



For GPD 333
Adjustable Frequency Drives

DEVICENET SATELLITE

MODEL CM051

NOTE

This option may have been installed by the factory. However, certain steps can only be completed at the installation site. Therefore, review and then perform those steps which will complete the installation process.

CAUTION

Before installing this option, a TECHNICALLY QUALIFIED INDIVIDUAL who is familiar with this type of equipment and the hazards involved, should READ THIS ENTIRE INSTRUCTION SHEET.

CAUTION

The DeviceNet Satellite board is an electrostatic sensitive device. Personnel must use approved methods for handling this type of equipment.

WARNING

HAZARDOUS VOLTAGE CAN CAUSE SEVERE INJURY OR DEATH. ENSURE ALL POWER SOURCES FEEDING DRIVE ARE LOCKED IN THE "OFF" POSITION BEFORE INSTALLING THIS OPTION.

INTRODUCTION

The DeviceNet network is a low-cost communications network used to connect industrial devices (such as limit switches, photoelectric switches, valve manifolds, motor starters, smart motor controllers, operator interfaces, and variable frequency drives) as well as control devices (such as programmable controllers and computers).

The DeviceNet network can accommodate up to 64 nodes per network. A GPD 333 appears as one node on the network. A DeviceNet Satellite board (MagneTek part no. CM051) must be installed into each GPD 333 drive that will be communicating on the DeviceNet network. The GPD 333 DeviceNet Satellite resides on the front of the drive in the location normally used by the status plate or the Digital Operator. The Satellite board is powered from both the 24VDC DeviceNet network power and the GPD 333 drive that it is connected to.

CHANGE RECORD			

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SPECIFICATIONS

GPD 333 DeviceNet Satellite	
Ambient Temperature	-10 to +40 degrees C (+14 to +104 degrees F)
Storage Temperature	-20 to +60 degrees C (-4 to +140 degrees F)
Relative Humidity	90% noncondensing
Altitude	3300 feet
Vibration	1G at less than 20 Hz, 0.2 G at 20-50 Hz
Input Power	Voltage: 11-25 VAC Current: 40 mA

SYSTEM CONNECTIVITY

The table below shows the Connector Pinout for the GPD 333 DeviceNet Satellite. For information on DeviceNet network topology, maximum cable distance, cable specifications, and network termination, refer to the GPD 333 DeviceNet Satellite technical manual, TM 4336.

Pin	Label	Definition	Color
1	V-	Common	Black
2	CL	CAN Data Signal Low	Blue
3	SH	Shield/Drain Connection	Bare
4	CH	CAN Data Signal High	White
5	V+	+24 VDC	Red

INSTALLATION

The DeviceNet Satellite installs directly on the GPD 333 drive in place of the standard status plate or optional Digital Operator display (see Figure 1).

1. Disconnect all electrical power to the GPD 333.
2. Remove the GPD 333 access cover located on the bottom front of the drive (View A).
3. Check to ensure that the CHARGE indicator lamp (located inside the GPD 333 on the bottom left corner) is not lit.
4. Verify that voltage has been disconnected by using a voltmeter to check for power at incoming power terminals (L1, L2, L3).
5. Gently press down on the plastic terminal board label strip located just below the status plate or Digital Operator (View B). Carefully lift upward on the bottom edge of the status plate/Digital Operator until the connector located on its back is released from the drive.
6. Route the green pigtail ground wire of the DeviceNet Satellite board through the rectangular opening in the drive chassis located in the area from which the status plate/Digital Operator was removed. This ground wire should be connected to one of the drive ground terminals marked 'G'. The two drive ground terminals are located at the lower right and lower left corners of the GPD 333.
7. The ten-position dipswitch located on the back of the DeviceNet Satellite board should be properly configured at this time (see setting definitions on last page of this instruction sheet).
8. Install the DeviceNet Satellite board in the mounting recess (View C).
9. Replace the GPD 333 access cover.
10. Insert the DeviceNet network connector into the receptacle on the front of the DeviceNet Satellite.

This completes installation of this option.

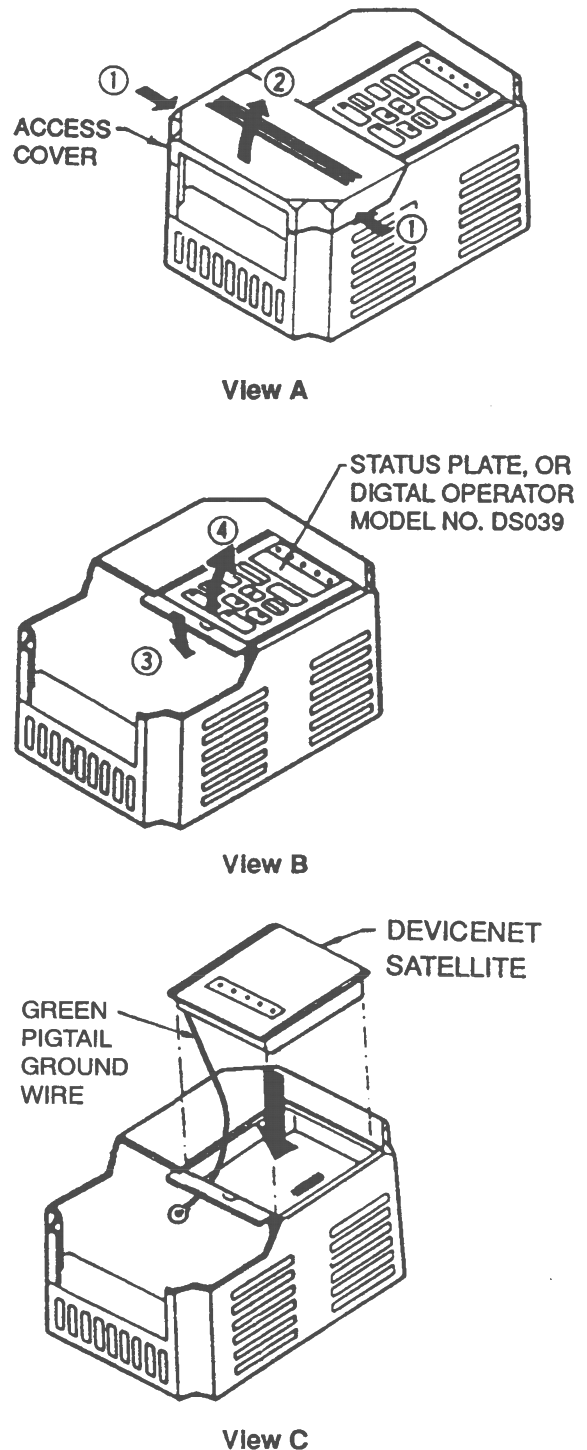


Figure 1 Mounting DeviceNet Satellite

DIPSWITCH SETTINGS

SWITCH #	SWITCH FUNCTION
1	Baud Rate, Bit 1
2	Baud Rate, Blt 0
3	GPD 333 Node Address, MSB
4	GPD 333 Node Address
5	GPD 333 Node Address
6	GPD 333 Node Address
7	GPD 333 Node Address
8	GPD 333 Node Address, LSB
9	Network Control of Frequency
10	Network Control of Run/Stop

Baud Rate	Switch 1	Switch 2
125 Kbaud	Off	Off
250 Kbaud	Off	On
500 Kbaud	On	Off
500 Kbaud	On	On

Network Control of Frequency	Switch 9
Frequency control local	Off
Frequency control from network	On

Network Control of Run/Stop	Switch 10
Run/Stop control local	Off
Run/Stop control from network	On

Node Address	Sw 3	Sw 4	Sw 5	Sw 6	Sw 7	Sw 8	Node Address	Sw 3	Sw 4	Sw 5	Sw 6	Sw 7	Sw 8
0	Off	Off	Off	Off	Off	Off	32	On	Off	Off	Off	Off	Off
1	Off	Off	Off	Off	Off	On	33	On	Off	Off	Off	Off	On
2	Off	Off	Off	Off	On	Off	34	On	Off	Off	Off	On	Off
3	Off	Off	Off	Off	On	On	35	On	Off	Off	Off	On	On
4	Off	Off	Off	On	Off	Off	36	On	Off	Off	On	Off	Off
5	Off	Off	Off	On	Off	On	37	On	Off	Off	On	Off	On
6	Off	Off	Off	On	On	Off	38	On	Off	Off	On	On	Off
7	Off	Off	Off	On	On	On	39	On	Off	Off	On	On	On
8	Off	Off	On	Off	Off	Off	40	On	Off	On	Off	Off	Off
9	Off	Off	On	Off	Off	On	41	On	Off	On	Off	Off	On
10	Off	Off	On	Off	On	Off	42	On	Off	On	Off	On	Off
11	Off	Off	On	Off	On	On	43	On	Off	On	Off	On	On
12	Off	Off	On	On	Off	Off	44	On	Off	On	On	Off	Off
13	Off	Off	On	On	Off	On	45	On	Off	On	On	Off	On
14	Off	Off	On	On	On	Off	46	On	Off	On	On	On	Off
15	Off	Off	On	On	On	On	47	On	Off	On	On	On	On
16	Off	On	Off	Off	Off	Off	48	On	On	Off	Off	Off	Off
17	Off	On	Off	Off	Off	On	49	On	On	Off	Off	Off	On
18	Off	On	Off	Off	On	Off	50	On	On	Off	Off	On	Off
19	Off	On	Off	Off	On	On	51	On	On	Off	Off	On	On
20	Off	On	Off	On	Off	Off	52	On	On	Off	On	Off	Off
21	Off	On	Off	On	Off	On	53	On	On	Off	On	Off	On
22	Off	On	Off	On	On	Off	54	On	On	Off	On	On	Off
23	Off	On	Off	On	On	On	55	On	On	Off	On	On	On
24	Off	On	On	Off	Off	Off	56	On	On	On	Off	Off	Off
25	Off	On	On	Off	Off	On	57	On	On	On	Off	Off	On
26	Off	On	On	Off	On	Off	58	On	On	On	Off	On	Off
27	Off	On	On	Off	On	On	59	On	On	On	Off	On	On
28	Off	On	On	On	Off	Off	60	On	On	On	On	Off	Off
29	Off	On	On	On	Off	On	61	On	On	On	On	Off	On
30	Off	On	On	On	On	Off	62	On	On	On	On	On	Off
31	Off	On	On	On	On	On	63	On	On	On	On	On	On

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