

ABB BALDOR RELIANCE III

Customer information packet

D5010R

C1812ATZ, 10HP, 1750RPM, 500, 300, DPG, F1

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

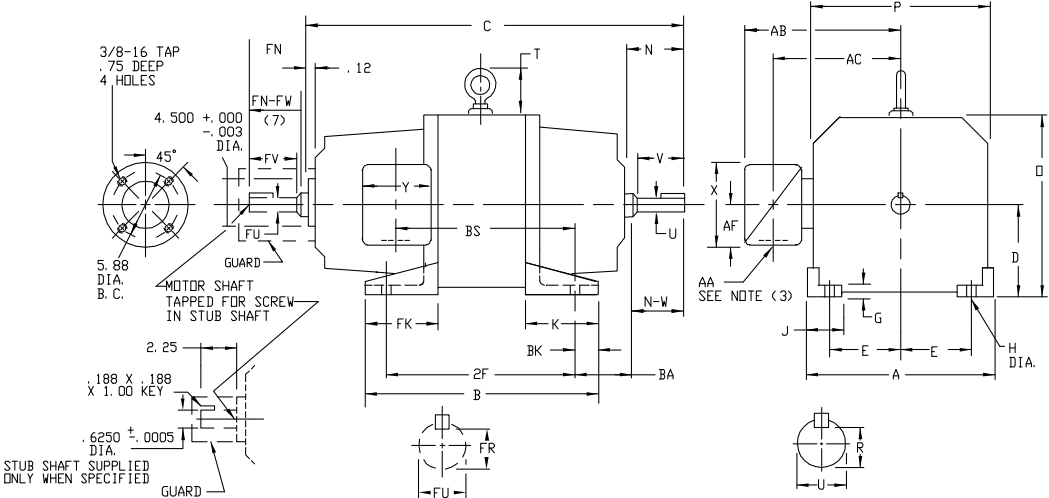
000613006HP									
CAT.NO.		SPEC NO.	T18S1307						
FR	C1812ATZ	HP	10	DUTY		CONT			
ENCL.	DP	RPM	1750/2300		S.F.	1.0			
ENCL MOD	GUARDED	VOLTS	500		INSUL		F		
MAX SAFE SPEED	5000	AMPS	17.40		AMB.		40		
FIELD DATA		SER.NO.							
WINDING	STAB SHUNT	POWER CODE	D						
VOLTS	300	D.E. BRG.	40BC02J30X						
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 ENCLOSURE: DRIP-PROOF FULLY-GUARDED COOLING: SELF-VENTILATED ACCESSORIES: PROVISION FOR
METHOD OF DRIVE: COUPLED OR BELTED SPLASHPROOF, TOTALLY ENCLOSED NON-VENTILATED 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 DDP, 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			
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	AA(6)	AB	AC	AF	X	Y	PART NUMBER	AA(6)	AB	AC	AF	X	Y	PART NUMBER
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, DDP, TENV, FOOT MTG.

SH 1 of 1

609980-001

406770-001			406770-001	
406770-001 CONNECTION DIAGRAM D-C MOTOR - STAB. SHUNT W1 (NOTE 7) SHUNT FIELD INTER-COIL AX2 A2 S1 SERIES FIELD S2 S3 (NOTE 2) S4 F2 P1 P2 (NOTE 5) THREE WIRE RTD TD1 TD2 TD3 (NOTE 6)				

ARMATURE AND FIELD EXTERNAL CONNECTIONS

WARNING- SEE NOTE 8 FOR GROUNDING INSTRUCTIONS

CCW ROTATION

A1 A2 S1 S2 F1 F2

CW ROTATION

A1 S1 A2 S2 F1 F2

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. _____

REL
CUMULATIVE
DIFFERENTIAL
CONTROL
INTERPOLE
SPACE HEATERS
THERMAL PROTECTOR
WINDING RTD'S
BRUSH WEAR SENSOR
WARNING

REV. DESC: DELETED DUPLICATE WORDS FROM NOTE 8

REV. LTR: A

FILE: \RSN\00026\422

MTL: —

VERSION: 01

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

TDR: 000000970330

BY: RAGTBM

BALDOR

D-C MOTOR CONNECTION DIAGRAM STAB. SHUNT

SH 1 of 1