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PAN35, PAN45, BV, SH

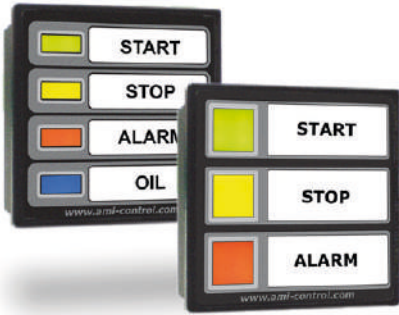


LEDS INDICATOR DISPLAY PANELS

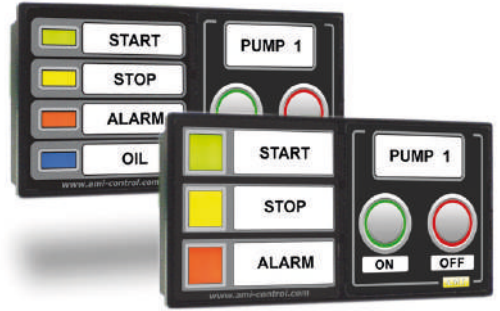


Each piece is tested one by one

INDICATOR DISPLAY PANELS ULTRA COMPACTS WITH LEDES DIN 48X48 DIN 48X96



PAN45



PAN45SH

PAN35

PAN35SH

Selection of 7 colours per LED

- Possible options :
- Displaying under voltage presence (induction cables)
 - Lighting up after undervoltage threshold
 - Contacts for remote information
 - Pushbuttons to control

Possible supply from 8V to 500Vac/dc



PAN45BV

PAN35BV



Realized by the company Mayfield Industries (Australia)



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



LED Indicator Display

PRESENTATION :

Very economical, the new range PAN35/PAN45 is designed for cabinets with many repetitive outputs such as :
Extractable cell distribution cabinets, Pump multiple outputs, Circuit breakers...

The PAN35/PAN45 series can be used in the most difficult situations.

THE DIFFERENT BOXES :

Each product includes :

- A luminous part fitted with of 3 or 4 indicators. This luminous part may be used alone (48x48 box) or combined with a control part (48x96 box).
- 1 or 2 contacts for remote information can be present in the luminous part.

There are many available models for all scenarios.

Advantages :

- Allows to integrate :
Signaling + contacts for remote information + control functions in the most restricted spaces.
- Very wide tolerance of each voltage supply range allowing to regroup many models and to reduce the stock via the standardization.
- The supply voltage tolerances allow the use of the same model for several various supply voltages. (example : One single model from 15Vac/dc to 265Vac or 300Vdc).
- Strengthened over-voltage protection.
- Selecting of one colour among 7 for each LEDs.
- Increased brightness with reduction in consumption (and decrease of internal heating).
- Exceptional long working life (LEDs).
- Sealing front face : IP65.
- «LEDs Test» terminal.
- Unpluggable terminal board to screw in.
- Label achievable oneself by the printer (free software).

All luminous parts can be used in the 48x96 format including the 1 or 2 transfer contact.

PAN35 / PAN45
 DIN box 48x48mm



- Luminous Part only**
 3 or 4 indicators
 with or without options
 - displaying undervoltage
 - undervoltage threshold
 - output contacts

PAN35BV / PAN45BV
 DIN box 48x96mm



- Luminous Part**
 3 or 4 indicators
 with or without options

- Extension**
 - 2 control switches

PAN35SH / PAN45SH
 DIN box 48x96mm

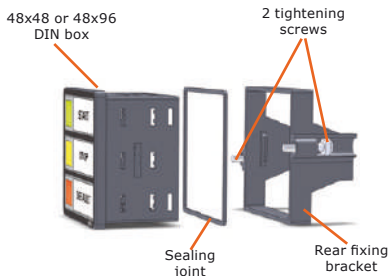


- Luminous Part**
 3 or 4 indicators
 with or without options

- Extension**
 - 2 push buttons
 - 2 push buttons + 1 switch
 - 3 push buttons
 - 2 push buttons + RJ coupler

All these products are designed and manufactured in FRANCE.
They are designed to have maximum durability in difficult environments.

GENERAL FEATURES TO ALL MODELS :



The boxes are made of polyamide PA66 30gf loaded to 30% for a high mechanical strength over time. A gasket at the front ensures sealing (IP65).

This new bracket allows an easier fitting by a simple push. The screw heads come to abut on the stops, avoiding bending of these. Possibility to rotate the bracket at 90° for 48x48 models.

- Unpluggable terminal board to screw-in (3 or 4 inputs + 1 common + «LEDs Test»).
- Very high luminosity.
- Very low consumption (10mA per Leds).
- Constant luminosity irrespective of supply voltage.
- Each LEDs is protected against over-voltage.



To fit the bracket, just put it on the panel and push the tabs.

To remove the bracket, just pull outward the 2 tabs, then pull to the rear of panel.

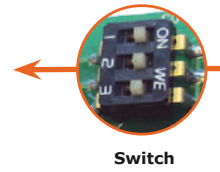


LEDS COLOUR SETTING :

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.

Color	Switch Position	Symbol
Bleu Blue	OFF ON	
Vert Green	OFF ON	
Rouge Red	OFF ON	
Jaune Yellow	OFF ON	
Magenta	OFF ON	
Cyan	OFF ON	
Blanc White	OFF ON	
Eteint Off	OFF ON	



Switch

For safety reasons, models with high voltages have the switches located in the front.

(PAN35-02-113, PAN35-05-13, PAN35-55-13, PAN45-02-113, PAN45-04-13, PAN45-05-113 and PAN45-55-13 versions)

To achieve this, it is necessary to extract the circuit board unit. Take out screw A and extract the unit by rear.



PAN35-55-13 rear view with screw A

Example

A



PAN35-55-13 front view cover removed

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.

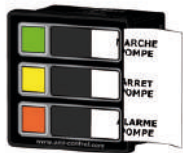
Labels can be handmade, or draw on the screen of the PC and produced with a colour printer (laser or ink-jet).

The PC software allows to create labels including images, allows to save and duplicate the achievements.

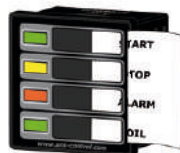
This PC software is FREE. It is possible to load it on our website :

www.ami-control.com

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



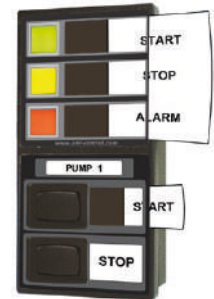
PAN35



PAN45



SH

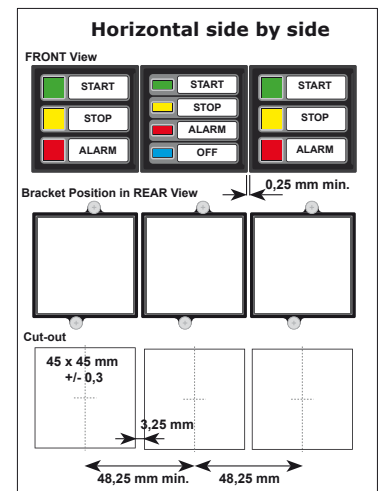
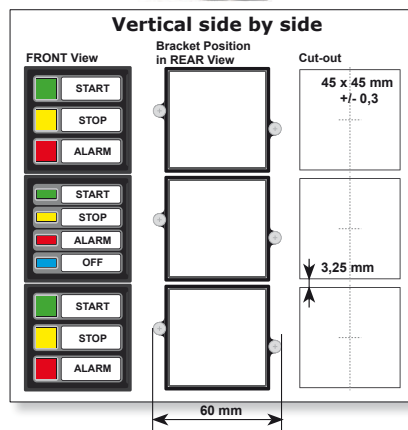
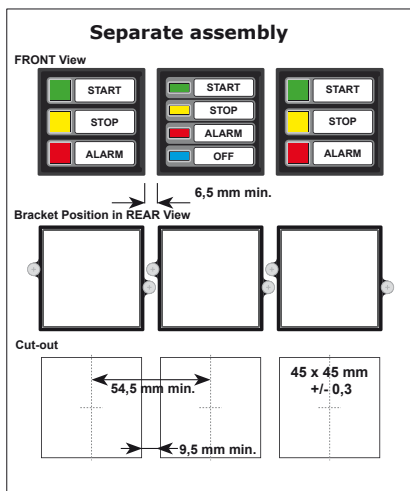


BV

ASSEMBLY :

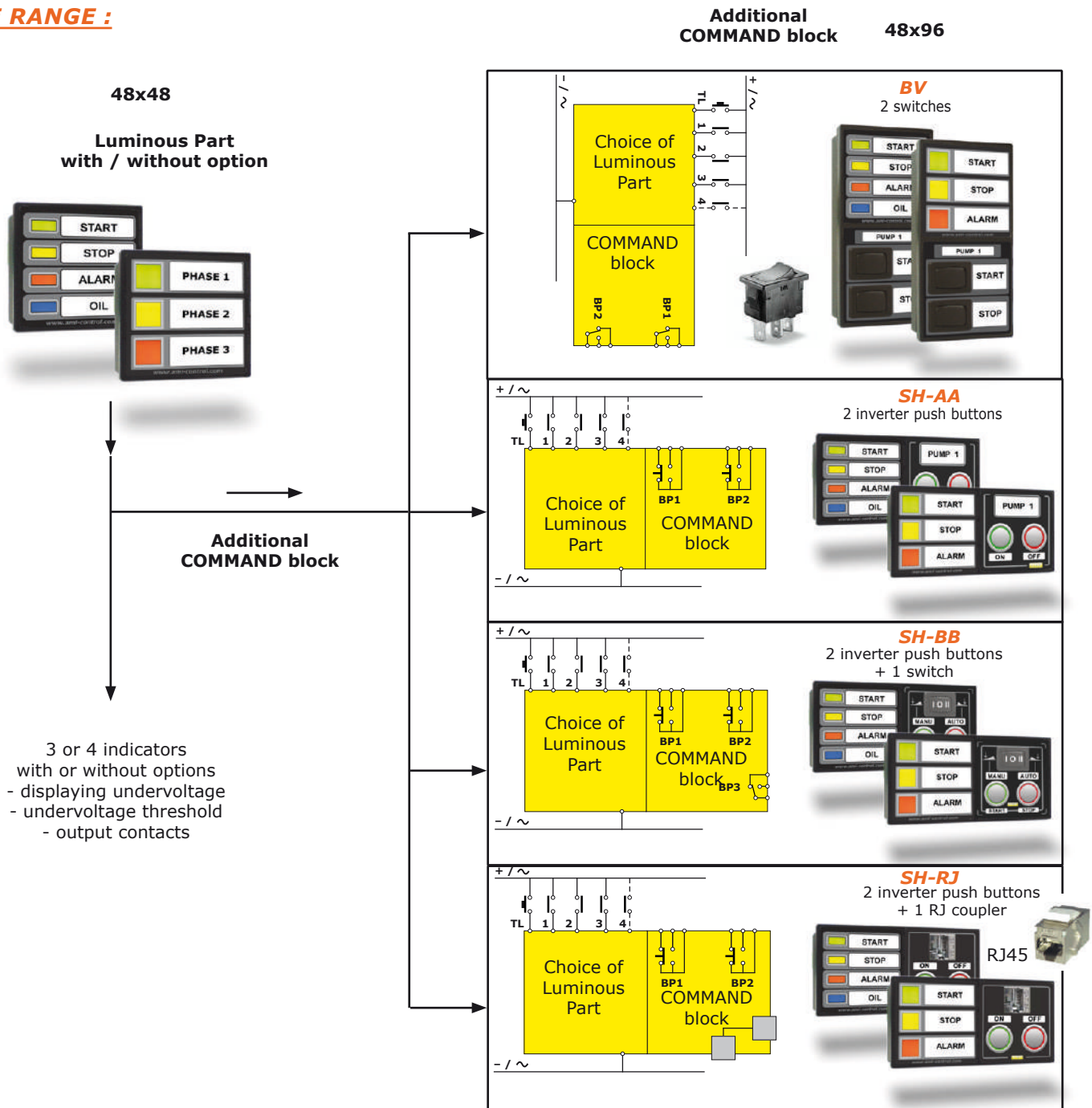


Possibility to turn the bracket 90°



It is recommended to keep a space of 3 mm gap between boxes. This cut-out interval is not essential, but it ensures the water tightness of the front face

THE RANGE :



3 or 4 indicators with or without options
 - displaying undervoltage
 - undervoltage threshold
 - output contacts

THE LUMINOUS PART :

GENERALITIES :

The luminous part can be used with both types of boxes :
 - **DIN 48x48**, one luminous part, with 3 or 4 LEDs with «LED test» input, with the optional output contacts.
 - **DIN 48x96**, containing the luminous part and an extension with a automatism part such as push-buttons, switches, coupler of connection.

It consists of an assembly containing 3 or 4 (10x10mm) LEDs or 4 (5x5mm) LEDs and a large common label with a label holder. LEDs are cms tri-LEDs type. For each input, there is a switch that allows the user to choose a display color from 7 options. This component service life is practically unlimited. To improve reliability, LEDs are not connected directly to the inputs. An electronic circuit ensures an effective protection of each input.

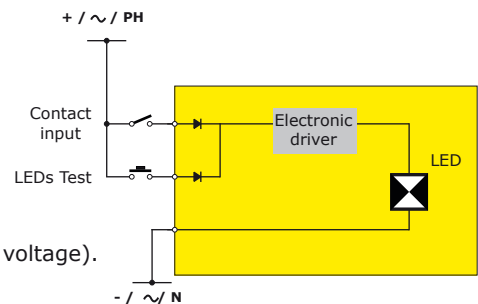
- It ensures among other things :
- LED monitoring at 10ma ensuring a significant and constant luminosity regardless of the voltage supply. The operation area width is increased.
 - Effective protection against overvoltage on the input.
 - A non-return device to avoid reinjecting voltage to external components.

In addition, every element contains an input intended for an outside push-button allowing realizing «Leds Test» general. (The «economic» version does not possess a regulator of light and the tolerances of tension of uses remain standard).

- All the connectors are of «unpluggable terminal screwed» type.

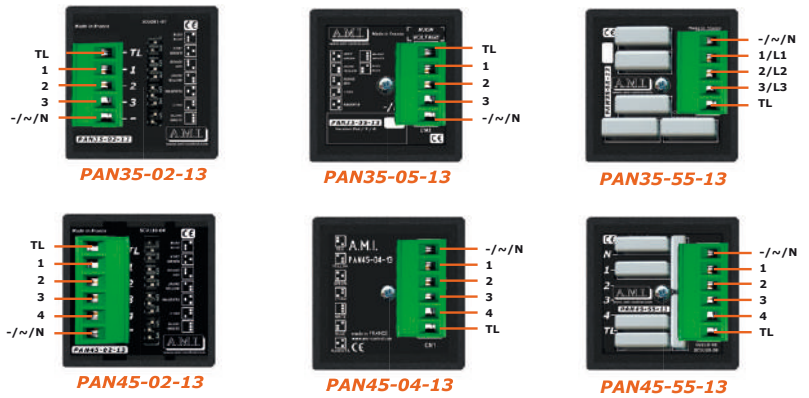
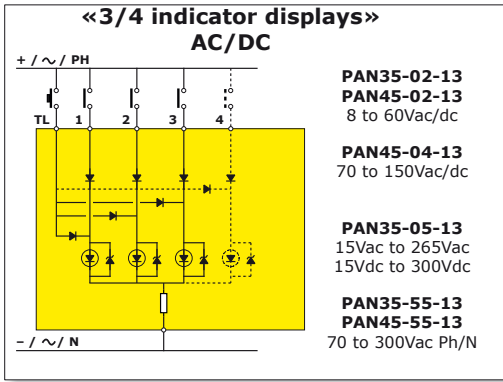
Many options can be added:

- minimum voltage threshold (avoids a glow in the Led in the presence of residual voltage).
- undervoltage detection (flashes in the presence of a dangerous residual voltage)
- reporting contacts (used to report the status of the remote signaling).

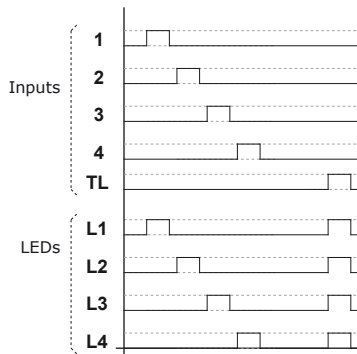


THE DIFFERENT LUMINOUS PARTS :

VERSIONS WITHOUT OPTION :



OPERATION :



- Closing the contact connected to the input lights up the corresponding LED.
- Opening the contact connected to the input turns off the corresponding LED.
- A «LEDs Test» terminal connected to an external push-button allows the lighting up of all the PAN35/PAN45 LEDs.

PAN35-02-13	3 indicator displays + «Leds Test» terminal 8 to 60Vac/dc
PAN35-05-13	3 indicator displays + «Leds Test» terminal 15 to 265Vac (Mono) / 15 to 300Vdc
PAN35-55-13	3 indicator displays + «Leds Test» terminal 70 to 300Vac Ph/N
PAN45-02-13	4 indicator displays + «Leds Test» terminal 8 to 60Vac/dc
PAN45-04-13	4 indicator displays + «Leds Test» terminal 70 to 150Vac/dc
PAN45-55-13	4 indicator displays + «Leds Test» terminal 70 to 300Vac Ph/N

if using AC: 50Hz to 60Hz only (can not be used with a frequency variator
ex : variable speed drive)

The PAN35-55-13 and PAN45-55-13 use capacitor technology which ensures very low heating. In order to avoid electrocution during an intervention (due to the residual voltage in the capacitors), each capacitor is equipped with fast discharge resistors.

PAN35-55-13 TWO POSSIBLE USES :

**“3 or 4 LED indicators”
in AC/DC**

PAN35-55-13 / PAN45-55-13

**Indicator of
“presence of the 3 phases”**

The PAN35-55-13 is used to indicate the presence of the 3 phases on an electrical grid. The connection of the neutral is not obligatory, but its connection will make it possible to signal the presence of a phase, even if the two others are absent.

PAN35-55-13
70 à 300Vac Ph/N
104 à 500Vac Ph/PH

Neutral is not required

50Hz to 60Hz only
(not suitable after a frequency variator ex: speed variator)

UNDERVOLTAGE THRESHOLD (PAN35-55-13 & PAN45-55-13)

The purpose of an LED (or an indicator) is to indicate information that is present or not.

- If voltage is present, the Led must be on.
 - If the voltage is absent, the Led must be off.
- But what if the voltage is «too low»?

LEDs have undeniable qualities: longevity, very low consumption, high brightness. But, on the other hand, they can cause inconvenience.

Their very high sensitivity added to their low consumption allow them to switch on at a very low voltage that could mislead an operator.

However, it often happens that a leak or a return voltage is present on the installation, generating a residual voltage of a few volts when it should be zero.

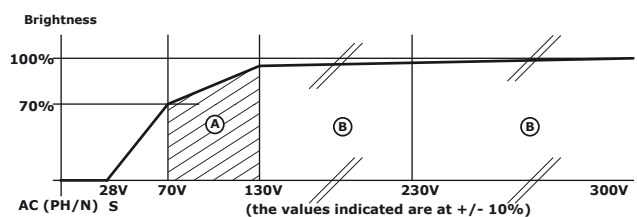
In order to prevent the LEDs from lighting up (weak glow) in the presence of residual voltage, it is possible to add a minimum ignition threshold (mark S).

The LEDs will only light up if the voltage present is greater than this threshold.

On the diagram, the correct brightness (70%) will be reached at the minimum operating voltage.

- In the ignition start zone (A), the color white may be pink. Normal brightness is reached as soon as 50% of nominal voltage.
- In zone (B) the brightness will be constant.

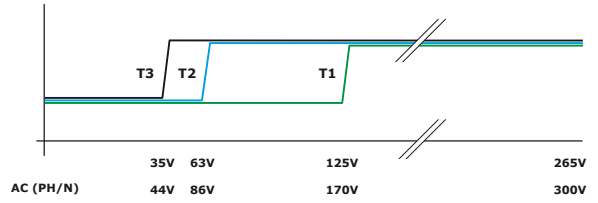
In «LED test» use and in order to limit general consumption in the case of numerous displays, the brightness is reduced.



OPTION WITH UNDERVOLTAGE THRESHOLD AND/OR DISPLAY UNDERVOLTAGE PRESENCE (PAN35-05-13)

Model « Tx » : This display will only illuminate from an acceptable voltage threshold.

	Minimum lighting voltage +/- 10%	Recommended use voltages
PAN35-05-13	15Vac / 15Vdc	15Vac to 265Vac 15Vdc to 300Vdc
PAN35-05-13T1	125Vac(Ph/N) 170Vdc	230Vac to 265 Vac 200Vdc to 300Vdc
PAN35-05-13T2	63Vac / 86Vdc	127Vac to 265Vac 110Vdc to 300Vdc
PAN35-05-13T3	35Vac / 44Vdc	48Vac to 265Vac 45Vdc to 300Vdc



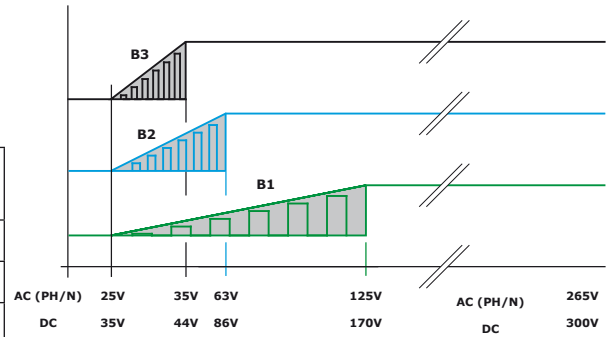
This new model allows to display a voltage state or voltage presence only after an acceptable voltage threshold has been exceeded. It avoids unwanted signaling in the event of insufficient voltage, leakage voltage or induction in the cables.

The « Bx » version indicates flashing, undervoltage, cable induction or voltage feedback which could be dangerous for users.

Model « Bx » : enhances the safety of people

- As soon as dangerous voltage (positive or alternating) is present, the indicator light flashes.
- If the voltage increases, the flash will accelerate to a maximum.
- When the voltage reaches an acceptable value, the indicator lights steadily.

	Start of detection of voltage presence (Flashing light)	Minimum lighting voltage in FIXED mode +/- 10%	Recommended use voltages
PAN35-05-13B1	25Vac / 35Vdc	125Vac(Ph/N) 170Vdc	230Vac to 265 Vac 200Vdc to 300Vdc
PAN35-05-13B2	25Vac / 35Vdc	63Vac / 86Vdc	127Vac to 265Vac 110Vdc to 300Vdc
PAN35-05-13B3	25Vac / 35Vdc	35Vac / 44Vdc	48Vac to 265Vac 45Vdc to 300Vdc

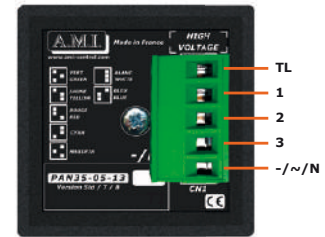


with voltage threshold	with voltage threshold with flashing when «under-voltage» presence
PAN35-05-13	
PAN35-05-13T1	PAN35-05-13B1
PAN35-05-13T2	PAN35-05-13B2
PAN35-05-13T3	PAN35-05-13B3

if using AC: 50Hz to 60Hz only (can not be used with a frequency variator ex : variable speed drive)

These functions reinforce personal safety and secure the installation:
They indicate the presence of a dangerous residual voltage. They control the minimum level of a supply voltage or battery voltage. Too low a level that risks preventing or disturbing a start and the automations.

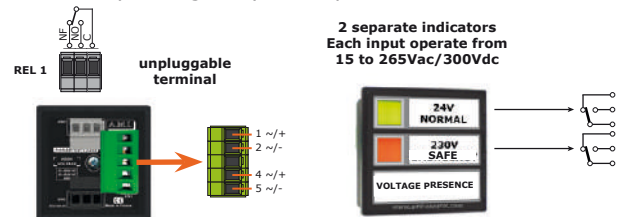
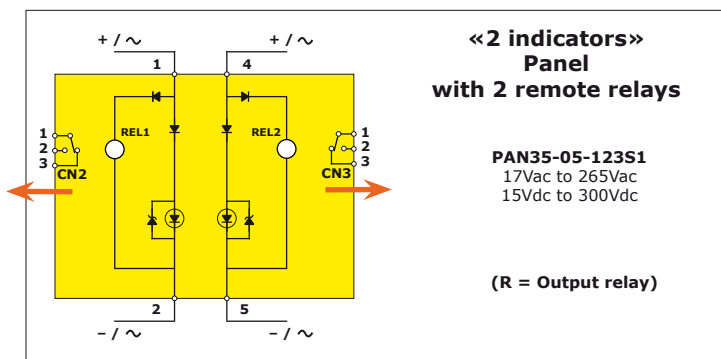
Works in AC and DC up to 300Vdc / 265Vac (Mono Ph/N).



PAN35-05-13Bx or Tx

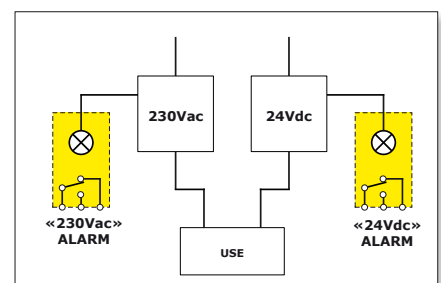
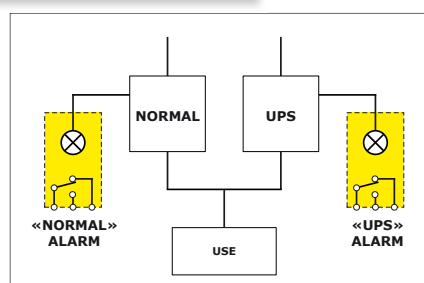
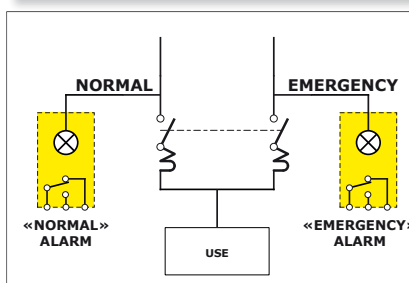
VERSION «CONTROLLER OF PRESENCE OF 2 DIFFERENT ISOLATED VOLTAGES» : PAN35-05-123S1

Allows monitoring of two independent power supplies. (example: 24Vdc and 230Vac) or two power transformers. A disappearance of one or the other voltage to be checked will cause the corresponding relay to drop out. The output relays are positive safety (normally activated).



2 relays R1/R2	
Led 1 = ON	=> Relay 1 = ON
Led 2 = ON	=> Relay 2 = ON

2 output contacts 1RT 6A/12Vdc - 0,15A/230Vac.



REPORT RELAY OPTION :

Many types of switchgears have multiple departures (extractable drawer, circuit breakers, motor departures...)

All these departures may require a local signaling of the 3 positions such as :
«OPEN / CLOSED / ALARM»

But it may become necessary to send information about the real position of the departure to the control room.

This requires one relay, which is costly in material ,in space and wiring.

The new versions can include 1 or 2 relays with a dry contact 1 O/C (galvanic isolation) avoiding to wire an external relay.

A selector allows to choose the information to send:
(Open and/or Close and/or Alarm)

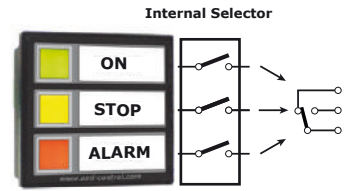
Space saving, Wiring saving, Price saving.

The relay contacts are inverters (1 O/C).

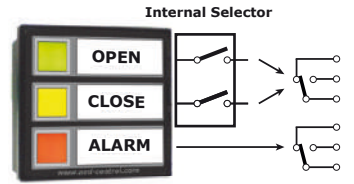
PAN35 : 6A/12Vdc - 0,15A/240Vac.

PAN45 : 2A/30Vdc - 0,25A/250Vac.

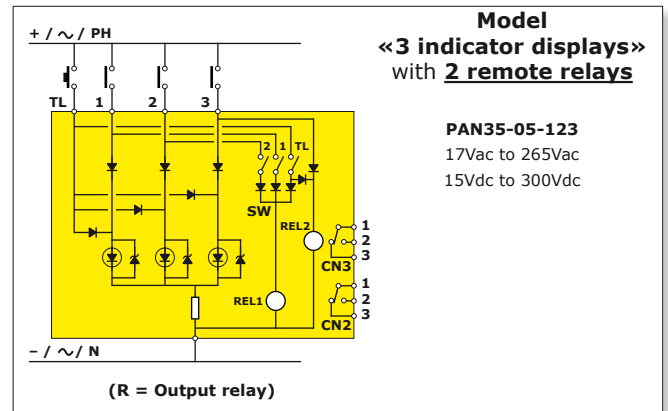
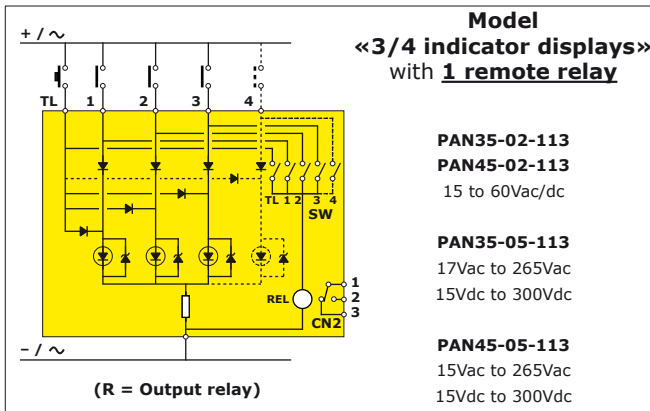
With 1 relay version



With 2 relays version



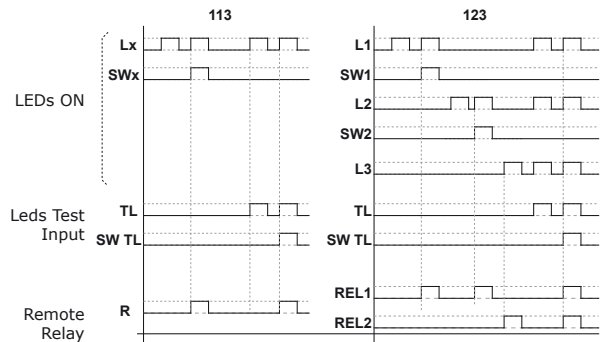
LED Indicator Display



The TL position of the switch allows the relay to be tested or not during the «Led test» function.

Version output relay option 113 or 123 :

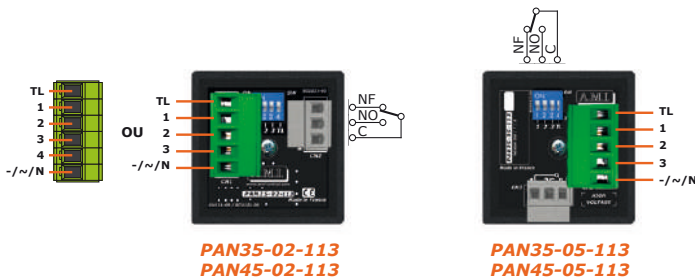
	1 relay (113)	2 relays (123)
Led 1 = ON	+ switch 1 = ON => Relay = ON	+ switch 1 = ON => Relay 1 = ON
Led 2 = ON	+ switch 2 = ON => Relay = ON	+ switch 2 = ON => Relay 1 = ON
Led 3 = ON	+ switch 3 = ON => Relay = ON	=> Relay 2 = ON
Test Led	+ switch TL = ON => Relay = ON	+ switch TL = ON => Relay 1 & 2= ON



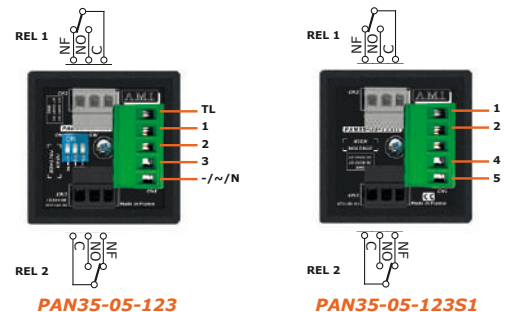
1 relay	PAN35-02-113	PAN35-05-113	PAN45-02-113	PAN45-05-113
2 relays		PAN35-05-123	PAN35-05-123S1	

if using AC: 50Hz to 60Hz only (can not be used with a frequency variator ex : variable speed drive)

With 1 relay version



With 2 relays version



THE EXTENSIONS: CONTROL PART (CASE 48X96)

48x96 box consist of a «luminous» part and a «control» part. They can use any of the luminous part models described previously.

(See «LUMINOUS PART» for the special features and connections of each of them).

As for the luminous part, all the components of the control part may receive labels that shall be inserted in a transparent pocket on the front side.

The «control» part is entirely isolated from the luminous part. All connections are either «unpluggable terminal screwed», or «Faston plug, 4.8». (See § «LUMINOUS PART» for the special features and connections of each of them).

HOW TO DEFINE THE EXTENSION IN CASE 48X96 :

- 1°) Choose the light part with its options, corresponding to your use. Note the reference.
- 2°) Choose the extension in the following possibilities.
- 3°) In the tables of each of the possible extensions, find the reference of the luminous part by completing with the chosen extension :
- Example : **PAN35BV-05-123** or **PAN35SH-05-123AA**

Allows to associate 3 or 4 usual indicator displays :

THE «BV» EXTENSIONS :

«ON / OFF/ ALARM»

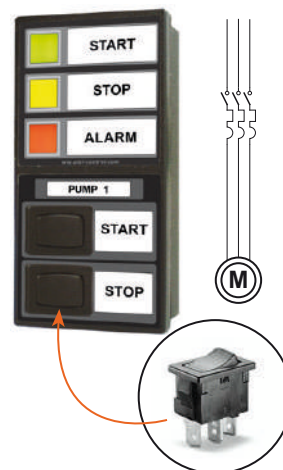
With choice of 2 control units
(On/off, impulse, Auto/Manu, ...)

- Control part :

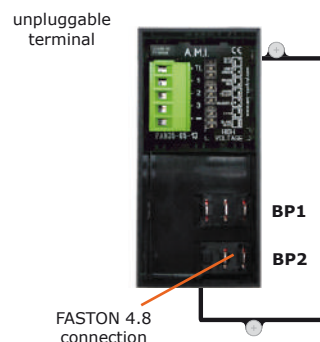
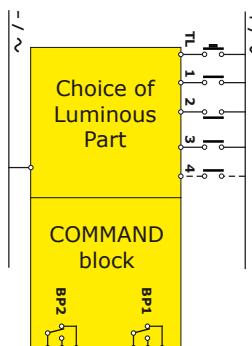
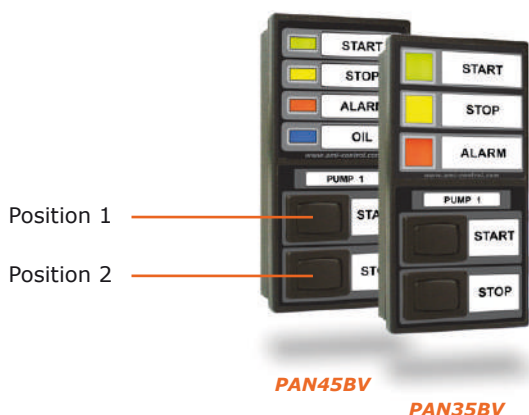
The lower part of the housing has two positions for mounting switches of your choice. The connection can be made directly using «Faston» type terminals on the switches. The upper and lower parts of the housing are completely insulated electrically one from the other.

Without contac	1 contact	2 contacts
PAN35BV-02-13	PAN35BV-02-113	
PAN35BV-05-13	PAN35BV-05-113	
PAN35BV-55-13		PAN35BV-05-123
PAN45BV-02-13	PAN45BV-02-113	PAN35BV-05-123S1
PAN45BV-04-13	PAN45BV-05-113	
PAN45BV-55-13		

if using AC: 50Hz to 60Hz only (can not be used with a frequency variator ex : variable speed drive)



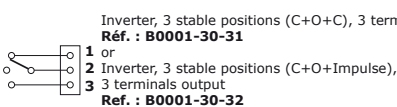
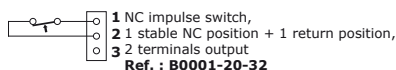
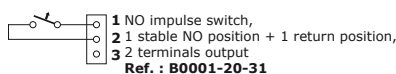
- **Order :** For this model, please, specify the part number and the desired switch model and their position.



CONTROL BUTTONS :

Switch models:

The 2 switches are included in the price of the panel.
The reference is to be specified separately.



Switches :
6A-125Vac /
4A-250Vac
max.

FASTON 4,8 plug
The use of isolated plugs
is recommended



Protection cap
on request
Ref. : **B0001-50-10**

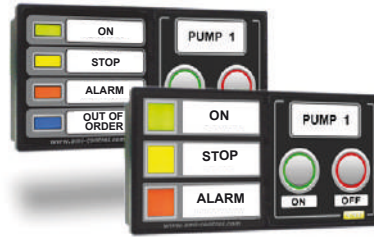


Black cover
on request
Ref. : **B0001-50-20**

«SH» EXTENSIONS WITH VERSION AA :

«ALL in ONE», it combines all the controls of a power departure :

- 3 or 4 indicator displays,
- 2 impulse push-buttons of control,
- 1 or 2 output contacts to send remote information (optional)



Control :

- The control part (on the right side) consists of 2 impulse inverter buttons. These buttons are used to control a contactor or can be used as «Leds Test» via an external wiring.
- The connection is made directly on the unpluggable terminal screwed terminal blocs. A color code on connectors avoided wrong connections. These buttons are fitted with a protection against power surges generated by inductive components.
- The «Indicator display» part and the «Control part» are entirely isolated from each other.

Without contact	1 contact	2 contacts
PAN35SH-02-13AA	PAN35SH-02-113AA	
PAN35SH-05-13AA	PAN35SH-05-113AA	
PAN35SH-55-13AA		PAN35SH-05-123AA
PAN45SH-02-13AA	PAN45SH-02-113AA	PAN35SH-05-123S1AA
PAN45SH-04-13AA	PAN45SH-05-113AA	
PAN45SH-55-13AA		

☐ if using AC: 50Hz to 60Hz only (can not be used with a frequency variator ex : variable speed drive)

Front view :

Choice of Luminous Part COMMAND block

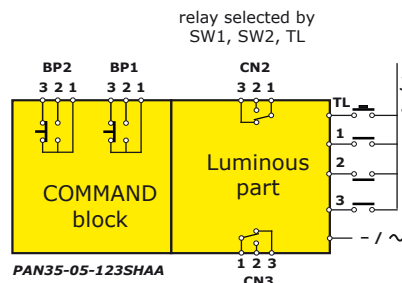
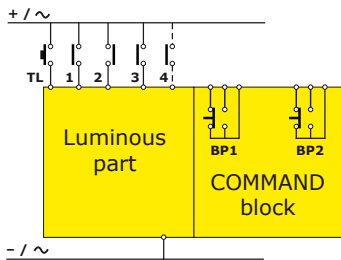


PB1 PB2

Rear side :



unpluggable terminal

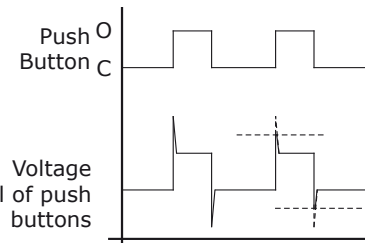


relay selected by TL

The layouts of the rear connectors change according to the model chosen. Refer to the "lighting part"

Power surge protection on pushbuttons :

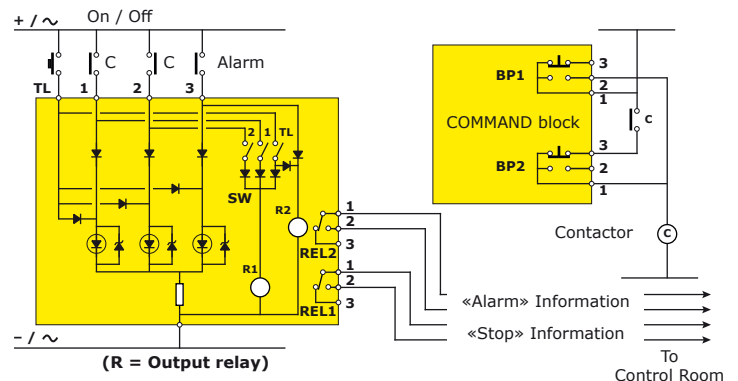
Contacts :
 EN 61058-1 : 6A, 250Vac
 UL 1054 : 5A, 125-250Vac
 Mechanical life : without protection 15x10⁶



Surges generated by closing / opening of inductive circuits reduce the lifetime of the contacts. The internal protection on each contact restricts this overvoltage to 400V and increases considerably the lifetime.

Example of usual application for a departure of electric engine or circuit breaker :

- Luminous Part : 3 indicator displays + 2 output relays, relay 1 is selected on way 1, relay 2 on way 3, the relay test with the "Test LED" is selected.
- BP1 and BP2 will enable/disable the contactor.
- The information «Stop» and «Alarm» will be transmitted in Control room.



«SH» EXTENSIONS WITH VERSION BB :

- «ALL in ONE», it combines all the controls of a power departure :**
- 3 or 4 indicator displays,
 - 1 switch for selection,
 - 2 impulse push-buttons of control,
 - 1 or 2 output contacts to send remote information (optional)



Control :

This is a SH model in version AA model with, an add-on, a selector switch. In addition to the uses of AA model, the switch can be used for the following functions :

- make a test led with an impulse switch.
- make a selection as "Manual/Automatic" with a selector switch.
- Display this selection on a Led.
- Inform the Control Room about the present selection with an isolated output contact.

Without contact	1 contact	2 contacts
PAN35SH-02-13BB	PAN35SH-02-113BB	
PAN35SH-05-13BB	PAN35SH-05-113BB	
PAN35SH-55-13BB		PAN35SH-05-123BB
PAN45SH-02-13BB	PAN45SH-02-113BB	PAN35SH-05-123S1BB
PAN45SH-04-13BB	PAN45SH-05-113BB	
PAN45SH-55-13BB		

Rear side :

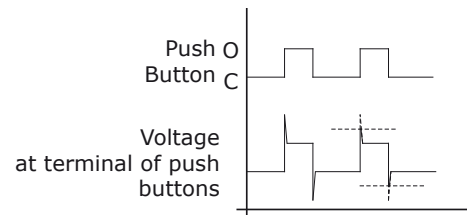
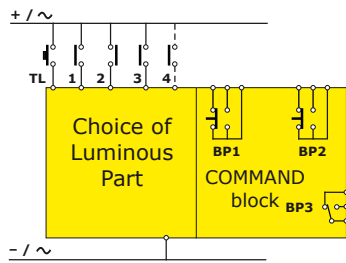


if using AC: 50Hz to 60Hz only (can not be used with a frequency variator ex : variable speed drive)

For this model, please specify the part number and the desired switch model (See § BV the different available switches).

Power surge protection on push buttons :

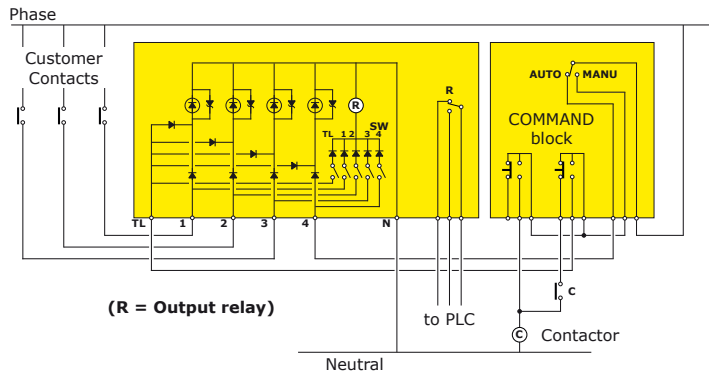
Contacts :
 EN 61058-1 : 6A, 250Vac
 UL 1054 : 5A, 125-250Vac
 Mechanical life : without protection 15x10⁶



Surges generated by closing / opening of inductive circuits reduce the lifetime of the contacts. The internal protection on each contact restricts this overvoltage to 400V and increases considerably the lifetime.

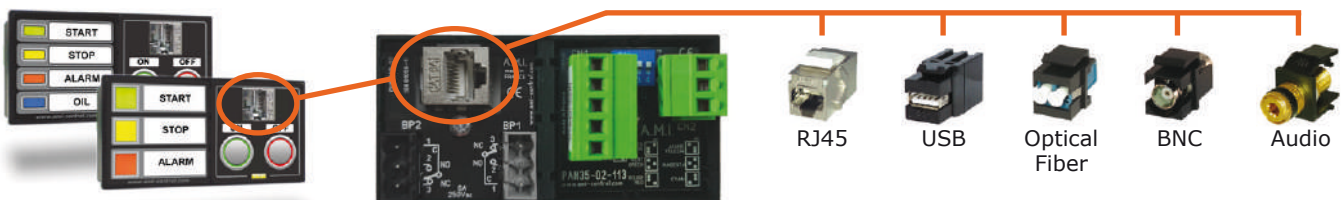
Example of an application with external connection :

- Luminous Part : 4 indicator displays + 1 output relay.
- The «Auto» position is indicated by the LED 4. The LED 4 turned on activates the internal relay who will send information to the Control Room.
- BP1 and BP2 will enable/disable the contactor.
- Possibility to do a «Led Test» with the Stop button but only in «Manual» position.

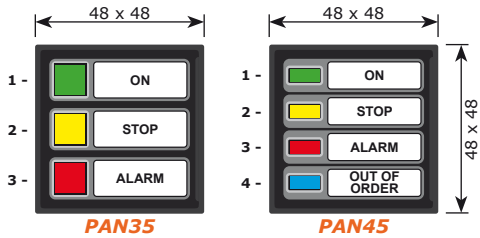


«SH» EXTENSIONS WITH VERSION RJ :

The AA models can be equipped with a coupler in front. This coupler allows to connect easily on an internal automatism in the enclosure without opening the door. Exist in RJ45, USB, optical fiber or audio. (Other on request)

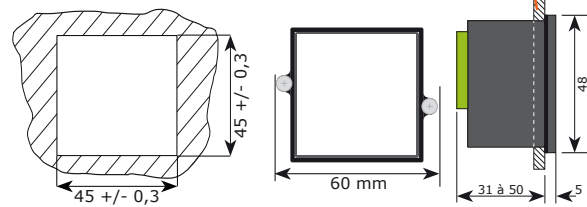


FRONT FACE : Numbering system

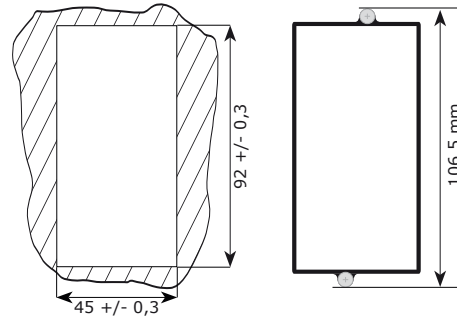
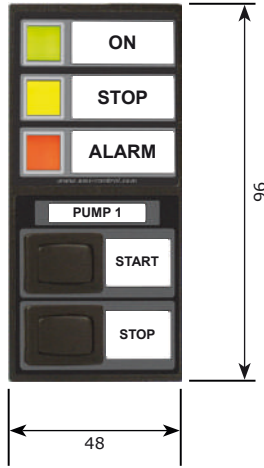


CUT-OUT :

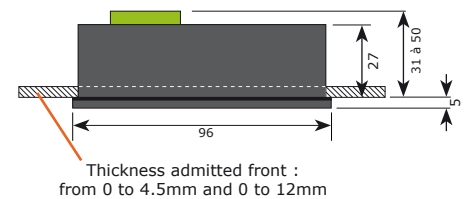
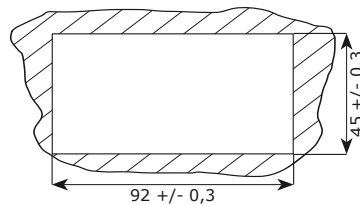
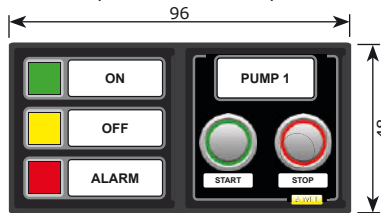
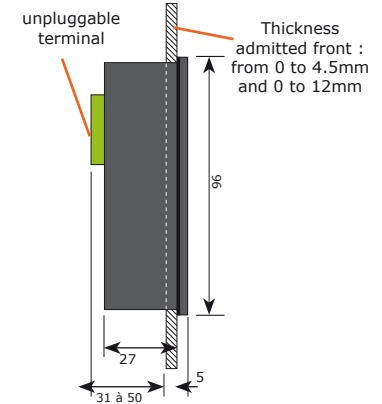
Thickness admitted front : from 0 to 4.5mm



	Depth
PAN35-02-13 PAN45-02-13	31mm
PAN35-05-13 PAN35-55-13 PAN35-02-113 PAN45-04-13 PAN45-55-13 PAN45-02-113 PAN45-05-113	42mm
PAN35-05-113 PAN35-05-123	50mm



DIN Format 48x96.

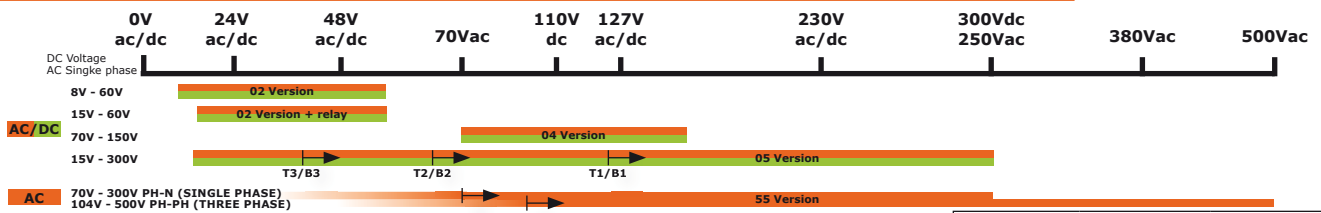


Thickness admitted front : from 0 to 4.5mm and 0 to 12mm

CHARACTERISTICS :

Box	Polycarbonat Front face, case of polyamide PA66 30gf.	Weight	45g to 90g depending on version
Colour	Black	Push buttons	EN 61058-1 : 6A, 250Vac UL 1054 : 5A, 125-250Vac Mechanical life : without protection 15x10 ⁶
Leak tightness front face	IP65 (switch IP40/IP54)	Switch	6A-125Vac / 4A-250Vac
Flame resistance	UL94 classe V2	Relay contact	1RT - 6A-12Vdc / 0,15A-240Vac For versions PAN45 : 1RT - 2A-30Vdc / 0,25A-250Vac
Surface insulation	10 ¹⁵ Ohms/cm		
Working / storage temperature	-20°C / +60°C / -20°C / +70°C		
Working / storage Humidity	90% without condensation / 70%		

THE DIFFERENTS POWER VOLTAGE SUPPLIES OF LUMINOUS PARTS :



- For models with voltage greater than 48V:
Connection cables must be fitted with insulating ferrules covering the insulation of the cable.

In some countries, it is usual to meet Automatism voltage such as 110Vdc, 127Vdc or 200Vdc.

The 05 version (**from 15Vac/dc to 265Vdc (Mono)/300Vdc**) is recommended for special contracts, such as those for Eastern Europe for example. Based on an concept of energy processing associated with high shelf-life Led, the heating is close to zero.

- Nominal power supply with extended voltage range.
- Leds Protection by constant current.

		PAN35 / PAN45		
DC	AC	Without relay	1 relay	2 relays
8V - 60V	8V - 60V	PAN35-02-13 PAN45-02-13		
15V - 60V	15V - 60V		PAN35-02-113 PAN45-02-113	
70V - 150V	70V - 150V	PAN45-04-13		
15V - 300V	15V - 265V	PAN35-05-13		
15V - 300V	17V - 265V		PAN35-05-113 PAN45-05-113	PAN35-05-123 PAN35-05-123S1
15V - 300V with minimum lighting threshold	15V - 265V	PAN35-05-13T1 PAN35-05-13T2 PAN35-05-13T3		
15V - 300V with minimum lighting threshold + detection undervoltage presence	15V - 265V	PAN35-05-13B1 PAN35-05-13B2 PAN35-05-13B3		
	70V - 300V Ph-N	PAN35-55-13 PAN45-55-13		
	104V - 500V Ph-Ph	PAN35-55-13		

AC/DC. if using AC: 50Hz to 60Hz only (can not be used with a frequency variator example : variable speed drive)

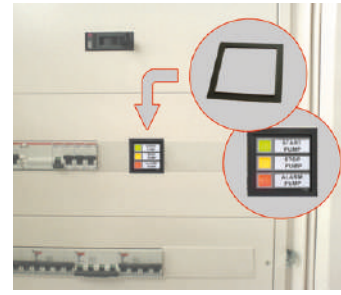
COMPLEMENTARY PRODUCTS :

Mounting in association with modular systems :

A adaptator plate allows to mount the PAN35/PAN45 on cabinet doors such as doors for modular switches or circuit-breakers. it is mounted in front of the rack, behind the PAN35 panel.

Dimensions : 56x56mm.
Deliverable per bags of 10 units.

Reference : **M0817**



Please refer to **ACCESSORIES** chapter from our catalogue.

FOR LARGER SIGNALING REQUIREMENTS OR FOR YOUR TECHNICAL ALARMS :

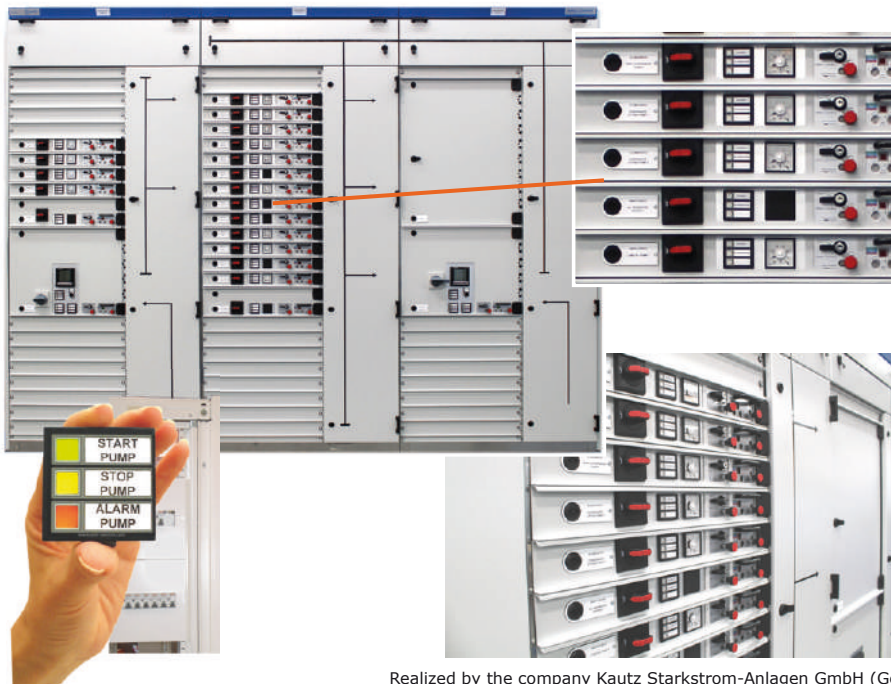
Available in:
English / German
French / Spanish

Consult our other catalogs

**Annunciator Panel
J1805, J2005, J2405
J2005RS, J2405RS**

**Three-Phase Network
Display and protection
PAN35-55-13
PH001 / PAN45-01-00**

**Alarm Annunciator Panel and
Centralization
J1905S, J3000, J3500
Alarm'Box, Panel'PC**



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