

ABB BALDOR RELIANCE III

Customer information packet

SUM71004SM-4

10HP, 1765RPM, 3PH, 60HZ, 210TY, XPNV, V1

Class - CLI GP C,D

Division - Not Applicable

Specifications

Enclosure	XPNV
Frame	210TY
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	NO CABLE
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

Part Detail

Revision	C
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	86077
Layout	619738-004
Eff. date	12-10-2024
CD Diagram	416820-001
Poles	///
Leads	
Proprietary	False
Created date	08-10-2021

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

Nameplate

000613007MS											
CAT.NO.	SUM71004SM-4			SPEC NO.		S21-CWS0-0010					
SER.NO.					FRAME SIZE		X215TY				
CONSTANT HP RPM	HP	RPM	VOLTS		AMPS		HZ		S.F.		
	10	1765	230/460		25/12.5		6-60		1.00		
	10	1765	230/460		25/12.5		60		1.15		
			@		HZ	CODE	H				
	TYPE	P	INSUL.CLASS		F	TORQUE		10:1_VT		DESIGN	B
	D.E. BRG.	60BC02JPP30A			ENCL	TENV		DUTY	15MIN		PH
O.D.E. BRG.	30BC02JPG30A			MOTOR WEIGHT					AMB	40	
FINAL CONN VOLTAGE = 460 *15											
MIN IN AIR ;SUB. IN WATER											
ONLY											

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

000692000MB	
SUITABLE FOR OPERATION ON PWM	
INVERTER EQUIPPED WITH IGBT	
DEVICES AND CAPABLE OF	
CARRIER	
FREQUENCY OF 2 KHZ MINIMUM	

000613007MS

CAT.NO.	SUM71004SM-4	SPEC NO.	S21-CWS0-0010			
SER.NO.			FRAME SIZE	X215TY		
	HP	RPM	VOLTS	AMPS	HZ	S.F.
	10	1765	230/460	25/12.5	6-60	1.00
	10	1765	230/460	25/12.5	60	1.15
CONSTANT HP RPM		@	HZ	CODE	H	
TYPE	P	INSUL.CLASS	F	TORQUE	10:1_VT	DESIGN B
D.E. BRG.	60BC02JPP30A	ENCL	TENV	DUTY	15MIN	PH 3
O.D.E. BRG.	30BC02JPG30A	MOTOR WEIGHT		AMB	40	
	FINAL CONN VOLTAGE = 460 *15					
	MIN IN AIR ;SUB. IN WATER					
	ONLY					

Record #86077 - Typical performance - not guaranteed values

Winding	07WGA0017
Type	0738M
Enclosure	TENV

Nameplate data

Rated Output	10		
Volts	230/460		
Full Load Amps	25/12.5		
R.P.M.	1765		
Hz	60	Phase	3
KVA Code	H		
S.F.	1.15		
NEMA Nom. Eff.	90.2	Power Factor	82
Duty	15 MIN		
S.F. Amps			

460 V, 60 Hz:

High Voltage Connection

Full Load Torque	29.74 LB-FT
Start Configuration	direct on line
Breakdown Torque	83.88 LB-FT
Pull-up Torque	29.9 LB-FT
Locked-rotor Torque	45.11 LB-FT
Starting Current	87.77 A
No-load Current	4.92
Line-line Res. @ 25°C	1.25 Ω
Temp. Rise @ Rated Load	15°C
Temp. Rise @ S.F. Load	18°C
Locked-rotor Power Factor	37.1
Rotor inertia	0.934 lb-ft ²

Load Characteristics 460 V, 60 Hz, 10 HP

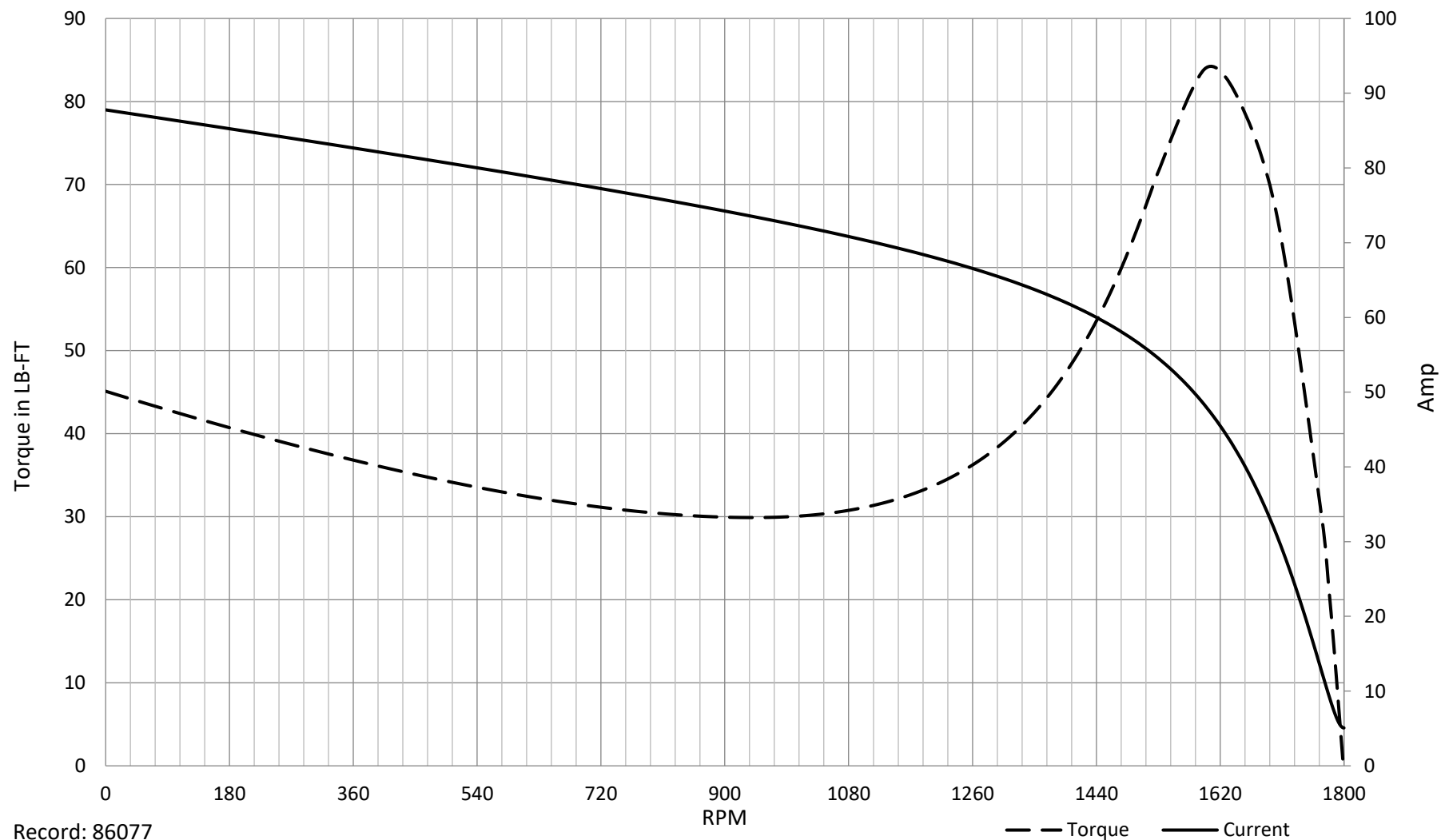
% of Rated Load	NL	25	50	75	100	125	150	SF
Power Factor	6	47	68	78	82	84	84	83
Efficiency	0	88.1	90.8	91.9	90.9	90	88.6	90.4
Speed	1799	1792	1785	1777	1768	1758	1747	1762
Line amperes	4.92	5.73	7.53	9.86	12.49	15.44	18.79	14.3

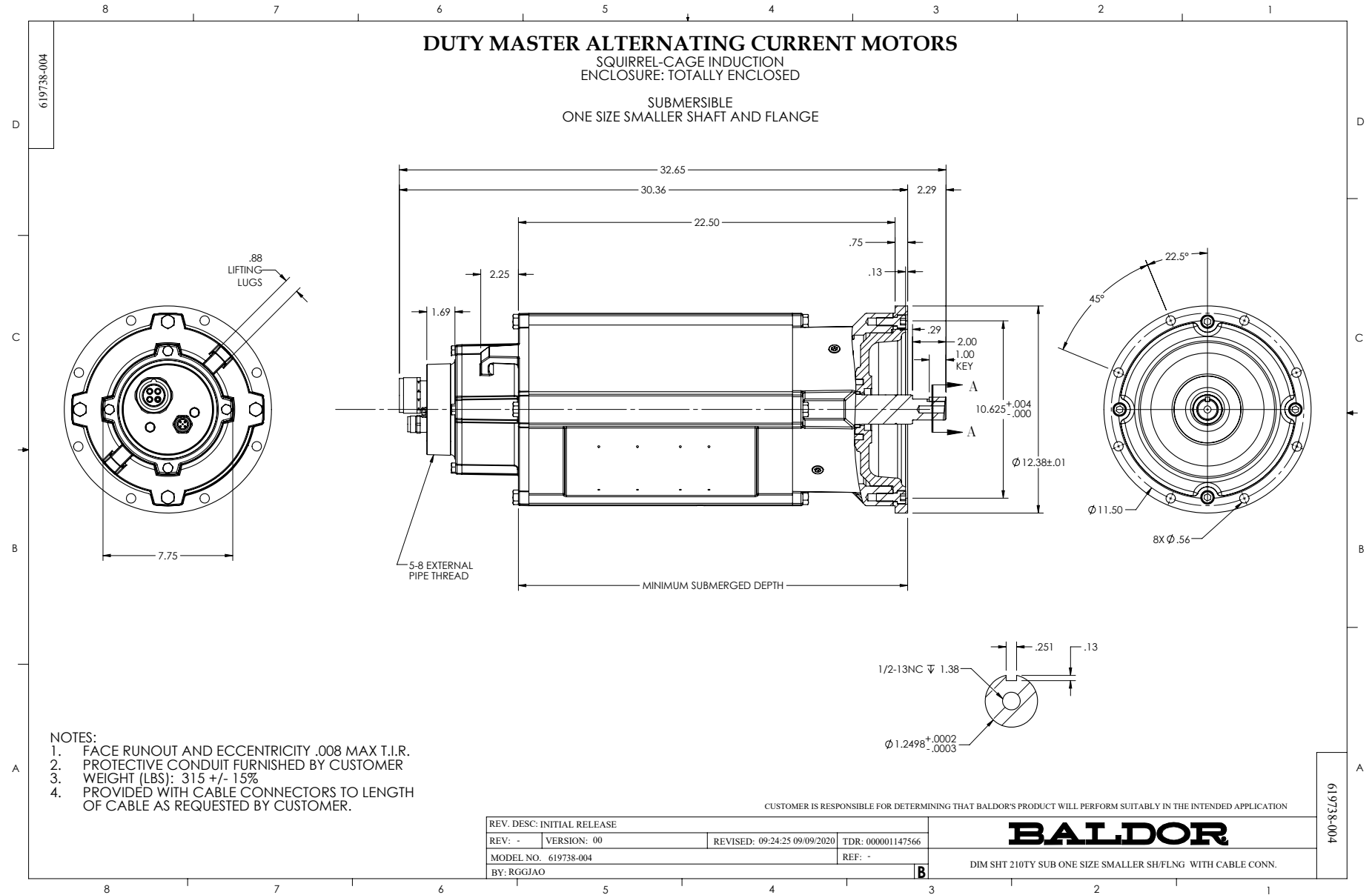
SPEED TORQUE / SPEED CURRENT CURVES



07WGA0017

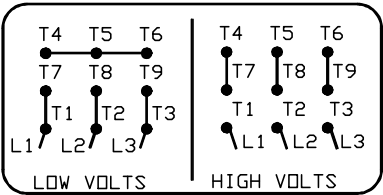
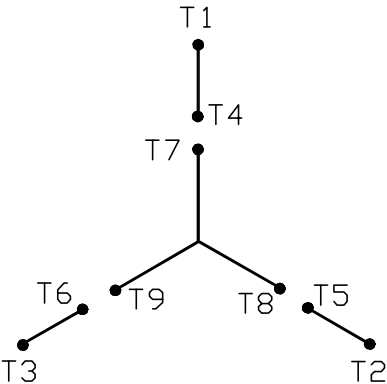
10HP 460V 60HZ





416820-001

A-C MOTOR
CONNECTION DIAGRAM
STANDARD 9 LEAD Y CONNECTED



(N. P. 1575-A)

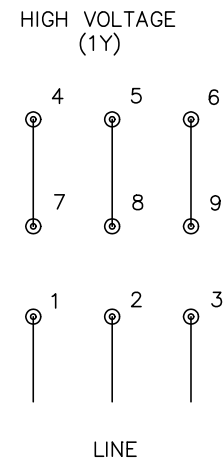
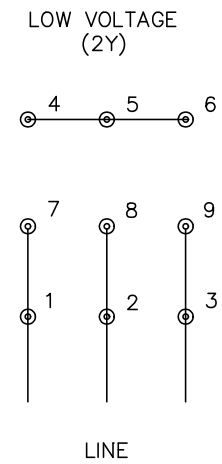
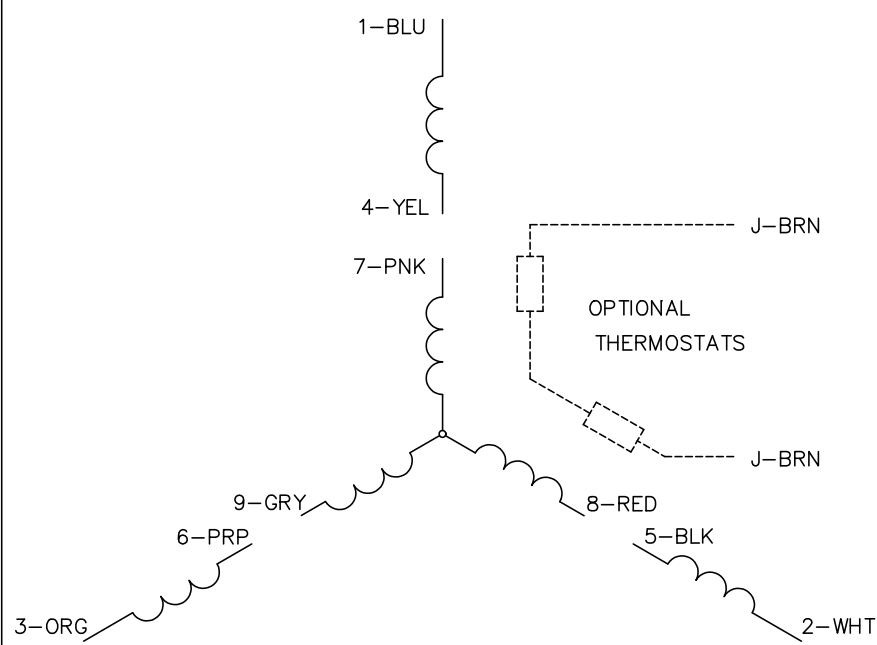
REV. DESC: FONT CHANGE FOR PDF SEARCHABLE		
REV. LTR: A	VERSION: 01	TDR: 000001009382
FILE: \MGA\00000\659	REVISED: 10: 33: 07 12/21/2016	BY: MGHMTT
MTL: -	© □	

BALDOR

CONN DIAG - STANDARD 9 LEAD, Y CONNECTED
SH 1 of 1

416820-001

CD0005



- 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
S00000		FILE: AAA00005140	MDL: -
		MTL: -	

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS

CD0005