

INT-DI12-1-ISO120AC_DC

12 channels - Discrete Inputs 120VAC – 120VDC

Description :

The **INT-DI12-1-ISO120AC_DC** interface unit is a remote termination panel that allows to connect up to 12 Discrete Inputs to a Distributed Control System (DCS), or a Programmable Logic Controller (PLC).

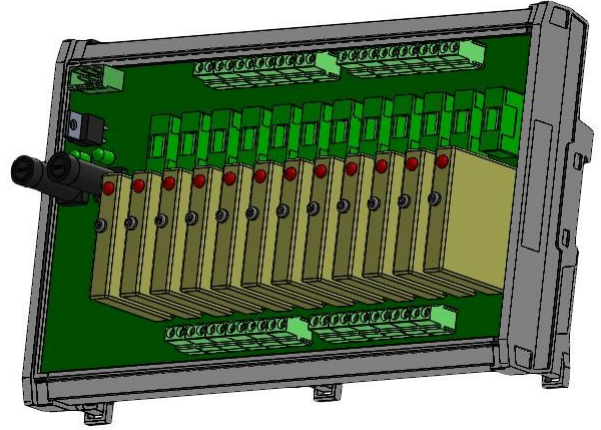
It provides a galvanic isolation between an AC-DC logic voltage and the Discrete Input card. Each channel is isolated from each other's and from the power supply of the DCS or the PLC.

The connection with the DCS or PLC is provided by two terminal blocks (TB4 and TB5) and the connection is made using a suitable cable with labelled flying wires at one end and a suitable connector or labelled flying wires at the other end.

Each input "plug-in" module (mechanically secured by a screw) is replaceable. The 12 discrete inputs are connected using TB2 to TB3 terminals.

A red LED indicates the status of each channel.

Two green LED are used to monitor the 24Vdc redundant system power supply which is connected on the TB1 terminal block.



Preliminary picture

Product options :

Option **ST** : Screw terminals for the process signals connection

Option **VSH** : Conformal coating (Tropicalization)

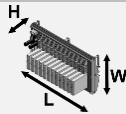
Technical specifications :

Dimensions :

Length : 243.8 mm

Width : 142.3 mm

Height : 74.25 mm



Weight :

500 gr

Temperature range :

Operating : 0°C to 50°C

Storage : 0°C to 50°C

Humidity :

Up to 90% (no condensation)

Mounting :

Symmetric DIN rail

Insulation voltage :

1500 Vac between input and outputs

Power Supply Specification :

Voltage : 24Vdc (+/-5%)

Current per channel : 15mA@24Vdc

Current protection : By fuse 5x20 (0,25A)

Shield connection :

1 x M3 screw

Connection to the DCS or to the PLC :

2 x Screw terminals blocks TB3 and TB4 : 24 to 12 AWG (0,2 to 2,5mm²)

Conductor cross section :

TB1 : PSU connection

ST : 24 to 12 AWG (0,2 to 2,5mm²)

TB2-TB3 : Inputs connection

ST : 24 to 12 AWG (0,2 to 2,5mm²)

TB4-TB5 : System connection

ST : 24 to 12 AWG (0,2 to 2,5mm²)

Input specifications :

Input current : 5mA@Vmax

Input impedance : 28 Kohms

Input range : 90 - 140Vac(rms)-Vdc

Min. dropout voltage : 40Vac(rms)-Vdc

Current protection : By fuse 5x20 (0,1A)

Output specifications :

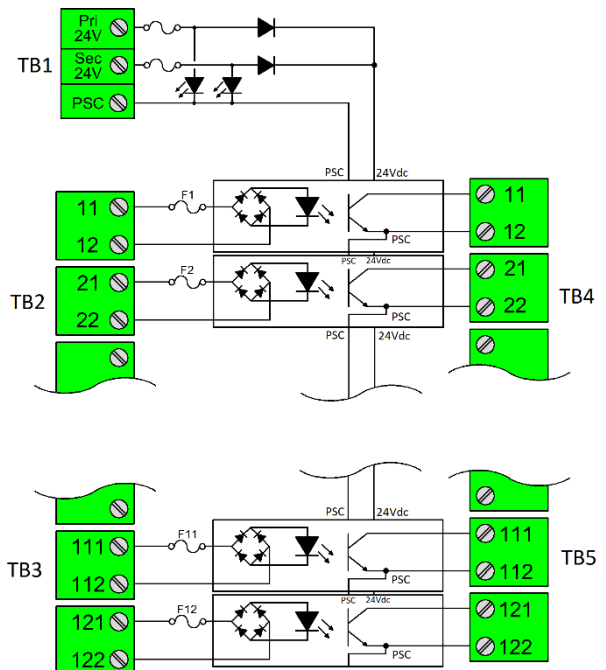
Max current : 50mA

Max voltage : 30Vdc

Leakage current : < 100µA@30Vdc

Heat dissipation :

4,4W (With 12 channels => On-State)





G4 DIGITAL AC INPUT MODULES

Features

- > 4000 volts optical isolation (transient)
- > Built-in LED status indicator
- > Small footprint design
- > UL recognized, CSA certified, CE approved
- > Passes NEMA Showering Arc Test (ICS 2-230)
- > Meets IEEE Surge Withstand Specification (IEEE-472)
- > Built-in filtering for transient suppression and noise rejection
- > Operating temperature: -30 °C to 70 °C

ROHS compliant

TYPE : **AC / DC INPUT SOLID STATE MODULE**

REFERENCE : **G4-IAC24**

General characteristics :

Input-Output isolation 4000V (**1500V** due to the interface unit limitation)
Dimensions L : 48.8mm / W : 12,2mm / H : 41,1mm

SPECIFICATIONS

	Units	G4IAC24*
Input voltage range	VAC or VDC	90–140
Key feature	--	--
Input current at maximum line	mA	5
Isolation, input-to-output (transient):		
1 ms	V	4000
1 minute	V	1500
Turn-on time	ms	20
Turn-off time	ms	20
Input allowed for off-state	mA, V	1.4, 40
Nominal output supply voltage	VDC	24
Output supply current at nominal logic voltage	mA	15
Input resistance (R1 in schematic)	ohms	28 K
Control resistance (Rc in schematic)	ohms	2.2 K
Output voltage drop	V @ 50 mA	0.4
Output current (sinking)	mA	50
Peak repetitive voltage	VAC	500
Output leakage with no input	microamps @ 30 VDC	100
Transistor	V breakdown	30
Temperature		
Operating:	°C	-30 to +70
Storage:	°C	-30 to +85

