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

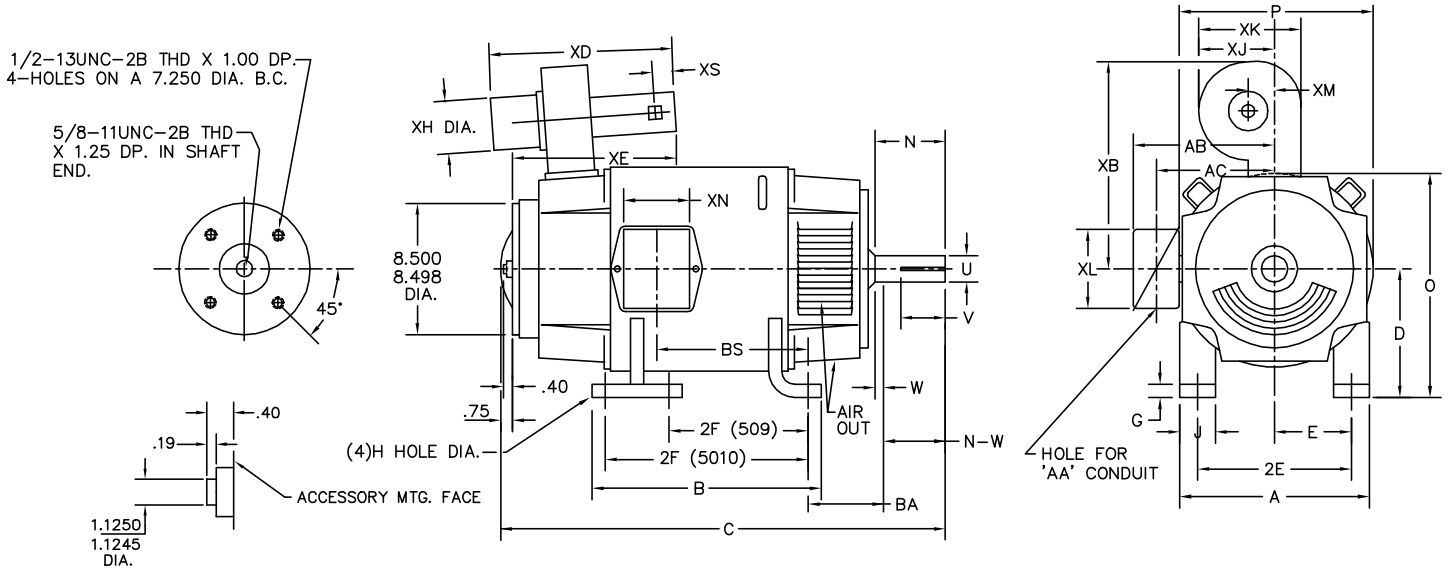
Part Detail

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.	D50500P2-BV			**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**	

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

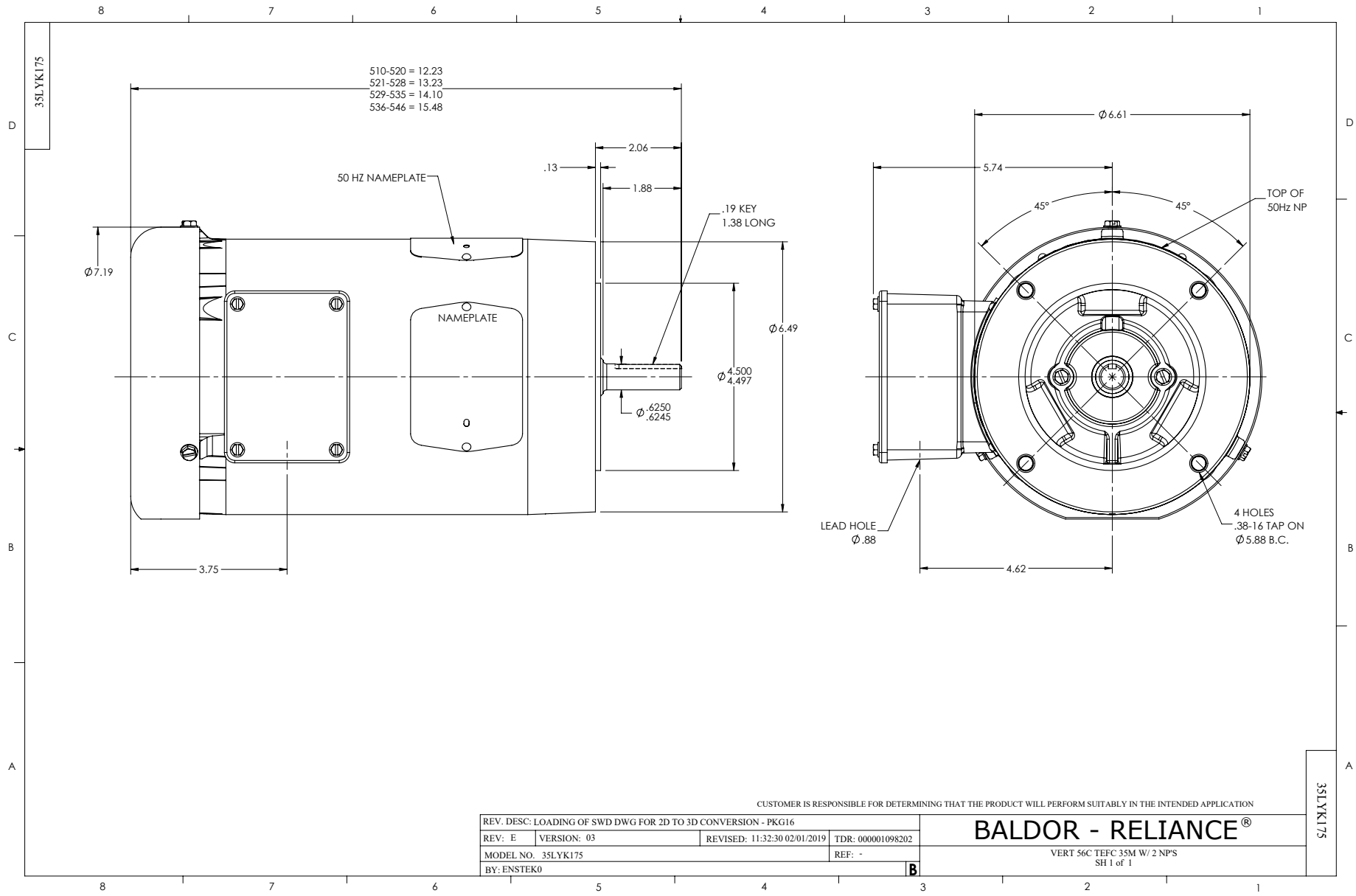
1) SHAFT DIAMETERS ABOVE 1.500 TOLERANCE +.0000 –.0010
   SHAFT DIAMETERS ABOVE 1.625 RUNOUT .003 T.I.R. MAX.
2) 'D' DIMENSION TOLERANCE +.000 – .060
3) 'V' DIMENSION IS MAX. HUB LENGTH ON SHAFT
4) CONDUIT BOX CAN BE ROTATED IN 90° STEPS ON ITS OWN AXIS.
5) THERE ARE TWO HOLES FOR 4" CONDUIT, SECOND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

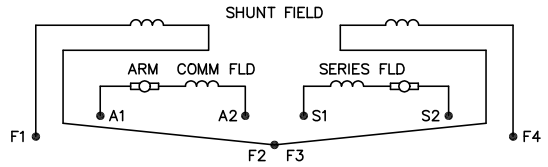
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ALUMINUM (MATT) BACKGROUND WITH BLACK LETTERS

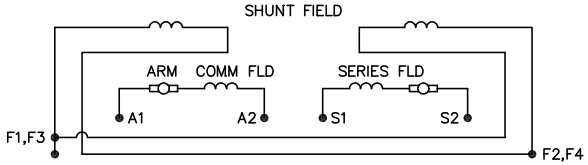
LABEL MANUFACTURER IDENTIFYING MARK TO APPEAR HERE

3 1/4

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

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