2 years warranty

J3500

J1905S

Panels 96 x 96

Panels 144 x 144

Centralization

Technical Alarm

J3000/J3105

ALARM'BOX

PANEL'PC Bus Alarms Centralization

Realized by the company «TIME» (France)

Realized by the company «Kautz Starkstrom-Anlagen GmbH» (Germany)

A.M.I.

J1905S

Dual security power supply
Positive and negative inputs
(Extension of the J1905 with redundant power supply)

DIN 96 x 96 format

2 years warranty

FRONT VIEW

Voltage presence LED   «LEDs test» button   «Reset» button

REAR VIEW

«General alarm» relay selection
Inputs selection «Positive or négative»
Connector E
Connector A
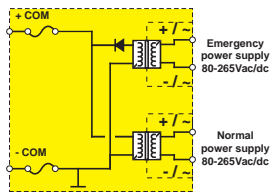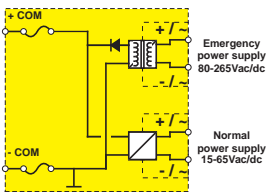Connector C
Connector B
Buzzer
Fuse

This panel is designed for installations with «high security».
It includes all the capabilities of J1905, added to :
- **Single** or **double permanent power supply**, with automatic switching from one to the other in case of failure.
- Inputs can be activated by a contact connected to the «+» or to «-» (open collector contact or contact connected to ground).

Double Redundant power supply :

The panel can be powered continuously with 2 different voltages (example: 24Vdc and 230Vac). In case of failure of one or the other voltage, the panel will continue to operate with the presence of the other voltage . An information of the loss voltage is indicated and available on the watchdog contact.

Regrouping of the supply voltages 24V and 48V :
The low-voltage range is expanded and goes at 15 to 65Vac/dc (the models for 24V and 48V voltages are grouped in one single model).

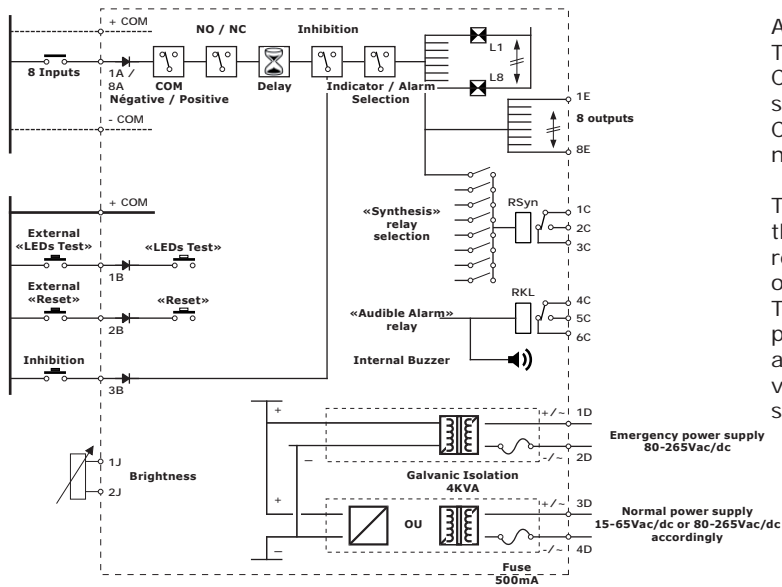## Inputs selection in «positive or negative» type is possible for each channels :
The input contacts are usually powered by the «+ COM» of the panel that delivers a low voltage. It's an use for «dry contact» type.
But it can happen that the input contacts are connected to the «-» (sensors screwed on the chassis on some generators) or from an automaton output «open collector» type. In this case, the information received will be : «no voltage» (open contact) or «-» (closed contact). With its selection by switches, the J1905S allows the use of both modes, channel by channel.

It includes all alarm processing functions already present in J1905 :

For each channel :

- 8 inputs and 8 LEDs indicator displays, with large label.
- Selection of type of display : simple indicator or alarm (blinking then fixed after reset).
- Selection of the direction of input contact (NO = Normally Open, NC = Normally Closed).
- Delay time on input from 0 to 1min. and from 1min. to 10min. (per channel, including on channels used as «simple indicator»).
- Alarm information memorized until operator reset.
- «Sound alarm» relay output with positive security (+ internal buzzer).
- «General alarm» relay output (synthesis relay) with positive security for report (selectable channel by channel) used in «Watchdog» protection.
- 8 «open collector» separate outputs for individual reports.
- «Inhibition» input with selection of channels to be inhibited.
- Luminosity adjustment possible by external potentiometer.
- «LEDs test» and «Reset» buttons on front face + terminals for external buttons.
- 7 colours of display possible per LEDs for easier colour change (selection by switches).
- Detachable screw-in terminals.
- Supply 15 to 65Vac/dc or 80-265Vac/dc with 4KV galvanic insulation.

Technical Alarm

J1905S_EN002_13-04-2018
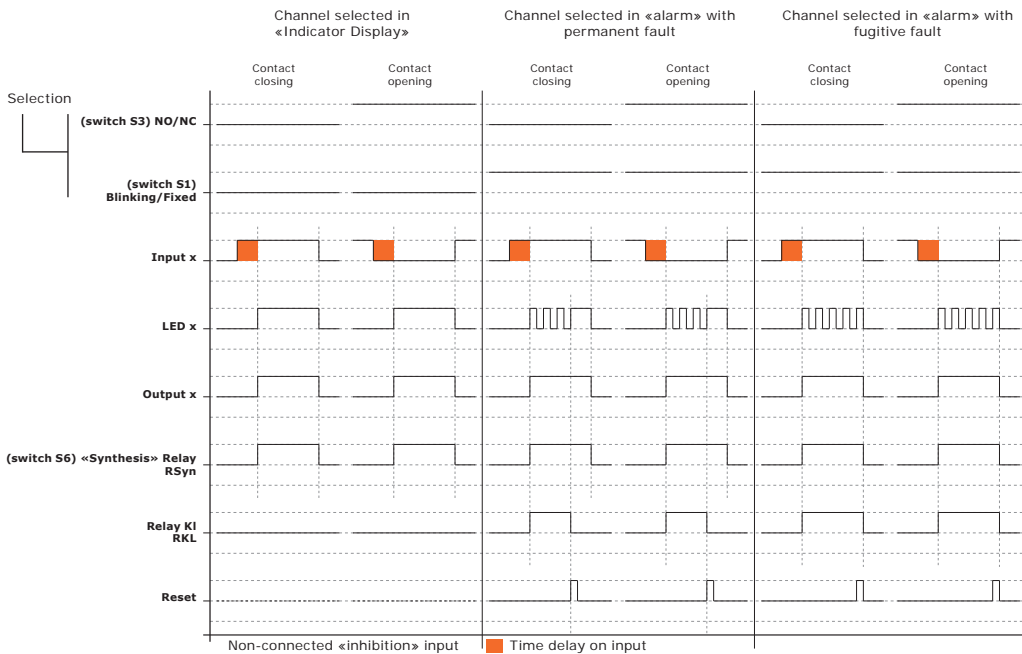
MAIN DIAGRAM :

A channel can be «positive input» or «negative input». The selection is made with S6 at the back of the panel. Contact direction: the direction of contact (NO / NC) is selected with the S3 switch. Caution : in case of a channel selected by S6 in negative input, the S3 selection becomes reversed.

The microprocessor is provided with a «Watchdog» that disables the «synthesis» relay and «Sound alarm» relay in case of system shut-down or in case of loss of one of the two power supplies.
The «Sound alarm» and «Synthesis» relay are with positive security (in our diagrams, the relay contacts are shown at the position when the J1905S is without voltage supply. In normal operation, the position of this switch is inverted).

OPERATION :

Channel selected as «Simple-indicator» treatment :
(Led is lit without blinking, without memory, without Horn, without RESET).

- S1 must be selected in «simple indicator» :

- Depending of the sense of the input contact «x» selected with S3 (Normally Open / Normally Closed) and after the end of the input delay time Tx (filter on input), the LED lights up in fixed mode (it also possible to light up a LED by opening the contact if the selection is NO).

- The corresponding «x» output is activated (output is «open collector» type and delivers a 0V).

- RSyn «Synthesis» relay can be activated if the S5 selection is programmed.

- The RKL «Sound alarm» relay is not activated.

- When the input contact returns to its normal position, the LED goes off.

- If the «inhibition» input is activated before the LED is lit and if the channel was selected by S2 (inhibition authorization), the display will be cancelled.
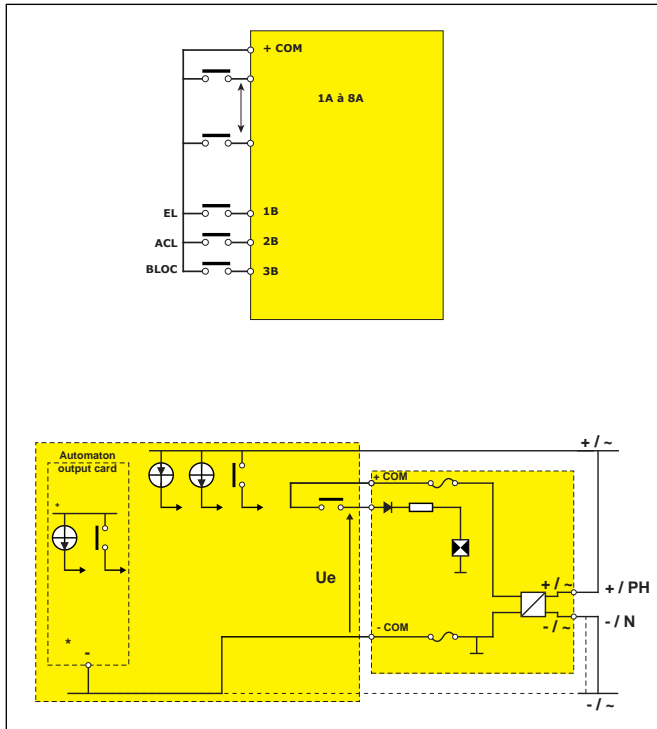
Channel selected as «Alarm treatment» :
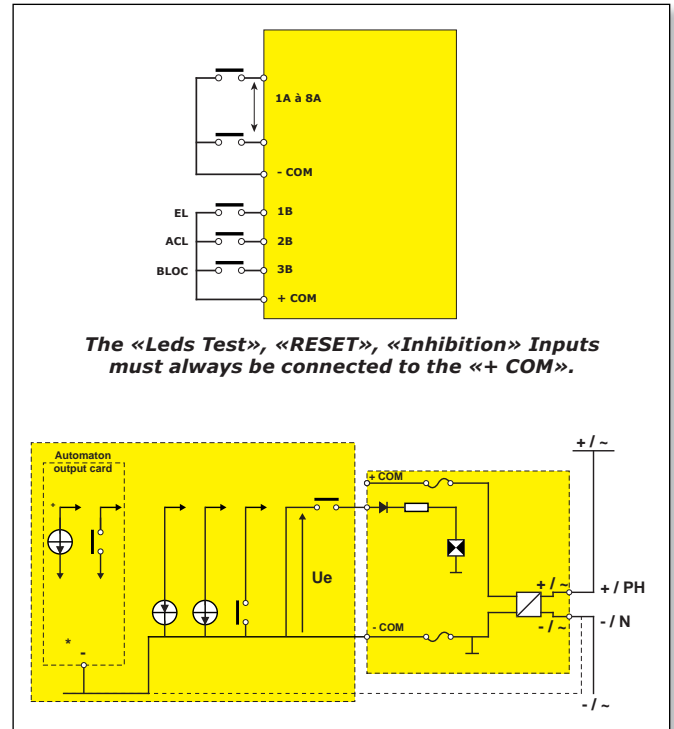(Led is lit flashing, memorized, with sound alarm, and with RESET necessary).

- The «x» channel must be selected in alarm with S1 :

- Depending of the sense of the input contact «x» selected with S3 (Normally Open / Normally Closed) and after the end of the input delay time Tx (filter on input), the arrival of the alarm will be taken into consideration and memorized.

- the LED will light up in blinking mode

- The corresponding «x» output is activated (open collector type output delivers a 0V).

- RSyn «Synthesis» relay can be activated if the S5 selection is programmed.

- The RKL «Sound alarm» relay is activated (along with the buzzer if it is present).

- Pressing the «Acquit» button on the front panel (or activating the acknowledgment via the rear terminal) stops the buzzer and switches the LED on if the alarm is still present or turns off the LED dice the return to the normal. The «open collector» output and the relay « Synthesis alarm» (if selected by S5) will be activated until the LED goes off.

33

INPUTS CONNECTIONS :

**Connection diagram for
J1905S with positive inputs**

**Connection diagram for
J1905S with negative inputs**
(contacts connected to the frame)

*The «Leds Test», «RESET», «Inhibition» Inputs
must always be connected to the «+ COM».*

Input by «External Voltage» :

Maximum voltage on input: 65 Vac / dc. In other cases, use the diagram «dry contact input.»

In case where the input is powered by an external voltage (e.g. open collector controller card) it is necessary to interconnect the «-» of external electronic with the J1905S terminal «- COM».

«Dry contact» input :

The contact voltage must be provided by the «+ COM» of the panel. (The voltage supplied on the «+ COM» is 24Vdc /max 100mA). This supply is internally protected against over current.

When using the model J1905S with power supply type «05» (80-265Vac/dc) with galvanic isolation, the voltage «+ COM» (as well as the internal electronics) of the J1905S is isolated from the main power supply (to 4KV).

«Positive» input :

The input is activated from the «+COM» terminal. It is possible to use an external positive or alternative voltage (maximum 65Vac/dc). In this case, It is necessary to interconnect the «-» outer with the J1905S «- COM» terminal to ensure the return of the negative.

«Inhibition» input :

It cancels the «recognition» of selected channel by the switch S2. Some information can be considered as alarms at certain time and be normal at another time. example:
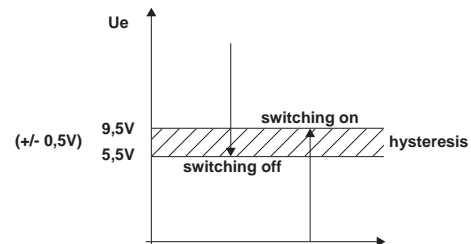- Control if the door is open the night, but no control the day.
- During technical intervention.
This function also allows managing start cycles with no active safety.
- Oil pressure of a generator during shutdown or during the startup phase.
This function is active for the channels configured as «simple indicator» and «alarm».
This cancellation will begin when the external input contact «Blocking» is closed (connected to «+ COM»). The function is only active if the input «Blocking» is activated before lighting an LED (flashing or fixed). Blocking will operate after turning off the LED (next input activation).

If the input «Blocking» is activated, the LED «voltage presence» on the front lights up orange.

To inhibit a channel, it is necessary :
- That the channel had been selected using S2.
- That the inhibiting contact is closed.

«Negative» input :

It may happen that the input contacts are connected the «-» (connection to the chassis on certain generators) or actived by «open collector» output card type automaton. In this case, the information received will be :
- No voltage = open contact)
- connection to a «-» = closed contact.
With its selection by switches , the J1905S allows to use inputs in «negative» mode.
The connection to the «- COM» ensures the return to the negative.

By using the power supply type «05» (80-265Vac/dc), the «- COM», «+Com» and the internal electronics of J1905S is isolated from the main power supply (to 4KV).

«LED TEST» input :

A rear terminal allow to connect an external button (closing contact, to be connected to the «+ COM») which will provide LED test on several panels at once.

«RESET» input or «Acknowledgement» :

A rear terminal allows to connect an external button (closing contact, to be connected to the «+COM») which will provide a RESET on several panels at once.
An activation of the button connected to RESET terminal stops the audible alarm and the flashing LED which goes into fixed mode. A new alarm on another channel will be displayed in flashing mode and will reactivate the audible alarm.
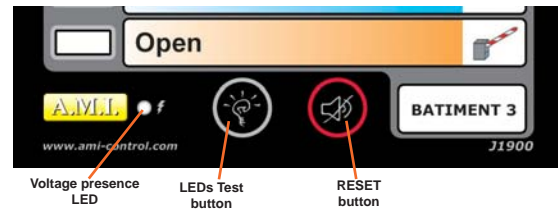
J1905S FRONT FACE :

«Voltage presence» indicator :

A «voltage presence» LED is present on the front face.

It lights green when all power supplies present are active.

In the case of loss of one of the power supplies, the Led will become flashing red.

It will go to orange fixed when the «blocking» terminal will be activated.

«LED Test» button :

A «test led» button is available on the front face.

A rear terminal allows to connect an external button (closing contact, it must be connected to the «+ COM») which will provide «LED test» on several panels at once.

THE J1905S OUTPUTS :

«General alarm» contact outputs or «synthesis» (RSyn) :

1(O/C) contact output with galvanic insulation. The relay is with «positive security», ie «normally activated ». The relay will be deactivated by each channel selected on the S5 switch. This function is active for both modes selection: «simple indicator» and «alarm».

The relay will be reactivated when all the selected channels will be back to normal. (Led OFF).

If the unit is equipped with two power supplies with redundancy, the lack of one of them will be indicated by a deactivation of the synthesis relay.

8 «OPEN COLLECTOR» OUTPUTS :

The J1905S has 8 electronic outputs 150mA.

These outputs are present on the connector for flat cable E.

These outputs deliver a «-» (open collector).

The output will be activated when the corresponding LED will be activated.

It will be deactivated when the Led will switch OFF.

The outputs are active in both modes (Channel configured in mode «simple indicator» or in mode «alarm»).

In some cases, it is appropriate to protect the output against extra current (relay coil), as well as against over current (cold filament with electric bulb) by adding a low resistance in series.

The outputs delivering a «-», it is necessary to connect external parts (relays, lamps, …) to a «+».

A voltage of + 12Vdc / 200mA is available on the E connector in terminal block 9.

Possibility to use a positive external voltage max. : + 48Vdc.

There are different output interfaces with relay (in option) with a galvanic isolation. They clip onto DIN rail on the bottom of cabinet and quickly connect thanks to a flat cable.

The supply of relays is provided by the J1905S. This relays provide a rapid and optimal mounting and they protect the electronic outputs of a risk of destruction (Refer to our leaflet «Accessories»).

Voltage presence LED — LEDs Test button — RESET button

RESET or Acknowledge button :

A «RESET» button is available on the front face. Pressing on RESET stops the audible alarm and make the flashing LED goes fixed in case of permanent fault (if the fault is no longer present the LED will turn off automatically).

If a new alarm arrive on another channel it will appear in flashing mode with audible alarm.

A rear terminal allow to connect an external button (closing button, it must be connected to the «+ COM» terminal). This button will ensure a RESET on several panels at once.

Output Contact «Audible Alarm» (RKL) :

1 (O/C) output with galvanic isolation. The relay is with «Positive Security», ie «normally activated». The relay will be deactivated by each one of the channels selected ALARM mode by S1. The relay will be reactivated when the operator will press on RESET (switching the light in fixe).
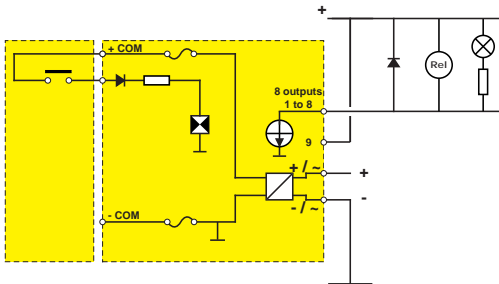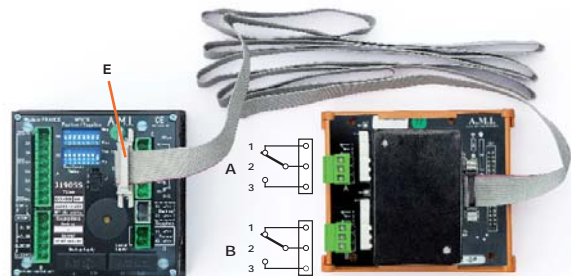
If a new alarm appears, the relay RKL will be deactivated once again.

Warning: in our diagram, the contact is shown when the panel is not powered.

For a powered device without alarms present, the position of contact with a fail-safe relay will be reversed.

OUTPUTS CONNECTIONS :

Connector E

13	14
11	12
9	10
7	8
5	6
3	4
1	2

14   To order the «Synthesis» relay coil
13   To order the «Audible Alarm» relay coil
12   0V
11   Not connected
10   0V
9   Supply voltage for «External Relays»

1 to 8   channels outputs (150mA)

1 = channel 8
2 = channel 7
…/…
7 = channel 2
8 = channel 1
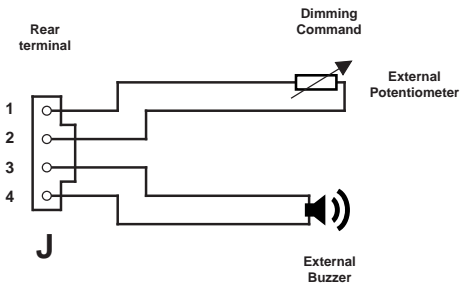

M901 Card « report relay» type DIN connected to the panel J1905S

M0901-01-01

35

LED LUMINOSITY ADJUSTMENT :

- LED luminosity can be adjusted using a connected external potentiometer
  between terminals 1 and 2 of J rear connector by rapid connection.
- No potentiometer => maximum luminosity.
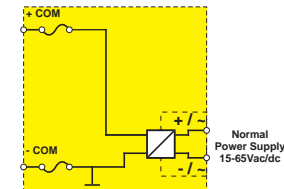- With potentiometer 1 to 5 kOhm => adjustments.

OUTPUT FOR EXTERNAL BUZZER :

An external buzzer (10mA maximum, Voltage 12Vdc) can be connected to
terminal 3 and 4 of J connector respecting polarity «+» on terminal 3.
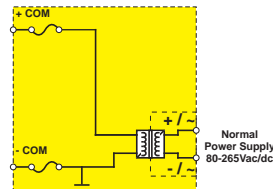(But it is better to use the contact of RKL relay).

POWER SUPPLY / DUAL POWER SUPPLY :

Depending on the option selected, the panel can be equipped with one or two power supplies.
The panel can be permanently supplied by two different voltages (example: 24Vdc and 230Vac).
In case of failure of one or the other of the voltages, the panel will continue to operate with to the
presence of the other. The disappearance of one of the voltages will be reported on the «voltage
presence» Led which will become blinking red. The relay synthesis will be disabled only in case of
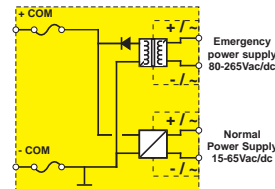total loss and not in case of a decrease in voltage.

Alimentation Simple

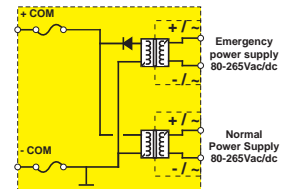**15-65Vac/dc**
24Vac/dc and 48Vac/dc
(Without galvanic isolation)

85-265Vac/dc
110Vac/dc / 127Vac/dc
200Vdc / 230Vac
(With galvanic isolation)

Double Alimentation

15-65Vac/dc + 80-265Vac/dc
24Vac/dc and 48Vac/dc
110Vac/dc / 127Vac/dc
200Vdc / 230Vac
(With galvanic isolation)

80-265Vac/dc + 80-265Vac/dc
110Vac/dc / 127Vac/dc
200Vdc / 230Vac
110Vac/dc / 127Vac/dc
200Vdc / 230Vac
(With galvanic isolation)

In case of model equiped with 2 power supplies, the consumption
will be done by so-called «normal supply», the consumption on the
«emergency supply» is close to zero. It will only be used in case of
failure of the normal supply.

Each power supply is protected by a 5x20mm 0.5A. fuse.

The options are :
Normal supply : **15-65Vac/dc** or **85-265Vac/dc.**
Emergency supply : **none** or **85-265Vac/dc.**
This give us 4 models of power supply.

Model	Normal Supply	Emergency Supply
J1905S-02-00	15-65Vac/dc	Unassembled
J1905S-05-00	80-265Vac/dc	Unassembled
J1905S-02-05	15-65Vac/dc	80-265Vac/dc
J1905S-05-05	80-265Vac/dc	80-265Vac/dc

LED COLOUR SETTING :

A display choice of 7 colors per LEDs is possible. This choice is selectable using switches on the
panel front face. You have a choice of the following colours :

Red, Green, Yellow, Blue, White, Cyan, Magenta.

Changing LEDs is no longer necessary.

PRODUCING LABELS :

Labels are ordinary paper sheets that can be slid into a transparent pocket included in the thickness of the front face. A blank label is supplied with each unit.
Labels can be handmade, or draw the screen of the PC and produced on a colour printer (laser or ink-jet).
The PC software allows to create labels including images, allows to save and duplicate the achievements.
This PC software is FREE. It is possible to load it on our website :
www.ami-control.com

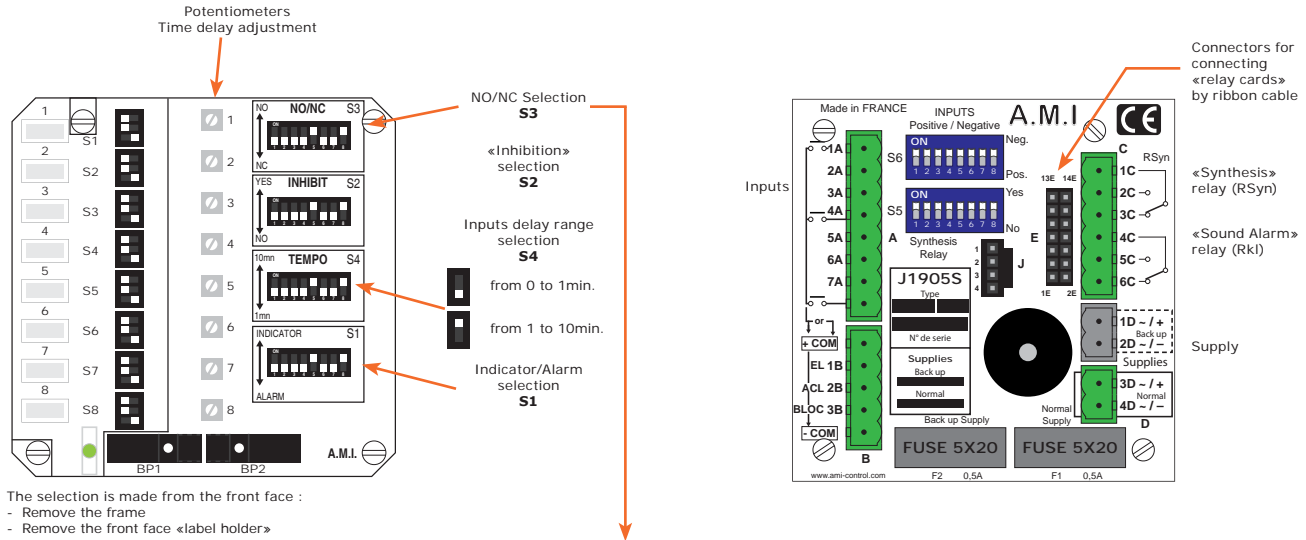For high humidity countries, the printing on plastic sheets is recommended.

SETTINGS :

The selection is made from the front face :
- Remove the frame
- Remove the front face «label holder»

Potentiometers
Time delay adjustment

NO/NC Selection
S3

«Inhibition» selection
S2

Inputs delay range selection
S4

from 0 to 1min.

from 1 to 10min.

Indicator/Alarm selection
S1

Connectors for connecting «relay cards» by ribbon cable

«Synthesis» relay (RSyn)

«Sound Alarm» relay (Rkl)

Supply

From the front face

S1 INDICATOR / ALARM Indicator/Alarm selection	S2 INHIBIT «Inhibition» selection	S3 NO/NC NO/NC selection (according to the position of S5)
Indicator	Inhibit	Negative Inputs — NC / NO
Alarm	Normal	OR Positive Inputs — NO / NC

At the back

S6 Positive / Negative Polarity of input selection	S5 Synthesis Relay To synthesis relay selection
Negative	yes
Positive	no

Caution: The direction of S3 (selection NO / NC) is reversed according to the S5 configuration (positive or negative inputs)

Positive / Negative

S6 Neg. / Pos.

CUTTING :

DIN Format 96x96.

92 mm

92 mm

96 x 96 mm

8 mm max.

53

14

MAIN CHARACTERISTICS :

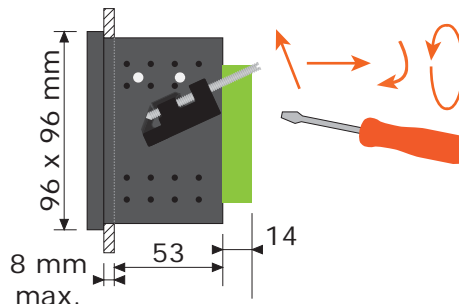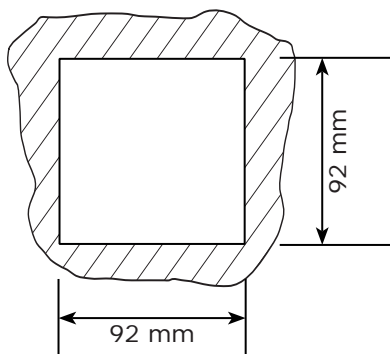|	02 Version 15-65Vac/dc			05 Version 80-265Vac/dc
	from 15Vdc	from 24Vdc	from 48Vdc	
Used in « Positive Inputs» : (Positive Inputs, Open contacts)				
- Consumption min.	80mA	50mA	30mA	22mA
- Consumption max. (8 channels active)	150mA	110mA	60mA	40mA
- Consumption 1 card 8 output relays	+70mA	+50mA	+30mA	+10mA
- Consumption on input	1mA	1,6mA	3,3mA	1,6mA
- High Threshold	>=9,5V			
- Low Threshold	<=5,5V			
Used in « Negative Inputs» : (Negative Inputs, Closed contacts)				
- Consumption min.	80mA	60mA	40mA	22mA
- Consumption max. (8 channels active)	150mA	110mA	60mA	40mA
- Consumption 1 card 8 output relays	+70mA	+50mA	+30mA	+10mA
- High Threshold	>=9,5V			
- Low Threshold	<=5,5V			
Voltage «+ COM»	+24Vdc			
Max Voltage on Inputs	«+ COM» or 65Vdc max.			
Line resistance allowed on contact input (with «+ COM»)	10Kohms max.			
Protection	Fuse 5x20 0,5A			

Temperature	-20°C / +60°C
Relay «General Alarm»	1 RT 6A/12Vdc - 0,15A/240Vac
«Sound Alarm» Relay	1 RT 6A/12Vdc - 0,15A/240Vac
Buzzer output	10mA / 12Vdc
Weight	250 to 320gr depending on version
Dimensions	96 x 96 x 67 mm
Protection without front cover	IP52
Protection with front cover	IP54 (with M0722)

REFERENCES FOR ORDERING :

J1905S-0x-0x

Normal Power Supply
15-65Vac/dc : **02**
80-265Vac/dc : **05**

Emergency Power Supply
00 : Not mounted
05 : 80-265Vac/dc

| 0V ac/dc | 24V ac/dc | 48V ac/dc | 70Vac | 110V dc | 127V ac/dc | 230V ac/dc | 300V ac/dc |

02 OR **05**

02 AND **05**

15V ac/dc — 65V ac/dc

05

AND

05

80V ac/dc — 265V ac/dc

example :
J1905S-02-05, J1905S, powered by :
- Normal Power supply : 15-65Vac/dc
- Emergency power supply : 80-265Vac/dc.
With integrated buzzer, synthesis relay and Audible Alarm relay.

Model	Normal Supply	Emergency Supply
J1905S-02-00	15-65Vac/dc	Unassembled
J1905S-05-00	80-265Vac/dc	Unassembled
J1905S-02-05	15-65Vac/dc	80-265Vac/dc
J1905S-05-05	80-265Vac/dc	80-265Vac/dc

ADDITIONAL PRODUCTS :

M0810 Front plate 19-inch, brushed aluminium Ht : 3U
Front for bay 4 pre-drilled holes 92x92mm.

M0816 Closing cover
Closing cover for mounting on M0810 front plate.

M0810 / M0816

M0722, IP54 sealed front
«Quarter-turn» closing button
DIN format 96x96.
IP54 sealed front that is fitted directly to product front. An O-ring provides sealing between steel cabinet and panel.
The front is a transparent openning door.

M0731 Adapter to mount on DIN Rail profil TS35. 96x96 format.
This kit allows to mount panels with 96x96 format on a DIN rail TS35 retaining the display towards the operator.

M0722   *M0731*

M0800-00-20 Empty predrilled wall cabinet
1 96x96 panel, for surface mounting, depth (lxhxp) : 190x200x110mm.

M0800-00-20

EXTENSION RELAY CARDS WITH GALVANIC ISOLATION :

They are fitted On DIN rail bracket at the bottom of cabinet and are directly connected to the panel rear extension connector by a flat ribbon cable. They can be used on 8 inputs and 12 inputs alarm panels.
- The relays are powered directly through the panel.
- A LED on each relay displays its state.
- A removable terminal block allows the connection «inverters outputs contact».
- Dry output contact : 1RT 6A/12Vdc or 24Vdc - 0,15A/240Vac (3 terminals each)

Card with 12 relays, galvanic isolation
Equiped with 12 outputs type «dry contact 1RT + 1 separate common». It allows to use the outputs «open collector» by a switches off 1RT contact.
(For the 8 inputs alarm panels, only the first 8 relays will be usable).
M0901-01-01 : 12 relays 12V

M0901-01-01

Card with 2 synthesis relays (1RT + 1 separate common), selectable with galvanic isolation.
It allows to realise 2 different synthesis (sort the outputs in 2 families, for example the «high risk » and « minor risk » alarms.
A selector allows the allocation of the channel on the relays. Each relay can be activated by one or several outputs of the panel.
An output can also activate the 2 relays. The relays can of positive security (activated on the card starting).
(For the 8 inputs alarm panels, only the first 8 channels of the selector will be usable).
M0901-01-20 : 2 relays 12V

M0901-01-20

Don't forget the cable connection :
M0901-02-53 Ribbon cable L=1.5m fitted for one relay card.
M0901-02-54 Ribbon cable L=1.75m fitted for two relay cards.
M0901-02-56 Ribbon cable L=2m fitted for three relay cards.
M0901-02-55 Additional length L=0,5m.

M0901 Card «report relay»
DIN type
connected to the J1905S panel

Refer to «Accessories» chapter of our catalog.

A.M.I.

www.ami-control.com

warranty 2 years warranty

IP65

External Buzzer

With J1905S

With single or redundant power supply

Allows a wall display of all information with and without memory and reset, with or without audible alarm.

This economic wall-mounted cabinet displays **states** and **alarms** of a installation.
It's equipped with the J1905S (redundant power supply).

The J1905S also allows to receive the input contacts with a positive voltage or negative voltage (open collector).
It includes :
- A buzzer is mounted on the bottom outside the cabinet in order to increase its effectiveness.
- A selectable general contact for postponement, and 8 outputs corresponding to 8 Leds.

It proves to be more economical than Alarm'Box for limited facilities comprising 8 signalings. And dual power solution avoids the disadvantages that may arise batteries.

POWER SUPPLY :

The redundant power supply (dual feed) ensures continious safe operation, regardless of the uncertainties of the «normal» voltage or «emergency» voltage.

The backup battery becomes useless.

Example : simultaneously supply with 24Vdc and 230Vac or 230Vac and 230Vac.

Supplies		Reference
Normal	Emergency	J1905S
15 - 65Vac/dc		J1905S-02-00S-00
80V - 265Vac/dc		J1905S-05-00S-00
15 - 65Vac/dc	80V - 265Vac/dc	J1905S-02-05S-00
80V - 265Vac/dc	80V - 265Vac/dc	J1905S-05-05S-00

☐ : supply with galvanic insulation

DESCRIPTION :

- Wall mounting IP65.
- 8 inputs «contact» / 8 outputs «open collector».
- Dual power (redundant) possible.
- Inhibition input (blockage).
- «Led test» and «RESET» buttons on the front.
- Buzzer outside.
- Contact for external siren.
- Contact «General alarm» selectable per channel.
- Brightness adjustment possible.

SETTING :

The parameters are set by simple switches for each channel separately.
- Choice of 7 colors by led.
- Inputs contact NO /NC.
- Negative or positive inputs.
- Selection in Indicator or Alarm. (status or alarms display)
- Filter delay on inputs 0 / 1mn or 1 / 10mn.
- Selection towards output relay «General alarm» with positive safety.

For more details of the possible functions, thank you to consult the manual for the J1905S

CHARACTERISTICS :

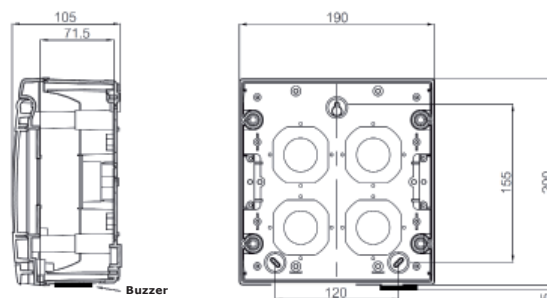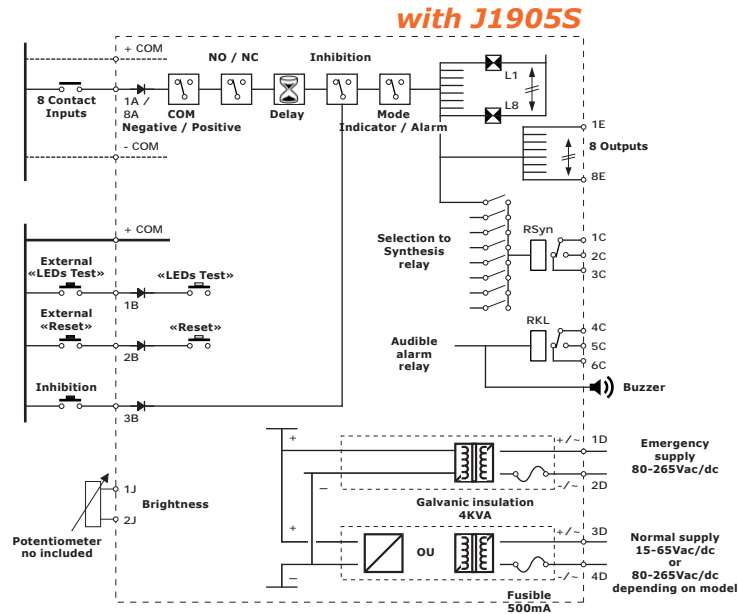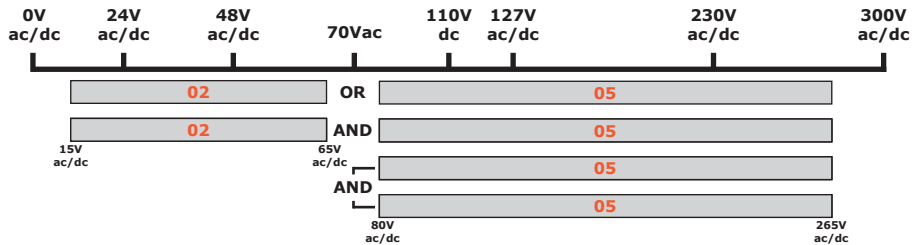| Enclosure	Polycarbonat (PC), screws of polyamide (PA)
Colour	Grey
Ingress Protection	IP65 / IK08
Flame resistance	UL746C 5V
Surface insulation	Totally insulated
Working / storage temperature	-20°C / +60°C / -20°C / +70°C

105
71.5

Buzzer

190

155
200

120

DIAGRAM :

with J1905S

ORDER REFERENCE :

J1905S-0x-0xS-00

J1905S

J1905S
Normal Power Supply
15-65Vac/dc : **02**
80-265Vac/dc : **05**

J1905S
Emergency Power Supply
00 : Not mounted
05 : 80-265Vac/dc

example :
For J1905S :
J1905S-02-05S-00, J1905S, powered by :
- Normal Power supply : 15-65Vac/dc
- Emergency power supply : 80-265Vac/dc.
With integrated buzzer, synthesis relay and Audible Alarm relay.

Supplies		Reference
Normal	**Emergency**	**J1905S**
15 - 65Vac/dc		J1905S-02-00S-00
80V - 265Vac/dc		J1905S-05-00S-00
15 - 65Vac/dc	80V - 265Vac/dc	J1905S-02-05S-00
80V - 265Vac/dc	80V - 265Vac/dc	J1905S-05-05S-00

▢ : supply with galvanic insulation

A.M.I.

A.M.I.

www.ami-control.com

BUREAU VERITAS

J3000, J3000RS
J3105, J3105RS

Sequence panel for TECHNICAL ALARM CENTRALIZATION «LED block» model

warranty 2 years warranty

DIN 144 x 144 format

Voltage presence LED

«LEDs Test» button

«Reset» button

The J3105 and J3105RS are J3000/J3000RS in which has been added the possibility of changing the colors of the LEDs frontage with switches.
The choice of color LEDs can process information according to color codes, levels of danger and easier visual grouping.
The dimensions and characteristics are identical.
To date, the approval «BUREAU VERITAS» for the J3105/J3105RS is underway.
The notice is common.

FUNCTION :

The J3000 or the J3105 is a PLC of technical alarms treatment, integrating all the functions required for local or deported signaling :
- Memorization, blinking and reset.
- Modular, installation can be extended to an unlimited number of inputs.
- It is immediately insertable and can be fitted into a bay, console or cabinet.

Its tolerances of climatic ambience (-10°C/+50°C) and its tolerances of supply voltage (-40%/+30%) make the component essential for any installation at significant risk.
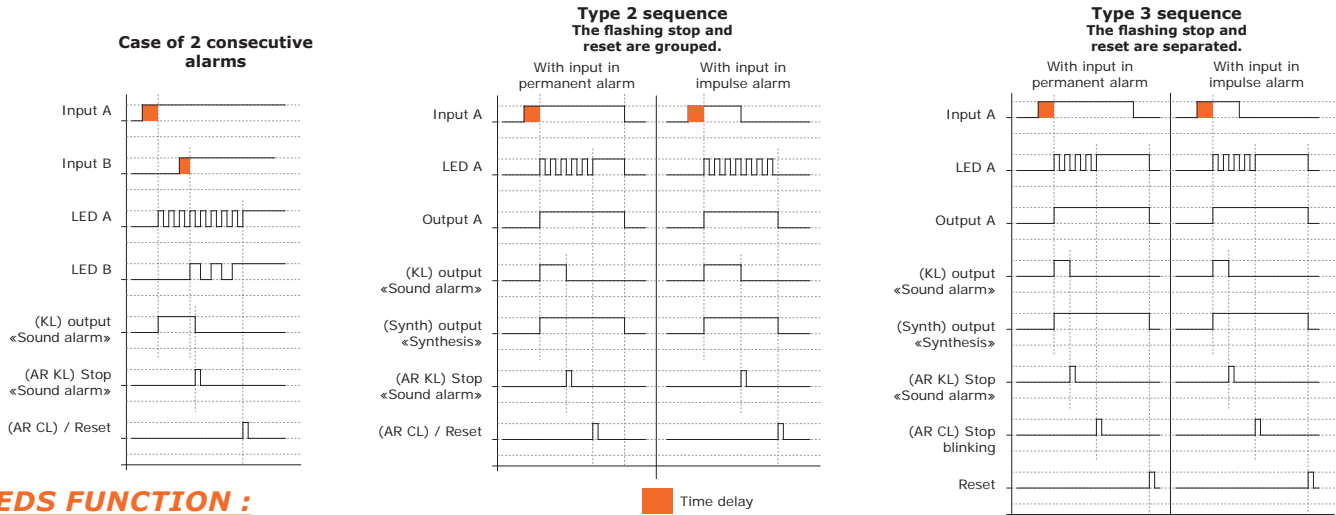
MAIN CHARACTERISTICS :

- 12 «high luminosity» LED's with large visible area 10x10mm in even in non-attenuated light.
- Labels with high legibility and easy of do (typewriter, laser printer) that can be slid behind a transparent window.
- Rapid and compact clustering of light indicators on cabinet front.
- Fast assembly using clips.
- 138x138mm cut-out in compliance with DIN 144x144 standard.
- Possibility to choice the Led's colors.
  J3000 : LEDs are removable. To change the color, you have to change the led.
  J3105 : Color change by switches mounted on the front.
- Long life LEDs (eliminates short-circuit problems with filament lamps).
- Low consumption.
- LED Indicator of voltage presence.
- Box delayed-inflammation type.

The parameter setting is done by selection of switches on rear (no PC programming required) :
- 12 contact inputs NO/NC + 12 remote reports (24V). Relay output card possible.
- 12 alarm LEDs on the front («LED block» type for effective contrast).
- 2 buttons on front («LEDs Test», «Reset»).
- 3 inputs/outputs for process (Inhibition input, 1st fault, external synchronization).
- 4 push button inputs (Test, Sound Alarm Stop, Blinking Stop, Reset).
- 2 output relays 1OC («Sound alarm», «Synthesis»).
- Selectable temporization on input (20ms, 750ms, 3s, 10s).
- Control of cable continuity on each input (loop control).
- 1st fault sequence, with rapid blinking.
- Storing fugitive information + blink + activated sound output + activated synthesis output + cancel.
- 2 types of sequence possible.
- Remote transfer (channel by channel + one general).
- Outputs can be in «blinking» mode for use on mimic panel.
- Analog monitoring of power supply voltage.

J3105_EN004_28-05-2018

OPERATING PRINCIPLE :

The changement of input state, after filtering time, causes LED blinking and the activation of sonorous output and synthesis output. This action will be stored even if the input disappears. The reset will be done step by step, after pressing the push buttons and depending of the sequence selected and the input position.

Case of 2 consecutive alarms

Input A
Input B
LED A
LED B
(KL) output «Sound alarm»
(AR KL) Stop «Sound alarm»
(AR CL) / Reset

Type 2 sequence
The flashing stop and reset are grouped.
With input in permanent alarm   With input in impulse alarm

Input A
LED A
Output A
(KL) output «Sound alarm»
(Synth) output «Synthesis»
(AR KL) Stop «Sound alarm»
(AR CL) / Reset

Type 3 sequence
The flashing stop and reset are separated.
With input in permanent alarm   With input in impulse alarm

Input A
LED A
Output A
(KL) output «Sound alarm»
(Synth) output «Synthesis»
(AR KL) Stop «Sound alarm»
(AR CL) Stop blinking
Reset

■ Time delay

LEDS FUNCTION :

«Pavers LEDs» type, they have very high contrast between «ON» and «OFF» position. Being unpluggable, it is possible to change the color. In version J3105, selection by switch of 7 colors by Leds mounted on withdrawable card).
The first activated channel will cause a display in «fast blinking». The following channels will display with a «slow blink». This helps differentiate the first alarm. In diagram «Type 2 sequence» and «Type 3 sequence», the LEDs are represented in «fast blinking» mode.

a) Fault avalanche : The avalanche is an arrival of several consecutive alarms.
It is very important to know the first alarm, as this enables rapid intervention in troubleshooting.
The differentiation between the 1st fault (first alarm) and the 2nd is done by flash and slow blink (1st fault is displayed in fast flashing mode; the following alarms are displayed in slow blink mode).
The avalanche begins with the arrival of the first alarm until operator cancellation. After cancellation by operator (all flashing LEDs are become fixed), a new alarm will be considered as a first fault. Discrimination time: 10ms.
The various light states on the LEDs :
Fast blink = 1st alarm   **Slow blink** = following alarm in avalanche   **light out (OFF)** = return to normal state
Fixed light (ON) = alarm present, memorized after acknowledgement.   **Very fast Flashing** = cable fault (this luminous signal is not cancellable).

b) Simple indicator display function : The S22/S23 switches allow processing with «simple display» type . Selected channels will pass directly to fixed light (ON), without sound alarm or synthesis output. Input storage is inoperable.
The settings NO/NC and delay time on input are still active.

PARAMETERING :

The rear switches can select a program choice.
It is necessary to shut off the power supply before this operation.
One switch is positioned at :
- 0 when it is down.
- 1 when it is up.

Switches S1 to S24

FUNCTION OF FRONT FACE BUTTONS :

- The front is equipped with two buttons :
  «LEDs Test» and «RESET».
- RESET combines several functions :
- 1st press => Stop Horn / 2nd press => Flashing off / 3rd press => Erase
- The flash off (switching to fixed lights) will be processed only if the alarm has been stopped.
- (see also the *FUNCTION OF REAR TERMINALS*)

Inputs		NO	NC
S1	1, 2, 3, 4, 5	0	1
S2	6, 7, 8, 9	0	1
S3	10, 11	0	1
S4	12	0	1
Time delay		20 ms	750 ms	3s	10s

Time delay		20 ms	750 ms	3s	10s
S5 S6	1, 2, 3, 4, 5	0 0	1 0	0 1	1 1
S7 S8	6, 7, 8, 9	0 0	1 0	0 1	1 1
S9 S10	10, 11	0 0	1 0	0 1	1 1
S11 S12	12	0 0	1 0	0 1	1 1

Selection					
S13	Loop control : without=0 / with=1				
S14	Synchronization : transmitter=0 / receiver=1				
S15	Sound alarm relay :	Normally activated=1 Normally deactivated=0			
	Selection	**A**	**B**	**C**	**D**
S16 S17	Sound alarm relay	A=> Fixed B=> 1 pulse C=> Fl 1s/1s D=> Fl 1s/2s	0 0	1 0	0 1	1 1
S18 S19	Inhibit	A=> V1 B=> V1 à V3 C=> V1 à V7 D=> V1 à V12	0 0	1 0	0 1	1 1
S20	Normal outputs=0		Blinking=1		
S21	Type 2 sequence=0		type 3=1		
S22 S23	Simple indicator	A=> none B=> V10 à V12 C=> V7 à V12 D=> V1 à V12	0 0	1 0	0 1	1 1
S24	Synthesis=0		watchdog=1		

S1 to S4 : Selects channels input «normally open» or «normally closed».

S5 to S12 : Adjusts the delaying time of input validation (filtering).

S13 : Ensures the control of cable continuity for each input (monitoring of short-circuit and wire cut) (need for resistors on each input).

S14 : To synchronize the blinking from several panels. With this switch, the panel will be pulse transmitter or pulse receiver.

S15 : KL Relay normally activated or not. «Sound alarm» KL relay can be used in «watchdog» mode (normally activated or not). Selected «normally activated» and contact output being fed with a different voltage, it can inform by falling in case of internal breakdown, loss supply or input activated.

S16/S17 : «Sound alarm» relay. Allows changing sound alarm modulation.
Fixed : S16=0 / S17=0   1 pulse : S16=1 / S17=0
Flash 1s/1s : S16=0 / S17=1   Flash 1s/2s : S16=1 / S17=1

S18/S19 : Inhibit. It is possible to inhibit out information's arriving on certain inputs (if inhibit input is at 0 => none way inhibited).

channel 1 : S18=0 / S19=0   channels 1 to 3 : S18=1 / S19=0
channels 1 to 7 : S18=0 / S19=1   channels 1 to 12 : S18=1 / S19=1

S20 : blinking outputs. Activates the outputs like the façade LEDs. (Used for pilot external LED on mimic).

S21 : Sequence type 2 or type 3.Selects 2 different types of sequences. (see diagram).
- Type 2 : The functions AR CL and RESET are grouped.
- Type 3 : AR CL and RESET are separated.

S22/S23 : «Simple indicator» type. Some inputs can be treated in simple indicator (ON/OFF) and not in alarm (Blinking and fixed light, memory, sonorous alarm, Reset).

none : S22=0 / S23=0   channels 10 à 12 : S22=1 / S23=0
channels 7 à 12 : S22=0 / S23=1   channels 1 à 12 : S22=1 / S23=1

S24 : Synthesis. The «Synthesis» relay will be deactivated (will fall down) if :
- an alarm is present or if the internal «Watchdog» is activated.
- Only if the internal «Watchdog» is activated.

Alarm present or watchdog activated : SW24 to 0
Watchdog only : SW24 to 1

Example of setting : To obtain channel 12 in NC, with a 3s time delay, with synchronization coming from outside, sound alarm activated and type sequence 3, the switches will be :

S4 on 1   S11 on 0   S12 on 1   S14 on 1
S15 on 1   S21 on 1

REPRESENTATIVE DIAGRAM :

- The inputs are called «positives» when the common feeding the alarm contacts is connected to «+» or to «+COM».
- The inputs are called «negatives» when the common feeding the alarm contacts is connected to «0V».

The contacts are represented with the J3000/J3105 off

«Positive inputs» J3000/J3105 (standard)
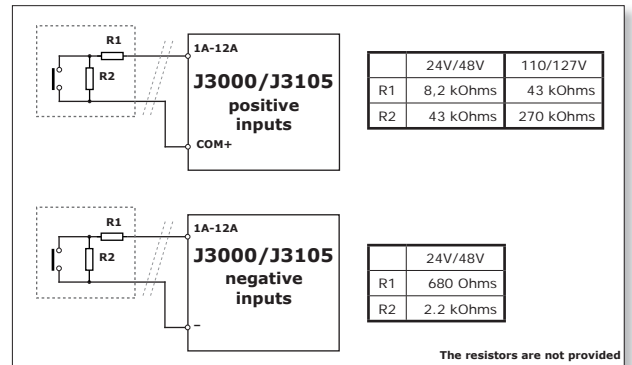
«Negatives inputs» J3000/J3105

INPUT FUNCTION :

- Terminal 1A/12A : Depending on the model selected J3000/J3105, the 12 contact inputs can be : «Positive common» (powered by a positive voltage or «+ COM» terminal) or «Negative common» (powered by a negative voltage or «19A» terminal). The NO/NC input selection will be done with the switches S1, S2, S3 and S4. (Note that this selection is reversed on the model «Negative common»).

- A delaying time can be associated with chosen inputs (S5/6, 7/8, 9/10, 11/12 selection switches). Channel validation is effective only if the channel remains in alarm mode for duration greater than the selected delaying time.

- «Cable monitoring» function:
This function (switch 13) detects short-circuits and cable cut between each contacts and the inputs terminal.
It only needs to put two resistors (one in series and the other in parallel) directly on the contact to monitor permanently line current. The cable fault will be indicated by a rapid «flashing» + sound alarm.
Only «Sound alarm» is cancellable. The output will not be activated.
It is not possible to cancel the flash before installation repair.

	24V/48V	110/127V
R1	8,2 kOhms	43 kOhms
R2	43 kOhms	270 kOhms

J3000/J3105 positive inputs

	24V/48V
R1	680 Ohms
R2	2.2 kOhms

J3000/J3105 negative inputs

The resistors are not provided

FUNCTION OF REAR TERMINALS AND FRONT FACE BUTTONS :

a) TEST terminal 13A or button front face «LEDs Test» :
- An activation time of 1 to 10s activates a «lamp test» generated by the microcontroller. By adding a resistor R3 between the «+COM» terminal and the «LEDs Test», it becomes possible to test the LEDs on front face and the outputs.
- For 24Vdc voltage supply: R3=43 kOhms (1/2W).
- For 48Vdc or 110Vdc voltage supply: R3=270 kOhms (1/2W).
- If the activation is greater than 10s, the Setup Mode J3000/J3105 BUS RS485 isactivated and all LEDs flashes (even if the Bus option is absent). (see manual transmission).
For the use of following three terminals, an action order must be respected.
The terminals AR CL and EFF are inactive if the audible alarm is present.
It is mandatory to deactivate the audible alarm (AR KL) in first.
- In sequence type 3, the EFF terminal is inactive if a light is flashing (it's impossible to erase before flashing stop by «AR CL»).
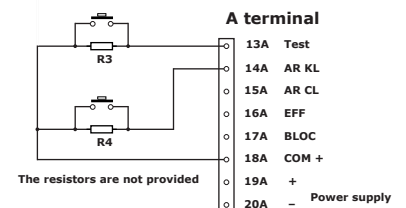
b) AR KL terminal 14A (Sound alarm stop) or button front face «RESET/Horn Stop » first impulse :
- Standard function: An input activation stops the alarm until the return to normal.
- With a R2 resistor connected between AR KL (14A terminal) and «+COM», an input activation stops the sound alarm but if the channel remains in alarm mode, the audible and flashing indications will be reactivated after 1 minute or 15 minutes. (Prevents a forgetting if an alarm is still present). (See the scheme of the external buttons).
- For 1 minute reactivation : 24Vdc or 48Vdc : R4=22 kOhms (1/2W) - 110Vdc R4=100 kOhm (1/2W).
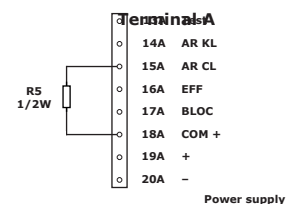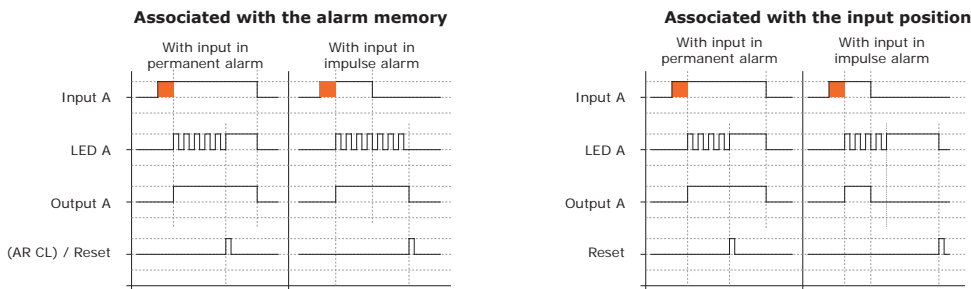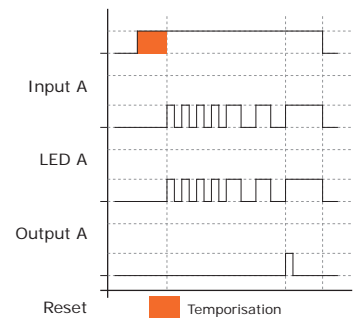- For 15 minutes reactivation : 24Vdc or 48Vdc : R4=4,7 kOhms (1/2W) - 110Vdc R4=22 kOhm (1/2W).

A terminal

	13A	Test
R3	14A	AR KL
	15A	AR CL
	16A	EFF
	17A	BLOC
R4	18A	COM +
The resistors are not provided	19A	+
	20A	− Power supply

c) <u>AR CL terminal 15A (blinking stop) and the button front face «RESET/Horn Stop » :</u> One activation changes the flashing mode to fixed mode (only after you have stopped the alarm sound). With the button front face «RESET/Horn Stop »: first impulse => Sound alarm stop / 2nd impulse => Blinking stop.
Functioning type 2 sequence :
When alarm will disappear, LEDs in fixed mode (ON) will turn OFF (After an activation on AR CL, if an input returns to normal, the blinking LED goes to fixed and quickly turns OFF.
Functioning type 3 sequence :
With this sequence, activation on AR CL terminal also turns ON the LED (fixe). But when the alarm will disappear, it will be necessary to use the EFF terminal to cancel the fixed light (turn OFF) or press the RESET button on the front panel again (3rd pulse).
A resistor can be connected to the AR CL terminal, allowing a different output process function (see «outputs» chapter).

d) <u>RESET/EFF terminal 16A (RESET) or button front face «RESET/Horn Stop » third impulse :</u>
Type 2 sequence operation : RESET/EFF this terminal is not used.
Type 3 sequence operation : The LEDs will turn OFF only after switching to fixed mode and after the input will be returned to normal and after activation of RESET/EFF terminal .(or after the third impulse on the RESET front button).

e) <u>Auto-test sequence :</u> (TEST + AR CL terminals or the 2 front push buttons).
If an operator presses and maintains the 2 push buttons or if the 2 terminals are activated simultaneously, the internal test cycle starts (LEDs Test + 2s + horn relay test + 2s + synthesis relay test + activation of all outputs).
This test is an «incremental» type which activates the each channel, each output, one after the other, and the selected outputs («Synthesis» relay, «Sound alarm» relay).

f) <u>Bloc terminal 17A :</u> The channel inhibition is activated by connecting a «+COM» on «Inhibition» input and with S18 + S19 switches. The selected inputs by S18+S19 will no longer be recognized as long as the inhibition input is activated.
One selected input is active only if the inhibit input is inactivated. If a selected channel inhibited (with S18 + S19) is already displayed before the activation of the terminal block (17A), the display management will continue until its extinction (return to normal of the input). For inhibition, the channel must be selected with S18+S19 AND the terminal 17A must be activated before the input change. This function is an indefinite delay equal to the duration of activation of the terminal 17A.

g) <u>«COM+» terminal 18A :</u> the «+COM» terminal allows supplying the input contacts with correct voltage and with internal protection.

**But these inputs can be powered directly from the «+» of the power supply of
the J3000/J3105 (24V or 48V version max voltage 70V, 110/127V version max voltage 127V).**

OUTPUTS FUNCTION :

a) <u>Terminal 21B/32B : 12 outputs</u>
The panel has 12 electronic outputs 150mA. These outputs are enabled or disabled at the onset of input activation or the LED. This is depending on the setup. This output transmits a «0V» (collector open). The external receiver should be connected to «+» (maximun voltage : +48Vdc). In certain cases it needs to be protected against break surges, and against cold start currents (bulb with filament) by the use of a serial low resistor.
There are different relay output interfaces with galvanic isolation (optional). They ensure optimum and fast operation without the risk of destruction. (Refer to chapter «Accessories»).

b) <u>«Blinking outputs» switch S20 =1 :</u> The outputs will become in flashing mode, so, the same type of the front LEDs (flash, fast or slow blinking, ON, OFF). This function can be used to pilot an external mimic. With this setting, the test function will activate the outputs (as for the front LEDs).

c) <u>Association of outputs at the alarm memory or at the input position :</u>
The output can be controlled by the presence of the corresponding LEDs or by the corresponding input which makes it possible to know if the alarm disappears and returns.

Associated with the alarm memory

Associated with the input position

Reminder : in standard function, the output activates when the input is activated and after a delaying time.
The output will be deactivated when LEDs will be OFF and after the REST by operator. And this is true even if the input returns before to its normal position.
The output is associated to <u>the memory of alarm.</u>

=> With R5 resistor connected : The output will be associated with the presence of alarm on input :
- If the input is activated, the associated output will be activated after time delayed on input.
- If the input returns to its normal position, the associated output turns OFF immediately.
The LEDs will remain activated until RESET by operator.
The output is associated to <u>the input.</u>

Terminals A	
14A	AR KL
15A	AR CL
16A	EFF
17A	BLOC
18A	COM +
19A	+
20A	–

R5 1/2W

Power supply

The resistors are not provided

	24V/48V	110/127V
R5	22 kOhms	100 kOhms

This function is activated by the presence of resistor connected between the 18A terminal and the AR CL terminal.

The 12 outputs on J3000/J3105 are of the type «open collector» with maximum current : 150mA.
A relay output interface (optional) can be used for galvanic isolation. It may be useful to add the A.M.I. output relay interface.

d) <u>KL output Terminal 35B/37B :</u> By 1RT relay, selectable with the S15 switch in positive security mode or not. A new alarm, an analog detection on electrical supply or the check of the bus will deactivate this output until operator cancellation.
It is possible to obtain various «Sound alarm» output types (S16/S17) :
- Fixed output (permanent up to cancellation).
- 1 pulse output (relay contact is deactivated for 1 second, and then goes back to its initial position. Sound cancellation is no longer useful on this selection).
- Blinking output 1s+1s => fast blinking (output relay blinks at rhythm 1 second every 1 second and is cancellable).
- Blinking output 1s+2s => slow blinking (output relay blinks at rhythm 1 second every 2 seconds and is cancellable).

e) <u>Synthesis output Terminal 38B/40B :</u> By 1RT relay with positive safety. It will be deactivated by the following cases :
- If an alarm is displayed.
- If the watchdog function is activated (analog voltage supply detection, cable monitoring function on one channel or internal fault present).
It will go back to its initial position when the display of the phenomenon involved disappears. The synthesis relay is not deactivated by channels used as simple indicator (switches S22 and S23). The S24 switch allows use of the synthesis relay only as Watchdog. In this case, the relay will no longer be activated by inputs.

f) <u>Buzzer Included (Option) :</u> It works as the KL output relay. If the KL relay is selected in positive security (S16-S17), do not forget to move the connector jumper. Open the box, the jumper is next the KL relay.

PROCESS TERMINAL OPERATION :

a) <u>Synchro terminal 34B :</u> (Terminal in Input/Output mode).
It synchronizes the blinking between all panels connected. If several flashing alarms are present on various panels, this can lead to visual fatigue for the operator.
With this function, all the flashes of the panels will synchronize with the signal arriving at this terminal.
- If synchronization is not selected on the panel (S14=0, transmitter), it is master and transmits timing clock pulses to the other users (it synchronizes itself on its own pulses).
- If synchronization is selected on this panel (S14=1, receiver), it receives pulses coming from outside and synchronizes on them. In the unlikely event of connection failure, the panel would resume it own synchronization. The power supply of this terminal is specific to this panel (**never connect other function than the «Synchro» terminal of another**).

b) <u>1st fault terminal 33B :</u> (Terminal in Input/Output mode).
Used to group multiple panels to get the 1st fault sequence on all channels.
If a panel has a first alarm displayed, it changes the status of its terminal 33B which will be received by the other connected panels. When the other panels will receive an alarm, they will display in slow blinking mode.
The power supply of this terminal is specific to this panel (**never connect another function as the «1st fault» terminal of another panel**).

INTERNAL PROCESS FUNCTION :

Analog monitoring of power supply voltage :
A ten-turn potentiometer at the back of the apparatus allows the setting of automatic detection of supply voltage faults.
- In the case of overvoltage, the green supply LED on the front turns to blinking red (tricolor LED).
- In the case of under-voltage, the green supply LED turns to blinking orange (tricolor LED). The panel remains operational.
- If the voltage drops to 13.5V, the light goes on with fixed orange and in order to avoid random operations, the panel is blocked.

The alarm detection on the supply voltage is memorized on the front . the power supply LED turns to blinking mode.
The synthesis relays and the sound alarm are triggered. It is necessary to cancel the sound alarm. After acknowledgement, the LED will turn fixed light (ON). As soon as the fault disappears and after cancellation, the power supply LED and the synthesis relay return to normal.
By turning in «anti-clockwise» (view from the rear), the detection range increases. (green zone authorized).
By turning in «clockwise» (view from the rear), the detection range decreases. (green zone authorized).
The tolerance zone around the supply voltage reduces in a «clockwise» (view from the rear). One turn corresponds to an increase or a decrease the adjustment range of about 5.5V (for the model with 110/125V power supply, this variation is +/-10%).

PRODUCING LABELS :

**4 text lines possible
Icons can be added
2 different languages possible**

Labels are ordinary paper sheets that can be slid into a transparent pocket included in the thickness of the front. A blank label is supplied with each unit.
Labels can be handmade, or produced on a colour printer (laser or ink-jet).
The PC software allows to create labels including images, allows to save and duplicate the achievements.
This PC software is <u>FREE</u>. It is possible to load it on our website :
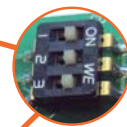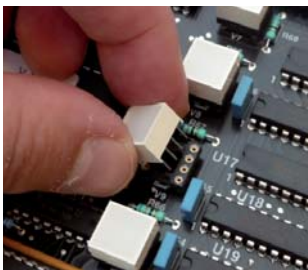**www.ami-control.com**

For high humidity countries, the printing on plastic sheets is recommended.

Version J3105: 7 possible display colors per channel, selectable from the front panel by switches.
Depending on the setting, the choice of colors is:
Red, Green, Yellow, Blue, White, Cyan, Magenta.
The change of the LED is no longer necessary.
Consumption by LEDS: 10mA maximum

CHANGING LEDS COLOUR :

Version J3000: The LEDs are fitted on removable sockets, enabling a change of colour.
The colours available are the following ones :
Red, Green, Yellow.

(*Blue and White available on request*)

The working lifetime of this component is practically unlimited. The low consumption (max 20mA per LED) and excellent luminosity contribute to the reliability of this type of panel.
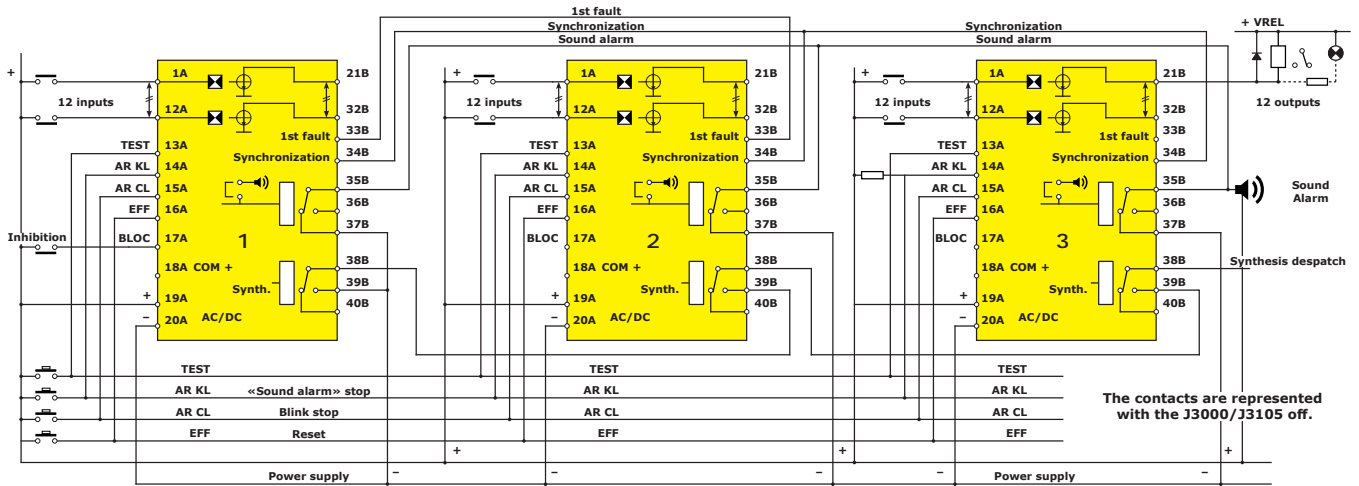
CONNECTIONS :

Application example :
- The Panel «1» can be connected with 11 contacts in NO mode and one in NC mode (connected on input 12 with selection S4 active).
- The Panel «2» can be connected with 9 contacts in NO mode (connected on inputs 1 to 9) and three in NC mode (connected on inputs 10 to 12 with selection S3/S4 active).
- The Panel «3» can be connected with 5 contacts in NO mode (connected on inputs 1 to 5) and seven in NC mode (connected on inputs 6 to 12 with selection S2/S3/S4 active).
  But other configurations are possible.
- The «Test», «AR KL», «AR CL» and «EFF/Reset» are centralized for the three panels.
- Contacts «Synthesis» of each panel are connected in series to send remote information. Synthesis relays are parameterized in positive safety (relays normally activated).

- Sound alarm relays are selected in positive safety(S15 = 1). Contacts are connected in parallel to an external general sound alarm.
- The blinking of the LEDs of this three panels is synchronized by the connection of the terminal 34B. (S14s on panels «1» and «2» is active and panels are used as receiver, S14 on panel «3» is inactive, the panel «3» is used as transmitter).
- Panels «1» and «2» are grouped to obtain the 1st fault among 24 inputs.
- The panel «3» uses its outputs directly to activate relays or external lamps.(terminals 21B and 32B).
  A diode or resistor has been fitted as protection.
  The maximum voltage on outputs is 48Vdc only.

The Alarm Reminder function (reactivation) is used (resistor connected between the «+» and terminal 14A.

+VREL : supply voltage on the outputs. This external voltage (+48Vdc max.) is useful only for particular connection. it is much safer to use the AMI relay cards. (Our relay cards are supplied directly by the panel).

«COM+» terminal (18A) is used to supply the input contacts.
But it is possible to use the 19A terminal «+» to supply all input contacts of several J3000/J3105. Max voltage 110/127V.

CUT-OUT :

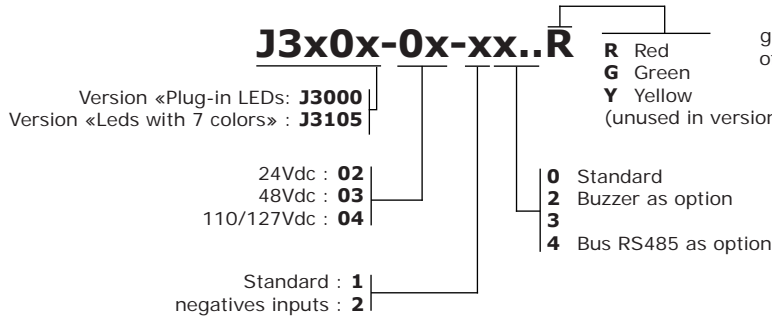DIN 144x144 format

Numbering system

J3000 / J3105

Rear view :

SPECIFICATIONS :

Delivered with red LEDs as standard (see below for another colour).

Possible voltages	24Vdc, 48Vdc or 110/127Vdc
Voltage supply tolerance	at 24V : -40% to +30% 48Vdc, 110Vdc : +/- 30%
Minimum consumption	100mA/24V
Maximum consumption	395mA (300mA for 110Vdc)
Input current (input supplied by +COM)	2.4mA
Permitted line resistance on contact input	2 kOhms
Maximum voltage on contact input	24Vdc, 48Vdc : 70V 110/127Vdc : 127V
Time delay accuracy	+/- 20%

Discrimination between 1st and 2nd fault	10ms
Temperature (at nominal voltage)	-10°C / +60°C
Voltage on outputs	24Vdc outputs on 48Vdc 110/127Vdc models (see output interface)
Current by output	150mA max.
Protection	Front IP52 / Rear IP22
With A.M.I. relay card	
Minimum voltage supply (when using relay cards)	17Vdc
Consumption by ouput	9mA per relay
Relay contact	1RT 6A/12Vdc - 0.15A/240Vac

ORDER REFERENCES :

J3x0x-0x-xx..R

Version «Plug-in LEDs: **J3000**
Version «Leds with 7 colors» : **J3105**

24Vdc : **02**
48Vdc : **03**
110/127Vdc : **04**

Standard : **1**
negatives inputs : **2**

0 Standard
2 Buzzer as option
3
4 Bus RS485 as option

R Red
G Green
Y Yellow
(unused in version J3105)

Indicates general colour of panel LEDs.

If multiple options, indices are placed in ascending order.
Example :
  J3000-03-124R
  J3000-02-224Y

The J3000 is delivered standard with all red LEDs.
It is possible to order additional LEDs :
J2001-00-00   LED 10x10mm colour GREEN, code : 2855
J2001-00-10   LED 10x10mm colour YELLOW, code : 2755
J2001-00-20   LED 10x10mm colour RED, code : 2655

ADDITIONAL PRODUCTS :

M0800
M0815

M0800 Front plate 19-inch, brushed aluminium Ht : 4U
Front for bay 3 pre-drilled holes 138x138mm.

M0815 Closing cover
Closing cover for mounting on M0800 front plate.

EXTENSION RELAY CARDS WITH GALVANIC ISOLATION :

Equipped with relays these cards deliver a dry changeover contact (without voltage) with galvanic isolation for each output. These cards allow secure use of «open collector» outputs with maximum safety. The relays are powered directly through the panel.
Characteristic of contacts : 1RT 6A/24Vdc - 0.15A/240Vac.
- A LED on each relay displays its status.
- 3 removable terminal blocks are available (one for contacts «O», one for contacts «F», the last for common).

Two possible presentations :
- Pluggable to the rear panel.
- On DIN rail bracket at the bottom of cabinet. With quick connection to the panel by ribbon cable. They avoid too many wires on the cabinet door.

These cards are available in versions :
- Complete (there are as many relays as there are outputs)
- 2 relays 1RT type with selectors, it allows you to sort the outputs in two directions: electrician / mechanic or Alarm high risk / Alarm ordinary.
M0900-02-01 Card 12 relays to plug at J3000/J3105 rear.
M0901-02-01 Card 12 relays to fit to DIN rail.

M0900-02-20 Card 2-synthesis-relays to plug at J3000 rear.
M0901-02-20 Card 2-synthesis-relays to fit to DIN rail.
Panel supply minimum voltage : 17Vdc.

Don't forget the cable connection :
M0901-02-50 Ribbon cable L=1.5m fitted for one relay card.
M0901-02-51 Ribbon cable L=1.75m fitted for two relay cards.
M0901-02-52 Ribbon cable L=2m fitted for three relay cards.
M0901-02-55 Additional length L=0,5m.

KJ3000-1 Demonstration kit, please refer to «Accessories» chapter.
Only for J3000-02/J3105-02, 24Vdc version.
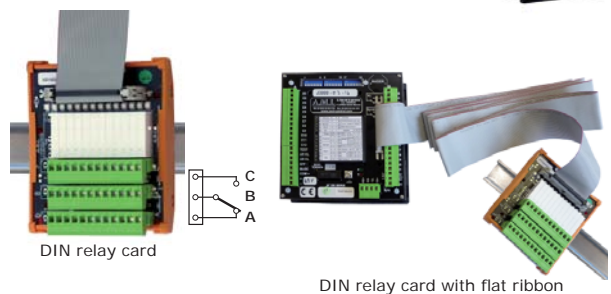

M0720

M0720, IP54 sealed front
«Quarter-turn» closing button
DIN format 144x144.
IP54 sealed front that is fitted directly to product front. An O-ring provides sealing between steel cabinet and panel. The front is a transparent openning door.

M0730 Adapter to mount on DIN Rail profil TS35. 144x144 format
This kit allows to mount panels with 144x144 format on a DIN rail TS35 retaining the display towards the operator.

DIN relay card

DIN relay card with flat ribbon

Demonstration kit

Plug-in relay card

Please refer to ACCESSORIES chapter from our catalogue.

J3000 RS485 BUS VERSION, PROTOCOL MODBUS/JBUS :

Please, ask us.
the protocol transmission documentation
for more information on signal frames.

RS485 bus : product reference : J3000-xx-x4 and J3105-xx-x4

The J3000/J3105 panel is a controller to technical alarm that can be fitted with an RS485 type BUS link (2 or 4 wires).
It is a multi-task intelligent peripheral. It is working in degraded mode. In case of bus failure or when stopping the supervisor, the panels will continue their control and will display alarms.
It is possible to connect 64 panels on the same Bus.
- The supervisor can recover the local process information stored in the panel (status, alarms, histories).
- The supervisor can also send an sound and visual information to a remote operator by activating a channel through the Bus on a J3000/J3105 or J3500 panel. This information can come from the supervisor (from its internal management system) but it can also come from another panel and be sent to a «receiver» panel.

COMPLETE TECHNICAL ALARM CENTRALISATION :

The PANEL'PC is an alarm centralizer on a RS485 Bus.
It can manage 64 panels with 12 alarms each.
Its touch screen allows to perform all necessary operations without additional keyboard (RESET, operator assistance display, historics, archiving).
It may refer alarms and remote information to other sub-stations.
It can be used either in a sub-station or control room :
- In local sub-station front cabinet, for monitoring alarms and local states, with historic for traceability.
- In control room with clustering by bus of local alarms panels.
- Possible transfer to other sub-stations.

It is very easy to realize
a technical alarm management unit by BUS :
Possibility of using modules equally :
- J3500/J3000/J3105 technical alarm automatic panel.
- J2x05RS indicator display receiver panel with 12 or 24 LEDs.
- PANEL'PC.

RS485 Bus / 1 km / fitted with 64 modules as a maximum

PANEL'PC :

The PANEL'PC integrates :
- Alarm display with «RESET» directly on the screen.
- Operator assistance or instructions for each inputs indicating to operator how to proceed depending on the alarm present.
- Display of historic periods.
- Re-display of the historic of a recorded period (10,000 pages possible).
- Printing in continuous with time stamping.
- Remote alarm reporting to one or several indicators display by BUS (for example, guard posts, technical service, control room).
- Remote outputs possible.
- Archiving on USB key
- Login with several safety levels

A.M.I.

J3500, J3500RS
VERSION PROM V1.03H & V1.05I

PLC CENTRALIZATION
TECHNICAL ALARMS
with text display

www.ami-control.com

warranty
2 years
warranty

DIN 144 x 144 format

«LEDs test» button «Reset» button Text screen Setup

The J3500 is a PLC of technical alarms treatment, integrating all the functions required for local or deported signaling. It has been designed for easy adaptation to all possible figure configurations likely to be encountered.

Numerous complementary functions have been added to those already present on the J3000/J3105. The multilingual text screen (3 languages) allows easy the setting of each channel and can displaying the historic of alarms. A luminosity adjustment system is available.

FUNCTION :

The setting can be done from the front with the text screen, or by PC with free software in several languages. Parameters are storable on hard drive, printable and duplicable.

The RESET is possible «channel by channel» with an external push button on each input (see manual start-up).

Free PC parametering software with recovery of the last 64 events

- Indicator (simple light) or Alarm treatment.
- Multiple types of sequences.
- Relaunch Alarm.
- Reactivation depending on input state.
- Global cancellation or per channel .
- Multiple types of sequences on RESET buttons and terminals.

12 «open collector» outputs
- «Contact outputs» possible.
- Association of 4 outputs possible on each input.
- Output synthesis selectable channel by channel.

12 «contact» inputs
- NO/NC contact input.
- Input time delay.
- Channel inhibit.
- Continuity monitoring.

AC/DC

Power supply
- Direct or alternating voltage.
- Continuous monitoring on power supply (max/min thresholds).

Modbus/Jbus RS485 Bus

Texte screen
- setting on front face.
- Alarm history display.
- Particular alarm display.
- 3 languages possible.
- Battery back-up.

It includes the management of memorizations, blinkings and acknowledgement systems.
- Modular, installation can be extended to an infinite number of inputs.
- Flush mounting, it can be immediately integrate on the front of bay, on console or cabinet.

Its climate ambience tolerances (-10°C/+50°C) and its extended power supply range (direct and alternating current supply) makes it an essential component for any high-risk installation.
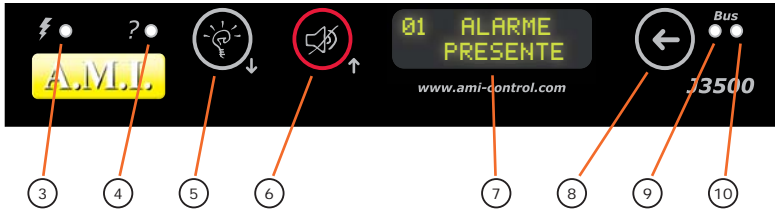
J3500_EN004_22-05-2018

FRONT VIEW :

1. 12 unpluggable LEDs 10x10mm , high-luminosity . It's possible to change colours (red as standard, yellow, green, blue).
2. Large label with 4 lines of text possible.
3. LED indicator of «Power supply presence».
4. LED «Alarm» indicator: BUS alarm / alarm of power supply level.
5. «LEDs Test»/«Next» pushbutton.
6. «Reset»/«Previous» pushbutton.
7. Screen of 2 lines of 16 characters to show: History Alarms/Program. It allows to easily perform the settings with the front panel keys.
8. Program/History pushbutton.
9/10. LED indicator Transmission / Reception Bus.

Language : The language used for menu texts can be selected in English, French or Spanish.

History : In normal mode the display panel can recall the previous 64 events. It shows the channel number and the type of event. This information are numbered and classified in arrival order. It is possible to delete the historic.

Brightness adjustment : For some special cases, it is possible to adjust the brightness of the LEDS and of the screen. This adjustment can be done from the front panel or by bus in program mode. (Example: navy applications).

The J3500 is an alarm processing controller with 12 inputs, 12 LEDs and 12 outputs and an optional RS485 Bus.
It is modular, this allows :
- Just use the desired number of identical panels for performing an installation. Whatever of the number of entries or configuration, each local sub stations will be equipped with the same model of product. (Decrease in inventory, easier maintenance).
- Reduce the overall processing time (each panel manages its own inputs)
- Ability of create families of panels to obtain the first alarm on a subset.
- Security: in case of failure of one of them, the other panels will continue their control.

PARAMETERING :

The different settings can be made :
- Directly from the front of the J3500 through a luminous display and user friendly menus..
  Changes are made using the three buttons present. An access code is provided.
- On the screen of the PC, with free software. It allows you to prepare settings, and then load them into the J3500.

Configuration from the front :
Since the front of the J3500, it is possible to set the entire J3500. A drop down menu appears on the text display for changing all parameters. Access to programming menu is protected by a changeable password.

3 buttons on front panel allows moving the dropdown menu, displaying options and validating the choice.

Language: You can select the language on the text display: French, English, and Spanish.

Although simple to use, this setting is used for changes in local mode. The setting by PC offering many others advantages.

Configuration from the software :
The software is free and available on our website.
It allows quick setup by selecting values on the screen.
The program consists of 3 different menus tabular form :
- The Inputs.
- The Outputs.
- The General parameters of the J3500.

This software allows you to create settings, store them on hard disk and print them. It also allows you to copy the settings present in an existing panel to modify and then reconfigure another panel.

**For details of operation,
thank you to refer to the Getting started manual**

A History function has been added. This configuration software also can recover the «Buffer events» in a J3500, sort events recovered, see recurrences, safeguard PC, print them.

```
Panel n° : 1
Buffer captured on 05/07/2016 at 11:37:21
Evt N°        Counter       Time           Channel      Parameter      Display
01            0000102       0:00:00.510    V03          Alarm          Blink Slow
02            0001543       0:00:07.715    ACK          Info           CL Acknolodge
03            0001543       0:00:07.715    V02          Alarm          Steady
04            0001544       0:00:07.720    V03          Alarm          Steady
05            0001545       0:00:07.725    ACK          Info           Clear
06            0001646       0:00:08.230    V02          Alarm          Off
```

Inputs

Outputs

General

PRODUCING LABELS :

Labels are ordinary paper sheets that can be slid into a transparent pocket included in the thickness of the front. A blank label is supplied with each unit.
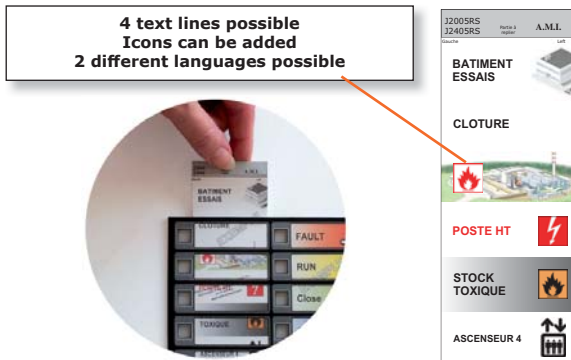Labels can be handmade, or produced on a color printer (Laser or ink-jet).
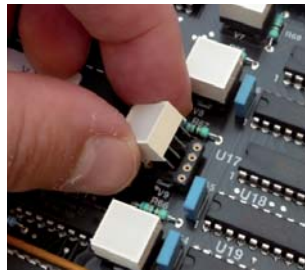The PC software allows to create labels including images, allows to save and duplicate the achievements.
This PC software is FREE. It is possible to load it on our website :

www.ami-control.com

For high humidity countries, the printing on plastic sheets is recommended.

**4 text lines possible
Icons can be added
2 different languages possible**

CHANGING LEDS COLOUR :

The LEDs are fitted on detachable sockets, enabling a change of colour. The colours available are the following ones :

Red, Green, Yellow, Blue, White.

The working lifetime of this component is practically unlimited. The low consumption (max 20mA per LED) and excellent luminosity contribute to the J3500 reliability.

OPERATING PRINCIPLE :

The J3500 allows optimized information management. Each input can be treated in simple visualization (ON/OFF) or with alarm treatment. Each input contact (also those with simple visualization) can be selected normally open or normally closed. A filter on input by temporization (delay time) is present.

Simple visualization or simple display (ON/OFF) :

Processing for stable information but minor as On, Off, level, temperature, …
One input in «simple visualization» is displayed in fixe (ON) long as input remains present without audible alarm, without RESET.
This input can activate one or more outputs and relay «Synthesis».
The loop control on the continuity of the input and the filtering time are possible.
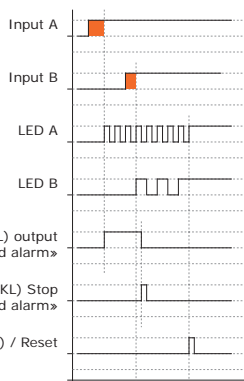
Alarm :

Processing for dangerous information with emergency.
Used in situation where it is necessary to call the operator (level and too high temperature, fire, trigger, …).
The operator can be absent, information will be displayed blinking, memorized and the display will remain present until acknowledged by the operator.
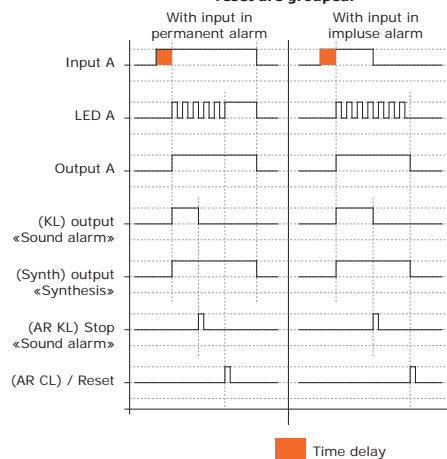This input can activate one or more outputs, relay «audible alarm» and «Synthesis» relay.
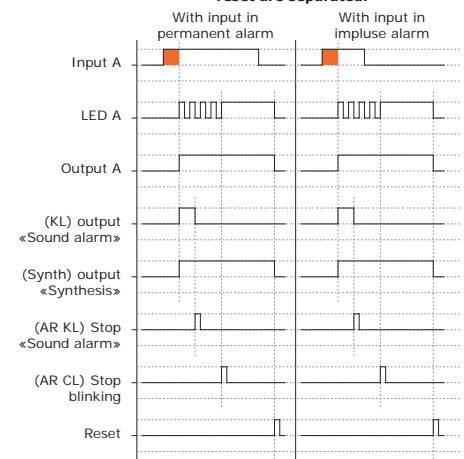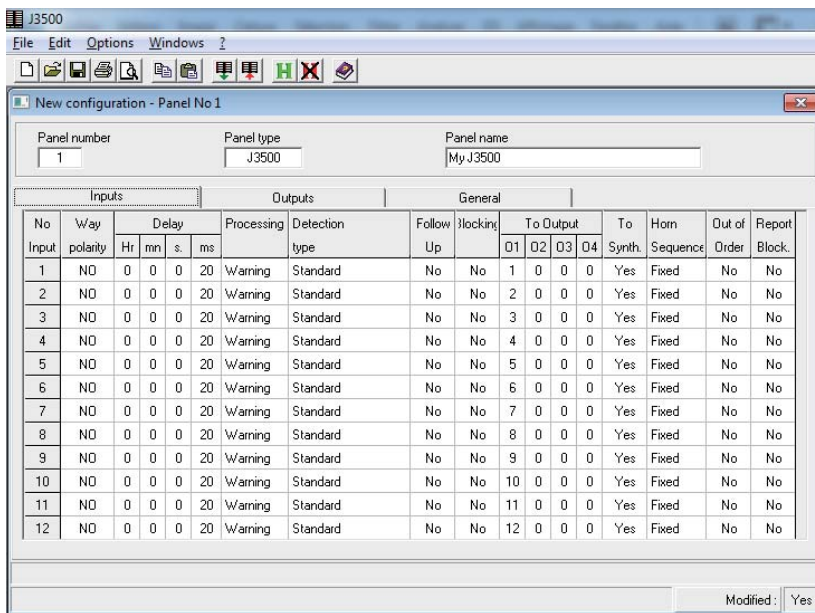The loop control on the continuity of the input is possible.

In diagram «Type 2 sequence» and «Type 3 sequence», the LEDs are represented in «fast blinking» mode.

The change of input state, after filtering time, causes LED blinking and the activation of sonorous output and synthesis output. This action will be stored even if the input disappears. The reset will be done step by step, after pressing the push buttons and depending of the sequence selected and the input position.

The first incoming alarm causes a display by a «rapid blink». The following lanes cause a «slow blink». This allows differentiating the first alarm among the followings. The cable defect will be displayed in «flash». The audible output is activated on each incoming alarm.

**For details of operation,
thank you to refer to the Getting started manual**

Temporization delay
to filter this input:
20ms to 24h

Reactivation of alarm
in case of operator's
forgetfulness

Selecting input
type (NO / NC)

Input processing :
- simple signaling or indicator
- alarm

Detection on input
- Loop control (connection cut or shorted)
- With RESET per channel

Setting each input separately :
- **Direction of inputs** (Normally Open or Normally Closed).

- **Filter Delay on input** from 100ms to 23h 59mn 59s 900ms with 100ms increments.

- **Input treatment type** : Alarm or signaling (indicator).
  - An input configured in alarm mode will be memorized, will activate the LED flashing, will activate the audible alarm and will wait for an RESET.
  - A signaling input (Indicator) is simply displayed (ON / OFF).
    The corresponding LED will be switched off with the disappearance of the input.
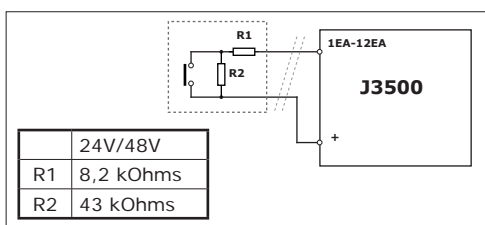
- **Input detection type** : Standard/Control loop.
  - «Standard» is the normal configuration.
  - «Loop control» Ensures effective control of the wire continuity on each input. Controls the short circuit or the cut of the cable between the J3500 and the contacts. Just put two resistors (one series and one in parallel) directly to the contact. This allows to continuously monitor the line current. A cable fault will be displayed blinking «flash» + audible alarm.
    Only the «Audible alarm» will be acknowledged.
    The output will not be activated.

- **Reactivation of alarm** : Allows avoiding alarm information is forgotten by operator, allows the channel to be reactivated in alarm (audible and visual) after a certain time.
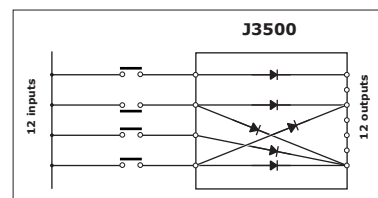
- **Blocking the channel (Inhibition)** : Inhibits temporarily the channel if the contact of inhibition input «Bloc» has been activated.

- **Outputs allocation** : Each input can activate up to 4 possible outputs that will be activated by the presence of this channel. Allows groups of specific inputs for sending remote syntheses. An input can control up to 4 outputs. This allows you to group remote information according to many levels. The output will remain activated as long as one of the causes having generated will remain present (the equivalent of an «OR»).
  Example :
  - The outputs «high risk».
  - Alarms for the mechanic and alarms to the electrician.

- **Enable to the synthesis relay :** The Way activate or not the synthesis relay.

- **Type audible sequence :** Selects 1 from 4 audible sequences which will be activated to the appearance of this channel. Allows better auditory discrimination according to the danger level of the incoming alarm.
  - «Without» : The audible alarm is disabled.
  - «Fixed» : The audio alarm is activated continuously until acknowledged.
  - «One pulse» : The audible alarm is activated for 1s only making unnecessary audible acknowledgement.
  - «T1/T2» : 2 types of sequences defined by the user.
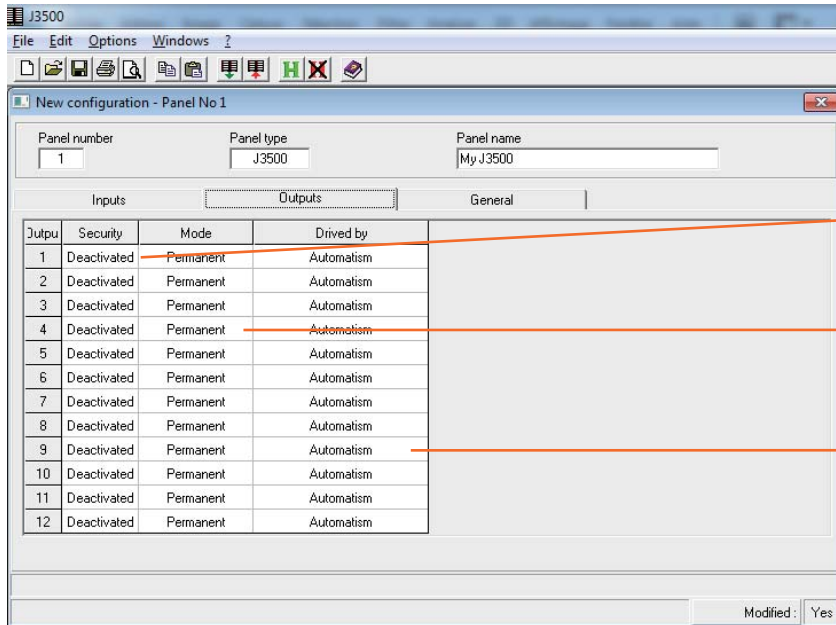 Example : Indicator 1s / 1s and flashing 1s / 2s.
  These two sequences require an audible acknowledgment.

- **Out of order :** Allows you to block (inhibit) a channel when the contact is incorrect operation.
  It will always be displayed on the LED but not audio alarm. When the contact will return to normal position, the LED will flash «Very Slow» to indicate this particular setting.

- **Blocking on out of order :** Allows to stop or not the activating of outputs when the channel is parametized on «out of order».

**For details of operation,
thank you to refer to the Getting started manual**

SETTING OUTPUTS :

Setting each output separately :
- **Direction :** Outputs can be negative or positive safety.
- **Controlled by :** An output can be activated by :
  - The appearance of the input and follow the movements of this input.
  - The memorization of the input. (Up erasing the Led).
  - The Led state (and blink fast or slow like this one).

The outputs will become «blinking», i.e., with the same state as the Led on the front (flash, fast or slow flashing, OFF). Can be used to pilot an external mimic. The «Led Test» function can activate the outputs directly (as on front LEDs).
- If intput is a first fault.
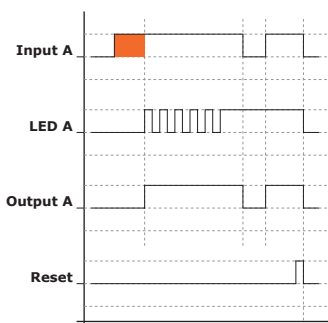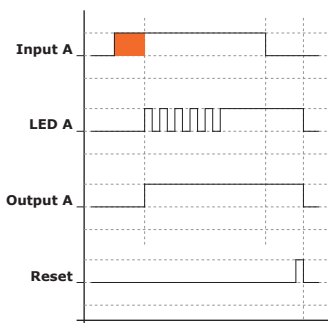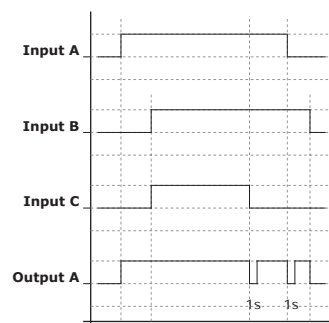- Special software for remote monitoring.

- **Software Version Prom V1.05I (on request):** This version adds the pulse output function. The output will issue a pulse to the appearance of the way. This function is used to inform remote the arrival of a new alarm or the presence of an ever existing alarm.
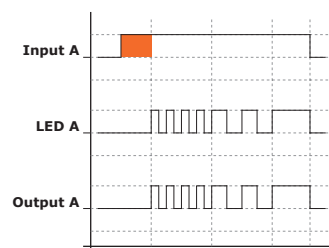
Output controlled by :

«Input» : If the input is still present after filter delay, the output will activate. If the input disappears even if the LED isn't reset, the output will disappear. It will be reactivated in the event of reappearance of the input (and after delay). This function is intended for remote maintenance. It allows to know the return to normal and the arrival of a new alarm on a channel not acquitted and indicates the level of intervention required.

«Input Memory» or «Automatism» : The output is activated after filter time delay (when the LED is displayed) and will remain activated so long as the LED will remain visible on the front (the output follows the input memory).

«Input with Revival» : An output can be activated by several inputs. This function allows reactivating the output to the appearance of a new input assigned to the same output. In this case, the output is switched off for 1s, and then reactivated.

«Front panel LED» or «Blinking»: The output will be the exact image of LEDs of the facade with a rapid blinking, slow, fixed and OFF. This function is intended to control external lamps or external mimic (synoptic).

«1st fault» : The output will only be activated if the input channel is a first default.
Remote watching : function used in the case of remote monitoring station.

■ Time delay

For details of operation, thank you to refer to the Getting started manual
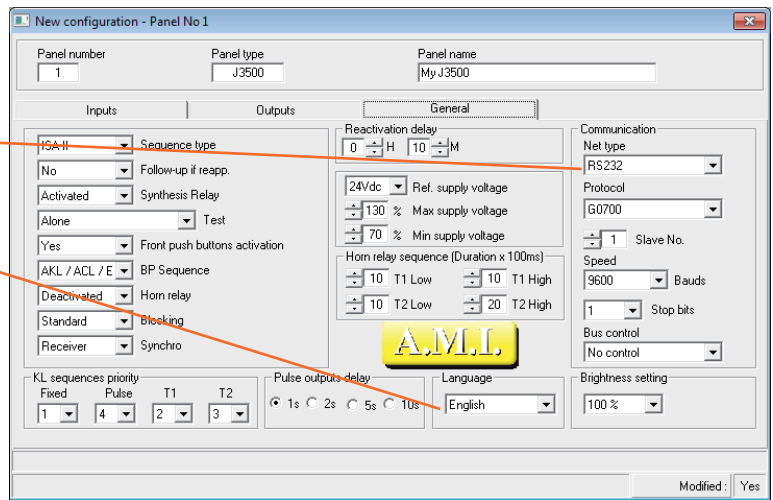
GENERAL SETTING :

These settings affect the entire panel :

Communication by BUS
RS485/RS232
ModBus / Jbus

Different
languages possible

- **Type sequence : ISA2 / ISA3 / Slow Blink**
  - «ISA2» : Standard sequence. It is necessary to stop the audible alarm first. The LED will always be in blinking. After acknowledgment, the LED will become fixed (ON). Then the LED will turn off automatically return to normal of the input.
  - «ISA3» : Similar with the precedent but after switching to LEDs fixed (ON), it will remain present after the return to normal of the input. Intentional RESET per operator will be needed to switch OFF the LED. (First possible defect, possible loop control).
  - «Slow Blink» : Sequence similar to ISA3. On arrival of the alarm, the display is done by flashing (fast or slow). After the stop «audible alarm», LED becomes fixed. When the input returns to the normal state, the LED will flash slowly indicating to the operator that it can erase. Displaying the «loop control» possible, impossible to display the «first fault».

- **Follow-up if reappearance** : A channel can be in alarm, displayed «acknowledged» or not and waiting to return to normal and waiting to operator «RESET». In the case of an alarm that would disappear and reappearing, the signaling and audible alarm will be reactivated.

- **Synthesis relay :** It can be activated normally (positive safety) or not.

- **«LED Test» Mode :** The «LEDs Test» button can have several actions :
  - «Alone» performs a «LED test» only on the front panel LEDs.
  - «LEDs With Output» tests the LEDs on front panel and outputs (used when the outputs animate a mimic in flashing mode).
  - «LEDs With KL» tests the LEDs on front panel and audible alarm.
  - «LEDs + Output + KL» : tests the LEDs on front panel, outputs and audible alarm.

- **Front push buttons :** (YES/NO). Allows the inhibition of the front push buttons when using external buttons connected on rear terminals.

- **BP sequence :** Regrouping functions «audible alarm OFF» and «blinking Off».
  - «AKL/ACL/EFF» : Separation of functions «Audible alarm», Acknowledgement (blinking off), Erase (reset).
    Front panel buttons : two successive presses in ISA2, 3 successive presses in ISA3.
    Buttons deported : 2 external buttons in ISA2, 3 external buttons in ISA3.
  - «AKL+ACL/EFF» : Regrouping functions «Audible alarm» and acknowledgment (blinking Off).
    Front panel buttons: 1 single press in ISA2, 2 successive presses in ISA3.
    Buttons deported : 1 single external button in ISA2, 2 external buttons ISA3.

- **Horn Relay :** Audible alarm relay can be activated normally (positive safety) or not.

- **Blocking :** Defines how the inhibition function will be realized when an alarm is present in display.

- **Synchro :** Allows you to set the panel in transmitter or receiver of sync tops. The synchronization of the blinks of LEDs of several J3500 facing an operator, increases visual comfort.

- **KL sequences priority :** Assign an order priority to the 4 types of sound alarms. This priority allows define what type of sound sequence will be executed first. If two alarms occur simultaneously, the audible output will be activated with the smallest priority level. This function allows you to manage the degree of urgency by a audible discrimination.

- **Reactivation delay :** 0 to 23h. Adjusts the time to reactivate the display if an acknowledged alarm is still present.

- **Supply voltage :** The panel is equipped with a voltage level control . Adjusts the under voltage and overvoltage threshold level in % of the specified voltage.
  Possible values: 24Vdc, 24Vac, 48Vdc.
  If the threshold is exceeded, an alarm will be displayed in the text screen and the red LED on the front (item 4 on the Front view).
  The J3500-04-xx version (80-260Vac /dc) is equipped with a stabilized switching power supply. The control is not possible for the values (110Vac, 125Vdc, 200VDC, 220Vac).

- **Horn relay sequence T1/T2 :** You can adjust the duration ON / OFF of flasher relay audible alarm. 2 possible flashing types (one fast and one slow).

- **Language :** Allows language selection on the J3500 screen.

- **Network Type :** Selects connection type on port «BUS»: RS232 / RS485 with 4 wires / RS485 with 2 wires.

- **Protocol** / number slave / Baud Rate / Stop bits.

- **BUS control :** Active and adjusts the temporization of presence control security on the bus.

- **Brightness :** Adjusts by program the LEDs brightness.

- **Prom V1.05I Version :** This version adds the following parameter :
- Adjusting the length of the pulses on the outputs.

LEDS FUNCTION :

«Pavers LEDs» type, they have very high contrast between «ON» and «OFF» position. Being unpluggable, it is possible to change the color.

Fault avalanche :
The differentiation between the 1st fault (first alarm) and the 2nd is done by flash and slow blink (1st fault is displayed in fast flashing mode; the following alarms are displayed in slow blink mode).
The avalanche is an arrival of several consecutive alarms.
It is very important to know the first alarm, as this enables rapid intervention in troubleshooting.
The avalanche begins with the arrival of the first alarm until operator cancellation. After cancellation by operator (all flashing LEDs are become fixed), a new alarm will be considered as a first fault.
Discrimination time: 10ms.

The various light states on the LEDs :
Fast blink = 1st alarm.
Slow blink = following alarm in avalanche.
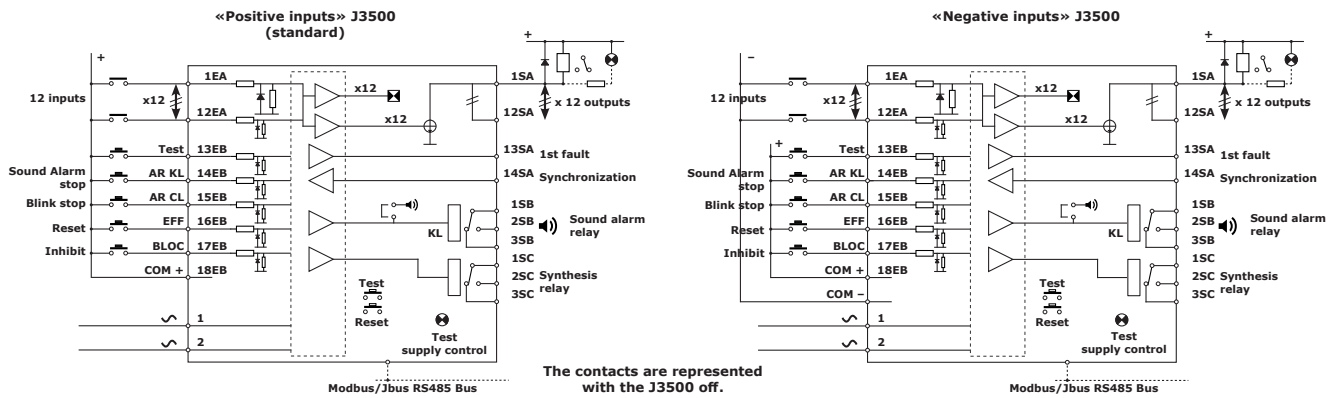**Very Slow blink** = return to normal position of contact in «Out of order» mode.
Fixed light (ON) = alarm present, memorized after acknowledgement.
OFF = return to normal state
Very fast Flashing = cable fault (this luminous signal is not cancellable).

REPRESENTATIVE DIAGRAM :

- The inputs are called «positives» when the common feeding the alarm contacts is connected to «+».
- The inputs are called «negatives» when the common feeding the alarm contacts is connected to «0V».

«Positive inputs» J3500 (standard)

«Negative inputs» J3500

The contacts are represented with the J3500 off.

TEXT DISPLAY FUNCTION :

Display of 2 lines of 16 characters, it displays :
- The operating status of the panel and these alarms with No. of input and type alarm, supply voltage control alarms, continuity of control over inputs.
- The historical ranked in order of arrival of the 64 last states informations with number of the channel. It also allows erase the history buffer.
- The various configuration settings.
3 front panel buttons are used to select various functions and to access the setup menu via an access code.

FUNCTION OF FRONT FACE BUTTONS :

The front is equipped with three buttons : «Test leds», «RESET» et «Paramétrage».

RESET combines several functions :
1st press => Stop Horn / 2nd press => Flashing off / 3rd press => Erase
The flash off (switching to fixed lights) will be processed only if the alarm has been stopped.
The «program» button is used in combination with the «test» button or the «Reset» button only in the program mode.
        (See also the «*FUNCTION OF REAR TERMINALS* » and the start-up instructions of the J3500).

INPUT FUNCTION :

Terminals 1A / 12A : The 12 contact inputs can be «Positive common» or «Negative common».
A direction of operation (NO/NC) and a delaying time may be associated to each input.
Channel validation is effective only if the channel remains in alarm state for duration greater than the selected delaying time.

FUNCTION OF REAR TERMINALS AND FRONT FACE BUTTONS :

The terminals (TEST + KL + AR CL + RESET/EFF + BLOC) will always be connected to external contacts supplied with a positive polarity. (Preferably the «+Com» terminal).

TEST terminal 13EB : This is a «LEDs Test» program activated by the micro-controller.
Ability to perform the test to : LEDs, outputs / Relay «Audible alarm».
This terminal also can remotely set the luminosity.
This input (with terminal 15EB) also allows the activation of the self-test (see «special functions»).

The order of use of the 3 following terminals must be respected. The terminals AR CL and EFF are inactive if the audible alarm is present. In sequence type 3, the EFF terminal is inactive if a LED blinks (no RESET possible before stop blink).

AR KL terminal 14EB (Audible alarm stop) or button front face «RESET/Horn Stop » first impulse :
Standard function: An input activation on 14EB stops the audible alarm until the return to normal state of input.
By program, it is possible to group the terminal AR KL and AR CL, In this case, a single external button connected to terminal AR CL, will stop the audible alarm and stop the blinking on the LED.

AR CL terminal 15EB (blinking stop) or button front face «RESET/Horn Stop » second impulse : One activation changes the flashing mode to fixed mode (only after you have stopped the alarm sound).
Functioning type 2 sequence : When alarm will disappear, LEDs in fixed mode (ON) will switch OFF (After an activation on AR CL, if an input returns to normal, the blinking LED goes to fixed and quickly turns OFF.
Functioning type 3 sequence : With this sequence, activation on AR CL terminal also turns ON the LED (fixe). But when the alarm will disappear, it will be necessary to use the EFF terminal to cancel the fixed light (turn OFF).

Auto-test sequence: (TEST + AR CL terminals or the 2 front push buttons).
If an operator presses and maintains the 2 push buttons or if the 2 terminals are activated simultaneously, the internal test cycle starts (LEDs Test + 2s + horn relay test + 2s + synthesis relay test + activation of all outputs). This test is an «incremental» type which activates the each channel, each output, one after the other, and the selected outputs («Synthesis» relay, «Sound alarm» relay).
This is a chaser lights type. it activates the LEDs , one after the other, and selected outputs (outputs, relay «Synthesis», relay «audible alarm»).

RESET/EFF terminal 16EB (RESET) or button front face «RESET/Horn Stop » third impulse :
- Functioning type 2 sequence: RESET/EFF this terminal is not used.
- Functioning type 3 sequence: The LEDs will turn OFF only after switching to fixed mode and after the input will be returned to normal, when the RESET/EFF terminal (or after the third impulse on the RESET front button) will be activated.

Bloc or Inhibition terminal 17EB : The channel inhibition is activated by connecting a «+» on «Inhibition» input. The selected inputs in "Blocking" will no longer be recognized as long as the inhibition input is activated. One selected input is active only if the inhibit input is inactivated.
If a selected channel inhibited is already displayed before the activation of the terminal block (17EB), the display management will continue until its extinction (return to normal of the channel input).
For inhibition, the channel must be selected in parameters AND the terminal 17EB must be activated BEFORE the input change.
This function is an indefinite temporization equal to the duration of activation of the terminal 17EB.

«+COM» terminal 18EB : the «COM+» terminal allows supplying the input contacts with correct voltage and with internal protection. However, these inputs can be supplied with the «+» of the supply voltage only for J3500-02 -xx version.

Technical Alarm

56

OUTPUTS FUNCTION :

Terminal 1SA/12SA : 12 outputs
The panel has 12 electronic outputs 150mA. This output transmits a «0V» (collector open). The external receiver should be connected to «+» (maximum voltage: +48Vdc). In certain cases it needs to be protected against break surges and against cold start currents (bulb with filament) by the use of a serial low resistor. These outputs are enabled or disabled at the onset of input activation or the LED. This is depending on the setup.
There are different relay output interfaces with galvanic isolation (optional). They ensure optimum and fast operation without the risk of destruction. (Refer to chapter «Accessories»).
For all possible functions with outputs, refer to § output settings and start-up instructions).

1st fault terminal 13SA : (Terminal in Input/Output mode).
Used to group multiple panels to get the 1st fault sequence on all channels.
If a panel has a first alarm displayed, it changes the status of its terminal 13SA which will be received by the other connected panels.
When the other panels will receive an alarm, they will display in slow blinking mode.
The power supply of this terminal is specific to this panel (never connect other function than the «1st fault » terminal of another panel).

Synchro terminal 14SA : (Terminal in Input/Output mode).
It synchronizes the blinking between all panels connected.
If several flashing alarms are present on various panels, this can lead to visual fatigue for the operator.
All panels with flashing LEDs will be synchronized on the signal coming from this terminal.
- If synchronization is not selected on the panel (transmitter), it is master and transmits timing clock pulses to the other users (it synchronizes itself on its own pulses).
- If synchronization is selected on this panel (receiver), it receives pulses coming from outside and synchronizes on them. In the unlikely event of connection failure, the panel would resume it own synchronization.
The power supply of this terminal is specific to this panel (never connect other function than the «Synchro» terminal of another panel).

1SB/2SB/3SB terminals : Outputs inverter contacts of audible relay.

1SC/2SC/3SC terminals : Outputs inverter contacts of synthesis relay (general alarm relay).

CONNECTIONS :

Application example :
- Panels «1», «2», «3» are connected with contacts on their inputs which can be NO or NC selection.
- The «Test», «AR KL», «AR CL» and «EFF/Reset» are centralized for the three panels.
- Contacts «Synthesis» of each panel are connected in series to send remote information. Synthesis relays are parameterized in positive safety (relays normally activated).
- Audible alarm relays are selected in positive safety. Contacts are connected in parallel to an external general sound alarm).
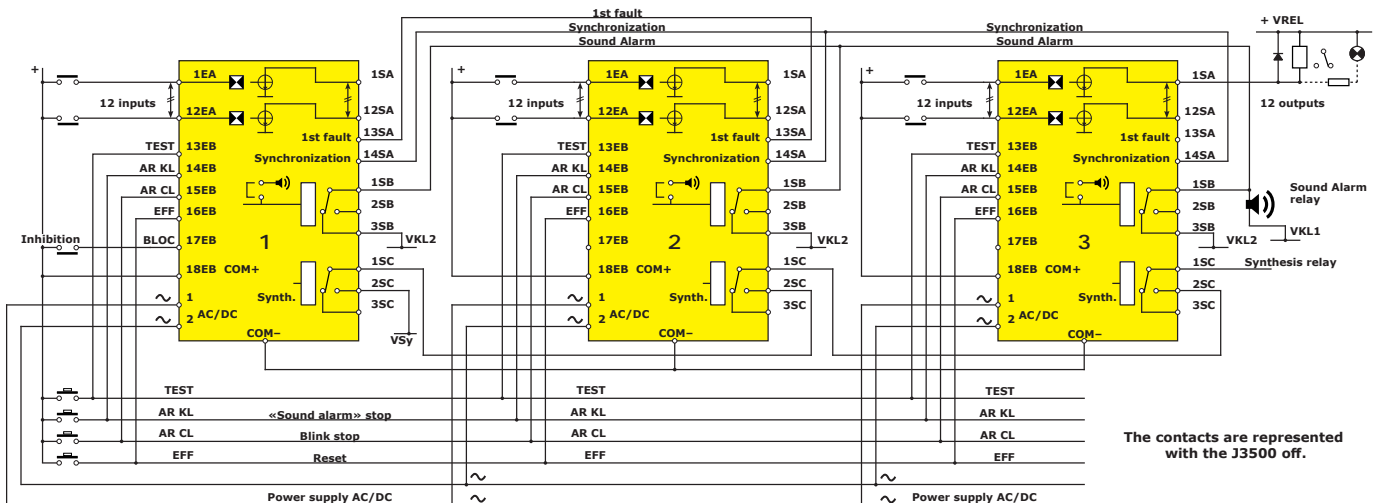
- The blinking of the LEDs of this three panels is synchronized by the connection of the terminal 14SA. One of the panels has been set in «Transmitter», the others in «receiver» mode.
- Panels «1» and «2» are grouped to obtain the 1st fault among 24 inputs.
- The panel «3» uses its outputs directly to activate relays or external lamps. (Terminals 1SA and 12SA). A diode or resistor has been fitted as protection.
  The maximum voltage on outputs is 48Vdc only.

  But other configurations are possible.

+VREL : supply voltage on the outputs. This external voltage (+48Vdc max.) is useful only for particular connection. (Our relay cards are supplied directly by the panel).

VKL : May be voltage independent of J3500 for supply the external «horn» with galvanic isolation. For example: 230Vac.

VSy : May be voltage independent of J3500 for supply the relay Synthesis contact with galvanic isolation. For example: 230Vac.
- «COM+» terminal (18EB) is used to supply the input contacts.
- With the 14-65Vac/dc, it is possible to use the use the polarity «+» of the J3500 power to supply all input contacts of several J3000.
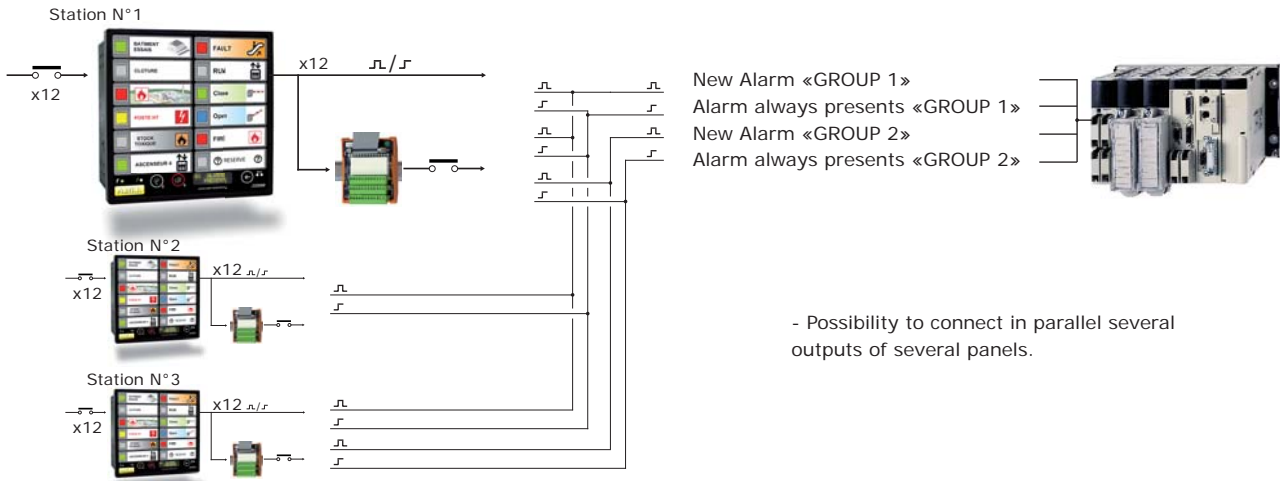***In this case, DO NOT CONNECT the «COM+»***

PROGRAM EXTENSION : VERSION 1.05I PROM (ON REQUEST)

New software can be added to J3500, allowing the setting in adjustable pulse on outputs.
This new function associated with the possibilities of the J3500 allows multiple possibilities.

To manage remote installations, it is often necessary to know :
- If an alarm is present,
- If a new alarm occurs,
- What is the danger level of the alarm present or incoming ?
But it is also necessary to limit the number of wired connections.

This function will help to decide whether an intervention is immediately necessary or whether it can be postponed.

Station N°1

New Alarm «GROUP 1»
Alarm always presents «GROUP 1»
New Alarm «GROUP 2»
Alarm always presents «GROUP 2»

Station N°2

Station N°3

- Possibility to connect in parallel several outputs of several panels.

SEND ALARM INFORMATION TO PLC REMOTED :

- Several levels of alarms: the J3500 allows creating different levels of alarms and group outings per family depending on their level of alarm.
- «New alarm» output delivering a pulse each new arrival on a change in a family input.
- «Alarms always present» output delivering a permanent state as long as inputs related to the family are present.
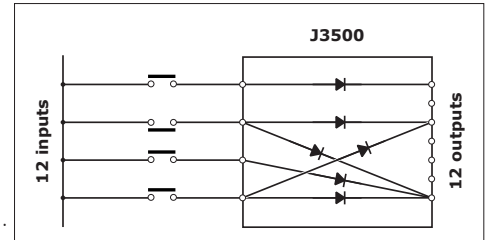
Regrouping outputs from different inputs :
It is possible with the J3500 to sort and regroup each of alarms present on 4 different outputs among 12 as desired.
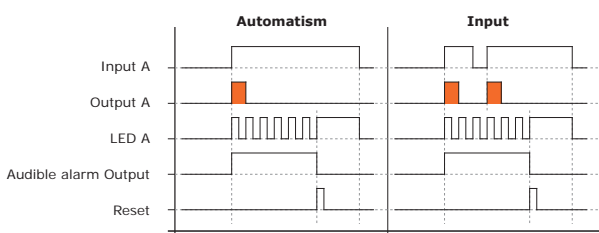This allows categorize them by families and / or by danger level.
It becomes possible with an external PLC to know the arrival of a new alarm or family of alarms (output pulsed), whether an alarm or family of alarms is still present and with what level of alarm (permanent output).

Example : To supervise : Electrical alarms, gas alarms and temperatures alarms.
Each with several degrees of emergencies.
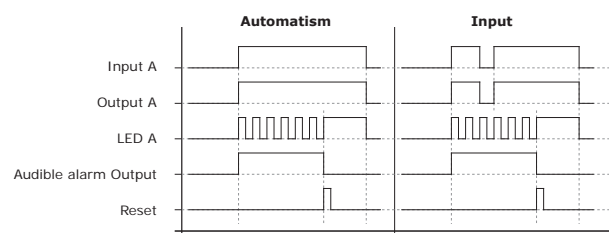Many other combinations are possible.

J3500

12 inputs

12 outputs

ADJUSTABLE PULSE ON OUTPUT :

	Automatism	Input
Input A		
Output A		
LED A		
Audible alarm Output		
Reset		

Allows to remote signaling the arrival of a new Alarm.
- Ability to define outputs «impulse» (new alarm) with adjustable pulse length.
  They will issue either one single pulse, or 1 pulse to each input arrival associated with this output.
- Ability to set the functioning output with «INPUT» mode (depending on the physical input) or «AUTOMATIC» mode (depending on the display present or not).
  This pulse can be generated by :
- The presence of the LED display (1 single pulse until the next RESET, even if the input disappears and then returns)
- The presence of the input (more pulses if the input disappears and returns).

PERMANENT OUTPUT (maintained) :

	Automatism	Input
Input A		
Output A		
LED A		
Audible alarm Output		
Reset		

Allows to remote signaling the presence of an ever existing Alarm.
- Ability to set outputs «permanent» (alarm always present).
  They will issue a permanent state as long as one of the associated inputs is present.
  They issue a Permanent state as long as one of the associated entries is present.
- Ability to set the operation of the output:
  - «INPUT» mode (depending on the physical input). The output is activated if the input is present.
  - In «AUTOMATISM» mode (depending on the LED). The output is activated by the presence of the display of LED (input present or not).

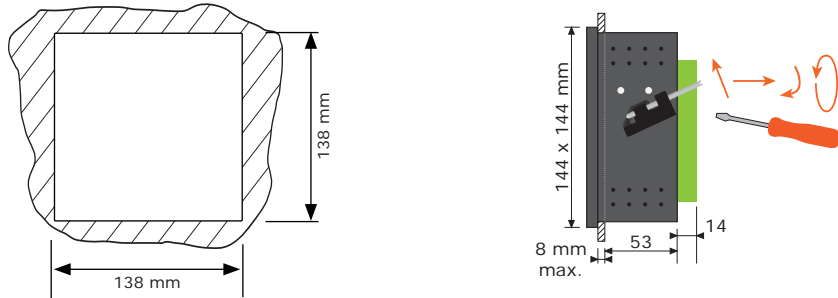**All these features make the J3500 a very powerful local alarm display**

Minimum voltage supply (when using relay cards)	17Vdc	Possible voltages	14Vdc-65Vdc, 14Vac-49Vac, 80Vac/dc-260Vac/dc
Maximum consumption	500mA/24Vdc, 256mA/48Vdc 116mA/110Vdc, 130mA/230Vac	12 «open collector» outputs	according to supply voltage (see output interface)
Minimum consumption	100mA/24V	Current by output	150mA
Temperature (at nominal voltage)	-10°C / +50°C	Input current	2,4mA
Relay contact	1RT 6A/12Vdc - 0,15A/240Vac	Permitted line resistance on input	2 kOhms
weight	750g	Time delay accuracy	+/- 20%
Dimensions	144 x 144 x 65 mm	Discrimination between 1st and 2nd fault	10ms
Without protection cover	IP52		
With protection cover	IP54		

CUT-OUT :

DIN 144x144 format

138 mm — 138 mm — 144 x 144 mm — 8 mm max. — 53 — 14

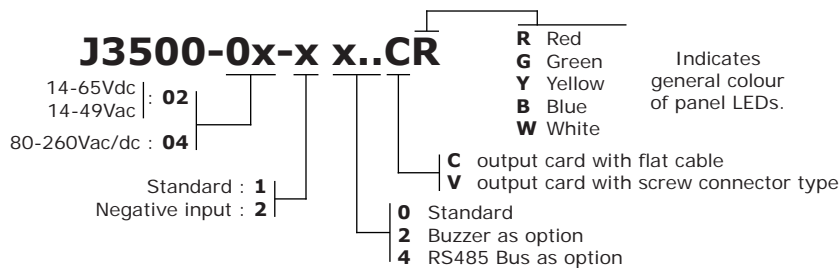## Numbering system

J3500

REAR VIEW :

Output ports :
- The RS232 port subD / 9 pins type for setting with PC is present as standard.
Ask the RS232 / USB adapter.
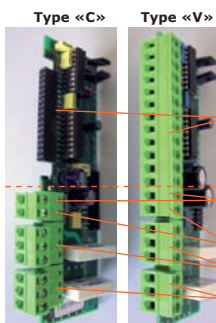- Option: Port RS485 / 422 Bus connection with MODBUS / JBUS .

ORDER REFERENCES :

J3500-0x-x x..CR

14-65Vdc 14-49Vac : **02**	
80-260Vac/dc : **04**	

Standard : **1**
Negative input : **2**

0 Standard
2 Buzzer as option
4 RS485 Bus as option

C output card with flat cable
V output card with screw connector type

R	Red
G	Green
Y	Yellow
B	Blue
W	White

Indicates general colour of panel LEDs.

If multiple options, indices are placed in ascending order.
Example :
J3500-02-124CR
J3500-04-10VR

Type «C»   **Type «V»**

12 outputs
1st fault
Synchronization
SC Synthesis
SB KL

Output Card : 2 models :
- Type «C» : With ribbon SD connector to connect a DIN additional card.
- Type «V» : With screw connector on the 12 outputs.
All other connectors are «screw-pluggable»..

Delivered with red LEDs as standard (Other models on request).

Possible complementary LEDs :
J2001-00-00   LED 10x10mm colour GREEN, code : 2855
J2001-00-10   LED 10x10mm colour YELLOW, code : 2755
J2001-00-20   LED 10x10mm colour RED, code : 2655
J2001-00-30   LED 10x10mm colour BLUE, code : 2655MBW
J2001-00-40   LED 10x10mm colour WHITE.

ADDITIONAL PRODUCTS :

M0800 Front plate 19-inch, brushed aluminium Ht : 4U
Front for bay 3 pre-drilled holes 138x138mm.

M0815 Closing cover
Closing cover for mounting on M0800 front plate.

M0720, IP54 sealed front
«Quarter-turn» closing button
DIN format 144x144.
IP54 sealed front that is fitted directly to product front.
An O-ring provides sealing between steel cabinet and panel.
The front is a transparent openning door..

M0720

EXTENSION RELAY CARDS WITH GALVANIC ISOLATION :

Equipped with relays these cards deliver a dry changeover contact (without voltage) with galvanic isolation for
each output. These cards allow secure use of «open collector» outputs with maximum safety.
The relays are powered directly through the panel.

Contacts feature: 1RT 6A/24Vdc or 48Vdc - 0,15A/240Vac
- A LED on each relay displays its state.
- 3 removable terminal blocks are available (one for contacts «O», one for contacts «F»,
  the last for common).
- DIN rail bracket at the bottom of cabinet. With quick connection to the panel by ribbon cable.
  They avoid too many wires on the cabinet door.

These cards are available in versions :
- 12 relays changeover contact each (there are as many relays as there are outputs).
  M0901-02-01 Card 12 relays 24Vdc to fit to DIN rail (For J3500 supplied with any voltage except 48Vac/dc).
  M0901-03-01 Card 12 relays 48Vdc to fit to DIN rail. (For J3500 supplied with 48Vac/dc).

- 2 relays 1RT type with selectors; it allows you to sort the outputs in two directions :
  Electrician / mechanic or Alarm high risk / Alarm ordinary.
  M0901-02-20 Card 2-synthesis-relays 24Vdc to fit to DIN rail.
  Panel supply minimum voltage: 17Vdc

Don't forget the cable connection :
M0901-02-50 Ribbon cable L=1.5m fitted for one relay card.
M0901-02-51 Ribbon cable L=1.75m fitted for two relay cards.
M0901-02-52 Ribbon cable L=2m fitted for three relay cards.
M0901-02-55 Additional length L=0,5m.

M0730 Adapter to mount on DIN Rail profil TS35.
144x144 format
This kit allows to mount panels with 144x144 format on a DIN rail TS35 retaining the display
towards the operator.

G0100-05-30 RS232 / USB adapter for setting with PC
This adapter enables the connection between the J3500 and a PC equipped
with a USB plug. it connects directly to the RS232 cable supplied with the J3500.

KJ3500-1 Demo Kit,
includes :
- 1 card equipped with 12 inputs contact by switches, 4 push
  buttons («Test LEDs», «stop horn», «Flashing Off / Reset»,
  «Erase»), 1 switch «Blocking» 1 Jack diet.
- 2 cards Output (one with screw connector, the other with flat
  cable connector) equipped with 12 LEDs for outputs, 2 LEDs for
  output «Synchro» and «first Fault «, 2 LEDs for output contact
  «Synthesis», 2 LEDs the contact output «Audible alarm» 1 Buzzer.
- 1 adaptator supply 230Vac / 24Vdc power supply output jack.
- 1 operating manual connection and using.

Demonstration kit

The test kit do not understand the product itself
only J3500-02, version 24V.

Refer to chapter ACCESSORIES from our catalog

J3000 RS485 BUS VERSION, PROTOCOL MODBUS/JBUS :

**Please, ask us.
the protocol transmission documentation
for more information on signal frames.**

RS485 bus : product reference : J3500-xx-x4

The J3500 panel is a controller to technical alarm that can be fitted with an RS485 type BUS link (2 or 4 wires).

It is a multi-task intelligent peripheral. It is working in degraded mode. In case of bus failure or when stopping the supervisor, the panels will continue their control and will display alarms.

It is possible to connect 64 panels on the same Bus.

- The supervisor can recover the local process information stored in the panel (status, alarms, histories).

- The supervisor can also send an sound and visual information to a remote operator by activating a channel through the Bus on a J3000/J3105 or J3500 panel. This information can come from the supervisor (from its internal management system) but it can also come from another panel and be sent to a «receiver» panel.

COMPLETE TECHNICAL ALARM CENTRALISATION :

The PANEL'PC is an alarm centralizer on a RS485 Bus.

It can manage 64 panels with 12 alarms each.

Its touch screen allows to perform all necessary operations without additional keyboard (RESET, operator assistance display, historics, archiving).

It may refer alarms and remote information to other sub-stations.

It can be used either in a sub-station or control room :

- In local sub-station front cabinet, for monitoring alarms and local states, with historic for traceability.
- In control room with clustering by bus of local alarms panels.
- Possible transfer to other sub-stations.

**It is very easy to realize
a technical alarm management unit by BUS :**
Possibility of using modules equally :
- J3500/J3105/J3000 technical alarm automatic panel.
- J2x05RS indicator display receiver panel with 12 or 24 LEDs.
- PANEL'PC.

RS485 Bus / 1 km / fitted with 64 modules as a maximum

PANEL'PC :

The PANEL'PC integrates :
- Alarm display with «RESET» directly on the screen.
- Operator assistance or instructions for each inputs indicating to operator how to proceed depending on the alarm present.
- Display of historic periods.
- Re-display of the historic of a recorded period (10,000 pages possible).
- Printing in continuous with time stamping.
- Remote alarm reporting to one or several indicators display by BUS (for example, guard posts, technical service, control room).
- Remote outputs possible.
- Archiving on USB key.
- Login with several safety levels.

A.M.I.

www.ami-control.com

2 years warranty

ALARM'BOX

Indicator Display and Alarm Unit with Battery

The ALARM'BOX allows clustering in single point for effective protection and easy maintenance for industrial and administrative sites :
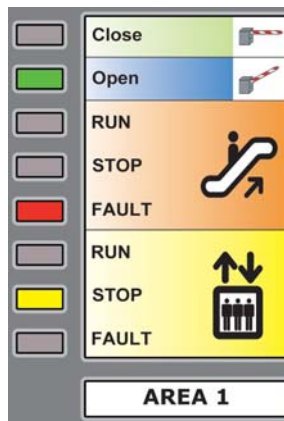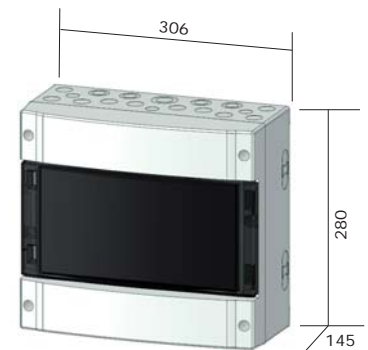- Important indicator displays : Including In service/Out of service, Run/Stop, and levels, …
- Technical alarms : Including trip-outs, temperature alarms, levels, and overspeeds, …

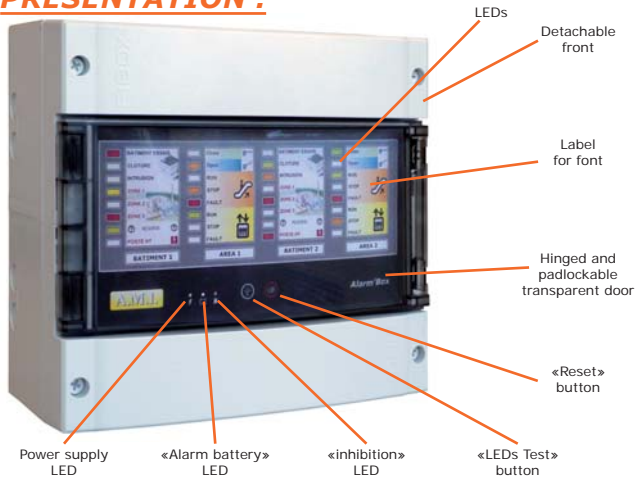- Each way can be shown on simple indicator displays or in alarm mode.
- High luminosity, long life 5x10mm LED display.
- Choice of 7 colours by LEDs with settings by switch.
- LEDs can be clustered according to the monitoring elements.

example : 3 ways for Run/Stop/Fault.

The ALARM'BOX was developed according to the strictest industrial standards.
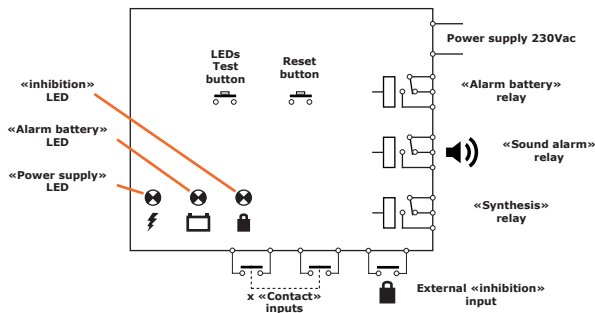
8 to 96 channels modulation (1 to 3 stages)

For each channel :
- Data storage, blinking, operator acknowledgement on selected «Alarm» ways.
- Fixed simple display on selected simple indicator display ways.
- Selection of 7 colors for each input by switch.
- NO/NC selection.
- 0-1min and 1-10min time delay (filtering input processing).
- Remote input inhibiting.
- Selection of ways to «synthesis» output (general alarm) for remote reporting.

One cabinet includes :
- 1 to 3 stages IP65 wall-fixed cabinet with double insulation.
- Front buttons for «Test» and «operator acknowledge».
- A certain number of 8 inputs cards.
- 1 internal buzzer and one output contact for external sound alarm.
- 1 «General alarm» output contact.
- 1 «power supply alarm» output contact.
- 1 x 230Vac power supply.
- Charged with battery for autonomous operation.

Wiring to be done :
It is fully pre-wired. You only need to connect up :
- Two leads for 230Vac power supply.
- Two leads per «contact» input.

MODELS :

Number of ways	Type	230Vac with battery	Autonomy standard *
8 inputs	1 stage	AJ1900-05-11BT	85 h
16 inputs		AJ1900-05-12BT	76 h
24 inputs		AJ1900-05-13BT	67 h
32 inputs		AJ1900-05-14BT	60 h
40 inputs	2 stages	AJ1900-05-21BT	45 h
48 inputs		AJ1900-05-22BT	42.5 h
56 inputs		AJ1900-05-23BT	40 h
64 inputs		AJ1900-05-24BT	37.5 h
72 inputs	3 stages	AJ1900-05-31BT	31 h
80 inputs		AJ1900-05-32BT	30 h
88 inputs		AJ1900-05-33BT	29 h
96 inputs		AJ1900-05-34BT	28 h
8 inputs	additionnal card	AJ1905-01-10C	

Additional 8 inputs card with connector for relay card : AJ1905-01-10CA
* standard autonomy : ALARM'BOX with batteries are delivered with a 12V/7Ah battery as standard.
The autonomous time is the one that allows the following test, after 24h battery charge (mains supply present) :
- Unit running on standby (no mains supply), with indicator displays or alarms.
- Detection and noting alarm for maximum 1 minute at the end of autonomous time.

Centralization

306
280
145

430
145

580
145

62

PRESENTATION :

LEDs
Detachable front
Label for font
Hinged and padlockable transparent door
«Reset» button

Power supply LED
«Alarm battery» LED
«inhibition» LED
«LEDs Test» button

Lifted central cover

Battery
Unpluggable 8 inputs card
Terminal board

Front cover is easily removable and includes :
- One «LED test», and a «Reset» or «Acknowlege» button.
- One «Mains presence» green light that changes to orange in the case of any activated track shut-down.
- One «Battery alarm» light that shows red in case of a too high battery discharge.
- An «inhibit» LED, normally off, which will light orange when inhibition input is actived.
- The «Contact» input terminal board is fitted with two terminals per way (4 terminal boards each with 2x8 terminals, corresponding to each the 4 input cards).
- One auxiliary terminal board with :
  - One input to connect an external contact to enable inhibiting certain ways (also called Day/Night). Possibility of inhibition ways per separate stage.
  - One inverter contact for external siren.
  - One inverter contact for general alarm (for sending out «alarm present» information to the outside).
  - one terminal board with a «Battery supply» alarm contact, as well as 230Vac general power supply.

All relays are set at positive security.

POSSIBLES SETTINGS :

Possible settings for each way :
- NO/NC contact input.
- 0-1min or 1-10min confirmation time delay.
- «Simple display» or «Alarm» type process selection.
- Selection to General Alarm relay or Not.
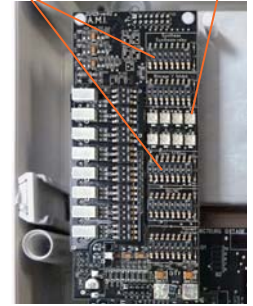- Selection to inhibit ways.

General adjustments possible :
- To inhibit all ways.
- Delay of buzzer.

Detection :
- Mains power loss / low voltage battery.
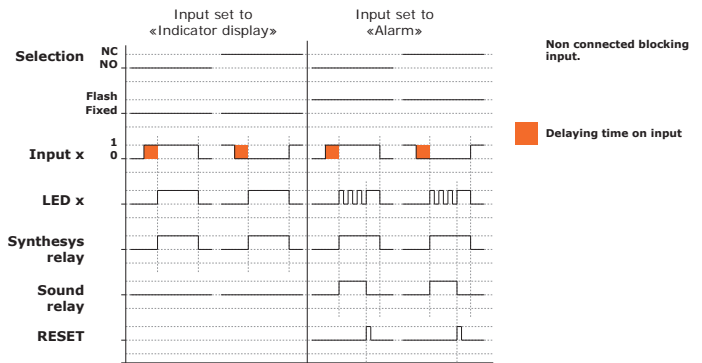

Selection switch
«Times delay» adjustement

8 inputs card (4 possible cards per stage)

The delay of buzzer allows when an alarm appears, not to leave the buzzer ring out permanently.
When an alarm appears, the buzzer rings, if this one is not acknowledged, with the timer option on, the buzzer will switch off after the programmed delay.
It has to be noted that when a new alarm appears the buzzer will not ring.

SPECIFICATIONS :

Possible voltages	230Vac
Supply tolerance	-30/+30%
Consumption : without path card through track card (standby) through track card (max.)	 0.2A 9mA 230mA

Consumption per input	2.4mA
Permitted line resistance on contact	2kOhms
Time delay accuracy	+/- 20%
Protection with cover	IP65
Temperature (at nominal voltage)	-10°C / +50°C
Relay contact (positive security)	1RT 6A/12Vdc - 0.15A/240Vac
Weight (with battery)	1 stage : 7kg 2 stages : 8.5kg 3 stages : 10kg

PRODUCING LABELS :

Labels are ordinary paper sheets that can be slid into a transparent pocket included in the thickness of the front face. A blank label is supplied with each unit.
Labels can be handmade, or draw the screen of the PC and produced on a colour printer (laser or ink-jet).
The PC software allows to create labels including images, allows to save and duplicate the achievements.
This PC software is FREE. It is possible to load it on our website : **www.ami-control.com**
For high humidity countries, the printing on plastic sheets is recommended.

A.M.I.

PANEL'PC
BUS ALARM CENTRALIZATION

2 years warranty

PANEL'PC is a TECHNICAL ALARM management system using a BUS that integrates operator-assisted capacities and history with file storage on a USB key.
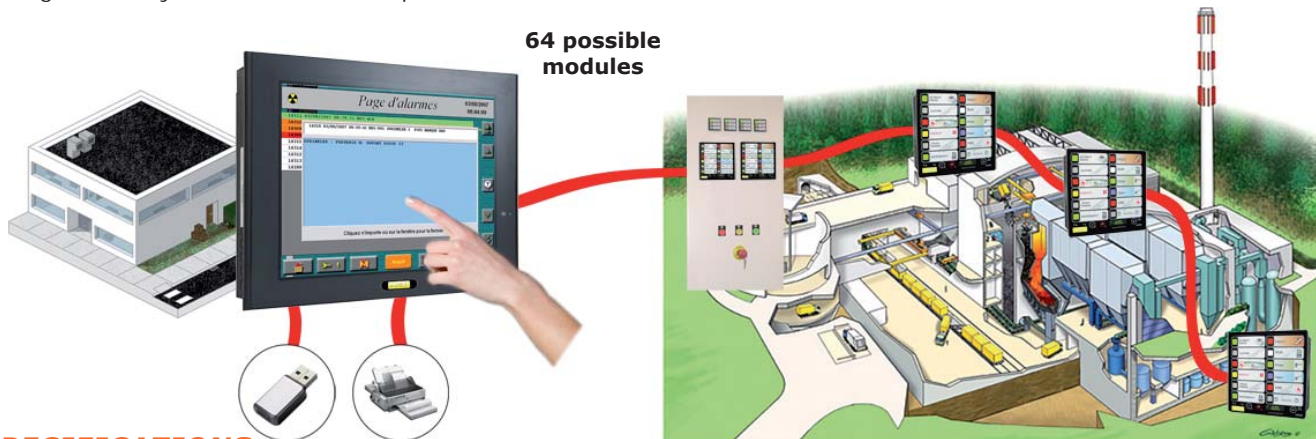

PANEL'PC

The PANEL'PC is the logical evolution of an installation equipped of panels alarms of type J3000/J3105 or J3500 in local area. It allows centralization and management of remote alarms, using the J3000/J3105 and J3500 as intelligent interfaces.
Security : The PANEL'PC only repatriate alarm information present in the J3000/J3105/J3500 interfaces. In case of communication loss, the local panels will continue to perform their function and thus manage alarms locally.
Speed : The detections and alarm treatments are performed by each of the J3000/J3105/J3500 present on the BUS.
The PANEL'PC makes a statement cyclical of new states in each of them.
It is a multitasking system. This results in a minimum time of treatment.

COMPLETE CENTRALIZATION OF TECHNICAL FAULTS :

- PANEL'PC is an alarm centralizing system on a RS485 BUS. It can manage 64 12-alarm offset modules or input/output modules. Its touch screen facilitates the carrying out of all operations with an additional keyboard (operator assistance, history and filing). It sends despatches or transfers to other sub-stations). It can be used either in a sub-station or control room.
- In the front of a local cabinet for monitoring alarms and local conditions, with history for traceability.
- In a control room with clustering by offset local alarm bus from local alarm panels.
- Using the facility for transfer to other possible sub-stations.

64 possible modules

SPECIFICATIONS :

PANEL'PC integrates:
- Alarm display with screen cancellation.
- Operator assistance or instructions for each track indicating to the operator the procedure to follow in relation to the present alarm.
- Display of history periods.
- Re-display of histories of a recorded period (possible 10 000 pages).
- Printing in continuous with time stamping.
- Remote alarm reporting to one or several subscribers by BUS (for example, guard post, technical service, control room).
- Possible remote control outputs.
- Archiving on USB key.
- Several security levels.
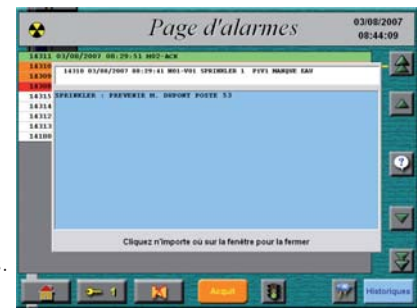
Centralization

OPERATORS MENUS :

PANEL'PC has a touch screen and thus does not need a keyboard.

Automatic display of alarm page. It is possible to display operator assistance that gives information on how to proceed according to displayed track.

Consultable history on PANEL'PC screen or at another station.

Hierarchical access code system to protect some functions.

SETUP MENUS :

All menus are intuitive using easy-to-use touch screens. A «General Menu» page gives access to the other sub-menus.

«Access code» screen :
 Various hierarchical levels, with operator name and personal code.

Alarm screen :
 Each channel in input mode can be parameterized in multiple ways :
 - With screen appearance.
 - With cancellation.
 - By printing.
 - With history storage.
 It is possible to associate specific operator assistance or INSTRUCTIONS with each channel.

The «Mirror» function or report despatches alarms, including in synthesis mode, to post clusters (including guard posts, local technical services or technical surveillance and control rooms). Instructions or «operator assistance» modes can be created at any time.

It is possible to carry out parameterization on another station and load it subsequently to the PANEL'PC.

Upgrading :
 A software upgrading system is included. From any new start-up, the PANEL'PC will load any new program in the USB key.
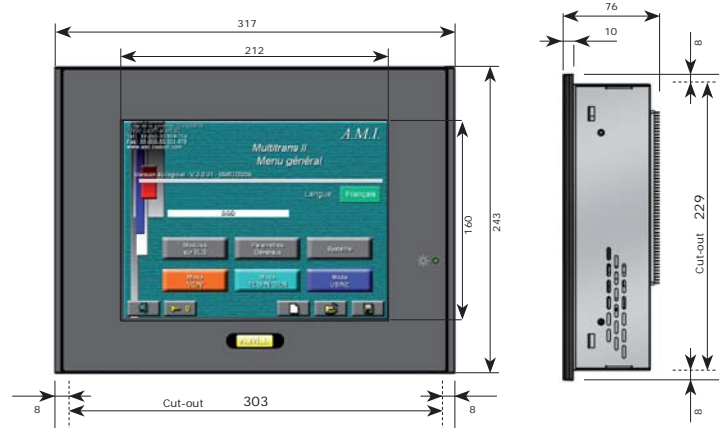
Included maintenance menu :
 The USB key uses data or parameterization on another station, without stopping current PANEL'PC use.

CHARACTERISTICS :

Power supply	24Vdc ou 230Vac
Temperature rated	0°C / +50°C
Temperature storage	-20°C / +60°C
Humidity	20% à 90%
Front protection	IP65
Rear protection	IP22
Dimensions :	
L x l x p	317 x 243 x 76 mm
cut-out	229 x 303 mm
Weight	5,5kg

Equipment supplied :

- PANEL'PC with factory settings.
- USB key with program.
- Additional loudspeaker.

Option :
The AUDIO AMPLI KIT allows you to add a sound option to your alarms of PANEL'PC, the PANEL'PC does not have a speaker.
The AUDIO AMPLI KIT consists of two parts, an amplifier that can be mounted on a DIN rail, and a waterproof loudspeaker that fits into a cabinet or control panel.
The amplifier allows you to modulate the sound volume according to your environment.
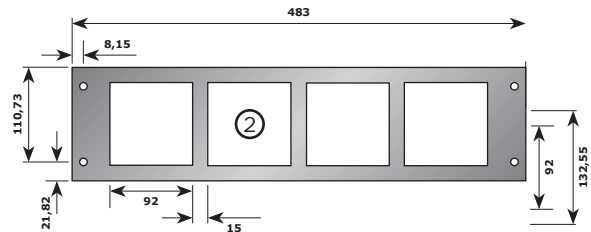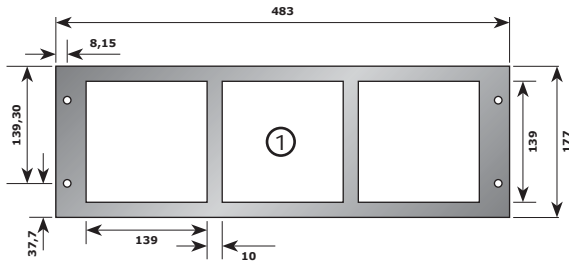Réf. : G0500-02-05

A.M.I.

A.M.I.
www.ami-control.com

4U to 19'' standard Bay

3U to 19'' standard Bay

1U = 44.55mm
Height : 3U = 132mm
Width = 484mm

Height : 4U = 178mm
Width = 484mm

PRE-DRILLED MOUNTING FRONT FACE :
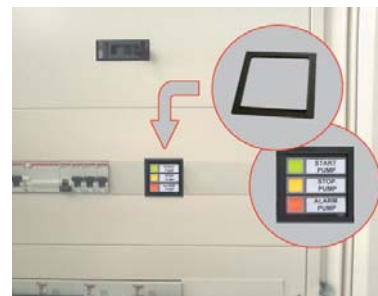
Fig	Product	
1	J2005-J2405 J2005RS J2405RS J3000-J3105 J3500	**M0800** : Aluminium front face for 19 inches bay, pre-drilled 3 holes 138x138mm for panel fitting 144x144 and drilled with 4 holes for fixing to bay vertical rails. Satinised finish.
2	J1805-J1850 J1905S	**M0810** : Aluminium front face for 19 inches bay, pre-drilled 4 holes 92x92mm for panel fitting 96x96 and drilled with 4 holes for fixing to bay vertical rails. Satinised finish.
3	J2005-J2405 J2005RS J2405RS J3000-J3105 J3500	**M0815** : Cover mask format 144x144 : covers cut-outs waiting for any future extension. Clips directly to sheeting : cut-out 138x138mm.
4	J1805-J1850 J1905S	**M0816** : Cover mask format 96x96 : covers cut-outs waiting for any future extension. Clips directly to sheeting : cut-out 92x92mm.

CABINETS :

Empty wall cabinet predrilled 1 96x96 panel for mounting.
Dimensions (lxhxp):
190x200x110mm
Référence : **M0800-00-20**

Assembly together with modular systems :

One separator plate allows the PAN35 to be mounted on cabinet door for modular switches or circuit-breakers. It is mounted with a flange ring like a simple spacer.

Dimensions : 56x56mm.
Delivered in 10 unit bags.

Reference : **M0817**

66

EXTENSION CARDS :

Our panels have «open collector» type outputs.
These outputs can handle 150mA currents.
Extension cards increase output power and provide galvanic
insulation for the unit with the rest of the installation.
They save significant assembly and wiring time.
The panel itself ensures relay power supply.
Red LEDs indicate when each relay is activated.
Screw-in detachable terminal boards ensure relay «inverter
contact» output connection.

Output contacts : 1RT 6A/24Vdc - 0.15A/240Vac.
Potential free per output.

PLUG-IN CARDS :
Only for the J3000/J3105 :

They are mounted directly to the
back of the J3000.
DIN cards are preferable since they
limit the number of cables on the
cabinet door.
They exist in version :

M0900-02-01 : 12 relays 24Vdc.
M0900-02-20 : 2 relays 24Vdc with selector.

DIN CARDS :

They are fitted to a DIN rail at cabinet bottom and connected to the panel by a ribbon cable.

- **Complete relay card :**
  It comes as a standard with 12 relays and can
  be used 8 outputs panels as well as those with
  12 output.

  There is also a model with two additional
  relays which can be used with the «1st fault»
  outputs and «Synchronization».

- **Card with 2 relay outputs with selectors :**
  It allows you to sort the panel outputs towards 2 synthesis relays.
  The allocation of the chanels on each relay is done through micro
  switches that can direct the output on one OR the other relays
  or on one AND the other. Relays can be selected «with positive
  security» or not.

  Use : To direct alarms to the «electrical» or «mechanical»
  staff, separate alarms «high risk» / «lower risk» or «Act / Act
  urgently».

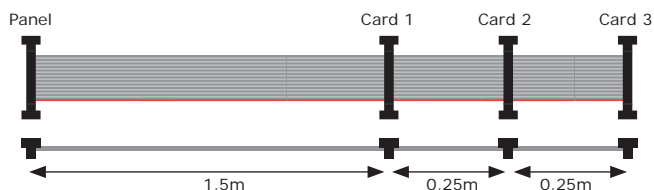| Fig	Product			I.
1	J1905S	**M0901-01-01**	12 relays 12Vdc DIN card. (Only the first 8 relays will be usable)	90
2	J1905S	**M0901-01-20**	2 relays 12Vdc DIN card with selectors. (Only the first 8 channels of the selector will be usable)	90
3	J3000/J3105 J3500 (except 48Vdc)	**M0901-02-01**	12 relays 24Vdc DIN card.	90
4	J3000/J3105 J3500 (except 48Vdc)	**M0901-02-20**	2 relays 24Vdc DIN card with selectors.	90
5	J3500 (with 48Vdc)	**M0901-03-01**	12 relays 48Vdc DIN card. The J3500 powered in 48Vdc has outputs powered in 48Vdc	90
7	ALARM'BOX	**M0901-01-02**	8 Relays DIN card 12Vdc for remote postponement (cable included).	

RIBBON CABLE :

Ribbon cable with 2 keyway connectors makes the link between panel rear and relay card. It also provides power supply to the
relay coils. There are cables for 1, 2 or 3 cards (maximum).
The standard length is 1.5m. supplementary 50cm sections can extend this up to 3 meters maximum.

Cable for J1905S :

M0901-02-53   Ribbon cable fitted up for 1 additional card.
M0901-02-54   Ribbon cable fitted up for 2 additional cards.
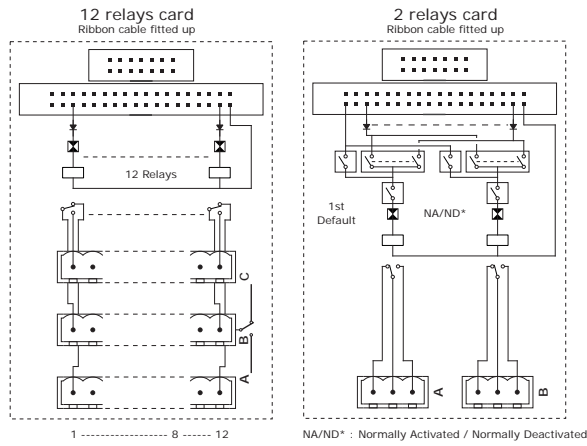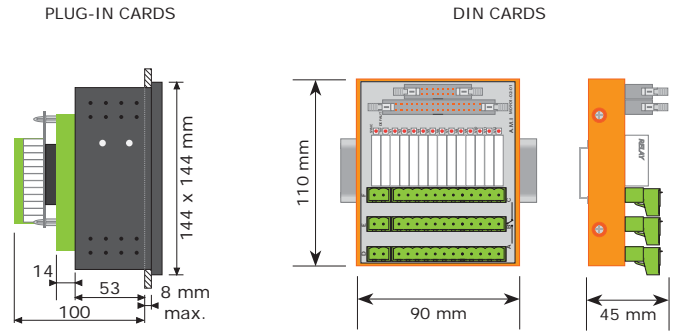**M0901-02-56**   Ribbon cable fitted up for 3 additional cards.

Cable for J3000/J3105 and J3500 :

M0901-02-50   Ribbon cable fitted up for 1 additional card.
M0901-02-51   Ribbon cable fitted up for 2 additional cards.
M0901-02-52   Ribbon cable fitted up for 3 additional cards.

Panel   Card 1   Card 2   Card 3

1,5m   0,25m   0,25m

M0901-02-55   0.5 meter additionnal length.

CONNECTIONS :

12 relays card
Ribbon cable fitted up

12 Relays

1 ------------------ 8 ------ 12

2 relays card
Ribbon cable fitted up

1st Default   NA/ND*

NA/ND* : Normally Activated / Normally Deactivated

DIMENSIONS :

PLUG-IN CARDS

144 x 144 mm
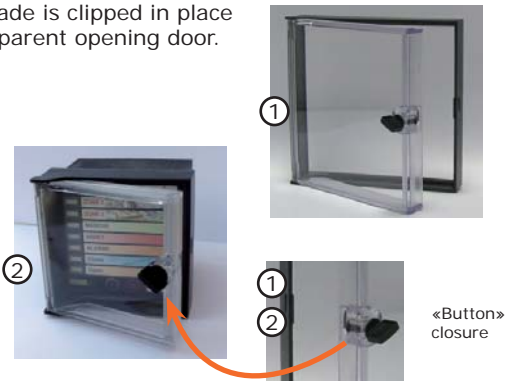
14   53   8 mm max.
100

DIN CARDS

110 mm

RELAY

90 mm   45 mm

OPEN FRONT FACE, IP54 SEALING :

IP54 sealed front panel is delivered with an o-ring seal. The sealed facade is clipped in place of the original banding holding the facade in place. The front is a transparent opening door.

Fig	Product	
1	J2005-J2405 J2005RS-J2405RS J3000-J3105 J3500	**M0720** : Quarter-turn closing button model. DIN format 144x144.
2	J1805-J1850 J1905S	**M0722** : Quarter-turn closing button model. DIN format 96x96.

«Button» closure

INSTALLATION ON DIN RAIL KIT :

This kit allows the installation of the panels to 96x96 size and 144x144 on a DIN rail profile TS35 all keeping the display toward the operator.

M0730 Adapter for 144x144 panel.
M0731 Adapter for 96X96 panel.

TEST AND DEMONSTRATION KITS :

Comprising 2 cards with connectors, they attach directly to rear panel connectors.
Input contacts can be simulated through the micro-switch that is on the Kit.
Push buttons in the Kit are used for cancellations and resets.
The sound alarm output is audible through a buzzer in the Kit and is visible through LEDs.
Outputs are visible through LEDs.
A 230Vac power supply is provided.
Use only with products on version «02» (24V supply).
For other voltages, thank you contact us.
A connection instruction sheet is included.

FOR J3000/J3105 IN 24V VERSION :

Ref. : KJ3000-1
Comprising :
- 1 input card with 12-contact switchs, 4 push buttons (LED test, Horn stop, Blink Stop/Reset, Delete), 1 «Inhibit» switch, 1 power supply jack.
- 1 output card with 12 LEDs for outputs, 2 LEDs for «Synchro» and «1st Fault» outputs, 2 LEDs for «Synthesis» output contact, 2 LEDs for «Sound Alarm» output contact, 1 Buzzer.
- 1 230Vac/24Vdc power supply with jack output.
- 1 connection and use instruction datasheet.

demonstration kit not include the panel.
(Use only on panels with 24V supply voltage.
For other, please contact us.)

FOR J3500 IN 24V VERSION :

Ref. : KJ3500-1
Comprising :
- 1 input card with 12-contact switchs, 4 push buttons (LED test, Horn stop, Blink Stop/Reset, Delete), 1 «Inhibit» switch, 1 power supply jack.
- 1 output card with 12 LEDs for outputs, 2 LEDs for «Synchro» and «1st Fault» outputs, 2 LEDs for «Synthesis» output contact, 2 LEDs for «Sound Alarm» output contact, 1 Buzzer.
- 1 230Vac/24Vdc power supply with jack output.
- 1 connection and use instruction datasheet.

CHOICE OF SUPPLEMENTARY LEDS :
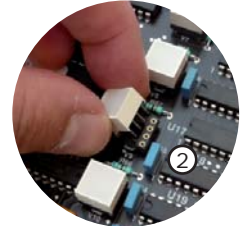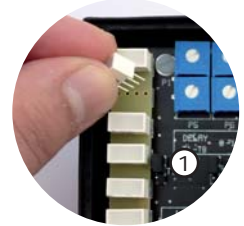
Normal LEDs have only one single colour.
It is necessary to change the LED to change the colour.
Our previous version products use this solution and are unpluggable from the front face, allowing the user to choose the desired colour.
Technology development means that we can use the CMS tri-LED unit giving us 7 different colours per LED with the same component.

All our products will be modified to use this new technology as we go along.

Fig	Product	Preceding version of the product detachable from the facade	
1	J1850	🟩 J2101-00-00	5x10mm GREEN colour LED, code 2500
		🟨 J2101-00-10	5x10mm YELLOW colour LED, code 2400
		🟥 J2101-00-20	5x10mm RED colour LED, code 2300
		🟦 J2101-00-30	5x10mm BLUE colour LED, code 230 MBW
		(exists as J2101-xx-x5 => 12 LEDs pack)	
2	J3000 J3500	🟩 J2001-00-00	10x10mm GREEN colour LED, code 2855
		🟨 J2001-00-10	10x10mm YELLOW colour LED, code 2755
		🟥 J2001-00-20	10x10mm RED colour LED, code 2655
		🟦 J2001-00-30	10x10mm BLUE colour LED, code 2655 MBW (assembly possible in factory only)
		⬜ J2001-00-40	10x10mm WHITE colour LED
		(exists as J2001-xx-x5 => 12 LEDs pack)	

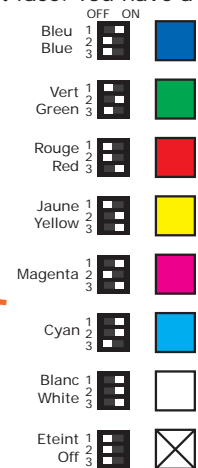### The new version with 7 colours selectable from the front

A display choice of 7 colors per LEDs is possible. This choice is selectable using switches on the panel front face. You have a choice of the following colours :

Red, Green, Yellow, Blue, White, Cyan, Magenta.

Changing LEDs is no longer necessary.

Already possible on :

- PAN35
- PAN35VB
- PAN35SH
- PAN45
- PAN45VB
- PAN45SH
- J1805
- J2005
- J2405
- J2005RS
- J2405RS
- J1905S
- J3105
- ALARM'BOX

	OFF ON	
Bleu / Blue		🟦
Vert / Green		🟩
Rouge / Red		🟥
Jaune / Yellow		🟨
Magenta		🟪
Cyan		🟦
Blanc / White		⬜
Eteint / Off		⊠

J0500-00-00 LABEL PRODUCTION :

Software developed under EXCEL™ (Microsoft Company) easily produces front face labels for all A.M.I. products. After on screen creation, you only need to print them on a laser printer, and store them on disk for later modification as needed.

You select the A.M.I. product for which you want to produce labels, using a PC with EXCEL™ software.
You type in your text in the predefined templates for the exact dimensions of the desired product.
Depending on the capability of your printer you can choose :
- Basic colours or text colours to attract the eye for certain significant tracks,
- The normal or plastic paper type depending on the environmental ambience of the product destination.

This software can be downloaded for free on our website :

www.ami-control.com

A.M.I.