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Product Information Packet

D50100P-BV

100HP,1750/2000RPM,DC,368AT,DPBV,F1,N

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Part Detail			
Type:	DC	**Prod. Type:**	T
Power Code:	C	**Weight:**	1145
Frame Group:		**Mounting Pos.:**	F1
HP:	100	**Enclosure:**	DPBV
RPM:	1750/2000	**Wound:**	STR. SHUNT
Service Factor:	1.0	**Arm V:**	500
Arm A:	158.00	**Field V:**	150/ 300
Field A:	8.84/4.42	**Field A Hot:**	6.00-4.70/3.00-
Insulation Class:	F	**Ambient:**	40
Duty:	CONT	**DE Bearing:**	6213
ODE Bearing:	6211	**Brushes:**	36024-3
Brush Qty.:			

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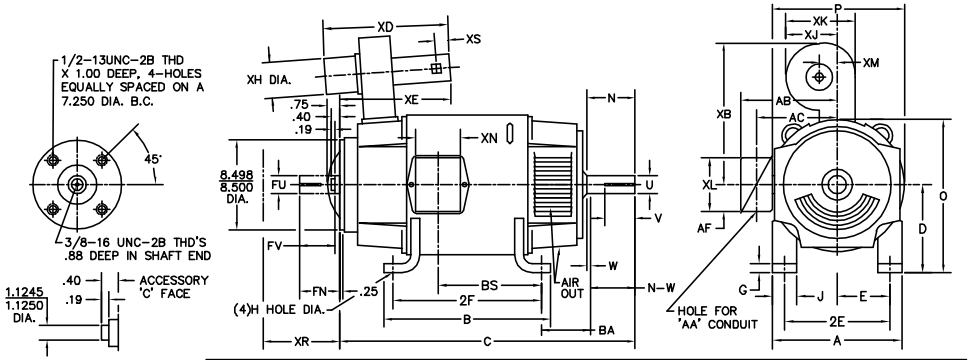
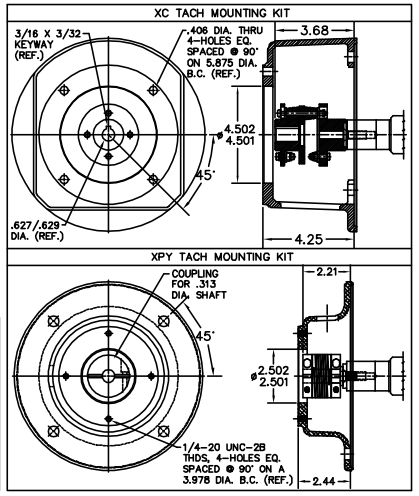
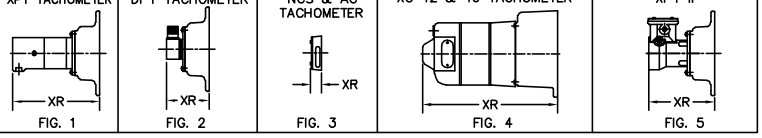




STANDARD COMM END FOR SINGLE SHAFT EXTENSION

TACHOMETER			
TACH	XR	LBS	FIG #
XPY	9.00	6.00	1
DPY	6.91	3.00	2
NCS	3.25	7.00	3
AC	2.77	7.00	3
XC42	12.49	25.00	4
XC46	14.50	35.00	4
XPYII	6.89	15.00	5

STANDARD TACHOMETER MOUNTINGS



	FOOT MOUNTING						D.E. SHAFT EXTENSION					DRIVE KEY		ACC SHAFT EXTENSION			ACC KEY		FRAME					
FRAME	BA	E	2F	G	H	J	N	N–W	U	V	W	KEY–SQ.	KEY–LONG	FN	FU	FV	KEY–SQ.	KEY–LONG	A	B	C	D	O	P
327AT	5.25	6.25	14.00	.81	.656	3.00	4.40	4.25	2.125	4.00 [3]	.15	.500	3.12	3.94	1.875	3.69	.500	2.81	15.88	15.75	32.75	8.00 [2]	15.94	15.88
328AT	5.25	6.25	16.00	.81	.656	3.00	4.40	4.25	2.125	4.00 [3]	.15	.500	3.12	3.94	1.875	3.69	.500	2.81	15.88	17.75	34.63	8.00 [2]	15.94	15.88
329AT	5.25	6.25	18.00	.81	.656	3.00	4.40	4.25	2.125	4.00 [3]	.15	.500	3.12	3.94	1.875	3.69	.500	2.81	15.88	19.75	36.63	8.00 [2]	15.94	15.88
365AT	5.88	7.00	12.25	.81	.813	3.25	4.94	4.75	2.375	4.50 [3]	.19	.625	3.50	4.62	2.125	4.37	.500	3.13	17.75	13.75	32.94	9.00 [2]	17.94	17.88
366AT	5.88	7.00	14.00	.81	.813	3.25	4.94	4.75	2.375	4.50 [3]	.19	.625	3.50	4.62	2.125	4.37	.500	3.13	17.75	15.50	35.13	9.00 [2]	17.94	17.88
368AT	5.88	7.00	18.00	.81	.813	3.25	4.94	4.75	2.375	4.50 [3]	.19	.625	3.50	4.62	2.125	4.37	.500	3.13	17.75	19.50	38.13	9.00 [2]	17.94	17.88
3610AT	5.88	7.00	22.00	.81	.813	3.25	4.94	4.75	2.375	4.50 [3]	.19	.625	3.50	4.62	2.125	4.37	.500	3.13	17.75	23.50	41.45	9.00 [2]	17.94	17.88
3612AT	5.88	7.00	28.00	.81	.813	3.25	4.94	4.75	2.375	4.50 [3]	.19	.625	3.50	4.62	2.125	4.37	.500	3.13	17.75	29.50	45.56	9.00 [2]	17.94	17.88

	CONDUIT BOX							BLOWER									ARM APPROX. WK^2 LBS.FT.^{2}	APPROXIMATE WEIGHT
FRAME	AA	AB	AC	AF	BS	XL	XN	SIZE	XB	XD	XE	XH	XM	XJ	XK	XS		
327AT	2	12.94	10.32	5.00	11.81	7.88	5.25	LM6	19.13	26.38	17.38	10.25	4.19	9.44	11.50	3.75	8.45	738 [5]
328AT	2	12.94	10.32	5.00	13.68	7.88	5.25	LM6	19.13	26.38	17.38	10.25	4.19	9.44	11.50	3.75	9.67	813 [5]
329AT	2	12.94	10.32	5.00	15.68	7.88	5.25	LM6	19.13	26.38	17.38	10.25	4.19	9.44	11.50	3.75	10.97	922 [5]
365AT	2 1/2	14.06	11.38	5.00	9.06	7.88	5.25	LM6	18.88	26.38	18.44	10.25	5.69	10.95	11.50	3.75	15.61	803 [5]
366AT	2 1/2	14.06	11.38	5.00	11.25	7.88	5.25	LM6	18.88	26.38	18.44	10.25	5.69	10.95	11.50	3.75	18.27	913 [5]
368AT	2 1/2	14.06	11.38	5.00	14.25	7.88	5.25	LM6	18.88	26.38	18.44	10.25	5.69	10.95	11.50	3.75	22.21	1073 [5]
3610AT	3	16.86	13.09	6.53	18.25	11.63	7.76	LM9	25.50	28.31	20.94	10.75	5.50	12.38	15.25	3.75	28.00	1109 [5]
3612AT	3	16.86	13.09	6.53	24.25	11.63	7.76	LM9	25.50	28.31	20.94	10.75	5.50	12.38	15.25	3.75	31.60	1145 [5]

1) SHAFT DIAMETERS TO 1.500 TOLERANCE +.0000 –.0005
SHAFT DIAMETERS ABOVE 1.500 TOLERANCE +.0000 –.0010
SHAFT DIAMETERS TO 1.625 RUNOUT .002 T.I.R. MAX.
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) TOTAL WEIGHT OF MOTOR AND BLOWER LESS TACH WEIGHT.
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 BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

REV. DESC: REV. "D" DIM TO +.000 –.060 ONLY			BALDOR
REV. LTR: G	VERSION: 01	TDR: 000000752448	
FILE: \RGG\00019\490		REVISED: 01:55:17 06/19/2012	DIM SHEET: 327–3612AT,DPBV,W/TACH
MTL: –		BY: RGGNAS	SH 1 of 1

1336–4

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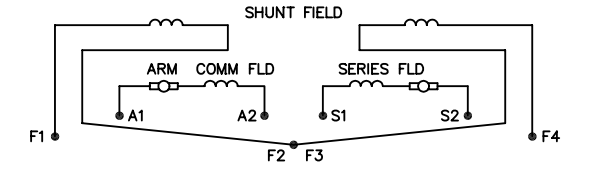
15209

ALUMINUM (MATT) BACKGROUND WITH BLACK LETTERS

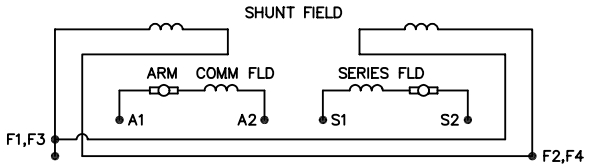
LABEL MANUFACTURER IDENTIFYING MARK TO APPEAR HERE

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				
REV:	G	CHANGE ALL "NAMEPLATE" TEXT TO "LABEL"		
15209	SCALE: –	BY: BKW	REVISED: 02/19/97	
	FILE: CHB00002485		TDR: 0115147	

BALDOR ELECTRIC Co.

LABEL, CONNECTIONS AND TERMINAL MARKINGS DC

15209

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REL S.O.	FRAME	RATING	RPM	ARM. VOLTS	ARM. AMPS
	368	100HP	1750	500	158

WINDING TYPE	S.F.	ENCL.	AMB °C/INSUL	DUTY	FIELD VOLTS
STRAIGHT SHUNT	1.0	DPG	40/F	CONT	300

POWER CODE	TYPE	WK^2 (LB-FT^2)	HOT ARM.CIR.RES.	FLD. AMPS@25 °C	HOT FIELD RES
D	T	20.10	.0942	4.41	99.8

ARM. CIR. IND. (mh)	FIELD IND. (H)	COOLING AIR(CFM/IN H_2O)	TURNS PER COIL SHUNT/SERIES	TEST DATE
2.31	53.4	-/-	1250/.00000	-

LOAD PERFORMANCE

LOAD	AMPERES	TORQUE IN LB.-FT.	OUTPUT IN HP	RPM	% EFFICIENCY
NO LOAD	1.9	0	0	1724	0
1/4	40	75.9	24.8	1717	87.6
2/4	79	155	50.4	1711	90.7
3/4	119	233	75.5	1703	91.5
4/4	158	308	100	1706	92.0
O.L.	237	448	147	1730	91.1

RPM VS. FIELD AMPS			Eg VS. FIELD AMPS	
FIELD AMPS	RPM N.L.	RPM F.L.	Eg N.L. @ BASE SPEED	Eg F.L. @ BASE SPEED
3.00	1724	1706	506	495
2.74	1812	1793	484	471
2.49	1926	1913	455	441
2.23	2083	2078	420	406
1.97	2298	2300	379	367

REMARKS: TYPICAL DATA

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DR. BY E.H. GILLOT
CK. BY B. GRANT
APP. BY R.ERLACHER
DATE 05-28-2009

D-C MOTOR PERFORMANCE DATA

DK0093A

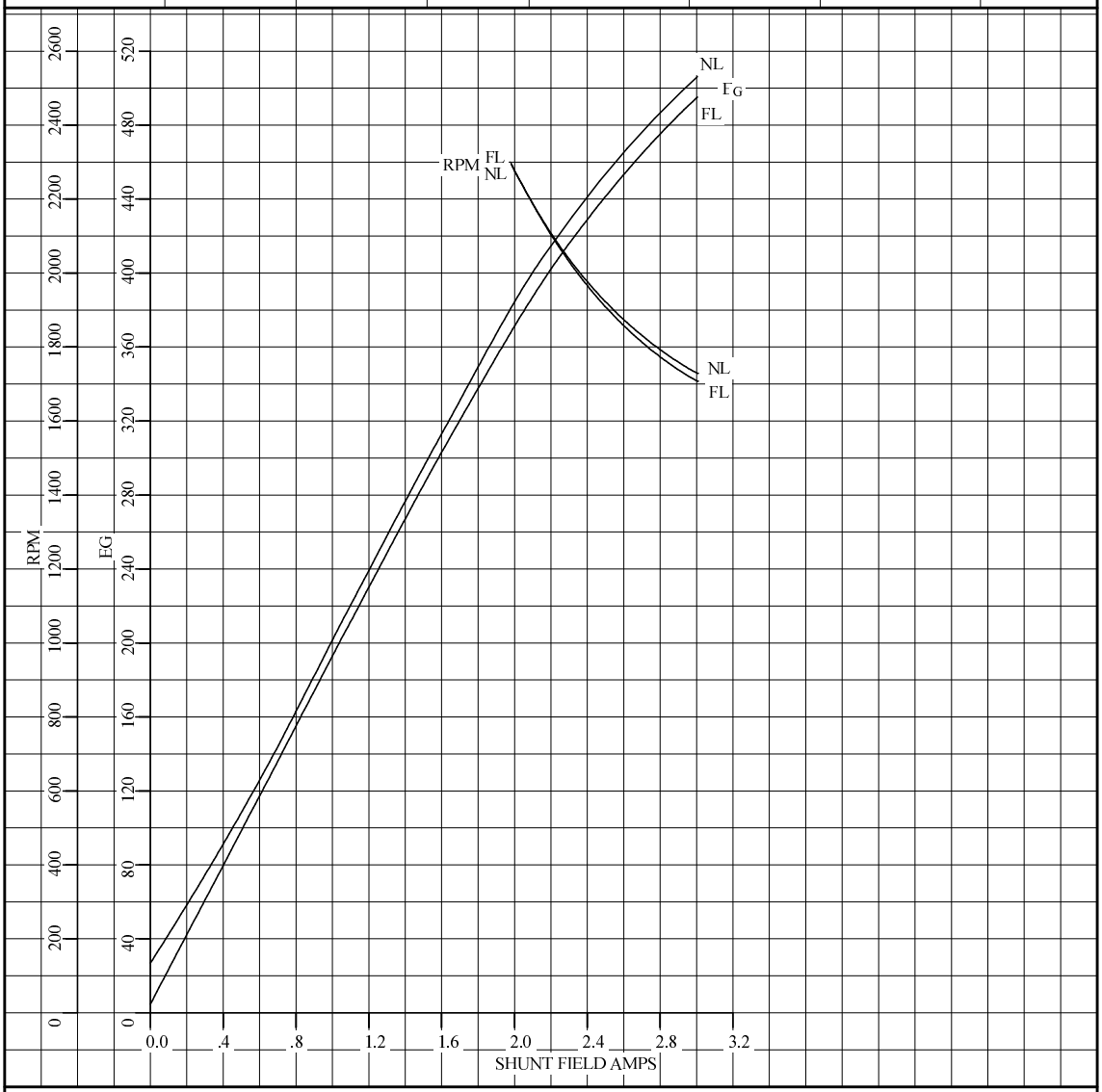
ISSUE DATE 05-28-2009

REL S.O.	FRAME	RATING	BASE SPEED	WINDING TYPE
	368	100HP	1750	STRAIGHT SHUNT

S.F.	ENCL.	AMB°C/INSUL	DUTY	POWER CODE/FORM FACTOR	TYPE	WK^2 (LB-FT^2)
1.0	DPG	40/F	CONT	D	T	20.10

COOLING AIR (CFM/IN H_2O)	$\bar{J}$ (sec)	$\bar{R}$ (hot)	T_E	T_M	BASIC RPM	MAX CONT RPM	WINDER RPM	MAX. SAFE
-/-	.380	.0349	.0216	.0133	1900	2300	-	-

WINDING	VOLTS	RESISTANCE		CURRENT		INDUCTANCE	TURNS PER COIL
		25°C	HOT	25°C	HOT		
ARM CIRCUIT	500	.0765	.0942	-	158	2.32 mH	-
SERIES S1-S2	-	-	-	-	-	-	-
SHUNT F1-F2	300	67.9	99.8	4.42	3.00	53.4 H	1250



REMARKS: TYPICAL DATA
CURVES VALID FOR NAMEPLATE SPEED RANGE ONLY

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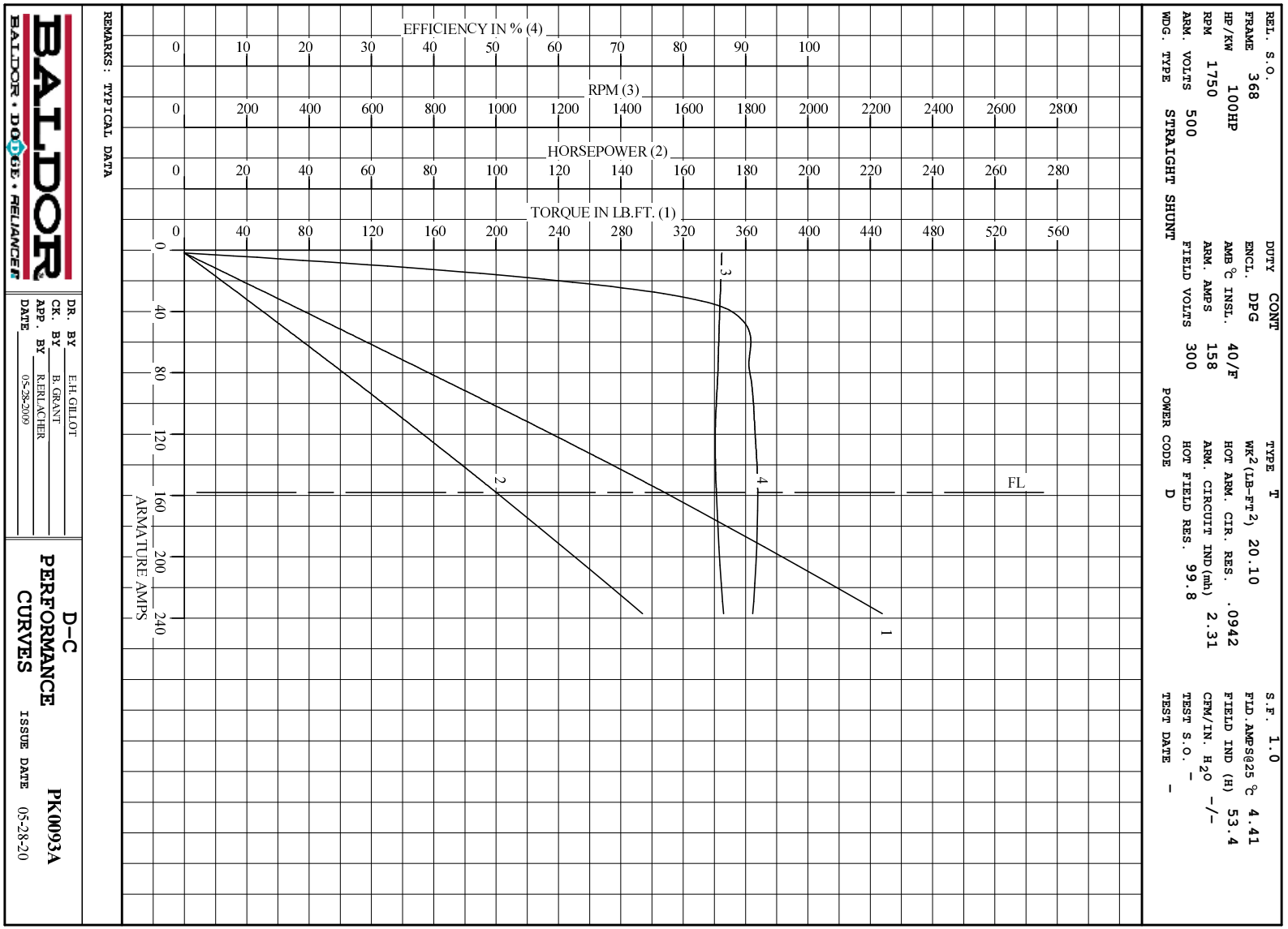
DR. BY E.H. GILLOT
CK. BY B. GRANT
APP. BY R.ERLACHER
DATE 05-28-2009

D-C APPLICATION DATA

SK0093A

ISSUE DATE 05-28-2009



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