ABB BALDOR RELIANCE

Customer information packet

SUM70154SM

1.5HP, 1770RPM, 3PH, 60HZ, 180TY, XPNV, V1
Class - CLI GP C,D
Division - Not Applicable

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Specifications

Enclosure	XPNV
Frame	180TY
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	M
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
Speed Code	Single Speed

Part Detail

Revision	B
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	86081
Layout	619738-002
Eff. date	12-10-2024
CD Diagram	
Poles	///
Leads	
Proprietary	False
Created date	10-27-2021

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

Nameplate

000613007MS

CAT.NO.	SUM70154SM			**SPEC NO.**	S18-CWS0-0014							
SER.NO.					**FRAME SIZE**	180TY						
	HP	**RPM**	**VOLTS**	**AMPS**	**HZ**	**S.F.**						
	1.5	1770	230/460	4.4/2.2	6-60	1.00						
	1.5	1770	230/460	4.4/2.2	60	1.15						
CONSTANT HP RPM		**@**		**HZ**	**CODE**	M						
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 = 230 *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.	SUM70154SM			**SPEC NO.**	S18-CWS0-0014							
SER.NO.				**FRAME SIZE**	180TY							
	HP	**RPM**	**VOLTS**	**AMPS**	**HZ**	**S.F.**						
	1.5	1770	230/460	4.4/2.2	6-60	1.00						
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	FINAL CONN VOLTAGE = 230 *15											
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	WATER ONLY											

AC Induction motor performance data

Record #86081 - Typical performance - not guaranteed values

Winding	06WGA0014
Type	3630M
Enclosure	TENV

Nameplate data			
Rated Output			1.5
Volts			230/460
Full Load Amps			4.4/2.2
R.P.M.			1770
Hz	60	Phase	3
KVA Code			M
S.F.			1.15
NEMA Nom. Eff.	86.5	Power Factor	71
Duty			15 MIN
S.F. Amps			

460 V, 60 Hz:

High Voltage Connection	
Full Load Torque	4.47 LB-FT
Start Configuration	direct on line
Breakdown Torque	21.47 LB-FT
Pull-up Torque	10.67 LB-FT
Locked-rotor Torque	12.6 LB-FT
Starting Current	19.49 A
No-load Current	1.4
Line-line Res. @ 25°C	7.07 Ω
Temp. Rise @ Rated Load	17°C
Temp. Rise @ S.F. Load	20°C
Locked-rotor Power Factor	43.1
Rotor inertia	0.279 lb-ft²

Load Characteristics 460 V, 60 Hz, 1.5 HP

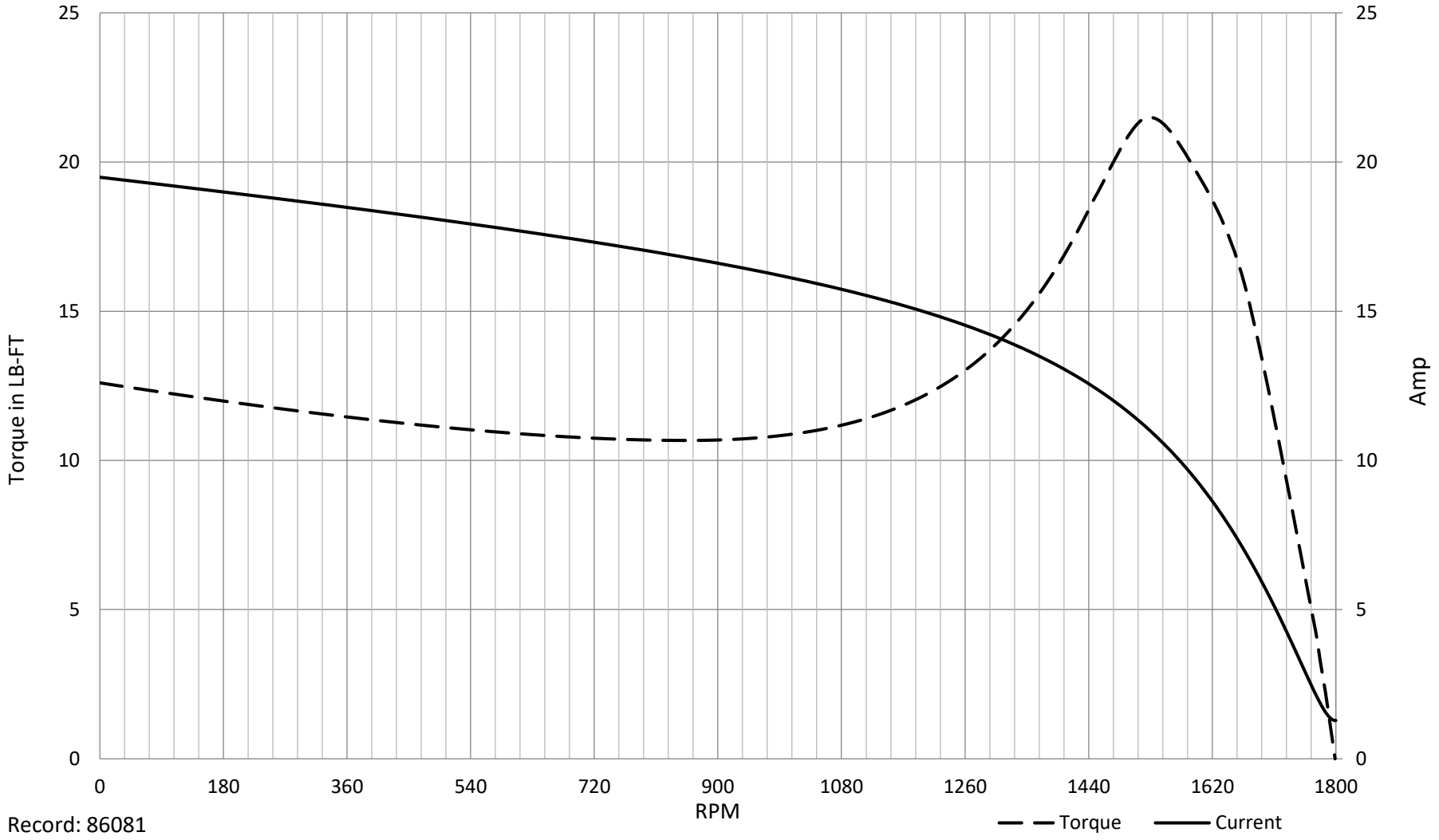
% of Rated Load	NL	25	50	75	100	125	150	SF
Power Factor	7	32	50	62	71	77	80	75
Efficiency	0	74.1	84.6	87.7	88.8	88.1	84.4	88.4
Speed	1799	1792	1785	1777	1769	1760	1748	1764
Line amperes	1.4	1.5	1.66	1.92	2.23	2.6	3.1	2.45

SPEED TORQUE / SPEED CURRENT CURVES

BALDOR • RELIANCE

06WGA0014

1.5HP 460V 60HZ



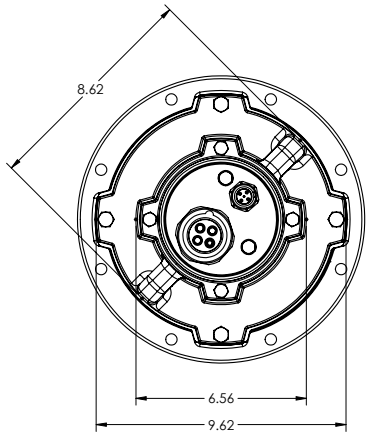
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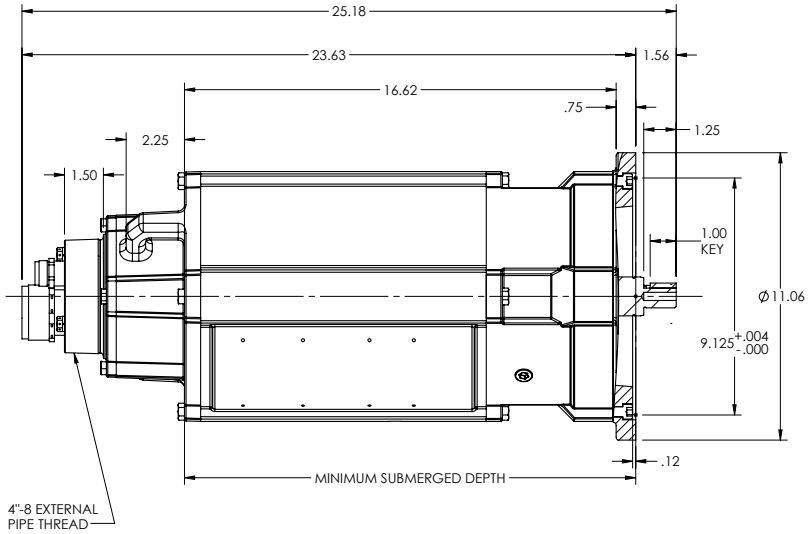
DUTY MASTER ALTERNATING CURRENT MOTORS

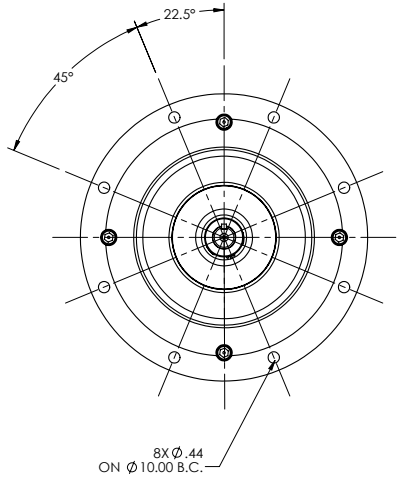
SQUIRREL-CAGE INDUCTION
ENCLOSURE: TOTALLY ENCLOSED

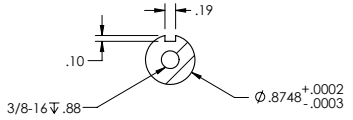
SUBMERSIBLE
ONE SIZE SMALLER SHAFT AND FLANGE

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

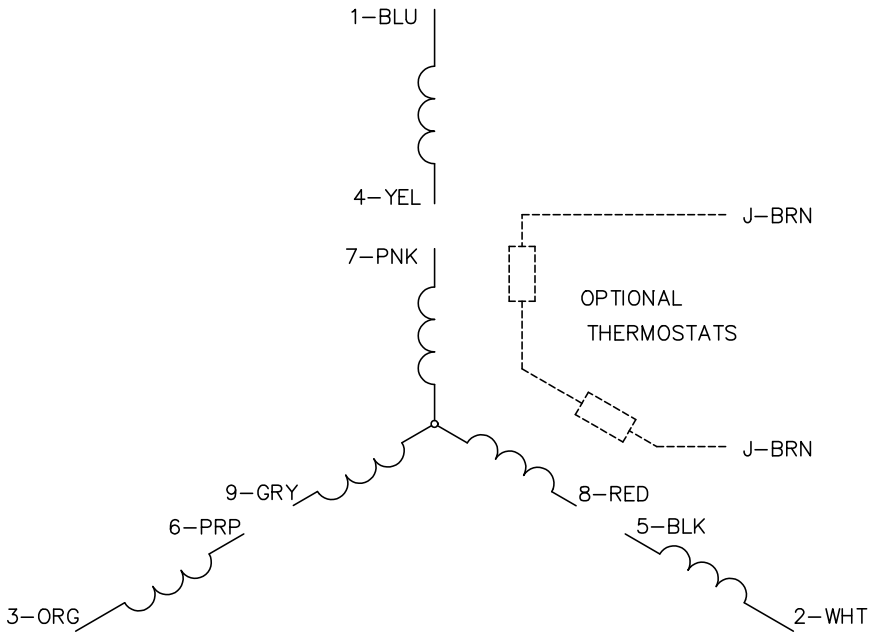
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REV: -	VERSION: 00	REVISED: 08:52:25 09/04/2020	TDR: 000001147566
MODEL NO. 619738-002			REF: -
BY: RGGJAO			B

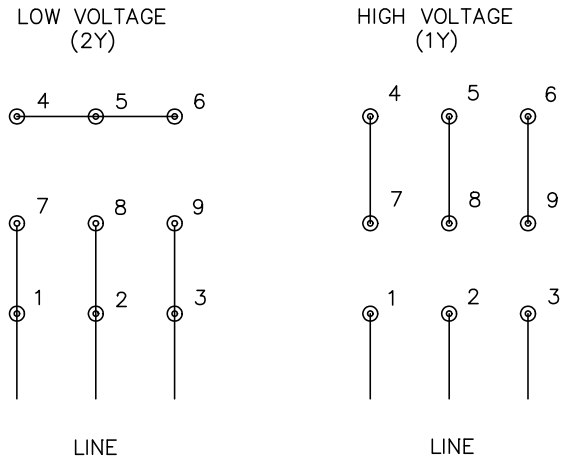
BALDOR

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