

**BALDOR® • RELIANCE** 

**Product Information Packet**

**D51500R-BV**

**500HP, 1150RPM, DC, 4414ATZ, DPG-FV,**

Part Detail							
Revision:	-	Status:	PRD/A	Change #:		Proprietary:	No
Type:	DC	Prod. Type:		Elec. Spec:	G9041A D	CD Diagram:	406770-006
Enclosure:	DP	Mfg Plant:		Mech. Spec:		Layout:	616492-001
Frame:	C4414	Mounting:	F2	Poles:	00	Created Date:	04-09-2015
Base:		Rotation:	R	Insulation:	F	Eff. Date:	04-13-2015
Field Type:		Literature:		Elec. Diagram:		Replaced By:	

Specs			
Enclosure:	DP		
Frame:	C4414ATZ		
Frame Material:	Steel		
Agency Approvals:	CCSA US		
Base Indicator:	Rigid		
Bearing Grease Type:	Polyrex EM (-20F +300F)		
Drip Cover:	No Drip Cover		
Duty Rating:	CONT		
Feedback Device:	NO FEEDBACK		
Field Winding Type:	STR. SHUNT		
Frame Prefix:	C		
Heater Indicator:	No Heater		
Insulation Class:	F		
Lifting Lugs:	Standard Lifting Lugs		
Mounting Arrangement:	F2		
Shaft Extension Location:	Pulley End		

<b>Shaft Ground Indicator:</b>	No Shaft Grounding		
<b>Shaft Slinger Indicator:</b>	No Slinger		
<b>Motor Standards:</b>	NEMA		
<b>Thermal Device - Bearing:</b>	None		

<b>Nameplate 000613006HP</b>			
<b>CAT.NO.</b>	D51500R-BV	<b>SPEC NO.</b>	T44T1306
<b>FR</b>	C 4414ATZ	<b>HP</b>	500
<b>ENCL.</b>	DP	<b>DUTY</b>	CONT
<b>ENCL MOD</b>	FORCE VENT	<b>RPM</b>	1150/ 1450
<b>MAX SAFE SPEED</b>	2450	<b>VOLTS</b>	500
		<b>AMPS</b>	805.00
		<b>SER.NO.</b>	
		<b>POWER CODE</b>	C
		<b>D.E. BRG.</b>	110BC02J30X
		<b>O.D.E. BRG.</b>	95BC02J30X
		<b>MIN. AMB.</b>	0
		<b>TYPE</b>	TR
		<b>INSUL</b>	F
		<b>S.F.</b>	1.0
		<b>AMB.</b>	40
		<b>FIELD DATA</b>	
<b>WINDING</b>	STR. SHUNT		
<b>VOLTS</b>	300		
<b>MAX AMPS @ 25 C</b>	12.35		
<b>HOT AMPS</b>	9.33/ 5.63		
	BRUSH:419904052BK		

Parts List		
Part Number	Description	Quantity
SA296992	SA T44T1306	1.000 EA
AA016043	AA T44T1306	1.000 EA
000613006HP	NAMEPLATE - RPM III D-C MOTOR W/CSA LOGO	1.000 EA
000692000FP	NP, WARNING LIFT INSTRUCTIONS	1.000 EA
000692000FS	WARNING LABEL	1.000 EA
036170004EA	ROUND HEAD DRIVE SCREW	10.000 EA
406770006	C/D TAG STRAIGHT SHUNT	1.000 EA
036000090NE	M16-2.0 X 90MM HXHCS	16.000 EA
036500009AB	METRIC NUTM8-1.25PLTD-360	6.000 EA
424423001A	WASHER, BEARING	1.000 EA
611916018A	(006) BALRG STEEL	1.000 EA
036000016JB	HHCS M8-1.25X16MMPLTD-250	4.000 EA
036000025LB	HHCS M12-1.75X25 PLATED	4.000 EA
036501009AB	M8-1.25 X 9MM HEX NUTS	8.000 EA
036600009AB	METRIC FLWASH M8 PLATED	4.000 EA
036610011AB	METRIC LCKW M12 PLTD-G512	4.000 EA
419904052BK	BRUSH	24.000 EA
419905004A	HARDWARE	8.000 EA
424418001A	PLATE (ROCKER CLAMP PLAT	4.000 EA
616057001RE	ROCKR METRIC	1.000 EA
706364053A	BRHLD (PHANTOM) -53A	4.000 EA
034693003AB	PPLG 3/8" SLOT PIPE PLUG	1.000 EA
034693003AB	PPLG 3/8" SLOT PIPE PLUG	1.000 EA
035000001A	ALFTG 1/8" 1610-BL	1.000 EA

Parts List (continued)		
Part Number	Description	Quantity
035000001A	ALFTG 1/8" 1610-BL	1.000 EA
036000012JB	M8-1.25 X 12MM HXHDC	14.000 EA
036000070PB	HHCS M20-2.5X70MM PLTD.	4.000 EA
036000070PB	HHCS M20-2.5X70MM PLTD.	4.000 EA
036000080KB	HHCSM10-1.5X80MMPLTD-360	4.000 EA
036000090KB	HHCS,DE CAP - 400	4.000 EA
418150003A	GREASE FITTING CAP	2.000 EA
424433001A	WAVY SPRING WSHER	1.000 EA
611917002Y	GASKET, NEOPRENE	1.000 EA
611917002Z	GASKT	1.000 EA
708518003A	COVER, HANDHOLE-SOLID	1.000 EA
708518005A	COVER, HANDHOLE SOLID	1.000 EA
804834001A	BRKT,ODE,C440	1.000 EA
807501001A	BRKT,DE,C440	1.000 EA
000613006NT	NAME PLATE IEC	1.000 EA
032018004CK	HHCS 3/8-16X1/2L PLATED	4.000 EA
032018008DK	HHCS 1/2-13X1 PLATED	4.000 EA
036000012KB	M10 1.50 X 12MM HXHDCS	4.000 EA
036000020HD	HHCS M6X20MM LONG 304S.S	4.000 EA
036000020JB	HHCS M8-1.25X20L PLTD-250	5.000 EA
036000020JB	HHCS M8-1.25X20L PLTD-250	8.000 EA
036000025JB	HHCS M8X25MM LONG PLATED	8.000 EA
036000030KB	HHCS M10-1.5X30LPLTD-400 (304529)	4.000 EA
036000065KB	HHCS,ODE CAP	4.000 EA

Product Information Packet: D51500R-BV - 500HP,1150RPM,DC,4414ATZ,DPG-FV,

036100020JA	M8-1.25 X 20MM HXSOCHDCS	6.000 EA
036620010AB	M10 EXT. TOOTH LK WASHER	1.000 EA
417733036B	GASKT,C/BOX BACKPLATE,REF 706310063E	2.000 EA
410978021A	FLANGE, INLET BLOWER HSG	1.000 EA
417733013E	GASKT L440	1.000 EA
417733014F	GASKT L440	1.000 EA
418018074A	GROUND LABEL G100 METRIC 160 D.C.	1.000 EA
418057256C	HHCS M10 25MM 440 IEC	1.000 EA
422919317	HHCVR KIT,L440,DE/ODE, SOLID	1.000 EA
422919317	HHCVR KIT,L440,DE/ODE, SOLID	1.000 EA
422919327	HHCVR KIT,C440,ODE,SOLID	1.000 EA
422919333	HHCVR KIT,C440,ODE,LOUVERED	1.000 EA
422919333	HHCVR KIT,C440,ODE,LOUVERED	1.000 EA
424414001A	GASKT	2.000 EA
424415001A	ADAPT	1.000 EA
424416001A	ADAPT	1.000 EA
610409082A	ADAPTER	1.000 EA
610490003G	5HP,3490RPM,3PH,60HZ,184TC,0632M,TEFC,F1	1.000 EA
611917002Y	GASKET, NEOPRENE	1.000 EA
611917002Z	GASKT	1.000 EA
706305026A	GUARD,SHAFT	1.000 EA
706310058E	KOBX CVR - 18.90 [480] X 19.49 [495]	1.000 EA
706310389A	706310389AA ENTRY PLATE	1.000 EA
706310063E	CBOX L440 1260A MAX	1.000 EA
708520001C	BLOWER WHEEL	1.000 EA
708528008A	SCROLL WELDMENT	1.000 EA

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000640000P	TAG WINDING THERMOST	1.000 EA
000692000NG	LABEL ;NP 4POLE METRIC LABEL	1.000 EA
034180046KA	KEY 7/8X7/8X5-3/4L	1.000 EA
036000025NF	SCREW, HEX M16 BRASS	2.000 EA
417744143G	PACKAGING (PHANTOM)	1.000 EA
418018071	LABEL LABE	1.000 EA

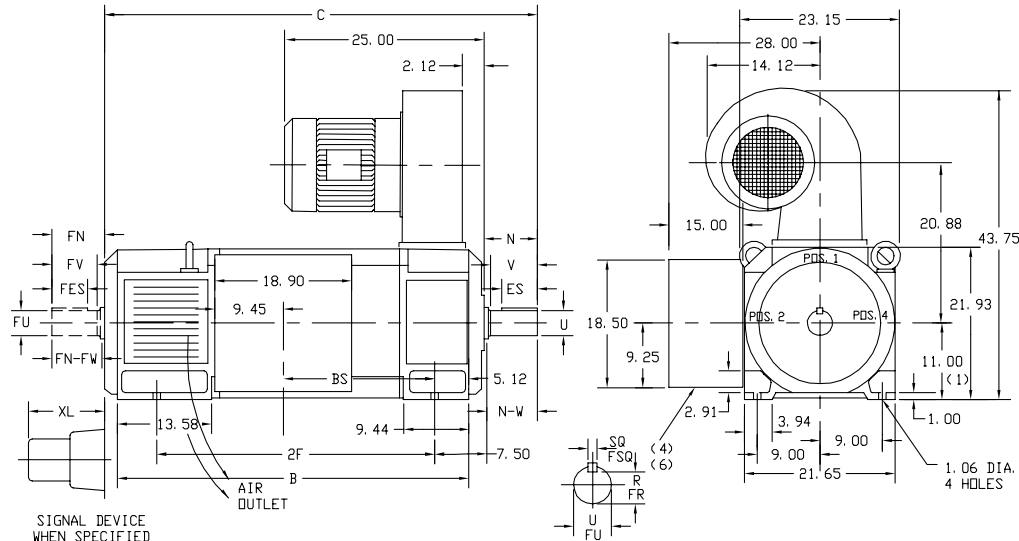
## DIRECT CURRENT MOTORS AND GENERATORS INDUSTRIAL-RPM III

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)

DIMENSIONS ARE IN INCHES.

FRAME	DUTY	C	BS	B	2F	DRIVE END SHAFT AND KEY										WT. (LBS)				
						N	N-W	U(2)	V	RC(3)	SQ	ES	FN	FN-FW	FUC(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
H56	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 DR 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	REVISED: 02:50:00 08/04/2014	BY: RGGWT
FILE: NRGG\00016\134		
MTL: -		

**BALDOR**

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

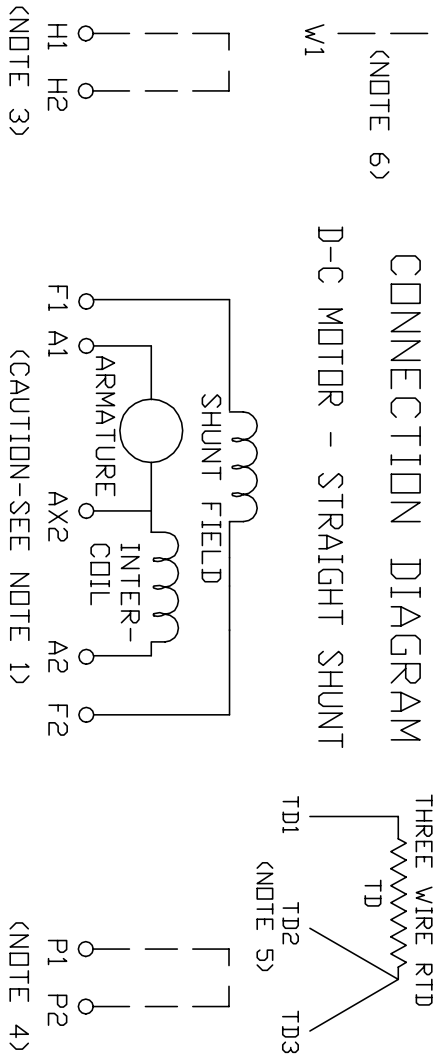
SH 1 of 1

616492-001

616492-001

406770-006

406770-006



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 \_\_\_\_\_ RELIANCE \_\_\_\_\_  
 ORDER NO. \_\_\_\_\_ S.D. NO. \_\_\_\_\_

REV. DESC: UPDATE LOGO AND TITLEBLOCK: LOADED TO BUS		
REV. LTR: -	VERSION: 00	TDR: 000000781086
FILE: \RSN\00026\515	REVISED: 02: 41: 08 02/01/2013	
MTL: -	BY: MGHPC	

**BALDOR**

D-C MOTOR CONNECTION DIAGRAM, STRAIGHT SHUNT

SH 1 of 1