

**BALDOR • RELIANCE**

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# Customer information packet

## SUM70754

7.5HP, RPM, 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	IP68
KVA Code	H
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	1.250 IN
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger

## Part detail

Revision	E
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	85768
Layout	619738-001
Eff. date	12-16-2024
CD Diagram	
Poles	///
Leads	
Proprietary	False
Created date	10-25-2021

<b>Speed Code</b>	Single Speed
<b>Starting Method</b>	Direct on line
<b>Thermal Device - Winding</b>	Normally Closed Thermostat

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**Nameplate**

000613007MS									
<b>CAT.NO.</b>	SUM70754		<b>SPEC NO.</b>	S18-CWS0-0006					
<b>SER.NO.</b>			<b>FRAME SIZE</b>	180TY					
	<b>HP</b>	<b>RPM</b>	<b>VOLTS</b>	<b>AMPS</b>	<b>HZ</b>	<b>S.F.</b>			
	7.5	1745	230/460	22.2/11.1	6-60	1.00			
	7.5	1745	230/460	22.2/11.1	60	1.15			
<b>CONSTANT HP RPM</b>		@	<b>HZ</b>	<b>CODE</b>	H				
<b>TYPE</b>	P	<b>INSUL.CLASS</b>	F	<b>TORQUE</b>	10:1_VT		<b>DESIGN</b>	B	
<b>D.E. BRG.</b>	50BC02JPP30A		<b>ENCL</b>	TENV	<b>DUTY</b>	15 MIN		<b>PH</b>	3
<b>O.D.E. BRG.</b>	25BC02JPG30A		<b>MOTOR WEIGHT</b>		<b>AMB</b>	40			
	FINAL CONN VOLTAGE = 230 *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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**000692000MB**

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SUITABLE FOR OPERATION ON PWM

INVERTER EQUIPPED WITH IGBT

DEVICES AND CAPABLE OF

CARRIER

FREQUENCY OF 2 KHZ MINIMUM

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**000613007MS**

<b>CAT.NO.</b>	SUM70754	<b>SPEC NO.</b>	S18-CWS0-0006			
<b>SER.NO.</b>		<b>FRAME SIZE</b>	180TY			
	<b>HP</b>	<b>RPM</b>	<b>VOLTS</b>	<b>AMPS</b>	<b>HZ</b>	<b>S.F.</b>
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<b>O.D.E. BRG.</b>	25BC02JPG30A	<b>MOTOR WEIGHT</b>		<b>AMB</b>	40	
	FINAL CONN VOLTAGE = 230 *15					
	MIN IN AIR ;SUB. IN SEWAGE /					
	WATER ONLY					

**AC induction motor performance data**

Record #85768 - Typical performance - not guaranteed values

Winding	36WGA0034
Type	3634M
Enclosure	PART

**Nameplate data**

Rated Output			7.5
Volts			230/460
Full Load Amps			22.2/11.1
R.P.M.			1745
Hz	60	Phase	3
KVA Code			H
S.F.			1.15
NEMA Nom. Eff.	91.7	Power Factor	67
Duty			15 MIN
S.F. Amps			

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

Full Load Torque	22.68 LB-FT
Start Configuration	direct on line
Breakdown Torque	71.3 LB-FT
Pull-up Torque	38.66 LB-FT
Locked-rotor Torque	45.66 LB-FT
Starting Current	65.32 A
No-load Current	7.43
Line-line Res. @ 25°C	2.17 Ω
Temp. Rise @ Rated Load	80°C
Temp. Rise @ S.F. Load	123°C
Locked-rotor Power Factor	50.7
Rotor inertia	0.317 lb-ft²

**Load Characteristics 460 V, 60 Hz, 7.5 HP**

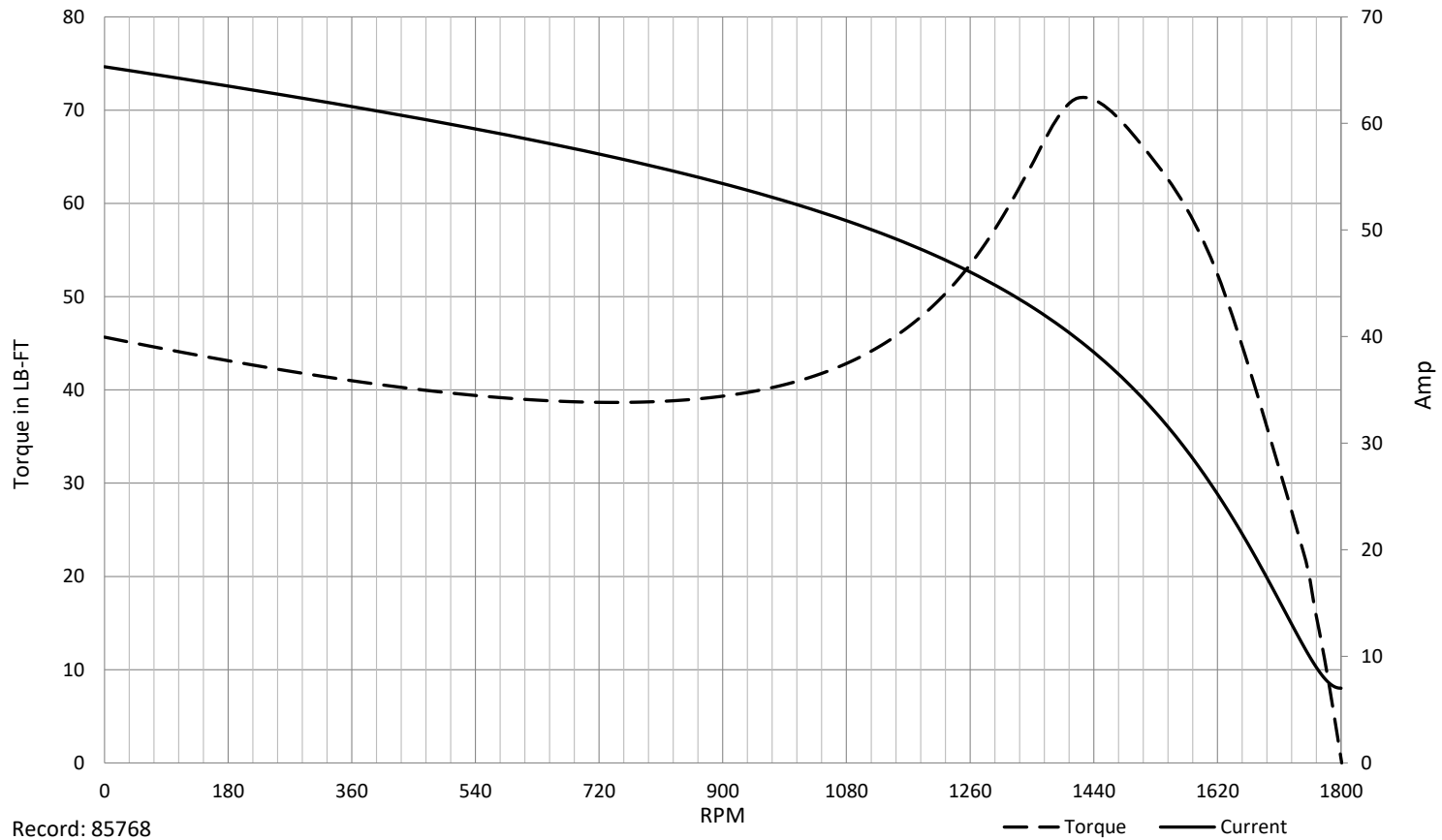
% of Rated Load	NL	25	50	75	100	125	150	SF
Power Factor	3	24	44	58	67	73	77	71
Efficiency	0	96.6	98.7	97.2	94.5	91.6	85.3	92.8
Speed	1801	1789	1776	1761	1745	1727	1703	1734
Line amperes	7.43	7.49	8.13	9.43	11.09	13.19	16.16	12.3

SPEED TORQUE / SPEED CURRENT CURVES

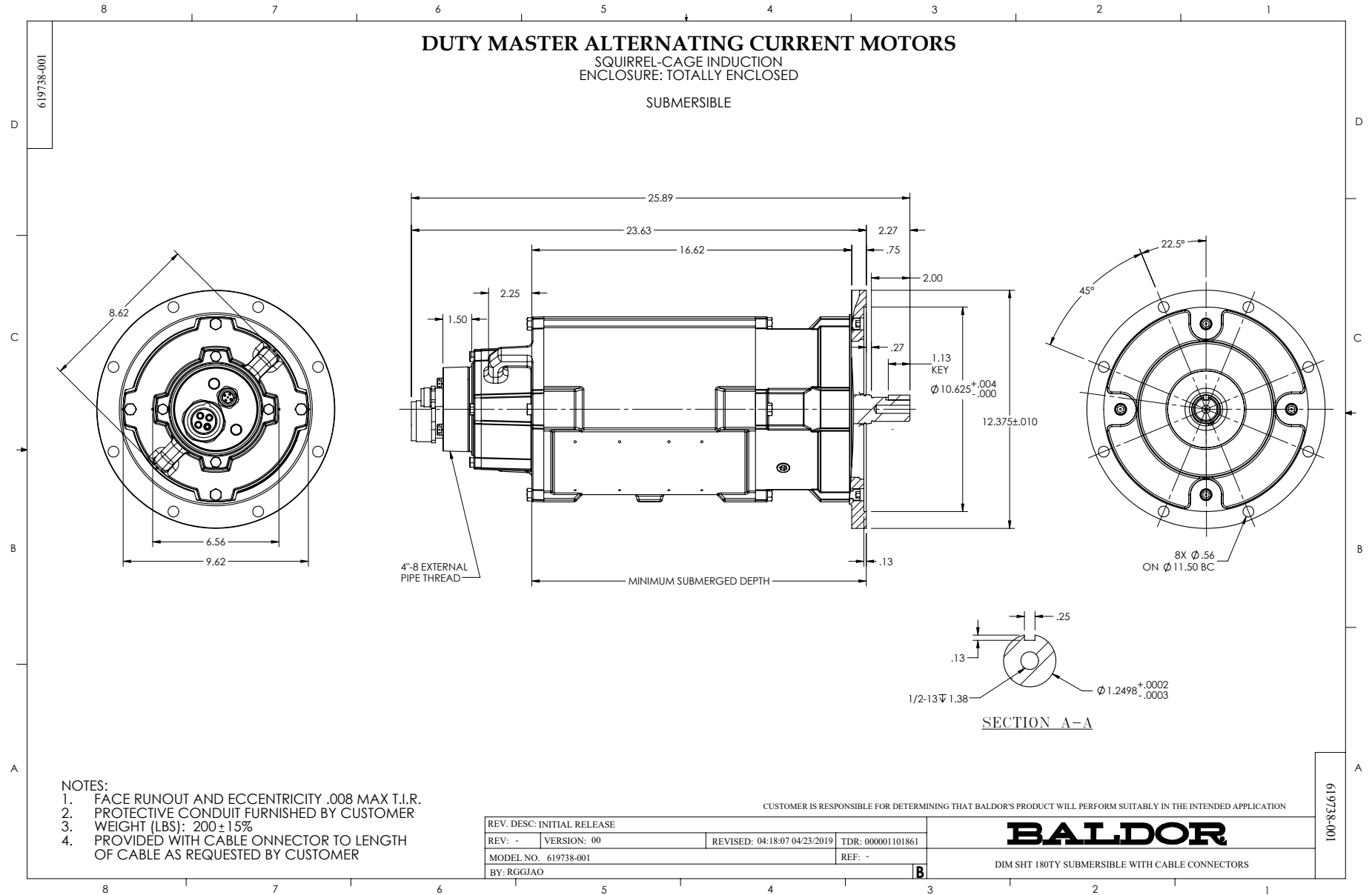


36WGA0034

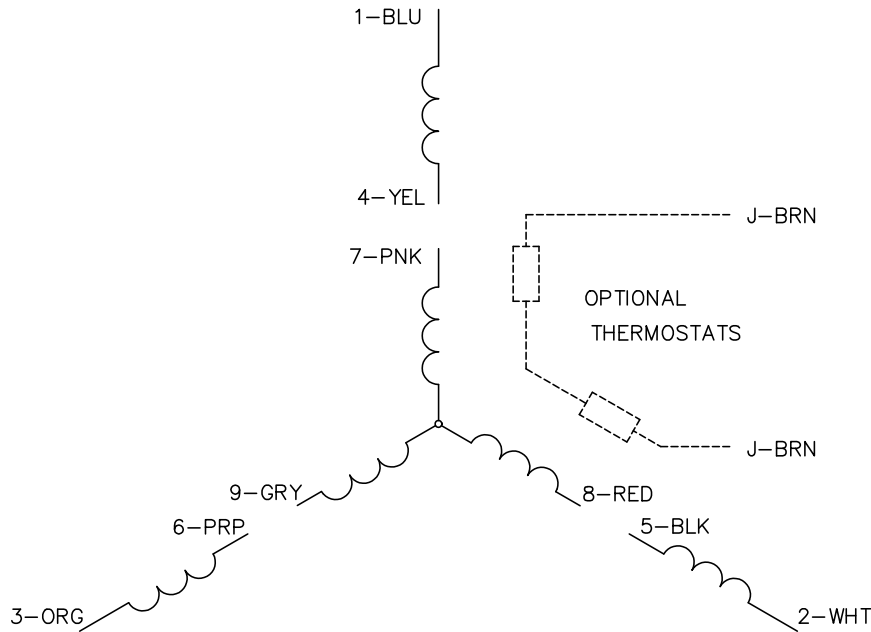
7.5HP 460V 60HZ



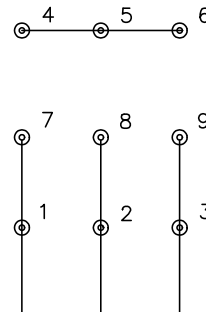
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CD0005

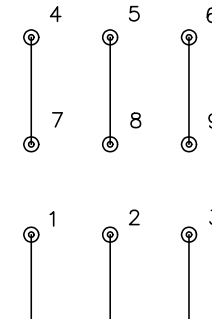


LOW VOLTAGE (2Y)



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