

ABB BALDOR RELIANCE III



Customer information packet BSM90N-375AF

BSM90N-375AF T'STAT ENCODER

Specifications

| | |
|--------------------------------------|------------------------|
| Enclosure | TENV |
| Nameplate Speed | 4000 |
| Agency Approvals | CE CSA TUV UR |
| Base Indicator | Bracket Mounted |
| Dimensional Drawing Numbers | S3LYP136 |
| Frame | D130D |
| Frame Material | Exposed Laminations |
| Motor Lead Quantity/Wire Size | 3 @ 14 AWG |
| Motor Standards | IEC |
| Mounting Arrangement | F1 |
| Nameplate Output | 3.46KW |
| Shaft Rotation | Reversible |

Part Detail

| | |
|---------------------|------------|
| Revision | AN |
| Type | AC |
| Mech. spec. | S3P136 |
| Base | |
| Status | PRD/A |
| Elec. spec. | S3WGW063 |
| Layout | S3LYP136 |
| Eff. date | 07-29-2025 |
| CD Diagram | CD0006A02 |
| Poles | 08 |
| Leads | 3#14 |
| Proprietary | False |
| Created date | 01-01-0001 |

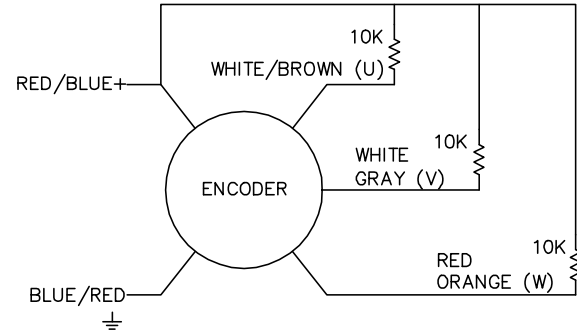
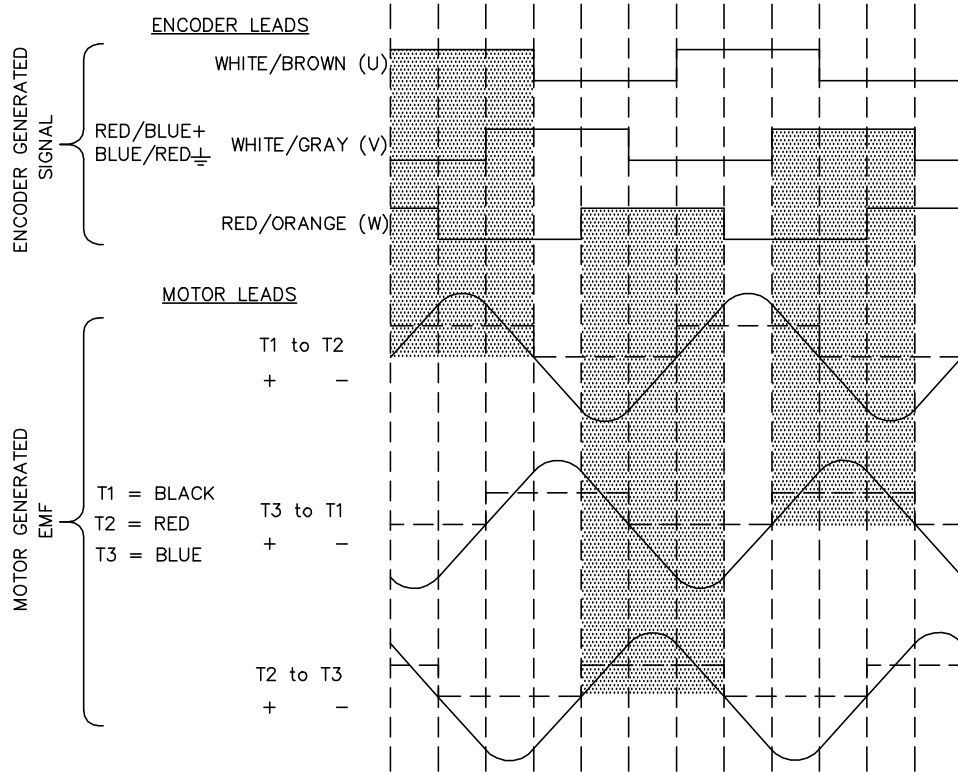
Nameplate

| NP2863L | | | | |
|-------------------------------|--------------|------------------|-----|---------------|
| CAT.NO. | BSM90N-375AF | | | |
| SPEC. | S3P136W063 | | | |
| MFG.NO. | | | | |
| TORQ CONT STALL | 13.3 NM | | | |
| CUR CONT STALL/A RMS | 19 | | | |
| POWER | 3.46KW | | | |
| RATED SPEED/RPM(1/MIN) | 4000 | | | |
| RATED BUS VOLTS | 300 | | | |
| PEAK CUR/A RMS | 68.5 | | | |
| MAX SPEED/RPM(1/MIN) | 7000 | | | |
| IP | 54 | IC | 410 | WT. 19 |
| CLASS | F | 25C RATED | | |

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

CD1338A01

| | | | |
|----------------|--------|------------------------------|----------------|
| REV. DESC: NEW | | | |
| REV. LTR: - | BY: FN | REVISED: 11:22:25 03/24/2004 | TDR: 328266 |
| CD1338A01 | | FILE: AAA00115153 | REF: CD1338A01 |
| | | MTL: - | |

BALDOR ELECTRIC Co.

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

MOTOR CONNECTIONS

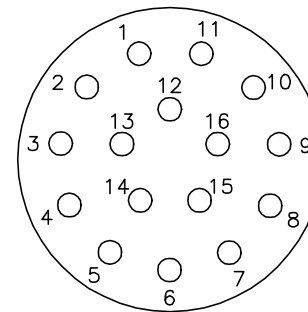
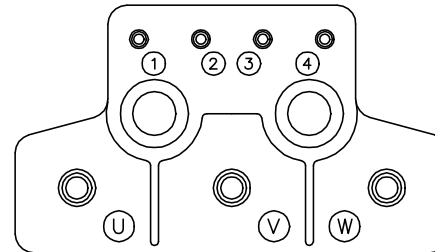
| TERMINAL LABEL | FUNCTION | INTERNAL WIRE MARKING |
|----------------|----------------|-----------------------|
| 1 | THERMAL SWITCH | YELLOW |
| 2 | THERMAL SWITCH | YELLOW |
| 3 | *BRAKE | BLACK |
| 4 | *BRAKE | BLACK |
| ⊥ | GROUND | ----- |
| U | PHASE U | BLACK OR T1 |
| V | PHASE V | RED OR T2 |
| W | PHASE W | BLUE OR T3 |

* 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 | ---- |



CD1388A02



16 PIN CONNECTOR
THREADED CRIMP PIN STYLE
16- #20 CONTACT SIZE
(CRIMP SIDE)

| | | | |
|----------------|--------|-------------------------------|----------------|
| REV. DESC: NEW | | | |
| REV. LTR: - | BY: FN | REVISED: 10: 20:15 03/25/2004 | TDR: 328341 |
| CD1388A02 | | FILE: AAA00115200 | REF: CD1388A02 |
| | | MTL: - | |

BALDOR ELECTRIC Co.

CONN DIAG KOYO ENCODER C/T, K.O. BOX & 16 PIN CONNECTOR

CD1388A02

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: ENJFDO |

BALDOR ELECTRIC Co.

3PH, SV, 3 LEADS, WYE CONNECTED

CD0006A02