

BALDOR® • RELIANCE

Product Information Packet

D2050P-BV

50HP, 1750/2100RPM, DC, 328AT, DPBV, F1

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| Part Detail | | | |
|-------------------|-----------|----------------|-----------------|
| Type: | DC | Prod. Type: | TR |
| Power Code: | D | Weight: | 835 |
| Frame Group: | 0328AT | Mounting Pos.: | F1 |
| HP: | 50 | Enclosure: | DPBV |
| RPM: | 1750/2100 | Wound: | STR. SHUNT |
| Service Factor: | 1.0 | Arm V: | 240 |
| Arm A: | 175.00 | Field V: | 150/ 300 |
| Field A: | 4.12/2.06 | Field A Hot: | 2.64-2.02/1.32- |
| Insulation Class: | F | Ambient: | 40 |
| Duty: | CONT | DE Bearing: | 6211 |
| ODE Bearing: | 6210 | Brushes: | 28610-1 |
| Brush Qty.: | | | |

1336-4

1/2-13UNC-2B THD X 1.00 DEEP, 4-HOLES EQUALLY SPACED ON A 7.250 DIA. B.C.

3/8-16 UNC-2B THD'S .88 DEEP IN SHAFT END

1.1245
1.1250 DIA.

.40
.19 ACCESSORY 'C' FACE

STANDARD COMM END FOR SINGLE SHAFT EXTENSION

STANDARD TACHOMETER MOUNTINGS

| 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 |

XC TACH MOUNTING KIT

XPY TACH MOUNTING KIT

FOOT MOUNTING

| 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

| FRAME | AA | AB | AC | AF | BS | XL | XN | SIZE | XB | XD | XE | XH | XM | XJ | XK | XS | ARM APPROX. WT. LBS.FT. ² | APPROXIMATE WEIGHT |
|--------|-------|-------|-------|------|-------|-------|------|------|-------|-------|-------|-------|------|-------|-------|------|--------------------------------------|--------------------|
| 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 |

ARM APPROX. WT. LBS.FT.²

APPROXIMATE WEIGHT

- 1) SHAFT DIAMETERS TO 1.500 TOLERANCE +.0000 -.0005
- 2) SHAFT DIAMETERS ABOVE 1.500 TOLERANCE +.0000 -.0010
- 3) SHAFT DIAMETERS TO 1.625 RUNOUT .002 T.I.R. MAX.
- 4) SHAFT DIAMETERS ABOVE 1.625 RUNOUT .003 T.I.R. MAX.
- 5) 'D' DIMENSION TOLERANCE +.000 -.060
- 6) 'V' DIMENSION IS MAX. HUB LENGTH ON SHAFT
- 7) CONDUIT BOX CAN BE ROTATED IN 90° STEPS ON ITS OWN AXIS.
- 8) TOTAL WEIGHT OF MOTOR AND BLOWER LESS TACH WEIGHT.
- 9) 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 | VERSION: 01 | TDR: 000000752448 |
| REV. LTR: G | FILE: \RGG\00019\490 | REVISED: 01:55:17 06/19/2012 |
| MTL: - | BY: RGGNAS | |

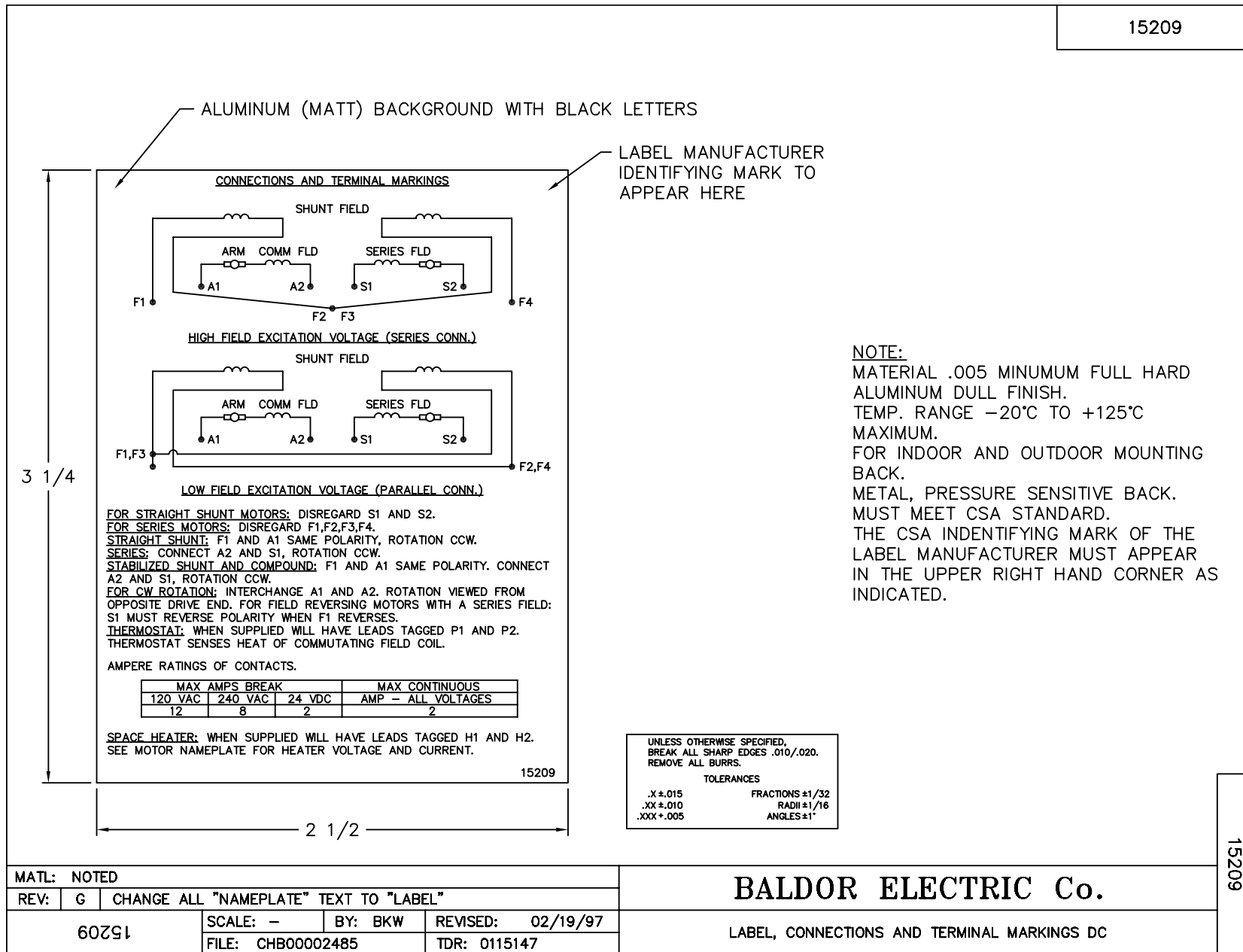
BALDOR

DIM SHEET: 327-3612AT,DPBV,W/TACH

SH 1 of 1

1336-4

15209




| | | | | | |
|----------------|-------|----------------------------|--------------------|-----------------|---------------|
| REL. S. O. | FRAME | RATING | RPM | ARM. VOLTS | ARM. AMPS |
| | 0328 | 50.0HP | 1750 | 240 | 175 |
| WINDING TYPE | | S.F. | ENCL. | AMB °C/INSUL | DUTY |
| STRAIGHT SHUNT | | 1.0 | DRG | 40/F | CONT |
| | | | | | 300 |
| POWER CODE | TYPE | WK 2 (LB-FT ²) | HOT ARM. CIR. RES. | FLD. AMPS@25 °C | HOT FIELD RES |
| D | TR | 7.377 | .130 | 2.06 | 226 |

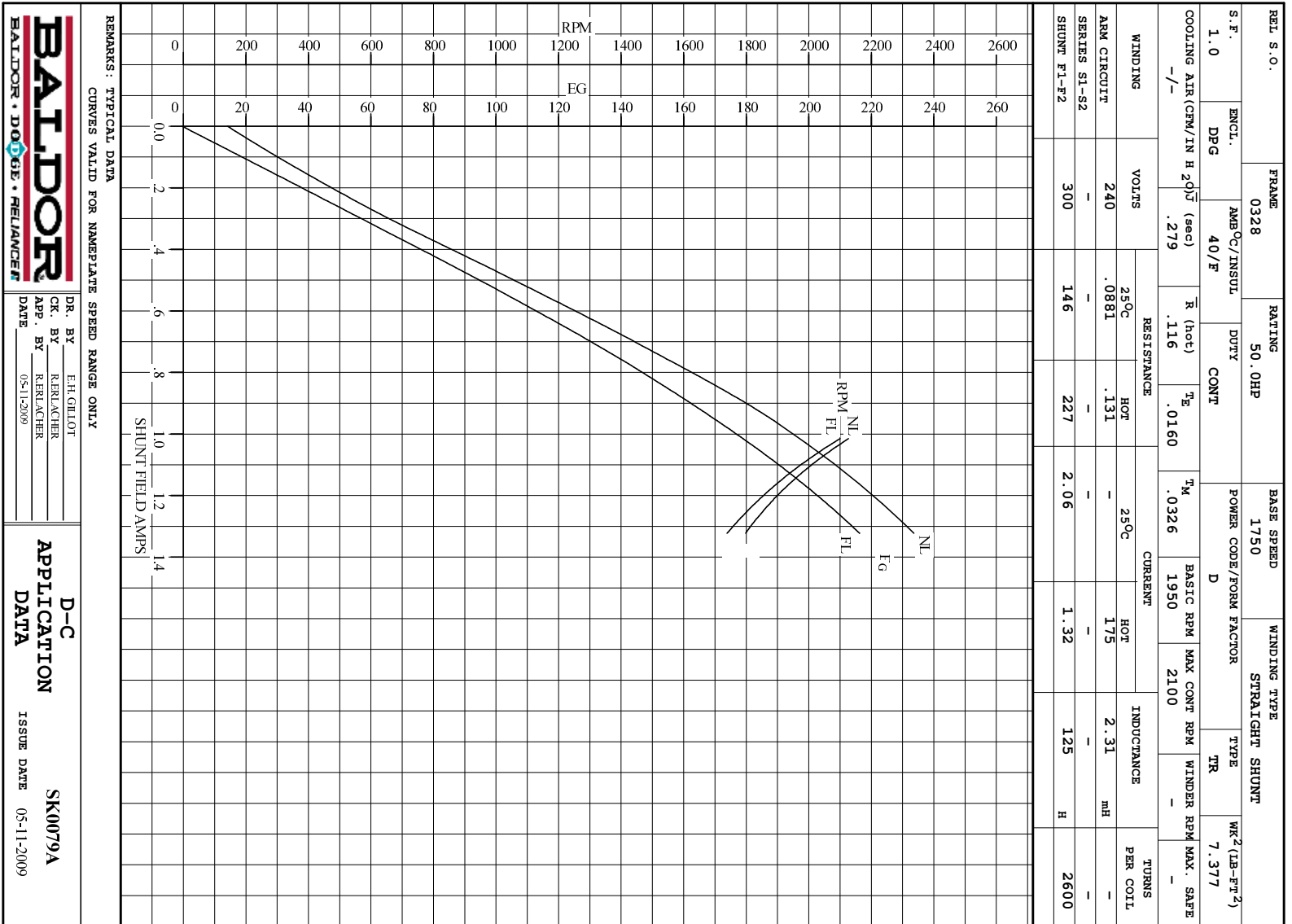
| | | | | |
|---------------------|----------------|---------------------------|-----------------------------|-----------|
| ARM. CIR. IND. (mh) | FIELD IND. (H) | COOLING AIR (CFM/IN H 20) | TURNS PER COIL SHUNT/SERIES | TEST DATE |
| 2.30 | 125 | -/- | 2600/.00000 | - |

| LOAD PERFORMANCE | | | | | |
|------------------|---------|-------------------|--------------|------|--------------|
| LOAD | AMPERES | TORQUE IN LB.-FT. | OUTPUT IN HP | RPM | % EFFICIENCY |
| NO LOAD | 6.5 | 0 | 0 | 1786 | 0 |
| 1/4 | 44 | 34.6 | 11.6 | 1756 | 76.9 |
| 2/4 | 88 | 74.5 | 24.5 | 1727 | 83.8 |
| 3/4 | 131 | 112 | 36.6 | 1725 | 84.5 |
| 4/4 | 175 | 145 | 47.9 | 1738 | 83.5 |
| O.L. | 263 | 198 | 68.1 | 1805 | 79.6 |

| 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 | |
| 1.32 | 1786 | 1738 | 233 | 216 | |
| 1.24 | 1858 | 1808 | 226 | 207 | |
| 1.16 | 1931 | 1889 | 217 | 198 | |
| 1.09 | 2019 | 1985 | 208 | 189 | |
| 1.01 | 2127 | 2100 | 197 | 179 | |

REMARKS: TYPICAL DATA

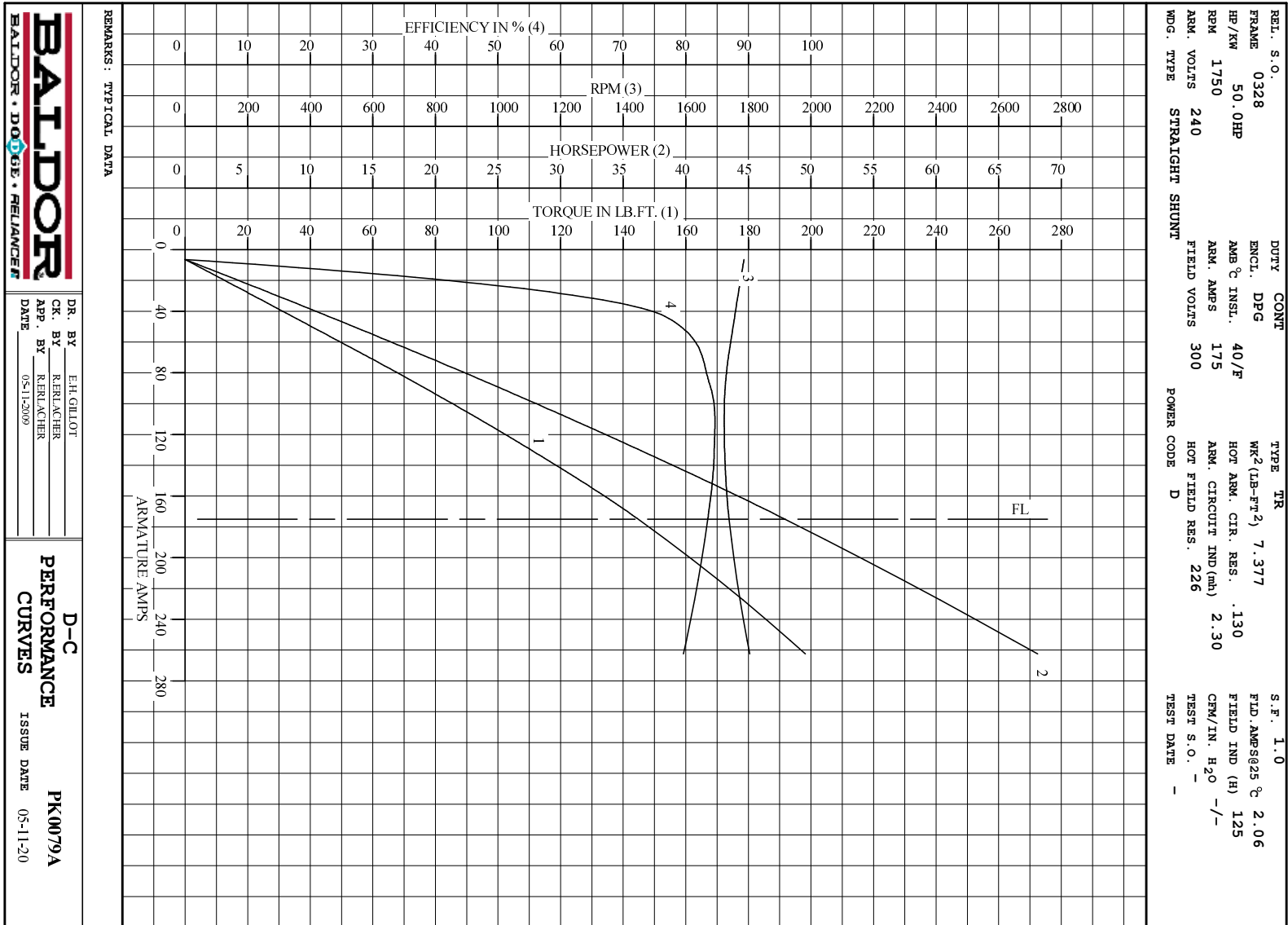
| | | |
|---|--|---|
|  | DR. BY E. H. GILLIOT | D-C MOTOR PERFORMANCE DATA DK0079A ISSUE DATE 05-11-2009 |
| | CK. BY R. BRÄNCHER APP. BY R. BRÄNCHER DATE 05-11-2009 | |



DR. BY E.H.GILLOT
 CK. BY RERLACHER
 APP. BY RERLACHER
 DATE 05-11-2009

D-C APPLICATION DATA

SK0079A
 ISSUE DATE 05-11-2009



DR. BY E.H. GILLOT
 CK. BY RERLACHER
 APP. BY RERLACHER
 DATE 05-11-2009

D-C
PERFORMANCE
CURVES
 ISSUE DATE 05-11-20
PK0079A