

**BALDOR • RELIANCE**

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# Customer information packet

## SUM72506SM-4

25HP, 1160RPM, 3PH, 60HZ, 250TY, XPNV, V1

Class - CLI GP C,D

Division - Not Applicable

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8/11/2024 3:35:30 AM

## Specifications

Enclosure	XPNV
Frame	250TY
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	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	F
Lifting Lugs	Standard Lifting Lugs
Motor Standards	NEMA
Motor Type	M
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	1.437 IN

## Part detail

Revision	C
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	85928
Layout	619738-006
Eff. date	03-09-2022
CD Diagram	416820-036
Poles	///
Leads	
Proprietary	False
Created date	05-21-2021

<b>Shaft Rotation</b>	Reversible
<b>Shaft Slinger Indicator</b>	No Slinger
<b>Speed Code</b>	Single Speed
<b>Starting Method</b>	Direct on line
<b>Thermal Device - Winding</b>	Normally Closed Thermostat

**Nameplate**

**000613007MN**

<b>CAT NO</b>	SUM72506SM-4	<b>SPEC NO.</b>	S25-CWS0-0010						
<b>HP</b>	25	<b>AMPS</b>	82/41	<b>VOLTS</b>	230/460		<b>DESIGN</b>	B	
<b>FRAME SIZE</b>	250TY	<b>RPM</b>	1160	<b>HZ</b>	60	<b>AMB</b>	40	<b>SF</b>	1.15
<b>D.E. BRG.</b>	60BC03JPP30A	<b>PH</b>	3	<b>DUTY</b>	15 MIN		<b>INSUL</b>	F	
<b>O.D.E. BRG.</b>	40BC02JPG30A	<b>TYPE</b>	P	<b>ENCL</b>	TENV		<b>CODE</b>	F	
		<b>POWER FACTOR</b>		<b>NEMA-NOM-EFF</b>					
		<b>MAX CORR KVAR</b>		<b>GUARANTEED EFFICIENCY</b>					
		<b>NEMA NOM/CSA QUOTED EFF @</b>		<b>100% LOAD</b>					
<b>SER.NO.</b>		<b>MOTOR WEIGHT</b>	496	<b>LBS.</b>					
	FINAL CONN VOLTAGE = 460 *15								
	MIN IN AIR ;SUB. IN SEWAGE /								
	WATER ONLY								

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**000613007RC**

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<b>CLASS I GROUP</b>	C D X	<b>NO.</b>	
<b>CLASS II GROUP</b>	X X X		
<b>OPERATING TEMP CODE</b>	T3C		

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**000613007MR**

<b>CAT NO</b>	SUM72506SM-4	<b>SPEC NO.</b>	S25-CWS0-0010						
<b>HP</b>	25	<b>AMPS</b>	82/41	<b>VOLTS</b>	230/460	<b>DESIGN</b>	B		
<b>FRAME SIZE</b>	250TY	<b>RPM</b>	1160	<b>HZ</b>	60	<b>AMB</b>	40	<b>SF</b>	1.15
<b>D.E. BRG.</b>	60BC03JPP30A	<b>PH</b>	3	<b>DUTY</b>	15 MIN	<b>INSUL</b>	F		
<b>O.D.E. BRG.</b>	40BC02JPG30A	<b>TYPE</b>	P	<b>ENCL</b>	TENV	<b>CODE</b>	F		
		<b>POWER FACTOR</b>		<b>NEMA-NOM-EFF</b>					
		<b>MAX CORR KVAR</b>		<b>GUARANTEED EFFICIENCY</b>					
		<b>NEMA NOM/CSA QUOTED EFF @</b>		<b>100% LOAD</b>					
<b>SER.NO.</b>		<b>MOTOR WEIGHT</b>	496	<b>LBS.</b>					
	FINAL CONN VOLTAGE = 460 *15								
	MIN IN AIR ;SUB. IN SEWAGE /								
	WATER ONLY								

**AC induction motor performance data**

Record #85928 - Typical performance - not guaranteed values

Winding	09WGA0210
Type	0950M
Enclosure	PART

**Nameplate data**

Rated Output			25
Volts			230/460
Full Load Amps			82/41
R.P.M.			1160
Hz	60	Phase	3
KVA Code			F
S.F.			1.15
NEMA Nom. Eff.	87.5	Power Factor	65
Duty			15 MIN
S.F. Amps			

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

Full Load Torque	113 LB-FT
Start Configuration	direct on line
Breakdown Torque	234 LB-FT
Pull-up Torque	113 LB-FT
Locked-rotor Torque	150 LB-FT
Starting Current	169 A
No-load Current	21.27
Line-line Res. @ 25°C	0.533 Ω
Temp. Rise @ Rated Load	58°C
Temp. Rise @ S.F. Load	71°C
Locked-rotor Power Factor	27.6
Rotor inertia	3.86 lb-ft²

**Load Characteristics 460 V, 60 Hz, 25 HP**

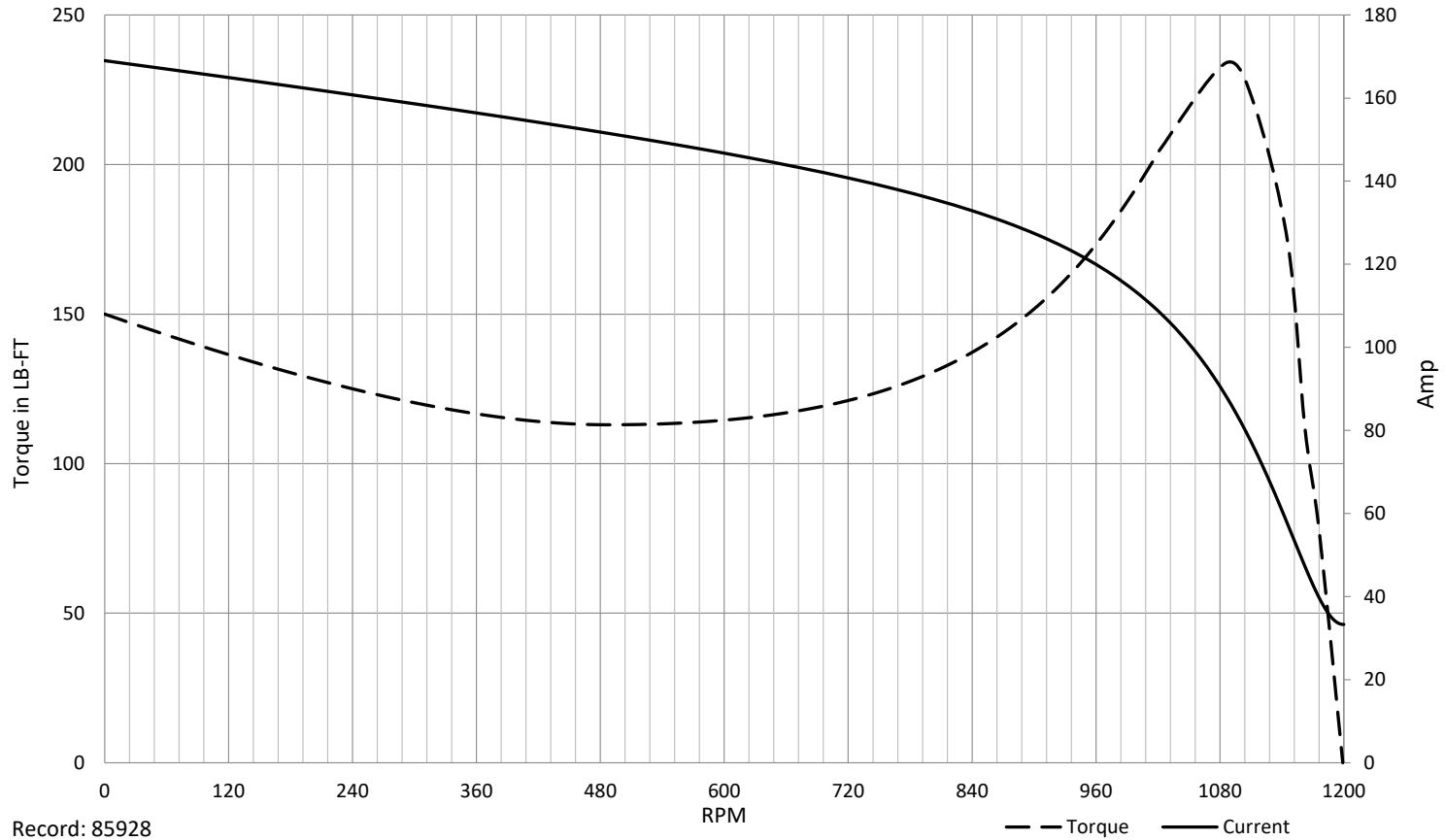
% of Rated Load	NL	25	50	75	100	125	150	SF
Power Factor	5	31	49	60	65	66	63	66
Efficiency	0	83.6	88.1	88.2	87.5	84.1	78.6	85.5
Speed	1199	1191	1183	1174	1162	1146	1110	1152
Line amperes	21.27	22.66	26.83	33.06	41.22	51.94	71.23	47.7

SPEED TORQUE / SPEED CURRENT CURVES



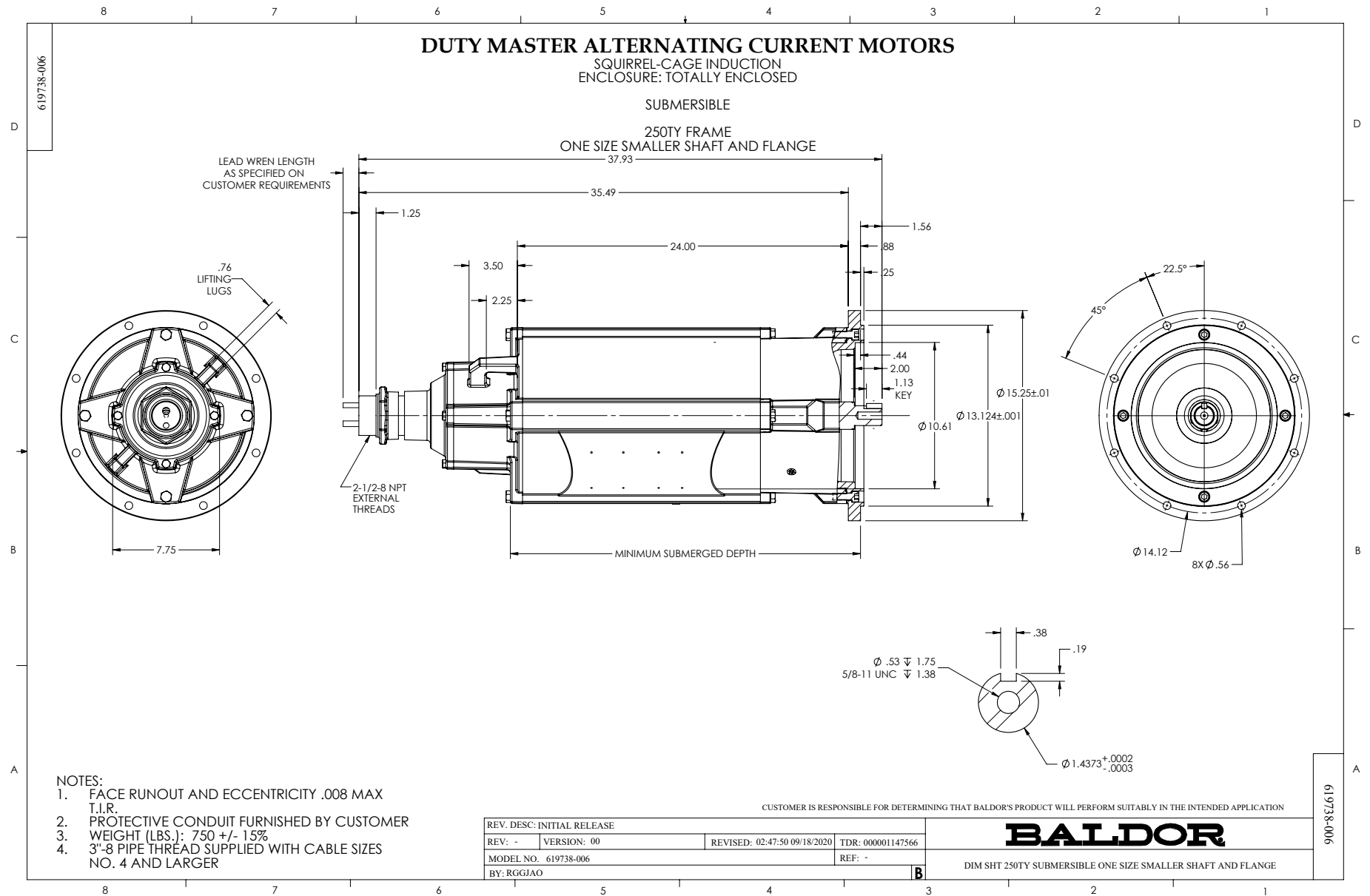
09WGA0210

25HP 460V 60HZ



Record: 85928





416820-036

A-C MOTOR  
CONNECTION DIAGRAM  
STANDARD 3 LEAD CONNECTED



(N.P. 1575-BA)

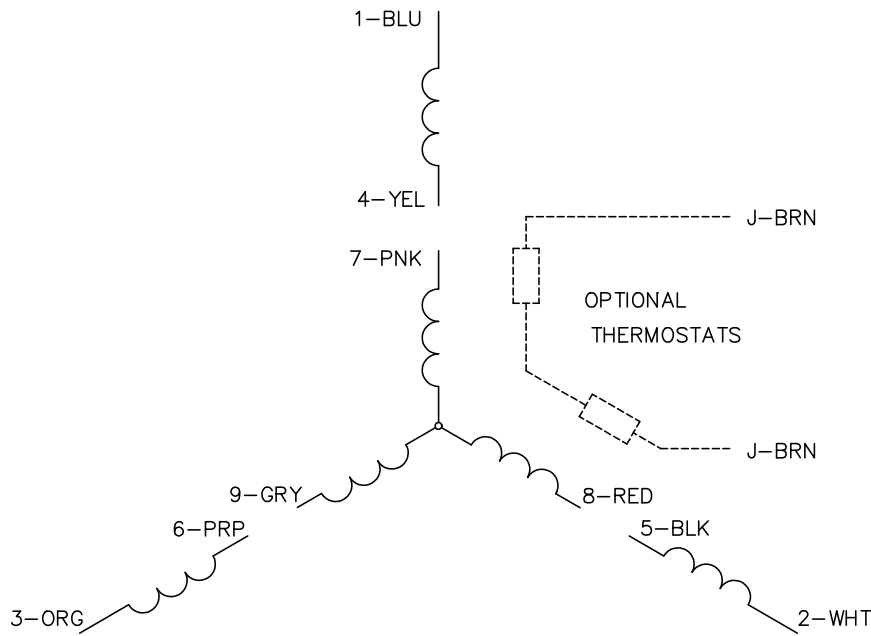
416820-036

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

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.

CD0005

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
S00000		FILE: AAA00005140	MDL: -
		MTL: -	

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS