

3740

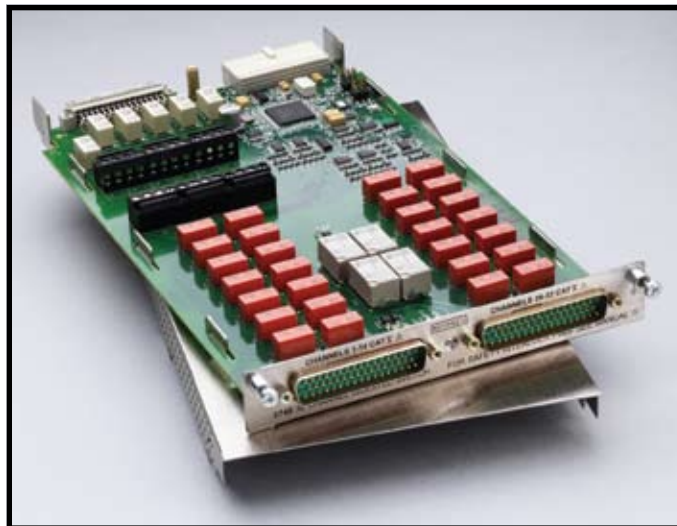
- 28 general purpose Form C relays rated for 300V, 2A switched or 3A carry signal capacity; 60W, 125VA
- 4 high current Form A relays rated for 250VAC, 7A or 30VDC, 7A switched capacity; 210W
- Analog backplane connection relays provided for user interconnections
- Screw terminal connections provided with removable 3740-ST accessory
- Relay closures stored in onboard memory
- Latching electromechanical relays

Ordering Information

3740 **General Purpose Card
with 32 Independent
Channels**

32 Channel Isolated Switch Card

28 Form C relays and 4 high power Form A relays



The Model 3740 offers 28 general-purpose form C channels that are ideal for routing power or other control devices. For higher power applications of up to 7A, four additional high current form A channels are provided.

If any general purpose signal requires routing to the Series 3700 mainframe backplane, terminal blocks are located on the card, which are enabled with jumpers. Custom configurations can be created with the user accessible terminal blocks. For additional protection, an onboard temperature sensor will notify the mainframe when the card's operating temperature exceeds 70°C, compromising system specifications.

The Model 3740 uses two 50-pin male D-sub connectors for signal connections. For screw terminal connections, use the detachable Model 3740-ST accessory.

ACCESSORIES AVAILABLE

3721-MTC-1.5	50 Pin D-sub Female to Male Cable, 1.5m (5 ft.)
3721-MTC-3	50 Pin D-sub Female to Male Cable, 3m (10 ft.)
3740-ST	Screw Terminal Block
3790-KIT50-R	50 Pin Female D-sub Connector Kit (contains 2 female D-sub connectors and 100 solder cup contacts)

SERVICES AVAILABLE

3740-3Y-EW-STD	1-year factory warranty extended to 3 years from date of shipment
3740-5Y-EW-STD	1-year factory warranty extended to 5 years from date of shipment
C/3740-3Y-STD	3 (Z540-1 compliant) calibrations within 3 years of purchase*

*Not available in all countries



S J ELECTRONICS
POWER • TEST & MEASUREMENT

0800 583 44 55

Tel: +44 1536 416 200

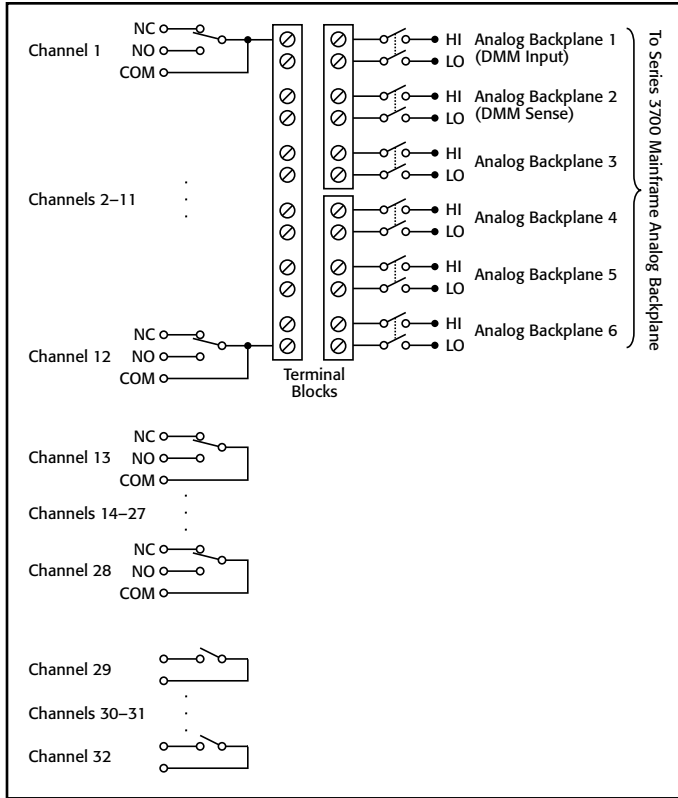
Fax: 0800 583 55 66

sales@sjelectronics.co.uk

www.sjelectronics.co.uk

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32 Channel Isolated Switch Card 28 Form C relays and 4 high power Form A relays



RELAY SWITCH CONFIGURATION: 32 general purpose independent channels. 28 channels of Form C switching at 2A and 4 channels of Form A switching at 7A. Relays can be connected to each other and backplane via removable terminal blocks.

CONTACT CONFIGURATION: **General Purpose:** 1 pole Form C. **High Current:** 1 pole Form A. **CONNECTOR TYPE:** Two 50 pin male D-shells.

MODEL 3740-ST SCREW TERMINAL OPTION: #22 AWG typical wire size with 0.062 inch O.D. 84 conductors maximum. #16 AWG maximum wire size with 0.092 inch O.D. 44 conductors per card maximum.

MAXIMUM SIGNAL LEVEL: **Form C:** 300V DC or RMS, 2A switched (3A carry), 60W, 125VA. **Form A:** 250VAC 7A, 30VDC 7A, 210W.

COMMON MODE VOLTAGE: 300V DC or RMS between any terminal and chassis.

VOLT-HERTZ LIMIT: 8×10^7 .

CONTACT LIFE: **Form C:** $>10^5$ operations at maximum signal level, $>10^8$ operations no load.¹ **Form A:** $>10^5$ operations at maximum signal level, $>5 \times 10^7$ operations no load.¹

CHANNEL RESISTANCE (end of contact life): $<0.5\Omega$.

CONTACT POTENTIAL: $< \pm 3\mu\text{V}$ typical per contact.

ISOLATION: **Channel-Channel:** $10^9\Omega$, $<200\text{pF}$. **Common Mode:** $>10^{10}\Omega$, $<150\text{pF}$.

Crosstalk (Channel-Channel, 50 Ω load-50 Ω source): 100kHz: $<-50\text{dB}$. 1MHz: $<-35\text{dB}$. 10MHz: $<-15\text{dB}$.

BANDWIDTH: 30MHz.

GENERAL

OVER-TEMPERATURE: Temperature sensor indicates over temperature.

ACTUATION TIME: **Form C:** 4ms. **Form A:** 10ms.

RELAY TYPE: **Form C:** Latching electromechanical. **Form A:** Nonlatching electromechanical. **RELAY DRIVE SCHEME:** Direct.

INTERLOCK: Backplane relays disabled when interlock connection is removed.

OPERATING ENVIRONMENT: Specified for 0° to 50°C. Specified to 70% R.H. at 35°C.

STORAGE ENVIRONMENT: -25° to 65°C.

WEIGHT: 2.5 lbs.

SAFETY: Conforms to European Union Directive 73/23/EEC, EN61010-1.

EMC: Conforms to European Union Directive 2004/108/EC, EN61326-1.

1. Minimum signal level 10mV, 10 μA .



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www.sjelectronics.co.uk

Model 3740 specifications

SWITCHING AND CONTROL

1.888.KEITHLEY (U.S. only)

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