ABB BALDOR RELIANCE

Customer information packet

D5003R

C1811ATZ, 3HP, 1750RPM, 500, 300, DPG, F1

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Specifications

Armature Voltage	500 V
Base Speed	1750 rpm
Enclosure	DP
Field Voltage	300 V
Frame	C1811ATZ
Output Power	3.000 HP
Agency Approvals	CCSA US
Ambient Temperature	40 °C
Armature Current	5.2 a
Drip Cover	No Drip Cover
Duty Rating	CONT
Feedback Device	NO FEEDBACK
Field Winding Type	STR. SHUNT
Frame Prefix	C
Heater Indicator	No Heater
Insulation Class	F
Lifting Lugs	Standard Lifting Lugs
Motor Standards	NEMA
Mounting Arrangement	F1
Overall Length	26.38 IN
Service Factor	1.00
Shaft Diameter	1.375 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Slinger Indicator	No Slinger
Thermal Device - Bearing	None

Part Detail

Revision	-
Type	DC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	G2194B A
Layout	609980-001
Eff. date	01-02-2020
CD Diagram	406770-006
Poles	00
Leads	
Proprietary	False
Created date	12-27-2019

Nameplate

000613006HP							
CAT.NO.		**SPEC NO.**	T18S1333				
FR	C1811ATZ	**HP**	3	**DUTY**	CONT		
ENCL.	DP	**RPM**	1750/2300	**S.F.**	1.0		
ENCL MOD	GUARDED	**VOLTS**	500	**INSUL**	F		
MAX SAFE SPEED	5000	**AMPS**	5.20	**AMB.**	40		
	FIELD DATA	**SER.NO.**					
WINDING	STR. SHUNT	**POWER CODE**	D				
VOLTS	300	**D.E. BRG.**	40BC02J30X				
MAX AMPS @ 25 C	.72	**O.D.E. BRG.**	30BC02J30X				
HOT AMPS	.57/.32	**MIN. AMB.**	0	**TYPE**	TR		
	BRUSH:419904051E						

Parts List

Part number	Description	Quantity
SA377470	SA T18S1333	1.000 ea
AA018271	AA T18S1333	1.000 ea
000692000FP	NP, WARNING LIFT INSTRUCTIONS	1.000 ea
000692000FS	WARNING LABEL	1.000 ea
033775004EA	DRSCR #6-1/4 304 S.S.	8.000 ea
000613006HP	NAMEPLATE - RPM III D-C MOTOR W/CSA LOGO	1.000 ea
422908009B	SLVNG EXTRA SLVG LENGT	28.000 ea
609844004A	LEAD SHELF	1.000 ea
036170006EA	DRSCW METRIC NAMEPLATE	2.000 ea
609848010A	INSUL, LEAD SHELF	1.000 ea
034180008EA	KEY 5/16X5/16X1 L	1.000 ea
417735001A	SLEEVE	1.000 ea
036000025HB	HHCS M6-1.0X25L PLTD.	4.000 ea
036610008AB	METRIC LCKW M6 PLTD-G508	4.000 ea
036600008AB	MFWSH M6 PLATED	4.000 ea
036501008AB	KPNUT M6-1.0 ZINCPLTED	4.000 ea
036000030HB	MHHCSM6-1.0X30MMPLTD-250	4.000 ea
036601008AB	M6 FLAT WASHER	4.000 ea
036000012HB	HHCS M6X12MM LONG PLATED	2.000 ea
419904-51E	BRUSH N	2.000 ea
706372003B	ROCKR	1.000 ea
706364051AA	BRHLD METRIC SPRING CHG.	2.000 ea
801758052A	BRKT,ODE,C180	1.000 ea
801759052A	BRKT,DE,C180	1.000 ea
004824015A	GREASE POLYREX EM	0.100 lb
036000050JB	M8-1,25 X 50 MHHCS	2.000 ea
036000050HB	MHHCS M6X50MM PLATED	2.000 ea
400638001E	WWSHR (Customer number 43699)	1.000 ea
418150003A	GREASE FITTING CAP	2.000 ea
035000001A	ALFTG 1/8" 1610-BL	1.000 ea
035000001A	ALFTG 1/8" 1610-BL	1.000 ea

034693001AB	PPLG - G508- use 034692001AB	1.000 ea
034693001AB	PPLG - G508- use 034692001AB	1.000 ea
036500009AB	METRIC NUTM8-1.25PLTD-360	4.000 ea
036500009AB	METRIC NUTM8-1.25PLTD-360	4.000 ea
609830005K	TBOLT METRIC RP609830-	4.000 ea
415000103G	TLUG	1.000 ea
417733001A	GSK C/ BOX BASE	1.000 ea
418018074A	GROUND LABEL G100 METRIC 160 D.C.	1.000 ea
036620009AB	M8 EXTERNAL LK WASHER	1.000 ea
036000012JB	M8-1.25 X 12MM HXHDC	1.000 ea
032018004CK	HHCS 3/8-16X1/2L PLATED	4.000 ea
422919160	HHCVR KIT,C180,DE,LOUVERED	1.000 ea
422919160	HHCVR KIT,C180,DE,LOUVERED	1.000 ea
422919160	HHCVR KIT,C180,DE,LOUVERED	1.000 ea
422919172	HHCVR KIT,C180,ODE,SOLID	1.000 ea
422919173	HHCVR KIT,C180,ODE,LOUVERED	1.000 ea
422919173	HHCVR KIT,C180,ODE,LOUVERED	1.000 ea
422919173	HHCVR KIT,C180,ODE,LOUVERED	1.000 ea
706320003A	CONDUIT BOX	1.000 ea
075451000A	COVER, CONDUIT BOX	1.000 ea
065530000B	GASK	1.000 ea
036000012HB	HHCS M6X12MM LONG PLATED	2.000 ea
036000012JB	M8-1.25 X 12MM HXHDC	4.000 ea
406770006	C/D TAG STRAIGHT SHUNT	1.000 ea
706305020A	GUARD, SHAFT	1.000 ea
034180014EA	KEY 5/16X5/16X1-3/4L	1.000 ea
000640000P	TAG WINDING THERMOST	1.000 ea
000692000NF	NP 2POLE METRIC LABEL	1.000 ea
004824007K	SPECIAL PAINT	0.100 ea

609980-001

INDUSTRIAL DIRECT CURRENT MOTORS AND GENERATORS – RPM III

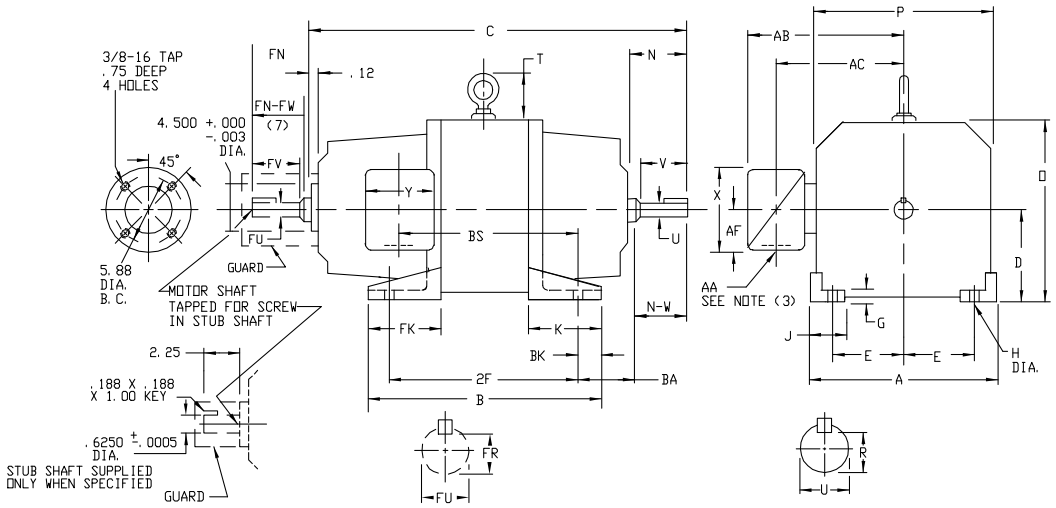
MOUNTING: FOOT
METHOD OF DRIVE:COUPLED OR BELTED

ENCLOSURE: DRIP-PROOF FULLY-GUARDED
SPLASHPROOF, TOTALLY ENCLOSED

COOLING: SELF-VENTILATED
NON-VENTILATED

ACCESSORIES: PROVISION FOR TACHOMETER MOUNTING ONLY WHEN SPECIFIED

FRAMES C180ATZ



(1) 'D' DIMENSION WILL NOT BE EXCEEDED. SHIMS UP TO .06 INCHES IN THICKNESS ARE USUALLY REQUIRED FOR COUPLED OR GEARED MACHINES.
(2) 'U' AND 'FU' VARY +.0000 -.0005
(3) TERMINAL BOX CAN BE ROTATED FOR LEAD OUTLET AT TOP, SIDES OR BOTTOM.
FOR 'X/P' TERMINAL BOX DIMENSIONS SEE 609989-1.
FOR MILL TYPE TERMINAL BOX DIMENSIONS SEE 609989-2.
(4) 'R' AND 'FR' VARY +.000, -.015.
(5) AA CONDUIT, TERMINAL BOX PROVIDED WITH DOUBLE KNOCKOUT.
(6) AA PIPE TAP
(7) OPPOSITE DRIVE END SHAFT SUPPLIED ONLY WHEN SPECIFIED.
(8) WHEN THE MOTOR APPLICATION DOES NO REQUIRE THE USE OF OPP. DRIVE END, ADD .25 TO 'C' DIM. FOR BRACKET COVER.

TERMINAL BOX LOCATED ON OPPOSITE SIDE WHEN F-2, W-1, W-4, W-5, W-7 OR C-1 MOUNTING IS SPECIFIED. BOX LOCATED ON TOP WHEN SPECIFIED.

MOTOR WEIGHT MAY VARY 15% FOR NON-STANDARD RATINGS AND/OR ACCESSORIES.

IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY.

DIMENSIONS ARE IN INCHES

FRAME	A	D(1)	E	G	H	J	O	P	T	BA	K	FK	BK
C1811ATZ-C1812ATZ	9.00	4.50	3.75	.31	.44	1.50	8.88	8.75	1.88	2.75	4.38	4.38	.50

FRAME	C(8)	B	BS	2F	DRIVE END SHAFT AND KEY							OPPOSITE DRIVE END SHAFT AND KEY (7)							WT.
					N	N-W	U(2)	V	R(4)	SQ.	LGTH	FN	FN-FW	FU(2)	FV	FR(4)	SQ.	LGTH.	LBS.
C1811ATZ	23.94	14.00	11.00	12.50	3.00	2.75	1.3750	2.50	1.201	.312	1.75	2.44	2.25	1.1250	2.00	.986	.250	1.38	175
C1812ATZ	25.44	15.50	12.50	14.00	3.00	2.75	1.3750	2.50	1.201	.312	1.75	2.44	2.25	1.1250	2.00	.986	.250	1.38	210

STEEL TERMINAL BOX DIMENSIONS

FRAME	MAX. AMPS	STANDARD SIZE						PART NUMBER	ONE SIZE LARGER						PART NUMBER
		AA(5)	AB	AC	AF	X	Y		AA(5)	AB	AC	AF	X	Y	
C180ATZ	40	3/4 & 1"	7.31	5.75	1.94	4.38	5.00	705028-1-R	1-1/4 & 1-1/2	8.31	6.31	2.50	5.50	6.12	705029-1-R
	96	1-1/4 & 1-1/2	8.31	6.31	2.50	5.50	6.12	705029-1-R	2" & 2-1/2	9.44	6.69	3.19	7.00	7.62	705030-1-R

CAST IRON TERMINAL BOX DIMENSIONS

FRAME	MAX AMPS	STANDARD SIZE						PART NUMBER	ONE SIZE LARGER						PART NUMBER
		AA(6)	AB	AC	AF	X	Y		AA(6)	AB	AC	AF	X	Y	
C180ATZ	18	3/4	9.38	7.38	2.50	5.00	5.75	705028-2-S	1	9.38	7.38	2.50	5.00	5.75	705028-2-T
	40	1	9.38	7.38	2.50	5.00	5.75	705028-2-T	1-1/2	10.31	7.88	3.00	6.00	7.00	705029-2-R
	96	1-1/2	10.31	7.88	3.00	6.00	7.00	705029-2-R	2	10.31	7.88	3.00	6.00	7.00	705029-2-S

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

REV. DESC: REVISE "D" DIM TOLERANCE		
REV. LTR: B	VERSION: 02	TDR: 000001158210
FILE: \RGG\00031\202	REVISED: 01:10:53 01/13/2021	BY: RGGNAS
MTL: –		

BALDOR - RELIANCE®

DIMENSION DRAWING,C180ATZ,DPP,TENV,FOOT MTG.

SH 1 of 1

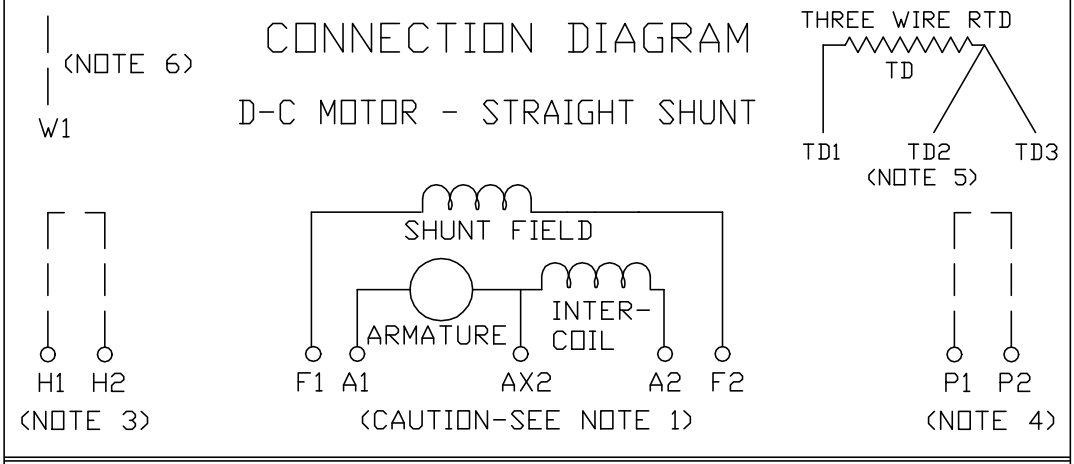
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406770-006

406770-006

CONNECTION DIAGRAM

D-C MOTOR - STRAIGHT SHUNT



ARMATURE AND FIELD EXTERNAL CONNECTIONS
WARNING- SEE NOTE 7 FOR GROUNDING INSTRUCTIONS



ROTATION FACING COMMUTATOR END

1. CAUTION — ARMATURE MAY HAVE MULTIPLE LEADS. CONNECT ALL LUGS WITH THE SAME MARKING TOGETHER.
2. OPTIONAL CONTROL SIGNAL LEAD IS MARKED AX2. ALWAYS TAKE INTERPOLE DROP BETWEEN A2 AND AX2. NOTE: NEMA DESIGNATION FOR AX2 IS LETTER C.
3. SPACE HEATERS, WHEN PROVIDED, WILL HAVE LEADS MARKED H1 AND H2, H3, H4, ETC.
4. THERMAL PROTECTOR, WHEN PROVIDED, WILL HAVE LEADS MARKED P1 AND P2, P3, P4, ETC.
5. WINDING RTD'S, WHEN PROVIDED, WILL HAVE LEADS MARKED TD1, TD2, &TD3.
6. BRUSH WEAR SENSOR, WHEN PROVIDED, WILL HAVE LEAD MARKED W1.
7. WARNING — MOTOR MUST BE GROUNDED TO PREVENT SERIOUS INJURIES TO PERSONNEL. GROUND THE MOTOR PER IEC, NATIONAL ELECTRICAL CODE AND ANY APPLICABLE LOCAL ELECTRICAL CODES. A TAPPED HOLE IS PROVIDED IN THE CONDUIT BOX, ON THE FOOT, FRAME BRACE OR OPPOSITE OPPOSITE DRIVE END BRACKET, ADJACENT TO THE TERMINAL BOX FOR FOR MOTOR GROUNDING. GROUND LEAD, WHEN PROVIDED, WILL BE GREEN.

CUSTOMER _____ CUSTOMER ORDER NO. _____ RELIANCE S.O. NO. _____

BALDOR

D-C MOTOR CONNECTION DIAGRAM, STRAIGHT SHUNT

SH 1 of 1

REV. DESC: UPDATE LOGO AND TITLEBLOCK; LOADED TO BUS
REV. LTR: - | VERSION: 00 | TDR: 000000781086
FILE: \RSN\00026\515 | REVISED: 02:41:08 02/01/2013
MTL: - | BY: MGHPC