

BALDOR® • RELIANCE

Product Information Packet

BSM80C-375AF

BSM80C-375AF T'STAT, ENCODER

| Specs | | | |
|------------------------------|-----------------|--|--|
| Enclosure: | TENV | | |
| Nameplate Speed: | 4000 | | |
| Agency Approvals: | CE | | |
| | CSA | | |
| | TUV | | |
| | UR | | |
| | WEEE | | |
| Base Indicator: | Bracket Mounted | | |
| Dimensional Drawing Numbers: | S2LYP196 | | |
| Frame: | D100D | | |

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| | | | |
|---------------------------------------|---------------------|--|--|
| Frame Material: | Exposed Laminations | | |
| Motor Lead Quantity/Wire Size: | 3 @ 18 AWG | | |
| Mounting Arrangement: | F1 | | |
| Nameplate Output: | 1.07KW | | |
| Shaft Rotation: | Reversible | | |
| Motor Standards: | IEC | | |

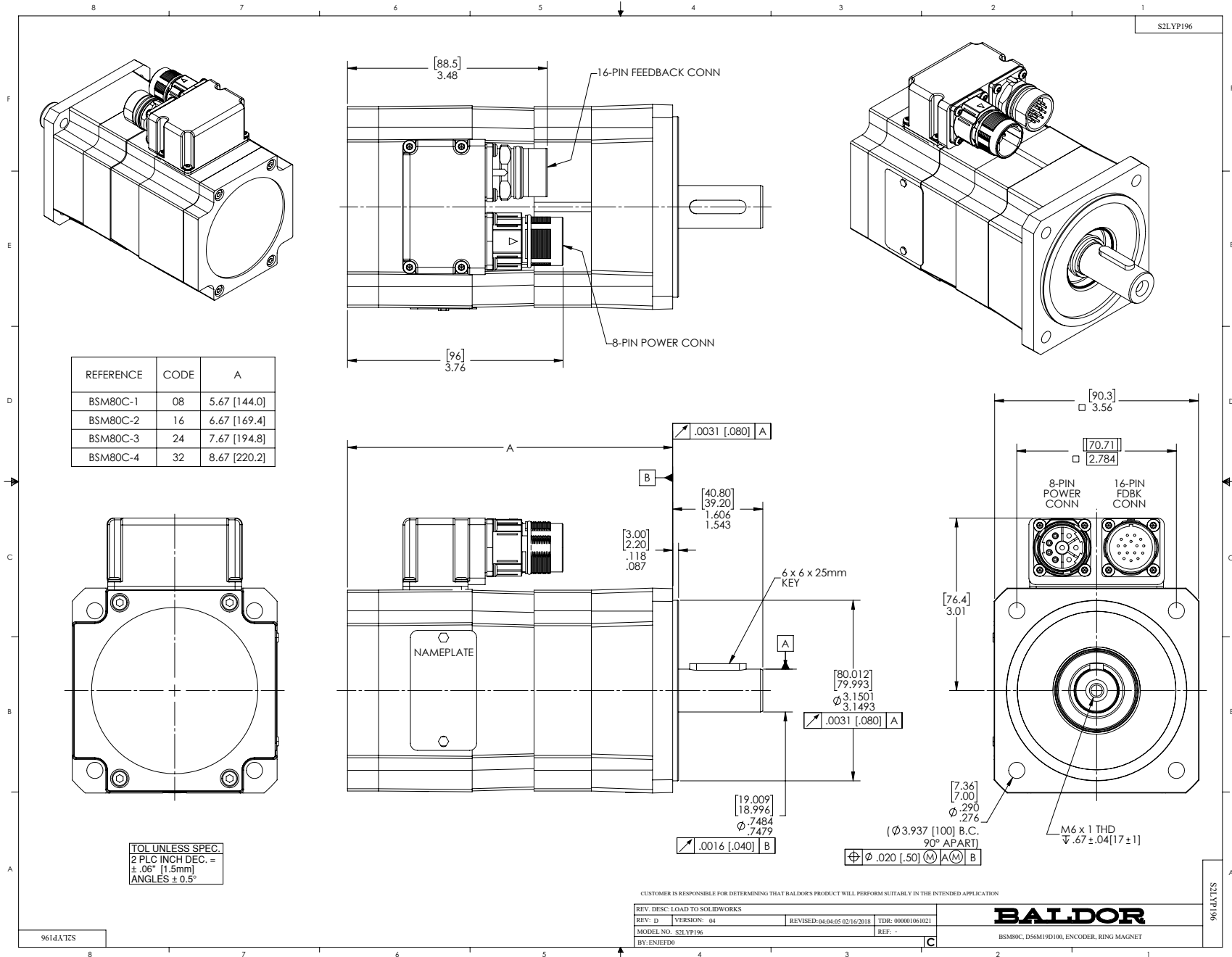
Nameplate NP2864L

| | | | |
|----------------------|--------------|------|----|
| CAT.NO. | BSM80C-375AF | | |
| BLANK | | | |
| SPEC. | S2P196W058 | | |
| MFG.NO. | | | |
| TORQ CONT STALL | 3.6 NM | | |
| CUR CONT STALL/A RMS | 6.29 | | |
| POWER | 1.07KW | | |
| RATED SPEED/RPM | 4000 | | |
| RATED BUS VOLTS | 300 | | |
| PEAK CUR/A RMS | 16 | | |
| MAX SPEED/RPM | 7000 | | |
| CLASS | F | AMB. | 25 |
| APRV-CE | | | |

| Parts List | | |
|---------------|--|----------|
| Part Number | Description | Quantity |
| SA099317 | SA S2P196W058 | 1.000 EA |
| RA091508 | RA S2P196W058 | 1.000 EA |
| WD1000A33 | 62307-2 AMP TERM,30K/REELREPLACING A19)3 | 4.000 EA |
| RM1020A10 | O-RING, -041 BUNA-N, .070 CS X 2.989 ID | 1.000 EA |
| HA4021A04 | 1/8 NPTF-HX SOC PIPE PLUG TAPER DRY SEAL | 1.000 EA |
| HW5002A93 | RET RING #NT002-145 BEVELED | 1.000 EA |
| HW2512E109 | KEY, 6 X 6 X 25MM ROUND ENDED | 1.000 EA |
| HW5109A04 | WASHER, SPLIT WAVE SPRING, FOR 32MM BORE | 2.000 EA |
| S2EP3907A05 | ENDPLATE, FR BRG, BSM80, ENCODER | 1.000 EA |
| 84YN0040J020 | M4 X 20MM SHC SCREW | 4.000 EA |
| HW1021A04 | WASHER, M4 SPLIT LOCK | 4.000 EA |
| RM1020A10 | O-RING, -041 BUNA-N, .070 CS X 2.989 ID | 1.000 EA |
| 62YW0025A007 | EPOXY LOCK SCREW,M2.5X7 TORX PAN HD TAPT | 1.000 EA |
| 84YN0040J014 | 4MM X 14MM SHCS | 4.000 EA |
| S1GS1000 | GASKET, 90 DEG ADAPTOR F/BSM MTRS | 1.000 EA |
| GS1000A25 | GASKET, METRIC CONNECTOR(CLOTH INSERTED | 2.000 EA |
| S1CB3000A02 | 90 DEG ADAPTOR, METRIC CONNECTORS F/BSM | 1.000 EA |
| 99XM0356A02 | STICK SCREW, #3-56 X .125 LG. HEX (MARK | 2.000 EA |
| MG2000A17 | RUST INHIBITOR PART # SRPO #20 | 0.001 GA |
| BG6904C03 | 6904/61904 D.SH,C3,POLYREX EM | 1.000 EA |
| OE0323A02 | ENCODER, EPC, 2500L,4 POLE, 40MM BC, CE | 1.000 EA |
| LD6229A01 | CABLE ASSY, FOR EPC ENCODERS | 1.000 EA |
| 84YN0030JE006 | SHCS 3MM X 6MM CARBON STEEL W/EPOXY LOCK | 2.000 EA |
| HW1021A03 | WASHER, M3 SPLIT LOCK | 2.000 EA |

| Parts List (continued) | | |
|-------------------------------|--|-----------------|
| Part Number | Description | Quantity |
| HW1020A03 | WASHER, FLAT 3MM | 2.000 EA |
| LD2200A08 | CUT LEAD GREEN&YELLOW #18 8 INCH W/ RIN | 1.000 EA |
| S2CB3502A08 | COVER, FEEDBACK, OMIT LOGO, COOL GRAY | 1.000 EA |
| WD5009A15 | KIT-M23 MOTOR POWER CONN, 8-PIN | 1.000 EA |
| 62YW0025A007 | EPOXY LOCK SCREW,M2.5X7 TORX PAN HD TAPT | 12.000 EA |
| MG1025L02 | WILKOFEST, 776.06 TEXTURE (BSM) BLACK | 0.002 QT |
| MG1025Z09 | CATALYST #060.06 WILCO | 0.002 QT |
| MG1500Y08 | PRIMER-WILKOPON (603.08A)YELLOW PRIMER W | 0.002 QT |
| MG1025Z08 | WILKO 603.08B PRIMER REDUCER TDR# 72361 | 0.002 QT |
| NP2864L | NAMEPLATE BSM80 ALUM, LASER ETCHED | 1.000 EA |
| 25PA1008 | PKG GRP, BSM 50, 63, & 80 | 1.000 EA |
| MS1240 | BSM Motor Quick Start 1/16 | 1.000 EA |
| LB1534 | MYLAR CE WARNING LABEL FOR SERVO MOTORS | 1.000 EA |

No performance data has been assigned to this product.



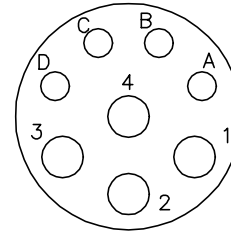
CD1297A04

MOTOR CONNECTIONS

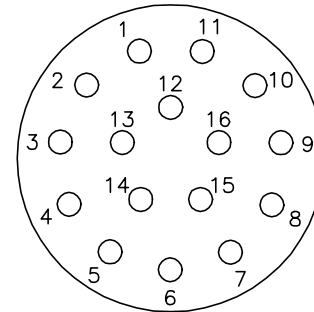
| PIN | FUNCTION | INTERNAL WIRE COLOR |
|-----|-----------------|---------------------|
| A | *THERMAL SWITCH | YELLOW |
| B | *THERMAL SWITCH | YELLOW |
| C | *BRAKE | BLACK |
| D | *BRAKE | BLACK |
| 1 | U | BLACK |
| 2 | GROUND | GREEN |
| 3 | W | BLUE |
| 4 | V | RED |

*WHEN REQUIRED

| PIN | FUNCTION | WIRE COLOR |
|-----|-------------------|-------------|
| 1 | DC+5V | RED/BLUE |
| 2 | GROUND | BLUE/RED |
| 3 | CHANNEL A | BLUE |
| 4 | CHANNEL \bar{A} | ORANGE |
| 5 | CHANNEL B | GREEN |
| 6 | CHANNEL \bar{B} | BROWN |
| 7 | CHANNEL Z | BLACK |
| 8 | CHANNEL \bar{Z} | YELLOW |
| 9 | OPEN | --- |
| 10 | CHANNEL U | WHITE/BROWN |
| 11 | CHANNEL \bar{U} | BROWN/WHITE |
| 12 | CHANNEL V | WHITE/GRAY |
| 13 | CHANNEL \bar{V} | GRAY/WHITE |
| 14 | CHANNEL W | RED/ORANGE |
| 15 | CHANNEL \bar{W} | ORANGE/RED |
| 16 | OPEN | --- |



8 PIN MOTOR CONNECTOR
THREADED CRIMP PIN STYLE



16 PIN CONNECTOR
THREADED CRIMP PIN STYLE

16- #20 CONTACT SIZE
(CRIMP SIDE)

| | | | |
|----------------|--------|------------------------------|----------------|
| REV. DESC: NEW | | | |
| REV. LTR: - | BY: FN | REVISED: 13:58:58 03/24/2004 | TDR: 328266 |
| CD1297A04 | | FILE: AAA00115154 | REF: CD1297A04 |
| | | MTL: - | |

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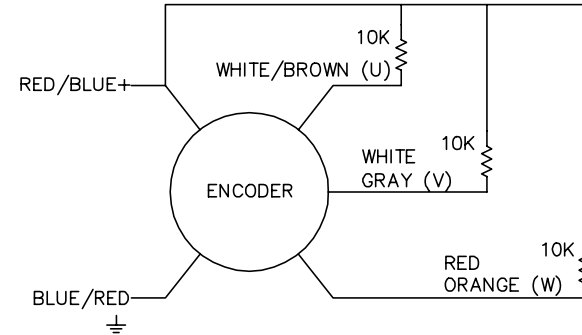
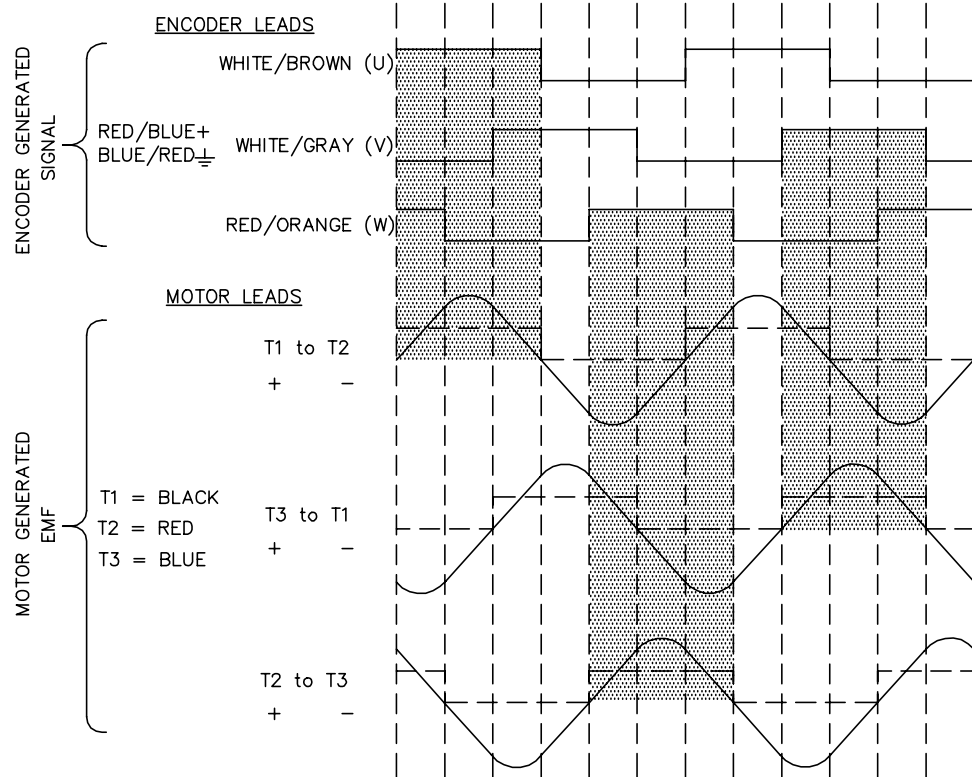
KOYO ENCODER (CHANNELS TO MATCH TMGW/SUMTAK OUTPUT)

CD1297A04

CD1338A01

BRUSHLESS D.C. COMMUTATION

| | | | | | | | | | | | | | |
|---------------------------|---|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 8 POLE MECHANICAL DEGREES | 0 | 15 | 30 | 45 | 60 | 75 | 90 | 105 | 120 | 135 | 150 | 165 | 180 |
| 4 POLE MECHANICAL DEGREES | 0 | 30 | 60 | 90 | 120 | 150 | 180 | 210 | 240 | 270 | 300 | 330 | 360 |
| ELECTRICAL DEGREES | 0 | 60 | 120 | 180 | 240 | 300 | 360 | 420 | 480 | 540 | 600 | 660 | 720 |



NOTE:
CCW ROTATION VIEWING
MOTOR SHAFT END

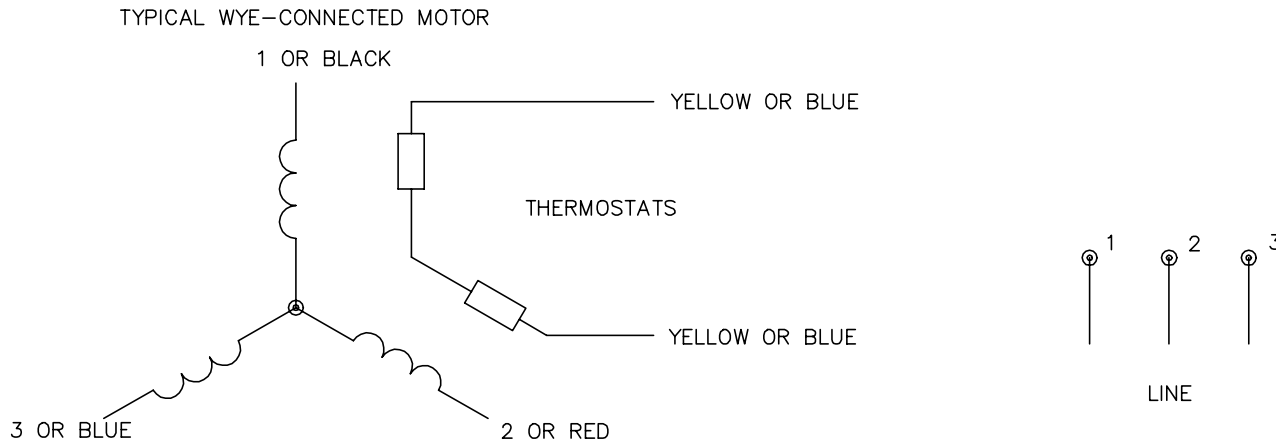
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| CD1338A01 | | MTL: - | | |

BALDOR ELECTRIC Co.

BLDC COMMUTATION KOYO ENC.(CHANNELS TO MATCH TMGW/SUMTAK)

CD1338A01

CD0006A02



NOTES:

1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
2. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.

| | | | |
|---|----------------------|------------------------------|--|
| REV. DESC: REMOVED "OPTIONAL" FROM PRINT, SERVO REQ'S T'STATS | | | |
| REV. LTR: D | VERSION: 03 | TDR: 000000414937 | |
| Z0V90000C CD0006A02 | FILE: \AAA\00068\606 | REVISED: 10:02:28 11/21/2006 | |
| | MTL: - | BY: ENJFDO | |

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3PH, SV, 3 LEADS, WYE CONNECTED

CD0006A02