

# PRODUCT PROFILE

## E1 PLUS DEVICENET™ COMMUNICATION MODULE

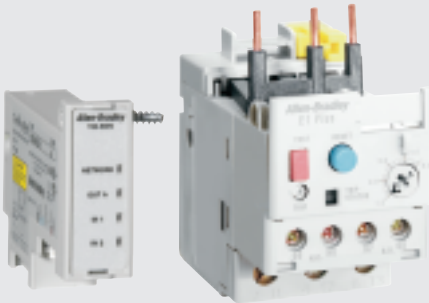
Allen-Bradley's E1 Plus electronic overload relays are the industry's first modular self-powered devices. Through the use of optional side-mount accessory modules, functionality of the E1 Plus overload relays can be cost effectively expanded and machine operation and protection enhanced.

### ADVANTAGES:

**COMPACT** – direct mounting to the left side of the 193-EE and 592-EE E1 Plus overload relays, only 18mm is added to the width

**SIMPLIFIED CONTROL** – the side-mount modules electronically interface with the E1 Plus overload relay so that all control circuit connections are made at the E1 Plus overload relay terminals

**FLEXIBILITY** – the modular design of the E1 Plus overload relays allows for expanded functionality in only those applications where it is required



### TAKE THE FIRST STEP TO INTELLIGENT MOTOR CONTROL

Seamless deployment of motor starters onto the Integrated Architecture is cost effectively accomplished with the E1 Plus Electronic Overload Relay and the optional DeviceNet™ Communication Module accessory. Streamline processes with enhanced control, protection, monitoring, and diagnostic capability for improved operating efficiency.

**ESSENTIAL COMPONENTS.  
EXCEPTIONAL VALUE.**

# 193-EDN DEVICENET COMMUNICATION MODULE

- ODVA Conformance Tested
- Unconnected Message Manager (UCMM) Support
- Get/Set Single Attribute Explicit Messaging
- Autobaud Network Rate Detection

## INTEGRATED I/O

Integrated I/O allow simplification of the network architecture, providing local connection of motor starter related inputs and outputs.

- 2 Inputs – 24 Vdc rated, module supplied
- 1 Output – B300 rated

## STATUS INDICATORS

**Network Status:** Green/red LED indicates the status of the network connection

**OUT A:** Amber LED that illuminates when the output contacts are commanded closed

**IN 1 and 2:** Amber LEDs illuminate when the user-connected device contact actuates

## OPERATIONAL AND DIAGNOSTIC DATA

The DeviceNet module allows access to the following information, allowing continual monitoring of machine performance:

- Average Motor Current (as a percentage of motor rated current)
- Percentage of Thermal Capacity Usage
- Device Status
- Trip and Warning Identification
- Trip History (record of five most recent trips)

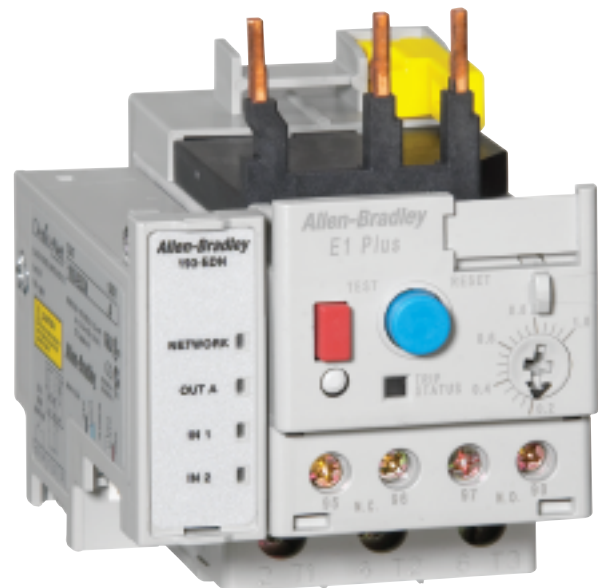
## EXPANDED PROTECTION FUNCTIONS

The added protective functions provided by the DeviceNet module increase the protection of motor and load. Additionally, warning functions allow operations personnel to take action when motor performance parameters exceed permissive limits so that downtime can be avoided.

**Overload Warning:** By monitoring the percentage of thermal capacity utilization (TCU) signal of the E1 Plus overload relay, the DeviceNet module offers a setting range of 0...100% TCU.

**Jam Protection:** A quick response in taking a motor off-line in the event of a mechanical jam reduces the potential for damage to the motor and the power transmission components. Trip adjustments include a trip setting adjustable from 150...600% FLA and a trip delay time with a range of 0.1...25.0 seconds. A separate warning setting is adjustable from 100...600% FLA.

**Underload Warning:** A sudden reduction in motor operating current can signal an abnormal condition such as pump cavitation or drive belt breakage. The underload warning function offers a setting range of 30...100% FLA.



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