

GX6315 SERIES

HIGH CURRENT RELAY CARD

- 45 individual high current single pole double throw (SPDT) Form C relays
- 7 A contact rating per channel
- 9 additional relay drivers for external relays or other devices
- 6U PXI board



DESCRIPTION

The GX6315 is a 45 channel, high current relay board that plugs directly into any 6U PXI slot. The GX6315 also provides nine transistor-driven channels for external relays. These outputs may be used to drive external load, such as heavier duty relays or lamps or other devices.

FEATURES

The GX6315 consists of three groups: A, B, and C. Each group has 15 high current relays, three open collector relay drivers, and a 50-pin D type connector. The three open collector drivers in each group are connected via diode to the same fly-back signal. The fly-back signal can be connected to the external relay supply to provide suppression for voltage spikes generated by the relays' coil.

SOFTWARE

The GX6315 is supplied with a virtual instrument panel, which includes the 32-bit DLL driver libraries and documentation. The virtual panel can be used to interactively adjust and control the instrument from a window that displays the current instrument settings and measurements.

In addition, various interface files provide access to the library for programming tools and languages such as ATEasy, LabVIEW, Microsoft® and Borland® C/C++, Microsoft Visual Basic®, Borland Delphi, and more.

APPLICATIONS

- Automatic Test Equipment (ATE)
- Power switching
- Alarm Outputs
- Data Acquisition Systems
- Process Control Systems

SPECIFICATIONS

CONTACT SPECIFICATIONS	
RELAY FORMAT	45 SPDT Form C
RELAY CONTACT RESISTANCE	0.1 Ω Initial
CONTACT LIFE RATING AT LOW LEVEL	10 x10 ⁶ Typ.
AT 28 V _{DC} @ 0.5A	5 x10 ⁵ Typ.
SWITCHABLE VOLTAGE, MAXIMUM	30 V _{DC} / 300 V _{AC}
SWITCHABLE CURRENT	7 A _{DC} / 7.5 A _{AC}
CONTACT CARRY CURRENT	7 A
OPERATE TIME	10 ms (Max.)
RELEASE TIME	10 ms (Max.)
DRIVER OUTPUTS	
DRIVER CHANNELS	9 Open Collector outputs
CURRENT	500 mA sink per driver
POWER REQUIREMENTS	
OPERATING VOLTAGE	+5 V _{DC}
POWER CONSUMPTION	100 mA
+3.3 V	70 mA per channel (Typ.); 3 A (Max.)
+5 V	
ENVIRONMENTAL	
TEMPERATURE	
OPERATING	-0° to +55° C
STORAGE	-20° C to +85° C
VIBRATION	9 g at 10-55 Hz
SHOCK ½ SINE	100 G for 6 ms
PHYSICAL	
SIZE	6U PXI
WEIGHT	16 oz
CONNECTIONS	50-pin D Sub-type connectors. Includes three mating connectors.

Note: Specifications are subject to change without notice.

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ORDERING INFORMATION

GX6315	45 channel high current relay card
GX6315-M	45 channel high current relay card for harsh environment applications
GX96108	Connector, D-type 50-pin male with solder pins for GX6315
GX97106	1' harness, 50-pin male connector on one end, loose wires (numbered) other end
GX97107	3' harness, 50-pin male connector on one end, loose wires (numbered) other end
GX97108	1' harness, 50-pin male connector on both ends
GX97109	3' harness, 50-pin mae connector on both ends

PIN ASSIGNMENT

GROUP A RELAYS CONNECTOR			
NO 1	1	26	CO 9
NO 2	2	27	CO 10
NO 3	3	28	CO 11
NO 4	4	29	CO 12
NO 5	5	30	CO 13
NO 6	6	31	CO 14
NO 7	7	32	CO 15
NO 8	8	33	FB A
NO 9	9	34	NC 1
NO 10	10	35	NC 2
NO 11	11	36	NC 3
NO 12	12	37	NC 4
NO 13	13	38	NC 5
NO 14	14	39	NC 6
NO 14	15	40	NC 7
DR 1	16	41	NC 8
DR 2	17	42	NC 9
CO 1	18	43	NC 10
CO 2	19	44	NC 11
CO 3	20	45	NC 12
CO 4	21	46	NC 13
CO 5	22	47	NC 14
CO 6	23	48	NC 15
CO 7	24	49	DR 3
CO 8	25	50	GND

GROUP B RELAYS CONNECTOR			
NO 16	1	26	CO 24
NO 17	2	27	CO 25
NO 18	3	28	CO 26
NO 19	4	29	CO 27
NO 20	5	30	CO 28
NO 21	6	31	CO 29
NO 22	7	32	CO 30
NO 23	8	33	FB B
NO 24	9	34	NC 16
NO 25	10	35	NC 17
NO 26	11	36	NC 18
NO 27	12	37	NC 19
NO 28	13	38	NC 20
NO 29	14	39	NC 21
NO 30	15	40	NC 22
DR 4	16	41	NC 23
DR 5	17	42	NC 24
CO 16	18	43	NC 25
CO 17	19	44	NC 26
CO 18	20	45	NC 27
CO 19	21	46	NC 28
CO 20	22	47	NC 29
CO 21	23	48	NC 30
CO 22	24	49	DR 6
CO 23	25	50	GND

GROUP C RELAYS CONNECTOR			
NO 31	1	26	CO 39
NO 32	2	27	CO 40
NO 33	3	28	CO 41
NO 34	4	29	CO 42
NO 35	5	30	CO 43
NO 36	6	31	CO 44
NO 37	7	32	CO 45
NO 38	8	33	FB C
NO 39	9	34	NC 31
NO 40	10	35	NC 32
NO 41	11	36	NC 33
NO 42	12	37	NC 34
NO 43	13	38	NC 35
NO 44	14	39	NC 36
NO 45	15	40	NC 37
DR 7	16	41	NC 38
DR 8	17	42	NC 39
CO 31	18	43	NC 40
CO 32	19	44	NC 41
CO 33	20	45	NC 42
CO 34	21	46	NC 43
CO 35	22	47	NC 44
CO 36	23	48	NC 45
CO 37	24	49	DR 9
CO 38	25	50	GND