ABB BALDOR RELIANCE

Customer information packet

SUM70204SM

2HP, 1760RPM, 3PH, 60HZ, 180TY, XPNV, V1
Class - CLI GP C,D
Division - Not Applicable

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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	L
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.	85821
Layout	619738-002
Eff. date	12-10-2024
CD Diagram	
Poles	///
Leads	
Proprietary	False
Created date	10-26-2021

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

Nameplate

000613007MS											
CAT.NO.	SUM70204SM			**SPEC NO.**	S18-CWS0-0013						
SER.NO.				**FRAME SIZE**	180TY						
	HP	**RPM**	**VOLTS**	**AMPS**	**HZ**	**S.F.**					
	2	1760	230/460	6.2/3.1	6-60	1.00					
	2	1760	230/460	6.2/3.1	60	1.15					
CONSTANT HP RPM		**@**		**HZ**	**CODE**	L					
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.	SUM70204SM			**SPEC NO.**	S18-CWS0-0013							
SER.NO.				**FRAME SIZE**	180TY							
	HP	**RPM**	**VOLTS**	**AMPS**	**HZ**	**S.F.**						
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	FINAL CONN VOLTAGE = 230 *15											
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	WATER ONLY											

AC Induction motor performance data

Record #85821 - Typical performance - not guaranteed values

Winding	06WGA0011
Type	0622M
Enclosure	PART

Nameplate data

Rated Output			2
Volts			230/460
Full Load Amps			6.2/3.1
R.P.M.			1760
Hz	60	Phase	3
KVA Code			K
S.F.			1.15
NEMA Nom. Eff.	0	Power Factor	0
Duty			15 MIN
S.F. Amps			

460 V, 60 Hz:
High Voltage Connection

Full Load Torque	6.01 LB-FT
Start Configuration	direct on line
Breakdown Torque	23.92 LB-FT
Pull-up Torque	12.46 LB-FT
Locked-rotor Torque	14.72 LB-FT
Starting Current	22.52 A
No-load Current	1.85
Line-line Res. @ 25°C	6.74 Ω
Temp. Rise @ Rated Load	30°C
Temp. Rise @ S.F. Load	46°C
Locked-rotor Power Factor	50.7
Rotor inertia	0.205 lb-ft²

Load Characteristics 460 V, 60 Hz, 2 HP

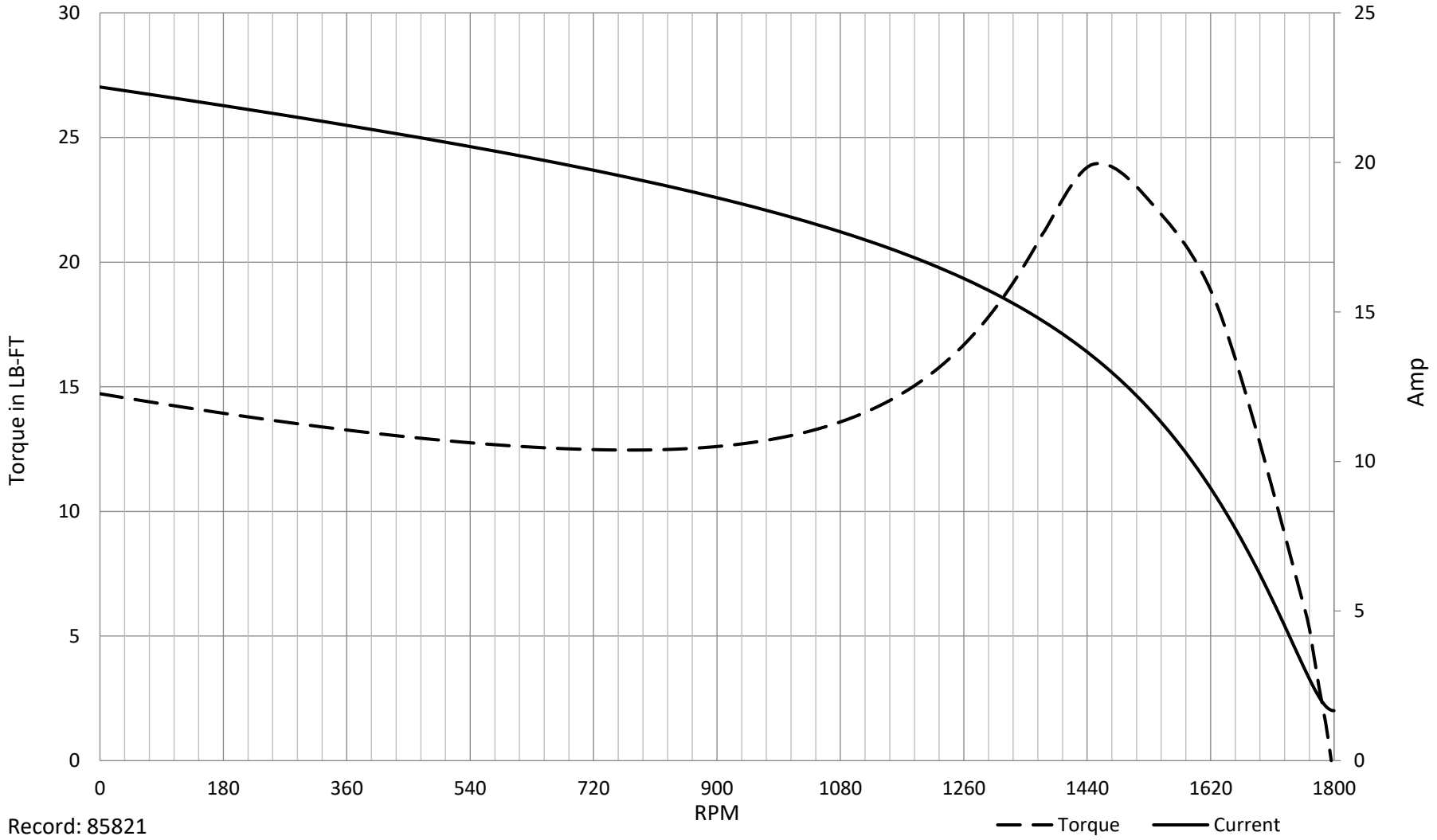
% of Rated Load	NL	25	50	75	100	125	150	SF
Power Factor	7	36	55	66	74	78	81	76
Efficiency	0	67.1	78.7	83.1	86.5	84.7	81.3	85.4
Speed	1796	1788	1778	1769	1758	1747	1732	1751
Line amperes	1.85	1.99	2.23	2.63	3.08	3.62	4.34	3.4

SPEED TORQUE / SPEED CURRENT CURVES

BALDOR • RELIANCE

06WGA0011

2HP 460V 60HZ



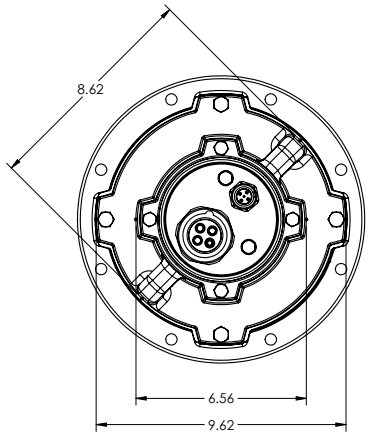
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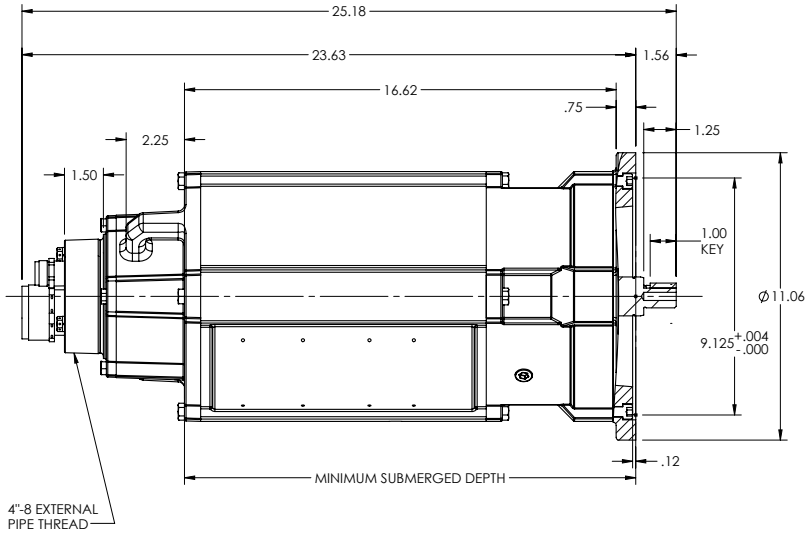
DUTY MASTER ALTERNATING CURRENT MOTORS

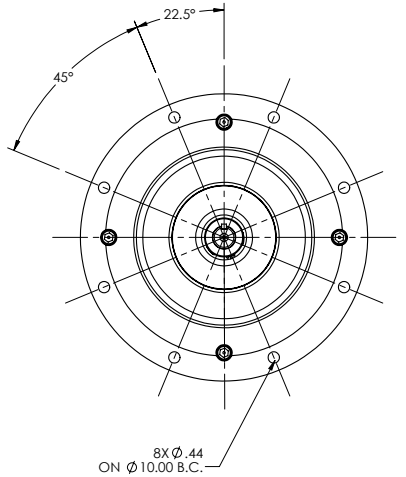
SQUIRREL-CAGE INDUCTION
ENCLOSURE: TOTALLY ENCLOSED

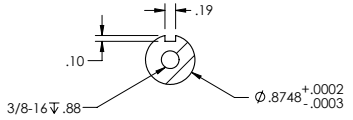
SUBMERSIBLE
ONE SIZE SMALLER SHAFT AND FLANGE

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

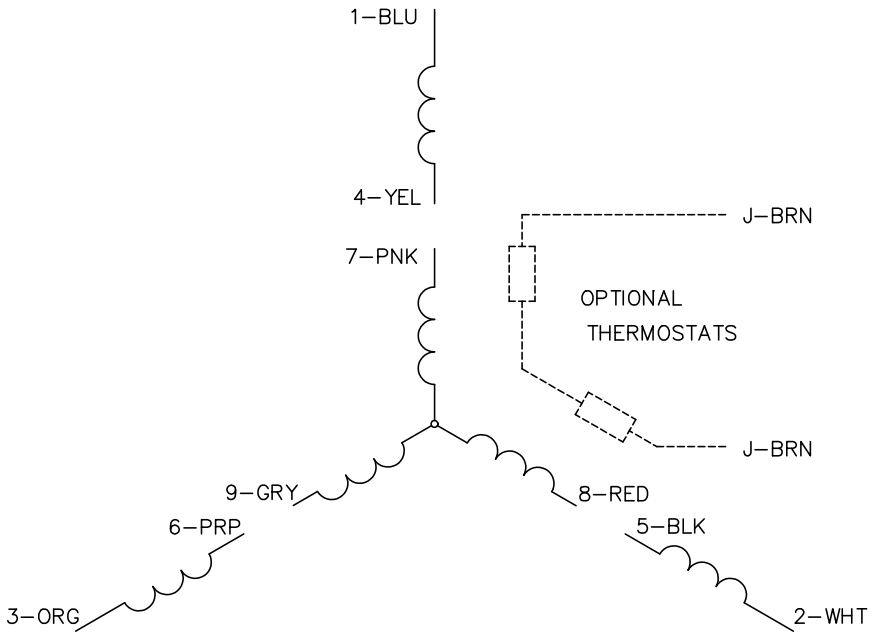
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REV: -	VERSION: 00	REVISED: 08:52:25 09/04/2020	TDR: 000001147566
MODEL NO. 619738-002			REF: -
BY: RGGJAO			B

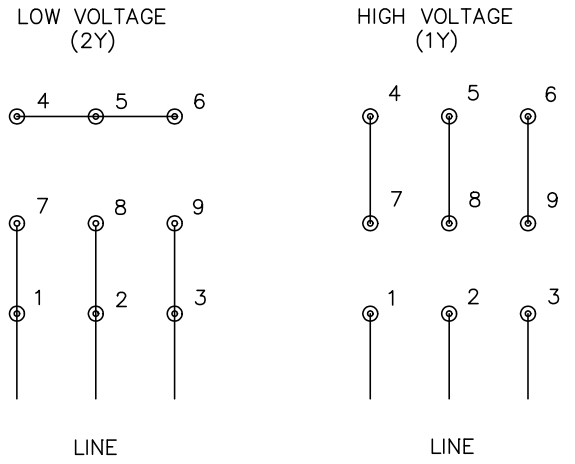
BALDOR

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