

D77A-NQ2**Analog Output Installation Leaflet****Installation of the D77A-NQ2**

The D77A-NQ2 is designed to be used in industrial applications and installed in accordance with this document. The intended use of the D77A-NQ2 is for use in clean, dry environments.

Mount the D77A-NQ2 to the DIN Rail

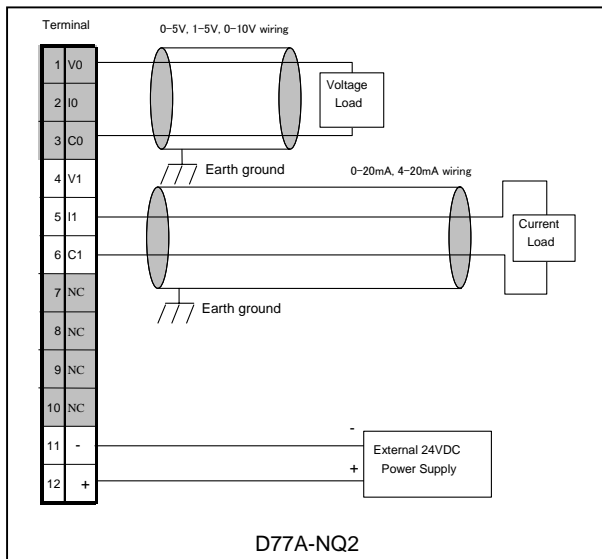
To mount the D77A NQ2 to a DIN rail the following procedure must be performed.

- Rotate the orange locking cams to unlock the customer-wiring terminal from the D77A-NQ2 module.
- Remove the terminal from the D77A-NQ2.
- Using a screwdriver or fingernail, gently pull out the locking tab located at the right side center of the D77A-NQ2 module.
- Insert the D77A-NQ2 module on to the DIN rail.
- Depress the locking tab to secure the D77A-NQ2 to the DIN rail.
- Reassemble the customer-wiring terminal to the D77A-NQ2.

Install the Field Wiring on the D77A-NQ2

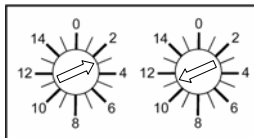
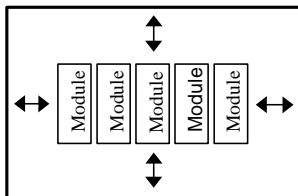
The customer-wiring terminal is used to connect the field wiring to the D77A-NQ2 module. It is recommended to limit the cable impedance by keeping the cable length as short as possible. The recommended cable is a Belden™ 8761 or equivalent. Limiting the distance from ground to the shield is also recommended.

Wire Type	Wire Size	Terminal Torque
Solid Cu-90°C	#14 - # 22 AWG	4.5 in.-lbs.
Stranded Cu-90°C	#16 - # 22 AWG	4.5 in.-lbs.

**Set the Group ID of the D77A-NQ2**

The Group ID is set using the rotary switch located at the top face of the D77A-NQ2 module.

The example to the right has the group ID switch set to 3 on the left and 11 on the right.

**Spacing Requirements for the D77A-NQ2**

Allow a minimum of 50mm (2 in) of ventilation space on the top and bottom of each module and to each side of a grouping of modules

Setup and Configuration of the D77A-NQ2

The IT. D77A-NQ2 will be completely configured from CH Studio Component Manager other than setting of the Group ID. For more information on the parameters and how to modify them refer to the user manual **MN05002001E**.

Specifications of the D77A-NQ2

Voltage Output	0-5Vdc, 1-5Vdc, 0-10Vdc	
Current Output	4-20mA, 0-20mA	
QCPort Current Draw	40mA max	
External Power	60A max @ 24Vdc	
Output Types	Single ended, Uni-polar	
Protections	Open and short circuit	
Points	2	
Resolution	Range	Resolution
	4-20mA, 0-20mA	14 bit
	0-10Vdc	14 bit
	0-5Vdc, 1-5Vdc	13 bit
Output Full Scale	Voltage – 0-10.5Vdc, 0-5.25Vdc Current – 0-21mA	
Over voltage protection	36Vdc @ +/- terminals	
Output to Bus Isolation	1500Vac for 60 seconds	
Resistive load on current output	<500 ohm	
Load range on voltage output	>1Kohm	
Max inductive load	0.1mH	
Max capacitive load	1 µF	
Output ripple (0-50Hz)	+/- 0.1%	
Output impedance	10 ohm	
Accuracy	Voltage	0.8% full scale @ 25C
		1% full scale @ 0-55C
	Current	0.8% full scale @ 25C
		1% full scale @ 0-55C
Update rate	350 µS	

Environmental Ratings of the D77A-NQ2

Transportation and Storage	Temperature	-50°C to 80°C (-58°F to 176°F)
	Humidity	5-95% non-condensing
	Temperature	0°C to 55°C (32°F to 131°F)
	Humidity	5-95% non-condensing
Operating	Altitude	Above 2000 meters (6600 feet) consult factory
	Shock IEC 68-2-27	15G any direction for 11 milliseconds
	Vibration IEC 68-2-6	5-150 Hz, 5G, 0.7 mm maximum peak-to-peak
	Pollution Degree	2
	Enclosure	IP 20

Approvals/Certifications of the D77A-NQ2

Electrical/EMC	
•ESD Immunity (IEC61000-4-2)	+/- 8kV air, +/- 4kV contact
•Radiated Immunity (IEC61000-4-3)	10V/m 80-1000 MHz, 80% amplitude modulation @ 1kHz
•Fast Transient (IEC61000-4-4)	+/- 2kV supply and control +/- 2kV communications
•Surge (IEC61000-4-5)	+/- 1kV line-to-ground +/- 2kV line-to-line
•RF Conducted (IEC61000-4-6)	10V, 0.15 – 80MHz
•Magnetic Field (IEC61000-4-8)	30 A/m, 50Hz
Ingress Protection Code	IP20
Radiated and Conducted Emissions	EN5011 Class A
Agency Certifications	UL 508 CUL (CSA C22.2 No. 14) CE (Low Voltage Directive)

Default Output Data for the D77A-NQ2

Bit Position			
Word	15	14 - 1	0
0	Sign	Data	N/A
1	Sign	Data	N/A