ABB BALDOR RELIANCE

Customer information packet

D5010R

C1812ATZ, 10HP, 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	C1812ATZ
Output Power	10.000 HP
Agency Approvals	CCSA US
Ambient Temperature	40 °C
Armature Current	17.4 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	27.88 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.	G2061B A
Layout	609980-001
Eff. date	12-27-2019
CD Diagram	406770-001
Poles	00
Leads	
Proprietary	False
Created date	12-17-2019

Nameplate

000613006HP								
CAT.NO.	D5010R	**SPEC NO.**	T18S1307					
FR	C1812ATZ	**HP**	10	**DUTY**	CONT			
ENCL.	DP	**RPM**	1750/2300	**S.F.**	1.0			
ENCL MOD	GUARDED	**VOLTS**	500	**INSUL**	F			
MAX SAFE SPEED	5000	**AMPS**	17.40	**AMB.**	40			
	FIELD DATA	**SER.NO.**						
WINDING	STAB SHUNT	**POWER CODE**	D					
VOLTS	300	**D.E. BRG.**	40BC02J30X					
MAX AMPS @ 25 C	1.09	**O.D.E. BRG.**	30BC02J30X					
HOT AMPS	.77/.41	**MIN. AMB.**	0	**TYPE**	TR			
	BRUSH:419904051G							

609980-001

INDUSTRIAL DIRECT CURRENT MOTORS AND GENERATORS – RPM III

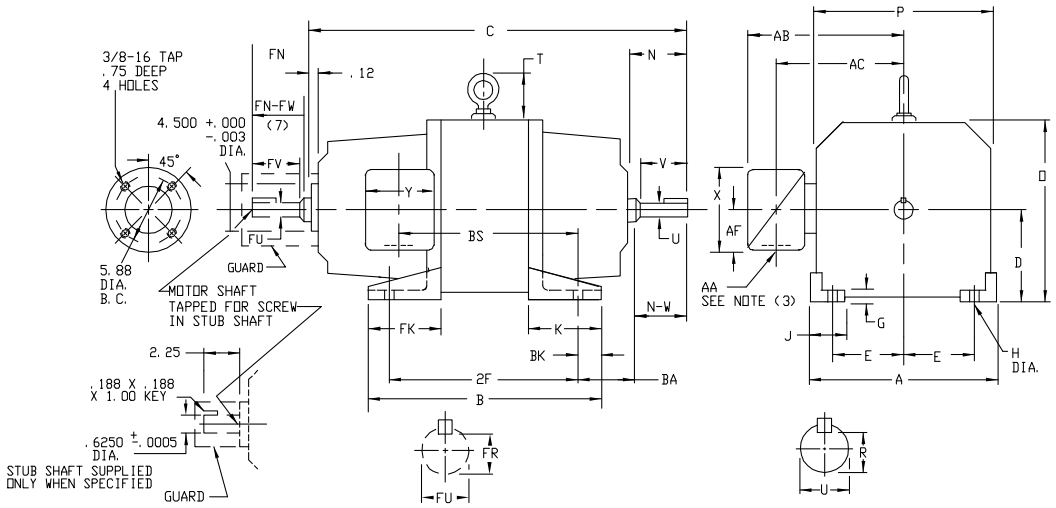
MOUNTING: FOOT
METHOD OF DRIVE:COUPLED OR BELTED

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

609980-001

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

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