

General

The relay-based G2R06 is a general purpose relay switching module perfect for ATE applications. This data sheet covers a configuration with up to four 2P16T relay sections. It provides a high performance, low cost solution for many applications. The user can connect the commons together to configure a 2P64T with one module. A reduced 2P8T is available too. 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.

Applications

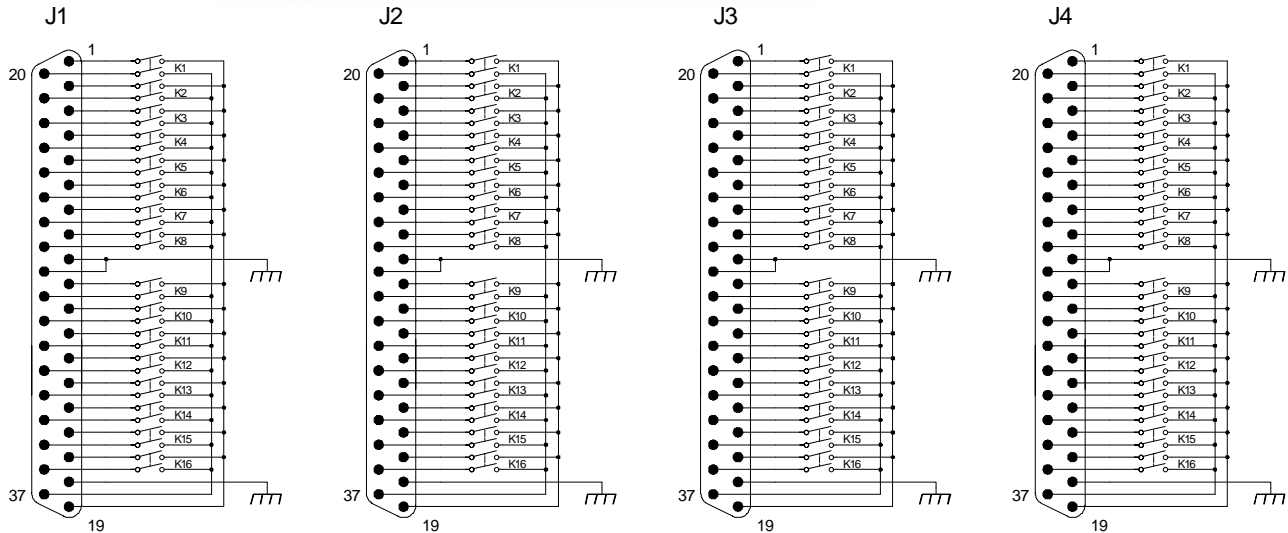
- ATE systems
- Communication installations
- General purpose signal routing
- Switching power (AC/DC)
- Satellite control centers
- Ground station IF signal routing

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

Configurations

Model Number	Configuration	Conn	Contacts
■ G2R06-1D1X16-22	One 1x16, 2-wire	DC-37P	2 amp
■ G2R06-2D1X16-22	Two 1x16, 2-wire	DC-37P	2 amp
■ G2R06-3D1X16-22	Three 1x16, 2-wire	DC-37P	2 amp
■ G2R06-4D1X16-22	Four 1x16, 2-wire	DC-37P	2 amp
■ G2R06-1D1X8-22	One 1x8 2-wire	DC-37P	2 amp
■ G2R06-2D1X8-22	Two 1x8, 2-wire	DC-37P	2 amp
■ G2R06-3D1X8-22	Three 1x8, 2-wire	DC-37P	2 amp
■ G2R06-4D1X8-22	Four 1x8, 2-wire	DC-37P	2 amp



Connector J1: (Relay Section 1)

Pin	Signal	Pin	Signal
1	Relay 01 (+)	20	Relay 01 (-)
2	Relay 02 (+)	21	Relay 02 (-)
3	Relay 03 (+)	22	Relay 03 (-)
4	Relay 04 (+)	23	Relay 04 (-)
5	Relay 05 (+)	24	Relay 05 (-)
6	Relay 06 (+)	25	Relay 06 (-)
7	Relay 07 (+)	26	Relay 07 (-)
8	Relay 08 (+)	27	Relay 08 (-)
9	GND	28	GND
10	Relay 09 (+)	29	Relay 09 (-)
11	Relay 10 (+)	30	Relay 10 (-)
12	Relay 11 (+)	31	Relay 11 (-)
13	Relay 12 (+)	32	Relay 12 (-)
14	Relay 13 (+)	33	Relay 13 (-)
15	Relay 14 NO (+)	34	Relay 14 (-)
16	Relay 15 NO (+)	35	Relay 15 (-)
17	Relay 16 NO (+)	36	Relay 16 (-)
18	GND	37	Common (-)
19	Common (+)		

Connector J3: (Relay Section 3)

Pin	Signal	Pin	Signal
1	Relay 01 (+)	20	Relay 01 (-)
2	Relay 02 (+)	21	Relay 02 (-)
3	Relay 03 (+)	22	Relay 03 (-)
4	Relay 04 (+)	23	Relay 04 (-)
5	Relay 05 (+)	24	Relay 05 (-)
6	Relay 06 (+)	25	Relay 06 (-)
7	Relay 07 (+)	26	Relay 07 (-)
8	Relay 08 (+)	27	Relay 08 (-)
9	GND	28	GND
10	Relay 09 (+)	29	Relay 09 (-)
11	Relay 10 (+)	30	Relay 10 (-)
12	Relay 11 (+)	31	Relay 11 (-)
13	Relay 12 (+)	32	Relay 12 (-)
14	Relay 13 (+)	33	Relay 13 (-)
15	Relay 14 NO (+)	34	Relay 14 (-)
16	Relay 15 NO (+)	35	Relay 15 (-)
17	Relay 16 NO (+)	36	Relay 16 (-)
18	GND	37	Common (-)
19	Common (+)		

Connector J2: (Relay Section 2)

Pin	Signal	Pin	Signal
1	Relay 01 (+)	20	Relay 01 (-)
2	Relay 02 (+)	21	Relay 02 (-)
3	Relay 03 (+)	22	Relay 03 (-)
4	Relay 04 (+)	23	Relay 04 (-)
5	Relay 05 (+)	24	Relay 05 (-)
6	Relay 06 (+)	25	Relay 06 (-)
7	Relay 07 (+)	26	Relay 07 (-)
8	Relay 08 (+)	27	Relay 08 (-)
9	GND	28	GND
10	Relay 09 (+)	29	Relay 09 (-)
11	Relay 10 (+)	30	Relay 10 (-)
12	Relay 11 (+)	31	Relay 11 (-)
13	Relay 12 (+)	32	Relay 12 (-)
14	Relay 13 (+)	33	Relay 13 (-)
15	Relay 14 NO (+)	34	Relay 14 (-)
16	Relay 15 NO (+)	35	Relay 15 (-)
17	Relay 16 NO (+)	36	Relay 16 (-)
18	GND	37	Common (-)
19	Common (+)		

Connector J4: (Relay Section 4)

Pin	Signal	Pin	Signal
1	Relay 01 (+)	20	Relay 01 (-)
2	Relay 02 (+)	21	Relay 02 (-)
3	Relay 03 (+)	22	Relay 03 (-)
4	Relay 04 (+)	23	Relay 04 (-)
5	Relay 05 (+)	24	Relay 05 (-)
6	Relay 06 (+)	25	Relay 06 (-)
7	Relay 07 (+)	26	Relay 07 (-)
8	Relay 08 (+)	27	Relay 08 (-)
9	GND	28	GND
10	Relay 09 (+)	29	Relay 09 (-)
11	Relay 10 (+)	30	Relay 10 (-)
12	Relay 11 (+)	31	Relay 11 (-)
13	Relay 12 (+)	32	Relay 12 (-)
14	Relay 13 (+)	33	Relay 13 (-)
15	Relay 14 NO (+)	34	Relay 14 (-)
16	Relay 15 NO (+)	35	Relay 15 (-)
17	Relay 16 NO (+)	36	Relay 16 (-)
18	GND	37	Common (-)
19	Common (+)		

Signal Specifications

Switching elementsRelay-based
 Operating modeNormally open (no terminations)
 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
 Contact rating2 amp, 60 watts
 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 (@2A)
 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.