ABB BALDOR RELIANCE

Customer information packet

SUM75006-4

50HP, RPM, 3PH, 60HZ, 320TY, XPNV, V1
Class - CLI GP C,D
Division - Not Applicable

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Specifications

Enclosure	XPNV
Frame	320TY
Frequency	60.00 Hz
Haz Area Class and Group	CLI GP C,D
Haz Area Division	Not Applicable
Phase	3
Agency Approvals	C UR US
	CCSA US
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Cable Length	25 FOOT
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	G
Lifting Lugs	Standard Lifting Lugs
Motor Standards	NEMA
Mounting Arrangement	V1
Number of Poles	6
Product Family	Pump - Centrifugal
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Service Factor	1.15
Shaft Diameter	2.499 IN
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Starting Method	Direct on line

Part Detail

Revision	D
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	85959
Layout	619738-007
Eff. date	12-10-2024
CD Diagram	416820-036
Poles	///
Leads	
Proprietary	False
Created date	05-07-2021

Thermal Device - Winding	Normally Closed Thermostat

Nameplate

000613007MS											
CAT.NO.	SUM75006-4			**SPEC NO.**	S32-CWS0-0012						
SER.NO.					**FRAME SIZE**	320TY					
	HP	**RPM**	**VOLTS**	**AMPS**	**HZ**	**S.F.**					
	50	1180	460	63	6-60	1.00					
	50	1180	460	63	60	1.15					
CONSTANT HP RPM		**@**		**HZ**	**CODE**	G					
TYPE	P	**INSUL.CLASS**	F	**TORQUE**	10:1_VT		**DESIGN**	B			
D.E. BRG.	85BJ33J30X		**ENCL**	TENV	**DUTY**	15 MIN	**PH**	3			
O.D.E. BRG.	50BC03JPG30A			**MOTOR WEIGHT**		**AMB**	40				
	*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

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AC Induction motor performance data

Record #85959 - Typical performance - not guaranteed values

Winding	12WGA0159
Type	1272M
Enclosure	XPNV

Nameplate data

Rated Output			50
Volts			460
Full Load Amps			126/63
R.P.M.			1180
Hz	60	Phase	3
KVA Code			G
S.F.			1.15
NEMA Nom. Eff.	93	Power Factor	80
Duty			CONT
S.F. Amps			

460 V, 60 Hz:
High Voltage Connection

Full Load Torque	224 LB-FT
Start Configuration	direct on line
Breakdown Torque	638 LB-FT
Pull-up Torque	238 LB-FT
Locked-rotor Torque	296 LB-FT
Starting Current	330 A
No-load Current	23.55
Line-line Res. @ 25°C	0.162 Ω
Temp. Rise @ Rated Load	80°C
Temp. Rise @ S.F. Load	100°C
Locked-rotor Power Factor	29.1122
Rotor inertia	13.8 lb-ft²

Load Characteristics 460 V, 60 Hz, 50 HP

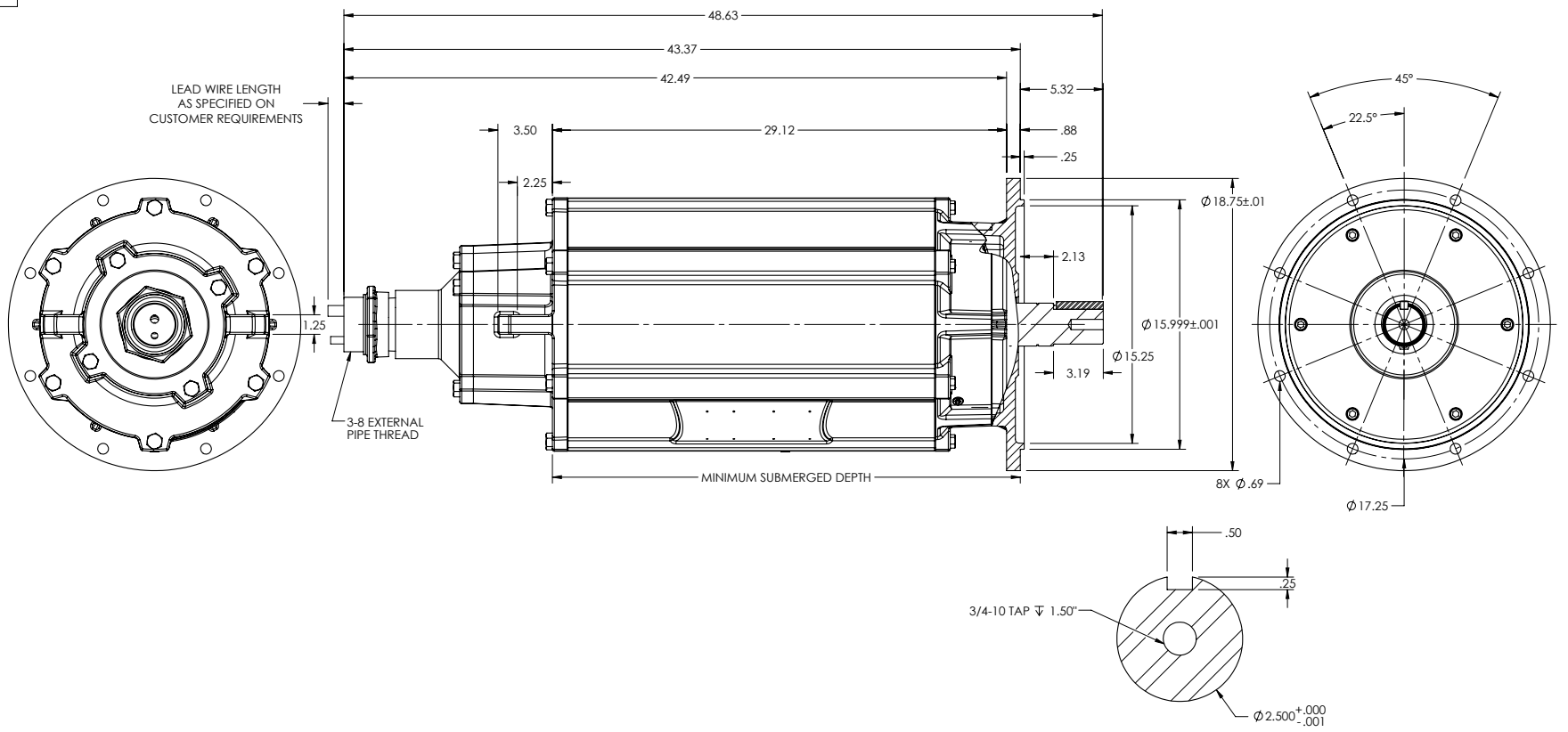
% of Rated Load	NL	25	50	75	100	125	150	SF
Power Factor	4	48	69	77	81	82	81	81
Efficiency	0	91.3	93.9	93.5	93	91.9	90.4	92
Speed	1199	1195	1191	1185	1179	1173	1163	1176
Line amperes	23.55	27.66	36.84	48.7	62.63	78.12	100	72.6

DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION
ENCLOSURE: TOTALLY ENCLOSED

SUBMERSIBLE

619738-007



NOTES:
1. FACE RUNOUT AND ECCENTRICITY .008 MAX T.I.R.
2. PROTECTIVE CONDUIT FURNISHED BY CUSTOMER
3. WEIGHT (LBS): 1150 +/- 15%

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

REV. DESC: ORRECT ENDPLATE DIMENSIONS			
REV: C	VERSION: 03	REVISED: 11:45:38 09/16/2021	TDR: 000001177617
MODEL NO. 619738-007			REF: -
BY: RGGJAO			B

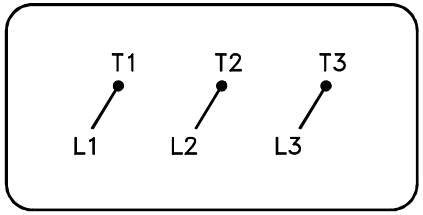
BALDOR

DIM SHT 320TY SUBMERSIBLE

619738-007

416820–036

A–C MOTOR
CONNECTION DIAGRAM
STANDARD 3 LEAD CONNECTED



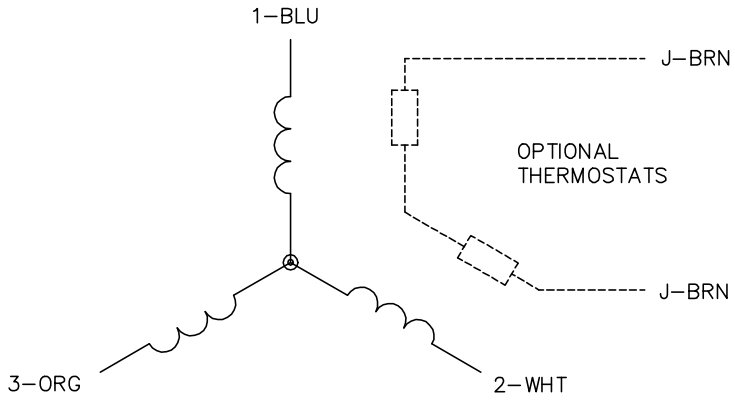
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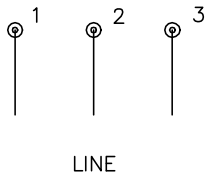
416820–036

REV. DESC: LOADED TO BUS, C/R 335225			BALDOR
REV. LTR: –	VERSION: 00	TDR: 000000538207	
FILE: \MGA\00000\682		REVISED: 11:54:06 04/30/2010	CONN DIAG – STANDARD 3 LEAD
MTL: –		BY: RAGRA	SH 1 of 1

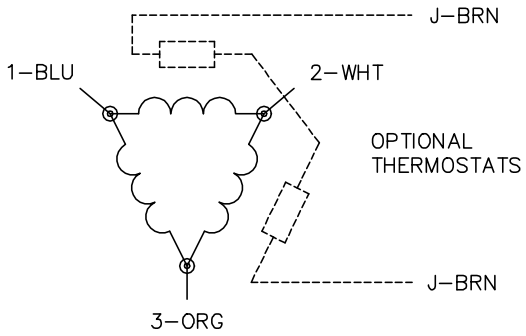
CD0006

TYPICAL WYE–CONNECTED MOTOR





TYPICAL DELTA–CONNECTED MOTOR



NOTES:

1. THREE LEAD MOTOR MAY BE EITHER WYE CONNECTED OR DELTA CONNECTED.
2. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
3. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
4. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
5. LEAD COLORS ARE OPTIONAL. LEADS MUST BE NUMBERED AS SHOWN.

CD0006

REV. DESC: ADD CLASS CONN00000007		
REV. LTR: E	VERSION: 01	TDR: 000001099922
FILE: \AAA\00005\141	REVISED: 10:24:49 02/19/2019	BY: ENBRIR0
MTL: –		

BALDOR - RELIANCE®

3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

SH 1 of 1