

D77B-QSNAP Starter Network Adapter Product Installation Leaflet**Mount D77B-QSNAP to IT. Starter**

The IT. D77B-QSNAP is designed to be installed in the auxiliary contact locations of the following IT. family of starters and the IT family of S751 and S752 soft starters.

NEMA N101/N501	IEC E101/E501
00	B
0	C
1	D
2	E
3	F
4	
5	

The D77B-QSNAP is designed to be used with the D77B-HOA8 Hands Off Auto adapter and the standard D77B-TC8 terminal adapter.

- Align both the D77B-QSNAP feet with the auxiliary contact mounting slots on the starter.
Recommendation: Use the middle mounting auxiliary location on the contact block when mounting the D77B-QSNAP.
- When the D77B-QSNAP is aligned, insert the feet into the starter auxiliary location and slide the D77B-QSNAP towards the overload until a "click" is heard. This ensures that the D77B-QSNAP is securely mounted to the starter.

On all starters, one or more auxiliaries can be used along with the D77B-QSNAP. The following table lists starters and indicates the number of available auxiliary locations for each.

Starter Frame Size (mm) (mounting location)	Number of Cover Mounted Available Auxiliary Locations when Center Mounted
45 (middle location)	1 single
54 (middle location)	1 single or 1 dual
76 (middle or right location)	1 single or 2 dual
105 (all locations)	2 single or 2 dual
140 (all locations)	2 single or 2 dual

Wire the D77B-QSNAP to the Starter

The D77B-QSNAP is shipped as a kit with a terminal adapter (D77B-HOA8 or D77B-TC8) to the IT starter and an interconnect cable from the adapter to the D77B-QSNAP to simplify the wiring of the D77B-QSNAP to the IT. starter. The Starter Terminal Adapter is installed into the IT. starter terminal and the terminal's screws are tightened securing the Starter Terminal Adapter in the terminal.

The D77B-QSNAP is connected to the IT. starter using a factory-provided jumper with an RJ-45 plug on each end. Connect one end of the jumper to J1 on the D77B-QSNAP and the other end of the jumper to J1 on the Starter Terminal Adapter.

Note: 24V DC needs to be wired to the Starter Terminal Adapter to power the starter. Size the power supply in accordance with the Motor Controller manual.

Connect the D77B-QSNAP to QCPort

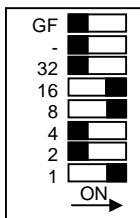
The D77B-QSNAP has two QCPort connections on the front of the unit that are labeled J2 and J3. The two connections are in parallel with one another and used so that multiple QCPort devices can be daisy chained to one another.

Connect the QCPort interconnect (cable) from the previous device to either of the two connections on the D77B-QSNAP. The QCPort interconnect has power and communications in the cable to power the D77B-QSNAP and to provide communications to the device. There are a number of premade interconnects available of various lengths, the part numbers are D77E-QPIPxx where xx is the length of the interconnect in centimeters. For more information on the interconnects or how to install and power QCPort, refer to **MN05001002E** QCPort System Install Manual.

Set the QCPort Address and Option Switches

The QCPort address and option settings are set through the DIP switches located on the face of the D77B-QSNAP. The software tool CH Studio can view the address and options for the D77B-QSNAP, but cannot be used to modify them.

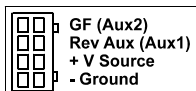
The bottom six switches are used to set the QCPort address. The address is set binary where moving the switch to the left is off and to the right is on. The option switches are used to enable the ground fault if a ground fault relay is connected to the D77B-QSNAP. Moving the GF switch to the right enables the ground fault.



Example: To set the address to 25, start from the top address switch (or 32) and set the switches to OFF(32), ON(16), ON(8), OFF(4), OFF(2), ON(1) (16+8+1=25).

Connect Auxiliary Devices to the D77B-QSNAP

The IT. D77B-QSNAP can accept two auxiliary inputs. One input is designed for the ground fault (GF) detector and the other input is for detecting the position of the reversing contactor (AUX) for full voltage reversing starters.



On the front of the D77B-QSNAP is a Connector Access breakout. The connector is accessed by prying up and removing breakout. The mating part of the connector is supplied with the Auxiliary device. The illustration describes the locations of the Auxiliary wiring. Refer to the users manual for proper wiring and configuration of the auxiliary inputs.

Setup and Configuration of the D77B-QSNAP

The IT. D77B-QSNAP requires no extra setup or configuration for normal operation, the user must only set the QCPort address. Prior to powering the D77B-QSNAP for the first time, ensure that the D77B-QSNAP is properly mounted and connected to the IT. Starter. The first time the D77B-QSNAP/IT. Starter assembly is powered, an association is made between the two. From then on, the D77B-QSNAP will fault if connected to an IT starter of a different overload range or frame size. If the D77B-QSNAP is moved to another IT starter of a different overload range or frame size, a fault reset will be required to re-associate the D77B-QSNAP/IT. Starter assembly.

There are extended parameters that can be set for increased diagnostics, also, the input and output data can be changed depending on system requirements. For more information on the parameters and how to modify them refer to **MN05001001E** QSNAP Installation and Users Manual.

Environmental Ratings of the D77B-QSNAP

Transportation and Storage	Temperature	-50°C to 80°C (-58°F to 176°F)
	Humidity	5-95% non-condensing
Operating	Temperature	-25°C to 65°C [-13°F to 149°F]
	Humidity	5-95% non-condensing
	Altitude	Above 2000 meters (6600 feet) consult factory
	Pollution Degree	2
	Power Draw	90 mA Steady State
	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

Approvals/Certifications of the D77B-QSNAP

Agency Certifications	UL-CUL UL 508 CSA C22.2 No. 14 CE (Low Voltage Directive)
Radiated and Conducted Emissions	EN5011 Class A
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 +/- 1kV communications
•Surge (IEC61000-4-5)	+/- 1kV line-to-line +/- 2kV line-to-ground
•RF Conducted (IEC61000-4-6)	10V, 0.15 – 80MHz
•Magnetic Field (IEC61000-4-8)	30 A/m, 50Hz
•Voltage Dips (IEC61000-4-11)	30% dip @ 10ms 60% dip @ 100 ms >95% interrupt @ 5 ms
Protection Degree (IEC60947-1)	IP20

Default Input/Output Data of the D77B-QSNAP (Full Voltage Non Reversing)**Input**

Byte	7	6	5	4	3	2	1	0
0	Fault Word (low byte)							
1	Fault Word (high byte)							
2	% FLA (Running current / OL FLA) (low byte)							
3	% FLA (Running current / OL FLA) (high byte)							
4	At Reference	Warning	Faulted	Local	-	Permissive	Running 2	Running 1
5	% Thermal Capacity							

Output

Byte	7	6	5	4	3	2	1	0
0	-	-	-	-	Fault Reset	Permissive	Run2	Run1

Status LED

There is a single bicolor status LED located on the front of the D77B-QSNAP. This status LED is used to indicate QCPort status as well as fault information. The blink rate of the LED indicates various conditions of QCPort while the color of the LED indicates if the device is faulted or not. For example, a Mostly On Red LED indicates that the device is On Line but has a fault (overload trip, phase loss, ground fault...)

State	Description
Mostly Off (10% Duty Cycle)	Off Line, OK
50% Duty Cycle	QCPort Fault
Mostly On (90% Duty Cycle)	On Line
Strobe	Identify or Off Line and Undiscovered
LED is Green	Device is not faulted
LED is Red	Device is faulted
LED is Amber	Device is in a warning state