ABB BALDOR RELIANCE

Customer information packet

SUM70204SM-8

2HP, 1755RPM, 3PH, 60HZ, 180TY, XPNV, V1
Class - CLI GP C,D
Division - Not Applicable

Copyright © All product information within this document is subject to ABB Motors and Mechanical Inc. copyright © protection, unless otherwise noted.
10/30/2026 2:43:03 PM

Specifications

Enclosure	XPNV
Frame	180TY
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	CLI GP C,D
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Phase	3
Agency Approvals	CCSA US
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Haz Area Temp Code	T3C
Heater Indicator	No Heater
Insulation Class	F
Inverter Code	Not Inverter
IP Rating	IP68
KVA Code	K
Lifting Lugs	Standard Lifting Lugs
Motor Standards	NEMA
Motor Type	M
Mounting Arrangement	V1
Number of Poles	4
Product Family	Pump - Centrifugal
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Service Factor	1.15
Shaft Diameter	0.875 IN
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger

Part Detail

Revision	B
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	85827
Layout	619738-002
Eff. date	12-10-2024
CD Diagram	
Poles	///
Leads	
Proprietary	False
Created date	11-30-2021

Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Winding	Normally Closed Thermostat

Nameplate

000613007MS												
CAT.NO.	SUM70204SM-8			**SPEC NO.**	S18-CWS0-0018							
SER.NO.					**FRAME SIZE**	180TY						
	HP	**RPM**	**VOLTS**	**AMPS**	**HZ**	**S.F.**						
	2	1755	200/400	7/3.5	6-60	1.00						
	2	1755	200/400	7/3.5	60	1.15						
CONSTANT HP RPM		**@**		**HZ**	**CODE**	K						
TYPE	P	**INSUL.CLASS**	F	**TORQUE**	10:1_VT			**DESIGN**	B			
D.E. BRG.	50BC02JPP30A			**ENCL**	TENV	**DUTY**	15 MIN		**PH**	3		
O.D.E. BRG.	25BC02JPG30A			**MOTOR WEIGHT**			**AMB**	40				
	FINAL CONN VOLTAGE = 200 *15											
	MIN IN AIR ;SUB. IN SEWAGE /											
	WATER ONLY											

000613007RC		
CLASS I GROUP	C D X	**NO.**
CLASS II GROUP	X X X	
OPERATING TEMP CODE	T3C	

000692000MB
SUITABLE FOR OPERATION ON PWM
INVERTER EQUIPPED WITH IGBT
DEVICES AND CAPABLE OF
CARRIER
FREQUENCY OF 2 KHZ MINIMUM

000613007MS

CAT.NO.	SUM70204SM-8			**SPEC NO.**	S18-CWS0-0018							
SER.NO.				**FRAME SIZE**	180TY							
	HP	**RPM**	**VOLTS**	**AMPS**	**HZ**	**S.F.**						
	2	1755	200/400	7/3.5	6-60	1.00						
	2	1755	200/400	7/3.5	60	1.15						
CONSTANT HP RPM		**@**		**HZ**	**CODE**	K						
TYPE	P	**INSUL.CLASS**	F	**TORQUE**	10:1_VT			**DESIGN**	B			
D.E. BRG.	50BC02JPP30A			**ENCL**	TENV	**DUTY**	15 MIN		**PH**	3		
O.D.E. BRG.	25BC02JPG30A			**MOTOR WEIGHT**			**AMB**	40				
	FINAL CONN VOLTAGE = 200 *15											
	MIN IN AIR ;SUB. IN SEWAGE /											
	WATER ONLY											

Parts List

Part number	Description	Quantity
SA399376	SA S18-CWS0-0018	1.000 ea
RA390441	RA S18-CWS0-0018	1.000 ea
000692000EJ	NAME PLATE	1.000 ea
000692000WC	WARNING FLAMMABLE VAPORS MAY BE PRESENT	2.000 ea
000613007MS	NP, MEDIUM AC,INVERTER DUTY CSA,STD INDU	1.000 ea
000901001AA	LABEL WARNING	1.000 ea
000613007RC	C UL US NAMEPLATE FOR HAZARDOUS LOC	1.000 ea
000692000MB	BALDOR RELIANCE MOTOR DATA NAMEPLATE	1.000 ea
000613007MS	NP, MEDIUM AC,INVERTER DUTY CSA,STD INDU	1.000 ea
034692002AE	HCSPP 1/4" 304 S.S.	1.000 ea
088203001AB	BRKT,ODE,180SUB 88203-1WB	1.000 ea
004824015A	GREASE POLYREX EM	0.100 lb
032018010CG	HHCS 3/8-16X1-1/4L 316SS	4.000 ea
421900124FU	ORING	1.000 ea
004824018AF	SHELL ROTELLA OIL 10W	2.741 lb
603760001AA	LABYRINTH	1.000 ea
413480001R	RESISTOR ASSEMBLY-BLANKET	1.000 ea
413412005R	LEAD WIRE ASSY(BLANKET	1.000 ea
413412004A	SUBM MOISTURE PROBE	2.000 ea
421900124FU	ORING	1.000 ea
088205002A	SUB PLT 180 88205-2WCB	1.000 ea
032130008CC	HSHCS 3/8-16 X 1.00" L	4.000 ea
032620020JD	HSSS 10-24X5/8L 304S.S.	1.000 ea
421900124FU	ORING	1.000 ea
088204001AA	BRKT,DE,180SUB 88204-1WA	1.000 ea
032018010CG	HHCS 3/8-16X1-1/4L 316SS	4.000 ea
032018006AG	HHCS 1/4-20X3/4L 316 SS	3.000 ea
064262012B	SEAL	1.000 ea
047174005C	SNAP RING	1.000 ea
034692003AN	3/8 PIPE PLUG	2.000 ea
047174005B	SNAP RING	1.000 ea

064262012C	SEAL	1.000 ea
032080003JB	HWHMS 10-24X3/8L PLTED	4.000 ea
032080003LB	HWHMS 1/4-20X3/8L PLTED	4.000 ea
415031017A	NUT W/WASHER 10-24 C.PLT	4.000 ea
415031017B	NUT W/WASHER1/4-20 C.P	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
421900072FU	ORING	1.000 ea
032018008BG	HHCS 5/16-18X1 316 SS	4.000 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
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
004824007K	SPECIAL PAINT	0.100 ea
033775004EA	DRSCR #6-1/4 304 S.S.	8.000 ea
034180008CD	3/16 SQ. X 1IN. KEY	1.000 ea
B3630-9	SUBM THERMOSTAT TAG	1.000 ea
B-3664002	TAG, (NON REGREASABLE)	1.000 ea

AC Induction Motor performance data

Record #85827 - Typical performance - not guaranteed values

Winding	06WGA0012
Type	0622M
Enclosure	PART

Nameplate data

Rated Output			2
Volts			200/400
Full Load Amps			7/3.5
R.P.M.			1755
Hz	60	Phase	3
KVA Code			K
S.F.			1.15
NEMA Nom. Eff.	89.5	Power Factor	79
Duty			15 MIN
S.F. Amps			

400 V, 60 Hz:
High Voltage Connection

Full Load Torque	6.01 LB-FT
Start Configuration	direct on line
Breakdown Torque	22.82 LB-FT
Pull-up Torque	11.93 LB-FT
Locked-rotor Torque	14.09 LB-FT
Starting Current	25.3 A
No-load Current	2.11
Line-line Res. @ 25°C	5.87 Ω
Temp. Rise @ Rated Load	80°C
Temp. Rise @ S.F. Load	82°C
Locked-rotor Power Factor	53.5
Rotor inertia	0.205 lb-ft²

Load Characteristics 400 V, 60 Hz, 2 HP

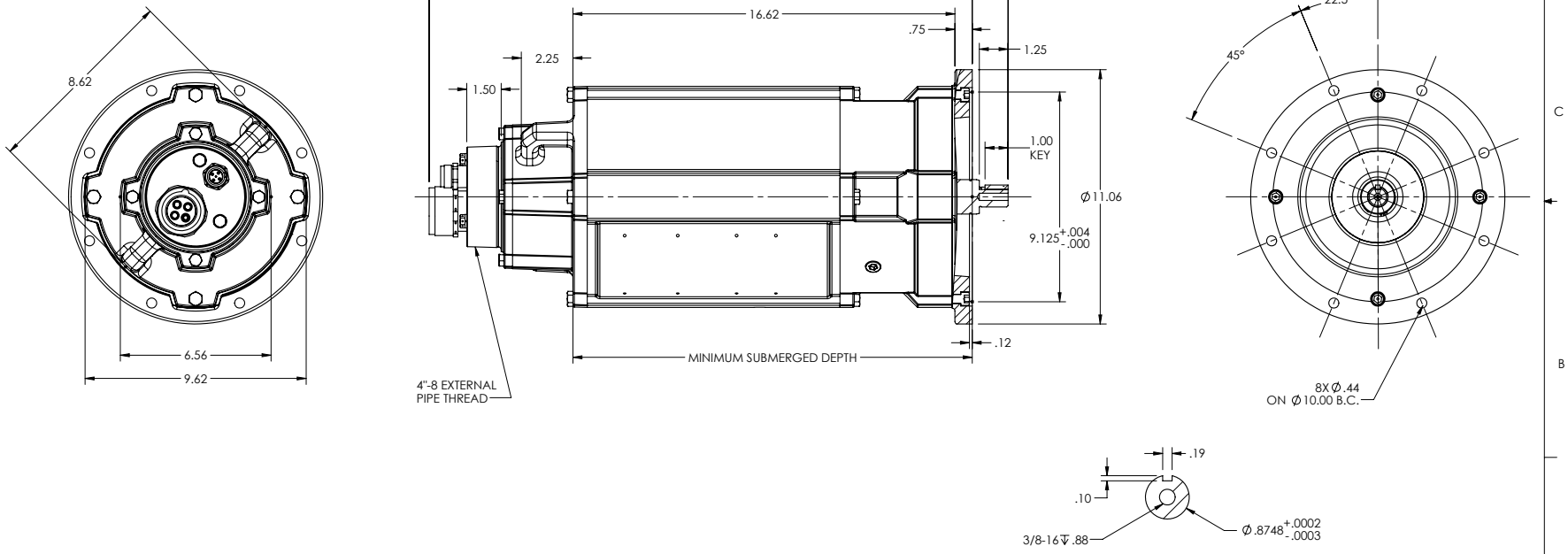
% of Rated Load	NL	25	50	75	100	125	150	SF
Power Factor	7	37	55	66	74	79	82	77
Efficiency	0	71.7	83.7	88.1	89.5	91.3	85.8	90.6
Speed	1796	1787	1778	1768	1757	1745	1730	1750
Line amperes	2.11	2.27	2.56	3.02	3.5	4.18	5.04	3.91

DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION
ENCLOSURE: TOTALLY ENCLOSED

SUBMERSIBLE
ONE SIZE SMALLER SHAFT AND FLANGE

619738-002



SECTION A–A

NOTES:
1. FACE RUNOUT AND ECCENTRICITY .008 MAX T.I.R.
2. PROTECTIVE CONDUIT FURNISHED BY CUSTOMER
3. WEIGHT (LBS): 200±15%
4. PROVIDED WITH CABLE ONNECTOR TO LENGTH OF CABLE AS REQUESTED BY CUSTOMER

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION

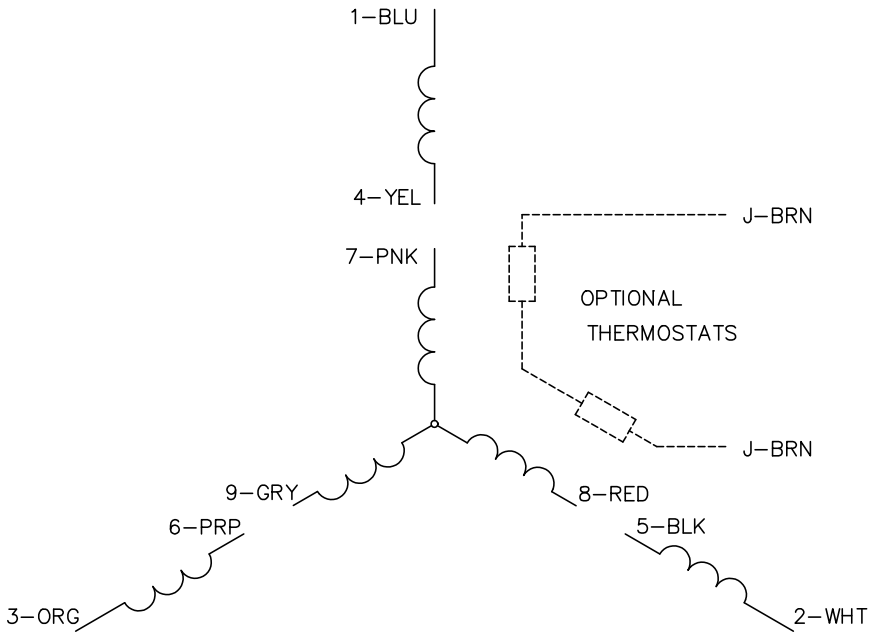
REV. DESC: INITIAL RELEASE			
REV: -	VERSION: 00	REVISED: 08:52:25 09/04/2020	TDR: 000001147566
MODEL NO. 619738-002			REF: -
BY: RGGJAO			B

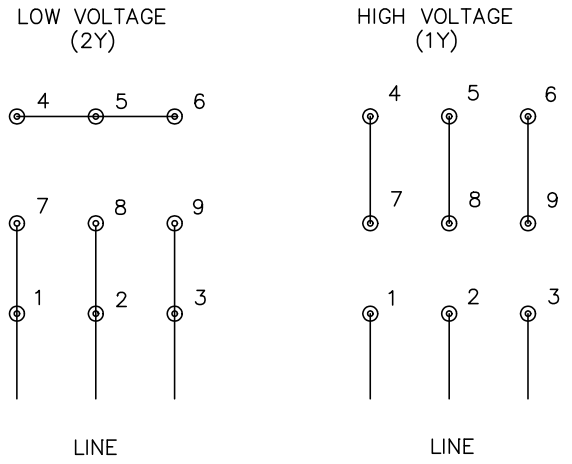
BALDOR

DIM SHT 180TY SUB ONE SIZE SMALLER SH/FLNG WITH CABLE CONN.

619738-002

CD0005





NOTES:

1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
2. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
3. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY BE A MULTIPLE OF THOSE SHOWN ABOVE.
4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

CD0005

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			BALDOR ELECTRIC Co.
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
CD0005		FILE: AAA00005140	MDL: –
		MTL: –	3PH, DV, 9 LEADS