

NIA-DI-01-1

32 channels - Discrete Input migration adapter from 8000 Series I/O toward Emerson DeltaV™

Description:

The NIA-DI-01-1 migration adapter allows to migrate \underline{TWO} 8000 Series I/O cards to \underline{ONE} EMERSON DeltaVTM card avoiding to disconnect and reconnect I/Os of the existing terminal blocks.

The aim is to replace two 8000 Series I/O cards (16 channel DI) with reference NT-8121-DI-DC (NovaTech®) or 8121-DI-DC (GE) with one Emerson DeltaV™ card whose reference is **VE4001S2T2B7** (32 channel DI card).

The main advantages of the NIA-DI-01-1 for such migration are as follow:

- The two existing DI terminal blocks and their associated wires are just moved (unplugging / re-plugging) from the existing carrier to the DeltaV™ carrier without any modification of the wiring.
- Since the wiring is not affected, the I/O testing times are reduced.
- The NIA-DI-01-1 does not affect the DeltaV™ card input specifications.

The status of each of the 32 inputs is indicated by a yellow LED on the front panel.

Product options:

Option -1: NIA-DI-01-1 Standard version

Option -VSH: NIA-DI-01-1-VSH Conformal coating (Tropicalization)



Bulletin Rev: 2025_04

The NIA-DI-01-1 is composed of two main parts:



DI Application Board

NIA-DI-01-1 Baseplate

Technical specifications:

Dimensions:

Height: 210mm Width: 83mm

Depth: 68mm (74mm including the fastening screw head)



Weight:

300 g (without terminal blocks)

Temperature range:

Operating : 0°C to 50°C Storage : -10°C to 50°C

Humidity:

Up to 90% (no condensation)

Input Specifications:

Number of channels: 32

The input specifications are the same as the DI card

Electrical Insulation:

750Vac between each input (not connected)

Connection to the DCS or to the PLC:

The NIA-DI-01-1 is directly plugged in the two HE1020 male connectors of the 32Ch DI card Mass Terminal Block (VE4001S2T2B7)







Installation of the NIA-DI-01-1:

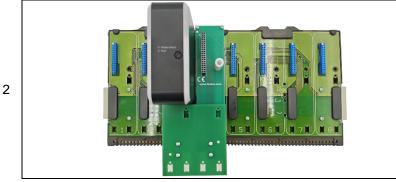
1

3

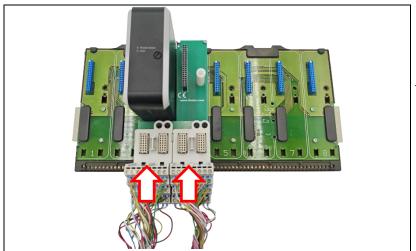


The NIA-DI-01-1 baseplate plugs directly into the two HE1020 connectors of the DeltaV[™] DI Mass Termination Block

Bulletin Rev: 2025_04

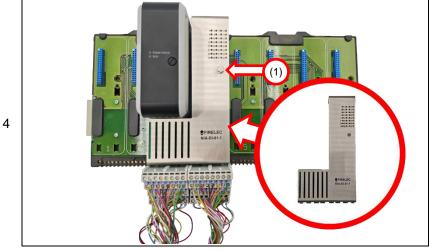


The NIA-DI-01-1 baseplate is now inserted.



The existing terminal blocks (with wiring kept in place) are inserted in the slots designated for this purpose on the NIA-DI-01-1 baseplate

To secure the terminal blocks, simply slide them upwards.



The NIA-DI-01-1 Application Board is inserted into both the two terminal blocks and the NIA-DI-01-1 baseplate

The assembly is secured by a fastening screw⁽¹⁾

Status of each channel is monitored by a yellow LED



