

BALDOR® • RELIANCE™

Customer information packet

D2005R

C1811ATZ, 1750/2300 RPM, DC

Specifications

Armature Voltage	240 V
Base Speed	1750 rpm
Enclosure	DP
Field Voltage	150 V
Frame	C1811ATZ
Output Power	5.000 HP
Agency Approvals	CCSA US
Ambient Temperature	40 °C
Armature Current	19.2 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
Mounting Arrangement	F1
Overall Length	26.50 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.	G2173E B
Layout	609980-001
Eff. date	01-02-2020
CD Diagram	406770-001
Poles	00
Leads	
Proprietary	False
Created date	12-27-2019

Nameplate

000613006HP					
CAT.NO.	D2005R	SPEC NO.	T18S1318		
FR	C1811ATZ	HP	5.	DUTY	CONT
ENCL.	DP	RPM	1750/2300	S.F.	1.0
ENCL MOD	GUARDED	VOLTS	240	INSUL	F
MAX SAFE SPEED	2450	AMPS	19.20	AMB.	40
	FIELD DATA	SER.NO.			
WINDING	STAB SHUNT	POWER CODE	D-50/60		
VOLTS	150	D.E. BRG.	40BC02J30X		
MAX AMPS @ 25 C	1.77	O.D.E. BRG.	30BC02J30X		
HOT AMPS	1.26/.66	MIN. AMB.	0	TYPE	TR
	BRUSH:419904051AB				

609980-001

INDUSTRIAL DIRECT CURRENT MOTORS AND GENERATORS - RPM III

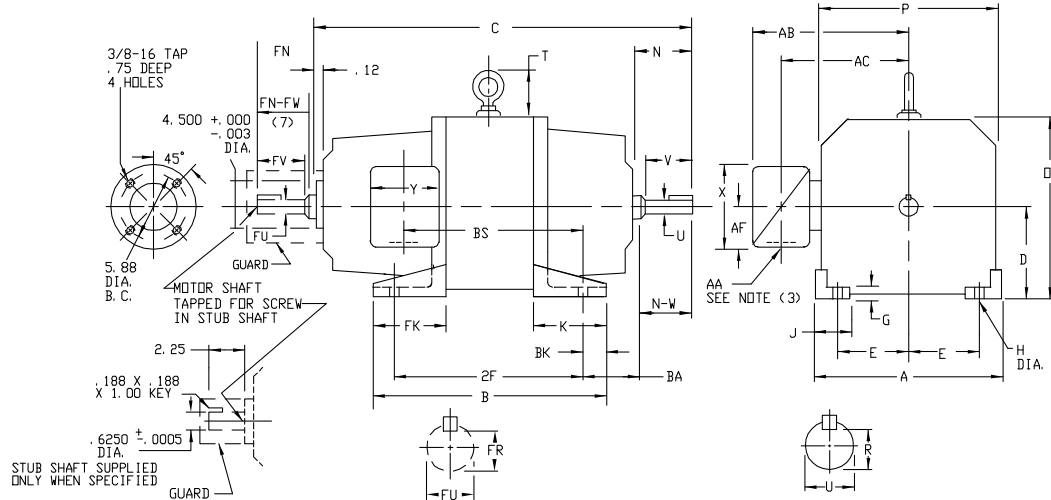
MOUNTING: FOOT
METHOD OF DRIVE: COUPLED OR BELTED

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 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	D(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	DRIVE END SHAFT AND KEY					OPPOSITE DRIVE END SHAFT AND KEY (7)					WT. LBS.				
					N	N-W	UC(2)	V	R(4)	SO.	LGTH	FN	FN-FW	FUC(2)		FV	FR(4)	SO.	LGTH
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

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	
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

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	
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: RGNAS
MTL: -		

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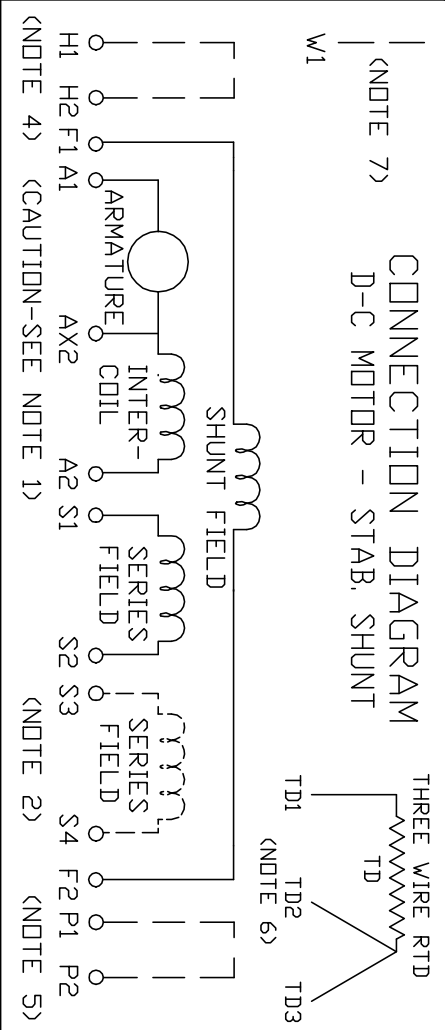
DIMENSION DRAWING, C180ATZ, DPP, TENV, FOOT MTG.

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609980-001

406770-001

406770-001



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: 00000970330

FILE: \RSN\00026\422

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

BY: RAGTBM

MTL: -

BALDOR

D-C MOTOR CONNECTION DIAGRAM STAB. SHUNT

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