ABB BALDOR RELIANCE

Customer information packet

BSM90N-375AF

BSM90N-375AF T'STAT ENCODER

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11/20/2026 10:26:22 AM

Specifications

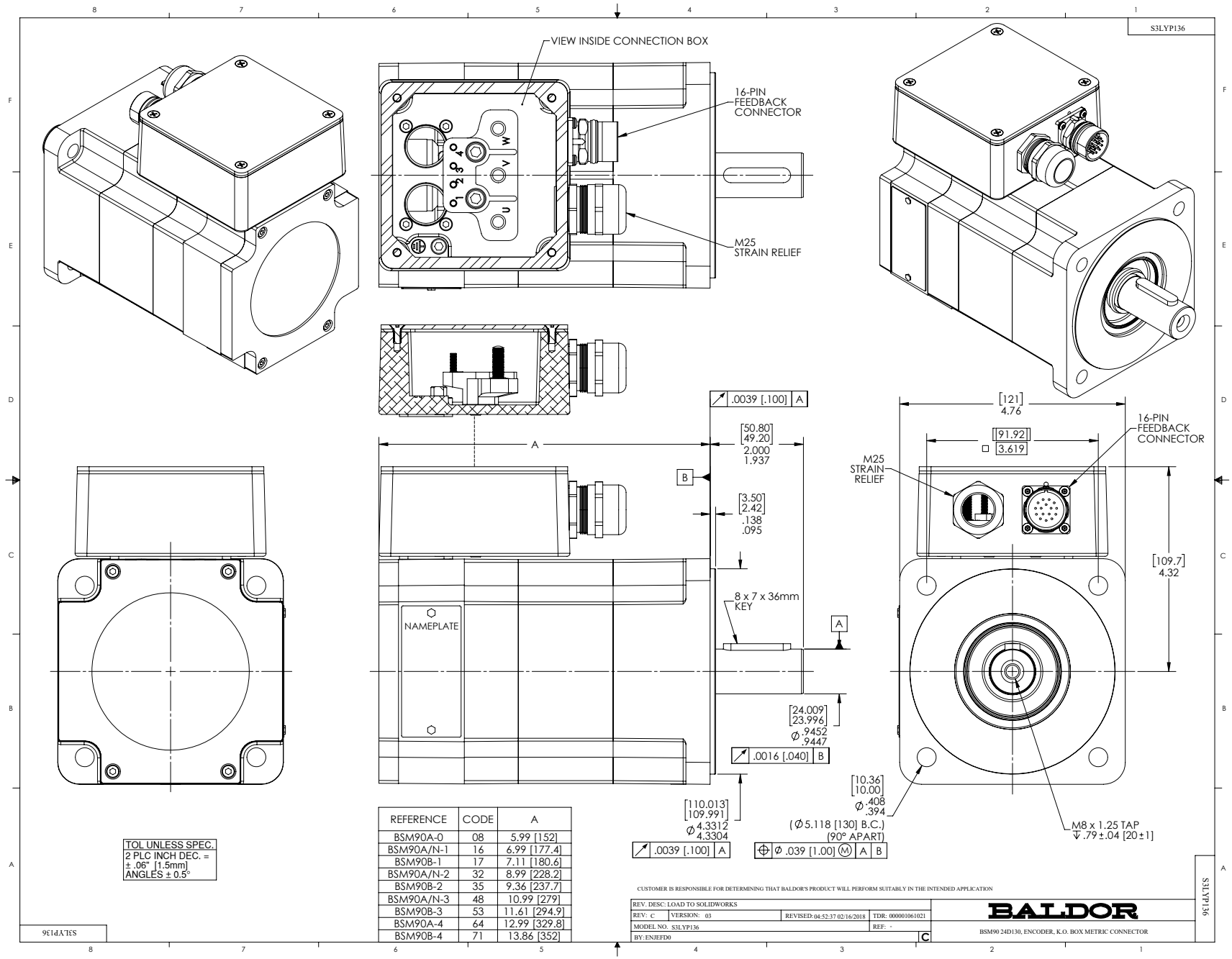
Enclosure	TENV
Nameplate Speed	4000
Agency Approvals	CE
	CSA
	TUV
	UR
Base Indicator	Bracket Mounted
Dimensional Drawing Numbers	S3LYP136
Frame	D130D
Frame Material	Exposed Laminations
Motor Lead Quantity/Wire Size	3 @ 14 AWG
Motor Standards	IEC
Mounting Arrangement	F1
Nameplate Output	3.46KW
Shaft Rotation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

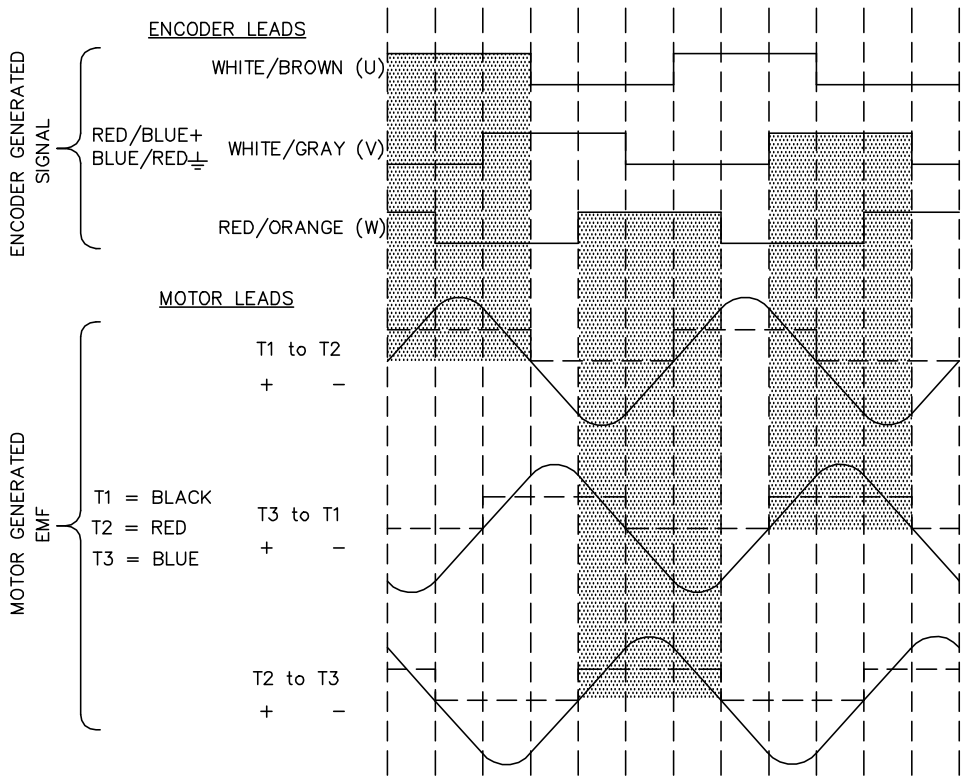


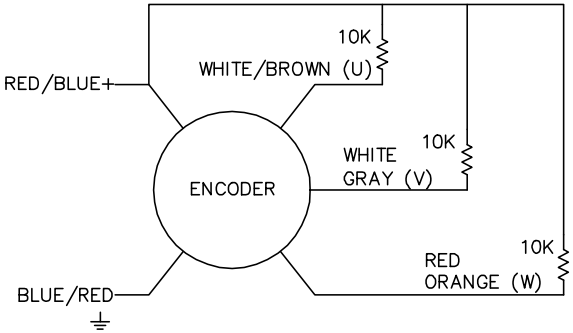
REFERENCE	CODE	A
BSM90A-0	08	5.99 [152]
BSM90A/N-1	16	6.99 [177.4]
BSM90B-1	17	7.11 [180.6]
BSM90A/N-2	32	8.99 [228.2]
BSM90B-2	35	9.36 [237.7]
BSM90A/N-3	48	10.99 [279]
BSM90B-3	53	11.61 [294.9]
BSM90A-4	64	12.99 [329.8]
BSM90B-4	71	13.86 [352]

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

REV. DESC: NEW			BALDOR ELECTRIC Co.
REV. LTR: –	BY: FN	REVISED: 11:22:25 03/24/2004	TDR: 328266
CD1338A01		FILE: AAA00115153	REF: CD1338A01
		MTL: –	BLDC COMMUTATION KOYO ENC.(CHANNELS TO MATCH TMGW/SUMTAK)

CD1338A01

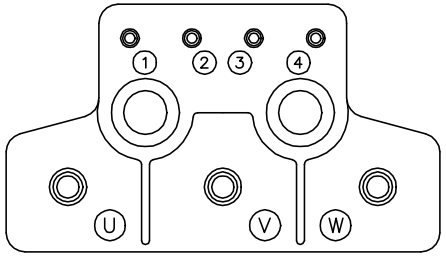
CD1388A02

MOTOR CONNECTIONS

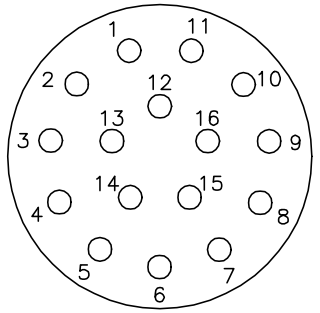
TERMINAL LABEL	FUNCTION	INTERNAL WIRE MARKING
1	THERMAL SWITCH	YELLOW
2	THERMAL SWITCH	YELLOW
3	✳BRAKE	BLACK
4	✳BRAKE	BLACK
⏚	GROUND	-----
U	PHASE U	BLACK OR T1
V	PHASE V	RED OR T2
W	PHASE W	BLUE OR T3

✳ WHEN REQUIRED





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



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

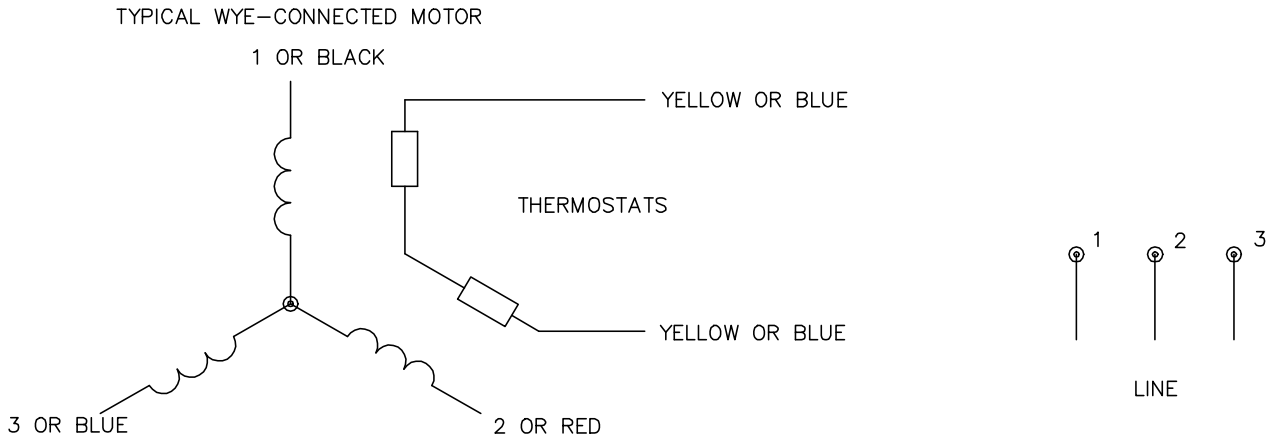
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REV. DESC: NEW			
REV. LTR: –	BY: FN	REVISED: 10:20:15 03/25/2004	TDR: 328341
CD1388A02		FILE: AAA00115200	REF: CD1388A02
		MTL: –	

BALDOR ELECTRIC Co.

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

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			BALDOR ELECTRIC Co.
REV. LTR: D	VERSION: 03	TDR: 000000414937	
CD0006A02	FILE: \AAA\00068\606	REVISED: 10:02:28 11/21/2006	3PH, SV, 3 LEADS, WYE CONNECTED
	MTL: –	BY: ENJEFDO	

CD0006A02