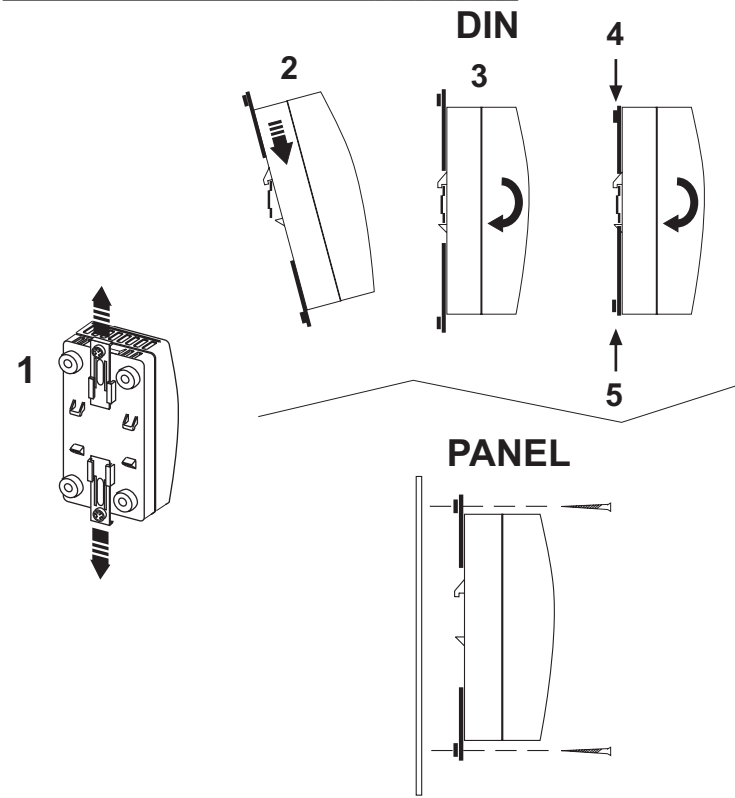


Mechanical



Schneider Electric Andover Continuum
I/O Installation
30-3001-716 Rev G.1

Wiring Rules

These modules are intended for installation within the UL Listed enclosure model UL-ENCL for UL 294 and UL 1076.

Do not remotely ground any part of the input sensor wiring.

Remote grounds connected to the return terminal could make the system operate incorrectly or damage the equipment.

The signal return is not true earth ground. It is an electronic reference point necessary to interpret the sensor properly.

For reliable operation, follow these wiring guidelines:

- Never lay wires across the surface of a printed circuit board.
- Wires should never be within 1 in. or 25 mm of any component on a printed circuit board.
- Use shielded wire.
- Terminate the shield of the wires at one end of the run only—preferably at the end where your I/O module is located.
- Be careful when stripping wire not to drop small pieces of wire inside the cabinet.
- Don't run your wiring in the same conduit with AC power.
- Don't run your input wiring in the same conduit with your output wiring.

Grounding the Modules

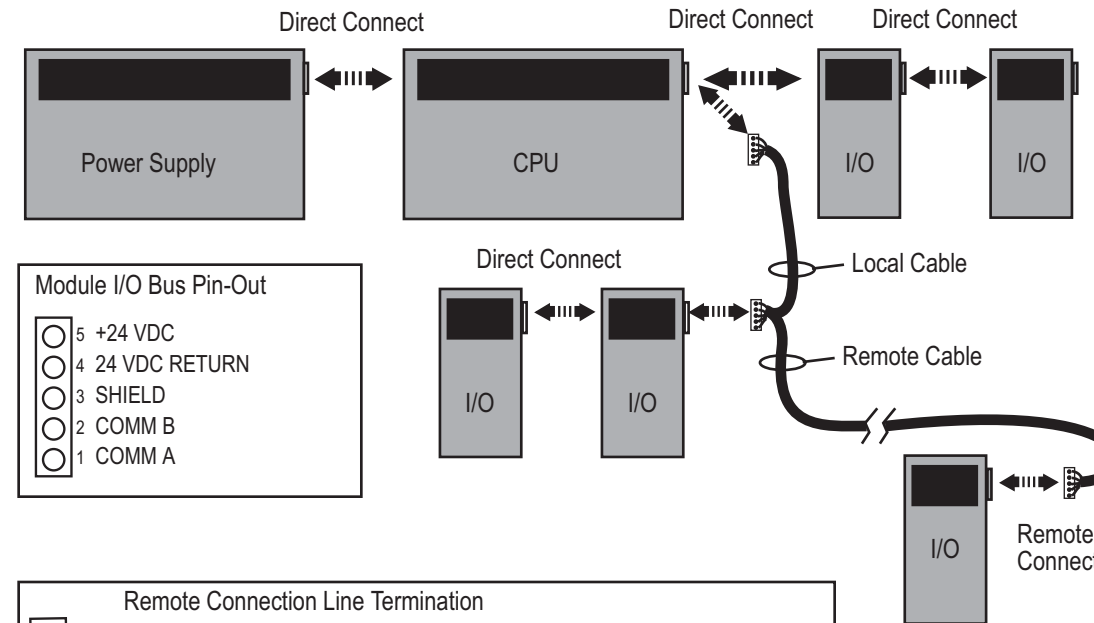
Some modules include an integral ground clip. **All modules include a screw terminal connection for earth ground. It is important that this connection be made as close to the module as possible.**

Caution

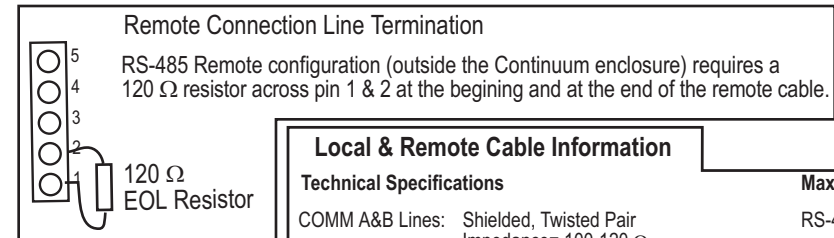
Do not externally ground any input signal. This may damage the unit. Signal return terminals are not connected to earth ground.

I/O Bus

I/O Modules connect in the following configurations:



Module I/O Bus Pin-Out	
5	+24 VDC
4	24 VDC RETURN
3	SHIELD
2	COMM B
1	COMM A



Local & Remote Cable Information

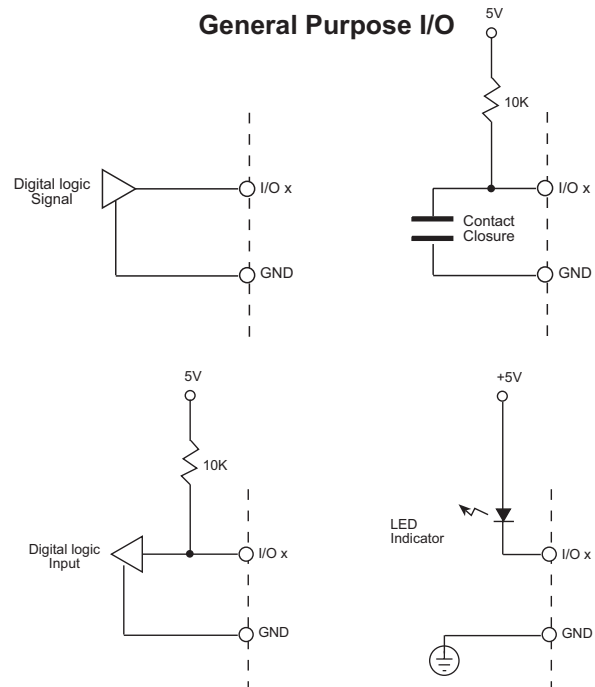
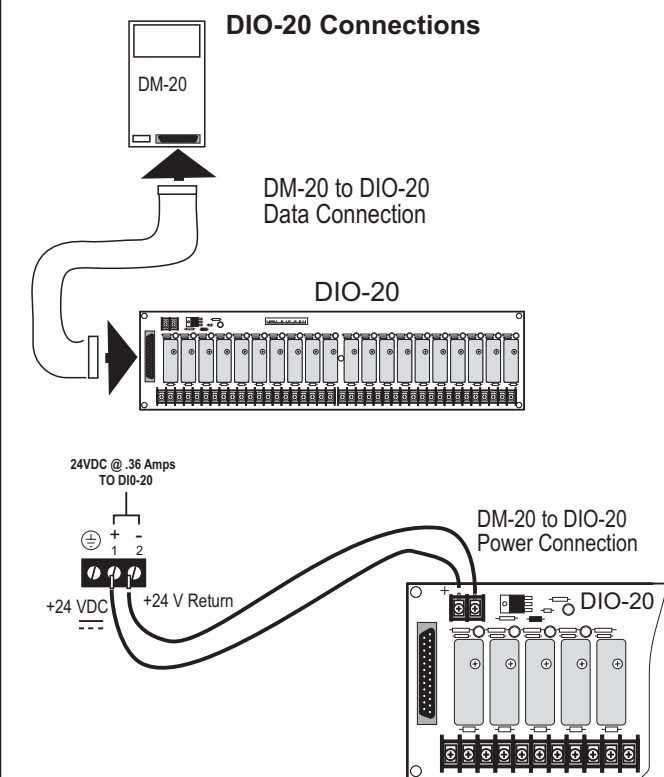
Technical Specifications	Max. Cable Lengths	Connectors
COMM A&B Lines: Shielded, Twisted Pair Impedance= 100-120 Ω Low Capacitance	RS-485 2000 ft. (610 m)	Cable Connector: ACC # 01-0010-840 (20 pcs.)
Power Lines: Remote hookups require Listed UL294 UL1076 power limited power supply. Calculate for maximum voltage drop of 2 VDC	FTT-10A 8858 ft. (2700 m) bus topology 1640 ft. (500 m) free topology	

Max. Number of I/O Modules	
Number of modules is limited to 32 per CPU but may be reduced due to the capacity of the Power Supply**	
Power Supply	Power Avail.
PS 120/240 AC 50-U	35 W
PS 120/240 AC 50	50 W
PS 120/240 AC 85-U ¹	70 W
PS 120/240 AC 85	85 W
PS -48 DC 50	50 W
Module	Power Req.
CPU (NetController)	10 W
UI-8-10 & UI-8-10-10V	0.7 W
DI-6 AC & DI-6 AC HV	0.7 W
DI-8; Digital Input Module	0.8 W
MI-6; MilliAmp Input Module	3.8 W
DM-20	0.5 W *
AO-4-8 & AO-4-8-O	3.8 W
DO-4-R & DO-4-R-O	2.8 W
DO-6-TR	1.1 W
LO-2 & LO-2-O	0.4 W
VT-1	1.5 W
AC-1	2.6 W *
AC-1A	2.0 W *
AC-1 Plus	2.2 W *

¹ The PS 120/240 AC 85-U model is only to be used for UL294 applications.
* Wattage does not include external devices
** 32 modules may require an auxiliary power source.

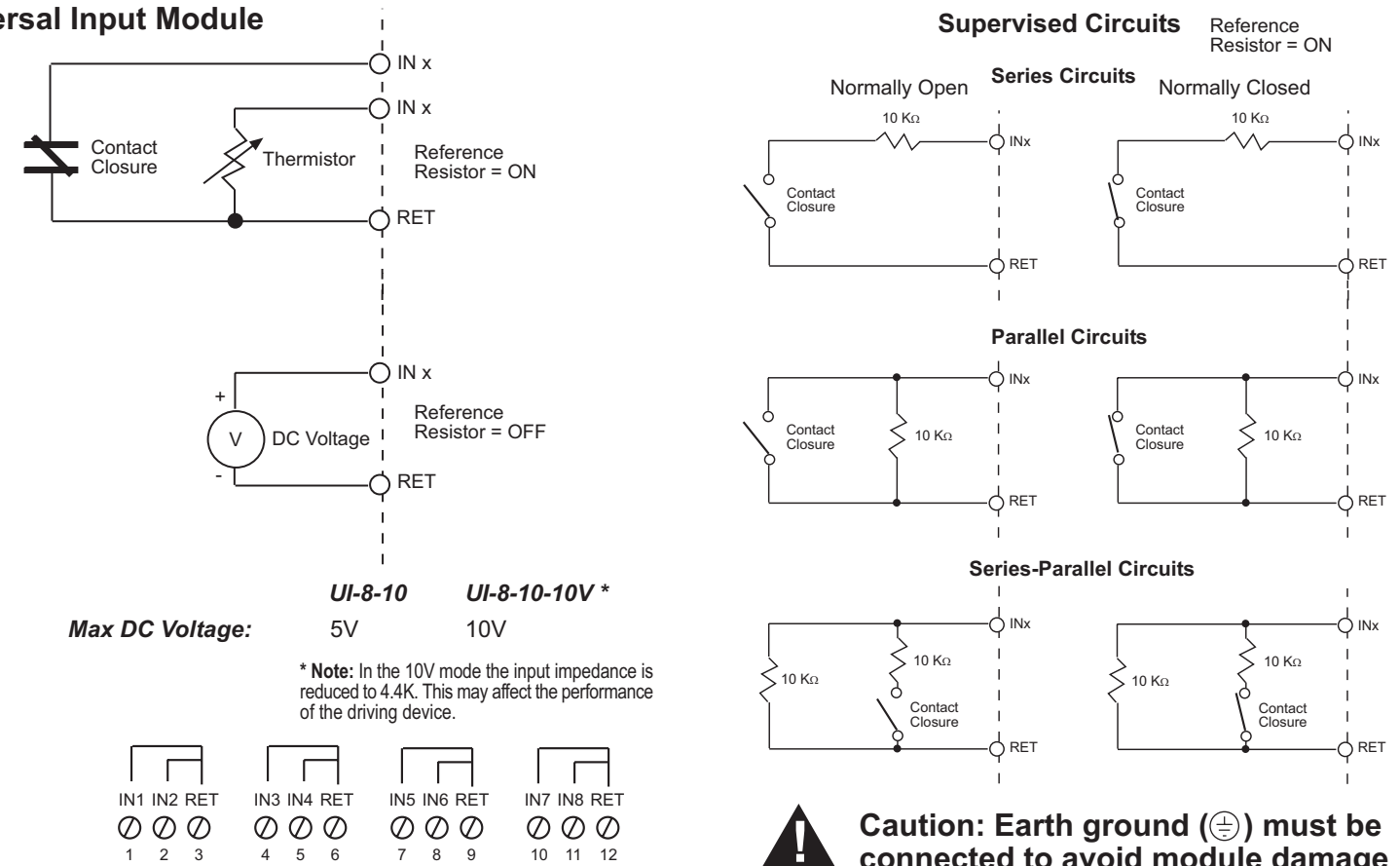
DM-20

Digital Input/Output Module



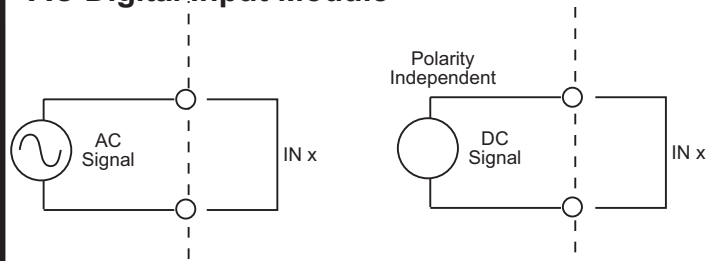
UI-8-10 / UI-8-10-10V

Universal Input Module



DI-6 AC / DI-6-AC-HV

AC Digital Input Module

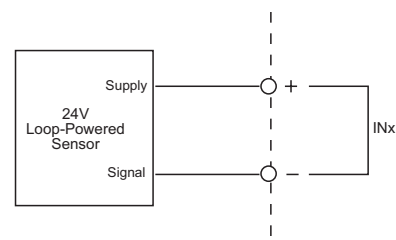


Voltage Range:

DI-6-AC 20-132 Vrms
DI-6-AC-HV 90-250 Vrms

MI-6

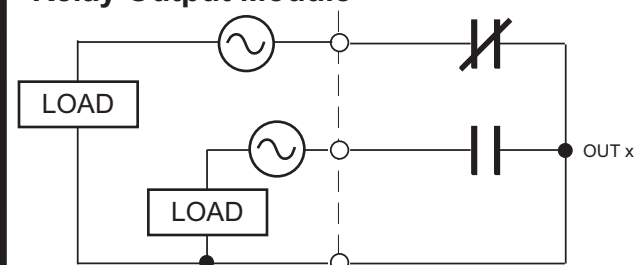
MilliAmp Input Module



Max Current: 20 mA
Voltage Supply to Sensor: 19 - 26V

DO-4-R / DO-4-R-O

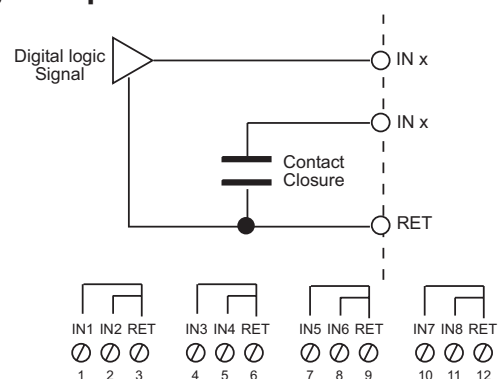
Relay Output Module



Contact Rating: 5A @ 240 VAC
 5A @ 30 VDC

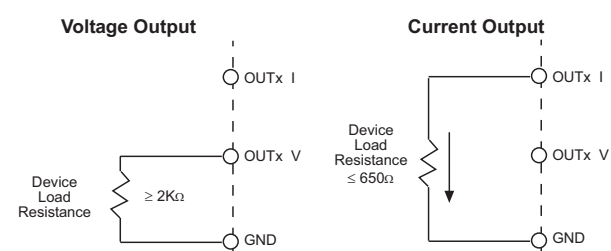
DI-8

Digital Input Module



AO-4-8 / AO-4-8-O

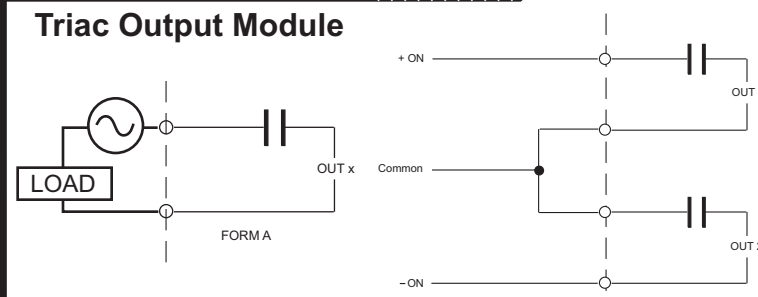
Analog Output Module



Current Output: 0 - 20 mA
Voltage Output: 0 - 10V

DO-6-TR

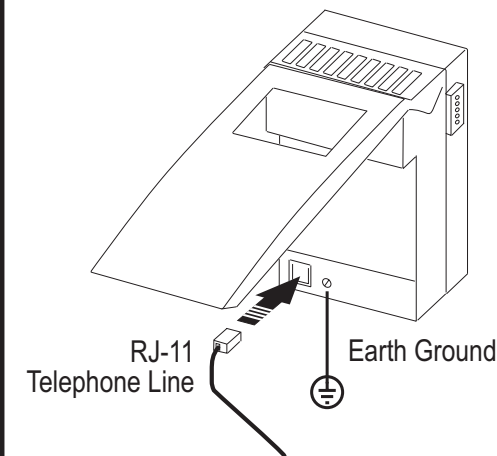
Triac Output Module



Output Rating: 24 VAC, 0.5 A (Cannot switch DC Loads)
Minimum Load Current: 30 mA

VT-1

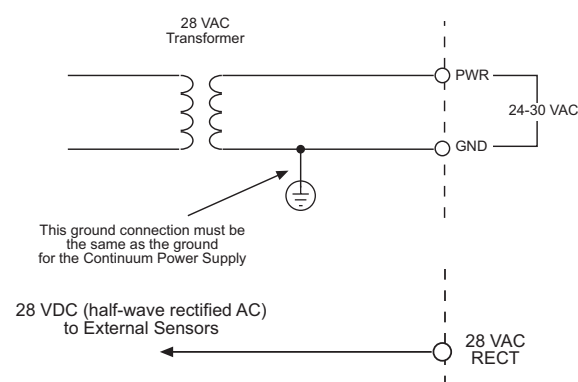
Voice Telecom Module



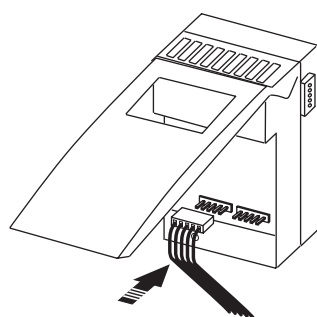
LO-2 / LO-2-O

Lighting Output Module

Module External Power Connections

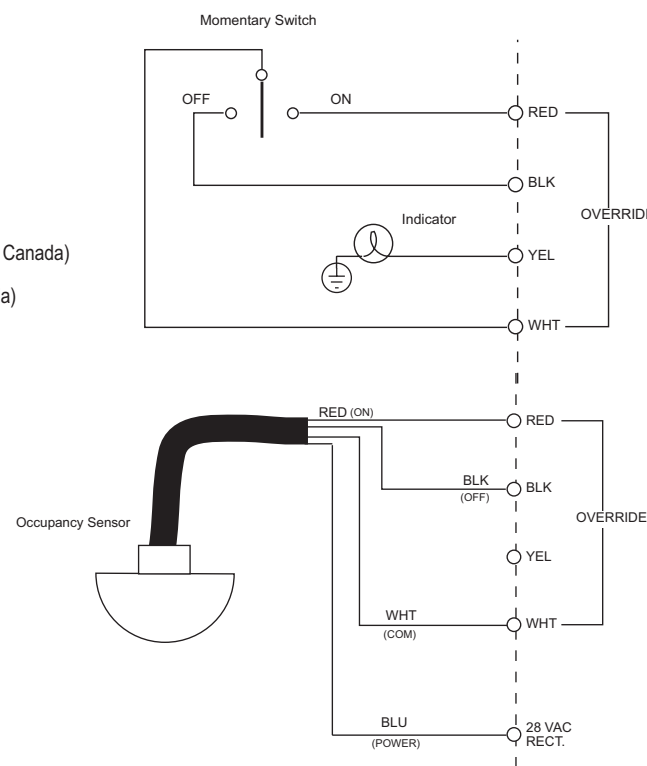


External Relay Assy. Connections



Output Rating: Lamp Load – 20 Amp Tungsten Filament @125 VAC
 Resistive Load – 20 Amp Ballast @ 277 VAC (20 amp @347 VAC, Canada)
 Motor Load – 0.5 Hp @ 110-125 VAC
 0.5 HP @ 220-277 VAC (0.5 Hp @ 347 VAC, Canada)

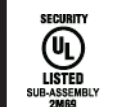
Override Switch Connections



For more information on these Andover Continuum products, see the *I/O Systems Reference*, 30-3001-499, and the *Power Supply Reference*, 30-3001-702. For documentation specific to Underwriters Laboratories (UL) evaluation, see the Note below.



UL 916 Listed product for the United States and Canada, Open Energy Management Equipment.



UL 294 (Access Control System Unit Subassemblies for the United States) and UL 1076 (Proprietary Burglar Alarm System Unit Subassemblies for the United States) and C22.2 No. 205-M1983 (Signal Equipment for Canada)

Note: Refer to the UL Listed Access Control/Proprietary Burglar Alarm System's installation manual (the *UL294 Access Control* and *UL 1076 Proprietary Burglar Alarm Systems Reference*, 30-3001-504) for specific wiring, operation, and compatibility information.

Note: Only these products mentioned in this document are evaluated by UL for UL 294 and UL 1076 applications:

UI-8-10
 UI-8-10-10V
 DI-8 (UL294 only)
 DO-4