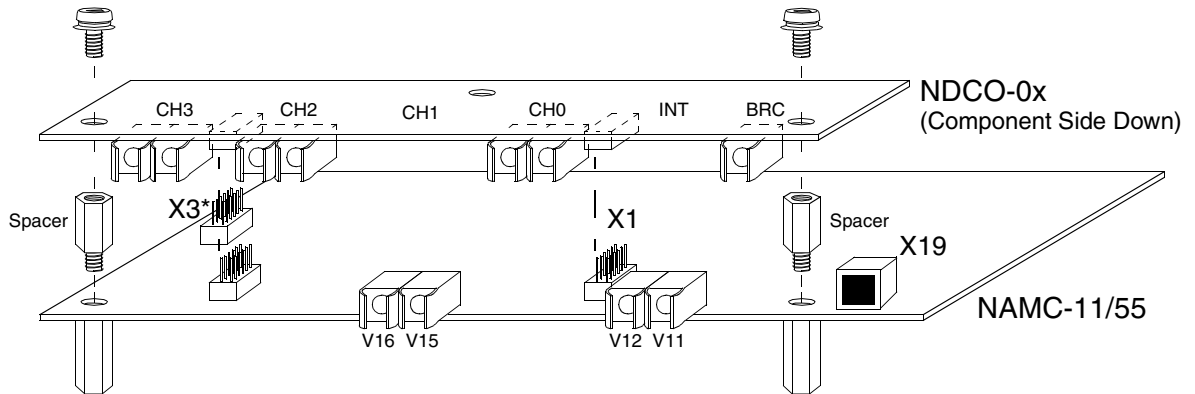


### Control Panel Connection (ACx 6x7)

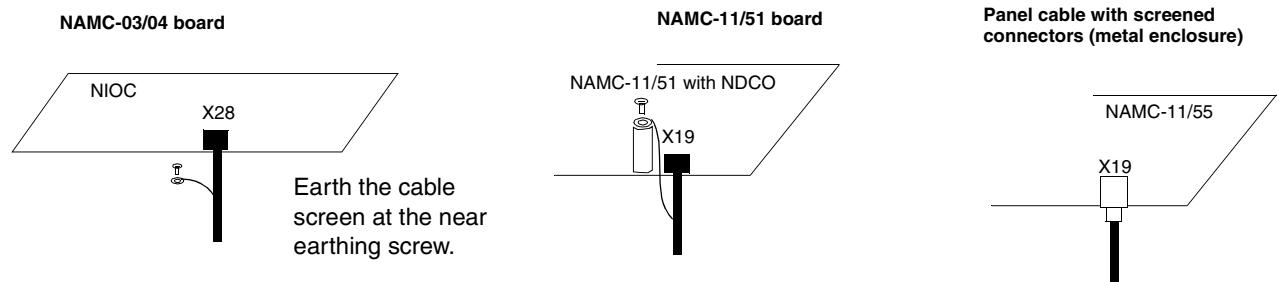
The Control Panel is connected to modular jack X19 on NAMC-11/51 board. The modular jacks on NIOC board are **not** intended for Panel use (they are used by Standard Modbus Link).



\* with NAMC-51 for optional Memory Backup board (NMBO)

### Control Panel in Remote Use (ACx 6x7)

Connect the Control Panel cable to terminal X19 of the NAMC-11/51, or with NAMC-03 board to terminal X28 of the NIOC board.



### Pulse Encoder Installation

See *NIOB-01 User's Guide* (EN code 64471341) or *Pulse Encoder Interface Module NTAC-0x Installation and Start-up Guide* (EN code 58919730) for the pulse encoder insulation requirements and connections.

The pulse encoder shall be insulated from the motor stator or rotor in order to prevent currents from finding their way out from the drive shaft through the encoder with resulting damage to the bearings in both the motor and the encoder.

## Installation of Optional Modules

This section gives general installation instructions for the DriveWindow PC tool and ACx 600 optional modules, such as fieldbus adapters, I/O extension modules and the pulse encoder interface. Connection examples are given at the end of the section.

- Placement** The module should be installed on the DIN mounting rail inside the inverter unit cabinet, located on the inside of the left-hand side cabinet wall. The DIN rail of ACx 6x7 units is located in the Auxiliary Control Unit (ACU). Follow the instructions given in the *Mechanical Installation* chapter of the module manual.
- Power Supply for the Module** The 24 V d.c. supply for **one** optional module is provided by the NIOC board of the inverter module (terminal X23). The NIOC board is assembled into the NDCU control unit, mounted on a DIN rail inside the inverter unit cabinet or in the Auxiliary Control Unit (ACx 6x7 units).
- Fibre Optic Link** Optional modules are connected via a DDCS fibre optic link to the NAMC board or NDCO board (both mounted on top of the NIOC board). The terminals to which the cables are connected on the NAMC/ NDCO board are given in the table below. Channel CH1 is on NAMC-11/51 board. Channels CH0, CH2 and CH3 are on the NDCO board. The NAMC-03 and NAMC-21/22 boards include channels CH0 to CH3.
- The NAMC 11/51 board is used with ACx 6x7 units. The NAMC-21 and NAMC 22 boards are used with ACS 600 MultiDrive: NAMC-21 with AC 80 and NAMC 22 with the fieldbus.

| Module Type                                              | Channel                                                                         | Terminals  |
|----------------------------------------------------------|---------------------------------------------------------------------------------|------------|
| Fieldbus Adapter Modules                                 | CH0*                                                                            | V13*, V14* |
| I/O Extension Modules                                    | CH1                                                                             | V15, V16   |
| Pulse Encoder Interface Module                           | CH2* with ACS 600 Standard Application Program 5.x                              | V17*, V18* |
|                                                          | CH1 with ACS 600 System, Crane Master/Follower and Template Application Program | V15, V16   |
| Double Pulse Encoder Interface Module (for ACP 600 only) | CH2*                                                                            | V17*, V18* |
| DriveWindow <sup>1)</sup>                                | CH3*                                                                            | V19*, V20* |

\* on the NDCO board when the NAMC-11/51 board is used.

<sup>1)</sup> DriveWindow Light is connected via an NPCU RS-232/485 converter to the panel connector on the cover (or to modular jack X19 on the NAMC-11/51 board).