ABB BALDOR RELIANCE

Customer information packet

BSM80C-275RF

BSM80C-275RF T'STAT ENCODER

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11/20/2026 7:08:13 AM

Specifications

Enclosure	TENV
Nameplate Speed	4000
Agency Approvals	CE
	CSA
	TUV
	UR
Base Indicator	Bracket Mounted
Dimensional Drawing Numbers	S2LYP345
Frame	D100D
Frame Material	Exposed Laminations
Motor Lead Quantity/Wire Size	3 @ 18 AWG
Motor Standards	IEC
Mounting Arrangement	F1
Nameplate Output	0.92KW
Shaft Rotation	Reversible

Part Detail

Revision	W
Type	AC
Mech. spec.	S2P345
Base	
Status	PRD/A
Elec. spec.	S2WGW048
Layout	S2LYP345
Eff. date	07-15-2025
CD Diagram	CD0006A02
Poles	04
Leads	3#18
Proprietary	False
Created date	11-01-2007

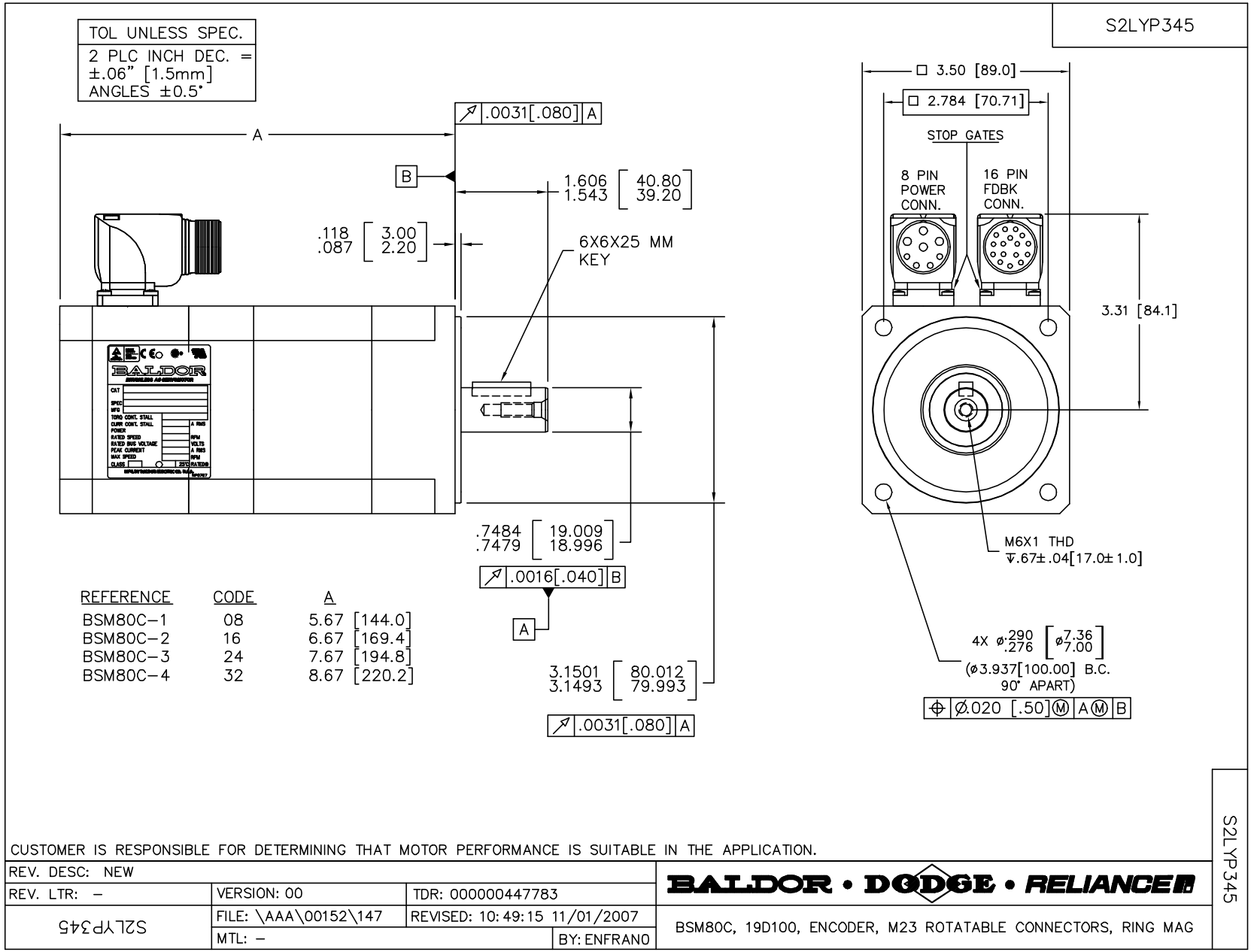
Nameplate

NP2864L									
CAT.NO.	BSM80C-275RF								
BLANK									
SPEC.	S2P345W048								
MFG.NO.									
TORQ CONT STALL	2.4 NM								
CUR CONT STALL/A RMS	3.2								
POWER	0.92KW								
RATED SPEED/RPM(1/MIN)	4000								
RATED BUS VOLTS	300								
PEAK CUR/A RMS	10.5								
MAX SPEED/RPM(1/MIN)	7000					**AMB.**	25		
CLASS	F	**IP**	54	**IC**	410	**MOTOR MASS**		5.4	

Parts List

Part number	Description	Quantity
SA164563	SA S2P345W048	1.000 ea
RA152993	RA S2P345W048	1.000 ea
WD1000A33	62307-2 AMP TERM,30K/REELREPLACING A19)3	4.000 ea
RM1020A10	O-RING, -041 BUNA-N, .070 CS X 2.989 ID	1.000 ea
84YN0030L006	SHCS 3MM X 6MM W/NYLON PATCH	2.000 ea
HW1020A03	WASHER, FLAT 3MM	2.000 ea
HW1021A03	WASHER, M3 SPLIT LOCK	2.000 ea
HW5002A93	RET RING #NT002-145 BEVELED	1.000 ea
BG6904C03	6904/61904 D.SH,C3,POLYREX EM	1.000 ea
HW5109A04	WASHER, SPLIT WAVE SPRING, FOR 32MM BORE	2.000 ea
HW2512E109	KEY, 6 X 6 X 25MM ROUND ENDED	1.000 ea
S2EP3907B39	ENDPLATE, BSM80, FR BRG, ENCODER, M23 NP	1.000 ea
84YN0040J020	M4 X 20MM SHC SCREW	4.000 ea
HW1021A04	WASHER, M4 SPLIT LOCK	4.000 ea
RM1020A10	O-RING, -041 BUNA-N, .070 CS X 2.989 ID	1.000 ea
62YW0025A007	EPOXY LOCK SCREW,M2.5X7 TORX PAN HD TAPT	1.000 ea
84YN0040J014	4MM X 14MM SHCS	4.000 ea
WD1455A16	CONNECTOR ROTATABLE, 30A POWER, M23, 8 P	1.000 ea
WD1455A18	CONNECTOR ROTATABLE, ENCODER, M23, 16P I	1.000 ea
09YN0030S008	SCREW, M3 X 8MM PHILLIPS PAN HEAD STAINL	8.000 ea
MJ5004A05	#242-21 LOCTITE GENERAL PURPOSE MED. STR	0.001 ea
99XM0356A02	STICK SCREW, #3-56 X .125 LG. HEX (MARK	2.000 ea
MG2000A17	RUST INHIBITOR PART # SRPO #20	0.001 ga
OE0323A02	ENCODER, EPC, 2500L,4 POLE, 40MM BC, CE	1.000 ea
LD6115A07	CABLE ASSY, EPC & KOYO ENC 12" *250 min*	1.000 ea
LD2200A08	CUT LEAD GREEN&YELLOW #18 8 INCH W/ RIN	1.000 ea
MG1025L02-1	WILKOFAST, 776.06 TEXTURE (BSM) BLACK	0.002 ga
MG1025Z09	CATALYST #060.06 WILCO	0.002 qt
MG1500Y08	PRIMER-WILKOPON (603.08A)YELLOW PRIMER W	0.002 qt
MG1025Z08	WILKO 603.08B PRIMER REDUCER TDR# 72361	0.002 qt
S2CB3502A08	COVER, FEEDBACK, OMIT LOGO, COOL GRAY	1.000 ea

NP2864L	NAMEPLATE BSM80 ALUM, LASER ETCHED	1.000 ea
25PA1008	PKG GRP, BSM 50, 63, & 80	1.000 ea
LB1534	MYLAR CE WARNING LABEL FOR SERVO MOTORS	1.000 ea

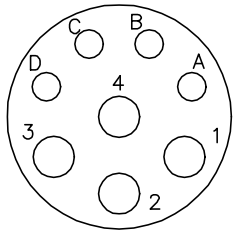

TOL UNLESS SPEC.
2 PLC INCH DEC. = ±.06" [1.5mm]
ANGLES ±0.5°
S2LYP345
.0031[.080] A
A
B
1.606 [40.80]
1.543 [39.20]
.118 [3.00]
.087 [2.20]
6X6X25 MM KEY
.7484 [19.009]
.7479 [18.996]
.0016[.040] B
A
3.1501 [80.012]
3.1493 [79.993]
.0031[.080] A
REFERENCE CODE A
BSM80C-1 08 5.67 [144.0]
BSM80C-2 16 6.67 [169.4]
BSM80C-3 24 7.67 [194.8]
BSM80C-4 32 8.67 [220.2]
□ 3.50 [89.0]
□ 2.784 [70.71]
STOP GATES
8 PIN POWER CONN.
16 PIN FDBK CONN.
3.31 [84.1]
M6X1 THD
↧.67±.04[17.0±1.0]
4X ø.290 [ø7.36]
.276 [7.00]
(ø3.937[100.00] B.C.
90° APART)
Ø.020 [.50]Ⓜ A Ⓜ B
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT MOTOR PERFORMANCE IS SUITABLE IN THE APPLICATION.
REV. DESC: NEW
REV. LTR: –
VERSION: 00
TDR: 000000447783
FILE: \AAA\00152\147
REVISED: 10:49:15 11/01/2007
MTL: –
BY: ENFRANO
S2LYP345
BALDOR • DODGE • RELIANCE
BSM80C, 19D100, ENCODER, M23 ROTATABLE CONNECTORS, RING MAG
S2LYP345

CD1297A04

MOTOR CONNECTIONS

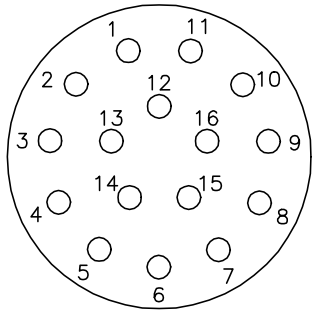
PIN	FUNCTION	INTERNAL WIRE COLOR
A	*THERMAL SWITCH	YELLOW
B	*THERMAL SWITCH	YELLOW
C	*BRAKE	BLACK
D	*BRAKE	BLACK
1	U	BLACK
2	GROUND	GREEN OR **GREEN/YELLOW
3	W	BLUE
4	V	RED

*WHEN REQUIRED
**CE MOTORS REQUIRE GREEN/YELLOW GROUND



8 PIN MOTOR CONNECTOR
THREADED CRIMP PIN STYLE

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)

CD1297A04

REV. DESC: ADD CE NOTE AND GREEN/YELLOW GROUND		
REV. LTR: A	VERSION: 01	TDR: 000001192301
FILE: \AAA\00115\154	REVISED: 02:31:08 06/13/2022	BY: ENDANDO
MTL: –		

BALDOR - RELIANCE®

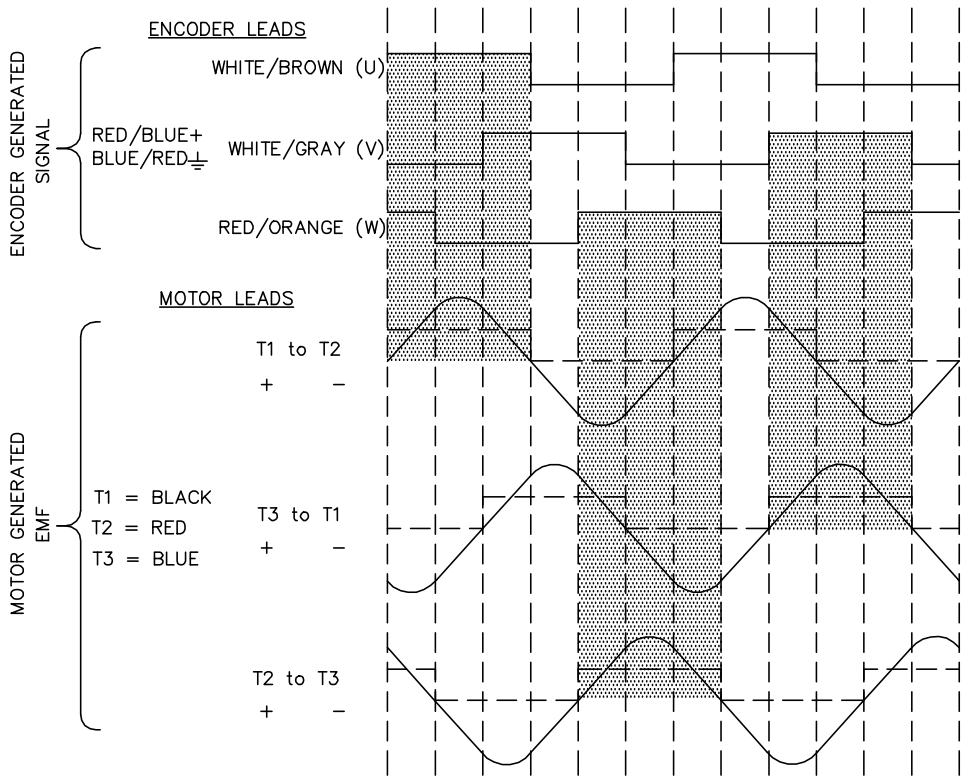
KOYO ENCODER (CHANNELS TO MATCH TMGW/SUMTAK OUTPUT)

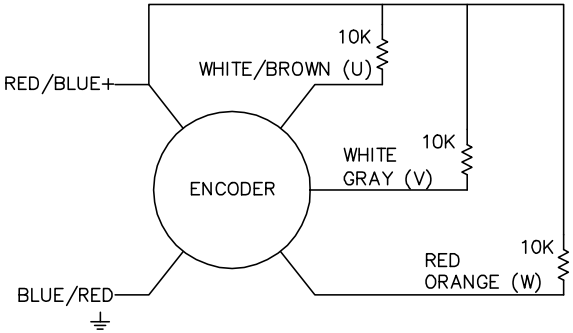
SH 1 of 1

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



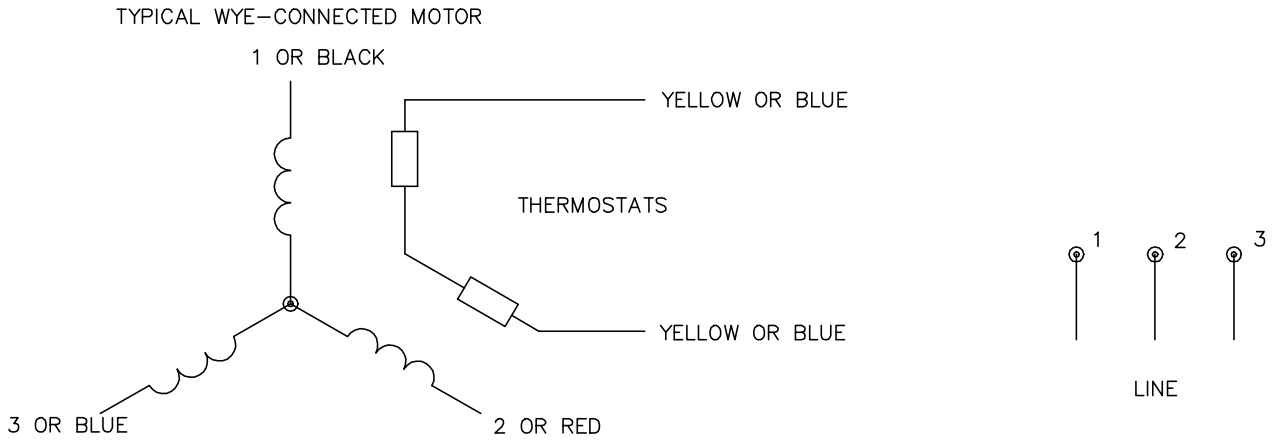


NOTE:
CCW ROTATION VIEWING
MOTOR SHAFT END

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

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