RT10

Right Track Controller/Expander

Description

The RightTrack RT10 Controller and RT10 Expander are designed to facilitate the monitoring of discrete inputs and the control of discrete outputs, communicating with a host system via an Ethernet network. The modules are both economical and compact, and mount easily to a standard DIN rail.

The RT10 Controller provides 18 open drain outputs and 18 discrete inputs that can be software configured for either supervised or non-supervised operation. With terminating resistors installed, supervised inputs can detect both open circuit and short circuit faults, and can monitor the status of either one or two switches* (allowing up to 36 switches to be monitored).

The RT10 controller also includes an Ethernet port and a 200 MHz ARM9 processor (that runs the Linux operating system), and provides supply circuitry for powering up to three RT10 Expanders.

RT10 Expanders are simply "daisy-chained" (one after the other) to an RT10 Controller, with each expander providing an additional 24 outputs and 24 inputs. A total of 90 discrete outputs and 90 discrete inputs (supporting up to 180 switches) can therefore be managed by an RT10 system.

Features

- an RT10 Controller/Expander provides 18/24 supervised or non-supervised inputs
- with terminating resistors, each supervised input can monitor one or two discrete contacts
- supervised inputs detect open and short circuit faults in the field wiring
- 2000V transient protection on all inputs
- an RT10 Controller/Expander provides 18/24 current sinking outputs
- current limit protection on all outputs
- terminal blocks provide reliable termination of input and output wiring
- up to three RT10 Expanders can be connected to an RT10 controller
- modular architecture allows expander modules to be easily connected to the controller or other expander module

Specifications

Physical	2.40" H x 3.54" W x 4.25" D (61 x 90 x 108 mm)
Environmental	
Operating Temperature	32 to 122 °F (0 to 50 °C)
Storage Temperature	-40 to 158 °F (-40 to 70 °C)
Humidity	0 to 95 % non-condensing
Power Supply	24 Vdc -10% + 10% @ 0.25A
Field Connections	
Input	screw terminal
Output	screw terminals
Network	RJ-45 Ethernet connection
Power	screw terminal
I/O Capacity Controller	18 supervised inputs 18 outputs
I/O Capacity Expander	24 supervised inputs 24 outputs
Output - open drain output	
voltage	30 Vdc max
current sinking	250 mA max

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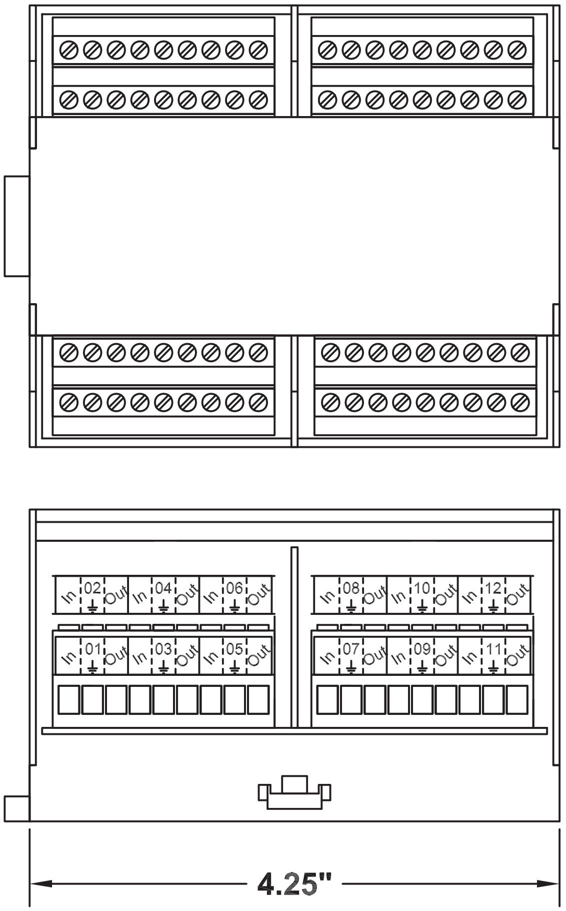
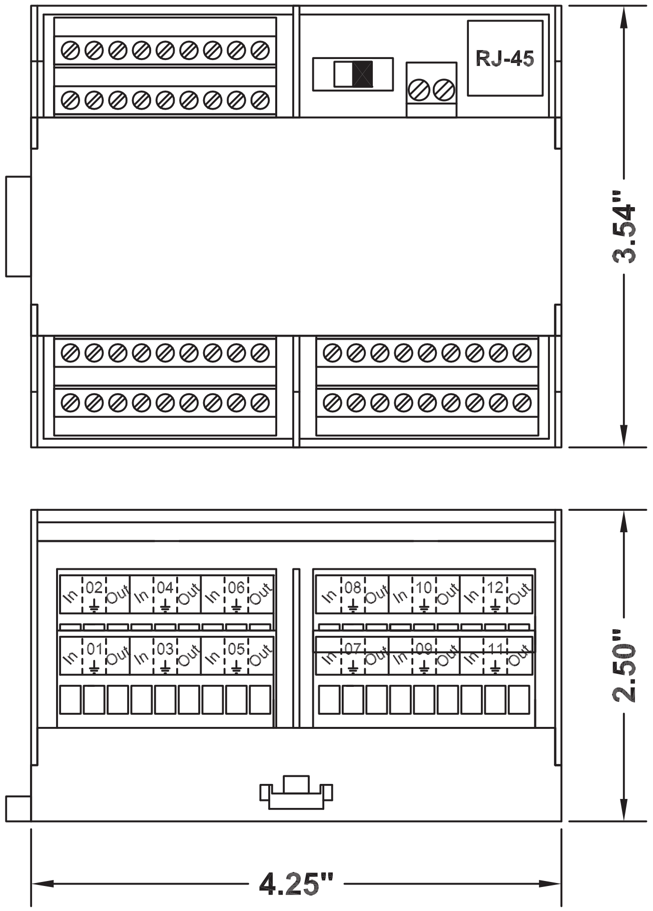
* when using two switches on a supervised input both switches must be momentary switches.

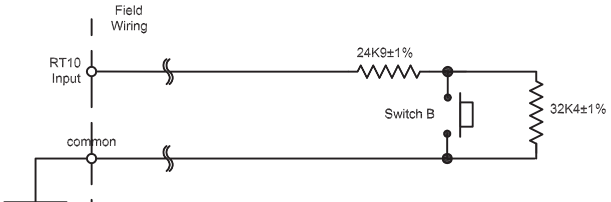
Mechanical



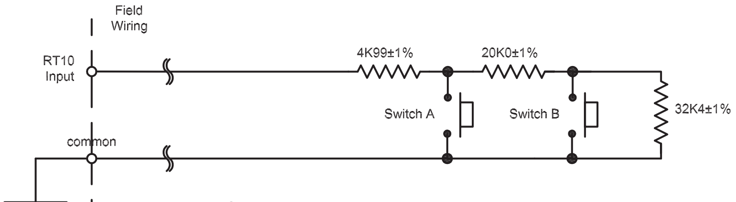
Expander Module



Controller Module



Input - 1 switch supervised



Input - 2 switches supervised

Ordering Information

Part number RT10-AB

- A Controller or Expander unit
  - 0 Controller
  - 1 Expander
- B Termination
  - 0 Standard Switch Inputs
  - 9 Custom

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