

DATA BUS RELAY DEVICES

The DBR1000 and DBR2000 Series of bus switching relays are designed for use in the test and simulation of MIL-STD-1553 data buses. They are particularly useful in reconfiguring bus systems.

The DBR1000 and DBR1001 bus switches are double-pole single-throw (2P1T) relay devices which act as on-off bus switches to disconnect individual RT's or entire bus segments from a bus network without having to physically disconnect the cables.

**North Hills Application Note 257 - "MIL-STD-1553 Umbilical Separation" provides further information on the subject.*

The DBR2000 through DBR2006 bus switches are double-pole double-throw (2P2T) relay devices which can switch instrumentation or RT's from one bus or stub to another or reconfigure a bus. The DBR2004 has internal terminators while the DBR2005 and DBR2006 have exceptional isolation, useful in red/black or secure bus situations.



North Hills Model # DBR2000 Data Bus Relay Device.

Features:

- Up to 90 dB separation
- 2P1T or 2P2T

Benefits:

- Ideal for test and simulation
- No cable changing
- Easy to use

Material Specifications:

Model #	Connectors	Case Material	Base Plate Material	Finish
DBR1000 & DBR1001	J1 & J2 Trompeter BJ71 or equivalent. J3 ITT Cannon subminiature DB-9-Male or equivalent.	0.020 Cold rolled steel hot tinned.	0.042 Cold rolled steel hot tinned.	Light blue enamel, per TT-E-529. Color per FED-STD-595 #25526. Mounting surface not painted.
DBR2000, DBR2001 & DBR2004	J1 thru J3 Trompeter BJ71 or equivalent. J4 ITT Cannon subminiature DB-9-Male or equivalent.	0.020 Cold rolled steel hot tinned.	0.042 Cold rolled steel hot tinned.	Light blue enamel, per TT-E-529. Color per FED-STD-595 #25526. Mounting surface not painted.
DBR2005 & DBR2006	Data-Trompeter BJ71 or equivalent (3PIcs). Control (DC) - DE9M	Case and cover - 0.025 THK. Cold rolled steel	0.042 THK. Cold rolled steel	Hot tin dipped. Paint with light blue semigloss enamel per TT-E-529. Color per FED-STD-595 #25526. Mounting surface not painted.



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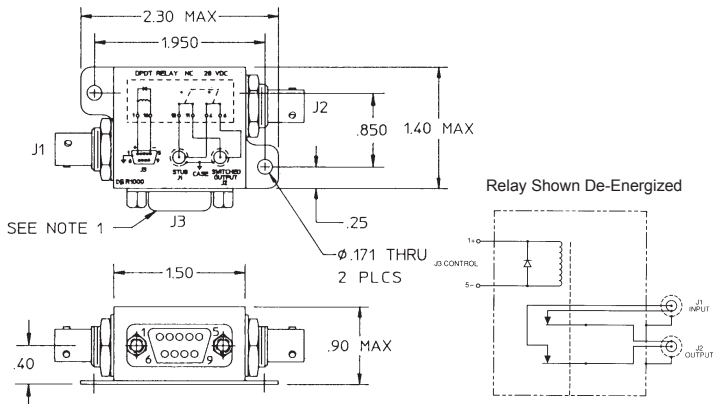


Figure 1. North Hills Data Bus Relay Device Dimensions Part# DBR1000 and DBR1001

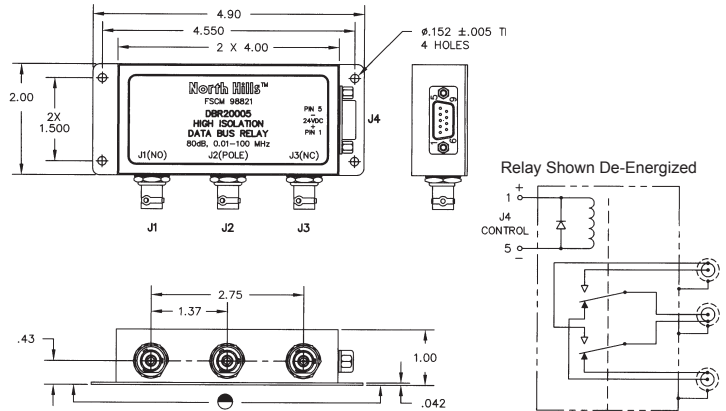


Figure 4. North Hills Data Bus Relay Device Dimensions Part# DBR2005 and DBR2006

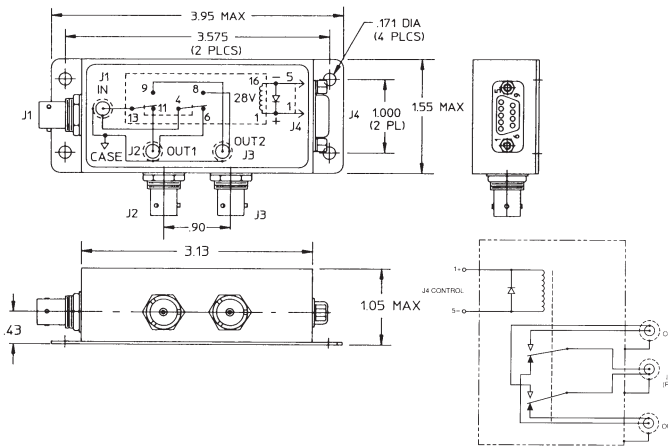


Figure 2. North Hills Data Bus Relay Device Dimensions Part# DBR2000 and DBR2001

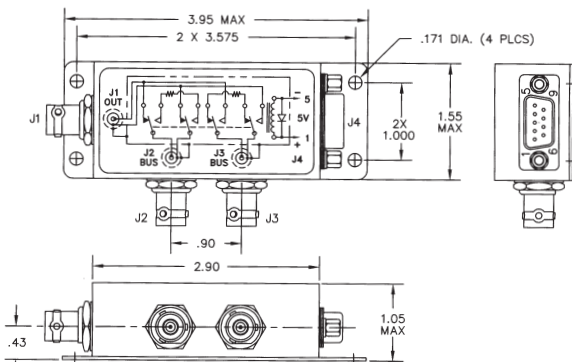


Figure 3. North Hills Data Bus Relay Device Dimensions Part# DBR2004

Ordering Information:

Parameter	DBR-1000	DBR-1001	DBR-2000	DBR-2001	DBR-2004	DBR-2005
Contact Arrangement	2P1T	2P1T	2P2T	2P2T	2P2T	2P2T
Insertion Loss	.25 dB max	.25 dB max	.25 dB max	.25 dB max	.25 dB max	.25 dB max
Isolation Between Ports 1 MHz	60 dB min	60 dB min	60 dB min	60 dB min	90 dB min	90 dB min
10 MHz	50 dB min	50 dB min	50 dB min	50 dB min	90 dB min	90 dB min
100 MHz	-	-	-	-	80 dB min	80 dB min
Connectors Bus Control	BJ71 or Equivalent High/Blue to Center DE9M-PIN1 = (+), PIN5 = (-).					
Coil Voltage Nominal	28VDC	5VDC	28VDC	5VDC	5VDC ¹	28VDC ²
Min-Max	16-48VDC	3.5-10	16-48VDC	3.5-10	3.5-10	16-48VDC
Resistance, ohms	2880	125	2880	125	125	1440
Insulation Withstanding	500Vac	500Vac	500Vac	500Vac	500Vac	500Vac
Case and Base Material	CRS Hot Tin Dipped					

1. For 28VDC operation, use DBR2007. It has the same coil specifications as DBR2000.
2. For 5VDC operation use DBR2006

Specifications subject to change without notice.
[Click here for a full list of accessories](#)



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