ABB BALDOR RELIANCE

Customer information packet

SUM70504SM-4

5HP, 1755RPM, 3PH, 60HZ, 180TY, XPNV, V1
Class - CLI GP C,D
Division - Not Applicable

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11/18/2026 10:54:31 AM

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	J
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	C
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	86086
Layout	619738-002
Eff. date	07-21-2025
CD Diagram	
Poles	///
Leads	
Proprietary	False
Created date	10-25-2021

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

Nameplate

000613007MS												
CAT.NO.	SUM70504SM-4			**SPEC NO.**	S18-CWS0-0008							
SER.NO.					**FRAME SIZE**	180TY						
	HP	**RPM**	**VOLTS**	**AMPS**	**HZ**	**S.F.**						
	5	1755	230/460	13.8/6.9	6-60	1.00						
	5	1755	230/460	13.8/6.9	60	1.15						
CONSTANT HP RPM		**@**		**HZ**	**CODE**	J						
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 = 460 *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.	SUM70504SM-4			**SPEC NO.**	S18-CWS0-0008							
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	FINAL CONN VOLTAGE = 460 *15											
	MIN IN AIR ;SUB. IN SEWAGE /											
	WATER ONLY											

AC Induction motor performance data

Record #86086 - Typical performance - not guaranteed values

Winding	06WGA0017
Type	0640M
Enclosure	TENV

Nameplate data

Rated Output			5
Volts			230/460
Full Load Amps			13.8/6.9
R.P.M.			1755
Hz	60	Phase	3
KVA Code			J
S.F.			1.15
NEMA Nom. Eff.	89.5	Power Factor	76
Duty			15 MIN
S.F. Amps			

460 V, 60 Hz:
High Voltage Connection

Full Load Torque	14.92 LB-FT
Start Configuration	direct on line
Breakdown Torque	53.26 LB-FT
Pull-up Torque	26.84 LB-FT
Locked-rotor Torque	31.7 LB-FT
Starting Current	47.59 A
No-load Current	3.62
Line-line Res. @ 25°C	2.57 Ω
Temp. Rise @ Rated Load	56°C
Temp. Rise @ S.F. Load	69°C
Locked-rotor Power Factor	41.4
Rotor inertia	0.372 lb-ft²

Load Characteristics 460 V, 60 Hz, 5 HP

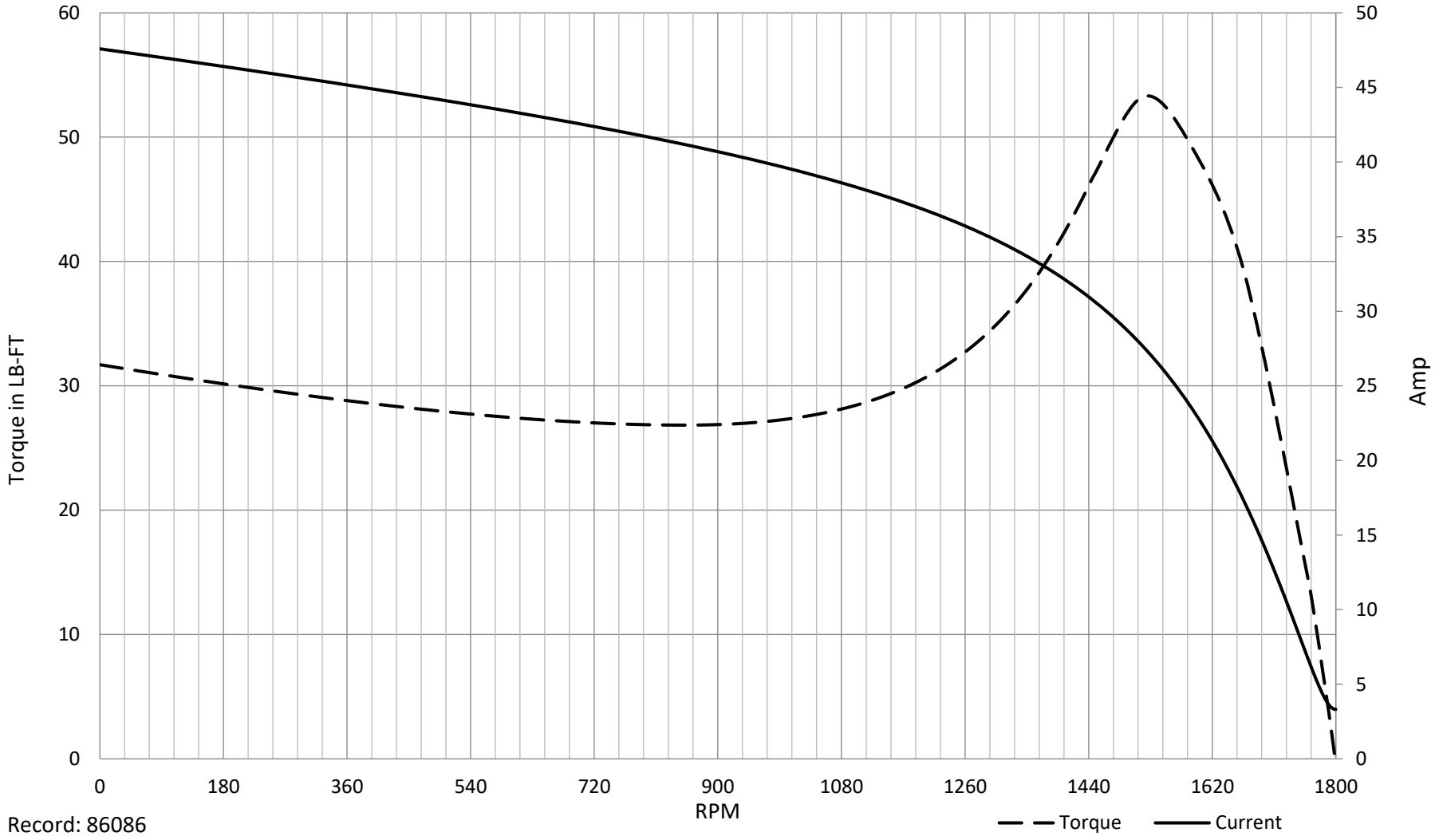
% of Rated Load	NL	25	50	75	100	125	150	SF
Power Factor	5	36	57	68	76	80	82	78
Efficiency	0	81	88.6	90.2	89.8	88.6	84.1	89.1
Speed	1799	1790	1780	1770	1758	1745	1729	1750
Line amperes	3.62	3.96	4.65	5.68	6.87	8.26	10.11	7.7

SPEED TORQUE / SPEED CURRENT CURVES

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06WGA0017

5HP 460V 60HZ



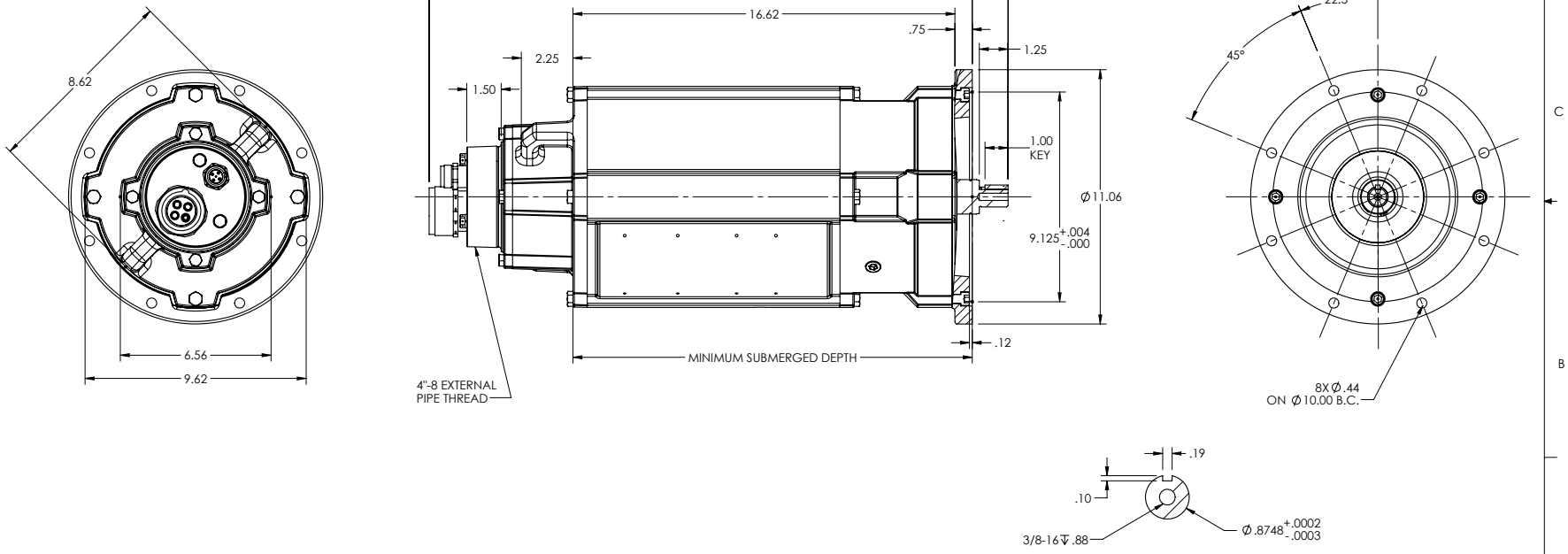
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DUTY MASTER ALTERNATING CURRENT MOTORS

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

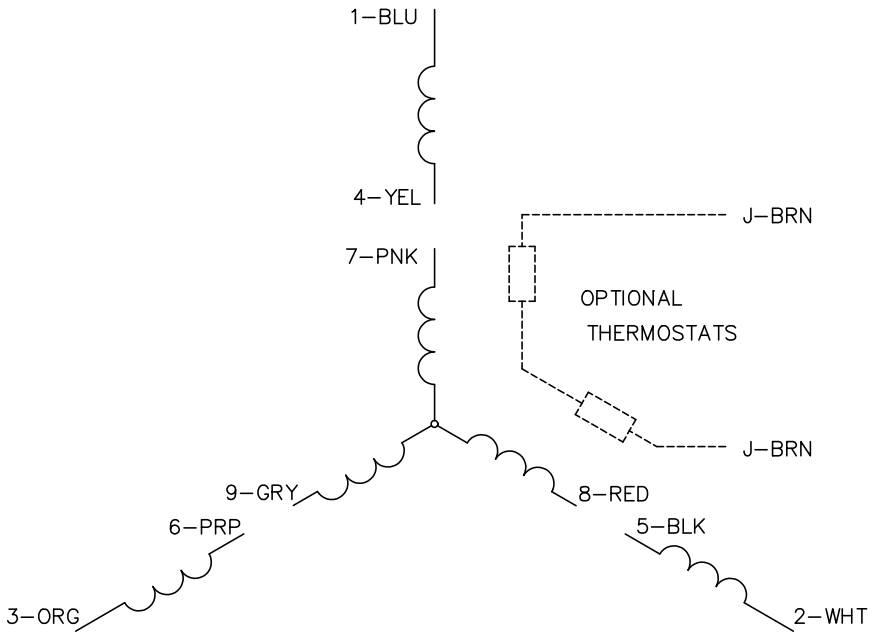
REV. DESC: INITIAL RELEASE			
REV: -	VERSION: 00	REVISED: 08:52:25 09/04/2020	TDR: 000001147566
MODEL NO. 619738-002			REF: -
BY: RGGJAO			B

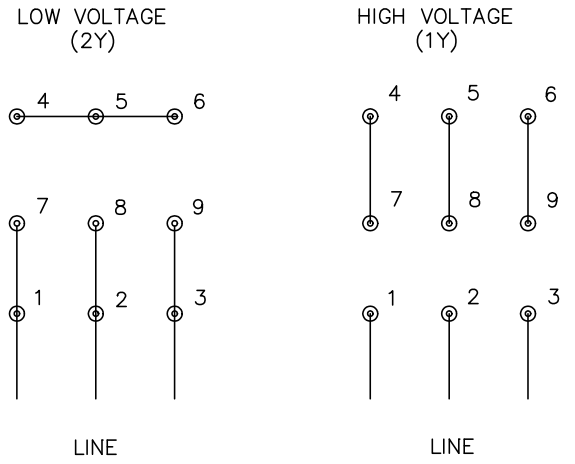
BALDOR

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