ABB BALDOR RELIANCE

Customer information packet

D50500P2-BV

5010AT, 500HP, 1750RPM, 500, 150, DPBV, F1

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Specifications

Armature Voltage	500 V
Base Speed	1750 rpm
Enclosure	DPBV
Field Voltage	150 V
	300 V
Frame	5010AT
Frame Material	Steel
Output Power	500.000 HP
Agency Approvals	CSA
Ambient Temperature	40 °C
Armature Current	788.0 a
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
Heater Indicator	No Heater
Insulation Class	F
Lifting Lugs	Standard Lifting Lugs
Motor Standards	NEMA
Mounting Arrangement	F1
Overall Length	61.75 IN
Service Factor	1.00
Shaft Diameter	3.250 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Slinger Indicator	No Slinger
Thermal Device - Bearing	None

Part Detail

Revision	B
Type	DC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	K0129A A
Layout	1227-6
Eff. date	03-22-2022
CD Diagram	15209
Poles	00
Leads	
Proprietary	False
Created date	04-09-2015

Nameplate

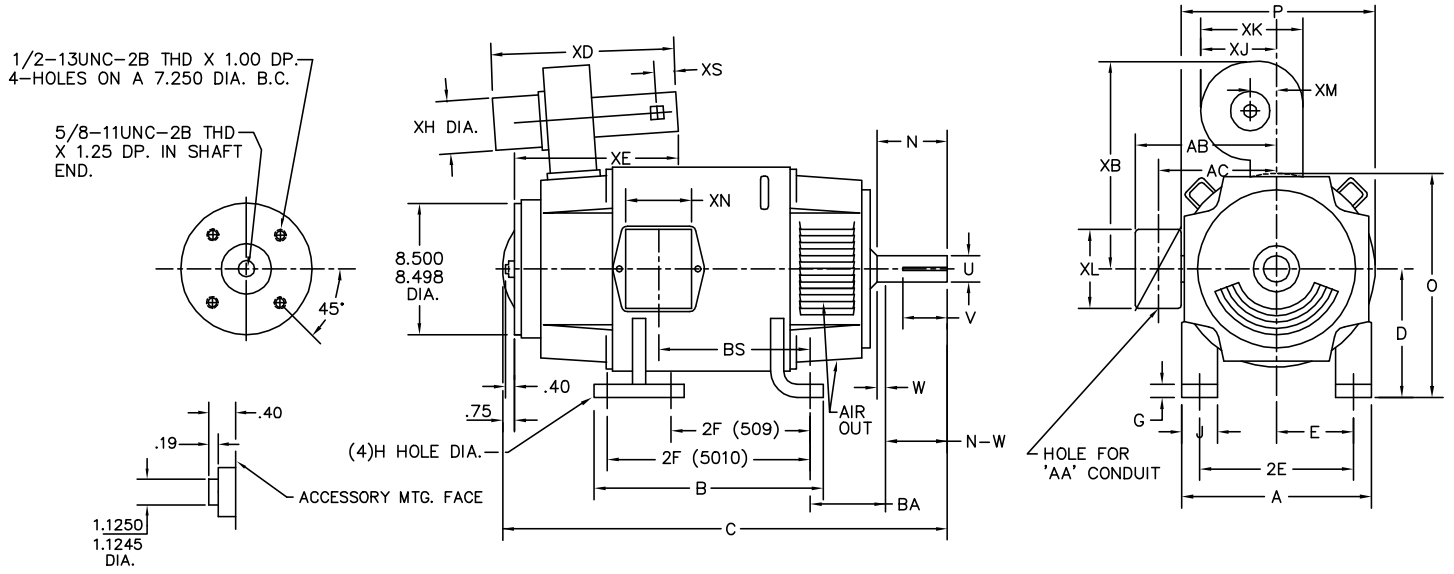
NP1734									
CAT.NO.				**MODEL**	T50R8006				
HP	500	**RPM**	1750/1950		**FRAME**	5010AT			
ARM V	500	**ARM A**	788.00		**WOUND**	STR. SHUNT			
FLD V	150/300	**FLD A**	17.64-12.06/8.82-6.03						
CONN		**OHMS**			**CL**	F			
ENCL	DPBV	**DUTY**	CONT		**MX AMB**	40			
P CODE	C	**CTSR**			**SER.F.**	1.0			
S/N				**E/S**	K0129A A				
	BRUSH:50034-2								
O.D.E. BRG.	6218	**D.E. BRG.**	6218		**BRUSH**		**QTY**		

Parts List

Part number	Description	Quantity
SA296985	SA T50R8006	1.000 ea
AA016036	AA T50R8006	1.000 ea
036170004DA	DRSCW METRIC NAMEPLATE	4.000 ea
150247	CAUTION LABEL,BLWR WHEEL ROTATION,MYLAR	1.000 ea
150047-3	TERMINAL, FR 500, B DIM=3	4.000 ea
150048-3	TERMINAL,500FR,B DIM=3	4.000 ea
150389-15	LUBRICATION PLATE ALUMINUM	1.000 ea
NP1734	NPL,BALDOR DC MTR ALUMINUM	1.000 ea
15209	LABEL CONNECTIONS & TERMINAL MARKIN	1.000 ea
032018004BK	HHCS 5/16-18X1/2 PLATED	4.000 ea
15094	DISHED LOCKWASHER .332 ID, .865 OD	4.000 ea
50009-S4	BRUSH ROCKER ASSY FR 500, SEVERE DUTY	1.000 ea
50034-2	BRUSH,500 FR. SERIES E-77 SGL/CARBON	16.000 ea
004824015A	GREASE POLYREX EM	1.100 lb
032018014CK	HHCS 3/8-16X1-3/4L	4.000 ea
032018014EK	HHCS 5/8-11X1-3/4 PLTED.	4.000 ea
032018014EK	HHCS 5/8-11X1-3/4 PLTED.	4.000 ea
032018016CK	HHCS 3/8-16X2 PLATE	4.000 ea
035000001A	ALFTG 1/8" 1610-BL	1.000 ea
035000001A	ALFTG 1/8" 1610-BL	1.000 ea
50028	FAN SHROUD FR500 THIS IS NOT A TEFC SHRD	1.000 ea
50052-10	FE BRKT MACH FR 500 STD FOR LOCKED	1.000 ea
50123-2	CE BRKT MACH FR500 6218 BRG.,LOCK	1.000 ea
85XU1008A06	10-32X3/8 TY U DRIVE	4.000 ea
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea
HW5100A18	WAVY WASHER, WB#W6173-058	1.000 ea
032018004AK	HHCS 1/4-20X1/2 PLATED	3.000 ea
032018006BK	HHCS 5/16-18X3/4 PLATED	4.000 ea
032018006BK	HHCS 5/16-18X3/4 PLATED	4.000 ea
032018006DK	HHCS 1/2-13X3/4 PLATED	4.000 ea

032018008CK	HHCS 3/8-16X1L PLATED	4.000 ea
032130008BA	5/16-18 X 1.0 HSHCS	10.000 ea
033190013AB	1.5 - 12 HEX SLOTTED NUT	4.000 ea
034036014AB	EX.TOOTH LCKW 3/8 PLTD.	1.000 ea
100088	LM9 BLWR ASSY KIT	1.000 ea
032130004BA	HSHCS 1/2 IN.	48.000 ea
P10230	FILTER KIT FOR LM8/LM9 BLOWER ASSEMBLY	1.000 ea
15021-1	ACCESSORY FACE COVER FRAME 180-500 SERIE	1.000 ea
150906-62	GRDG STUD,HX HD BOLT 3/8-16,W/HD PAINTED	1.000 ea
15191-3	TERM BOX MACH 36-4050 SERIES 15037	1.000 ea
15194-350	PIPE PLUG 3 1/2 - 8 TAPERED THREAD	1.000 ea
36113	TERM BOX HOLE COVER FR 36 SERIES #16 GA	1.000 ea
36246	GASKET,TERM.BOX,FR.360 1/8 THK ARMSTRONG	2.000 ea
50025-2	VENT COVER,FAN END #16 GA STEEL	3.000 ea
50026-1	SOLID CVR,FE,FR-500 14GA (.075THK)	1.000 ea
50026-2	SOLID CVR,CE,FR-500 14GA (.075THK)	1.000 ea
50026-2	SOLID CVR,CE,FR-500 14GA (.075THK)	3.000 ea
50027-1	GASKET CVR,FE,FR-500 3/32 THK CORK/NEOPR	4.000 ea
50027-2	GASKET CVR,CE,FR-500 3/32 THK CORK/N	4.000 ea
50056	LM-8 BLWR ADAPTER FR 500 SERIES	1.000 ea
50147	FLANGED NIPPLE-WELD&MACH.COMPLETE BY VEN	1.000 ea
GS4000A04	GASKET,1/2 WIDE X .25 THICK NEOPRENE SPO	5.600 ft
004824007BTW	SPECIAL PAINT4824-3BVZ	0.500 ea
034180042JA	KEY FE SHAFT EXT	1.000 ea

1227–6



	FOOT MOUNTING							D.E. SHAFT EXTENSION					DRIVE KEY		FRAME					
FRAME	BA	E	2F (509)	2F (5010)	G	H	J	N	N–W	U	V	W	KEY–SQ.	KEY–LONG	A	B	C	D	O	P
5010AT	8.50	10.00	28.00	32.00	1.18	1.188	4.50	6.76	6.57	3.250	6.32 [3]	.19	.750	5.25	24.88	34.75	61.75	12.50 [2]	24.91	24.81

	CONDUIT BOX							BLOWER								APPROXIMATE WEIGHT
FRAME	AA	AB	AC	AF	BS	XL	XN	SIZE	XB	XD	XE	XH	XM	XJ	XK	XS	
5010AT	4	21.20	17.19	2.84	30.12	13.40	13.50	9	25.50	28.31	20.94	10.75	5.50	12.38	15.25	3.75	3526

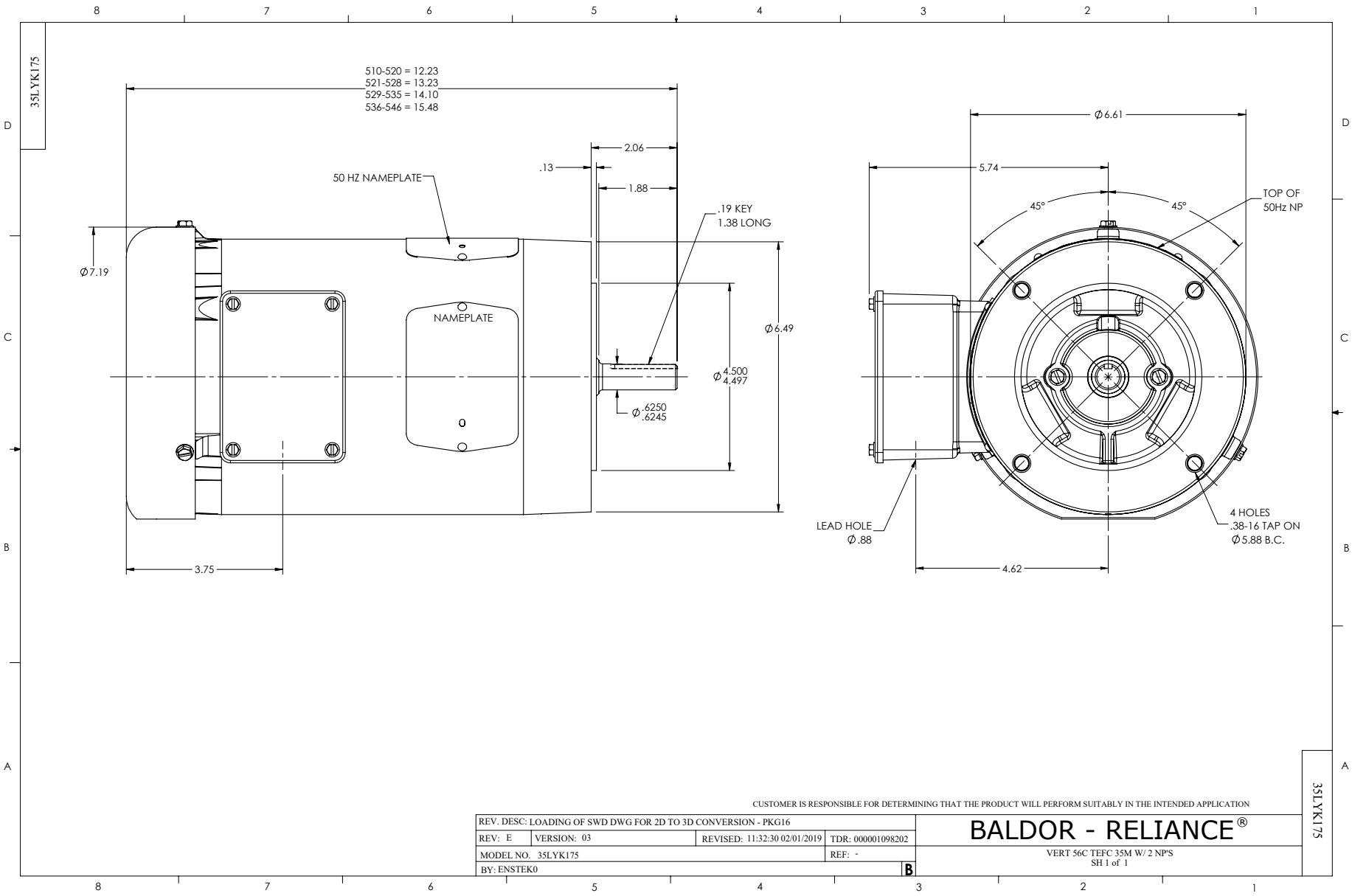
1) SHAFT DIAMETERS ABOVE 1.500 TOLERANCE +.0000 –.0010
   SHAFT DIAMETERS ABOVE 1.625 RUNOUT .003 T.I.R. MAX.
2) 'D' DIMENSION TOLERANCE +.000 – .060
3) 'V' DIMENSION IS MAX. HUB LENGTH ON SHAFT
4) CONDUIT BOX CAN BE ROTATED IN 90° STEPS ON ITS OWN AXIS.
5) THERE ARE TWO HOLES FOR 4" CONDUIT, SECOND HOLE IS 6" TOWARD DRIVE END.
6) ALL DIMENSIONS NOT NOTED ARE NOMINAL DIMENSIONS CONSULT FACTORY FOR TOLERANCES.

FOR F1 OR F2 CONDUIT BOX LOCATION SEE SALES ORDER

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT MOTOR PERFORMANCE IS SUITABLE IN THE APPLICATION.

REV. DESC: NEW LOAD			BALDOR ELECTRIC Co.
REV. LTR: –	BY: RRL	REVISED: 13:54:56 03/19/2003	TDR: 289015
1227–6		FILE: CHB00010378	REF: 1227–6
		MTL: –	5010AT,DPBV,LM9 BLOWER,DIRECT COUPLED ONLY,509 & 5010 FEET

1227–6

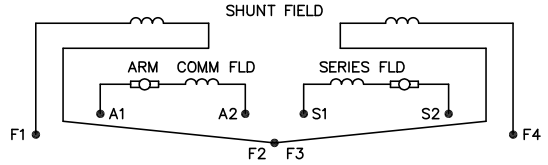

35LYK175
510-520 = 12.23
521-528 = 13.23
529-535 = 14.10
536-546 = 15.48
2.06
.13
1.88
50 HZ NAMEPLATE
.19 KEY
1.38 LONG
Ø7.19
NAMEPLATE
Ø6.49
Ø4.500
4.497
Ø.6250
.6245
3.75
Ø6.61
5.74
45°
45°
TOP OF
50Hz NP
LEAD HOLE
Ø.88
4 HOLES
.38-16 TAP ON
Ø5.88 B.C.
4.62
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: LOADING OF SWD DWG FOR 2D TO 3D CONVERSION - PKG16
REV: E
VERSION: 03
REVISED: 11:32:30 02/01/2019
TDR: 000001098202
MODEL NO. 35LYK175
REF: -
BY: ENSTEK0
B
BALDOR - RELIANCE®
VERT 56C TEFC 35M W/ 2 NP'S
SH 1 of 1
35LYK175

15209

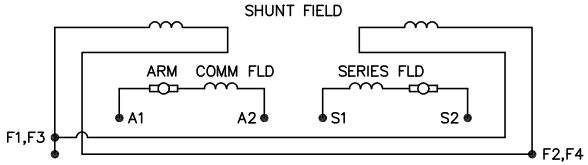
ALUMINUM (MATT) BACKGROUND WITH BLACK LETTERS

LABEL MANUFACTURER IDENTIFYING MARK TO APPEAR HERE

CONNECTIONS AND TERMINAL MARKINGS



HIGH FIELD EXCITATION VOLTAGE (SERIES CONN.)



LOW FIELD EXCITATION VOLTAGE (PARALLEL CONN.)

FOR STRAIGHT SHUNT MOTORS: DISREGARD S1 AND S2.
FOR SERIES MOTORS: DISREGARD F1,F2,F3,F4.
STRAIGHT SHUNT: F1 AND A1 SAME POLARITY, ROTATION CCW.
SERIES: CONNECT A2 AND S1, ROTATION CCW.
STABILIZED SHUNT AND COMPOUND: F1 AND A1 SAME POLARITY. CONNECT A2 AND S1, ROTATION CCW.
FOR CW ROTATION: INTERCHANGE A1 AND A2. ROTATION VIEWED FROM OPPOSITE DRIVE END. FOR FIELD REVERSING MOTORS WITH A SERIES FIELD: S1 MUST REVERSE POLARITY WHEN F1 REVERSES.
THERMOSTAT: WHEN SUPPLIED WILL HAVE LEADS TAGGED P1 AND P2. THERMOSTAT SENSES HEAT OF COMMUTATING FIELD COIL.

AMPERE RATINGS OF CONTACTS.

MAX AMPS BREAK			MAX CONTINUOUS
120 VAC	240 VAC	24 VDC	AMP – ALL VOLTAGES
12	8	2	2

SPACE HEATER: WHEN SUPPLIED WILL HAVE LEADS TAGGED H1 AND H2. SEE MOTOR NAMEPLATE FOR HEATER VOLTAGE AND CURRENT.

15209

3 1/4

2 1/2

NOTE:
MATERIAL .005 MINUMUM FULL HARD ALUMINUM DULL FINISH.
TEMP. RANGE −20°C TO +125°C MAXIMUM.
FOR INDOOR AND OUTDOOR MOUNTING BACK.
METAL, PRESSURE SENSITIVE BACK.
MUST MEET CSA STANDARD.
THE CSA INDENTIFYING MARK OF THE LABEL MANUFACTURER MUST APPEAR IN THE UPPER RIGHT HAND CORNER AS INDICATED.

UNLESS OTHERWISE SPECIFIED,
BREAK ALL SHARP EDGES .010/.020.
REMOVE ALL BURRS.

TOLERANCES

.X ±.015	FRACTIONS ±1/32
.XX ±.010	RADII ±1/16
.XXX +.005	ANGLES ±1°

MATL: NOTED				BALDOR ELECTRIC Co.
REV:	G	CHANGE ALL "NAMEPLATE" TEXT TO "LABEL"		
15209	SCALE: –	BY: BKW	REVISED: 02/19/97	LABEL, CONNECTIONS AND TERMINAL MARKINGS DC
	FILE: CHB00002485		TDR: 0115147	

15209