

ABB BALDOR RELIANCE III

Customer information packet

SUM20754-4

7.5HP, 1770RPM, 3PH, 60HZ, 210TY, TENV, V1

Class - None

Division - Not Applicable

Specifications

Enclosure	TENV
Frame	210TY
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	None
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
Heater Indicator	No Heater
Insulation Class	F
Inverter Code	Not Inverter
IP Rating	IP68
KVA Code	J
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	1.437 IN
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger

Part Detail

Revision	C
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	86000
Layout	619738-003
Eff. date	12-10-2024
CD Diagram	416820-001
Poles	///
Leads	
Proprietary	False
Created date	08-18-2021

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

Nameplate

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

000613007MS

CAT.NO.	SUM20754-4		SPEC NO.	S21-CWS0-0020		
SER.NO.			FRAME SIZE	210TY		
	HP	RPM	VOLTS	AMPS	HZ	S.F.
	7.5	1770	230/460	18.4/9.2	6-60	1.00
	7.5	1770	230/460	18.4/9.2	60	1.15
CONSTANT HP RPM		@	HZ	CODE	J	
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					

000613007MS

CAT.NO.	SUM20754-4		SPEC NO.	S21-CWS0-0020		
SER.NO.			FRAME SIZE	210TY		
	HP	RPM	VOLTS	AMPS	HZ	S.F.
	7.5	1770	230/460	18.4/9.2	6-60	1.00
	7.5	1770	230/460	18.4/9.2	60	1.15
CONSTANT HP RPM		@	HZ	CODE	J	
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					

AC induction motor performance data

Record #86000 - Typical performance - not guaranteed values

Winding	07WGA0016
Type	0738M
Enclosure	PART

Nameplate data

Rated Output	7.5		
Volts	230/460		
Full Load Amps	18.4/9.2		
R.P.M.	1770		
Hz	60	Phase	3
KVA Code	J		
S.F.	1.15		
NEMA Nom. Eff.	91	Power Factor	84
Duty	15 MIN		
S.F. Amps			

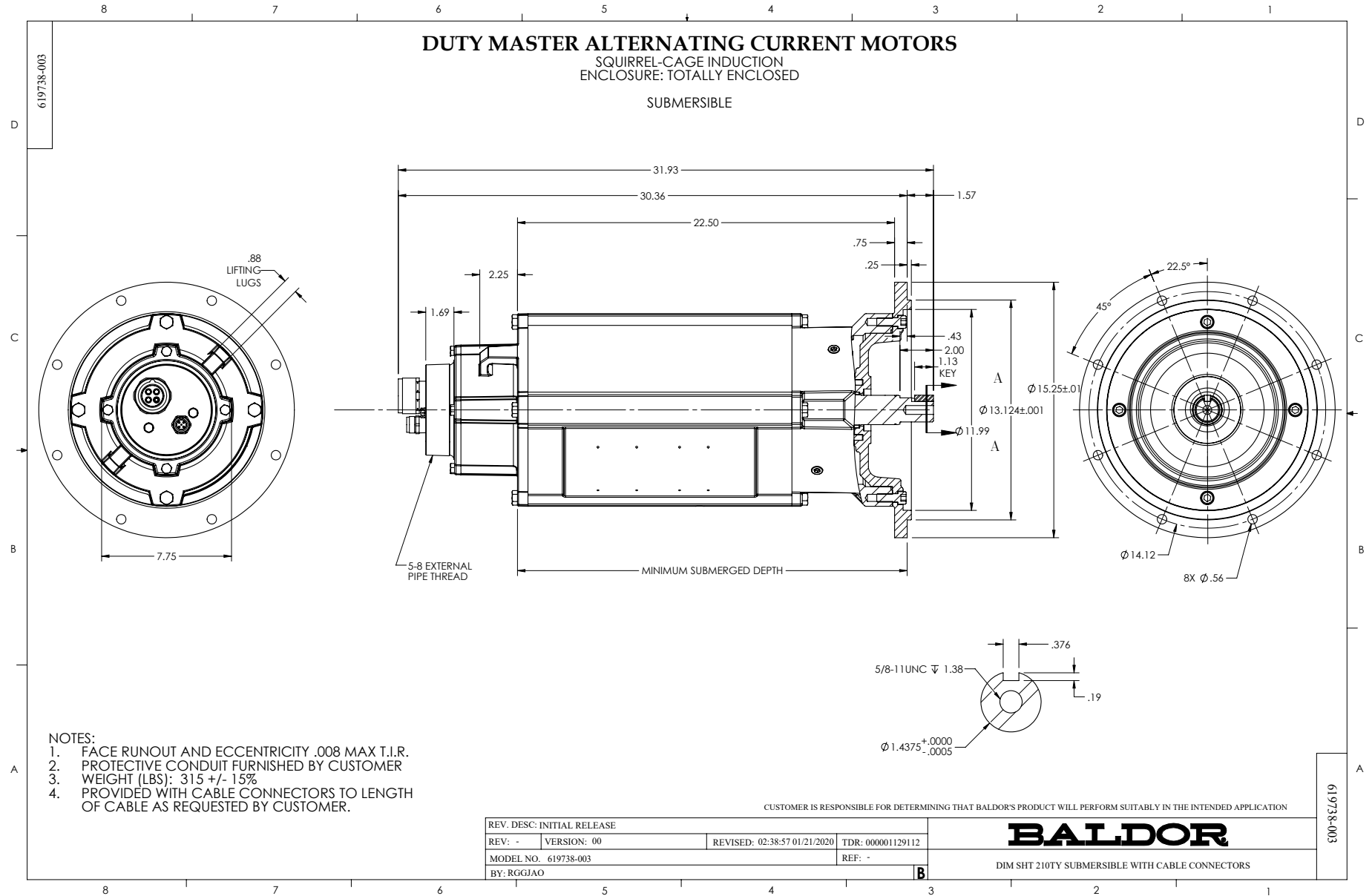
460 V, 60 Hz:

High Voltage Connection

Full Load Torque	22.3 LB-FT
Start Configuration	direct on line
Breakdown Torque	66.73 LB-FT
Pull-up Torque	23.24 LB-FT
Locked-rotor Torque	35.06 LB-FT
Starting Current	69.17 A
No-load Current	3.51
Line-line Res. @ 25°C	1.5 Ω
Temp. Rise @ Rated Load	52°C
Temp. Rise @ S.F. Load	65°C
Locked-rotor Power Factor	36
Rotor inertia	0.934 lb-ft²

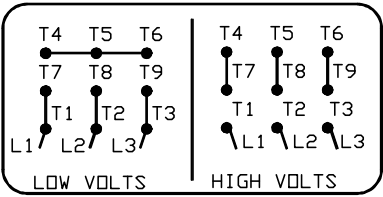
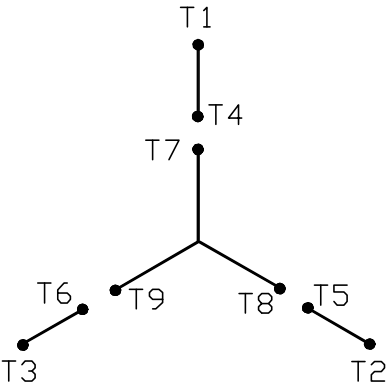
Load Characteristics 460 V, 60 Hz, 7.5 HP

% of Rated Load	NL	25	50	75	100	125	150	SF
Power Factor	7	49	70	79	84	85	85	85
Efficiency	0	87	90.4	91.7	91.1	90.6	89.3	90.8
Speed	1799	1793	1786	1779	1770	1762	1752	1765
Line amperes	3.51	4.15	5.52	7.26	9.24	11.4	13.85	10.5



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

