

ABB BALDOR RELIANCE III

Customer information packet

SUM73006-4

30HP, RPM, 3PH, 60HZ, 320TY, XPNV, V1

Class - CLI GP C,D

Division - Not Applicable

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	E
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	85958
Layout	619738-007
Eff. date	12-10-2024
CD Diagram	416820-036
Poles	///
Leads	
Proprietary	False
Created date	05-06-2021

Thermal Device - Winding

Normally Closed Thermostat

Nameplate

000613007MS											
CONSTANT HP RPM	CAT.NO.	SUM73006-4			SPEC NO.	S32-CWS0-0007					
	SER.NO.					FRAME SIZE	320TY				
		HP	RPM	VOLTS	AMPS	HZ	S.F.				
		30	1180	460	41	6-60	1.00				
		30	1180	460	41	60	1.15				
			@		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									
CAT.NO.	SUM73006-4		SPEC NO.		S32-CWS0-0007				
SER.NO.				FRAME SIZE		320TY			
CONSTANT HP RPM	HP	RPM	VOLTS	AMPS	HZ		S.F.		
	30	1180	460	41	6-60		1.00		
	30	1180	460	41	60		1.15		
	@		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								

AC induction motor performance data

Record #85958 - Typical performance - not guaranteed values

Winding	12WGA0158
Type	1240M
Enclosure	XPNV

Nameplate data

Rated Output	30		
Volts	460		
Full Load Amps	82/41		
R.P.M.	1175		
Hz	60	Phase	3
KVA Code	G		
S.F.	1.15		
NEMA Nom. Eff.	91	Power Factor	75
Duty	15 MIN		
S.F. Amps			

460 V, 60 Hz:

High Voltage Connection

Full Load Torque	133 LB-FT
Start Configuration	direct on line
Breakdown Torque	294 LB-FT
Pull-up Torque	134 LB-FT
Locked-rotor Torque	175 LB-FT
Starting Current	214 A
No-load Current	19.44
Line-line Res. @ 25°C	0.326 Ω
Temp. Rise @ Rated Load	21°C
Temp. Rise @ S.F. Load	26°C
Locked-rotor Power Factor	30
Rotor inertia	7.66 lb-ft ²

Load Characteristics 460 V, 60 Hz, 30 HP

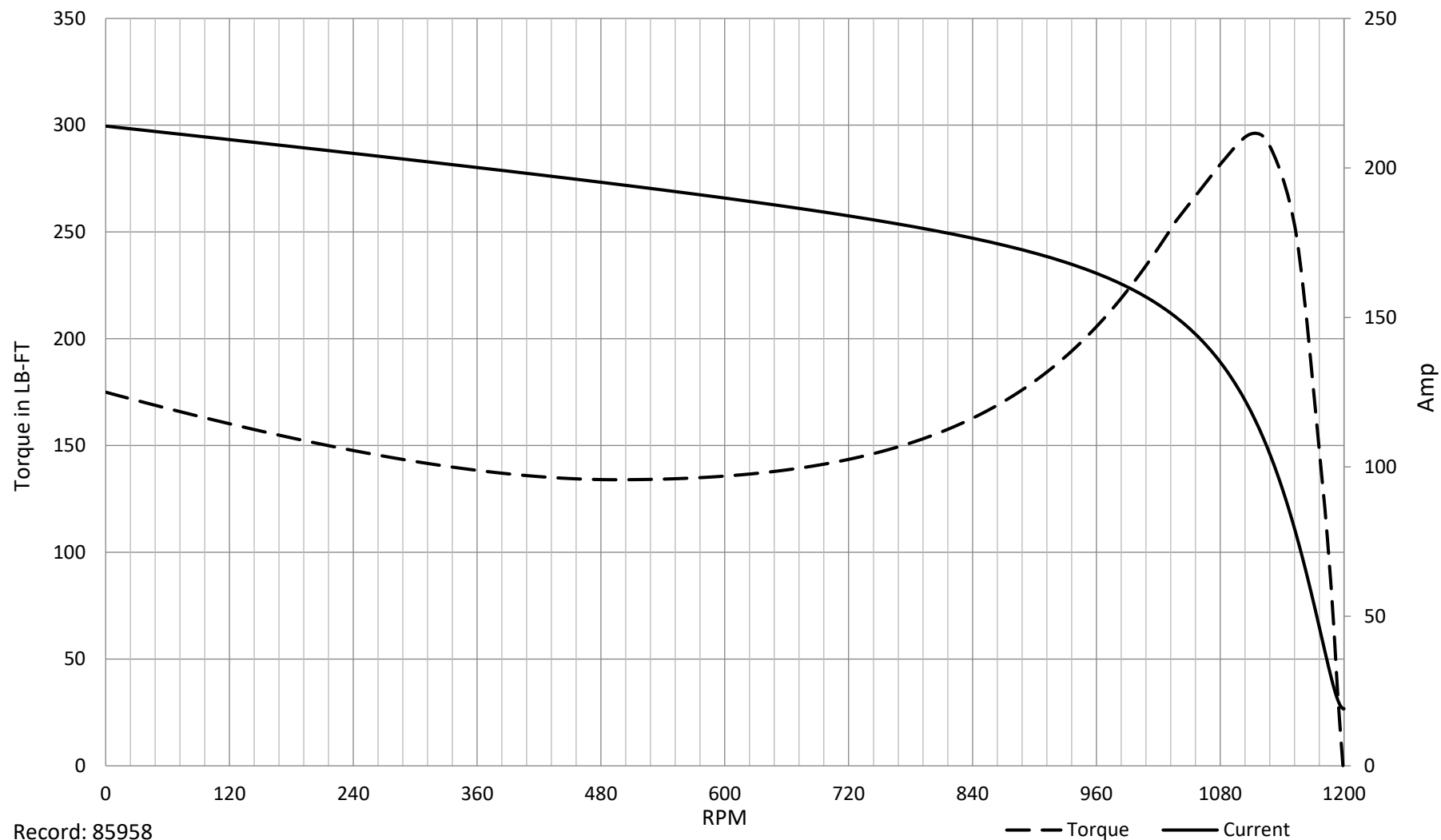
% of Rated Load	NL	25	50	75	100	125	150	SF
Power Factor	5	38	59	69	75	77	78	76
Efficiency	0	85.6	90.5	92	91.1	90	85.6	90.4
Speed	1199	1194	1190	1185	1179	1173	1165	1175
Line amperes	19.44	21.44	26.28	33.09	41.01	50.22	63.06	46.5

SPEED TORQUE / SPEED CURRENT CURVES

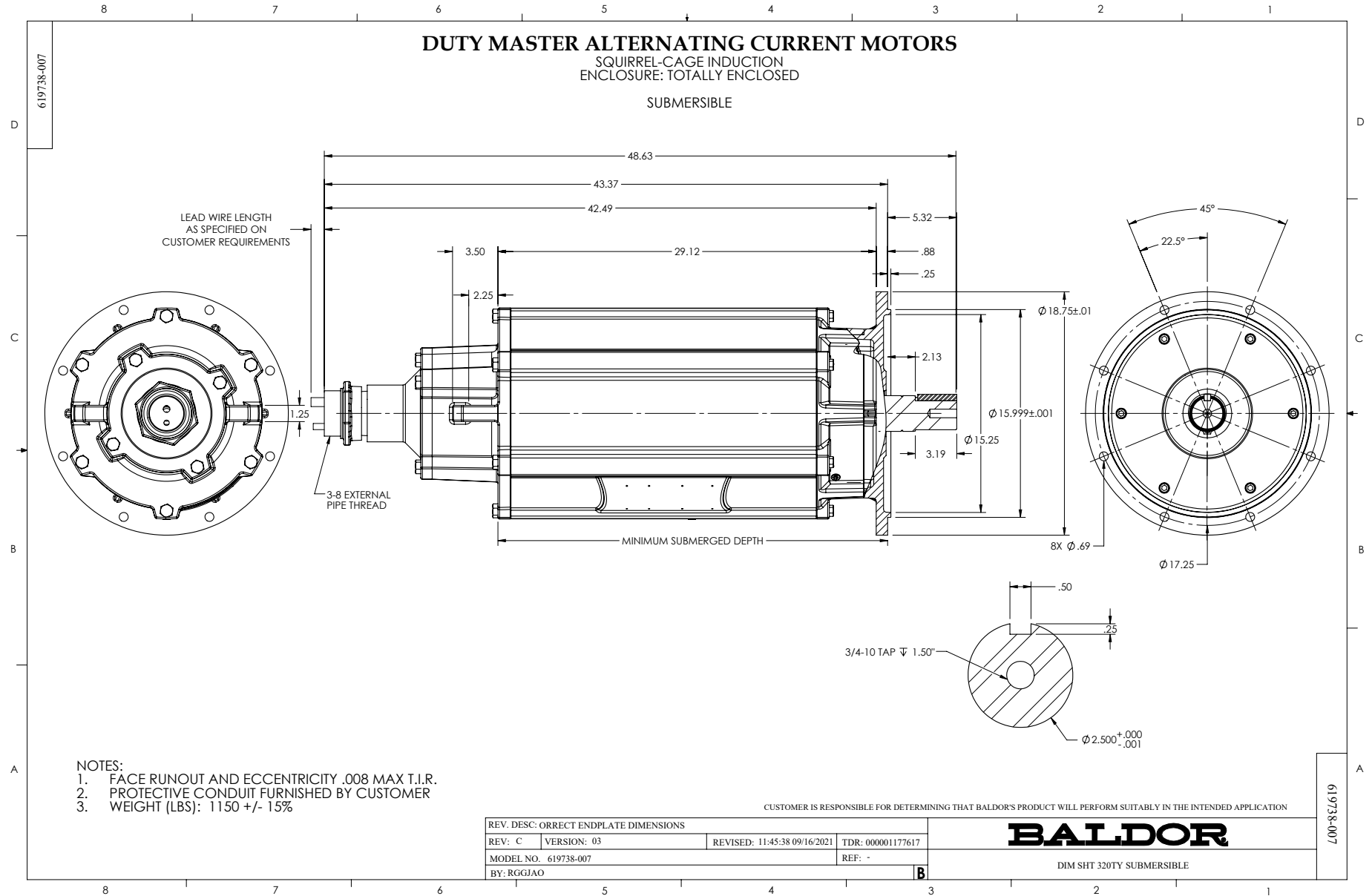


12WGA0158

30HP 460V 60HZ

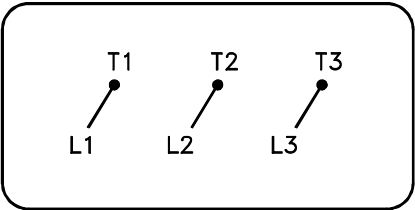


Record: 85958



416820-036

A-C MOTOR
CONNECTION DIAGRAM
STANDARD 3 LEAD CONNECTED



(N.P. 1575-BA)

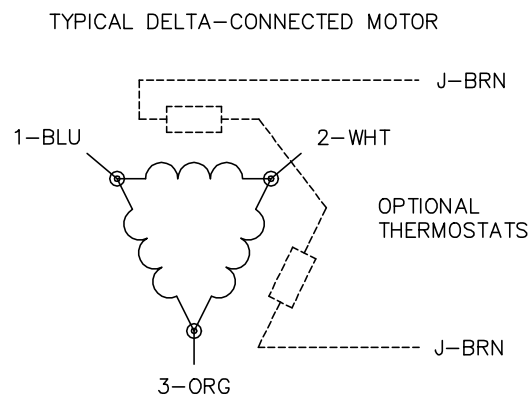
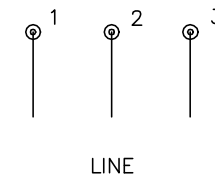
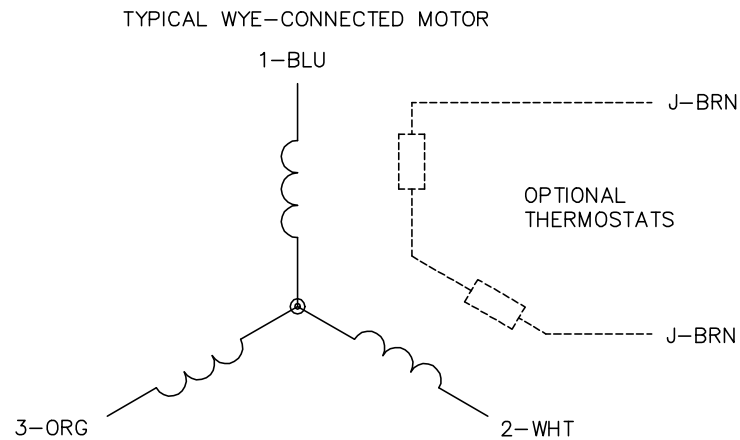
416820-036

REV. DESC: LOADED TO BUS, C/R 335225		
REV. LTR: -	VERSION: 00	TDR: 000000538207
FILE: \MGA\00000\682	REVISED: 11: 54: 06 04/30/2010	
MTL: -	BY: RAGRA	

BALDOR

CONN DIAG - STANDARD 3 LEAD
SH 1 of 1

CD0006


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: ENBRIRO

MTL: —


BALDOR - RELIANCE®

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

SH 1 of 1