

**BALDOR® • RELIANCE** 

**Product Information Packet**

**SUM70204SM**

**2HP,1730RPM,3PH,60HZ,180TY,TENV,FOOTLES**

Part Detail							
Revision:	-	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	E02741A A 009	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:	SUM70204SM	Duty Rating:	15 MIN
Enclosure:	XPNV	Heater Indicator:	No Heater
Frame:	180TY	Insulation Class:	F
Frame Material:	Iron	Inverter Code:	Inverter Ready
Output @ Frequency:	2.000 @ 60 HZ	KVA Code:	K
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:	2.90 A @ 460 V	Motor Standards:	NEMA
	5.80 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
CLASS II GROUP	X X X
OPERATING TEMP CODE	T3C
	NO. <input type="text"/>

<b>Nameplate 000613007MN</b>										
<b>CAT NO</b>	SUM70204SM		<b>SPEC NO.</b>	P18G2791						
<b>HP</b>	2	<b>AMPS</b>	5.80/2.90		<b>VOLTS</b>	230/ 460		<b>DESIGN</b>	B	
<b>FRAME SIZE</b>	X180TY	<b>RPM</b>	1730		<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>	K	
			<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>				100% LOAD	
<b>SER.NO.</b>					<b>MOTOR WEIGHT</b>	245		<b>LBS.</b>		
	*15 MIN IN AIR ;SUB.IN									
	WATER/SEWAGE ONLY;FINAL CONN@									
	230V SEE MANUAL FOR MAXDEPTH									

<b>Nameplate 000613007MR</b>									
<b>CAT NO</b>	SUM70204SM		<b>SPEC NO.</b>	P18G2791					
<b>HP</b>	2	<b>AMPS</b>	5.80/2.90		<b>VOLTS</b>	230/ 460		<b>DESIGN</b>	B
<b>FRAME SIZE</b>	X180TY	<b>RPM</b>	1730		<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>	245		<b>LBS.</b>			
	*15 MIN IN AIR ;SUB.IN								
	WATER/SEWAGE ONLY;FINAL CONN@								
	230V SEE MANUAL FOR MAXDEPTH								
			<b>NEMA-NOM-EFF</b>						
			<b>GUARANTEED EFFICIENCY</b>	100% LOAD					
			<b>INSUL</b>	F		<b>CODE</b>	K		
			<b>SF</b>	1.15		<b>FRAME SIZE</b>	X180TY		

Parts List		
Part Number	Description	Quantity
SA297460	SA P18G2791	1.000 EA
RA284429	RA P18G2791	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	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
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
032018008BG	HHCS 5/16-18X1 BRASS-447	4.000 EA
421900072FU	ORING	1.000 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	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	2	P	3/60	1730	230/460
AMPS	DUTY	AMB °C/ INSUL.	S.F.	NEMA DESIGN	CODE LETTER	ENCL.
5.8/2.9	CONT	40/F	1.15	B	K	TENV
E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES. @25 °C OHMS (BETWEEN LINES)		
535710	418424-33CE	---	---	2.08/8.32		

**PERFORMANCE**


LOAD	HP	AMPERES	RPM	INPUT KW	POWER FACTOR	% EFFICIENCY
NO LOAD	0	1.2	1800	.366	36.9	0
1/4	.50	1.6	1777	.754	60.6	49.4
2/4	1.00	1.9	1763	1.16	74.7	64.3
3/4	1.50	2.4	1749	1.58	82.5	70.7
4/4	2.00	2.9	1732	2.03	86.4	73.5
5/4	2.50	3.5	1714	2.50	88.5	74.6

**SPEED TORQUE**

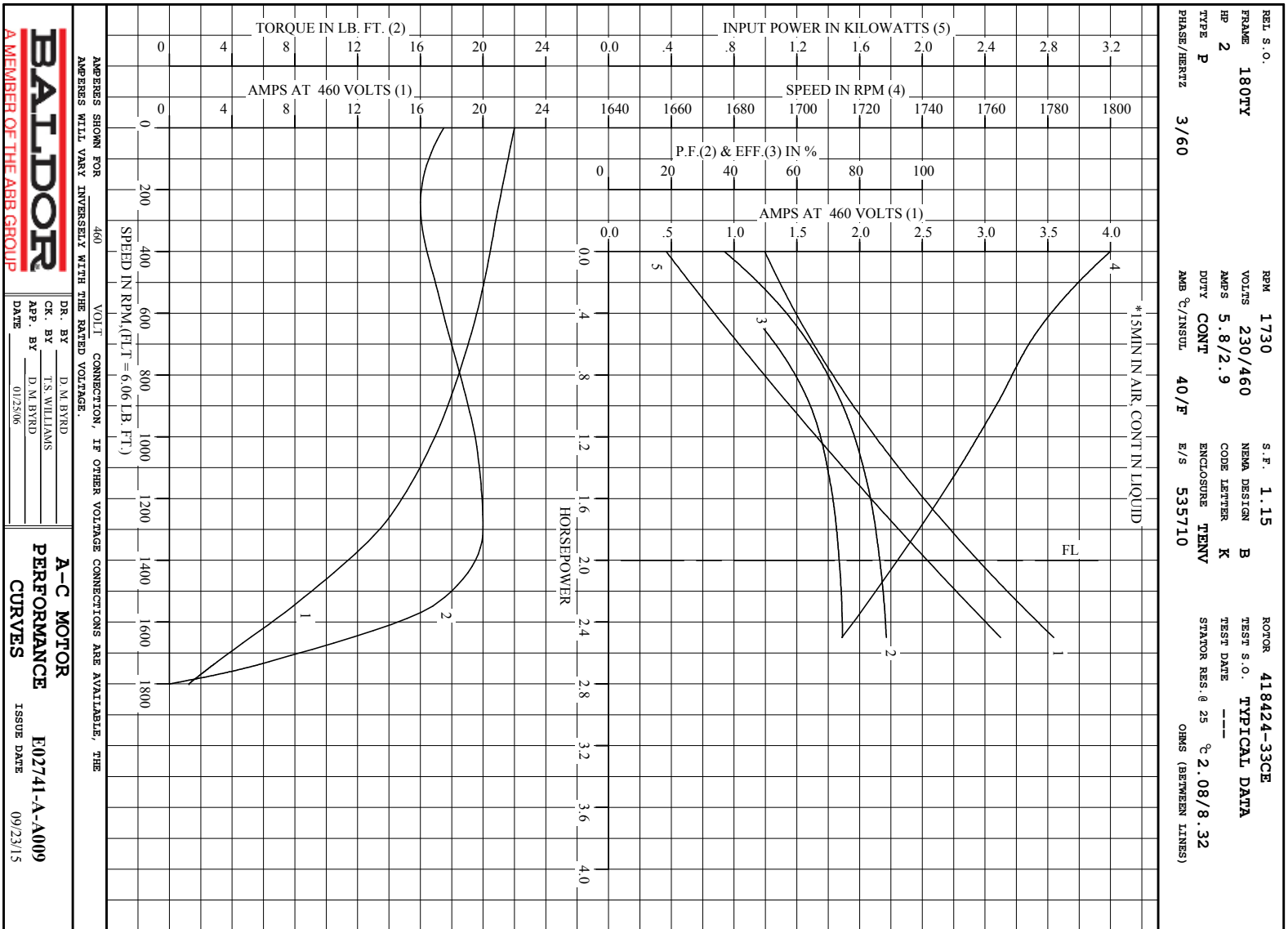
	RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES
LOCKED ROTOR	0	288	17.5	22.0
PULL UP	250	264	16.0	21.0
BREKDOWN	1300	330	20.0	13.4
FULL LOAD	1732	100	6.06	2.9

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

REMARKS: TYPICAL DATA  
\*15MIN IN AIR, CONT IN LIQUID

 <p><b>A MEMBER OF THE ABB GROUP</b></p>	DR. BY	D. M. BYRD	<p><b>A-C MOTOR PERFORMANCE DATA</b></p> <p>E02741-A-A009</p> <p>ISSUE DATE 09/23/15</p>
	CR. BY	T. S. WILLIAMS	
	APP. BY	D. M. BYRD	
	DATE	01/25/06	





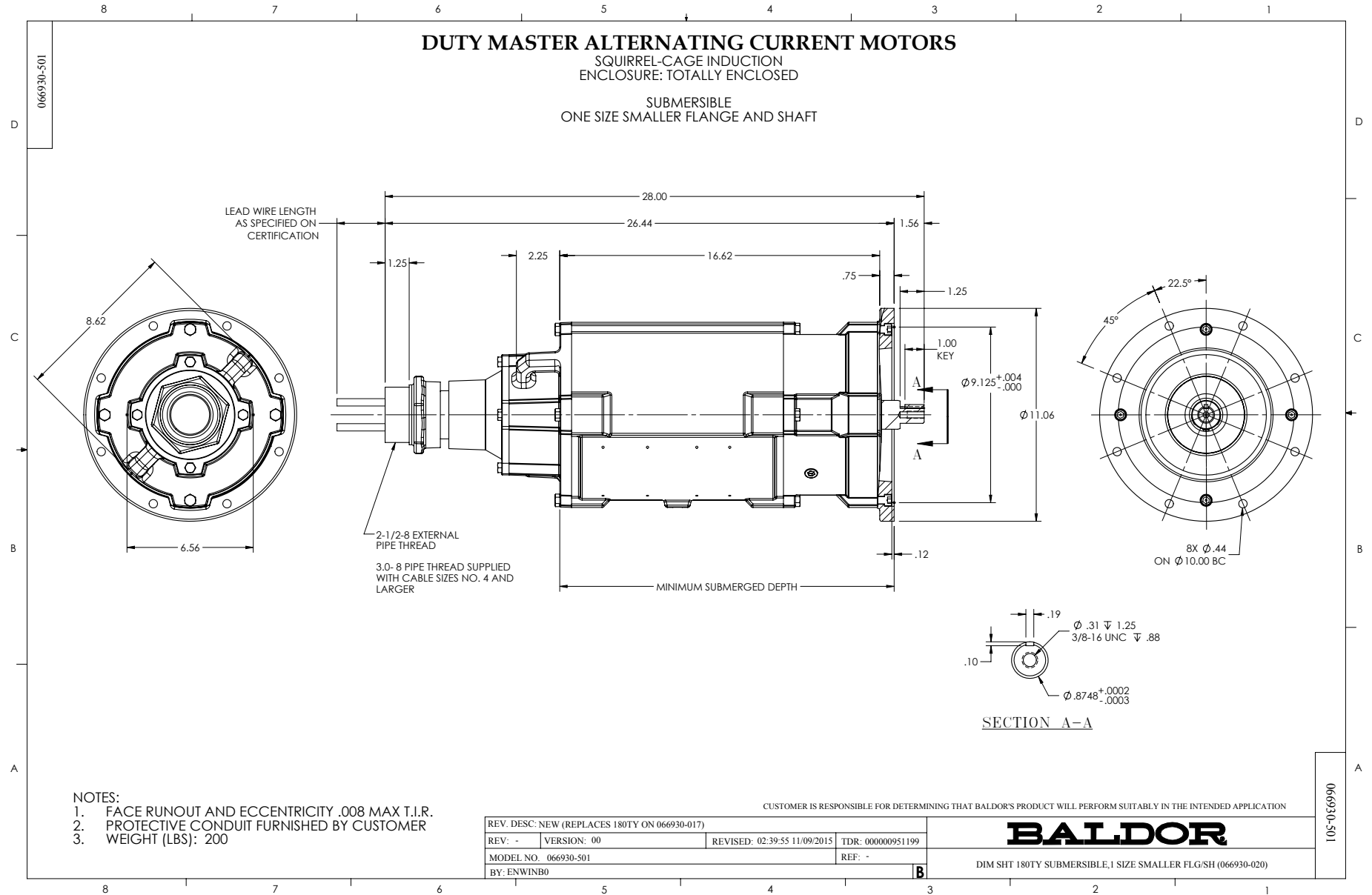
**BALDOR**  
A MEMBER OF THE ABB GROUP

DR. BY D. M. BYRD  
 CK. BY T. S. WILLIAMS  
 APP. BY D. M. BYRD  
 DATE 01/25/06

**A-C MOTOR**  
**PERFORMANCE**  
**CURVES**  
 E02741-A-A009  
 ISSUE DATE 09/23/15

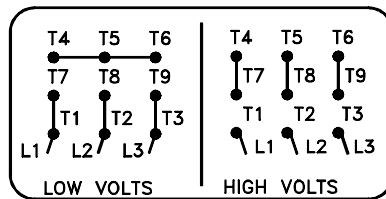
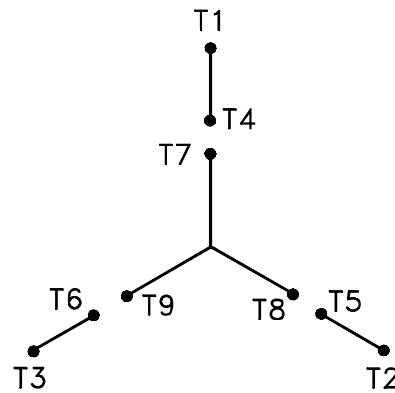
APPROX SHOWN FOR 460 VOLTS  
 AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.  
 VOLT CONNECTION, IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE

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416820-001

A-C MOTOR  
 CONNECTION DIAGRAM  
 STANDARD 9 LEAD Y CONNECTED



(N.P. 1575-A)

416820-001

REV. DESC: LOADED TO BUS, C/R 335225		
REV. LTR: -	VERSION: 00	TDR: 000000538207
FILE: \MGA\00000\659	REVISED: 10:14:19 04/30/2010	
MTL: -	BY: RAGRA	

**BALDOR**

CONN DIAG - STANDARD 9 LEAD, Y CONNECTED

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