

**BALDOR® • RELIANCE** 

**Product Information Packet**

**SUM72004-4**

**20HP,1800RPM,3PH,60HZ,210TY,TENV,FOOTLE**

Part Detail							
Revision:	-	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	E02775A A 009	CD Diagram:	416820-002	Mfg Plant:	
Mech. Spec:		Layout:	066930-502	Poles:	04	Created Date:	04-09-2015
Base:		Eff. Date:	04-13-2015	Leads:			

Specs			
Catalog Number:	SUM72004-4	Duty Rating:	15 MIN
Enclosure:	XPNV	Heater Indicator:	No Heater
Frame:	210TY	Insulation Class:	F
Frame Material:	Iron	Inverter Code:	Inverter Ready
Output @ Frequency:	20.000 @ 60 HZ	KVA Code:	G
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:	D-Flange
	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:	26.2 A @ 460 V	Motor Standards:	NEMA
	52.4 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>	SUM72004-4	<b>SPEC NO.</b>	P21G2758						
<b>HP</b>	20	<b>AMPS</b>	52.4/26.2	<b>VOLTS</b>	230/ 460		<b>DESIGN</b>	B	
<b>FRAME SIZE</b>	X210TY	<b>RPM</b>	1740	<b>HZ</b>	60	<b>AMB</b>	40	<b>SF</b>	1.15
<b>D.E. BRG.</b>	60BC02JPP30A		<b>PH</b>	3	<b>DUTY</b>	*		<b>INSUL</b>	F
<b>O.D.E. BRG.</b>	30BC02JPG30A		<b>TYPE</b>	P	<b>ENCL</b>	TENV		<b>CODE</b>	G
		<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>	420	<b>LBS.</b>			
	FINAL CONN @ 460V *15 MIN IN								
	AIR ;SUB.IN WATER/SEWAGE ONLY								
	SEE MANUAL FOR MAXDEPTH;								

<b>Nameplate 000613007MR</b>										
<b>CAT NO</b>	SUM72004-4	<b>SPEC NO.</b>	P21G2758							
<b>HP</b>	20	<b>AMPS</b>	52.4/26.2		<b>VOLTS</b>	230/ 460		<b>DESIGN</b>	B	
<b>FRAME SIZE</b>	X210TY	<b>RPM</b>	1740		<b>HZ</b>	60	<b>AMB</b>	40	<b>SF</b>	1.15
<b>D.E. BRG.</b>	60BC02JPP30A		<b>PH</b>	3	<b>DUTY</b>	*		<b>INSUL</b>	F	
<b>O.D.E. BRG.</b>	30BC02JPG30A		<b>TYPE</b>	P	<b>ENCL</b>	TENV		<b>CODE</b>	G	
			<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>	420		<b>LBS.</b>		
	FINAL CONN @ 460V *15 MIN IN									
	AIR ;SUB.IN WATER/SEWAGE ONLY									
	SEE MANUAL FOR MAXDEPTH;									

Parts List		
Part Number	Description	Quantity
SA297392	SA P21G2758	1.000 EA
RA284354	RA P21G2758	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
001575000B	WIRING DIAGRAM	1.000 EA
424476003WA	WIRING DIAGRAM MEDIUMA	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
413480001R	RESISTOR ASSEMBLY-BLANKET	1.000 EA

Parts List (continued)		
Part Number	Description	Quantity
421900144FU	ORING	1.000 EA
421900144FU	ORING	1.000 EA
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
032018010CG	HHCS 3/8-16X1-1/4L 316SS	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
047024003AH	T/LUG AMP 34112	4.000 EA
047024003E	TERMINAL LUG	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
700385014DA	CCA #4 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
421900144FU	ORING	1.000 EA
004824018AF	SHELL ROTELLA OIL 10W	2.500 LB
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	20	P	3/60	1740	230/460
AMPS	DUTY	AMB °C/ INSUL.	S.F.	NEMA DESIGN	CODE LETTER	ENCL.
52.4/26.2	CONT	40/F	1.15	B	G	SUB
E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES (25 °C OHMS (BETWEEN LINES))		
537473	418425-45YE	---	---	.172/.689		

**PERFORMANCE**

LOAD	HP	AMPERES	RPM	INPUT KW	POWER FACTOR	% EFFICIENCY
NO LOAD	0	10.2	1800	.878	10.8	0
1/4	5.01	12.0	1786	4.70	49.1	79.6
2/4	10.0	15.6	1772	8.68	69.7	86.1
3/4	15.0	20.5	1757	12.8	78.6	87.2
4/4	20.0	26.2	1740	17.2	82.7	86.6
5/4	25.0	32.5	1720	21.9	84.6	85.1

**SPEED TORQUE**

	RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES
LOCKED ROTOR	0	193	116	141
PULL UP	540	152	92.0	131
BREAKDOWN	1517	253	153	86.8
FULL LOAD	1740	100	60.4	26.2

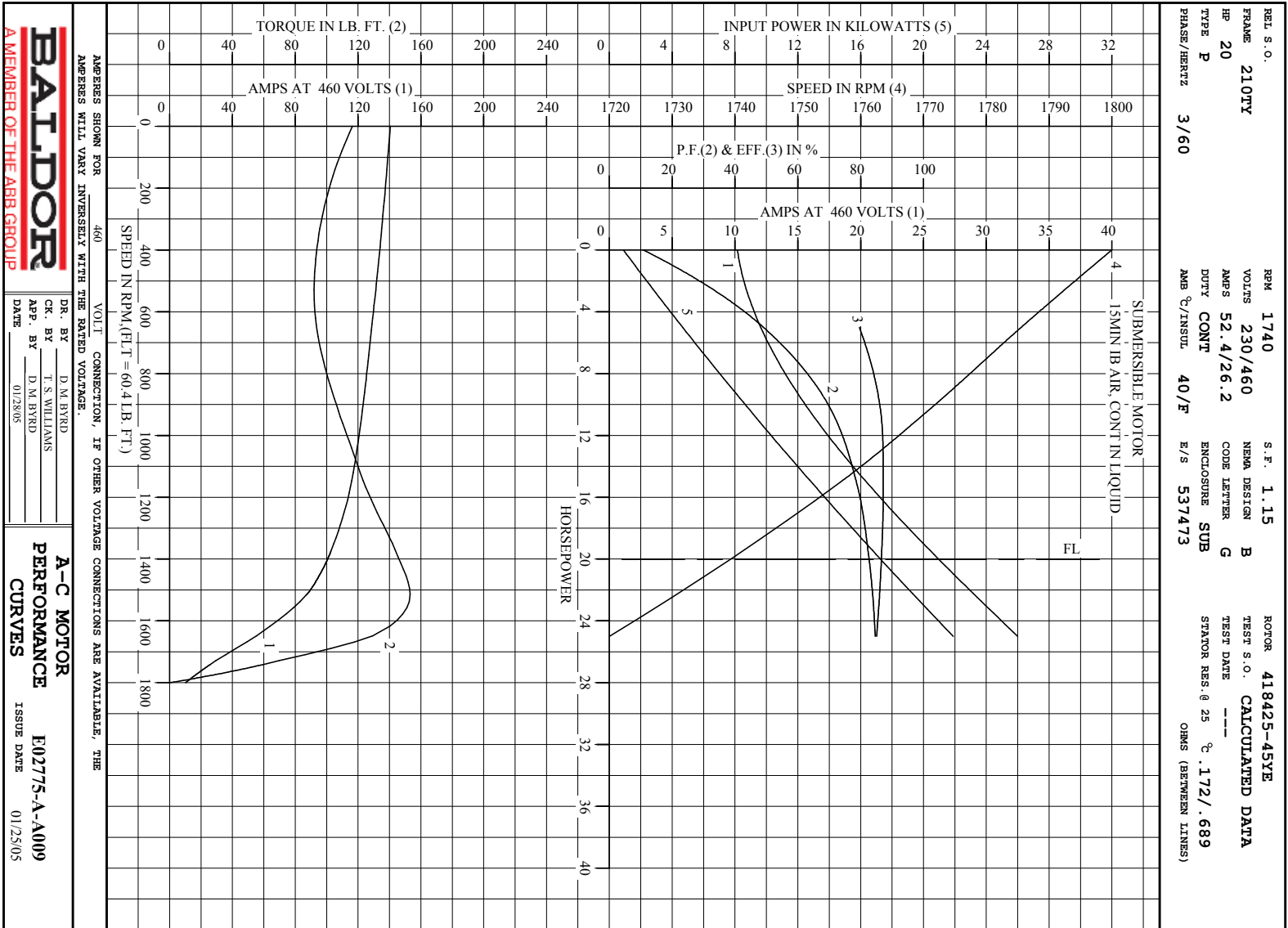
AMPERES SHOWN FOR 460. VOLT CONNECTION. IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE

REMARKS : CALCULATED DATA  
SUBMERSIBLE MOTOR  
15MIN IB AIR, CONT IN LIQUID



DR. BY D. M. BYRD  
CR. BY T. S. WILLIAMS  
APP. BY D. M. BYRD  
DATE 01/28/05

A-C MOTOR  
PERFORMANCE DATA  
E02775-A-A009  
ISSUE DATE 01/25/05



Printed on 12/10/14 16:22 @ r99

