



Isolated High Current Relay

Product Specifications
and Installation Data

1 INTRODUCTION

The Horner APG Isolated High Current Relay (HE670RLY168) is a discrete I/O output module that is compatible with GE Fanuc Field Control. It provides sixteen isolated relay outputs with a maximum current capability of 8A per point. The module as a whole can dissipate a maximum of 50A at any one time. Each relay is completely isolated, which gives the flexibility of mixing voltage levels with a maximum voltage of 250VAC or 30VDC. All of the relays are Form A (Normally Open Contacts). Each relay is individually fused, and the relay and fuses are field-replaceable. Typical applications include: switching power supplies, power switching for various I/O equipment, control or driving relays for industrial machines and output relays for programmable logic controllers, temperature controllers, timers, and other devices.

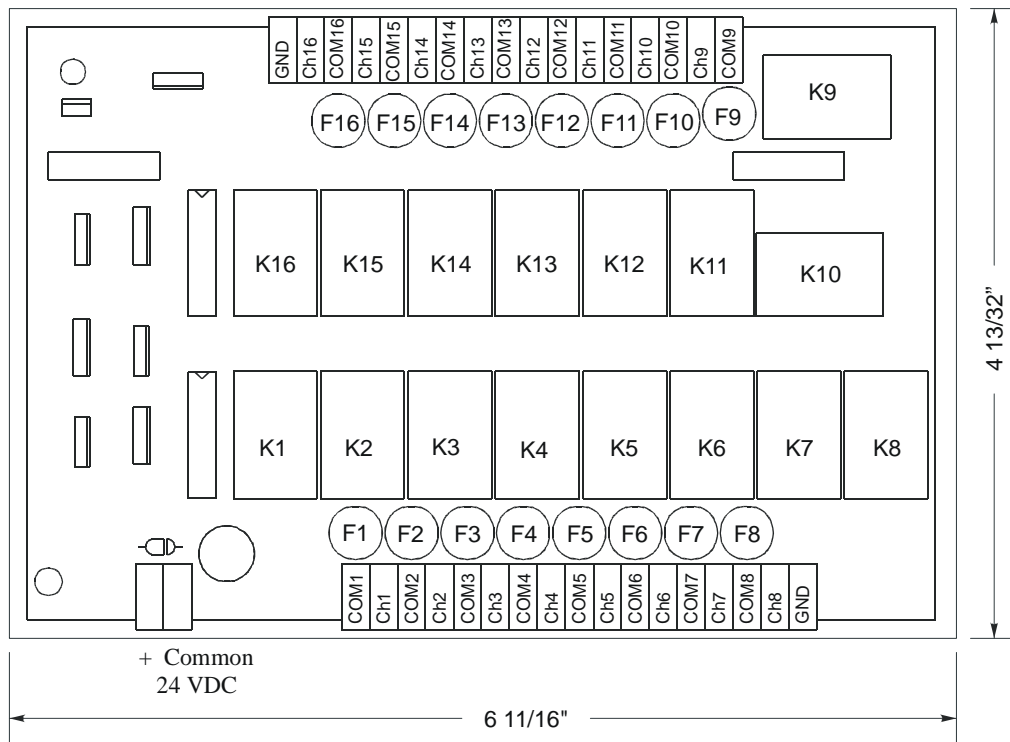


Figure 1 - Top View

Table 1—HE670RLY168 Specifications			
Number Of Discrete Outputs	16	Maximum AC Voltage	250VAC
Power Consumption	120ma@24VDC with all relays ON	Maximum DC Voltage	30VDC
Maximum Current per Output	8A @ Room Temperature	Expected Life	100,000 operations@8A (AC or DC)
Maximum Total Module Current	50A	Maximum Operating Speed	20 cpm at rated load
Operating Temperature	0 to 50° Celsius	Coil Resistance	2880 ohms@20° Celsius
Relative Humidity	5% to 95% (non-condensing)	Coil Power	20-28 VDC

2 INSTALLATION

2.1 Wiring

Figure 2 depicts the top view of the Isolated Field Control Relay Module with power and I/O connections.

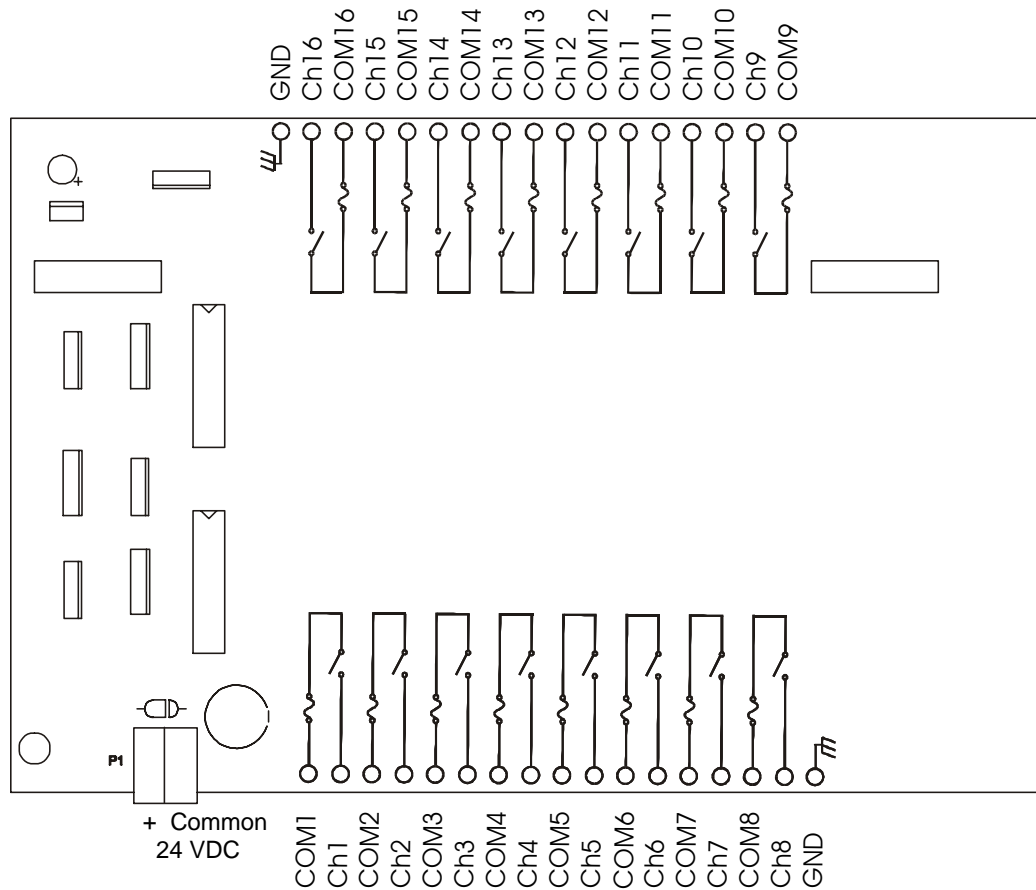


Figure 2 - Top View

Table 2 shows the I/O wiring for the Field Control Relay. Refer to Figure 1(P1).

Pin	Voltage
1	+24VDC
2	24VDC Common

2.2 Installation Hints

- a. 14-gauge wire is recommended for all power and I/O wiring.
- b. The module should not be directly exposed to heat, moisture, or any foreign debris.
- c. Excessive temperature will cause a deterioration in performance and will shorten life.

2.3 Configuration

2.3.1 General

The HE670RLY168 can be configured with the Horner Electric Bus Interface Unit (HE670IBU100) using a Hand-Held Programmer (HHP). The RLY168 can also be configured using other types of master units such as the GE Fanuc Bus Interface Unit or a GE Fanuc Genius Hand-Held Monitor (IC660HHM501). The RLY168 is a generic 16-point output card that occupies two slots in the rack and uses 16 discrete output registers (%Q) for any type of configuration. Please refer to the applicable manual for the master unit that is used with the Field Control application.

When using more than one relay card on the same bus unit, each relay card must be configured in its own slot. Since the relay card takes up two slots in the rack, each consecutive relay should be two slots away from the previous relay card. For example, if the system has three different relay cards: The first one is configured in slot 1 as a **DISCRETE OUT 16**. The next relay is configured in slot 3 as a **DISCRETE OUT 16**. The last relay is configured in slot 5 as a **DISCRETE OUT 16**.

2.4 Replacement Parts

The replacement relays and fuses can be purchased from Horner Electric. The following are the part numbers:

RLY00003	24V, 10A Relay	Ea.
FUS00020	250V, 10A Fuse	Ea.

NOTES