

General

The relay-based G2R06 is a general purpose relay switching module. This data sheet covers a configuration with up to twenty-four DPDT relays. It provides a high performance, low cost solution for many applications such as ATE. Additional special configurations can be made per spec by contacting the factory.

Ultra-high reliability relay elements are coupled with control and status circuitry. The module also features hot-swap control technology for easy maintenance.

For control and DC power, the module must be installed into any G2 type mainframe controller. The mainframe must have either the -200, D200, -207 or -D207 power supply configuration. Optionally, the -600, -D600, -100 or -D100 power supply configuration could be used if the -6x suffix is specified on the module.

Configurations

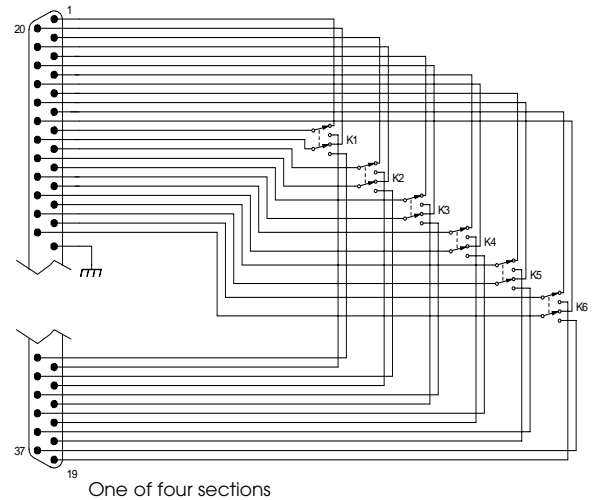
Model Number	Configuration	Conn	Contacts
■ G2R06-DD06-22	Six DPDT	DC-37P	2 amp
■ G2R06-DD12-22	Twelve DPDT	DC-37P	2 amp
■ G2R06-DD18-22	Eighteen DPDT	DC-37P	2 amp
■ G2R06-DD24-22	Twenty-four DPDT	DC-37P	2 amp

Applications

- ATE systems
- Communication installations
- General purpose signal routing
- Switching power (AC/DC)
- Satellite control centers
- Ground station IF signal routing

Features

- High reliability relay elements
- DC to 10MHz bandpass (min)
- Standard DC-37P connectors (others optional)
- Hot-Swap module technology
- Plug-in relay sections (eight elements per)
- Rugged aluminum shielded enclosure
- Built-in control and status circuitry



Connector J1: (Relay Section 1)

Pin	Signal	Pin	Signal
1	Relay 01 NC (+)	20	Relay 01 NC (-)
2	Relay 02 NC (+)	21	Relay 02 NC (-)
3	Relay 03 NC (+)	22	Relay 03 NC (-)
4	Relay 04 NC (+)	23	Relay 04 NC (-)
5	Relay 05 NC (+)	24	Relay 05 NC (-)
6	Relay 06 NC (+)	25	Relay 06 NC (-)
7	Relay 01 Com (+)	26	Relay 01 Com (-)
8	Relay 02 Com (+)	27	Relay 02 Com (-)
9	Relay 03 Com (+)	28	Relay 03 Com (-)
10	Relay 04 Com (+)	29	Relay 04 Com (-)
11	Relay 05 Com (+)	30	Relay 05 Com (-)
12	Relay 06 Com (+)	31	Relay 06 Com (-)
13	GND	32	Relay 01 NO (-)
14	Relay 01 NO (+)	33	Relay 02 NO (-)
15	Relay 02 NO (+)	34	Relay 03 NO (-)
16	Relay 03 NO (+)	35	Relay 04 NO (-)
17	Relay 04 NO (+)	36	Relay 05 NO (-)
18	Relay 05 NO (+)	37	Relay 06 NO (-)
19	Relay 06 NO (+)		

Connector J3: (Relay Section 3)

Pin	Signal	Pin	Signal
1	Relay 01 NC (+)	20	Relay 01 NC (-)
2	Relay 02 NC (+)	21	Relay 02 NC (-)
3	Relay 03 NC (+)	22	Relay 03 NC (-)
4	Relay 04 NC (+)	23	Relay 04 NC (-)
5	Relay 05 NC (+)	24	Relay 05 NC (-)
6	Relay 06 NC (+)	25	Relay 06 NC (-)
7	Relay 01 Com (+)	26	Relay 01 Com (-)
8	Relay 02 Com (+)	27	Relay 02 Com (-)
9	Relay 03 Com (+)	28	Relay 03 Com (-)
10	Relay 04 Com (+)	29	Relay 04 Com (-)
11	Relay 05 Com (+)	30	Relay 05 Com (-)
12	Relay 06 Com (+)	31	Relay 06 Com (-)
13	GND	32	Relay 01 NO (-)
14	Relay 01 NO (+)	33	Relay 02 NO (-)
15	Relay 02 NO (+)	34	Relay 03 NO (-)
16	Relay 03 NO (+)	35	Relay 04 NO (-)
17	Relay 04 NO (+)	36	Relay 05 NO (-)
18	Relay 05 NO (+)	37	Relay 06 NO (-)
19	Relay 06 NO (+)		

Connector J2: (Relay Section 2)

Pin	Signal	Pin	Signal
1	Relay 01 NC (+)	20	Relay 01 NC (-)
2	Relay 02 NC (+)	21	Relay 02 NC (-)
3	Relay 03 NC (+)	22	Relay 03 NC (-)
4	Relay 04 NC (+)	23	Relay 04 NC (-)
5	Relay 05 NC (+)	24	Relay 05 NC (-)
6	Relay 06 NC (+)	25	Relay 06 NC (-)
7	Relay 01 Com (+)	26	Relay 01 Com (-)
8	Relay 02 Com (+)	27	Relay 02 Com (-)
9	Relay 03 Com (+)	28	Relay 03 Com (-)
10	Relay 04 Com (+)	29	Relay 04 Com (-)
11	Relay 05 Com (+)	30	Relay 05 Com (-)
12	Relay 06 Com (+)	31	Relay 06 Com (-)
13	GND	32	Relay 01 NO (-)
14	Relay 01 NO (+)	33	Relay 02 NO (-)
15	Relay 02 NO (+)	34	Relay 03 NO (-)
16	Relay 03 NO (+)	35	Relay 04 NO (-)
17	Relay 04 NO (+)	36	Relay 05 NO (-)
18	Relay 05 NO (+)	37	Relay 06 NO (-)
19	Relay 06 NO (+)		

Connector J4: (Relay Section 4)

Pin	Signal	Pin	Signal
1	Relay 01 NC (+)	20	Relay 01 NC (-)
2	Relay 02 NC (+)	21	Relay 02 NC (-)
3	Relay 03 NC (+)	22	Relay 03 NC (-)
4	Relay 04 NC (+)	23	Relay 04 NC (-)
5	Relay 05 NC (+)	24	Relay 05 NC (-)
6	Relay 06 NC (+)	25	Relay 06 NC (-)
7	Relay 01 Com (+)	26	Relay 01 Com (-)
8	Relay 02 Com (+)	27	Relay 02 Com (-)
9	Relay 03 Com (+)	28	Relay 03 Com (-)
10	Relay 04 Com (+)	29	Relay 04 Com (-)
11	Relay 05 Com (+)	30	Relay 05 Com (-)
12	Relay 06 Com (+)	31	Relay 06 Com (-)
13	GND	32	Relay 01 NO (-)
14	Relay 01 NO (+)	33	Relay 02 NO (-)
15	Relay 02 NO (+)	34	Relay 03 NO (-)
16	Relay 03 NO (+)	35	Relay 04 NO (-)
17	Relay 04 NO (+)	36	Relay 05 NO (-)
18	Relay 05 NO (+)	37	Relay 06 NO (-)
19	Relay 06 NO (+)		

Signal Specifications

Switching elementsRelay-based
 Operating modeFailsafe (A/B switch)
 Ports per relay sectionSee configuration list
 Signal typeAnalog or digital, bi-directional
 Signal connectorMale D-Sub Type (DC-37P)
 Frequency rangeDC - 10MHz (min)
 On resistance<500 mOhms
 Switching capacity2 amp, 30VDC (resistive)
 Max switching power60W
 Max switching voltage220 VDC
 Max switching current2A
 Min switching capacity10uA, 10mVDC
 Contact materialGold-clad silver alloy
 Switching speed<5mS (plus control time)

General Specifications

Module size1 slot height
 Control typeG2 compatible
 SparingHot-Swappable
 ConstructionShielded aluminum case
 DC power-200, D200, -207 or -D207 configuration
 Weight<1.5lbs
 Operating temp0 to +70C
 Non-operating temp-20 to +85C
 Humidity0 to 95% (NC @ +25C)
 Contact life>100,000 operations (@1A)
 MTBF (estimated)>120,000 hours
 (per MIL-HDBK-217F, N1
 ground benign @ +25C)

Universal Switching's policy is one of continuous development, and consequently the company reserves the right to vary from the descriptions and specifications shown in this publication.