

BALDOR • RELIANCE

Customer information packet

SUM75004SM-4

50HP, 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	NONE
KVA Code	G
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	1.750 IN
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Starting Method	Direct on line

Part detail

Revision	C
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	85946
Layout	619738-008
Eff. date	09-15-2021
CD Diagram	416820-036
Poles	///
Leads	
Proprietary	False
Created date	05-06-2021

Thermal Device - Winding

Normally Closed Thermostat

Nameplate

000613007MN										
CAT NO	SUM75004SM-4	SPEC NO.	S32-CWS0-0010							
HP	50	AMPS	60	VOLTS	460	DESIGN	B			
FRAME SIZE	320TY	RPM	1775	HZ	60	AMB	40	SF	1.15	
D.E. BRG.	85BJ33J30X	PH	3	DUTY	15MIN		INSUL	F		
O.D.E. BRG.	50BC03JPG30A	TYPE	P	ENCL	TENV		CODE	G		
		POWER FACTOR		NEMA-NOM-EFF						
		MAX CORR KVAR		GUARANTEED EFFICIENCY						
		NEMA NOM/CSA QUOTED EFF @		100% LOAD						
SER.NO.		MOTOR WEIGHT	880	LBS.						
	*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		

000613007MR

CAT NO	SUM75004SM-4	SPEC NO.	S32-CWS0-0010						
HP	50	AMPS	60	VOLTS	460	DESIGN	B		
FRAME SIZE	320TY	RPM	1775	HZ	60	AMB	40	SF	1.15
D.E. BRG.	85BJ33J30X	PH	3	DUTY	15MIN	INSUL	F		
O.D.E. BRG.	50BC03JPG30A	TYPE	P	ENCL	TENV	CODE	G		
		POWER FACTOR		NEMA-NOM-EFF					
		MAX CORR KVAR		GUARANTEED EFFICIENCY					
		NEMA NOM/CSA QUOTED EFF @		100% LOAD					
SER.NO.		MOTOR WEIGHT	880	LBS.					
	*15MIN IN AIR ;SUB. IN SEWAGE								
	/ WATER ONLY								

AC induction motor performance data

Record #85946 - Typical performance - not guaranteed values

Winding	12WGA0157
Type	1254M
Enclosure	PART

Nameplate data

Rated Output			50
Volts			230/460
Full Load Amps			120/60
R.P.M.			1775
Hz	60	Phase	3
KVA Code			G
S.F.			1.15
NEMA Nom. Eff.	93	Power Factor	84
Duty			15 MIN
S.F. Amps			

**460 V, 60 Hz:
High Voltage Connection**

Full Load Torque	148 LB-FT
Start Configuration	direct on line
Breakdown Torque	395 LB-FT
Pull-up Torque	166 LB-FT
Locked-rotor Torque	205 LB-FT
Starting Current	335 A
No-load Current	21.49
Line-line Res. @ 25°C	0.138 Ω
Temp. Rise @ Rated Load	78°C
Temp. Rise @ S.F. Load	97°C
Locked-rotor Power Factor	27.1
Rotor inertia	7.19 lb-ft²

Load Characteristics 460 V, 60 Hz, 50 HP

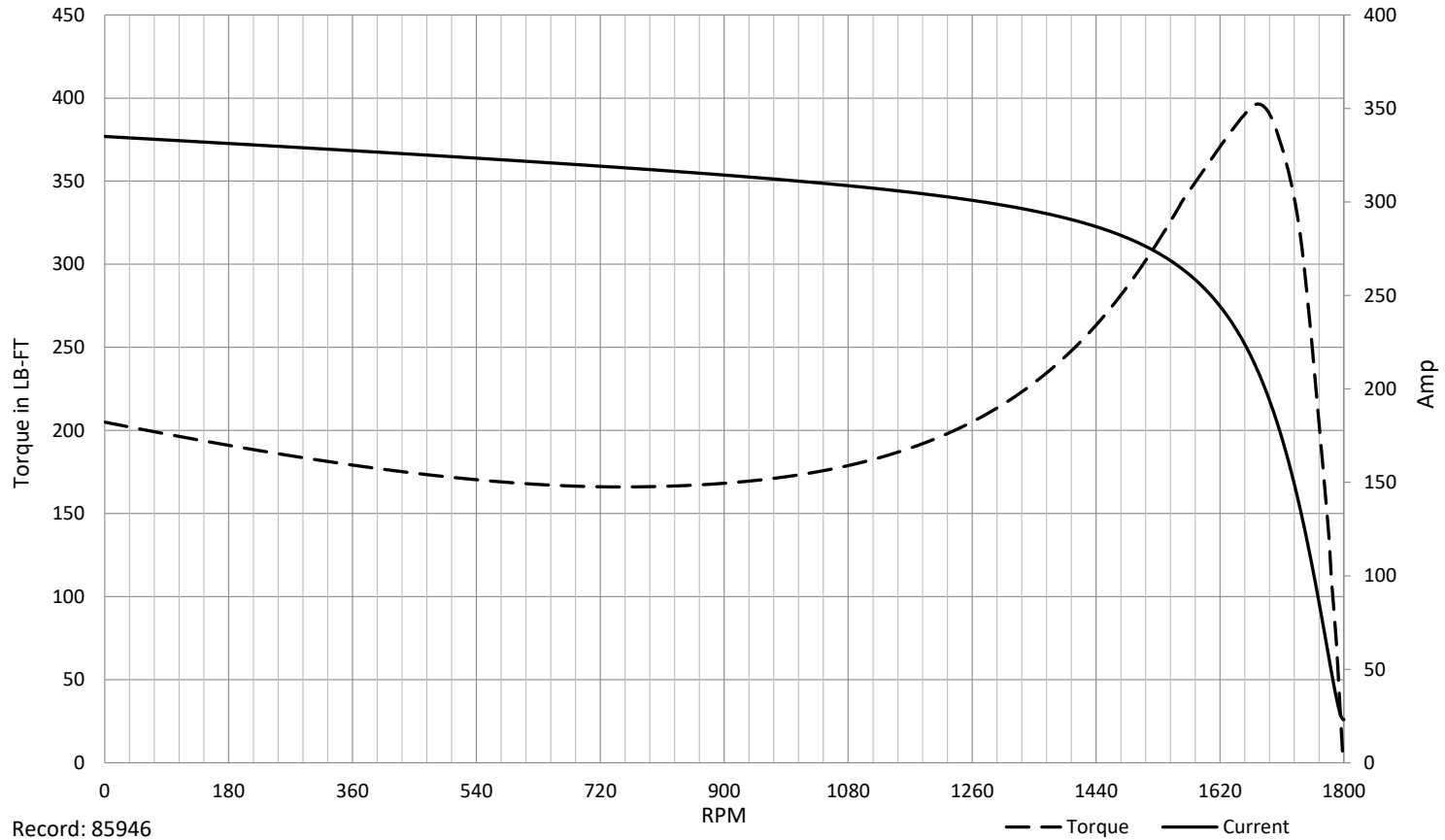
% of Rated Load	NL	25	50	75	100	125	150	SF
Power Factor	7	54	74	82	84	85	85	85
Efficiency	0	84.6	90.6	92.1	92.8	92.4	92.2	92.6
Speed	1799	1794	1789	1782	1776	1769	1760	1772
Line amperes	21.49	25.84	34.93	46.52	60.36	74.08	89.43	68.6

SPEED TORQUE / SPEED CURRENT CURVES

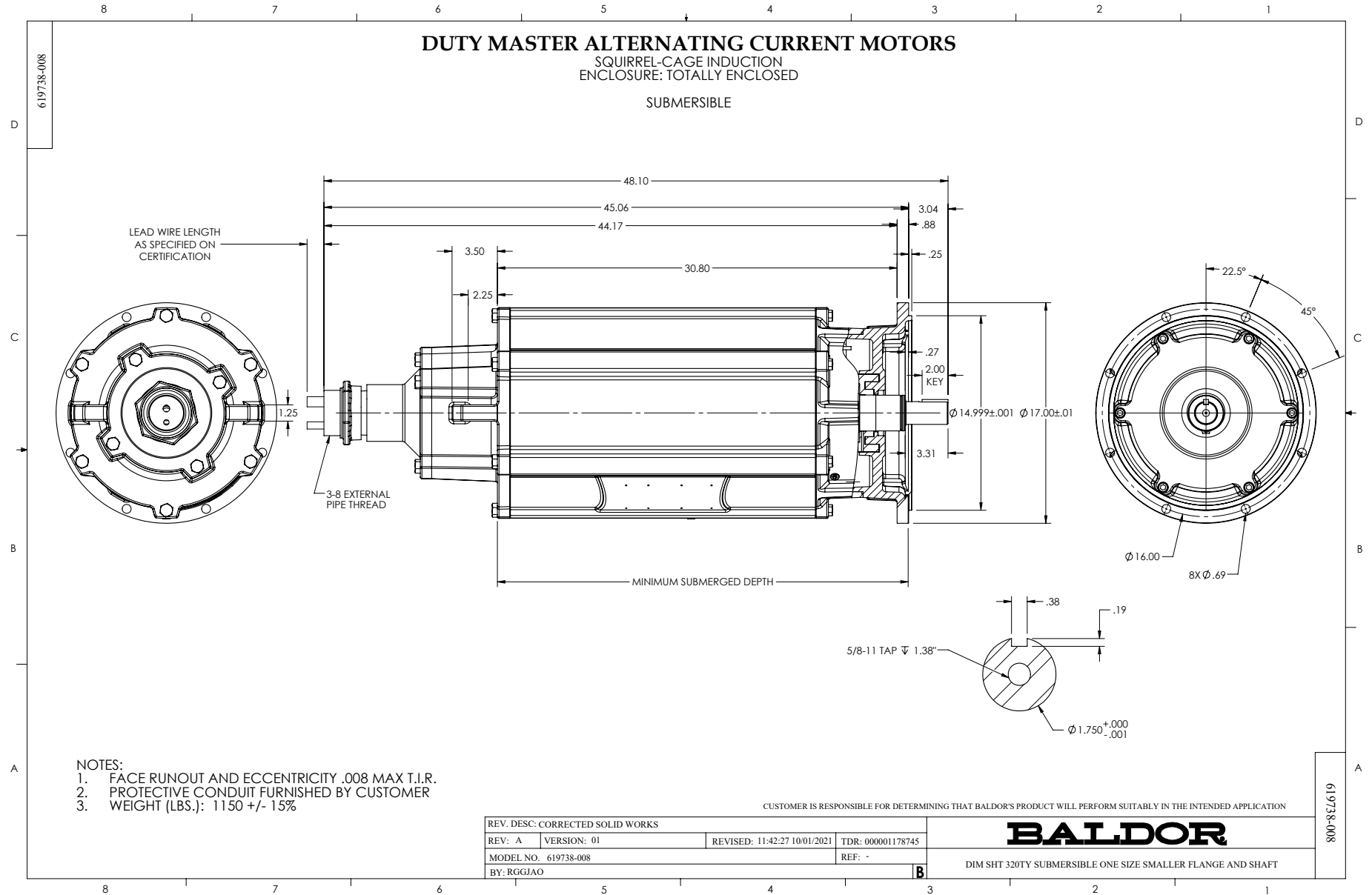


12WGA0157

50HP 460V 60HZ



Record: 85946



416820-036

A-C MOTOR
CONNECTION DIAGRAM
STANDARD 3 LEAD CONNECTED



(N.P. 1575-BA)

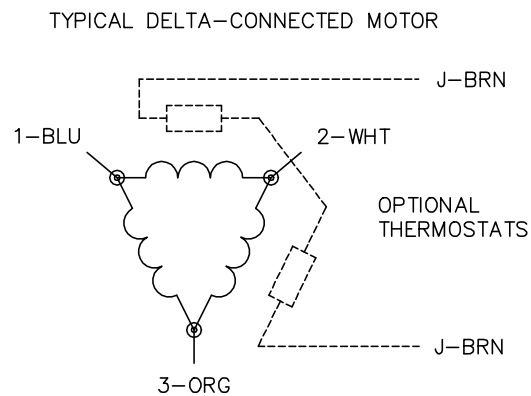
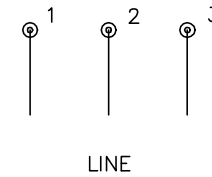
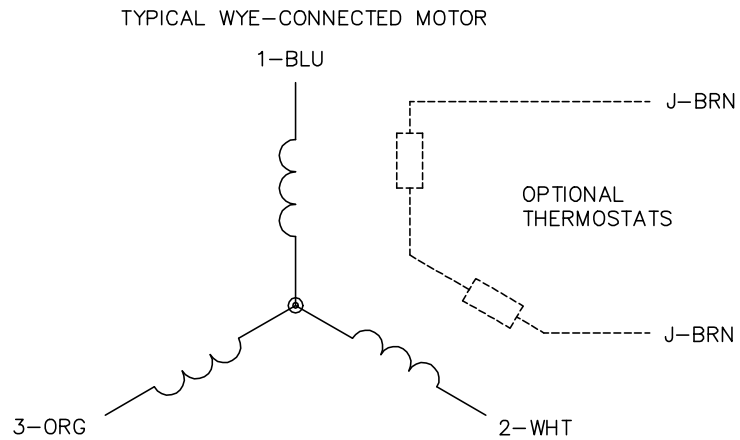
416820-036

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	

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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: -		© □

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

SH 1 of 1