

ABB BALDOR RELIANCE III

Customer information packet

D50500R-BV

500HP, 1750RPM, DC, C4412ATZ, DPG-FV,

Specifications

Enclosure	DP
Frame	C4412ATZ
Frame Material	Steel
Output Power	500.000 HP
Agency Approvals	CCSA US
Ambient Temperature	40 °C
Bearing Grease Type	Polyrex EM (-20F +300F)
Drip Cover	No Drip Cover
Feedback Device	NO FEEDBACK
Field Winding Type	STR. SHUNT
Frame Prefix	C
Heater Indicator	No Heater
Lifting Lugs	Standard Lifting Lugs
Motor Standards	NEMA
Mounting Arrangement	F2
Overall Length	58.32 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Slinger Indicator	No Slinger

Part Detail

Revision	C
Type	DC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	G9048A D
Layout	616492-001
Eff. date	11-14-2023
CD Diagram	406770-006
Poles	00
Leads	
Proprietary	False
Created date	04-09-2015

Nameplate

000613006HP									
CAT.NO.	D50500R-BV	SPEC NO.		T44T1305					
FR	C 4412ATZ	HP	500		DUTY		CONT		
ENCL.	DP	RPM	1750/2050		S.F.		1.0		
ENCL MOD	FORCE VENT	VOLTS		500		INSUL		F	
MAX SAFE SPEED	03000	AMPS		797.00		AMB.		40	
FIELD DATA		SER.NO.							
WINDING	STR. SHUNT	POWER CODE		C					
VOLTS	300	D.E. BRG.		110BC02J30X					
MAX AMPS @ 25 C	10.87	O.D.E. BRG.		95BC02J30X					
HOT AMPS	7.84/5.59	MIN. AMB.		0		TYPE		TR	
BRUSH:419904052BK									

616492-001

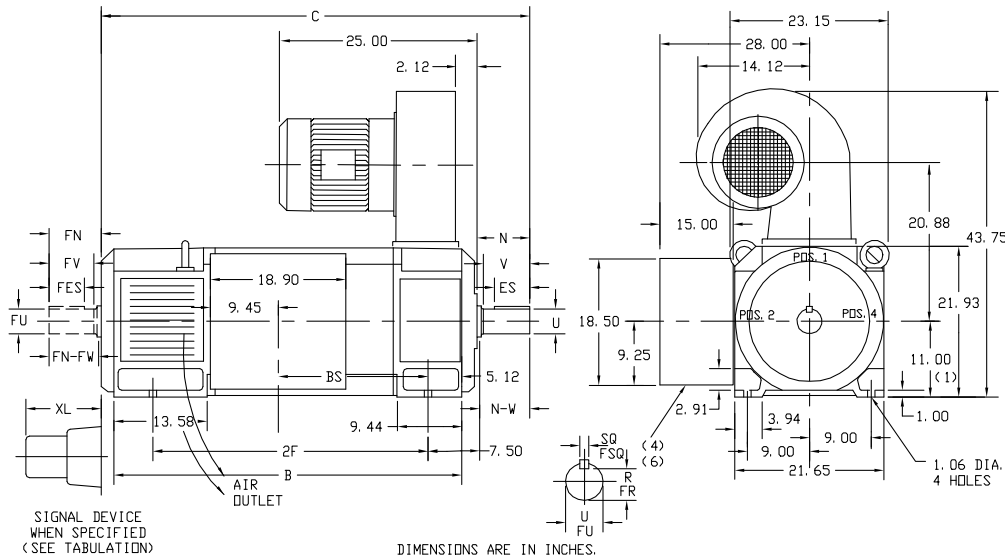
DIRECT CURRENT MOTORS AND GENERATORS INDUSTRIAL-RPM III

ENCLOSURE: DRIP PROOF FULLY GUARDED
SPLASHPROOF
MOUNTING: FOOT

COOLING: FORCE VENTILATED WITH
INTEGRAL BLOWER & MOTOR

ACCESSORIES: FLANGE MOUNTED
TACHOMETER

FRAME C4412ATZ - C4414ATZ



SIGNAL DEVICE
WHEN SPECIFIED
(SEE TABULATION)

FRAME	DUTY	C	BS	B	2F	DRIVE END SHAFT AND KEY							(5) OPPOSITE DRIVE END SHAFT AND KEY							WT. (LBS.)
						N	N-W	UC(2)	V	R(3)	SQ	ES	FN	FN-FW	FUK(2)	FV	FR(3)	FSQ	FES	
C4412ATZ	COUPLED	58.32	19.81	46.56	36.00	7.62	7.25	3.625	7.00	3.134	.875	5.75	7.62	7.25	3.625	7.00	3.134	.875	5.75	3245
UC4412ATZ	BELTED	59.32	19.81	46.56	36.00	8.62	8.25	4.125	8.00	3.563	1.000	6.50	7.62	7.25	3.625	7.00	3.134	.875	5.75	3275
C4413ATZ	COUPLED	62.25	23.75	50.56	40.00	7.62	7.25	3.625	7.00	3.134	.875	5.75	7.62	7.25	3.625	7.00	3.134	.875	5.75	3660
UC4413ATZ	BELTED	63.25	23.75	50.56	40.00	8.62	8.25	4.125	8.00	3.563	1.000	6.50	7.62	7.25	3.625	7.00	3.134	.875	5.75	3690
C4414ATZ	COUPLED	68.56	30.05	56.56	45.00	7.62	7.25	3.625	7.00	3.134	.875	5.75	7.62	7.25	3.625	7.00	3.134	.875	5.75	4280
UC4414ATZ	BELTED	69.56	30.05	56.56	45.00	8.62	8.25	4.125	8.00	3.563	1.000	6.50	7.62	7.25	3.625	7.00	3.134	.875	5.75	4310

SIGNAL DEVICE	XL	WT. (LBS.)
SPY	10.88	7
BC-42	13.38	25
BC-46	15.68	35
M-627A	10.50	14
M-628A	10.50	14
M-727A	10.50	14
M-737A	10.50	14
RD-11	10.00	17
RD-51	16.68	38
RD-61	10.00	17
HS6	10.00	17
RE-045	2.56	5
RE-210	15.31	17
TG2168A	2.56	5
TS2014N	6.50	5
TS2087N	11.00	17
RD-120	1.88	5
ST67/RL67	2.00	5
HS35	3.00	5
M285	3.12	20
RPY444	11.00	15
M3 OR M4	3.62	10
AV56	2.00	5

- (1) THIS DIMENSION WILL NOT BE EXCEEDED. SHIMS UP TO .06 INCH IN THICKNESS ARE USUALLY REQUIRED FOR COUPLED OR GEARED MACHINES.
- (2) 'U' AND 'FU' VARY +.000 - .001.
- (3) 'R' AND 'FR' VARY +.000 - .015.
- (4) REMOVEABLE COVER PLATE FOR CUSTOMER DRILLING. TERMINAL BOX CAN BE POSITIONED FOR EITHER TOP OR BOTTOM CONDUIT ENTRY.
- (5) OPPOSITE DRIVE END SHAFT SUPPLIED ONLY WHEN SPECIFIED.
- (6) TERMINAL BOX LOCATED ON OPPOSITE SIDE WHEN F-2, W-1, W-4, W-5, W-7 OR C-1 MOUNTING IS SPECIFIED.
- (7) AIR FILTER SUPPLIED ONLY WHEN SPECIFIED. BLOWER ASSEMBLY CAN BE LOCATED AT POSITIONS 1, 2 OR 4.

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

REV. DESC: ADD AV56 TO DS	VERSION: 02	TDR: 000000865577
REV. LTR: B	FILE: \RGG\00016\134	REVISD: 02:50:00 08/04/2014
MTL: -	BY: RGGWT	

DIMENSION DRAWING, C4412ATZ - C4414ATZ, DPP, FOOT MTG, FRC VENT.

SH 1 of 1

616492-001

406770-006			406770-006		
CONNECTION DIAGRAM D-C MOTOR - STRAIGHT SHUNT W1 <NOTE 6> H1 H2 SHUNT FIELD INTER-COIL ARMATURE F1 A1 AX2 A2 F2 <NOTE 3> <CAUTION-SEE NOTE 1> <NOTE 4> THREE WIRE RTD TD1 TD2 TD3 <NOTE 5> 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 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		BALDOR D-C MOTOR CONNECTION DIAGRAM, STRAIGHT SHUNT SH 1 of 1			
REV. LTR: -	VERSION: 00				TDR: 000000781086
FILE: \RSN\00026\515	REVISED: 02: 41:08 02/01/2013				
MTL: -	BY: MGHPC				