

ABB BALDOR RELIANCE III

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	IP68
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	A
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	92224
Layout	619738-002
Eff. date	10-29-2025
CD Diagram	
Poles	///
Leads	
Proprietary	False
Created date	07-25-2022

Shaft Slinger Indicator	No Slinger
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Winding	Normally Closed Thermostat

Nameplate

000613007MN											
CAT NO	SUM70156SM		SPEC NO.		S18-CWS0-0075						
HP	1.5	AMPS	5.0/2.5		VOLTS		230/460		DESIGN		B
FRAME SIZE	180TY		RPM	1160		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	K
SER.NO.				POWER FACTOR				NEMA-NOM-EFF			
				MAX CORR KVAR				GUARANTEED EFFICIENCY			
				NEMA NOM/CSA QUOTED EFF @							100% LOAD
				MOTOR WEIGHT				LBS.			
	FINAL CONN VOLTAGE = 230 *15										
MIN IN AIR											

000613007RC			
CLASS I GROUP	C D X	NO.	
CLASS II GROUP	X X X		
OPERATING TEMP CODE	T3C		

000613007MR

CAT NO	SUM70156SM	SPEC NO.	S18-CWS0-0075					
HP	1.5	AMPS	5.0/2.5	VOLTS	230/460	DESIGN	B	
FRAME SIZE	180TY	RPM	1160	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	K	
		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							

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-ft²

Load Characteristics 460 V, 60 Hz, 1.5 HP

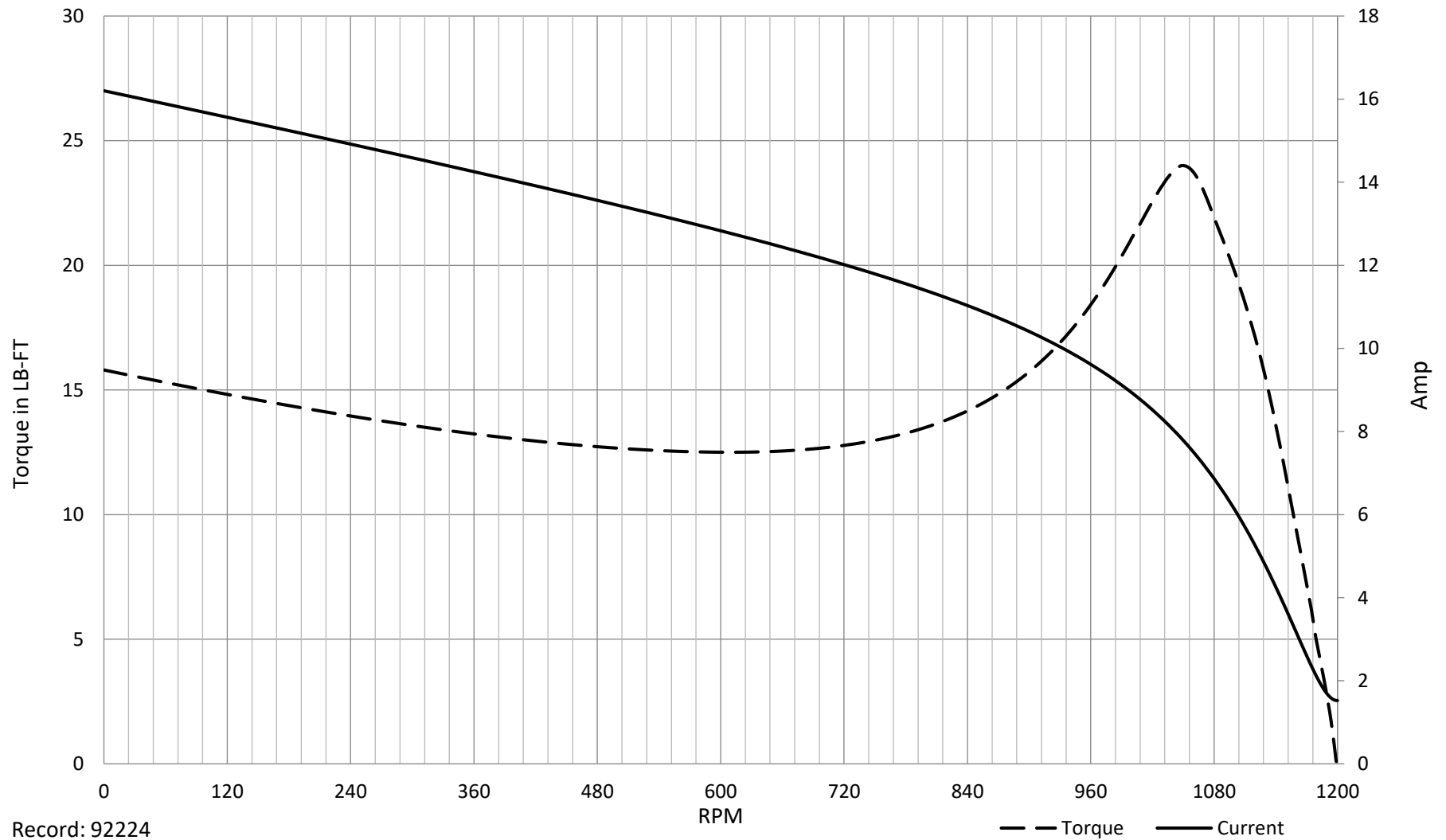
% of Rated Load	NL	25	50	75	100	125	150	SF
Power Factor	6	27	44	56	64	69	73	67
Efficiency	0	76.3	84.8	86.8	87.5	87.1	85.8	87.3
Speed	1199	1194	1187	1179	1172	1163	1153	1167
Line amperes	1.63	1.7	1.9	2.18	2.51	2.92	3.38	2.76

SPEED TORQUE / SPEED CURRENT CURVES

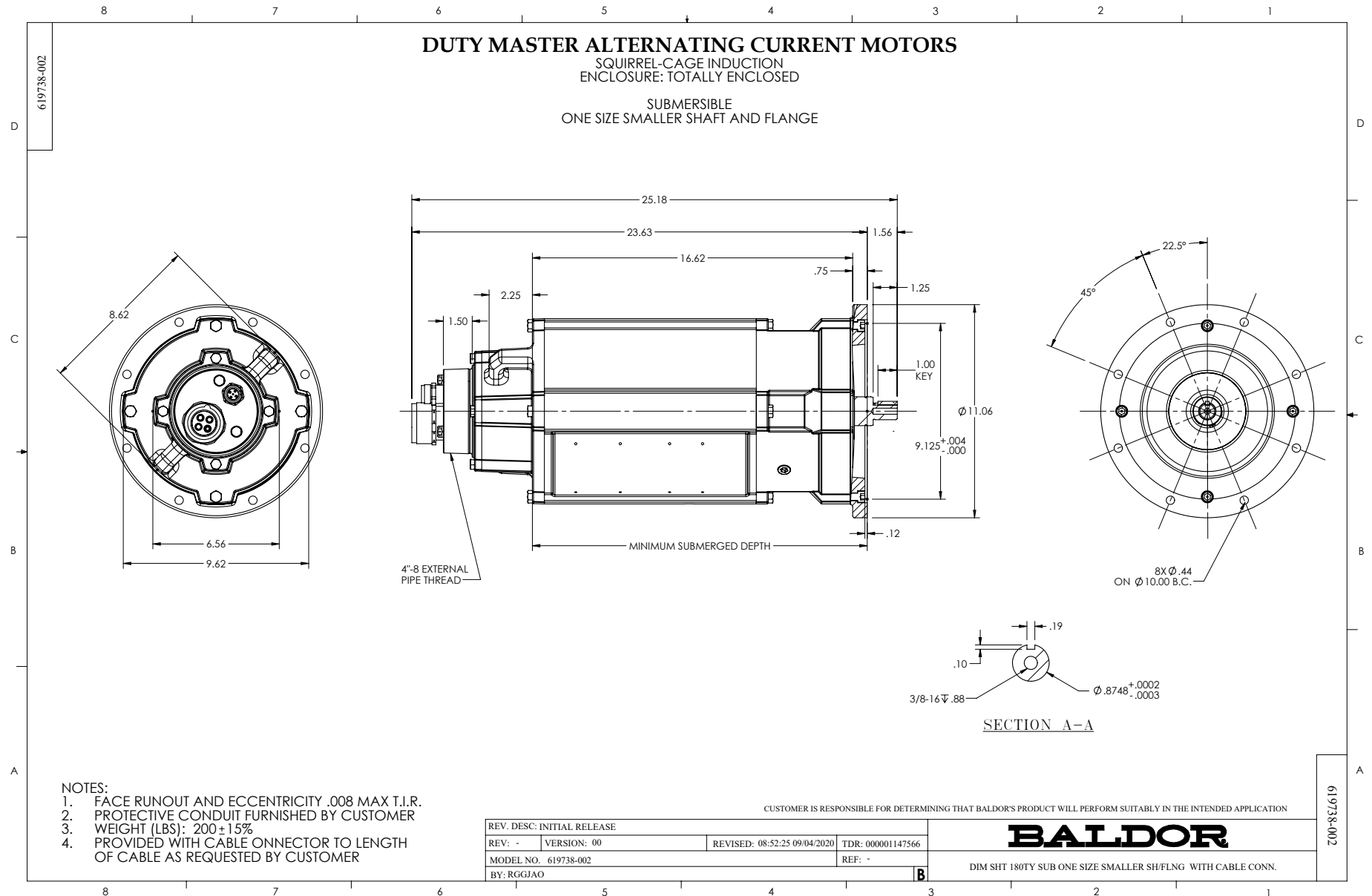
BALDOR • RELIANCE

06WGA0021

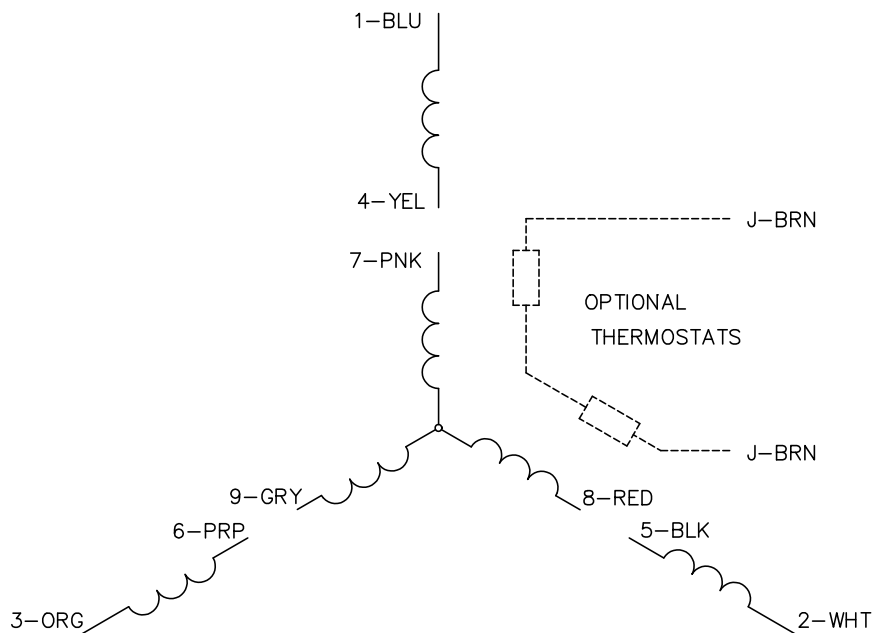
1.5HP 460V 60HZ



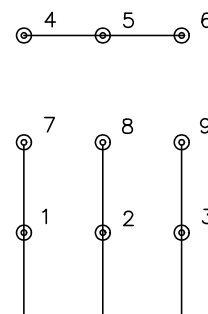
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CD0005

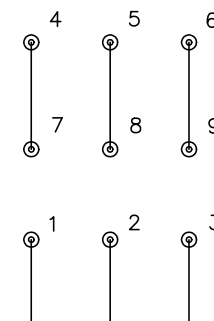


LOW VOLTAGE
(2Y)



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.

REV. DESC: REVISE TO SHOW OPTIONAL COLORS

REV. LTR: E

BY: JLP

REVISED: 01/19/99 10:15

TDR: 0171435

900000

FILE: AAA00005140

MDL: -

MTL: -

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS

CD0005