



Customer information packet

SUM70104SM

1HP, 1770RPM, 3PH, 60HZ, 180TY, XPNV, V1

Class - CLI GP C,D

Division - Not Applicable

Specifications

Enclosure	XPNV
Frame	180TY
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	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	NONE
KVA Code	M
Lifting Lugs	Standard Lifting Lugs
Motor Standards	NEMA
Motor Type	M
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	0.875 IN
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger

Part detail

Revision	A
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	85864
Layout	619738-002
Eff. date	04-12-2023
CD Diagram	
Poles	///
Leads	
Proprietary	False
Created date	10-22-2021

Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Winding	Normally Closed Thermostat

Nameplate

000613007MN

CAT NO	SUM70104SM	SPEC NO.	S18-CWS0-0002						
HP	1	AMPS	3.6/1.8	VOLTS	230/460	DESIGN	B		
FRAME SIZE	180TY	RPM	1770	HZ	60	AMB	40	SF	1.15
D.E. BRG.	50BC02JPP30A	PH	3	DUTY	15 MIN	INSUL	F		
O.D.E. BRG.	25BC02JPG30A	TYPE	P	ENCL	TENV	CODE	M		
		POWER FACTOR		NEMA-NOM-EFF					
		MAX CORR KVAR		GUARANTEED EFFICIENCY					
		NEMA NOM/CSA QUOTED EFF @		100% LOAD					
SER.NO.		MOTOR WEIGHT		LBS.					
	FINAL CONN VOLTAGE = 230 *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		

000613007MR

CAT NO	SUM70104SM	SPEC NO.	S18-CWS0-0002						
HP	1	AMPS	3.6/1.8	VOLTS	230/460	DESIGN	B		
FRAME SIZE	180TY	RPM	1770	HZ	60	AMB	40	SF	1.15
D.E. BRG.	50BC02JPP30A	PH	3	DUTY	15 MIN	INSUL	F		
O.D.E. BRG.	25BC02JPG30A	TYPE	P	ENCL	TENV	CODE	M		
		POWER FACTOR		NEMA-NOM-EFF					
		MAX CORR KVAR		GUARANTEED EFFICIENCY					
		NEMA NOM/CSA QUOTED EFF @		100% LOAD					
SER.NO.		MOTOR WEIGHT		LBS.					
	FINAL CONN VOLTAGE = 230 *15								
	MIN IN AIR ;SUB. IN SEWAGE /								
	WATER ONLY								

AC induction motor performance data

Record #85864 - Typical performance - not guaranteed values

Winding	06WGA0013
Type	0620M
Enclosure	PART

Nameplate data

Rated Output			1
Volts			230/460
Full Load Amps			3.6/1.8
R.P.M.			1770
Hz	60	Phase	3
KVA Code			M
S.F.			1.15
NEMA Nom. Eff.	85.5	Power Factor	69
Duty			15 MIN
S.F. Amps			

460 V, 60 Hz:

High Voltage Connection

Full Load Torque	2.97 LB-FT
Start Configuration	direct on line
Breakdown Torque	14.05 LB-FT
Pull-up Torque	7.2 LB-FT
Locked-rotor Torque	8.5 LB-FT
Starting Current	13.41 A
No-load Current	1.05
Line-line Res. @ 25°C	13.7 Ω
Temp. Rise @ Rated Load	80°C
Temp. Rise @ S.F. Load	93°C
Locked-rotor Power Factor	49.7
Rotor inertia	0.186 lb-ft²

Load Characteristics 460 V, 60 Hz, 1 HP

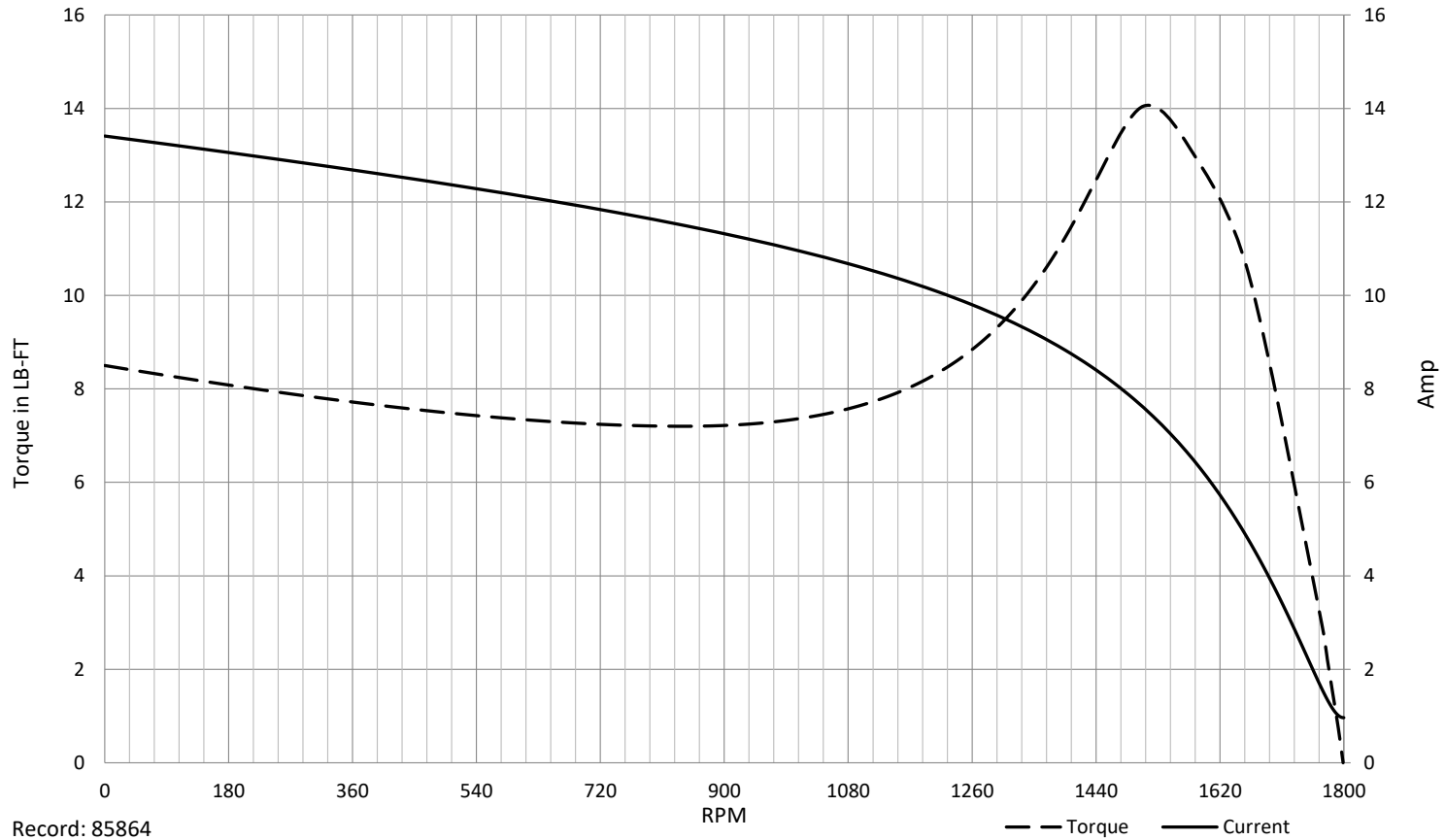
% of Rated Load	NL	25	50	75	100	125	150	SF
Power Factor	8	31	48	60	69	75	79	73
Efficiency	0	68.5	80.6	84.7	85.7	85.5	82	85.6
Speed	1799	1792	1784	1776	1768	1759	1746	1763
Line amperes	1.05	1.12	1.22	1.38	1.58	1.82	2.16	1.72

SPEED TORQUE / SPEED CURRENT CURVES

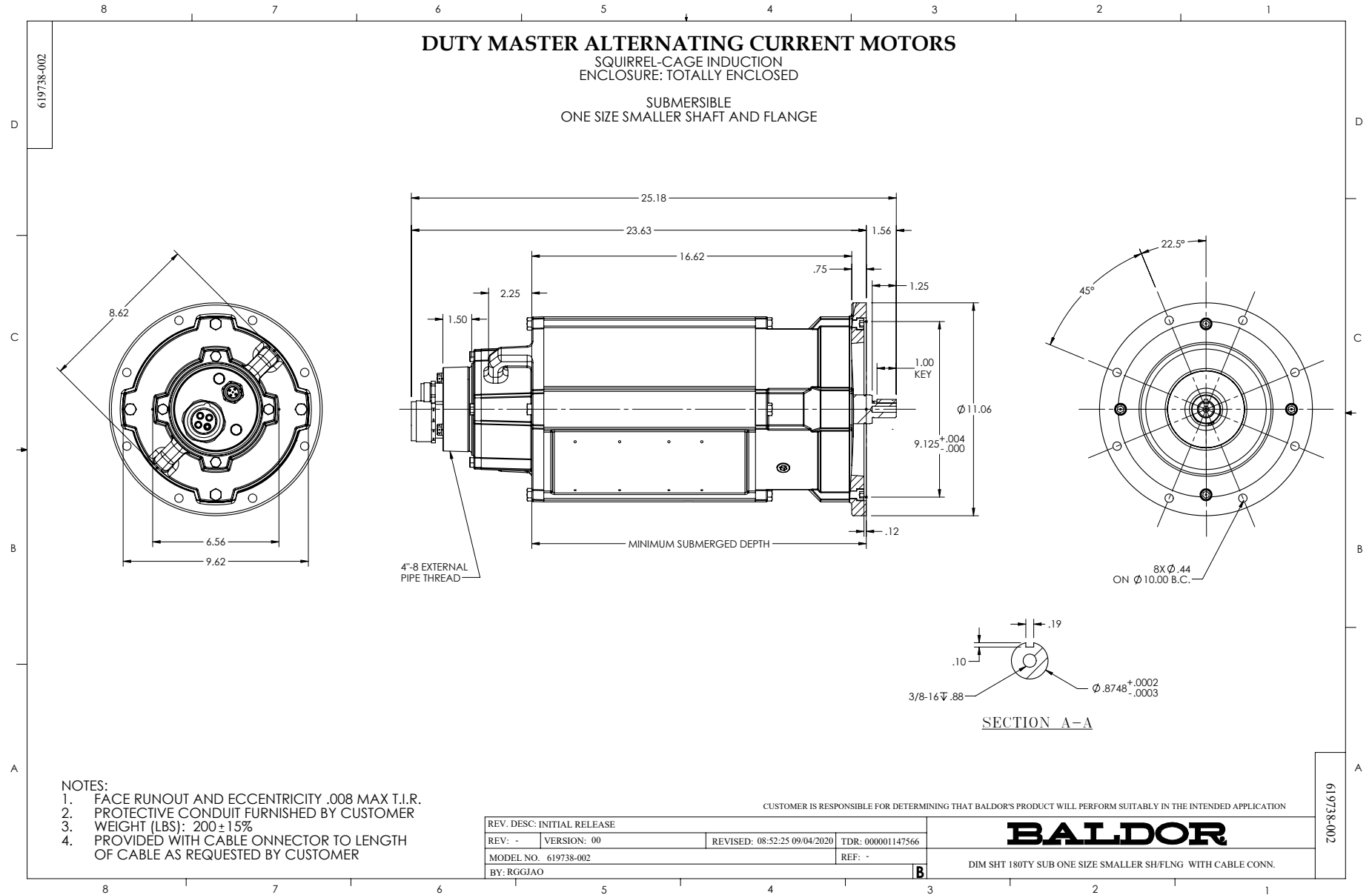


06WGA0013

1HP 460V 60HZ



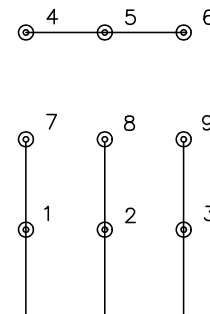
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CD0005

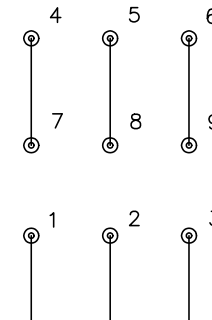


LOW VOLTAGE
(2Y)



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