

ABB BALDOR RELIANCE III

Customer information packet D5007R

7.5 1750 DPG C1811ATZ STRT SHUNT

Specifications

Armature Voltage	500 V
Base Speed	1750 rpm
Enclosure	DP
Field Voltage	300 V
Frame	C1811ATZ
Output Power	7.500 HP
Agency Approvals	CCSA US
Ambient Temperature	40 °C
Armature Current	13.5 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.	G2060A B
Layout	609980-001
Eff. date	01-02-2020
CD Diagram	406770-006
Poles	00
Leads	
Proprietary	False
Created date	12-27-2019

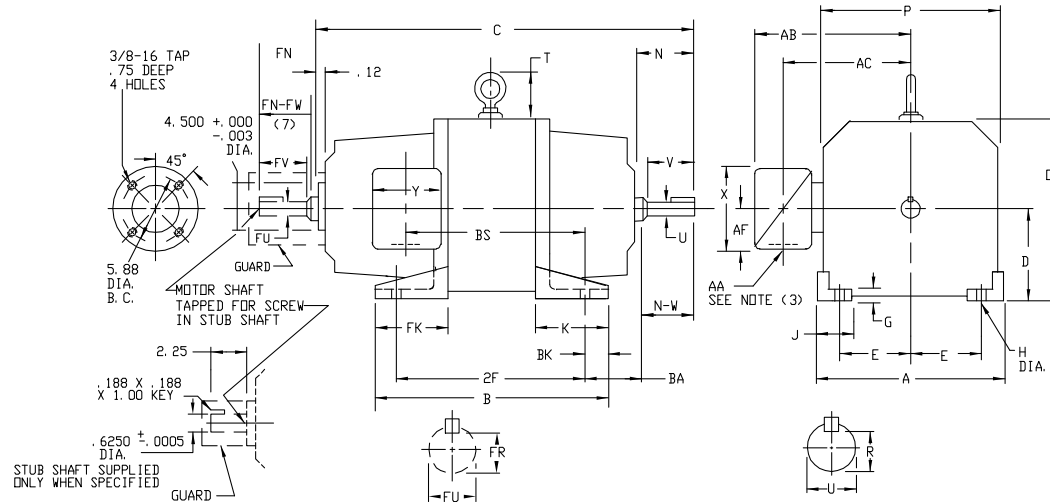
Nameplate

000613006HP									
CAT.NO.		SPEC NO.	T18S1335						
FR	C1811ATZ	HP	7.5	DUTY	CONT				
ENCL.	DP	RPM	1750/2300	S.F.	1.0				
ENCL MOD	GUARDED	VOLTS	500	INSUL		F			
MAX SAFE SPEED	5000	AMPS	13.50	AMB.	40				
	FIELD DATA	SER.NO.							
WINDING	STR SHUNT	POWER CODE	D						
VOLTS	300	D.E. BRG.	40BC02J30X						
MAX AMPS @ 25 C	1.29	O.D.E. BRG.	30BC02J30X						
HOT AMPS	.92/.61	MIN. AMB.	0	TYPE	TR				
	BRUSH:419904051F								

609980-001

INDUSTRIAL DIRECT CURRENT MOTORS
AND GENERATORS - RPM IIIMOUNTING: FOOT
METHOD OF DRIVE: COUPLED OR BELTEDENCLOSURE: DRIP-PROOF FULLY-GUARDED
SPLASHPROOF, TOTALLY ENCLOSEDCOOLING: SELF-VENTILATED
NON-VENTILATEDACCESSORIES: 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 NOT REQUIRE THE USE OF DPP, DRIVE END, ADD .25 TO "C" DIM. FOR BRACKET COVER.
TERMINAL BOX LOCATED ON OPPOSITE SIDE WHEN F-2, V-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	B(1)	E	G	H	J	D	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	N	N-W	UC(2)	V	R(4)	SG	LGTH	FN	FN-FW	FUC(2)	FV	FR(4)	SG	LGTH	WT.
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	VERSION: 02	TDR: 000001158210
REV. LTR: B	FILE: \RGG\00031\202	REVISED: 01:10:53 01/13/2021
MTL: -	BY: RGGNAS	

BALDOR - RELIANCE®

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

SH 1 of 1

609980-001

406770-006			406770-006	
CONNECTION DIAGRAM D-C MOTOR - STRAIGHT SHUNT <NOTE 6> W1 THREE WIRE RTD TD1 TD TD2 TD3 <NOTE 5> <NOTE 3> H1 H2 F1 A1 AX2 A2 F2 <CAUTION-SEE NOTE 1> <NOTE 4> P1 P2 ARMATURE AND FIELD EXTERNAL CONNECTIONS WARNING- SEE NOTE 7 FOR GROUNDING INSTRUCTIONS A1 A2 F1 F2 CCW ROTATION A1 A2 F1 F2 CW ROTATION 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.D. NO. _____ 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 BALDOR D-C MOTOR CONNECTION DIAGRAM, STRAIGHT SHUNT SH 1 of 1				