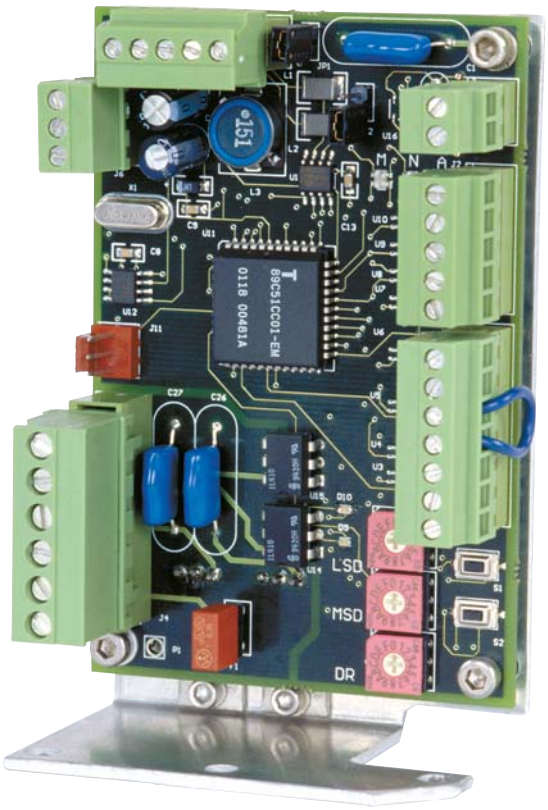
DeviceNet™ Control Logic Card



Models
DNET115 **115 Volt A.C. Actuators**

Application

For on/off or positioning control of motorized valves. DeviceNet™ is a type of communication network that allows up to 63 field devices to be linked together with a singe five-conductor cable. DeviceNet™ is a product of Allen-Bradley and is an open, non-proprietary, bus network. Typically, a DeviceNet™ system is used with the Allen-Bradley PLC5 and SLC series of programmable logic controllers. A standard DeviceNet™ Scanner interface is available for both types. Devices in the field are connected via a drop line to a 5 conductor trunk-line that is then routed to the scanner card.

Features

- Provides open/stop/close or positioning control with limit switch status feedback.
- Provides instantaneous motor reversal protection.
- Command and end-of-travel verification alarm.
- Conforms to ODVA standards.
- Easy-to-see LED indicators for all control outputs, status inputs and diagnostic alarm.
- ESD functions for ‘go open’, ‘stay put’, or ‘go closed’.

Hardware Specifications

Supply Power:	2W @ 24VDC
Operating Temperature:	-20°C – 70°C
Storage Temperature:	-40°C – 80°C
Humidity:	90% Non Condensing
Solid State Outputs:	(2) Isolated 600VAC 15A
Digital Inputs:	(8) Dry Contacts
Analog Inputs:	(2) Channels (see below)
Processor:	Temic 89C51CC01
RAM:	1K
Flash:	32K
EEPROM:	32K

Specifications

Technical Summary of DeviceNet™

Network Size:	Up to 64 nodes (including scanner)
Network Length:	Up to 1,640 ft. at 125 Kbps.
Data Packets:	0-8 bytes
Bus Topology:	Trunkline/Dropline
Cable:	5-Conductor cable (2 for power, 2 for communication, and 1 for ground).
Thick Trunk Lines:	Belden 3082A or 3083A
Thin Drop Lines:	Belden 3084A or 3085A
Drop Lines:	Max. drop length is 20 ft. with cumulative drop length of 512 ft.
Repeaters:	Not currently, but expected in future revisions of specifications.

Serial Interfaces

One CAN 2.0 port.

Network Communication Protocols

Module Supports DeviceNet™ Group 2 Slave.

Analog Inputs Specification

Resolution:	10bit
Accuracy:	1% of FS.
Linearity:	1% of FS.
Temperature Drift:	2% of FS.
Range:	0 to 5V or 0-20mA input for AI1 1-5K Potentiometer for the Position Feedback.

Input/Output Listing

Digital Input Status:

Bit 0	Communication Loss
Bit 1	Reserved
Bit 2	Loss of Position Signal
Bit 3	Motor Stall
Bit 4	Limit Calibration Incorrect
Bit 5	Thermostat Trip
Bit 6	Manual Operation
Bit 7-15	Reserved

Digital Output Command:

Bit 0	Open Command
Bit 1	Close Command
Bit 2	Stop Command
Bit 3	ESD Command
Bit 4-7	Future

Environmental

Temperature Range:	Storage: -40°C to +90°C Operating: -20°C to +80°C
Humidity Range:	5% to 95% at 25°C non-condensing
Vibration:	IEC 6B-2-6 1G @ 40-50 Hz., 0.012p-p @ 10-40 Hz.

Industrial Products Group
Dresser, Inc.
16240 Port Northwest Drive
Houston, Texas 77041-2645 USA
Ph: 832.590.2306 Fax: 713.849.2879
Toll Free Phone: 800.945.9898 Email: rcs@dresser.com, andco@dresser.com

www.dresser.com