

**BALDOR • RELIANCE**

---

# Customer information packet

## CD2005R-2

C1811ATCZ, 5HP, 1750RPM, 240, 240, DPG,

**Specifications**

Armature Voltage	240 V
Base Speed	1750 rpm
Enclosure	DP
Field Voltage	240 V
Frame	C1811ATCZ
Output Power	5.000 HP
Agency Approvals	CCSA US
Ambient Temperature	40 °C
Armature Current	18.1 a
Drip Cover	No Drip Cover
Duty Rating	CONT
Feedback Device	NO FEEDBACK
Field Winding Type	STAB SHUNT
Frame Prefix	C
Heater Indicator	No Heater
Insulation Class	F
Lifting Lugs	Standard Lifting Lugs
Motor Standards	NEMA
Overall Length	24.06 IN
Service Factor	1.00
Shaft Diameter	1.125 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Slinger Indicator	No Slinger
Thermal Device - Bearing	None

**Part detail**

Revision	A
Type	DC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	G2202A B
Layout	609980-023
Eff. date	06-02-2021
CD Diagram	406770-001
Poles	00
Leads	
Proprietary	False
Created date	11-12-2019

**Nameplate**

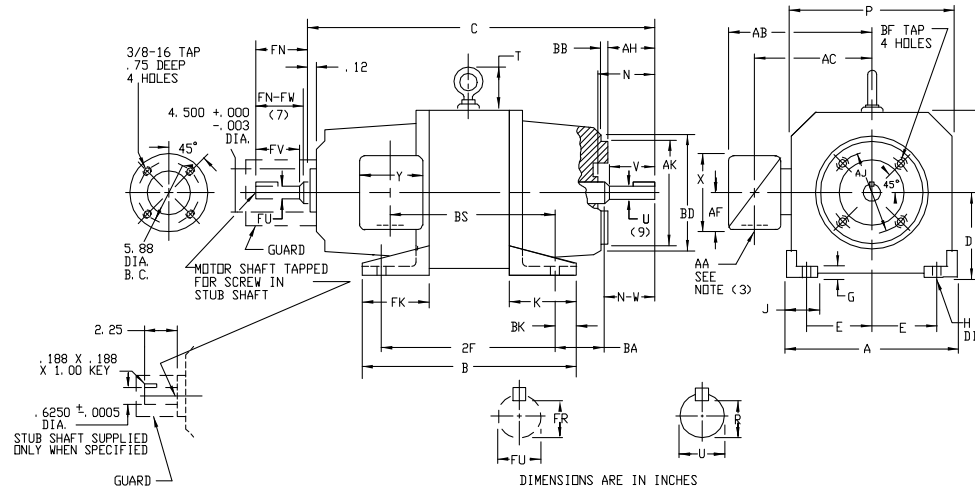
000613006HP					
<b>CAT.NO.</b>	CD2005R-2	<b>SPEC NO.</b>	T18S1010		
<b>FR</b>	C1811ATCZ	<b>HP</b>	5	<b>DUTY</b>	CONT
<b>ENCL.</b>	DP	<b>RPM</b>	1750/2300	<b>S.F.</b>	1.0
<b>ENCL MOD</b>	GUARDED	<b>VOLTS</b>	240	<b>INSUL</b>	F
<b>MAX SAFE SPEED</b>	2450	<b>AMPS</b>	18.10	<b>AMB.</b>	40
	<b>FIELD DATA</b>	<b>SER.NO.</b>			
<b>WINDING</b>	STAB SHUNT	<b>POWER CODE</b>	C		
<b>VOLTS</b>	240	<b>D.E. BRG.</b>	40BC02J30X		
<b>MAX AMPS @ 25 C</b>	1.11	<b>O.D.E. BRG.</b>	30BC02J30X		
<b>HOT AMPS</b>	.79/.40	<b>MIN. AMB.</b>	0	<b>TYPE</b>	TR
	BRUSH:419904051AB				
	SPLASHPROOF				

609980-023

## INDUSTRIAL DIRECT CURRENT MOTORS AND GENERATORS – RPM III

ENCLOSURE: DRIP-PROOF FULLY-GUARDED MOUNTING: FOOT,NEMA AC "C" FACE COOLING: SELF-VENTILATED ACCESSORIES: PROVISION FOR  
 SPLASHPROOF, TOTALLY ENCLOSED METHOD OF DRIVE:COUPLED OR BELTED NON-VENTILATED TACHOMETER MOUNTING  
 ONLY WHEN SPECIFIED

### FRAMES C180ATCZ



- (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.
- (4) FOR "X/P" TERMINAL BOX DIMENSIONS SEE 609989-1. FOR MILL TYPE TERMINAL BOX DIMENSIONS SEE 609989-2.
- (5) "R" AND "FR" VARY +.000, -.015.
- (6) AA CONDUIT, TERMINAL BOX PROVIDED WITH DOUBLE KNOCKOUT.
- (7) AA PIPE TAP
- (8) OPPOSITE DRIVE END SHAFT SUPPLIED ONLY WHEN SPECIFIED.
- (9) "AK" VARIES +.000, -.003.
- (10) FACE ROUNDOFF AND ECCENTRICITY .004 MAX. T. I. R.
- (11) DRIVE END SHAFT DIMENSIONS PER 180T AC MOTOR SHAFT EXTENSION.
- (12) 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, W-1, W-4, W-5, V-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.

FRAME	A	BK(1)	E	G	H	J	D	P	T	BA	K	FK	BK	BB	BD	BF TAP	BF TAP 'DEPTH'	AJ	AK(8)
C1811ATCZ-C1812ATCZ	9.00	4.50	3.75	.31	1.44	1.50	8.88	8.75	1.88	2.75	4.38	4.38	.50	2.5	8.75	1/2-13	.88	7.25	8.500

FRAME	C(10)	B	BS	2F	DRIVE END SHAFT AND KEY (9)								OPPOSITE DRIVE END SHAFT AND KEY (7)				WT. LBS.			
					AH	N	N-V	UK(2)	V	UK(4)	SQ	LGTH	FN	FN-FW	FUK(2)	FV		FR(4)	SQ	LGTH
C1811ATCZ	24.06	14.00	11.00	12.50	2.62	3.12	2.88	1.1250	2.62	.986	2.50	1.75	2.44	2.25	1.1250	2.00	.986	2.50	1.38	180
C1812ATCZ	25.56	15.50	12.50	14.00	2.62	3.12	2.88	1.1250	2.62	.986	2.50	1.75	2.44	2.25	1.1250	2.00	.986	2.50	1.38	215

FRAME	MAX. AMPS	STEEL TERMINAL BOX DIMENSIONS										PART NUMBER			
		STANDARD SIZE					ONE SIZE LARGER								
		AA(5)	AB	AC	AF	X	Y	AA(5)	AB	AC	AF		X	Y	
C180ATCZ	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

FRAME	MAX. AMPS	CAST IRON TERMINAL BOX DIMENSIONS										PART NUMBER			
		STANDARD SIZE					ONE SIZE LARGER								
		AA(6)	AB	AC	AF	X	Y	AA(6)	AB	AC	AF		X	Y	
C180ATCZ	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" DIMENSION TOLERANCE	VERSION: 02	TDR: 000001150521
REV. LTR: B	REVISD: 12:00:27 10/06/2020	BY: RGNAS
FILE: \RGG\00030\981		
MTL: -		

**BALDOR - RELIANCE®**

DIMENSION DRAWING, C180ATCZ, TENV, DPP, FOOT MTG., NEMA AC C-FACE

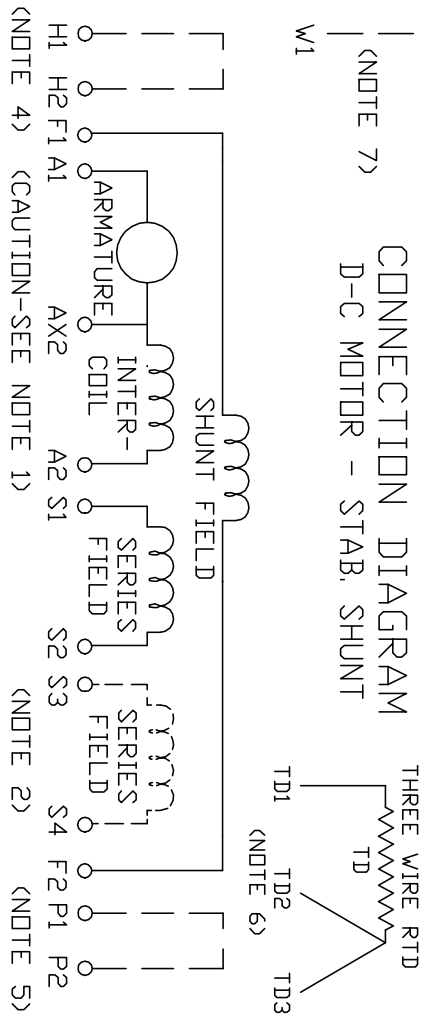
SH 1 of 1

609980-023

406770-001

406770-001

CONNECTION DIAGRAM  
D-C MOTOR - STAB. SHUNT



ARMATURE AND FIELD EXTERNAL CONNECTIONS  
WARNING- SEE NOTE 8 FOR GROUNDING INSTRUCTIONS



ROTATION FACING COMMUTATOR END

1. CAUTION — ARMATURE AND SERIES FIELD MAY HAVE MULTIPLE LEADS. CONNECT ALL LUGS WITH THE SAME MARKING TOGETHER.
2. OPTIONAL SERIES FIELD IS MARKED S3 AND S4. FOR CUMULATIVE SERIES FIELD, CONNECT S3 TO S2 AND CONNECT S4 TO NEGATIVE. FOR DIFFERENTIAL SERIES FIELD CONNECT S4 TO S2 AND S3 TO NEGATIVE.
3. OPTIONAL CONTROL SIGNAL LEAD IS MARKED AX2. ALWAYS TAKE INTERPOLE DROP BETWEEN A2 AND AX2. NOTE: NEMA DESIGNATION FOR AX2 IS LETTER C.
4. SPACE HEATERS, WHEN PROVIDED, WILL HAVE LEADS MARKED H1 AND H2, H3, H4, ETC.
5. THERMAL PROTECTOR, WHEN PROVIDED, WILL HAVE LEADS MARKED P1 AND P2, P3, P4, ETC.
6. WINDING RTD'S, WHEN PROVIDED, WILL HAVE LEADS MARKED TD1, TD2, & TD3
7. BRUSH WEAR SENSOR, WHEN PROVIDED, WILL HAVE LEAD MARKED W1.
8. 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 DRIVE END BRACKET, ADJACENT TO THE TERMINAL BOX FOR MOTOR GROUNDING. GROUND LEAD, WHEN PROVIDED, WILL BE GREEN.

CUSTOMER \_\_\_\_\_ ORDER NO. \_\_\_\_\_ S.D. NO. \_\_\_\_\_

RELIANCE CUSTOMER

REV. DESC: DELETED DUPLICATE WORDS FROM NOTE 8

REV. LTR: A

VERSION: 01

TDR: 000000970330

FILE: \RSN\00026\422

REVISED: 10:19:12 03/11/2016

BY: RAGTBM

MTL: -

**BALDOR**

D-C MOTOR CONNECTION DIAGRAM STAB. SHUNT

SH 1 of 1