

# BALDOR® • RELIANCE

## Product Information Packet

# BSM90N-1150AF

## BSM90N-1150AF T'STAT ENCODER

Specs			
Enclosure:	TENV		
Nameplate Speed:	2000		
Agency Approvals:	CE		
	CSA		
	TUV		
	UR		
	WEEE		
Base Indicator:	Bracket Mounted		
Dimensional Drawing Numbers:	S3LYP136		
Frame:	D130D		

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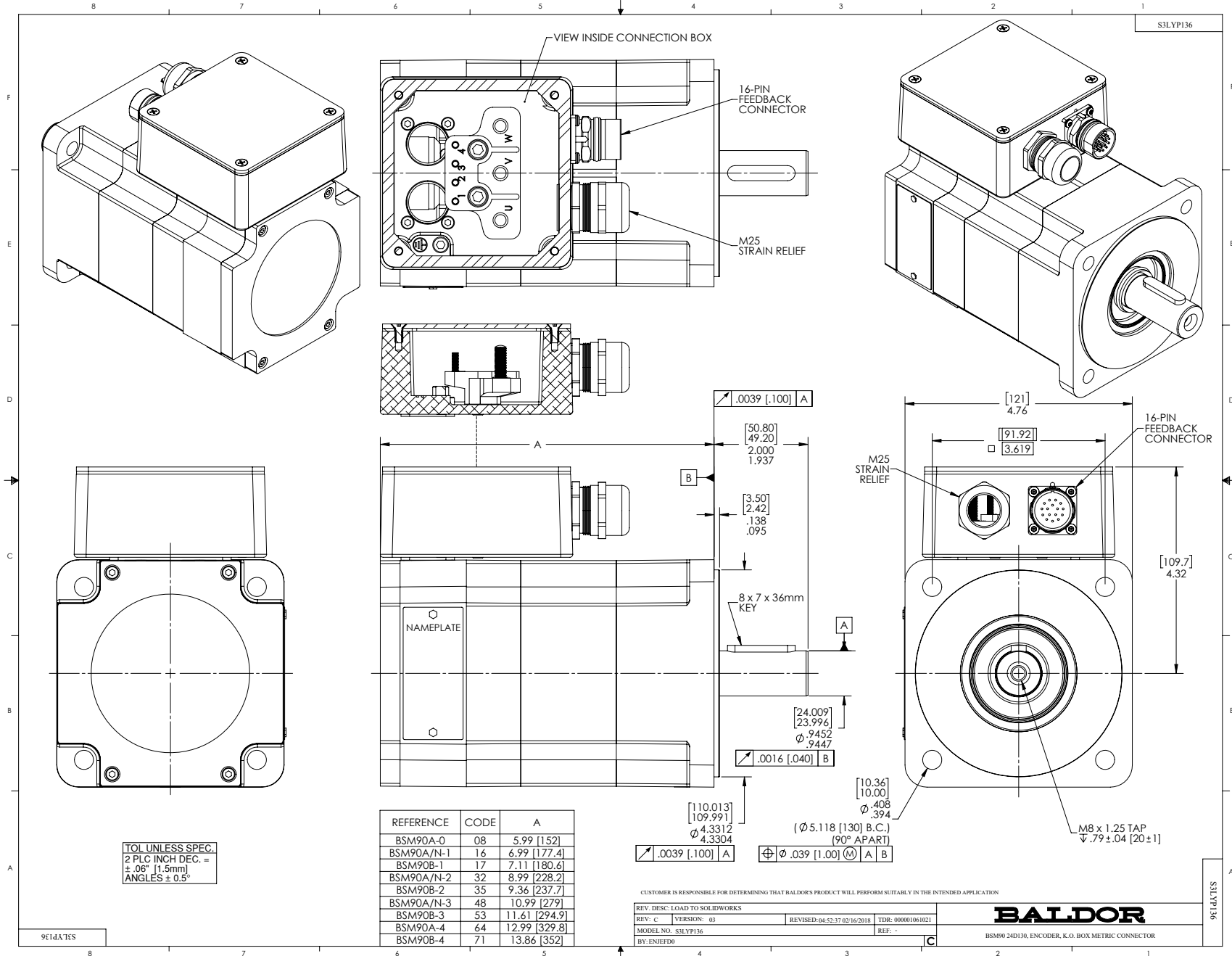
<b>Frame Material:</b>	Exposed Laminations		
<b>Motor Lead Quantity/Wire Size:</b>	3 @ 16 AWG		
<b>Mounting Arrangement:</b>	F1		
<b>Nameplate Output:</b>	1KW		
<b>Shaft Rotation:</b>	Reversible		
<b>Motor Standards:</b>	IEC		

<b>Nameplate NP2863L</b>	
<b>CAT.NO.</b>	BSM90N-1150AF
<b>BLANK</b>	
<b>SPEC.</b>	S3P136W058
<b>MFG.NO.</b>	
<b>TORQ CONT STALL</b>	6 NM
<b>CUR CONT STALL/A RMS</b>	4.03
<b>POWER</b>	1KW
<b>RATED SPEED/RPM</b>	2000
<b>RATED BUS VOLTS</b>	300
<b>PEAK CUR/A RMS</b>	14.5
<b>MAX SPEED/RPM</b>	7000
<b>CLASS</b>	F
<b>AMB.</b>	25
<b>APRV-CE</b>	

Parts List		
Part Number	Description	Quantity
SA098029	SA S3P136W058	1.000 EA
RA090294	RA S3P136W058	1.000 EA
WD1000A30	62306-2 AMP SPLICE = 20M/RL (4,320,000/Y	4.000 EA
WD1000D140	TRM,T&B #B71,RING,18-14,.25,NON-INSL	3.000 EA
RM1020A03	O-RING, -045 BUNA-N, .070 CS X 3.989 ID	1.000 EA
84YN0030JE006	SHCS 3MM X 6MM CARBON STEEL W/EPOXY LOCK	2.000 EA
HW1020A03	WASHER, FLAT 3MM	2.000 EA
HW1021A03	WASHER, M3 SPLIT LOCK	2.000 EA
S3CB3002E01	BSM90 BLDC FEEDBACK COVER LIGHT GREY	1.000 EA
84YN0040J020	M4 X 20MM SHC SCREW	4.000 EA
HW5002A94	RET RING 52MM INTERNAL BEVELED F/205 BRG	1.000 EA
BG6205E03	6205 D.SL,C3,POLYREX EM	1.000 EA
HW5100A43	WASHER WAVE (W1543-020) ZINC PLATED 40MM	2.000 EA
HW2511A101	KEY, 8MM X 7MM X 36MM W/ROUNDED ENDS	1.000 EA
HA1038	SYNCHRO CLAMP, BLDC RESOLVER/HALL MTG	1.000 EA
OE0323A03	ENCODER, EPC, 2500L,8 POLE, 40MM BC, CE	1.000 EA
S4CB5001A41EPC	TERM BOX ASSY BSM90-100 M25 TAP WITH	1.000 EA
S3EP3504C07	FR EP BSM90, TERMINAL BOX MTG W/ ENCODER	1.000 EA
84YN0040J020	M4 X 20MM SHC SCREW	4.000 EA
HW1021A04	WASHER, M4 SPLIT LOCK	4.000 EA
RM1020A03	O-RING, -045 BUNA-N, .070 CS X 3.989 ID	1.000 EA
WD1000D84	TERMINAL, NON-INS RING, 22-18 GA, BULK P	2.000 EA
99XM0356A02	STICK SCREW, #3-56 X .125 LG. HEX (MARK	2.000 EA
MJ5004A02	P-2 FRANKLIN RESIN KIT	0.001 GA

<b>Parts List (continued)</b>		
<b>Part Number</b>	<b>Description</b>	<b>Quantity</b>
MJ5004A03	S-C FRANKLIN ACTIVATOR	0.001 QT
MJ5004A27	RP 4005 RESIN, FOR ROTOR FIBERGLASS WIND	0.001 EA
MJ5004A28	REN 1500H HARDENER, FOR ROTOR FIBERGLASS	0.003 GA
ME3001A02	449S2 FIBERGLASS 20 END ROVING AA-750	0.015 LB
MG2000A17	RUST INHIBITOR PART # SRPO #20	0.001 GA
MG1025L02	WILKOFAS, 776.06 TEXTURE (BSM) BLACK	0.003 QT
MG1025Z09	CATALYST #060.06 WILCO	0.003 QT
MG1500Y08	PRIMER-WILKOPON (603.08A)YELLOW PRIMER W	0.003 QT
MG1025Z08	WILKO 603.08B PRIMER REDUCER TDR# 72361	0.003 QT
NP2863L	NAMEPLATE BSM90/100 ALUM, LASER ETCHED	1.000 EA
PK3083T	STYROFOAM PACKING CRADLE	1.000 EA
27PA1001	PKG GRP, PRINT PK1027A06	1.000 EA
LB1534	MYLAR CE WARNING LABEL FOR SERVO MOTORS	1.000 EA
PK3088	MICROFOAM, 8"X"8 PERF. SHEETS 5,400/RL	1.000 EA
LB1594	MYLAR WEEE WHEELIE BIN SYMBOL FOR CE MOT	1.000 EA

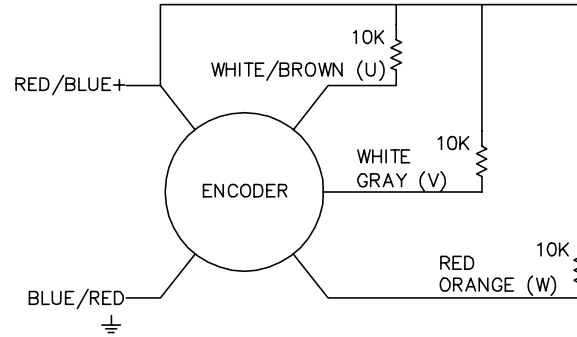
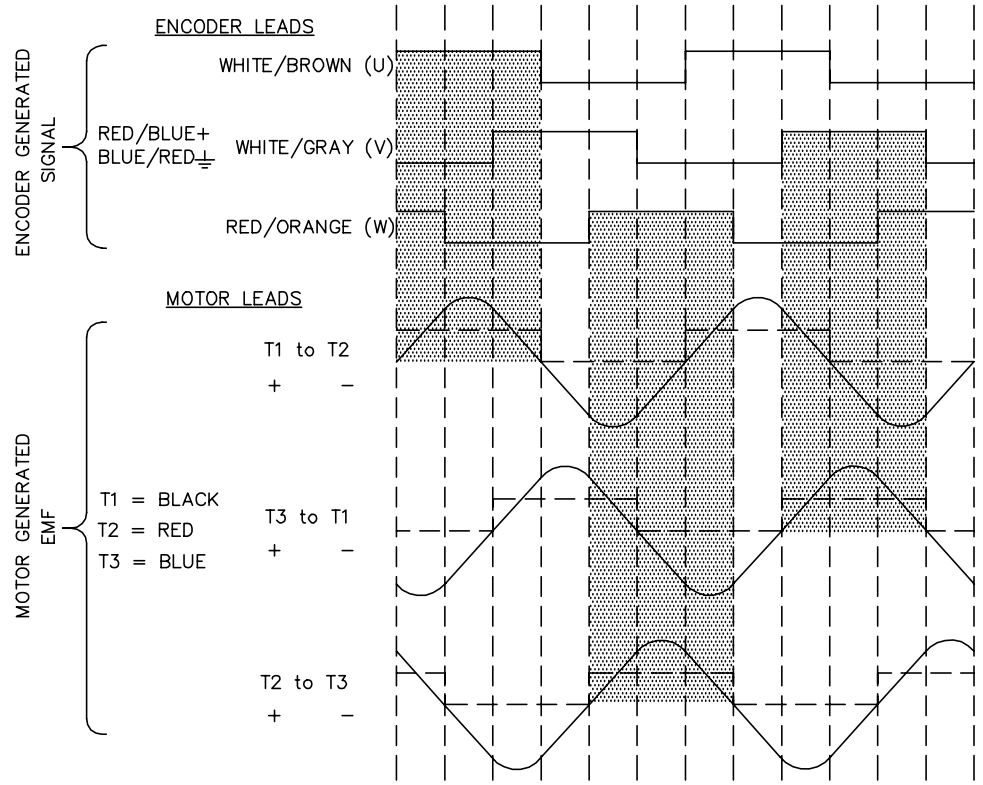
No performance data has been  
assigned to this product.



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

**BALDOR ELECTRIC Co.**

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

CD1338A01



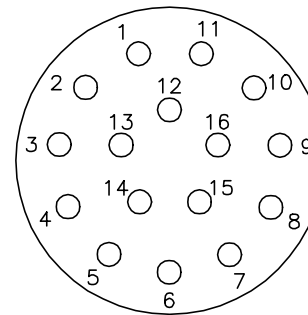
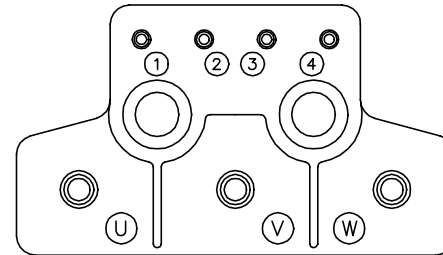
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MOTOR CONNECTIONS

TERMINAL LABEL	FUNCTION	INTERNAL WIRE MARKING
1	THERMAL SWITCH	YELLOW
2	THERMAL SWITCH	YELLOW
3	*BRAKE	BLACK
4	*BRAKE	BLACK
$\perp$	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	---



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

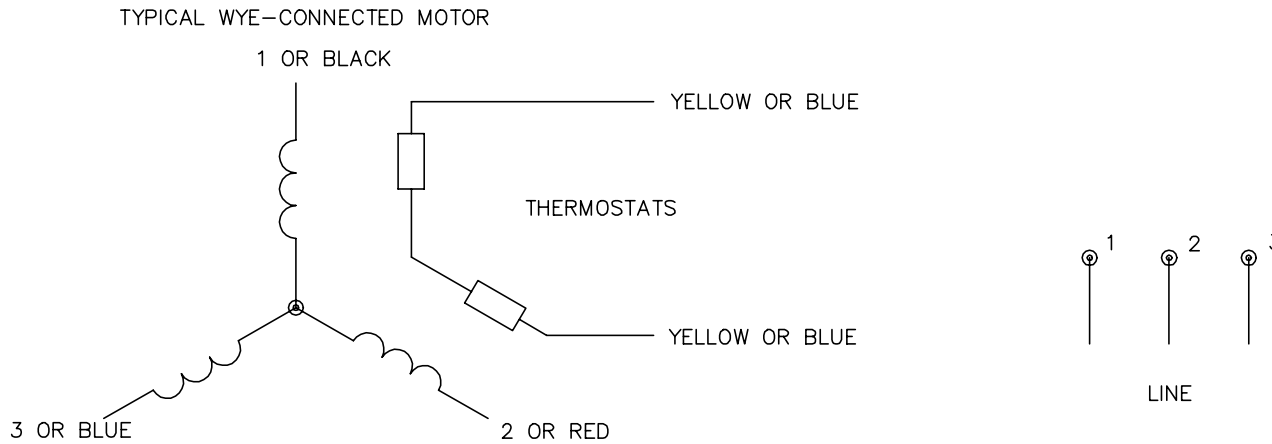
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MTL: -

**BALDOR ELECTRIC Co.**

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

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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			
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Z0V9000003 CD0006A02	FILE: \AAA\00068\606	REVISED: 10:02:28 11/21/2006	
	MTL: -	BY: ENJFDO	

**BALDOR ELECTRIC Co.**

3PH, SV, 3 LEADS, WYE CONNECTED

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