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REVISIONS

P	LTR	DESCRIPTION	DATE	DWN	APVD
	A	INITIAL DRAWN	12NOV2019	RV	MB

Electrical Characteristics

Contact Ratings —
DC resistive — 2 amps at 28 volts
DC inductive — 0.5 amps at 28 volts, 200 mH
AC resistive — 0.5 amps at 115 volts, 400 or 60 Hz (enclosure isolated from ground, or enclosure and movable contact at same potential)
AC — 0.125 amps at 115 volts (enclosure at line potential with respect to movable contact)
Low-level — low-level operation at 50 millivolts, 30 µA, 33 ohm miss level

Contact Resistance —
0.050 ohms max.;
0.150 ohms after life test

Life —
100,000 operations at rated loads listed;
1,000,000 operations at low-level loads

Operating Characteristics

Operate Time — 4 ms max.

Release Time — 4 ms max.

Contact Bounce — 1.5 ms

Dielectric Strength —
500 volts rms at sea level;
350 volts rms at 70,000 feet

Insulation Resistance —
1,000 megohms min. over temperature range

Environmental Characteristics

Vibration — 30 G, to 3,000 Hz

Shock — 100 G at 11 ms

Temperature — -65°C to +125°C

Coil Table (All Values DC)* Type 3SBH, 4 Pole Relay — 250 mW Sensitivity: (Code 1)

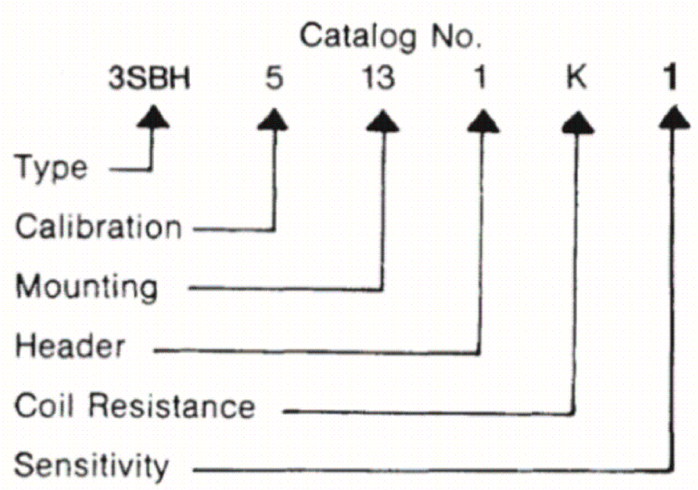
SENSITIVITY CODE: 1					
		Voltage Calibrated, Code: 5			
Coil Code Letter	Coil Resistance at 25C ohms	Suggested Source Volts†	Maximum Operate Volts at 25C	Release Voltage Range at 25C	
				Max.	Min.
B	28 ± 10%	4.0- 7.0	2.7	1.6	0.3
D	73 ± 10%	6.0-11.0	4.2	2.5	0.4
E	115 ± 10%	8.0-14.0	5.4	3.2	0.6
G	280 ± 10%	12 -22.0	8.4	5.0	0.8
H	430 ± 10%	15 -26.0	10.3	6.0	1.0
K	720 ± 10%	20 -35.0	13.5	8.1	1.5
N	1040 ± 10%	26 -46.0	17.5	10.5	1.9

*Values listed are factory test and inspection values. User should allow for meter variations.
†Applicable over the operating temperature range in circulating air.

Example: The relay selected in this example is a 4PDT .150-grid relay, voltage calibrated, end bracket mounting, 0.13 inch solder hook header, 720 ohms coil resistance, and 250 mW sensitivity. By choosing the proper code for each of these relay characteristics, the catalog number is identified as 3SBH5131K1. The letter R following sensitivity code indicates relay received 5000 operation miss-test. Ex. 3SBH5131K1R.

Ordering Instructions

Catalog-selected Relays: The catalog number is derived by choosing the proper CODE for each of the six relay characteristics in the order in which the codes are listed.



THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN RV 12NOV2019	TE Connectivity
DIMENSIONS: INCHES	TOLERANCES UNLESS OTHERWISE SPECIFIED: 0 PLC ± – 1 PLC ± – 2 PLC ± – 3 PLC ± – 4 PLC ± – ANGLES ± –	CHK RV 12NOV2019	NAME 3SBH–SERIES – –
MATERIAL –	FINISH –	APVD MB 12NOV2019	SIZE A3 / CAGE CODE – / DRAWING NO C–3SBH–SERIES / RESTRICTED TO –
		PRODUCT SPEC –	
		APPLICATION SPEC –	
		WEIGHT –	CUSTOMER DRAWING / SCALE NTS / SHEET 1 OF 3 / REV A

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REVISIONS

P	LTR	DESCRIPTION	DATE	DWN	APVD
	–	SEE SHEET 1	–	—	—

Operating Characteristics

Operate Time — 4 ms max.

Release Time — 6 ms max.

Contact Bounce — 2.0 ms

Dielectric Strength (Note 1) — 500 volts rms at sea level; 350 volts rms at 70,000 feet

Insulation Resistance (Note 1) — 1,000 megohms min. over temperature range

Semiconductor Characteristics at 25°C

Max. Negative Transient — 1 volt

Breakdown Voltage — 100 Vdc @ 10 µA min.

Max. Leakage Current — 1 µA @ 50 Vdc

Note 1: Tests for dielectric withstanding voltage and insulation resistance should be made with "coil terminals" shorted together to avoid unnecessary electrical stress to semiconductor elements.

Electrical Characteristics

Contact Ratings —
DC resistive — 2 amps at 28 volts
DC inductive — 0.5 amps at 28 volts, 200 mH
AC resistive — 0.5 amps at 115 volts, 400 or 60 Hz (enclosure isolated from ground, or enclosure and movable contact at same potential)
AC — 0.125 amps at 115 volts (enclosure at line potential with respect to movable contact)
Low-level — 50 µA at 50mV

Contact Resistance —
0.050 ohms max.;
0.150 ohms after life test

Life — 100,000 operations at rated loads listed; 1,000,000 operations at low-level loads

Coil Table (All Values DC)* Type 3SBH, 4 Pole Relay — 250 mW Sensitivity: (Code 5 single diode, Code 6 dual diodes)

Single Diode		SENSITIVITY CODE: 5			
		Voltage Calibrated, Code: 5			
Coil Code Letter	Coil Resistance at 25C ohms	Suggested Source Volts†	Maximum Operate Volts at 25C	Release Voltage Range at 25C	
				Max.	Min.
B	28 ± 10%	4.0- 7.0	2.7	1.6	0.3
D	73 ± 10%	6.0-11.0	4.2	2.5	0.4
E	115 ± 10%	8.0-14.0	5.4	3.2	0.6
G	280 ± 10%	12 -22.0	8.4	5.0	0.8
H	430 ± 10%	15 -26.0	10.3	6.0	1.0
K	720 ± 10%	20 -35.0	13.5	8.1	1.5
N	1040 ± 10%	26 -46.0	17.5	10.5	1.9
Dual Diode		**SENSITIVITY CODE: 6**			
B	28 ± 10%	4.0- 7.0	3.7	2.3	0.5
D	73 ± 10%	6.0-11.0	5.2	3.2	0.6
E	115 ± 10%	8.0-14.0	6.4	3.9	0.8
G	280 ± 10%	12.0-22.0	9.4	5.7	1.0
H	430 ± 10%	15 -26.0	11.3	6.7	1.2
K	720 ± 10%	20 -35.0	14.5	8.8	1.7
N	1040 ± 10%	26 -46.0	18.1	11.1	2.1

*Values listed are factory test and inspection values. User should allow for meter variations.
†Applicable over the operating temperature range in circulating air.

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DIMENSIONS: INCHES

TOLERANCES UNLESS OTHERWISE SPECIFIED:
0 PLC ± –
1 PLC ± –
2 PLC ± –
3 PLC ± –
4 PLC ± –
ANGLES ± –

MATERIAL –

FINISH –

DWN	RV	12NOV2019
CHK	RV	12NOV2019
APVD	MB	12NOV2019
PRODUCT SPEC	—	
APPLICATION SPEC	—	
WEIGHT	—	

TE Connectivity

NAME 3SBH–SERIES – –

SIZE	CAGE CODE	DRAWING NO	RESTRICTED TO
A3	–	C-3SBH-SERIES	—

CUSTOMER DRAWING | SCALE NTS | SHEET 2 OF 3 | REV A

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REVISIONS

P	LTR	DESCRIPTION	DATE	DWN	APVD
	–	SEE SHEET 1	–	—	—

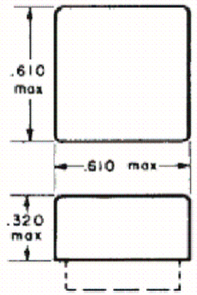
Mounting Forms (3SBH)

(Vibration note with each form is acceleration from 55 to 3000 Hz)

No Mount

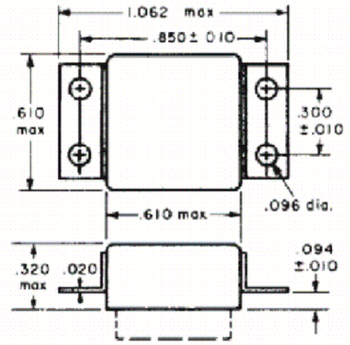
Mounting Code	Vibration*
00	30g

*Assumes relay held securely by potting or other means.



End Bracket

Mounting Code	Vibration
13	30g



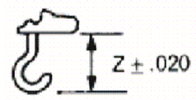
All dimensions in inches

TOLERANCES (Unless otherwise specified)	
Hundredths	±0.020
Thousandths	±0.005

Header Types

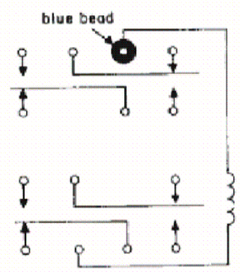
Type	Z Dimension	Header Code

CODE: 1

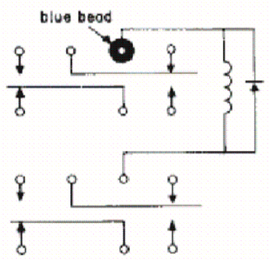


Header and Connection Diagrams

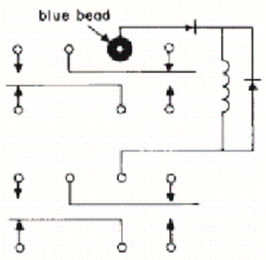
CODE 1
4-Pole Terminal View



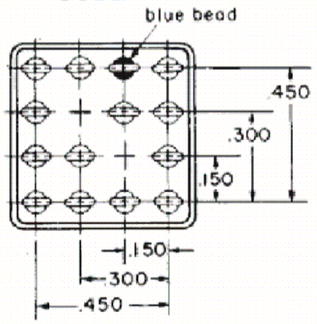
CODE 5



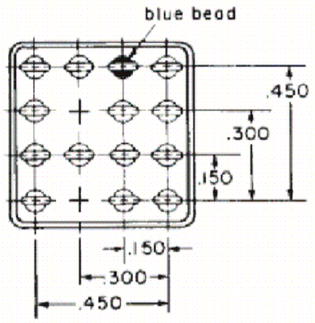
CODE 6



CODE 1



CODE 5 & 6



Terminals .020 dia

ALL DIMENSIONS ARE IN INCHES

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DIMENSIONS: INCHES

TOLERANCES UNLESS OTHERWISE SPECIFIED:
0 PLC ± –
1 PLC ± –
2 PLC ± –
3 PLC ± –
4 PLC ± –
ANGLES ± –

MATERIAL –

FINISH –

DWN RV	12NOV2019	
CHK RV	12NOV2019	
APVD MB	12NOV2019	
PRODUCT SPEC —		
APPLICATION SPEC —		
WEIGHT —		

TE Connectivity

NAME 3SBH–SERIES – –

SIZE	CAGE CODE	DRAWING NO	RESTRICTED TO
A3	–	C-3SBH–SERIES	—

CUSTOMER DRAWING | SCALE NTS | SHEET 3 OF 3 | REV A