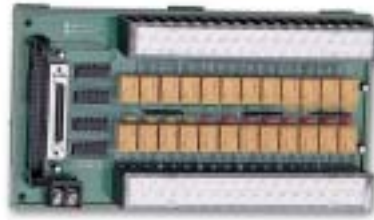


DIN-24R/TB-24R

Termination Board with 24 Relay Outputs

Features

- 24-CH single-pole, double-throw (SPDT form C) relay outputs
- 50-pin Opto-22™ compatible connector
- Maximum switching voltage 220 V_{DC}/250 V_{AC}
- Maximum switching current up to 2 A_{DC}/AC
- LED indicator for relay status
- On-board relay driver circuitry
- Screw terminals for easy field wiring
- DIN socket available on DIN-24R
- 50-pin SCSI-type connector available on DIN-24R to interface with ND-6058



DIN-24R



TB-24R

Introduction

The DIN-24R and TB-24R relay output boards are designed for industrial control applications. It contains 24 electro-mechanical SPDT relays that can be driven by the 24-bit digital output ports of the PCI-7224, PCI-7248, PCI-7296, ACL-7112, ACL-7124 and PET-48DIO, ND-6058.

Each relay's switching capacity is 60 W, 125 VA. The normally closed, and common contacts for each relay are made available for maximum flexibility.

Specification

- Relay Output
 - Number of channels: 24
 - Relay type: SPDT (Form C)
 - Contact rating
 - AC: 125 V_{AC} @ 0.6 A
 - DC: 30 V_{DC} @ 2 A
 - Breakdown voltage: 1500 V_{RMS}
 - Contact resistance: 50 mΩ
 - Relay ON/OFF time
 - Operate time: 3 ms
 - Release time: 3 ms

- LED Indicators for relay status: per channel
- Expected life: 5×10^5 operations @ 2 A, 30 V_{DC}
- External coil excitation voltage
 - 12 V nominal, 19.2 V maximum (TB-24R/12 & DIN-24R/12)
 - 24 V nominal, 38.5 V maximum (TB-24R/24 & DIN-24R/24)

- I/O Connector
 - 50-pin ribbon male
 - 50-pin SCSI-II female
- Operating temperature: 0 to 60 °C
- Storage temperature: -20 to 80 °C
- Relative humidity: 5 to 95%, noncondensing
- Power consumption

	+12 V	+24 V
TB-24R/12	288 mA maximum	--
DIN-24R/12		
TB-24R/24	--	144 mA maximum
DIN-24R/24		

- Dimensions
 - TB-24R: 220 mm x 132 mm x 15 mm (WxLxH)
 - DIN-24R: 203 mm x 120 mm x 55 mm (WxLxH)

Ordering Information

- **TB-24R/12**
Termination Board with 24-CH Relay Outputs @ 12V Coil Voltage (Including One 1.5-meter ACL-10150 Cable)
- **TB-24R/24**
Termination Board with 24-CH Relay Outputs @ 24V Coil Voltage (Including One 1.5-meter ACL-10150 Cable)
- **DIN-24R/12**
Termination Board with 24-CH Relay Outputs @ 12V Coil Voltage and DIN-Rail Mounting (Including One 1.5-meter ACL-10150 Cable)
- **DIN-24R/24**
Termination Board with 24-CH Relay Outputs @ 24V Coil Voltage and DIN-Rail Mounting (Including One 1.5-meter ACL-10150 Cable)

DIN-24P/TB-24P

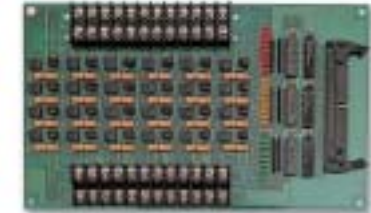
Termination Board with 24 Opto-Isolated Digital Inputs

Features

- 24-CH opto-isolated digital inputs
- 50-pin Opto-22 compatible connector
- Non-polarity digital input range
- Isolated input voltage up to 24 V
- 5000 V_{RMS} optical isolation
- Jumper selectable for voltage input or dry-contact input mode
- LED indicator for input status
- Screw terminals for easy field wiring
- DIN socket is available on DIN-24P
- 50-pin SCSI-type connector available on DIN-24P to interface with ND-6058



DIN-24P



TB-24P

Introduction

The DIN-24P and TB-24P digital input termination boards feature high-voltage opto-isolation on all input channels. They provides 24 channels that are accessed through a single 50-pin connector, standard on the NuDAQ digital I/O boards, such as ACL-7122, ACL-7124, PET-48DIO, PCI-7224, PCI-7248, PCI-7296 and ND-6058.

Specification

- Input modes (jumper selectable on per channel basis)
 - Voltage input
 - Dry contact input
- Isolated digital input
 - Number of channels: 24, maximum

- Maximum input range: 24 V, non-polarity
- Digital logic levels
 - 0-24 V, non-polarity
 - Input high voltage: 5-24 V
 - Input low voltage: 0-1.5 V
- Input resistance: 1.2 kΩ @ 0.5 V
- Isolation voltage: 5000 V_{RMS}

- Dry contact input
 - Number of channels: 24
 - Internal pull-up voltage supply: +5 V_{DC}
- LED Indicators for input status: one per channel
- I/O Connector
 - 50-pin ribbon male
 - 50-pin SCSI-II female
- Operating temperature: 0 to 60 °C
- Storage temperature: -20 to 80 °C
- Relative humidity: 5 to 95%, noncondensing

- Power requirement:

+5V
40 mA maximum

- Dimensions
 - TB-24P: 220 mm x 132 mm x 23 mm (WxLxH)
 - DIN-24P: 259 mm x 121 mm x 55 mm (WxLxH)

Ordering Information

- **TB-24P/24**
Termination Board with 24-CH Isolated Digital Inputs (Including One 1.5-meter ACL-10150 Cable)
- **DIN-24P/24**
Termination Board with 24-CH Isolated Digital Inputs and DIN-Rail Mounting (Including One 1.5-meter ACL-10150 Cable)