

Bulletin 100 DeviceNet™ Starter Auxiliary with DeviceLogix™



Product Profile

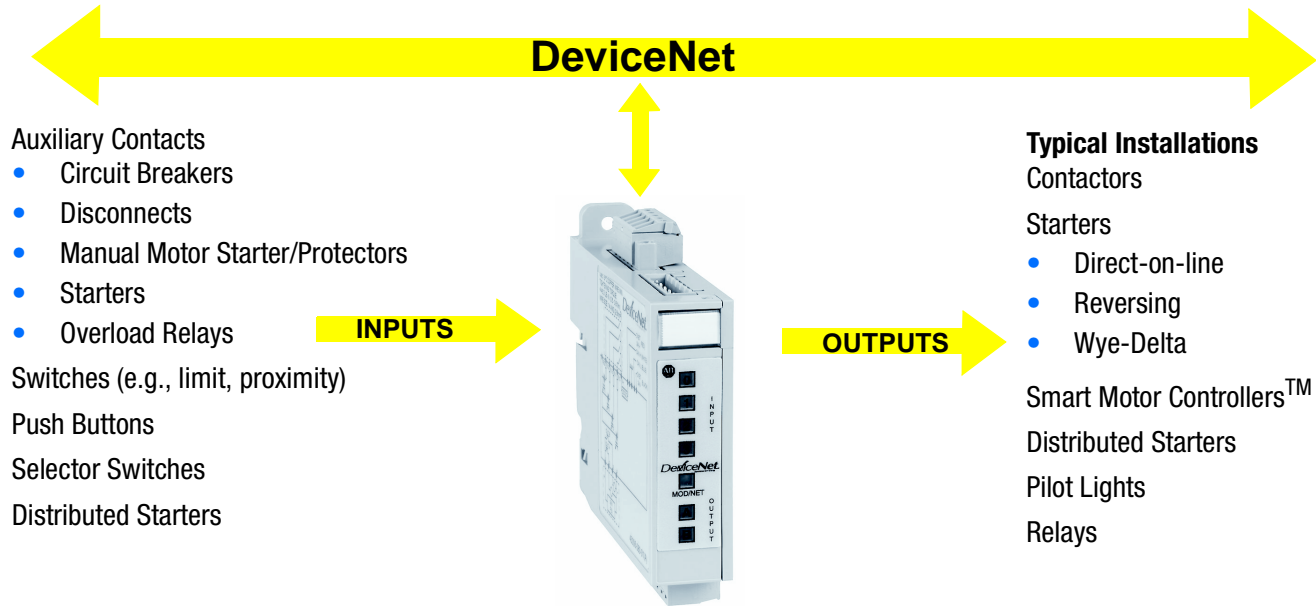
Flexible, Cost-Effective Direct Component Connection to DeviceNet

The Allen-Bradley Bulletin 100 DeviceNet Starter Auxiliary (DSA) is an optimal Complete Automation product to use for connecting discrete input or output devices to a DeviceNet network. High-capacity outputs are especially suited for motor starter applications. With the addition of DeviceLogix, control functions can be performed at the device level. As a world-class product, the DSA's modular concept enables it to be installed in both new and existing installations and provides the following features:

- **Compact size**
 - 22.5 mm wide
 - Enables I/O to be added to devices while requiring minimal panel space
 - Mounted via 35 mm DIN rail or to a panel using two mounting screws
- **Easy to install**
- **Cost-effective communications**
- **DeviceLogix — provides embedded control at the device level**
 - Processing at the device level reduces sense to actuation times, **resulting in higher network performance**
 - Offers stand-alone control features such as alarming, event detection, and signal conditioning
- **I/O configurations**
 - 4 inputs/2 outputs
- **Examples of components connected to DeviceNet:**
 - Pushbuttons
 - Limit switches
 - Disconnect switches
 - Motor starters
 - Reduced-voltage starters
 - Pilot lights
 - Relays
 - Solenoids



- **Simplified Wiring**
 - Plug-in terminal blocks (allow connectors to be wired and then plugged into the unit)
 - Supports “wire elimination” when compared to non-networked applications. Multiple wiring runs are replaced by a single trunk cable and I/O connections are made locally, saving both installation time and wire.
- **LED input and output status indicators**
- **Flexible Outputs**
 - Choice of outputs is available, adding flexibility to the DSA configuration options
 - Both relay and solid-state outputs are available for switching loads
 - Relay output – 5 A at 240V AC
 - Solid-State output – 2 A at 24V DC



Available options:

- **Inputs** — Accepts inputs from hard contacts (e.g., contactor, overload relay or circuit breaker auxiliary contacts, disconnect switches; limit switches; proximity switches)
 - 120V AC or 24V DC
 - Automatic reset of faulted inputs
- **Outputs** (e.g., to energize a contactor, solenoid or pilot light)
 - Solid-state output (for DC contactor coils)
 - Relay output (generally for AC contactor coils)
- **Mounting**
 - DIN Rail
 - Panel
 - Dovetail connection to Bulletin 100C contactor
- **Communication**
 - Autobaud detection; without DIP switches — adding to ease of setup
 - Faulted node recovery — for ease of installation and configuration
 - Change-of-State (COS) messaging — reduces network traffic
 - Individual LED status indication for both inputs and outputs — provides easily identified status indication

Product Selection:

Description		Cat. No.
120V AC, 4 inputs	2 Relay outputs	100-DNY41R
24V DC, 4 inputs	2 Relay outputs	100-DNY42R
24V DC, 4 inputs	2 Solid-state outputs	100-DNY42S

The DSA is cost-effective, particularly in comparison to applications in which discrete inputs are wired back to a programmable logic controller (PLC) (e.g., motor starting applications). The DSA's ease of wiring, compact size and DeviceNet communications protocol allow traditionally discrete devices to be connected to DeviceNet simply and easily.

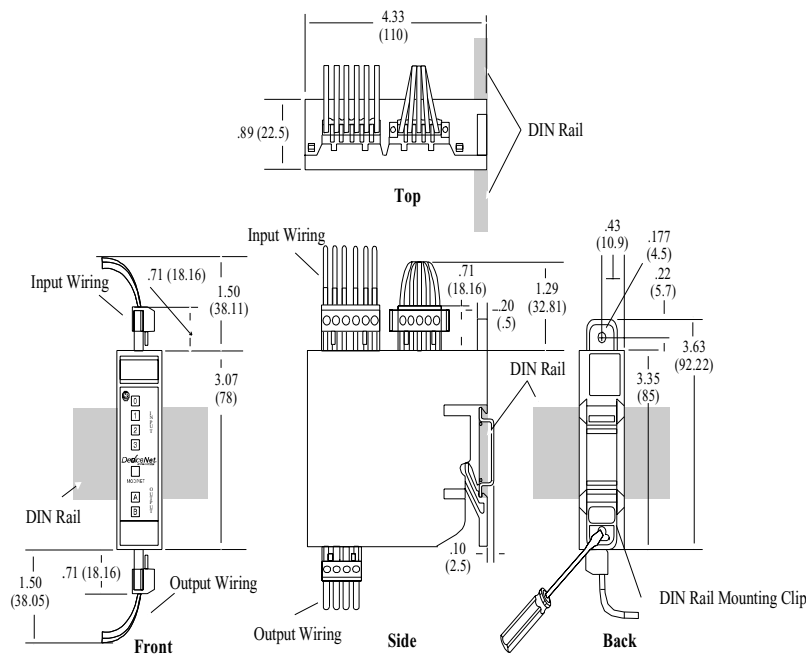
Input Specifications

		Cat. No. 100-DNY41R	Cat. Nos. 100-DNY42R, 100-DNY42S
Inputs per device		4 for 100-DNY41R	4 for 100-DNY42R, 100-DNY42S
On-state voltage range		80...132V AC	10...30V DC
Off-state voltage		40V at 60 Hz	5.5V DC
On-state current	max.	2 mA	11 mA at 30V
	min.	1.2 mA	3 mA at 10V
Off-state current		0.6 mA min.	1.5 mA max.
Transition	Voltage	40...79V AC	5...10V DC
	Current	0.6...1.2 mA	1.5...3 mA
Sensor Source	Voltage	—	19...25V DC
	Current	—	35 mA

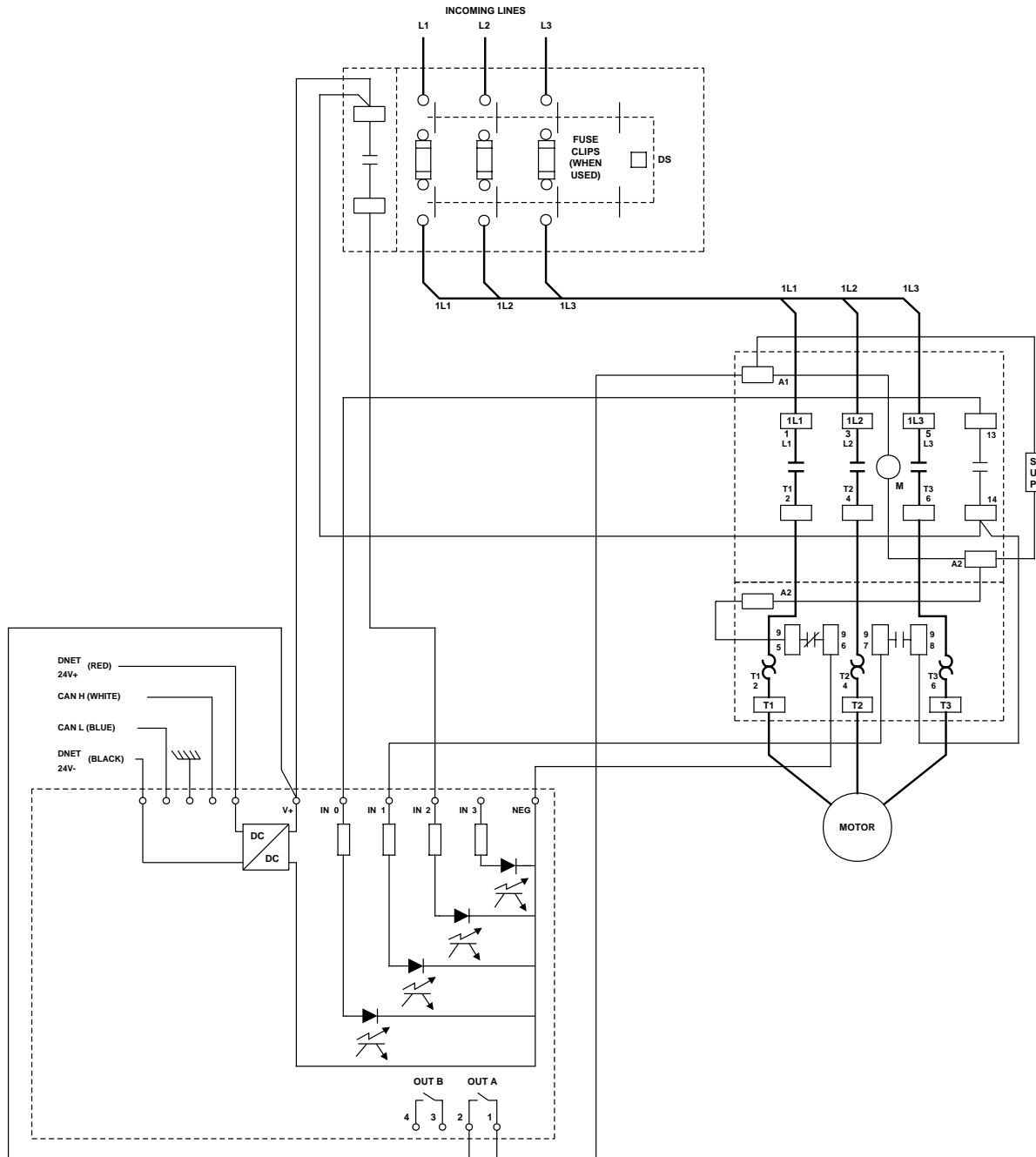
Output Specifications

		Cat. Nos. 100-DNY41R, 100-DNY42R (Relay Outputs)	Cat. No. 100-DNY42S (Transistor Outputs)
Outputs per device		2 for 100-DNY41R, 100-DNY42R	2 for 100-DNY42S
Voltage range		max. 240V AC, 30V DC	15...30V DC, ± 0.0%
Switching Capacity	max.	3600 VA UL: B 300 IEC: AC-15: 5 A	—
Thermal continuous current per output		5 A	—
On-State voltage drop		—	0.25V at 2 A
On-State current per output		—	2 A
Maximum Off-state leakage current		—	1.5 mA
Surge Current per output		—	4 A for 50 ms

Approximate Dimensions — Dimensions are in inches (mm). Dimensions are not intended for manufacturing purposes.



Wiring Diagram — for typical starter applications (100DNY-42R shown)



Reach us now at www.rockwellautomation.com

Wherever you need us, Rockwell Automation brings together leading brands in industrial automation including Allen-Bradley controls, Reliance Electric power transmission products, Dodge mechanical power transmission components, and Rockwell Software. Rockwell Automation's unique, flexible approach to helping customers achieve a competitive advantage is supported by thousands of authorized partners, distributors and system integrators around the world.

Americas Headquarters, 1201 South Second Street, Milwaukee, WI 53204, USA, Tel: (1) 414 382-2000, Fax: (1) 414 382-4444
European Headquarters SA/NV, avenue Herrmann Debroux, 46, 1160 Brussels, Belgium, Tel: (32) 2 663 06 00, Fax: (32) 2 663 06 40
Asia Pacific Headquarters, 27/F Citicorp Centre, 18 Whitfield Road, Causeway Bay, Hong Kong, Tel: (852) 2887 4788, Fax: (852) 2508 1846

Publication 100-PP005B-EN-P — June 2001
 Supersedes Publication 0100-1.8 — May 1999



Rockwell Automation