

ABB BALDOR RELIANCE III

Customer information packet

SUM70504-8

5HP, 1755RPM, 3PH, 60HZ, 180TY, XPNV, V1

Class - CLI GP C,D

Division - Not Applicable

Specifications

Enclosure	XPNV
Frame	180TY
Frequency	60.00 Hz
Haz Area Class and Group	CLI GP C,D
Haz Area Division	Not Applicable
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
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	1.250 IN
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Starting Method	Direct on line
Thermal Device - Winding	Normally Closed Thermostat

Part Detail

Revision	C
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	86084
Layout	619738-001
Eff. date	12-10-2024
CD Diagram	
Poles	///
Leads	
Proprietary	False
Created date	12-15-2021

Nameplate

000613007MS											
CAT.NO.	SUM70504-8			SPEC NO.	S18-CWS0-0025						
SER.NO.					FRAME SIZE	180TY					
CONSTANT HP RPM	HP	RPM	VOLTS		AMPS		HZ		S.F.		
	5	1755	200/400		15.6/7.8		6-60		1.00		
	5	1755	200/400		15.6/7.8		60		1.15		
	@			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 = 200										
	*15MIN 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

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	FINAL CONN VOLTAGE = 200					
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	/ WATER ONLY					

Record #86084 - Typical performance - not guaranteed values

Winding	06WGA0015
Type	0640M
Enclosure	TENV

Nameplate data

Rated Output	5		
Volts	200/400		
Full Load Amps	15.6/7.8		
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			

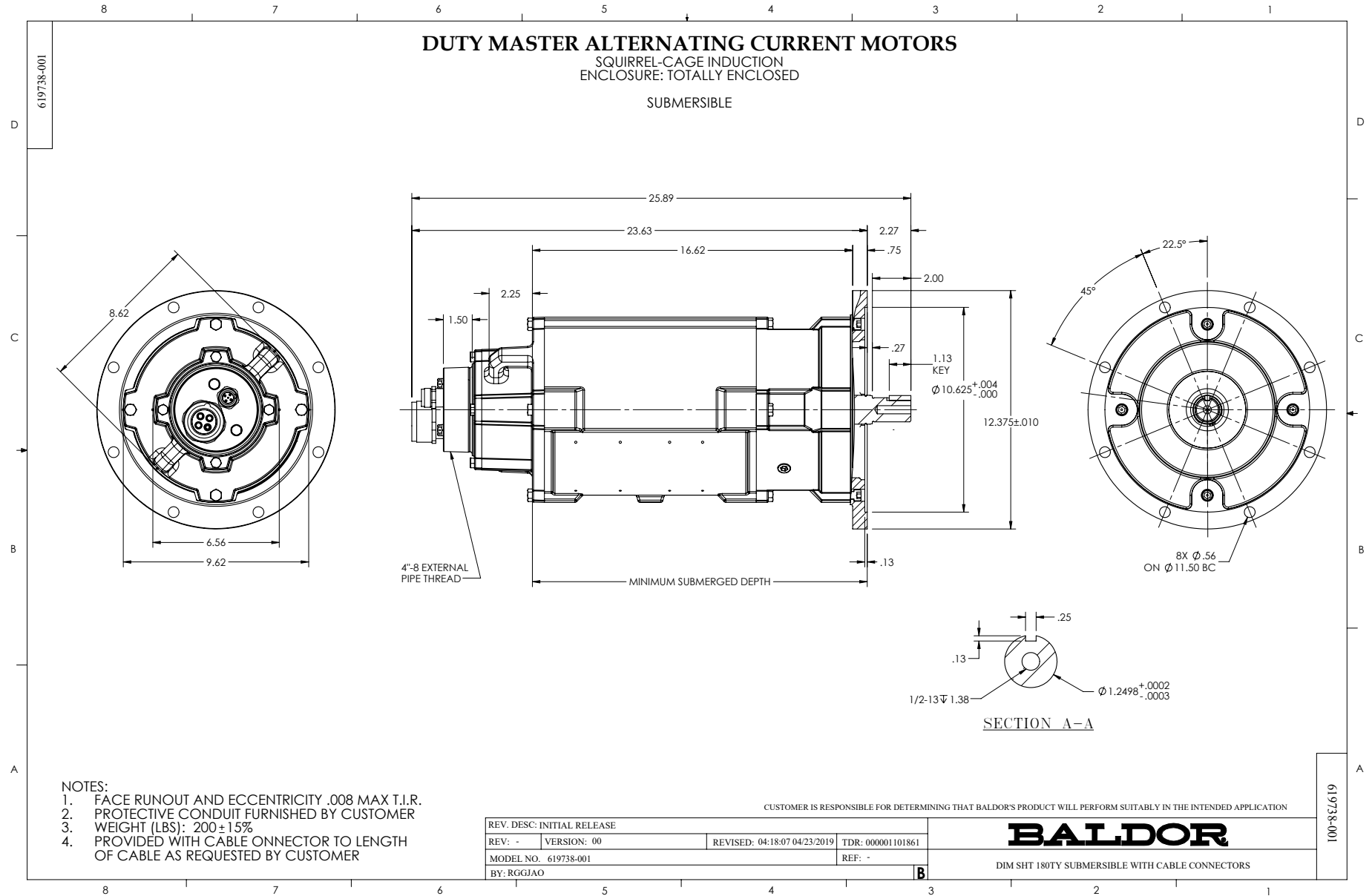
400 V, 60 Hz:

High Voltage Connection

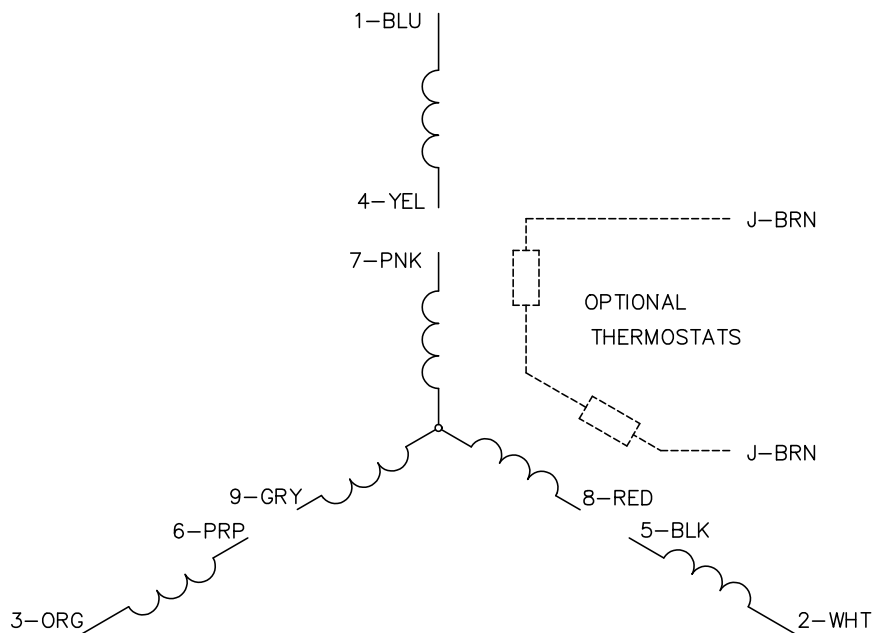
Full Load Torque	15.01 LB-FT
Start Configuration	direct on line
Breakdown Torque	51.89 LB-FT
Pull-up Torque	26.04 LB-FT
Locked-rotor Torque	30.75 LB-FT
Starting Current	53.22 A
No-load Current	3.99
Line-line Res. @ 25°C	1.98 Ω
Temp. Rise @ Rated Load	56°C
Temp. Rise @ S.F. Load	69°C
Locked-rotor Power Factor	41.1
Rotor inertia	0.372 lb-ft ²

Load Characteristics 400 V, 60 Hz, 5 HP

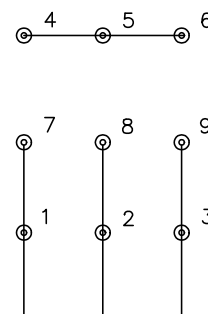
% of Rated Load	NL	25	50	75	100	125	150	SF
Power Factor	5	38	58	69	76	80	83	78
Efficiency	0	81.6	88.8	90.2	90.4	88.7	83.9	89.4
Speed	1799	1790	1779	1769	1757	1744	1727	1749
Line amperes	3.99	4.4	5.23	6.43	7.82	9.44	11.6	8.79



CD0005

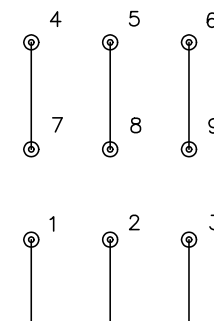


LOW VOLTAGE
(2Y)



LINE

HIGH VOLTAGE
(1Y)



LINE

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.

REV. DESC: REVISE TO SHOW OPTIONAL COLORS

REV. LTR: E BY: JLP REVISED: 01/19/99 10:15 TDR: 0171435

900000

FILE: AAA00005140

MDL: -

MTL: -

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS

CD0005