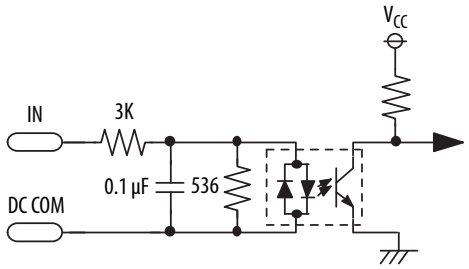
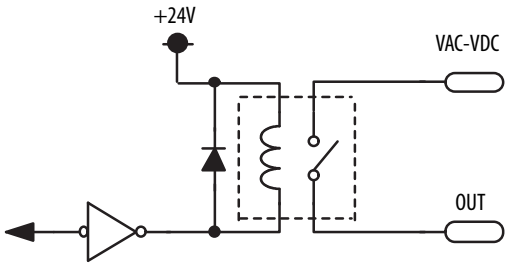
# 1769-IQ6X0W4

Compact combination 24V DC sink/source input and AC/DC relay output module

Simplified Input Circuit Diagram




Simplified Output Circuit Diagram




**1769-IQ6X0W4**

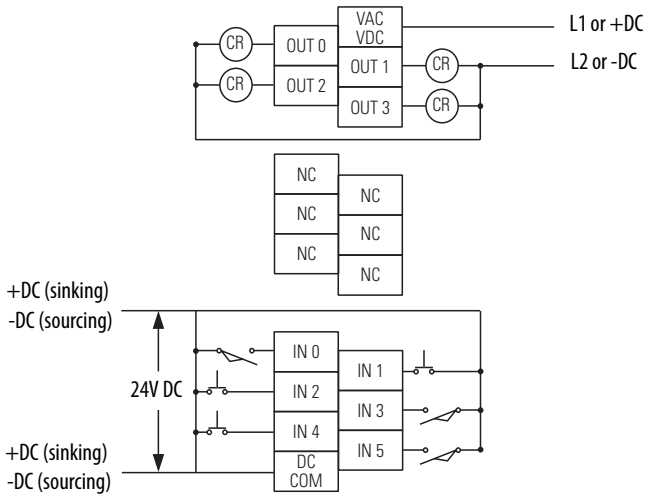



**Table 43 - Technical Specifications - 1769-IQ6X0W4**

| Attribute | 1769-IQ6X0W4 |
|---|---|
| Current draw @ 5.1V | 105 mA |
| Current draw @ 24V | 50 mA |
| Heat dissipation, max | 2.75 W |
| Off-state voltage, max | 11V DC |
| Isolation voltage | Verified by one of the following dielectric tests: 1200V AC for 1 s or 1697V DC for 1 s, input group to bus, output group to bus, and input group to output group<br>75V DC working voltage (IEC Class 2 reinforced insulation) |
| Weight, approx | 280 g (0.61 lb) |
| Dimensions (HxWxD), approx | 118 x 35 x 87 mm (4.65 x 1.38 x 3.43 in.)<br>Height with mounting tabs 138 mm (5.43 in.) |
| Slot width | 1 |
| Module location | DIN rail or panel mount |
| Power supply | 1769-PA2, 1769-PB2, 1769-PA4, 1769-PB4 |
| Power supply distance rating | 8 modules |
| Terminal screw torque | 0.68 N•m (6 lb•in) |
| Retaining screw torque | 0.46 N•m (4.1 lb•in) |
| Wire size | (22…14 AWG) solid<br>(22…16 AWG) stranded |
| Wire type | Cu-90 °C (194 °F) |
| IEC input compatibility | Type 1+ |
| Replacement terminal block | 1769-RTBN18 (1 per kit) |
| Replacement door label | 1769-RL1 (2 per kit) |

**Table 43 - Technical Specifications - 1769-IQ6X0W4**

| Attribute | 1769-IQ6X0W4 |
|---|---|
| Replacement door | 1769-RD (2 per kit) |
| Vendor ID code | 1 |
| Product type code | 7 |
| Product code | 66 |
| Enclosure type rating | None (open-style) |

**Table 44 - 1769-IQ6X0W4 Input Specifications**

| Attribute | 1769-IQ6X0W4 |
|---|---|
| Inputs | 6 |
| Voltage category | 24V DC sink/source |
| Operating voltage range | 10…30V DC @ 30 °C (86 °F)<br>10…26.4V DC @ 60 °C (140 °F) |
| Delay, on | 8 ms |
| Delay, off | 8 ms |
| Off-state voltage, max | 5V DC |
| Off-state current, max | 1.5 mA |
| On-state voltage, min | 10V DC |
| On-state current, min | 2.0 mA |
| Inrush current, max | 250 mA |
| Input impedance, nom | 3 kΩ |
| IEC input compatibility | Type 3 |

**Table 45 - 1769-IQ6X0W4 Output Specifications**

| Attribute | 1769-IQ6X0W4 |
|---|---|
| Outputs | 4 |
| Voltage category | AC/DC normally open relay contacts |
| Operating voltage range | 5…265V AC<br>5…125V DC |
| Delay, on | 10 ms |
| Delay, off | 10 ms |
| Off-state leakage, max | 0 mA |
| On-state current, min | 10 mA @ 5V DC |
| Current per point, max | 2.5 A |
| Current per module, max | 8 A |

**Table 46 - Relay Contact Ratings - 1769-IQ6X0W4**

| Volts, max | Continuous Amps per Point, max | Amperes[1] | | Voltamperes | | NEMA ICS 2-125 |
|---|---|---|---|---|---|---|
| | | Make | Break | Make | Break | |
| 240V AC | 2.5 A | 7.5 A | 0.75 A | 1800VA | 180VA | C300 |
| 120V AC | | 15 A | 1.5 A | | | |
| 125V DC | 1.0 A | 0.22 A[2] | | 28VA | | R150 |
| 24V DC | 2.0 A | 1.2 A[2] | | 28VA | | — |

(1) If you connect surge suppressors across your external inductive load, you extend the life of the relay contacts.
(2) For DC voltage applications, the make/break ampere rating for relay contacts can be determined by dividing 28VA by the applied DC voltage. For example, 28 VA/48V DC = 0.58 A. For DC voltage applications less than 48V, the make/break ratings for relay contacts cannot exceed 2 A.

### Table 47 - Certifications - 1769-IQ6X0W4

| Certification[1] | 1769-IQ6X0W4 |
|---|---|
| c-UL | C-UL certified (under CSA C22.2 No. 142)<br>UL 508 listed<br>Class I, Division 2 Group A,B,C,D Hazardous Locations (UL 1604, C-UL under CSA C22.2 No. 213) |
| CE | CE compliant for all applicable directives |
| C-Tick | C-Tick compliant for all applicable directives |

(1) When marked. See the Product Certification link at http://www.rockwellautomation.com/global/certification/overview.page for Declarations of Conformity, Certificates, and other certification details.