

# **ABB BALDOR RELIANCE III**



## **Customer information packet** BSM90C-3150AF

BSM90C-3150AF T'STAT, ENCODER

**Specifications**

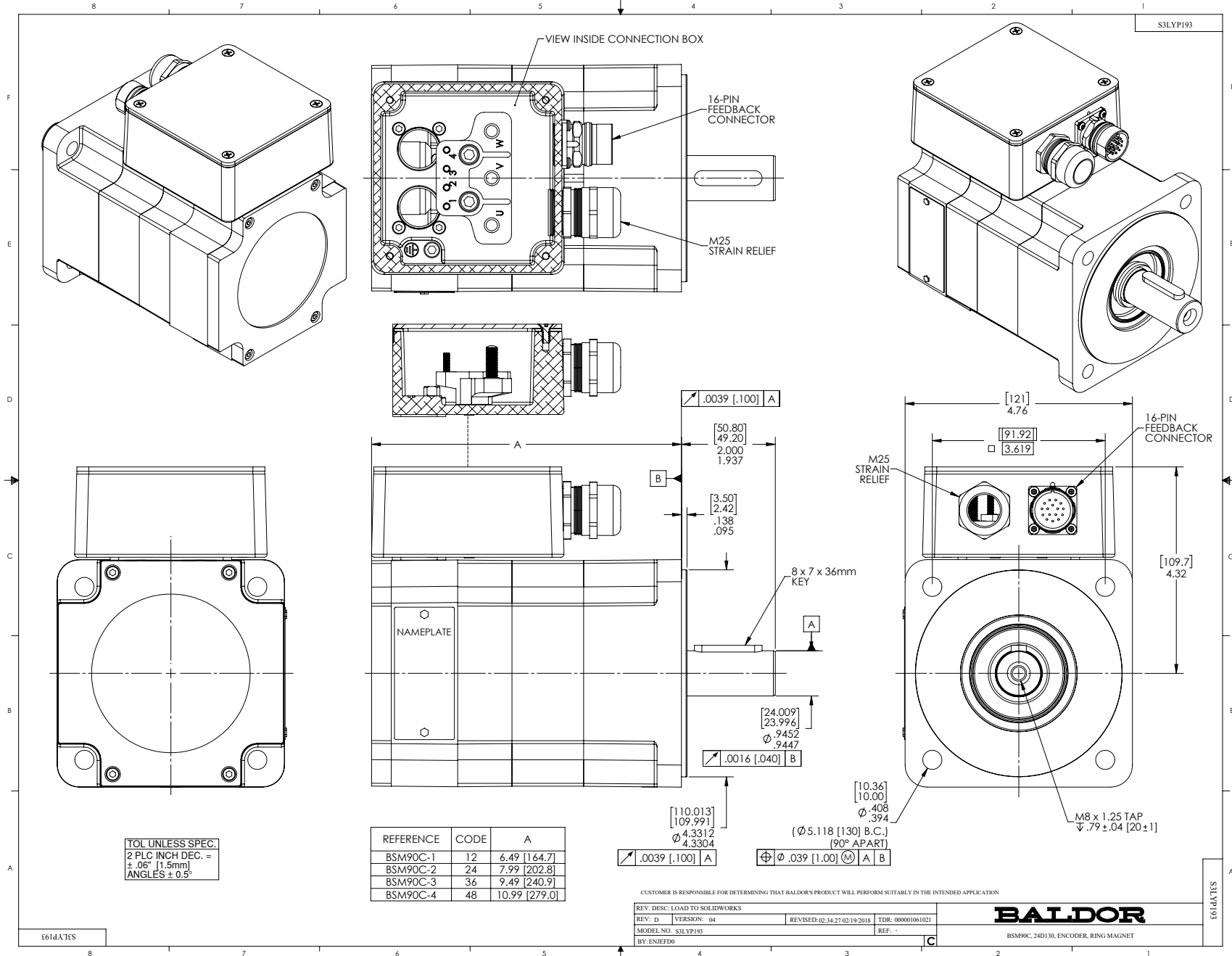
<b>Enclosure</b>	TENV
<b>Nameplate Speed</b>	4000
<b>Agency Approvals</b>	CE CSA TUV UR
<b>Base Indicator</b>	Bracket Mounted
<b>Dimensional Drawing Numbers</b>	S3LYP193
<b>Frame</b>	D130D
<b>Frame Material</b>	Exposed Laminations
<b>Motor Lead Quantity/Wire Size</b>	3 @ 16 AWG
<b>Motor Standards</b>	IEC
<b>Mounting Arrangement</b>	F1
<b>Nameplate Output</b>	1.66KW
<b>Shaft Rotation</b>	Reversible

**Part Detail**

<b>Revision</b>	AT
<b>Type</b>	AC
<b>Mech. spec.</b>	S3P193
<b>Base</b>	
<b>Status</b>	PRD/A
<b>Elec. spec.</b>	S3WGW082
<b>Layout</b>	S3LYP193
<b>Eff. date</b>	10-15-2025
<b>CD Diagram</b>	CD0006A02
<b>Poles</b>	08
<b>Leads</b>	3#16
<b>Proprietary</b>	False
<b>Created date</b>	01-01-0001

**Nameplate**

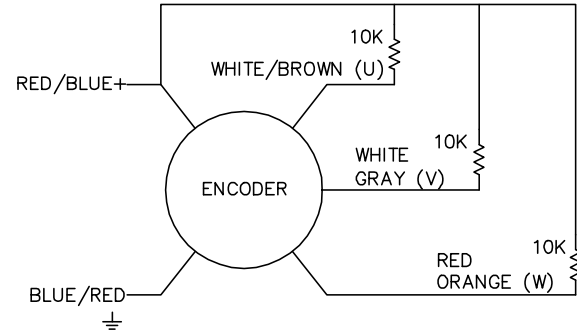
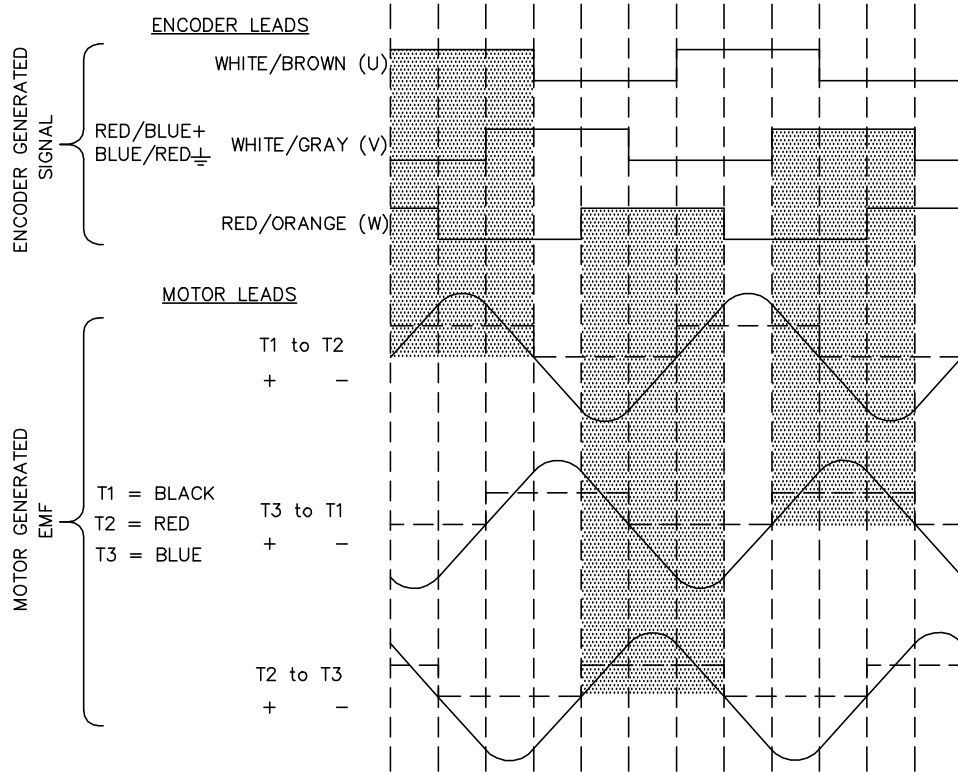
<b>NP2863L</b>				
<b>CAT.NO.</b>				
<b>SPEC.</b>	S3P193W082G1			
<b>MFG.NO.</b>				
<b>TORQ CONT STALL</b>	7.8 NM			
<b>CUR CONT STALL/A RMS</b>	6.04			
<b>POWER</b>	1.66KW			
<b>RATED SPEED/RPM(1/MIN)</b>	2000			
<b>RATED BUS VOLTS</b>	320			
<b>PEAK CUR/A RMS</b>	18.1			
<b>MAX SPEED/RPM(1/MIN)</b>	6000			
<b>IP</b>	54	<b>IC</b>	410	<b>WT.</b> 15.8
<b>CLASS</b>	F	<b>25C RATED</b>		



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.**

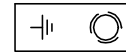
BLDC COMMUTATION KOYO ENC.(CHANNELS TO MATCH TMGW/SUMTAK)

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

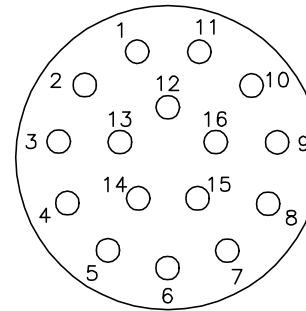
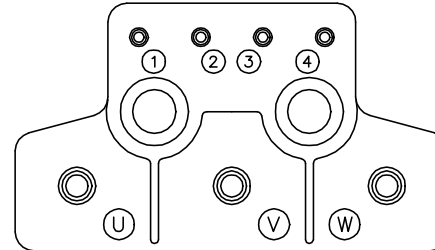
\* WHEN REQUIRED

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	----



GROUND  
BOSS

CD1388A02



16 PIN CONNECTOR  
THREADED CRIMP PIN STYLE

16- #20 CONTACT SIZE  
(CRIMP SIDE)

CD1388A02

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		
REV. LTR: D	VERSION: 03	TDR: 000000414937
CD0006A02	FILE: \AAA\00068\606	REVISED: 10:02:28 11/21/2006
	MTL: -	BY: ENJEFD0

**BALDOR ELECTRIC Co.**

3PH, SV, 3 LEADS, WYE CONNECTED

CD0006A02