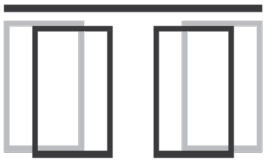
APPLICATION NOTE

GENERAL DOOR CONTROL WIRING MATRIX FOR SLIDING DOORS



PURPOSE STATEMENT:

The purpose of this document is to provide a matrix of sliding door controls and their associated wiring terminals to assist in the proper field connections of BEA products.

HOW TO USE THIS WIRING MATRIX:

1. Determine which door control is being used and locate it on the following page.

2. Make proper wire connections based on the description of each column.

   EX: When wiring the activation sensor to a Besam 3000 door control, connect the sensor's COM wire to terminal 13 on the door control for Interior Activation.

	POWER		INTERIOR ACTIVATION		EXTERIOR ACTIVATION	
	+	-	COM	N.O.	COM	N.O.
BESAM 3000	12 – 24 VAC ±10% 12 – 35 VDC ±10%		18	17	20	19
BESAM 4000	1	2	TB1-6	TB1-5	TB108	TB1-7

3. If you are unsure which wire connects with which terminal, check the product's User's Guide for a Wiring Color Guide that can be used to pair with the top row of the matrix. Simply align the color guide from the User's Guide with the top of the matrix on the following page to reveal the wire color associated with the description.

PLACE COLOR BAR HERE

	POWER		INTERIOR ACTIVATION		EXTERIOR ACTIVATION		INTERIOR SAFETY		EXTERIOR SAFETY		INTERIOR TEST		EXTERIOR TEST	
	+	-	COM	N.O.	COM	N.O.	COM	N.O. / N.C.	COM	N.O. / N.C.				
BESAM 3000	12 – 24 VAC ±10% 12 – 35 VDC ±10%		18	17	20	19	18	17	20	19	*Monitoring not supported.*			
BESAM 4000	1	2	TB1-6	TB1-5	TB108	TB1-7	18	17	20	19	*Monitoring not supported.*			
BESAM AMD I	1	6	6, 11, 16	2	6, 11, 16	4	6, 11, 16	8	6, 11, 16	9	*Monitoring not supported.*			
BESAM AMD II	10	11	1, 5, 11	13	1, 5, 11	12	1, 5, 11	7	1, 5, 11	9	*Monitoring not supported.*			
BESAM UNISLIDE	3, 9	4, 10	1	2	4	5	10	11	10	12	13	17	13	17
BESAM SL 500	7, 14	8, 15	8	16	15	5	8	15	15	11	13	17	13	17
DOOR CONTROL DC 1	12 – 24 VAC ±10% 12 – 35 VDC ±10%		JS-3	J5-4	J5-7	J5-8	J5-10	J5-9	J5-10	J5-9	J8 Sens Mon	J8 COM	J8 Sens Mon	J8 COM
DOORTRONICS CONDOR	12 – 24 VAC ±10% 12 – 35 VDC ±10%		L-INNER	K-INNER	J-OUTER	I-OUTER	3-GND	C-INNER	3-GND	C-OUTER	*Monitoring not supported.*			
DORMA ESA	7	4	1	5	4	6	4	2	4	2	22	23	27	28
DORMA ESA II	14, 17	16, 19	19	18	16	15	23	21	28	26	22	23	27	28
DORMA ESA 200-400	12 – 24 VAC ±10% 12 – 35 VDC ±10%		4	5	4	6	GND	2	GND	2	*Monitoring not supported.*			
DORMA MAGNEO	1	3	3	42	3	41	3	11	3	15	*Monitoring not supported.*			
DOR-O-MATIC ASTROSLIDE	12 – 24 VAC ±10% 12 – 35 VDC ±10%		BROWN	BROWN	BROWN	BROWN	WHITE	BROWN	WHITE	BROWN	*Monitoring not supported.*			
DOR-O-MATIC 96K	BROWN 9	RED 7	2	1	9	10	8	9	8	10	*Monitoring not supported.*			
GILDOR SLM	6	7	8	9	8	10	14	17	14	18	*Monitoring not supported.*			
GYROTECH/NACBO 1100	12 – 24 VAC ±10% 12 – 35 VDC ±10%		RED	BLACK	RED	BLACK	RED	BLACK	RED	BLACK	*Monitoring not supported.*			
GYROTECH/NABCO 1175	12 – 24 VAC ±10% 12 – 35 VDC ±10%		RED 7	BLACK 61	RED 7	ORANGE 62	RED 7	WHITE 6B	RED 7	WHITE 6B	*Monitoring not supported.*			
HORTON 2150	CN3	CN3	4, 11, 15	2	4, 11, 15	3	7	6	7	6	*Monitoring not supported.*			
HORTON 2160	12 – 24 VAC ±10% 12 – 35 VDC ±10%		WHITE	BLACK	WHITE	BLACK	WHITE	GREEN	WHITE	GREEN	*Monitoring not supported.*			
HUNTER DS18	12 – 24 VAC ±10% 12 – 35 VDC ±10%		TS-1 COM	TS-1 SS	TS-1 COM	TS-1 SS	TS-1 COM	TS-1 SB	TS-1 COM	TS-1 SB	*Monitoring not supported.*			
HUNTER ROTARY / KEYSWITCH	7 + 24 VDC	1 - 0 VDC	TS1 ORANGE	SWITCH BROWN	SWITCH RED	SWITCH BROWN	TS1 ORANGE	TS-1 SB PINK	TS1 ORANGE	TS-1 SB PINK	*Monitoring not supported.*			
HUNTER 3 POS. SWITCH	7 + 24 VDC	1 - 0 VDC	TS1 ORANGE	SWITCH BROWN	TS1 ORANGE	SWITCH ORANGE	TS1 ORANGE	TS-1 SP PINK	TS1 ORANGE	TS-1 SB PINK	*Monitoring not supported.*			
KM 1100 / Z	12 – 24 VAC ±10% 12 – 35 VDC ±10%		GREEN	RED	GREEN	RED	GREEN	YELLOW	GREEN	YELLOW	*Monitoring not supported.*			
RECORD 5100 (4-WIRE)	2, 22	1, 21	2	22	3	23	22	23	2	3	*Monitoring not supported.*			
RECORD 5100 (6-WIRE)	2, 22	1, 21	2	23	2	3	6	EXT. SENSOR BROWN	6	INT. SENSOR BLUE	*Monitoring not supported.*			
RECORD SYSTEM 20	13	15	13-INNER	14-INNER	17-OUTER	16-OUTER	***Refer to BEA product User's Guide and OEM manual / wiring diagrams to determine proper wiring connections.***							
STANLEY OLD-STYLE I/0 BOARD	10, 20	11, 21	22	23	12	13	36	33	36	33	*Monitoring not supported.*			
STANLEY NEW STYLE I/O BOARD	TB2 - 1, 5	TB2 - 2, 6	3	4	7	8	TB3-3	TB3-8	TB3-3	TB3-8	*Monitoring not supported.*			
STANLEY MC 521 / 521 PRO	TB4 - 2, 6	TB4 - 1, 5	3	4	7	8	TB3-7	TB3-8	TB3-7	TB3-8	TB3-5	TB3-5	TB4-5	TB6-7
TUCKER RETROFIT	J3 GRAY	J3 BLACK	L	K	J	I	H	G	H	G	*Monitoring not supported.*			
TORMAX TLP/TCP 51LC	5	6	1	2	3	4	1	2	3	4	*Monitoring not supported.*			
TORMAX TEP/ TLC51&101	10, 5	8, 3	1	2	6	7	1	2	6	7	*Monitoring not supported.*			
TORMAX 9300 / TX9000	A4, A8	A1, A5	C1	C2	C4	C5	C1	A2	C4	A6	A4	A3	A8	A7

BEA, INC. INSTALLATION/SERVICE COMPLIANCE EXPECTATIONS

BEA, Inc., the sensor manufacturer, cannot be held responsible for incorrect installations or inappropriate adjustments of the sensor/device; therefore, BEA, Inc. does not guarantee any use of the sensor outside of its intended purpose.

BEA, Inc. strongly recommends that installation and service technicians be AAADM-certified for pedestrian doors, IDA-certified for doors/gates, and factory-trained for the type of door/gate system.

Installers and service personnel are responsible for executing a risk assessment following each installation/service performed, ensuring that the sensor system installation is compliant with local, national, and international regulations, codes, and standards.

Once installation or service work is complete, a safety inspection of the door/gate shall be performed per the door/gate manufacturer recommendations and/or per AAADM/ANSI/DASMA guidelines (where applicable) for best industry practices. Safety inspections must be performed during each service call – examples of these safety inspections can be found on an AAADM safety information label (e.g. ANSI/DASMA 102, ANSI/DASMA 107).

Verify that all appropriate industry signage and warning labels are in place.

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