

POLARIS 4/8/12 detection zones or 2 extinguishing zones

POLARIS is fire detection and extinguishing panel certified in respect of European product standard EN 54-2, EN 54-4 and EN 12094-1 concerning the extinguishing part.

It is endowed with agreement CE mark according to ZA directive enclosure "The Construction Products" 89/106/CEE.

POLARIS is compliant to European directive 2002/95/CE, concerning the use of dangerous substances inside electrical products, in particular about the use of lead.

POLARIS has 4 on-board fire detection zones, expansible to 12; otherwise it has 2 extinguishing zone.

In association with the conventional Orion series detectors, **POLARIS** is indicated for medium dimensions installations and where is necessary controlling and piloting the extinguishing devices.

POLARIS is equipped by 4 open collector outputs, 4 relay outputs by **RC1108** card. Optional cards **R7P2** or **R12P2** add 7 or 12 programmable relays.

It's possible to enable or disable the sounders line and associate it to one or more detection lines.

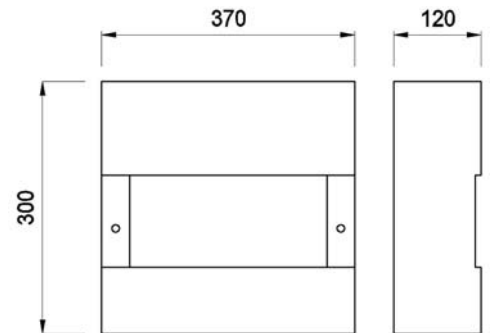
POLARIS has inside a 230 Vac 50 Hz power supply and place for two 12V batteries up to 7,2 Ah

Night and day function allows manually modifying, in a simple and instantaneous way, the switching between single or double knock.

The double knock feature actives the alarm signalisation only if two detectors, belonging to the same zone, change their state.

This behaviour reduces at minimum the false alarms (Day).

Single knock feature actives the alarm signalisation immediately when one detector, in one zone, change the state (Night).



CONVENTIONAL

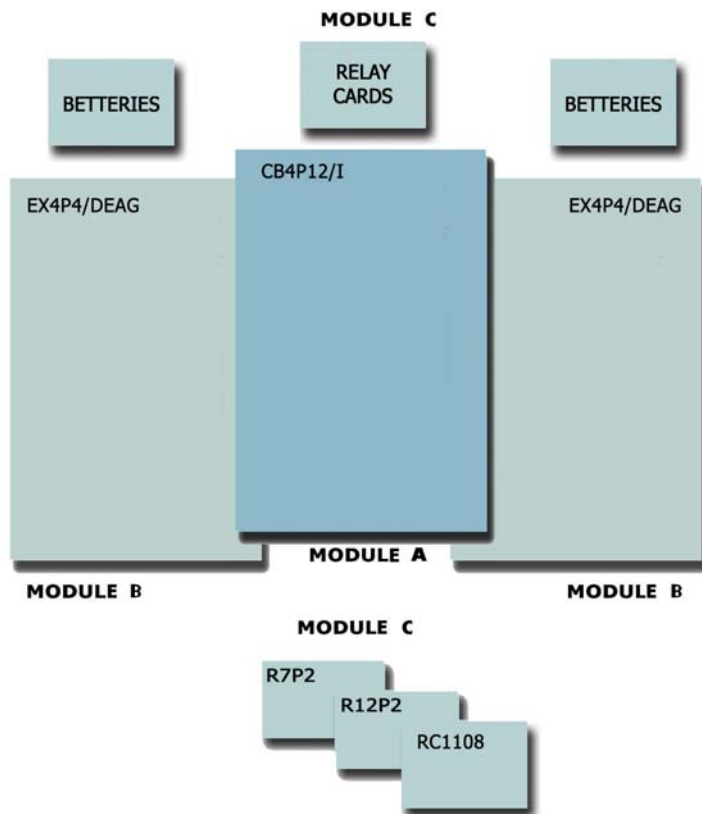
TECHNICAL CHARACTERISTICS

Main Power Supply:	230Vca 50-60Hz
Transformation Ratio:	230 / 30Vca
Secondary Power Supply:	2 sealed lead batteries 12 Vdc / 7 Ah, serial connection
Number of zones:	4/8/12
Number of points:	128/256/384
Open Line max.length:	500 m: 2x0.5 mm ² 1000 m: 2x1.0 mm ² 1500 m: 2x1.5 mm ² 2000 m: 2x2.0 mm ² 2500 m: 2x2.5 mm ²
Fire Alarm management:	pre-alarm / alarm (day/night)
Fire Alarm Output:	SPDT relay
General Fault Output:	SPDT Relay
Programmable Outputs:	4 Open collector Outputs
Programmable Inputs:	1 supervised by EOL resistor
Sounders Line Output:	450 mA max. @ 24 Vdc
Dimensions (HxLxP):	300 x 370 x 120 mm
IP Protection:	IP31
Case Material:	ABS 5V
Colour:	Gray RAL 7016
Weight:	2000 g w/o batteries
CPD Certificate (Bosec):	1175 CPD 040

DEF International Operations

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POLARIS system architecture

POLARIS fire detection panel is composed by an ABS box and a front panel with LCD and integrated function keypad.

Inside the main box there:

- the motherboard (**CB4P12/I**) that manages 4 conventional zones
- the power supply
- 2 batteries 12V max. 7 Ah
- 1 free slot for **R12P2** or **R7P2** or **R4P2** or **RC1108**.

MODULES A:

CB4P12/I:

Microprocessor-based motherboard. Max. 4 conventional detection lines, 4 open collector outputs, 1 fire alarm output, 1 fault output, a 24V output, 1 supervising sounders line and a programmable inputs.

MODULES B:

On **CB4P12/I** is possible to put one of the two cards below:

- **EX4P4:** 4 conventional detection zones expansion card.
- **DEAG:** Single extinguishing zone detection card.

MODULES C:

On the top of **CB4P12/I** is possible to put one of the cards below:

- **RC1108:** 4 relays card for open collector status repetition.
- **R12P2:** 12 relays card*
- **R7P2:** 7 relays card*
- **R4P2:** 4 relays card*

* Contact type (NA or NO) is selectable for each relay.

EX4P4 4 conventional detection zones extension card

4 conventional detection zones extension card.

EX4P4 card manages 4 conventional detection zones.

2 **EX4P4** cards max. can be installed in a **POLARIS**.



EX4EX 4 convent. detection zones extension card, for intrinsic security

4 conventional detection zones extension card, intrinsic security.

EX4EX card manages 4 conventional detection zones.

2 **EX4EX** cards max. can be installed in a **POLARIS**.



DEAG 1 extinguishing zone card

DEAG card manages a single extinguishing zone.

2 **DEAG** cards max. can be installed in a **POLARIS**.



RC1108 4 relays card for Open Collector

RC1108 card allows transforming the 4 Open Collector outputs available on **POLARIS**, in 4 free SPDT contacts, using 4 relays on board.

TECHNICAL CHARACTERISTICS

Power supply:	24 Vdc
Relay:	2A @ 30 Vdc
Dimensions (HxLxP):	35 x 110 x 55 mm



R12P2 12 Relays programmable card

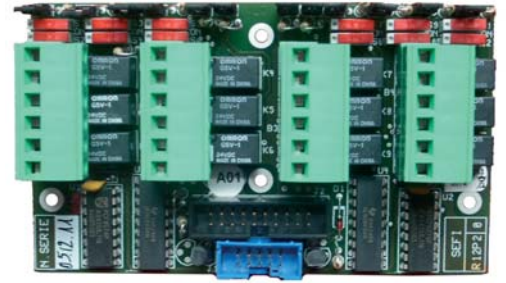
R12P2 12 programmable relays card allows repeating panel states.

The relays supply, setting the on board jumper, a free contact (NO or NA) for a resistive load.

On a **POLARIS** only one R4P2 card can be connected (alternatively, **R4P2** or **R7P2** card).

TECHNICAL CHARACTERISTICS

Voltage:	22 ÷ 28Vdc
Max. consumption:	5 mA, + 8,5 mA for each active relay
Relay characteristics:	30 Vdc 1A
Resistive Load:	560 Ohm



R7P2 7 Relays programmable card

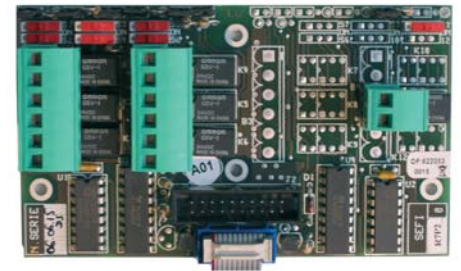
R7P2 7 programmable relays card allows repeating panel states.

The relays supply, setting the on board jumper, a free contact (NO or NA) for a resistive load.

On a **POLARIS** only one R4P2 card can be connected (alternatively, **R4P2** or **R12P2** card).

TECHNICAL CHARACTERISTICS

Voltage:	22 ÷ 28Vdc
Max. consumption:	5 mA, + 8,5 mA for each active relay
Relay characteristics:	30 Vdc 1A
Resistive Load:	560 Ohm



R4P2 4 Relays programmable card

R4P2 4 programmable relays card allows repeating panel states.

The relays supply, setting the on board jumper, a free contact (NO or NA) for a resistive load.

On a **POLARIS** only one R4P2 card can be connected (alternatively, **R7P2** or **R12P2** card).

TECHNICAL CHARACTERISTICS

Voltage:	22 ÷ 28Vdc
Max. consumption:	5 mA, + 8,5 mA for each active relay
Relay characteristics:	30 Vdc 1A
Resistive Load:	560 Ohm

