

**BALDOR • RELIANCE**

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# Customer information packet

## SUM70156SM

1.5HP, 1160RPM, 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)
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	K
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	0.875 IN
Shaft Rotation	Reversible

## Part detail

Revision	-
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	92224
Layout	619738-002
Eff. date	08-01-2022
CD Diagram	
Poles	///
Leads	
Proprietary	False
Created date	07-25-2022

<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>	SUM70156SM	<b>SPEC NO.</b>	S18-CWS0-0075						
<b>HP</b>	1.5	<b>AMPS</b>	5.0/2.5	<b>VOLTS</b>	230/460		<b>DESIGN</b>	B	
<b>FRAME SIZE</b>	180TY	<b>RPM</b>	1160	<b>HZ</b>	60	<b>AMB</b>	40	<b>SF</b>	1.15
<b>D.E. BRG.</b>	50BC02JPP30A	<b>PH</b>	3	<b>DUTY</b>	15 MIN		<b>INSUL</b>	F	
<b>O.D.E. BRG.</b>	25BC02JPG30A	<b>TYPE</b>	P	<b>ENCL</b>	TENV		<b>CODE</b>	K	
		<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>	250	<b>LBS.</b>					
	FINAL CONN VOLTAGE = 230 *15								
	MIN IN AIR								

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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>	SUM70156SM	<b>SPEC NO.</b>	S18-CWS0-0075						
<b>HP</b>	1.5	<b>AMPS</b>	5.0/2.5	<b>VOLTS</b>	230/460	<b>DESIGN</b>	B		
<b>FRAME SIZE</b>	180TY	<b>RPM</b>	1160	<b>HZ</b>	60	<b>AMB</b>	40	<b>SF</b>	1.15
<b>D.E. BRG.</b>	50BC02JPP30A	<b>PH</b>	3	<b>DUTY</b>	15 MIN	<b>INSUL</b>	F		
<b>O.D.E. BRG.</b>	25BC02JPG30A	<b>TYPE</b>	P	<b>ENCL</b>	TENV	<b>CODE</b>	K		
		<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>	250	<b>LBS.</b>					
	FINAL CONN VOLTAGE = 230 *15								
	MIN IN AIR								

**AC induction motor performance data**

Record #92224 - Typical performance - not guaranteed values

Winding	06WGA0021
Type	0630M
Enclosure	TENV

**Nameplate data**

Rated Output			1.5
Volts			230/460
Full Load Amps			5/2.5
R.P.M.			1160
Hz	60	Phase	3
KVA Code			K
S.F.			1.15
NEMA Nom. Eff.	87.5	Power Factor	64
Duty			15 MIN
S.F. Amps			

460 V, 60 Hz:

**High Voltage Connection**

Full Load Torque	6.77 LB-FT
Start Configuration	direct on line
Breakdown Torque	24 LB-FT
Pull-up Torque	12.5 LB-FT
Locked-rotor Torque	15.8 LB-FT
Starting Current	16.2 A
No-load Current	1.63
Line-line Res. @ 25°C	7.01 Ω
Temp. Rise @ Rated Load	26°C
Temp. Rise @ S.F. Load	31°C
Locked-rotor Power Factor	30.4
Rotor inertia	0.282 lb-ft <sup>2</sup>

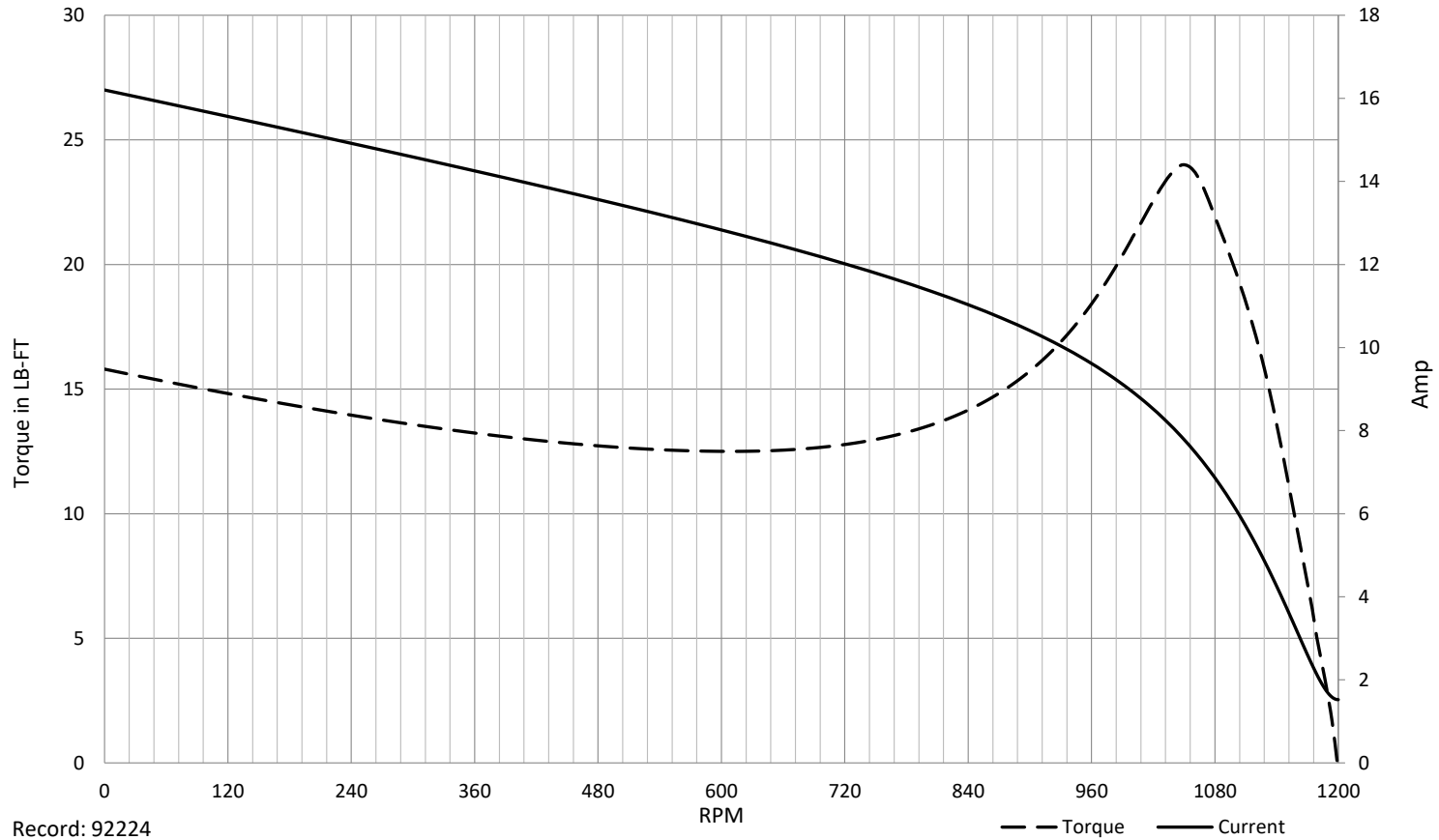
**Load Characteristics 460 V, 60 Hz, 1.5 HP**

% of Rated Load	NL	25	50	75	100	125	150	SF
Power Factor	6	27	44	56	64	69	73	67
Efficiency	0	76.3	84.8	86.8	87.5	87.1	85.8	87.3
Speed	1199	1194	1187	1179	1172	1163	1153	1167
Line amperes	1.63	1.7	1.9	2.18	2.51	2.92	3.38	2.76

SPEED TORQUE / SPEED CURRENT CURVES

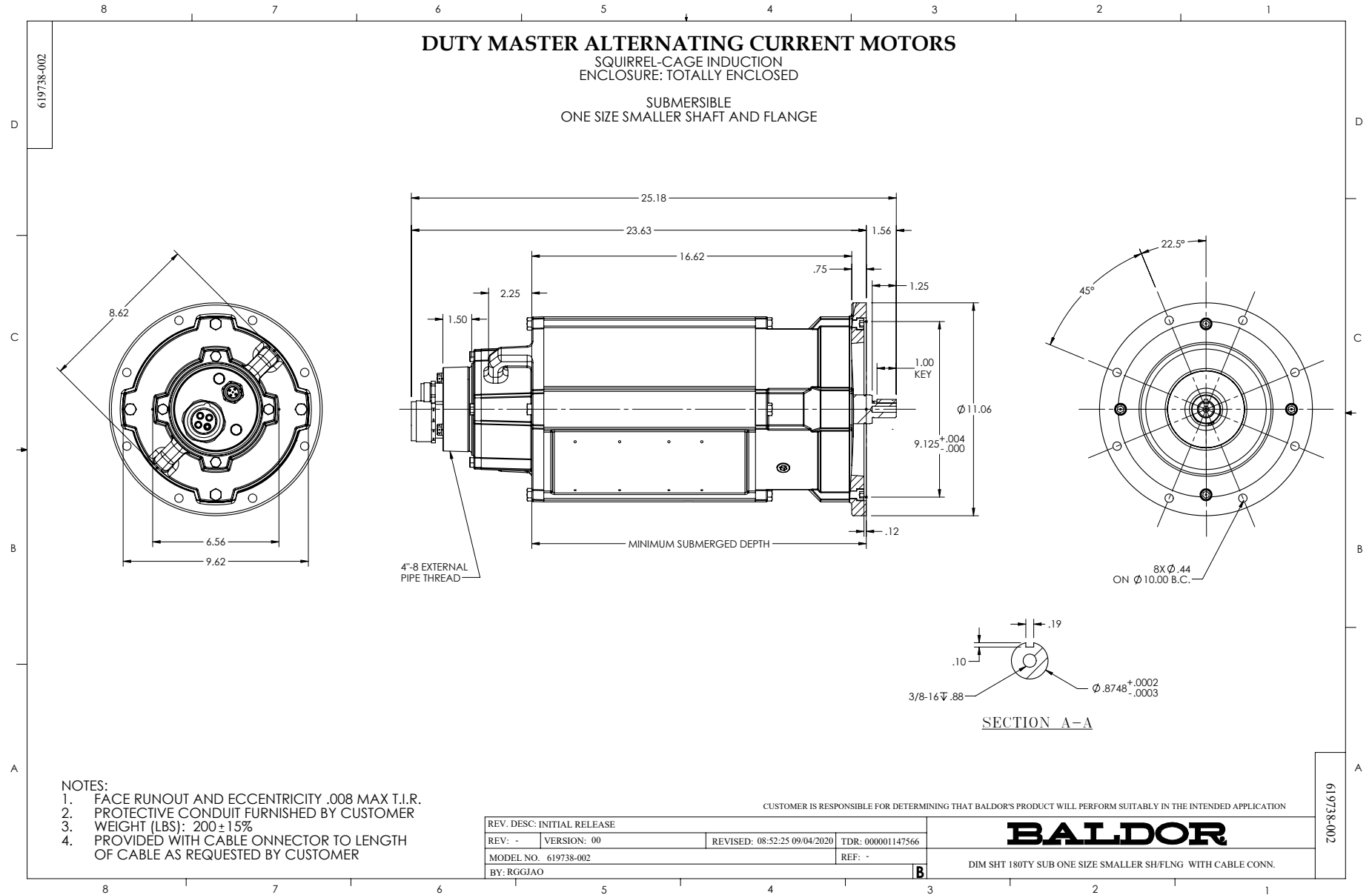


06WGA0021  
1.5HP 460V 60HZ



Record: 92224





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