

Adapters & Sockets

IDC50-SRC

'Plug-on' Output Sinking Driver Interface

I/O Compatibility
Industry Standard I/O Racks

Overview

The **IDC50-SRC** is a piggy-back adapter board with on-board *inverting* I/O Module Drivers designed to control standard **Output** Modules. It comprises 24 individual module drivers with sinking outputs for interfacing and converting PLC sourcing outputs or TTL logic to logic compatible with standard output modules (active low). The input terminals accepts control logic signals ranging from standard 5v to 24V (active high). — see *Operation*

The **IDC50-SRC** adapter board plugs directly onto the IDC 50 pin connector of Industry Standard I/O Mounting Racks to provide wiring access for all Input/Output control signals (*for up to 24 position I/O Racks*) and signal common (GND). The 26 position terminal block accepts wires ranging from 16 to 24 AWG wires.

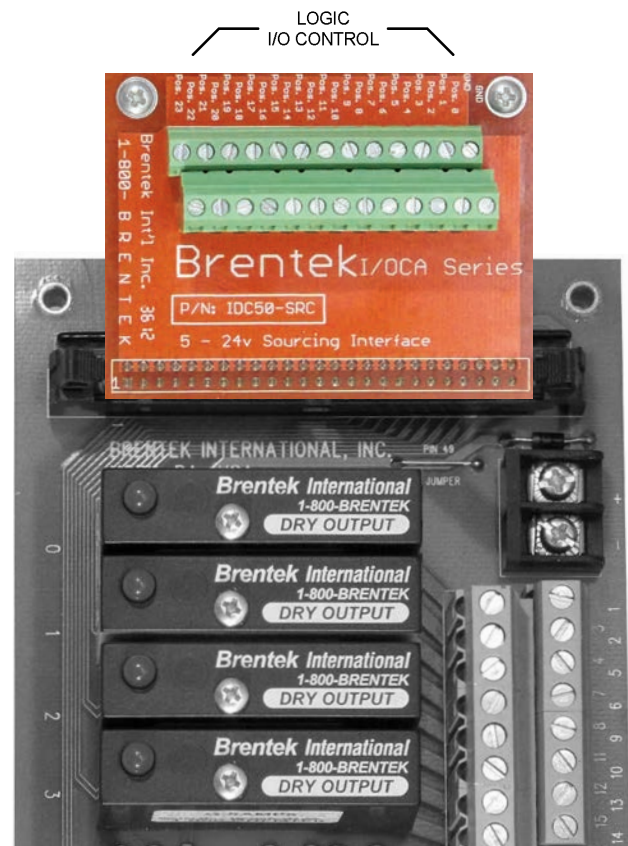
Compatible with 5 to 24V Logic.

Recommended Operating Parameters

SYMBOL	PARAMETER	LIMITS			UNIT	CONDITION
		MIN	TYP	MAX		
V _{cc}	I/O Rack Voltage	4.75		26	VDC	Output Module Voltage
V _{IL}	Logic Input Low	0		0.5	VDC	MAX = Low Input Threshold
V _{IH}	Logic Input High	2.5		26	VDC	MIN = High Input Threshold
I _{out}	Output Drive Current			80	mA	Per Channel (24 Ch)
R _{in}	Input resistance	2.4K	2.7K		Ohms	Per Channel (24 Ch)
f _{in}	Max. Input Frequency	0		1	MHz	Per Ch @50% Duty Cycle

Part Numbering

IDC50-SRC (Standard Model)



Product Features

- ▶ Mounts to 'On-Board' 50 Pin IDC
- ▶ Controls Up to 24 I/O Points
- ▶ Fits Industry Standard I/O Racks
- ▶ Sinking Drivers for up to 24 I/O
- ▶ Direct PLC 24V Interfacing
- ▶ 5V TTL Logic Compatible*
- ▶ Controls 5V to 24V I/O Modules
- ▶ Accepts 16-24 AWG Wire
- ▶ 3 Year Limited warranty**

* Inputs not compatible with open-collector & open-drain logic. All driver inputs must be sourced >2.5V to turn output ON.
** Refer to warranty section for limited warranty details. All inputs include an integral pull-down resistor.

*Absolute Maximum Ratings

Input Voltage (all lines)	-0 to 28VDC
I/O Rack Voltage	-0 to +28VDC
I/O Module sinking current	100 mA/channel
Ambient Operating Temperature ..	-40°C to +85°C

***NOTE:** STRESSES ABOVE THOSE LISTED UNDER ABSOLUTE MAXIMUM RATINGS MAY CAUSE PERMANENT DEVICE DAMAGE. OPERATION AT THESE RATINGS FOR EXTENDED PERIODS MAY AFFECT RELIABILITY.

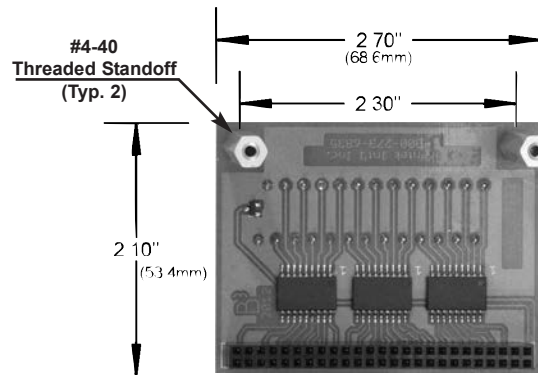
Operation

When plugged into an Industry Standard I/O rack with standard Output Modules, each I/O point is turned-on with a logic high signal present at the corresponding Terminal Block Control input (TB). The input on TB accepts a wide range of logic signals from 5V TTL to 24V PLC Sourcing. The input signal is converted to an 'open-collector' sinking (logic low) signal required to turn-on the corresponding Output Module.

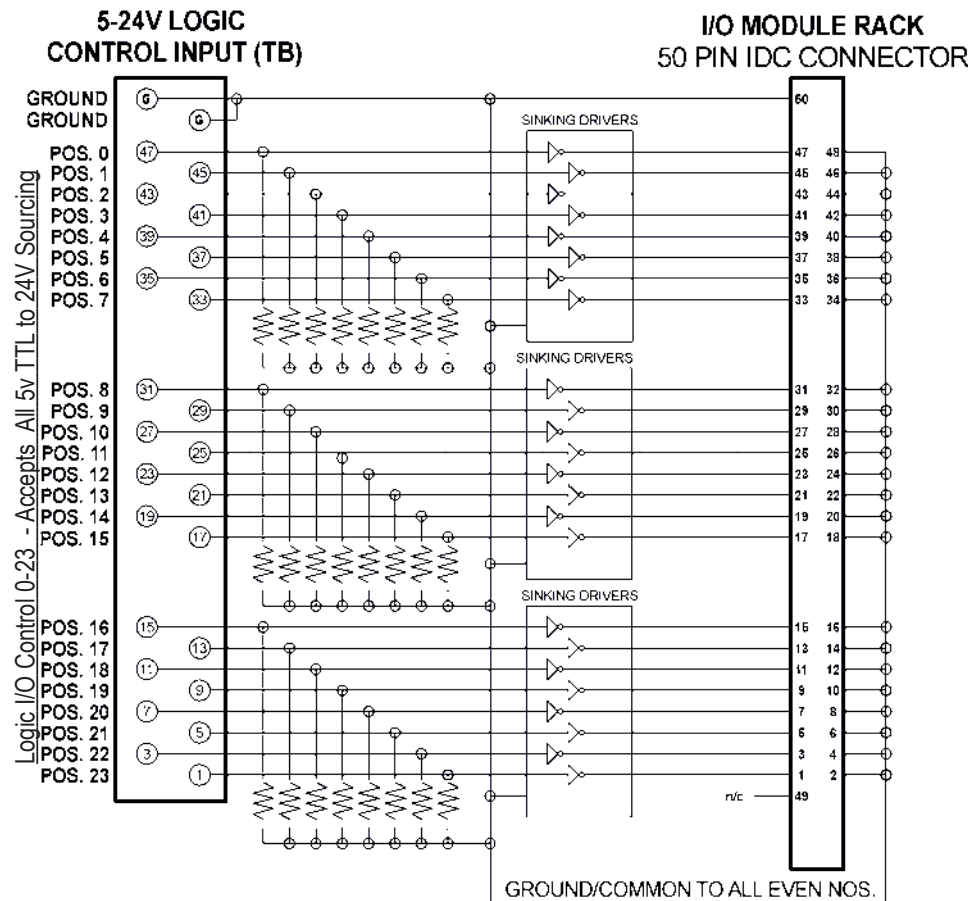
Dimensions

(Bottom View)

Dimensions are in inches except where noted otherwise.



Schematic Diagram



Applications Information:

1. The IDC50-SRC operates as a passive driver requiring no external power. High Logic signals applied to the input terminals are directly converted to logic low (sinking) control signals to the corresponding output modules.
2. Any power source applied to the I/O rack is used to power the output modules used. The IDC50-SRC operates over the full 5 to 24VDC range of module types, regardless of input logic voltage. All I/O modules should correspond to I/O rack voltage.
3. For use with I/O racks where pin 1 is tied to +V, terminal POS 23 should be tied to ground.
4. Internal pull-down resistor assures inputs 'not connected' or 'open' are OFF.