

ABB BALDOR RELIANCE III

Customer information packet

BSM80C-250AA

BSM80C-250AA T'STAT, RESOLVE

Specifications

| | |
|--------------------------------------|------------------------|
| Enclosure | TENV |
| Nameplate Speed | 6000 |
| Agency Approvals | CE CSA TUV UR |
| Base Indicator | Bracket Mounted |
| Dimensional Drawing Numbers | S2LYP166 |
| Frame | D100D |
| Frame Material | Exposed Laminations |
| Motor Lead Quantity/Wire Size | 3 @ 18 AWG |
| Motor Standards | IEC |
| Mounting Arrangement | F1 |
| Nameplate Output | 1.02KW |
| Shaft Rotation | Reversible |

Part Detail

| | |
|---------------------|------------|
| Revision | AF |
| Type | AC |
| Mech. spec. | S2P166 |
| Base | |
| Status | PRD/A |
| Elec. spec. | S2WGW054 |
| Layout | S2LYP166 |
| Eff. date | 05-29-2026 |
| CD Diagram | CD0006A02 |
| Poles | 04 |
| Leads | 3#18 |
| Proprietary | False |
| Created date | 01-01-0001 |

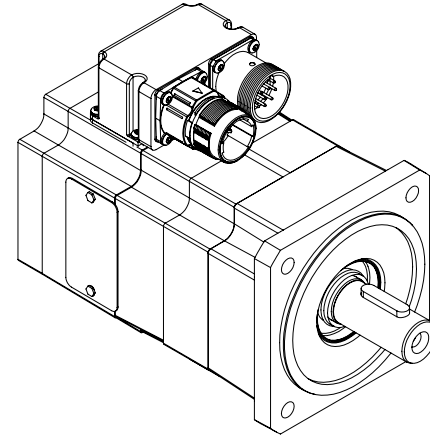
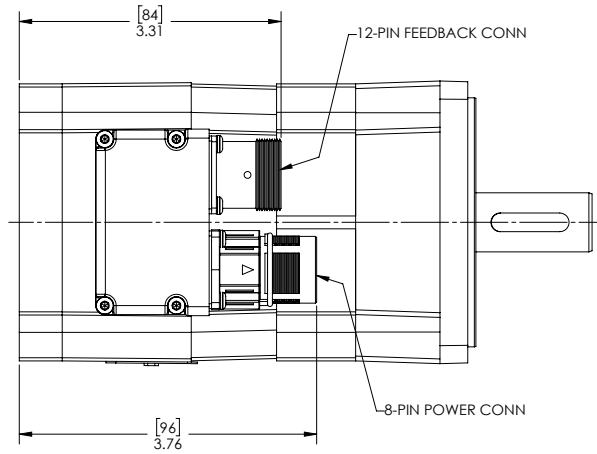
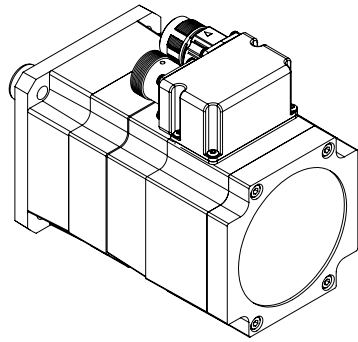
Nameplate

| NP2864L | | | | | | | | | |
|-------------------------------|------------|----|----|-------------|-----|-------------------|--|--|-----|
| CAT.NO. | | | | | | | | | |
| BLANK | | | | | | | | | |
| SPEC. | S2P166W054 | | | | | | | | |
| MFG.NO. | | | | | | | | | |
| TORQ CONT STALL | 2.4 NM | | | | | | | | |
| CUR CONT STALL/A RMS | 5.22 | | | | | | | | |
| POWER | 1.02KW | | | | | | | | |
| RATED SPEED/RPM(1/MIN) | 6000 | | | | | | | | |
| RATED BUS VOLTS | 320 | | | | | | | | |
| PEAK CUR/A RMS | 15.6 | | | | | | | | |
| MAX SPEED/RPM(1/MIN) | 7000 | | | AMB. | 25 | | | | |
| CLASS | F | IP | 54 | IC | 410 | MOTOR MASS | | | 5.4 |

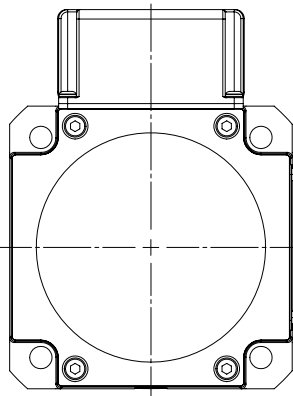
Accessories

| Part number | Description | Multiplier |
|--------------------|-------------------------------|-------------------|
| GBSM80-MRP090-4 | Std. Servo Gearbox Ratio 4:1 | |
| GBSM80-MRP090-5 | Std. Servo Gearbox Ratio 5:1 | E4 |
| GBSM80-MRP090-7 | Std. Servo Gearbox Ratio 7:1 | E4 |
| GBSM80-MRP090-10 | Std. Servo Gearbox Ratio 10:1 | E4 |
| GBSM80-MRP090-16 | Std. Servo Gearbox Ratio 16:1 | E4 |
| GBSM80-MRP120-50 | Std. Servo Gearbox Ratio 50:1 | E4 |

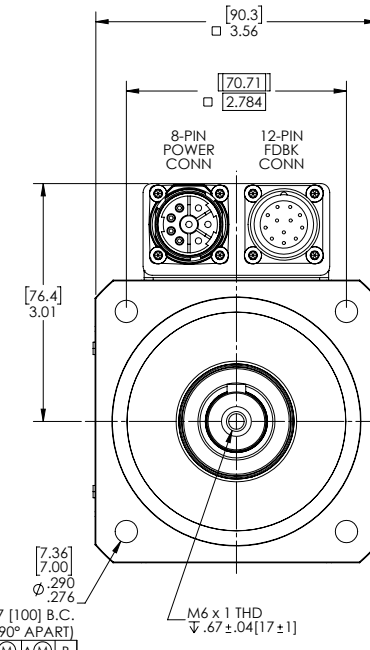
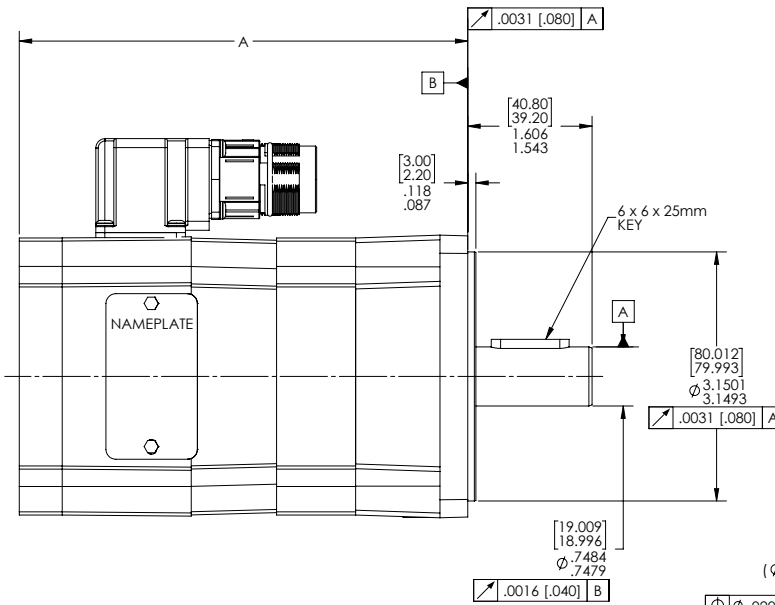
S2LYP166



| REFERENCE | CODE | A |
|-----------|------|--------------|
| BSM80C-1 | 08 | 5.67 [144.0] |
| BSM80C-2 | 16 | 6.67 [169.4] |
| BSM80C-3 | 24 | 7.67 [194.8] |
| BSM80C-4 | 32 | 8.67 [220.2] |



TOL UNLESS SPEC.
2 PLC INCH DEC. =
± .06" [1.5mm]
ANGLES ± 0.5°



CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION

| | | |
|-------------------------------|------------------------------|------------------|
| REV. DESC: LOAD TO SOLIDWORKS | REVISED: 03-09-43 01:30/2018 | TDR: 00001059004 |
| REV: G | VERSION: 05 | REF: - |
| MODEL NO. S2LYP166 | | |
| BY: ENJEFFD0 | | |

BALDOR

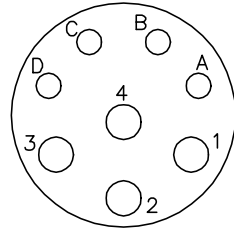
BSM80C, 19D100, RESOLVER, M23 CONNECTORS, RING MAGNET

9914ATCS

9914ATCS

CD1321

8 PIN THREADED CONNECTOR
(CRIMP STYLE)
(INSERTION SIDE)



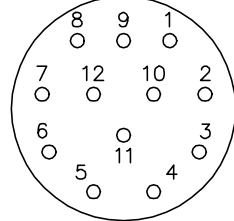
MOTOR CONNECTIONS

| PIN | FUNCTION | INTERNAL/EXTERNAL MARKINGS |
|-----|------------------|----------------------------|
| A | THERMAL SWITCH | YELLOW |
| B | THERMAL SWITCH | YELLOW |
| C | BRAKE (OPTIONAL) | BLACK (* RED) |
| D | BRAKE (OPTIONAL) | BLACK |
| 1 | U | BLACK OR T1 |
| 2 | GROUND | GREEN OR **GREEN/YELLOW |
| 3 | W | BLUE OR T3 |
| 4 | V | RED OR T2 |

* WHEN REQUIRED

**CE MOTORS REQUIRE GREEN/YELLOW GROUND

12 PIN THREADED CONNECTOR
(CRIMP STYLE)
(INSERTION SIDE)



RESOLVER CONNECTIONS

| PIN | FUNCTION | INTERNAL WIRE COLOR |
|-----|-----------|---------------------|
| 1 | REF HI R1 | RED/WHITE |
| 2 | REF LO R2 | YELLOW/WHITE |
| 3 | COS+ S1 | RED |
| 4 | COS- S3 | BLACK |
| 5 | SINE- S4 | BLUE |
| 6 | SINE+ S2 | YELLOW |

CD1321

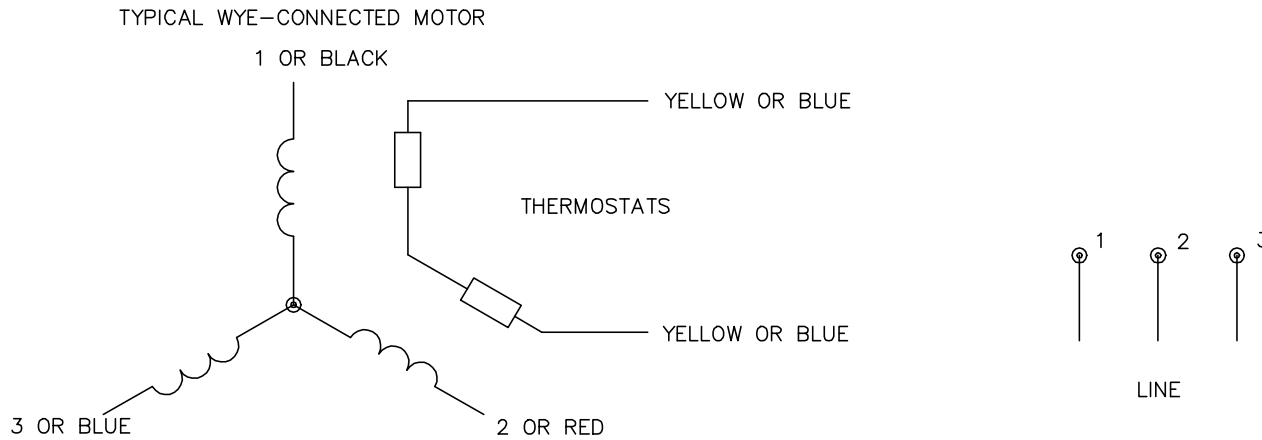
| | | |
|--|------------------------------|-------------------|
| REV. DESC: ADD CE NOTE AND GREEN/YELLOW GROUND | | |
| REV. LTR: F | VERSION: 03 | TDR: 000001192301 |
| FILE: \AAA\00055\309 | REVISED: 02:34:44 06/13/2022 | BY: ENDANDO |
| MTL: - | © □ | |

BALDOR - RELIANCE®

BSM WIRING DIAG, POWER & RESOLVER, 8 & 12 PIN THD CONNECT.

SH 1 of 1

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 |
| CD0006A02 | FILE: \AAA\00068\606 | REVISED: 10:02:28 11/21/2006 |
| | MTL: - | BY: ENJEFO |

BALDOR ELECTRIC Co.

3PH, SV, 3 LEADS, WYE CONNECTED

CD0006A02