

GENESIS II

Installation Manual
and
Technical Data

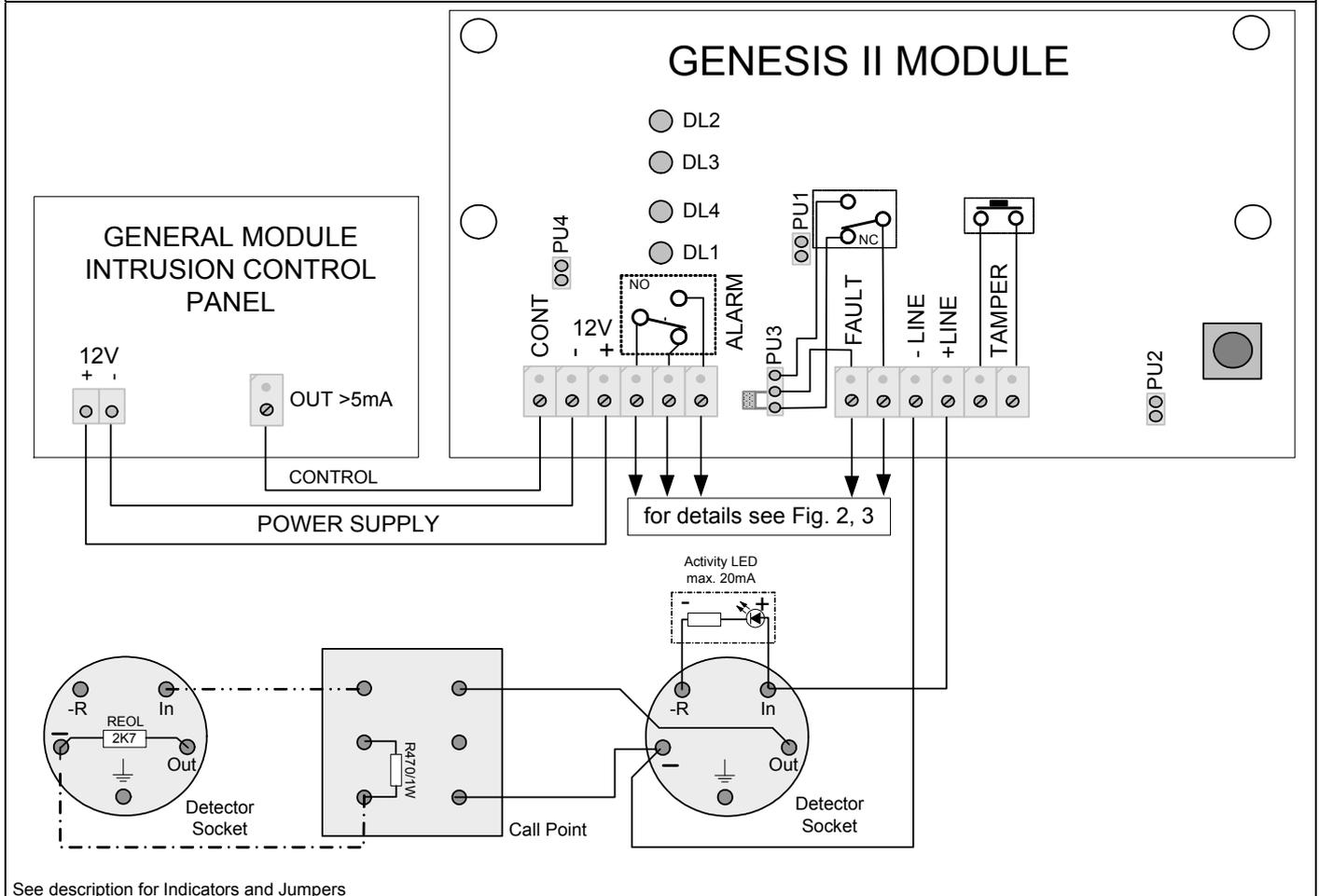
Control panel with
one fire detection zone,
associated
an intrusion
and/or
hold-up-system



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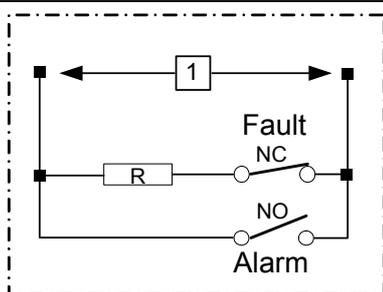


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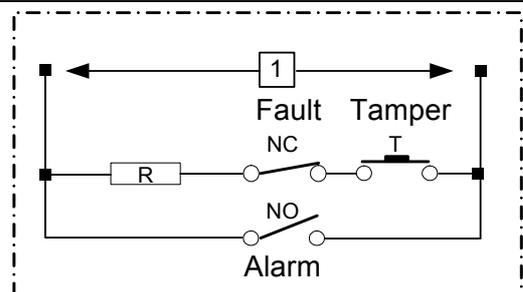
See description for Indicators and Jumpers

2



Alarm and fault outputs to one zone of the Intrusion Control Panel (1)

3



Alarm and fault outputs (tamper incl.) to one zone of the Intrusion Control Panel(1)

Instructions for use the GENESIS II Control Panel

Overview

The GENESIS II, makes it possible to install single-zone fire detection based on a conventional intrusion detection control panel, controlling and supervising a 2-wire line, equipped with up to 32 conventional detectors at 24Vdc.

The GENESIS II is supplied with 13.8Vdc from the intrusion control panel and, by means of an internal converter, is able to provide the 24Vdc supply required by the detectors and/or call points. This eliminates the need for an external 24Vdc power supply and battery backup, as in the case of mains failure /-disconnection, the intrusion control panel backup powers the system.

Jumper settings

Description	ON	OFF
Non current limited detectors		PU1 PU2
Current limited detectors	PU1 PU2	
Fault Output C-NC	PU3 (2,3)	
Fault Output C-NO	PU3 (1,2)	
Local Control (Push button GENESIS II)	PU4	
Remote control (from Intrusion control panel)		PU4

LED displays

LED	Colour	Description
DL1	Green	Enable LED
DL2	Red	Fire LED
DL3	Amber	Short Circuit fault LED
DL4	Amber	Open Circuit fault LED

Wiring

Power supply and control.

GENESIS II has two control possibilities, depending on the fact that the Intrusion Control Panel has an output for sensors rearming or not.

Follow the steps detailed here below:

- Carry the supply (11 to 14Vdc) from the Intrusion Control Panel to the terminals designated (-12V+) of GENESIS II.
- If the Intrusion Control Panel does not include the aforementioned output for detectors rearming, the control on GENESIS II will be carried out from the reset push-button itself (make sure that the PU4 jumper has been inserted).
- In case the Intrusion Control Panel has the output available, wire it at the input of the terminals input labelled (CONT) of GENESIS II. It will be reset when it detects a level of 0V in that control input; this implies a rearming in the detectors line if that level is present during the period required by the detectors (3 to 4 seconds is usually enough for most of them). To have this feature available, you must remove the PU4.

Detectors and/or call points line.

Connect the detectors (ionizing, optical, etc) and/or call points line to (+LINE-) as shown in fig.1.



The GENESIS II allows both current-limited and non-current-limited detectors and/or call points provided that the two types are not mixed on the same line.

Setup

Set up the GENESIS II according to the type used as follows:

Non-current-limited detectors and/or call points:

Remove GENESIS II jumpers PU1 and PU2.
See Fig.1

Compatibility with the non-current detectors below:

- DLO beam detector
- DF1191/92 infrared flame detector

Current-limited detectors and/or call points

Insert GENESIS II jumpers PU1 and PU2.

See Fig.1

Compatibility with the current detectors below:

- OP320C optical detector
- OH320C multi detector
- HI320C heat detector
- HI322C heat detector
- MT320C manual call point

Alarm and fault output

It incorporates alarm and fault outputs by means of voltage-free relay contacts, what facilitates its adaptation to the different Intrusion Control Panels, regards to connection.

Figures 2 and 3 show, as an example, 2 types of connection, among the most common ones, used for this kind of installations:

- Figure 2 presents a typical connection for the identification of alarm and fault on the detectors line of GENESIS II, in two independent zones associated to the Intrusion Control Panel.
- In those Intrusion Panels with EOL resistor in each zone, being possible to program some of them as "fire zone" so that a short-circuit or open-circuit in that zone will be identified as fire alarm or fault, respectively, the wiring can be done as shown in fig.3, which includes an electrical diagram for a better comprehension.
- In addition to the connection shown in figure 2, fig.3 presents the possibility of tamper detection on the part of the GENESIS II box.

Functional test

Before testing the installation ensure that the power supply polarity is correct. Also, check that jumpers PU1 and PU2 are in the correct positions according to the type of detectors used in the installation.

Next, connect the GENESIS II to power and check that the green "ENABLED" led is lit and that the Intrusion Control Panel is in standby mode.

Open-circuit fault.

- Disconnect the 2K7 end of line resistor. The amber "OC FAULT" led on the GENESIS II will be lit and the Intrusion Control Panel indicate fault on the corresponding zone.
- Reconnect the resistor. The indicator will go out.
- Remove each of the detectors from their sockets one at a time (the line will open as each is removed provided the standard mounting instructions for the detectors have been followed). Check that unit in exactly the same was as described in the previous paragraph.

Short-circuit fault

- Short-circuit the 2K7 end of line resistor. The amber "SC FAULT" led on the GENESIS II will be lit and the Intrusion Control Panel will indicate fault on the corresponding zone. Remove the short-circuit. The indicator will go out.

Alarm

- Now activate each detector by means of the effect it is designed to detect (smoke, rapid temperature rise, manual call point activation etc). The indicator on the detector will be lit, as will the "ALARM" led on the GENESIS II. The Intrusion Control Panel will indicate alarm on the corresponding zone.

Resetting the detector lines

- From the reset push-button of GENESIS II, or from a sensors rearming output, in case the Intrusion Control Panel allows it, cause a 3 seconds rearming approximately in the detectors line, checking that during this period of time, the "ENABLED" LED of GENESIS II will go out, so that if the cause that originated the activation of the detectors has disappeared, the detectors will go back to standby condition.

Technical data

General features

Dimensions in mm (wide x height x depth)	134 x 85 x 27cm
Aprox. Weight (gr.)	125gr
Temperature and relative humidity without condensation.	0° - 50°C 10% - 90%

Standards

EN50130-4	✓
EN61000-6-3	✓
89/336/EEC	✓
93/68/EWG	✓

Electrical features

Supply voltage	11 - 14V.
Stand-by consumption (with no detectors)	35 - 45mA
Max. consumption	<200mA
Establishment timing since rearming	<500ms.
Delay timing of alarm signal	<300ms

Output features

Alarm output by voltage-free contacts C NO NC	30Vd.c. 1A
Fault output by voltage-free contacts C-NO or C-NC	30Vd.c. 1A

Line characteristics for PU1 and PU2 for non-current-limited detectors OFF

Power supply voltage	11 - 14V
Line voltage with detectors in stand-by,	17.5 - 22.5V
Line voltage in alarm condition	6 - 10V.
Line consumption to indicate alarm	18 - 56mA.
Line consumption to indicate short-circuit.	59 - 65mA
Line consumption to indicate open-circuit	<4mA
Maximum consumption of stand-by detectors	<4mA
End-of-line resistor	2K7 Ohm 1/2W +/-10%

Line characteristics for PU1 and PU2 for current-limited detectors ON

Line voltage with detectors in stand-by	11 -14V
Line voltage in alarm condition	18.5 - 24V
Line consumption to indicate alarm	17 - 22.5V
Line consumption to indicate short-circuit.	25 - 58mA
Line consumption to indicate open-circuit	60 - 75mA
Maximum consumption of stand-by detectors	<4mA
End-of-line resistor	2K7 Ohm 1/2W +/-10%

Details for ordering

Type	Part no	Designation
MGEN2	9300170001	Fire detection panel PCB
GEN2-DE	9300150001	Fire detection panel German
GEN2-EN	9300110001	Fire detection panel English
GEN2-ES	9300100001	Fire detection panel Spanish
GEN2-PL	9300090001	Fire detection panel Polish
GEN2-IT	930012.0-001	Fire detection panel Italian
GEN2-SV(SE)	9300130001	Fire detection panel Swedish
GEN2-FR)	9300180001	Fire detection panel French
GEN2-NL	9300190001	Fire detection panel Netherlands
GEN2-NO	9300140001	Fire detection panel Norwegian