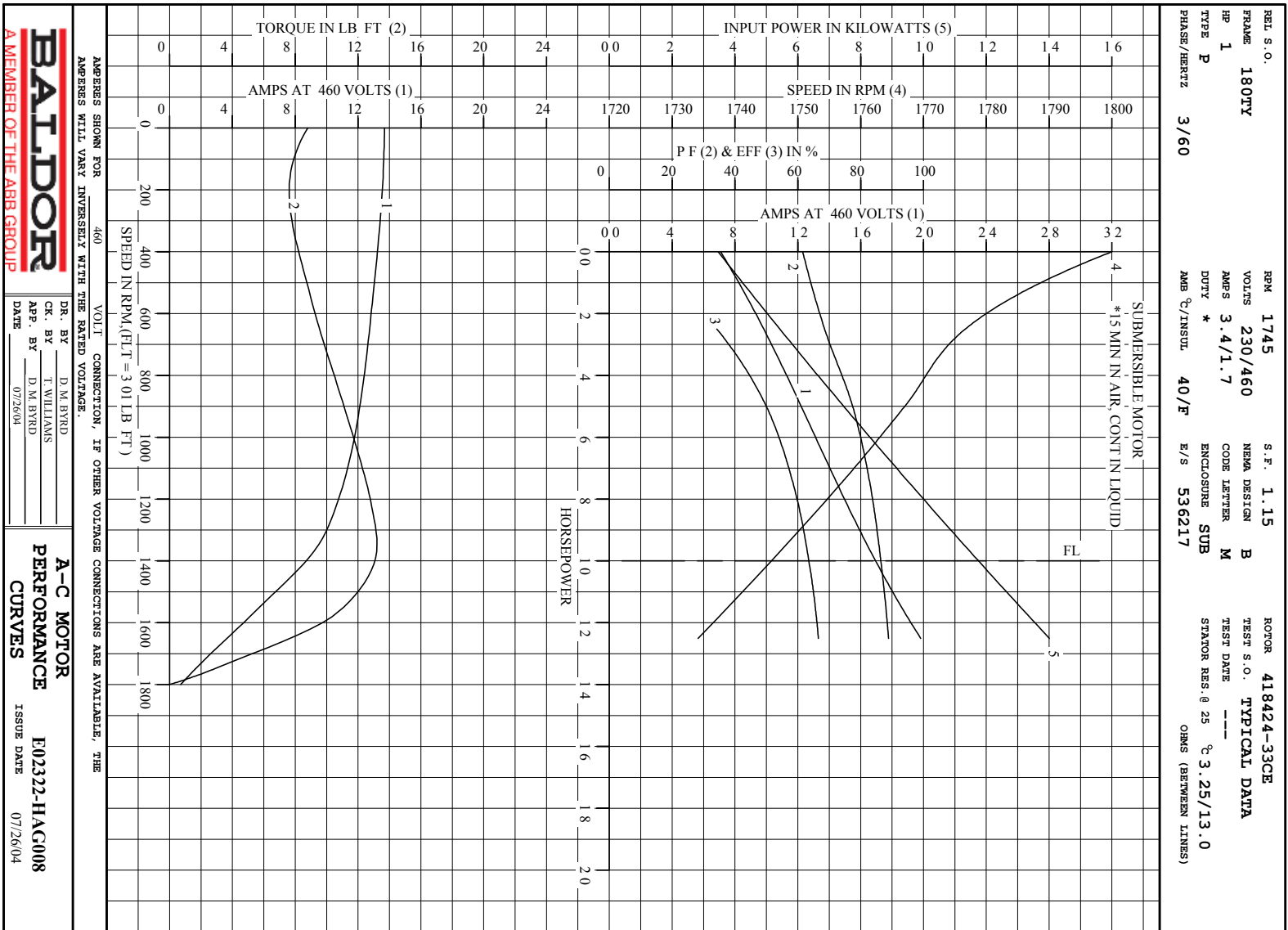
SPEED TORQUE

	RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES
LOCKED ROTOR	0	292	8.79	13.7
PULL UP	200	253	7.61	13.5
BREAKDOWN	1350	439	13.2	9.5
FULL LOAD	1746	100	3.01	1.7

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

REMARKS: TYPICAL DATA
SUBMERSIBLE MOTOR
*15 MIN 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>E02322-HAG008</p> <p>ISSUE DATE 07/26/04</p>
	CR. BY	T. WILLIAMS	
	APP. BY	D. M. BYRD	
	DATE	07/26/04	

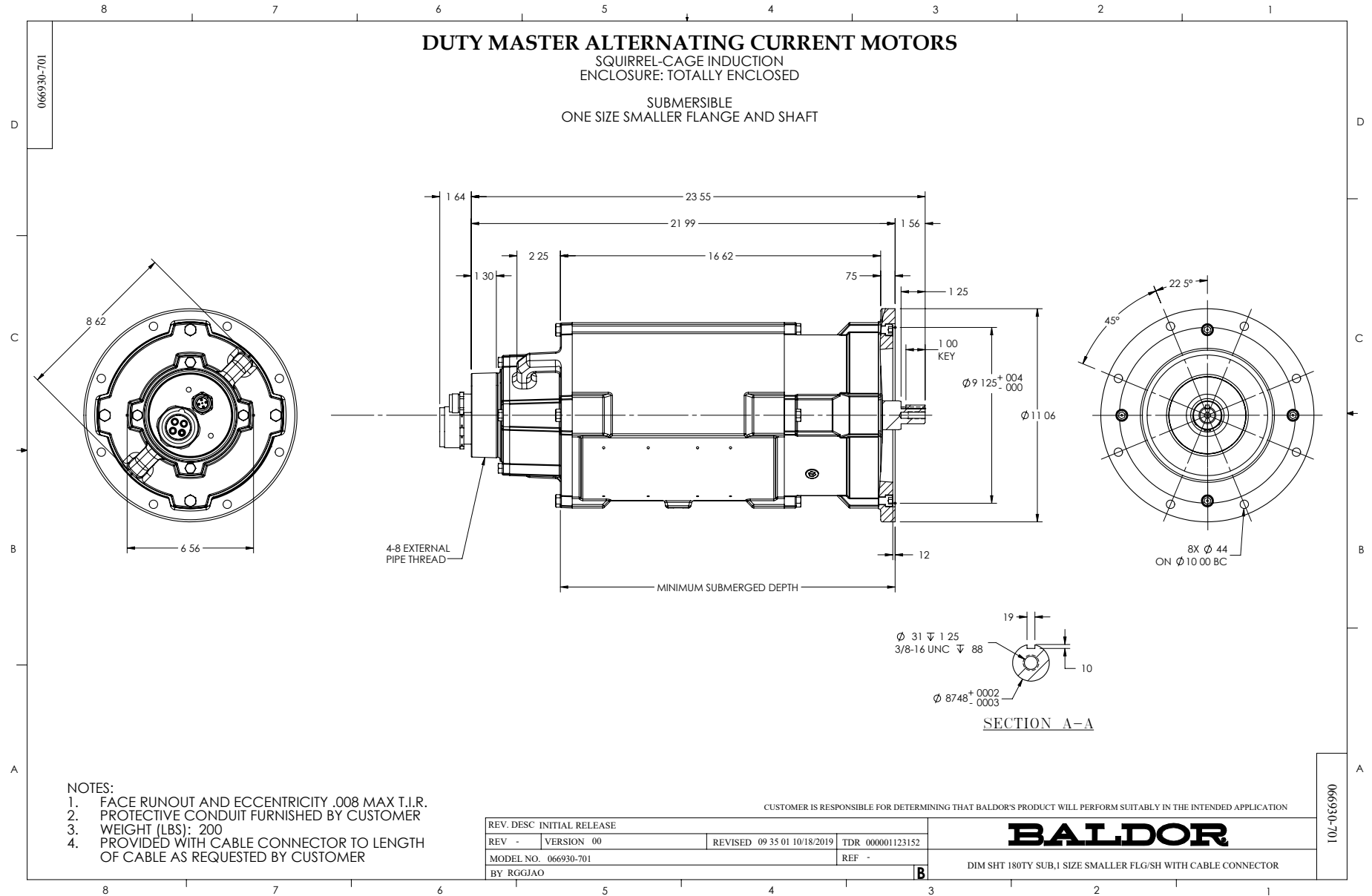


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 CK. BY T. WILLIAMS
 APP. BY D. M. BYRD
 DATE 07/26/04

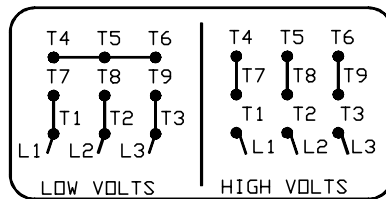
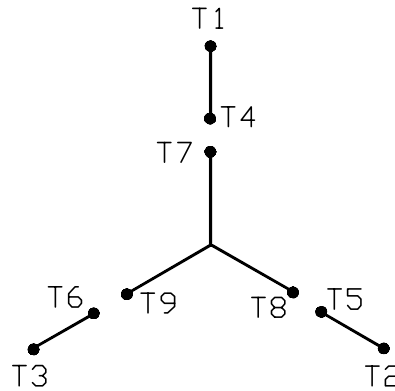
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PERFORMANCE
CURVES
 E02322-HAC008
 ISSUE DATE 07/26/04

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A-C MOTOR
 CONNECTION DIAGRAM
 STANDARD 9 LEAD Y CONNECTED



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CONN DIAG - STANDARD 9 LEAD, Y CONNECTED

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