32-Channel Relay Output Card

3134

PRODUCT HIGHLIGHTS

- **32** Non-Latching Relay Outputs
- Source Voltage up to 30VDC or 250VAC
- I/O Bus Checking Diagnostics
- Hot Swappable

Corp

Temperature Sensor



3134 32-Channel Relay Output Card

PRODUCT OVERVIEW

The 3134 Relay Output Card provides switching control of 32 DC or AC field signals to any RTP3000 TAS family system. Each channel consists of a single non-latching power relay. All channels are isolated from the RTP chassis ground. Voltages up to 30VDC or 250VAC at up to 0.5 Amp per channel may be switched by the output channels.

The PLD controller performs I/O Bus checking diagnostics on all output data and command transfers to the card. Each transfer is performed twice (all data bits in the second transfer are inverted). Both transfers are then compared to insure that no errors exist in the data path between the relay cards and the chassis processor. I/O bus slot address and control signal contention tests are also performed.

The 3134 Relay Output Card is hot swappable. You can replace the relay output card without shutting off the chassis power. Use NetArrays to disable the card, remove the termination cable, and then remove the 32 channel relay output card. Next, install the replacement card, attach the termination cable, and re-enable the card within NetArrays. If adding a new relay output card, install it into the chassis, connect the termination cable, make the change in NetArrays and download the new file online. Existing logic and I/O to continue processing undisturbed while the new I/O card and logic is initialized.

The 32 Channel Relay Output Card includes an onboard temperature sensor which provides the operating temperature of the card. Users can then implement limits for alarming based on the board temperature within their application.

RTP is the Best Technology for Your Investment,

Here's why:

The 3000 TAS is a multi-processor architecture that delivers exceptional Performance and Comprehensive Diagnostics. The results speak for themselves: A reaction time of 12 msec, true 1 msec SOE (Analog and Digital), an MBTF of greater than 50000 years an MTTFS of greater than 60000 years, and a PFDavg of 5×10^{-5} . *Compare these numbers to any other system.*

Built-in proof test diagnostics means it will never be necessary to shut down at the proof test interval. Unlimited online downloads of logic and configuration changes do not require a periodic shut down like other systems. *Compare this functionality to any other system*.

NetSuite Software: One-time price includes unlimited use of Logic Development, Alarm Manager, Data Archive and Historian and HMI without hardware or software keys. *Compare this functionality and price to all other systems.*

Finally, a Safety Instrumented System (SIS) should always take the process it protects to a safe state when it is required to do so, and it should never interfere with the operation of the process at the time. *The 3000 TAS does this better than any other system.*

SPECIFICATIONS

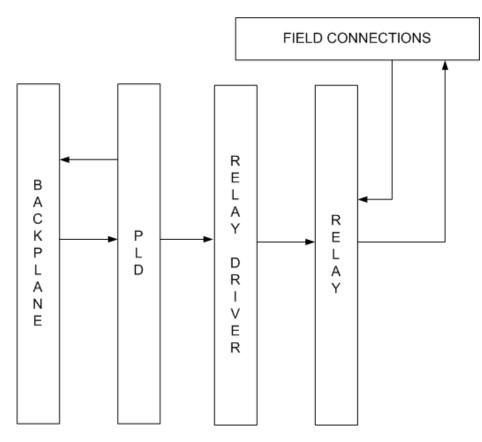
Number of Channels	32
Maximum Open Circuit Voltage	30 VDC or 250 VAC
Minimum Load:	10 mA
Maximum Load:	500 mA per channel
Maximum Leakage Current Relay Off	3 mA
Contact form	Form A (Normally Open)
Contact arrangement	32 relays, all channels share common ground
Maximum Bounce	2 msec
Backplane to Card Output Delay Time	10 msec (ON to OFF)
Backplane to Card Output Delay Time	10 msec (OFF to ON)
Isolation from RTP system	500 V AC/DC
Backplane power	5 VDC @ 1.1 A

ENVIRONMENTAL SPECIFICATIONS

Temperature range:	-20°C to +60°C, operating, -20°C to +85°C, storage
Altitude:	Operation to 10,000 feet
Humidity range:	10 to 95 % relative humidity, non-condensing

TERMINATION MODULES

3099/40-100	Single Termination Module – 32 channel relay output, sourcing (breaks the positive), field replaceable fuses, 24 VDC
3099/41-100	Single Termination Module – 32 channel relay output, sourcing (breaks the positive), field replaceable fuses, 120/240 VAC



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