CanWorks® iTrax™ Two-Channel Control Unit Installation

WARNING: Allow only qualified personnel to perform the following tasks. Follow the safety instructions in this document and all other related documentation.

WARNING: All installations must conform to national and local codes.

The CanWorks iTrax Spray Monitor System detects problems in coating application systems by monitoring the fluid pressure at the spray gun, provides warnings and alarms to the operators, and stores process data for quality control. The system consists of:

- one or more CanWorks iTrax Spray Monitor modules,
- a USB-to-CAN network adapter, and
- the CanWorks iTrax software.

The CanWorks iTrax Operator Interface runs on an IBM-compatible personal or industrial computer with the Windows 2000 or Windows XP operating system. Communications between the computer running the CanWorks iTrax Operator Interface and the Spray Monitors is through a CAN (Controller Area Network) network and the USB-to-CAN network adapter.

The CanWorks iTrax two-channel control unit has two spray monitor modules, a power supply, and terminal blocks for easy installation of a two-channel iTrax Spray Monitor System. The control unit comes completely assembled. Installation consists of mounting the box and wiring external equipment to the terminal blocks.

Refer to the online Help system in the iTrax Operator Interface for Spray Monitor configuration, calibration, system setup, and operation.

Mounting

See Figure 1. Mount the control unit to a suitable surface using customer-supplied $^{3}/_{8}$-in. hardware.

WEIGHT: 12.7 kg (28 lb)

NOTE: The mounting tabs on the control unit may be removed if necessary.

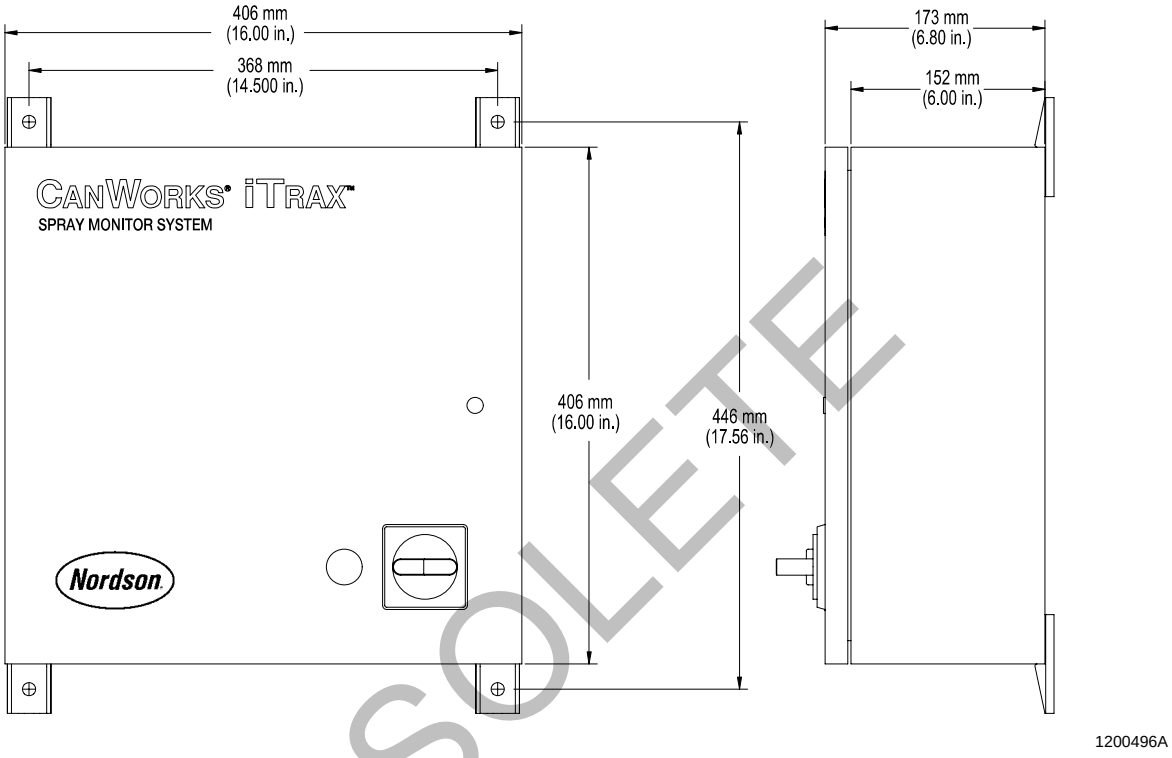


Figure 1 Mounting Dimensions

Wiring

EMC Directive Compliance

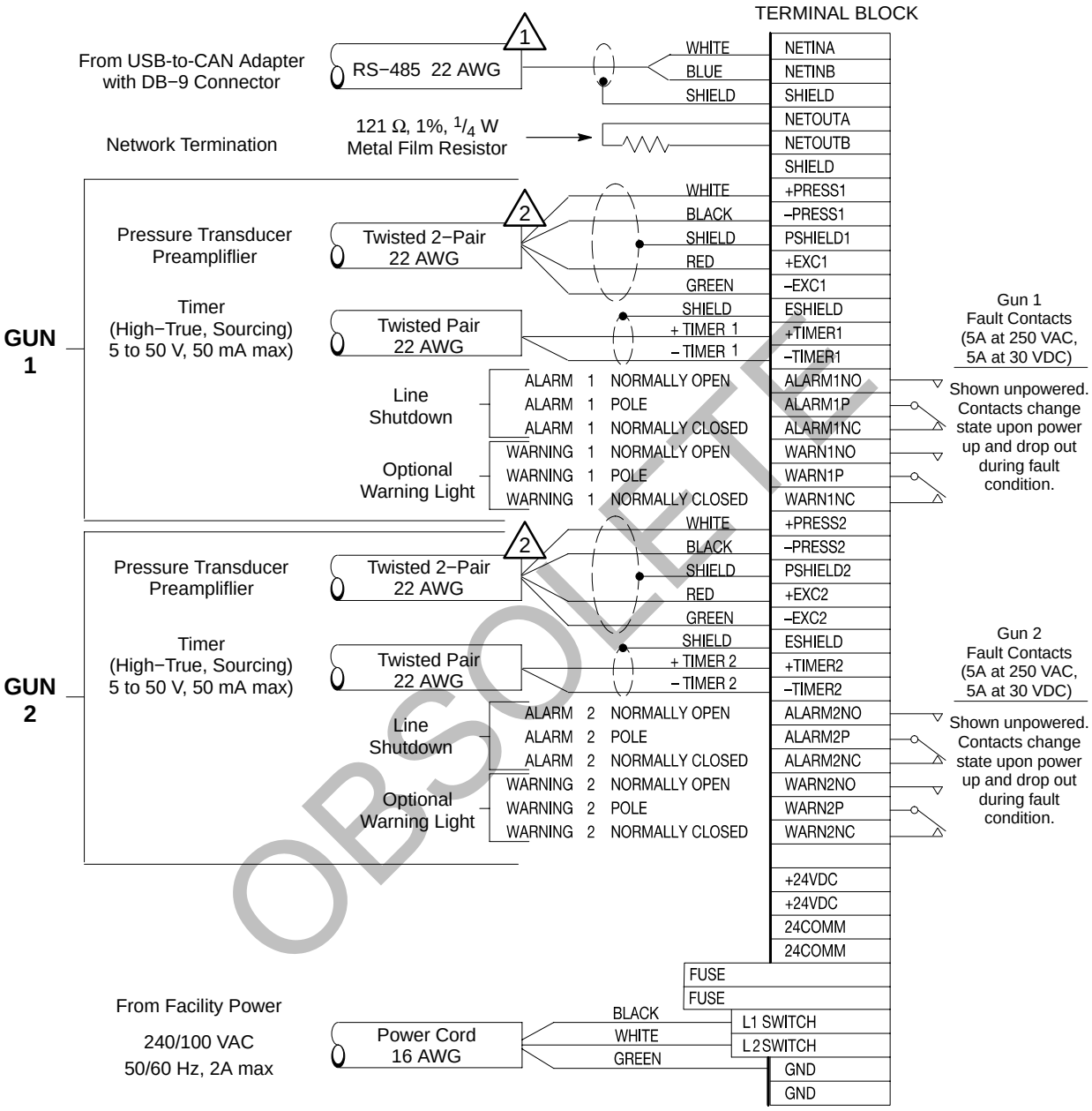
See Figure 2. For compliance to the European Union Electromagnetic Compatibility Directive (EMC Directive):

1. For general safety fuse L1 and L2 with 2-Amp fuses.
2. Cabling from the trigger signal (driver), sensor signal (applicator), and the network cable to the computer must all be shielded and terminated.

Drill or punch out holes and install strain reliefs in the bottom, side, or top of the control unit as appropriate to accommodate the wiring. Connect to the main terminal block as shown in the wiring diagram.

NOTE: If you are installing the two-channel control unit into an existing CanWorks iTrax network, perform the *Connecting Multiple Control Units* procedure.

CAUTION: Do not plug the USB-to-CAN adapter into the computer until the adapter's driver software has been installed.



1 Use RS−422/485, 22−AWG rated cable for all network wiring.
Low capacitance 16 pf/ft of less having a characteristic Impedance of 120 ohm nominal (Example: Belden 9841)

2 Two−Pair twisted shield, 22−AWG wire (Example: Belden 8723)

1200497A

Figure 2 Wiring Diagram

Note: Refer to Nordson drawing 1045603 for internal wiring details.

Connecting Multiple Control Units

If your CanWorks iTrax network will have more than two channels, follow these steps:

NOTE: Leave the termination switches in all Spray Monitors in the OFF position. The resistor shown in Figures 2 and 3 terminates the CanWorks iTrax network.

1. Set appropriate network address in the Spray Monitors.
   Refer to *Spray Monitor Configuration* in the Spray Monitor instructions (included in the door of the control unit).

   NOTE: Figure 3 shows a six-channel system. The Spray Monitors' network addresses are shown as 01 through 06. The maximum number of channels is 64.

2. See Figure 3. Connect network wiring between the control units:

   a. Remove the resistor from the NETOUTA and NETOUTB terminals.

   b. Install RS-485 network cable from the NETOUTA and NETOUTB terminals of one control unit to the NETINA and NETINB terminals of the next.

   c. Install the resistor in the NETOUTA and NETOUTB terminals of the last control unit on the network.

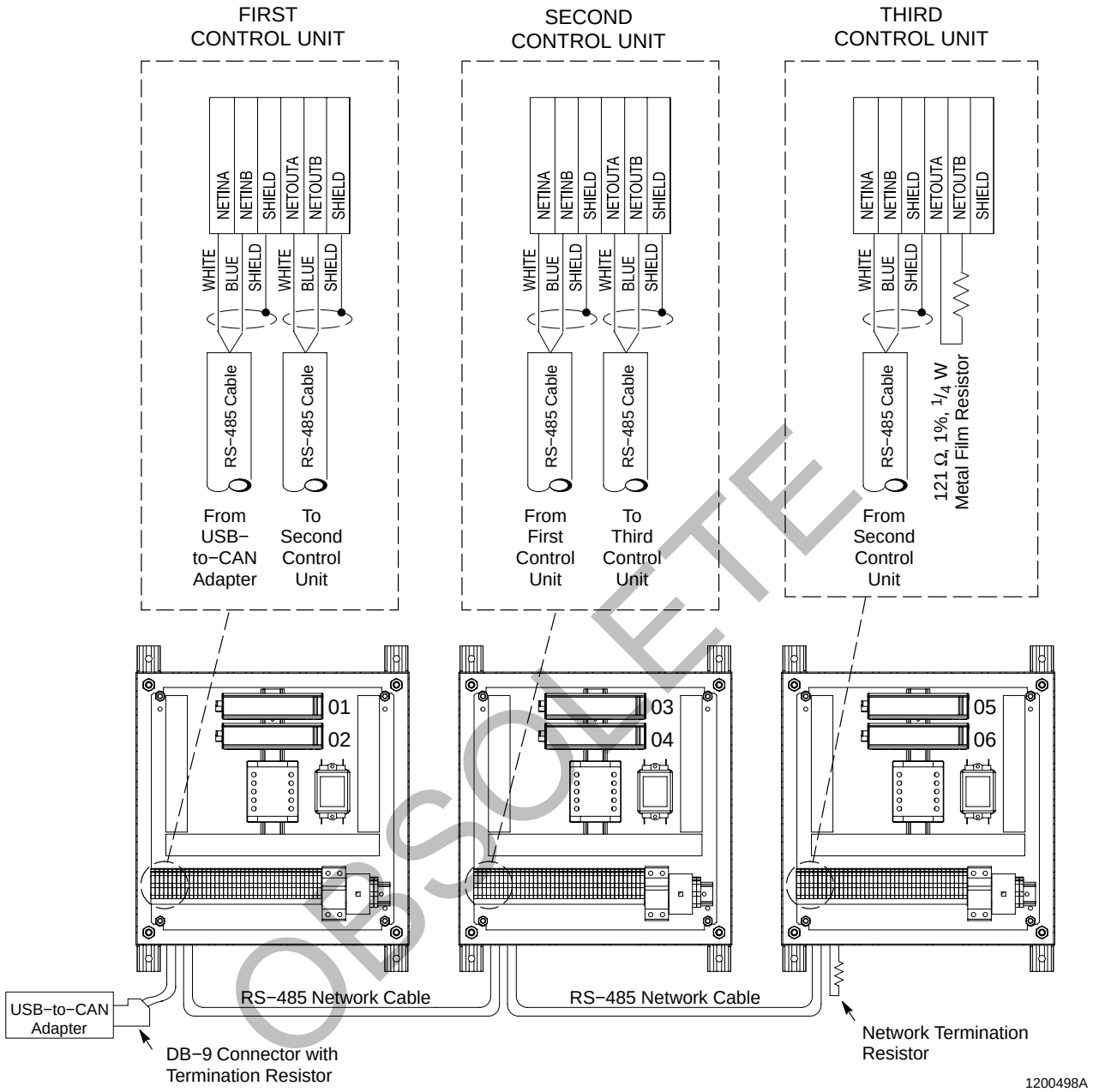


Figure 3 Connecting Multiple Control Units

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DECLARATION of CONFORMITY

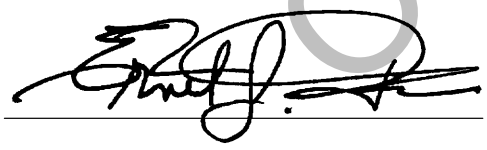
PRODUCT: CanWorks / iTrax

APPLICABLE DIRECTIVES:
73/23/EEC (Low Voltage Directive)
89/336/EEC (Electromagnetic Compatibility Directive)

STANDARDS USED FOR COMPLIANCE:
EN50081 EN50082 IEC417
EN55011 EN60204

PRINCIPLES:
This product has been manufactured according to good engineering practices.
The product specified conforms to the directives and standards described above.

CERTIFICATIONS:
ISO 9001 DNV No. 08796-2003
TUV EN60204



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