

ABB BALDOR RELIANCE III

Customer information packet

SUM70756-4

7.5HP, 1150RPM, 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	G
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	1.437 IN
Shaft Rotation	Reversible

Part Detail

Revision	D
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	85997
Layout	619738-003
Eff. date	12-10-2024
CD Diagram	416820-001
Poles	///
Leads	
Proprietary	False
Created date	08-09-2021

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

Nameplate

000613007MS											
CAT.NO.	SUM70756-4			SPEC NO.	S21-CWS0-0007						
SER.NO.					FRAME SIZE	210TY					
CONSTANT HP RPM	HP	RPM	VOLTS		AMPS		HZ		S.F.		
	7.5	1150	230/460		20.8/10.4		6-60		1.00		
	7.5	1150	230/460		20.8/10.4		60		1.15		
	@			HZ	CODE	G					
	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										

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

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SER.NO.			FRAME SIZE	210TY		
	HP	RPM	VOLTS	AMPS	HZ	S.F.
	7.5	1150	230/460	20.8/10.4	6-60	1.00
	7.5	1150	230/460	20.8/10.4	60	1.15
CONSTANT HP RPM		@	HZ	CODE	G	
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					

Parts List

Part number	Description	Quantity
SA396197	SA S21-CWS0-0007	1.000 ea
RA387002	RA S21-CWS0-0007	1.000 ea
001575000A	WIRING DIAGRAM	1.000 ea
424476003WB	WIRING DIAGRAM MEDIUMA	1.000 ea
424476003WB	WIRING DIAGRAM MEDIUMA	1.000 ea
000901001AA	LABEL WARNING	1.000 ea
000692000EJ	NAME PLATE	1.000 ea
000692000WC	WARNING FLAMMABLE VAPORS MAY BE PRESENT	2.000 ea
000613007MS	NP, MEDIUM AC,INVERTER DUTY CSA,STD INDU	1.000 ea
000901001AA	LABEL WARNING	1.000 ea
000613007RC	C UL US NAMEPLATE FOR HAZARDOUS LOC	1.000 ea
000692000MB	BALDOR RELIANCE MOTOR DATA NAMEPLATE	1.000 ea
000613007MS	NP, MEDIUM AC,INVERTER DUTY CSA,STD INDU	1.000 ea
034692002AE	HCSP 1/4" 304 S.S.	1.000 ea
088206510A	BRKT,ODE,210SUB 88206-1WB	1.000 ea
004824015A	GREASE POLYREX EM	0.100 lb
032018012DG	HHCS 1/2-13X1-1/2 316S.S	4.000 ea
421900144FU	406673000BF	1.000 ea
004824018AF	SHELL ROTELLA OIL 10W	4.569 lb
603761001AA	LABYRINTH	1.000 ea
413480001R	RESISTOR ASSEMBLY-BLANKET	1.000 ea
413412006S	LEAD WIRE ASSY	1.000 ea
413412004A	SUBM MOISTURE PROBE	2.000 ea
421900144FU	406673000BF	1.000 ea
088208001AA	MTG PLATE EX210Y SUBMERSIBLE 088208001WB	1.000 ea
032130010DC	HSNCS 1/2-13X1-1/4 304SS	4.000 ea
032620020JD	HSSS 10-24X5/8L 304S.S.	1.000 ea
421900144FU	406673000BF	1.000 ea
088207510A	BRKT,DE,210SUB 88207-1WA	1.000 ea
032018012DG	HHCS 1/2-13X1-1/2 316S.S	4.000 ea
032018008BG	HHCS 5/16-18X1 316 SS	3.000 ea

064262012C	SEAL	1.000 ea
047174005D	SNAP RING	1.000 ea
034692003AE	PPLG 3/8" 304 S.S.	2.000 ea
047174005C	SNAP RING	1.000 ea
064262012D	SEAL - Mech Ceramic Seal	1.000 ea
032080003JB	HWHMS 10-24X3/8L PLTED	4.000 ea
032080003LB	HWHMS 1/4-20X3/8L PLTED	6.000 ea
415031017B	NUT W/WASHER 1/4-20 C.P	6.000 ea
415031017A	NUT W/WASHER 10-24 C.PLT	4.000 ea
032677003BG	5/16-18 X 3/8 DHFHBHCS	2.000 ea
047024003B	T/LUG AMP 33218	9.000 ea
603767501A	LCSTG LEAD CONDUIT	1.000 ea
421900092FU	ORING	1.000 ea
032018010CG	HHCS 3/8-16X1-1/4L 316SS	4.000 ea
032018006BM	HHCS 5/16-18X3/4 PLTGRN.	1.000 ea
032018006BM	HHCS 5/16-18X3/4 PLTGRN.	1.000 ea
034036013AB	LCKW 5/16 EXT.TOOTH LCKW	1.000 ea
034017013AC	LCKW 5/16" 316 S.S.	2.000 ea
047024003AH	T/LUG AMP 34112	4.000 ea
609181014D	HEAT SHRINK TUBING 3/4	10.000 ea
802386001R	PAIGE INTERNAL MOTOR POWER PLUG	1.000 ea
802386002R	PAIGE INTERNAL MOTOR CONTROL PLUG	1.000 ea
613425013E	12" SAFETY CABLE	2.000 ea
613425013S	FERRULE, SAFETY CABLE	2.000 ea
004824007K	SPECIAL PAINT	0.100 ea
033775004EA	DRSCR #6-1/4 304 S.S.	8.000 ea
034180009FD	KEY 3/8X3/8X1-1/8 303 SS	1.000 ea
B3630-9	SUBM THERMOSTAT TAG	1.000 ea
B-3664002	TAG, (NON REGREASABLE)	1.000 ea

AC induction motor performance data

Record #85997 - Typical performance - not guaranteed values

Winding	07WGA0019
Type	0758M
Enclosure	PART

Nameplate data

Rated Output	7.5		
Volts	230/460		
Full Load Amps	20.8/10.4		
R.P.M.	1150		
Hz	60	Phase	3
KVA Code	G		
S.F.	1.15		
NEMA Nom. Eff.	89.5	Power Factor	75
Duty	15 MIN		
S.F. Amps			

460 V, 60 Hz:

High Voltage Connection

Full Load Torque	34 LB-FT
Start Configuration	direct on line
Breakdown Torque	84.38 LB-FT
Pull-up Torque	61.39 LB-FT
Locked-rotor Torque	74.5 LB-FT
Starting Current	59.05 A
No-load Current	4.22
Line-line Res. @ 25°C	1.26 Ω
Temp. Rise @ Rated Load	16°C
Temp. Rise @ S.F. Load	21°C
Locked-rotor Power Factor	21
Rotor inertia	1.44 lb-ft ²

Load Characteristics 460 V, 60 Hz, 7.5 HP

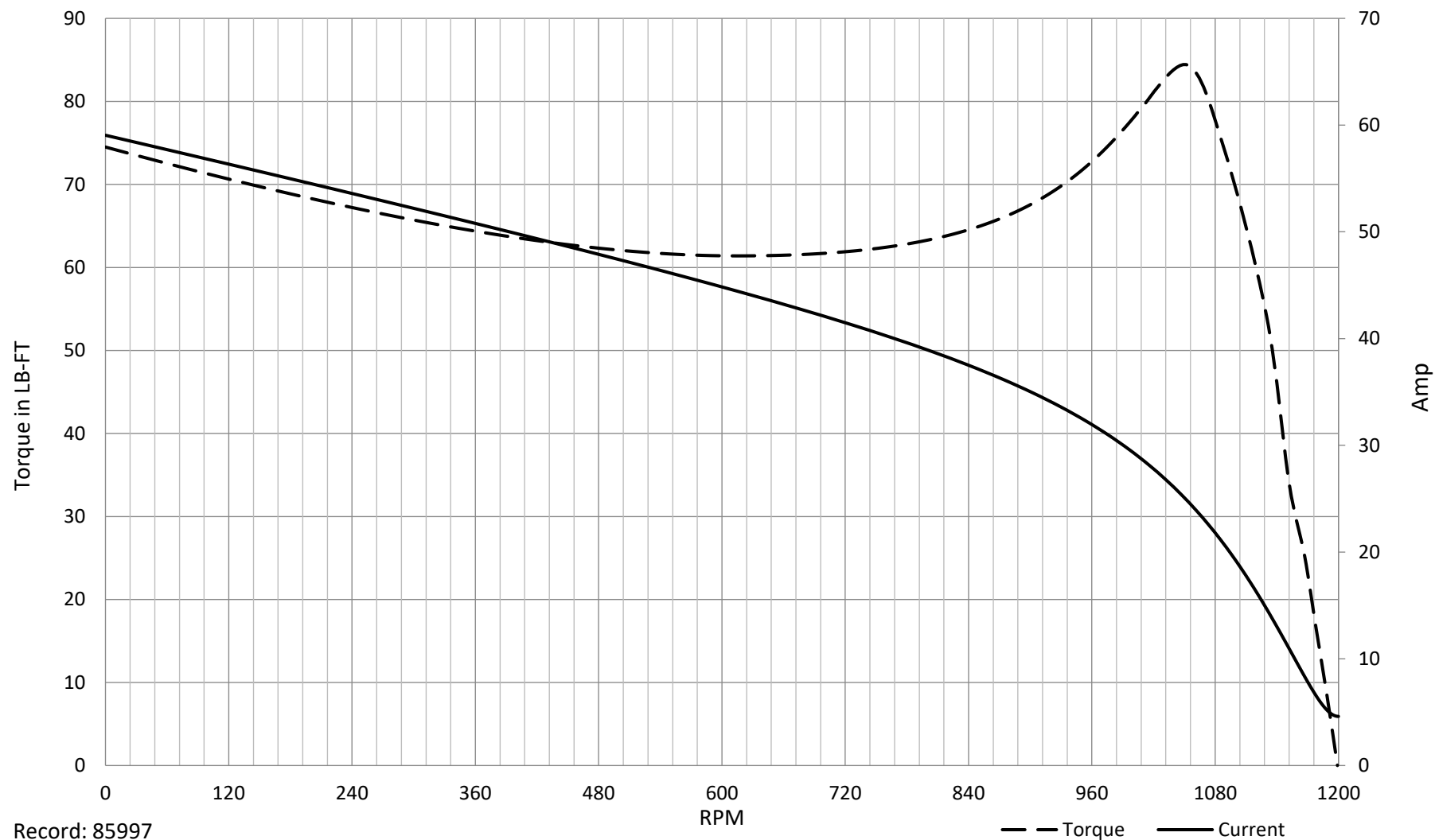
% of Rated Load	NL	25	50	75	100	125	150	SF
Power Factor	5	41	63	72	75	76	74	76
Efficiency	0	90.9	91.6	90.6	89.5	86.9	83.5	88.1
Speed	1199	1189	1178	1167	1152	1135	1110	1142
Line amperes	4.22	4.73	6.13	8.11	10.41	13.2	17	12.1

SPEED TORQUE / SPEED CURRENT CURVES

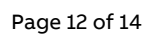
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07WGA0019

7.5HP 460V 60HZ

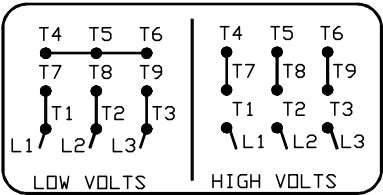
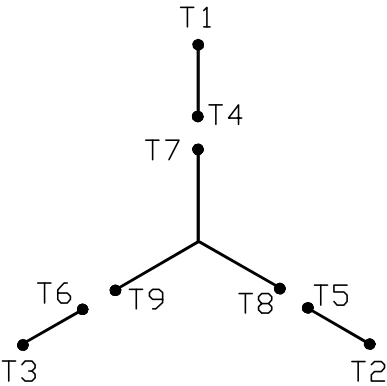


Record: 85997



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
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CONN DIAG - STANDARD 9 LEAD, Y CONNECTED
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