

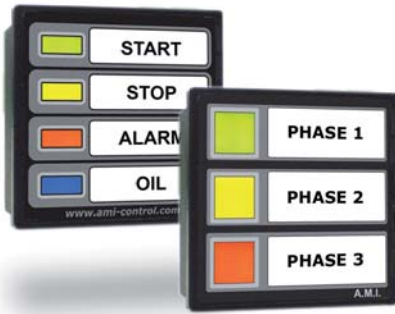


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EACH PIECE  
IS TESTED  
ONE BY ONE

## INDICATOR DISPLAY PANELS ULTRA COMPACTS WITH LEDS 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



Realized by the company Mayfield Industries  
(Australia)



PAN45BV

PAN35BV



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 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.

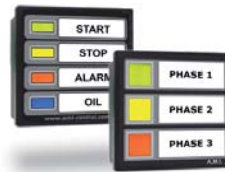
There are many available models for all scenarios.

### **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.

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



**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

## **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.

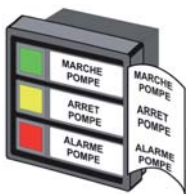
Labels can be handmade, or draw on the screen of the PC and produced with a colour printer (laser or ink-jet).

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](http://www.ami-control.com)**

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



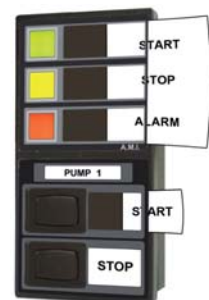
**PAN35**



**PAN45**



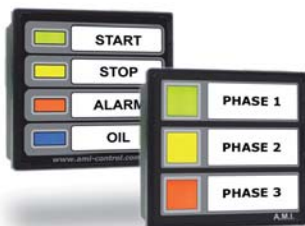
**SH**



**BV**

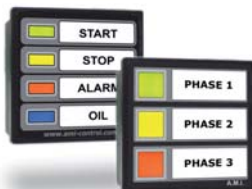
## THE RANGE :

### Luminous Part with / without option



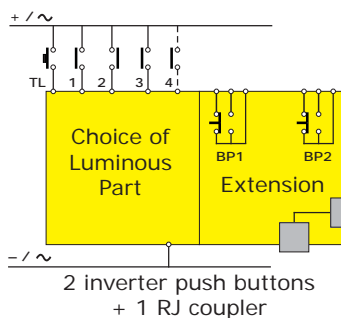
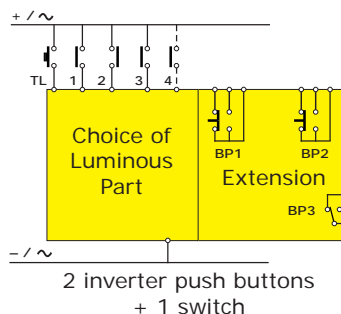
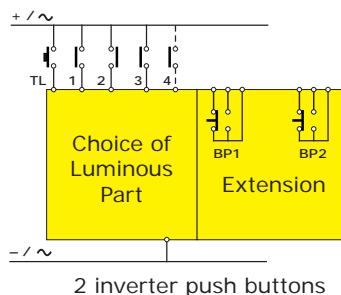
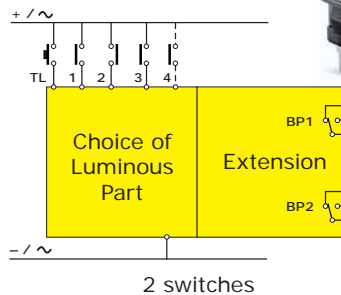
3 or 4 indicators  
with or without options  
- displaying undervoltage  
- undervoltage threshold  
- output contacts

+ EXTENSION



PAN45 / PAN35

### Extension



BV



SH-AA

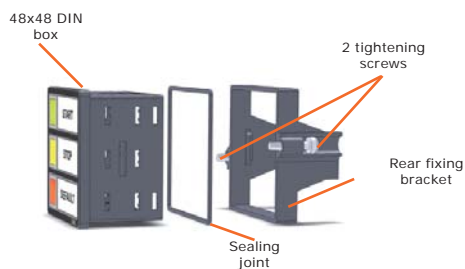


SH-BB



SH-RJ

## GENERAL FEATURES TO ALL MODELS :



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.



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.

## 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.

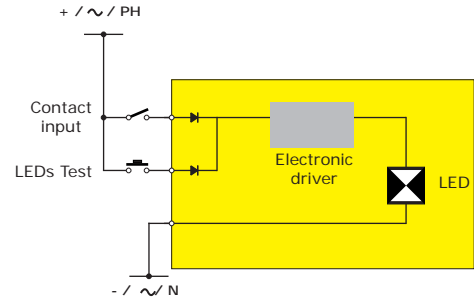
In addition, every element contains an input intended for an outside push-button allowing realizing «Leds Test» general.

(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:

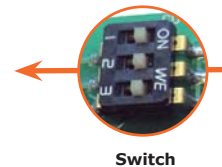
- displaying undervoltage
- undervoltage threshold
- output contacts



### 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.**



	OFF	ON
Bleu 1 Blue 2 3		
Vert 1 Green 2 3		
Rouge 1 Red 2 3		
Jaune 1 Yellow 2 3		
Magenta 1 2 3		
Cyan 1 2 3		
Blanc 1 White 2 3		
Eteint 1 Off 2 3		

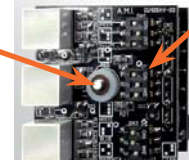
For safety reasons, models with high voltages have the switches located in the front.

**(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.



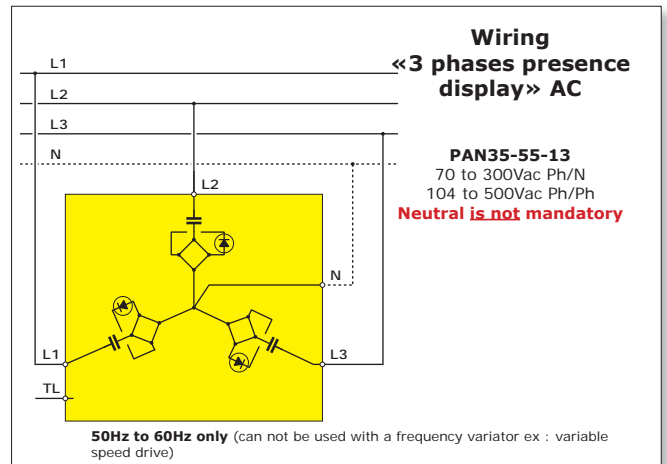
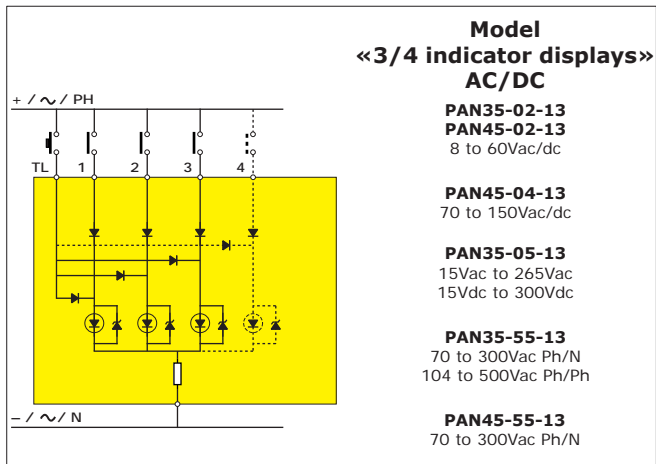
**PAN45-55-13**  
rear view with screw A



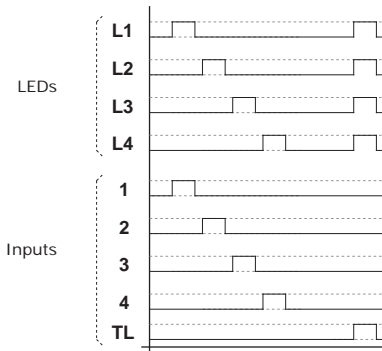
**PAN35-55-13**  
front view cover removed

## THE DIFFERENT LUMINOUS PARTS :

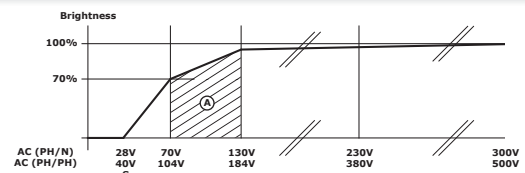
### VERSIONS WITHOUT OPTION :



### OPERATION :



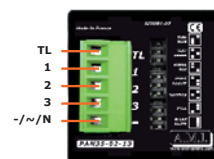
- Closing the contact connected to the input lights up the corresponding LED.
- Opening the contact connected to the input turns off the corresponding LED.
- A «LEDs Test» terminal connected to an external push-button allows the lighting up of all the PAN35/PAN45 LEDs.



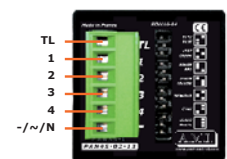
The versions PAN35-55-13 and PAN45-55-13 are economical versions with «capacitor» technology. However, it often happens that a leak or a return voltage is present on the installation, generating a residual voltage of a few volts when it should be zero. In order to avoid ignition in the event of residual voltage in the Leds (low glow), these versions have an ignition threshold (S). The LEDs will only illuminate if the voltage present is above this threshold. The correct brightness (70%) will be reached at the minimum voltage of use. In the ignition start area (A), the white color may be pink. In use «test Leds» and in order to limit the general consumption in case of many displays, the brightness is reduced. (the values indicated are +/- 10%).

<b>PAN35-02-13</b>	3 indicator displays + «Leds Test» terminal 8 to 60Vac/dc
<b>PAN35-05-13</b>	3 indicator displays + «Leds Test» terminal 15 to 265Vac (Mono) / 15 to 300Vdc
<b>PAN35-55-13</b>	3 indicator displays + «Leds Test» terminal 70 to 300Vac Ph/N and 104 to 500Vac Ph/Ph
<b>PAN45-02-13</b>	4 indicator displays + «Leds Test» terminal 8 to 60Vac/dc
<b>PAN45-04-13</b>	4 indicator displays + «Leds Test» terminal 70 to 150Vac/dc
<b>PAN45-55-13</b>	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)



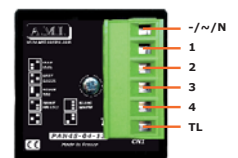
PAN35-02-13



PAN45-02-13



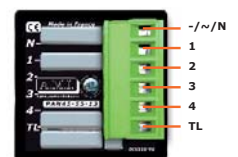
PAN35-05-13



PAN45-04-13



PAN35-55-13



PAN45-55-13

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

The 05 version (**from 15Vac/dc to 265Vac (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.

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:

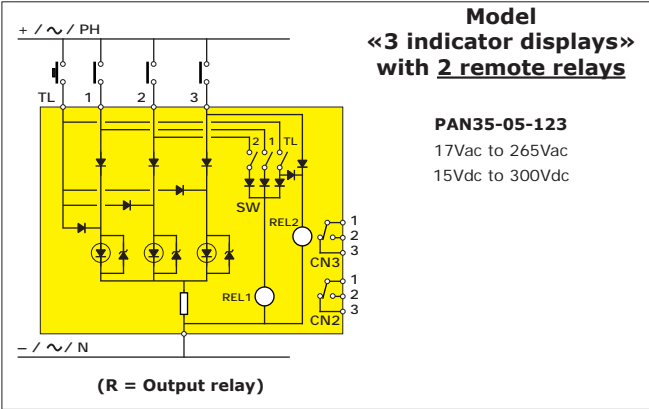
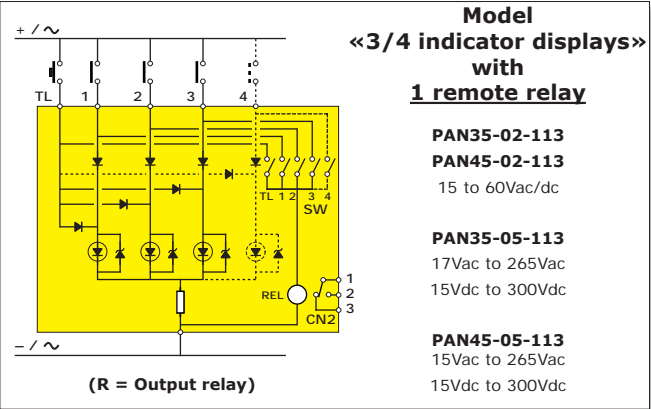
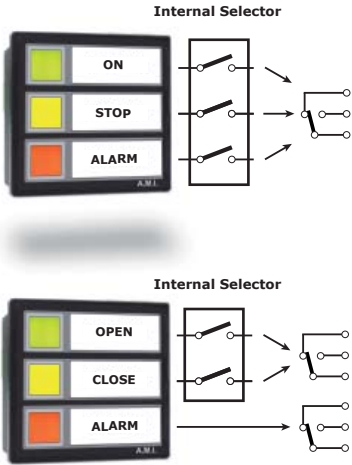
(Open and/or Close and/or Alarm )

Space saving, Wiring saving, Price saving.

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

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

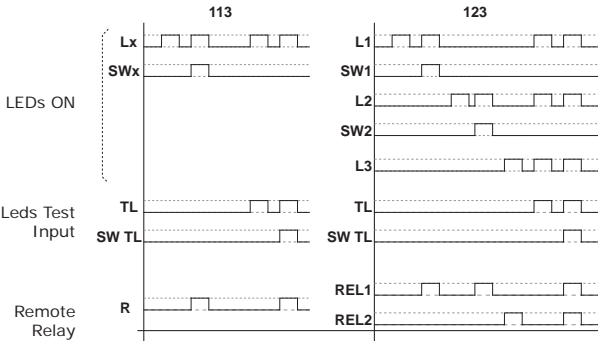
PAN45 : 2A/30Vdc - 0,25A/250Vac.



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

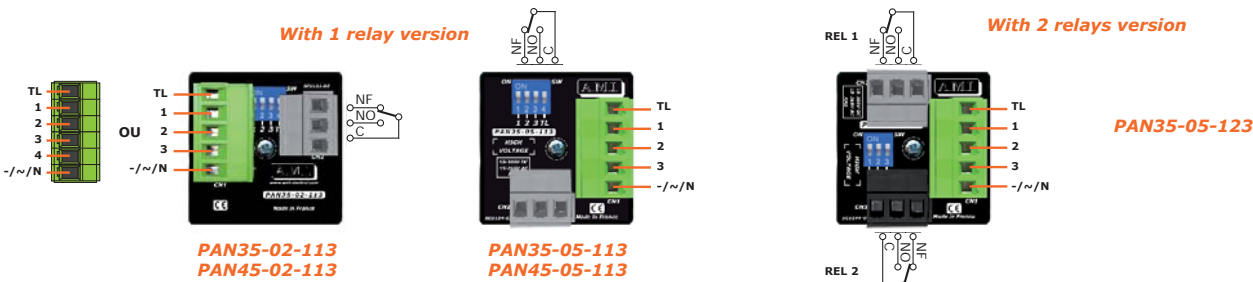
Version output relay option 113 or 123 :

	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)



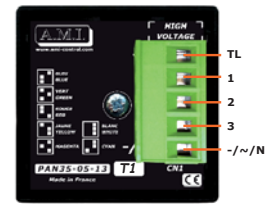
## OPTION WITH UNDERVOLTAGE THRESHOLD AND/OR DISPLAY UNDERVOLTAGE PRESENCE (INDUCTION IN CABLES) :

The LED display allows simple signaling of a «state» or «voltage presence».

However, an indicator light may be illuminated, even at low voltages, which may cause the operator to be misled.  
This can have serious consequences (presence of abnormal voltage not signaled, risk of manipulation for the operator).

Example: the «48V presence» indicator is displayed, while the voltage is only 39V or caused by a voltage feedback in a coil, or induction in the cables.

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.  
An option indicates flashing, undervoltage, cable induction or voltage feedback which could be dangerous for users.



PAN35-05-13Bx ou Tx

**This function is ideal for :**  
Checking a battery voltage : It will prevent the battery light from turning solid when the «battery voltage» is too low and it will flash for easy maintenance.

### Model « Tx » :

This display will only illuminate from an acceptable voltage threshold.

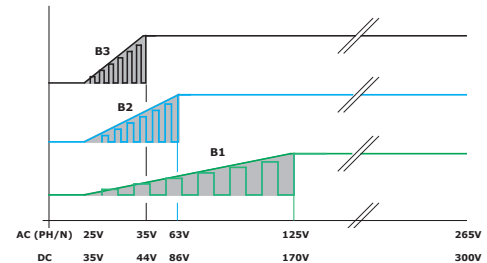
	Minimum lighting voltage +/- 10%	Recommended use voltages
T1	125Vac (Ph/N) 170Vdc	230Vac mono. 200Vdc
T2	63Vac / 86Vdc	127Vac / 110Vdc
T3	35Vac / 44Vdc	48Vac / 48Vdc



### Model « Bx » :

- 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
B1	25Vac / 35Vdc	125Vac (Ph/N) 170Vdc	230Vac mono. 200Vdc
B2	25Vac / 35Vdc	63Vac / 86Vdc	127Vac / 110Vdc
B3	25Vac / 35Vdc	35Vac / 44Vdc	48Vac / 48Vdc



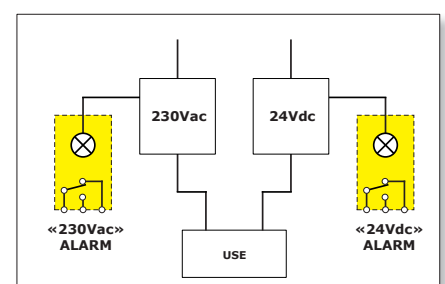
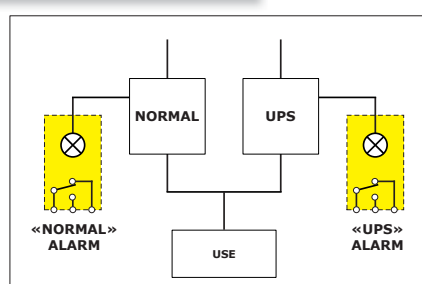
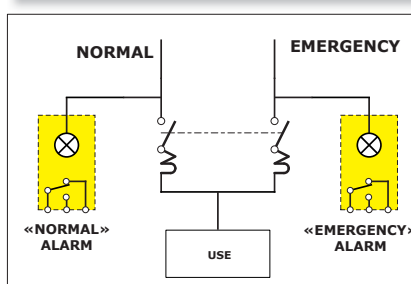
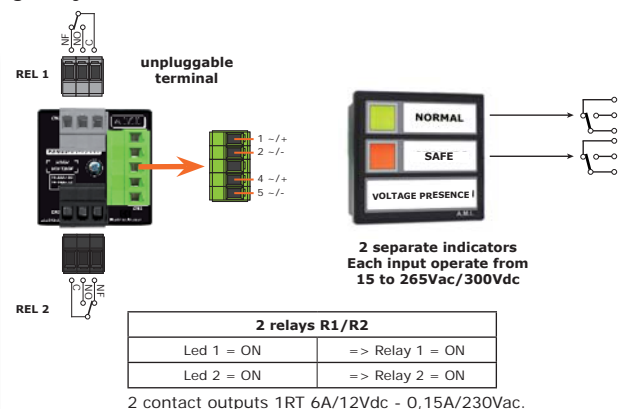
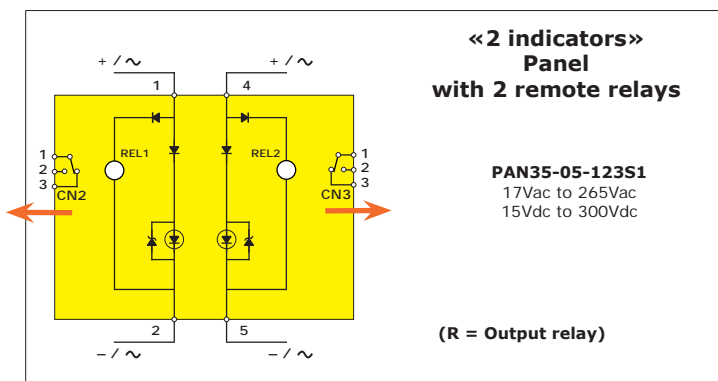
with voltage threshold	with voltage threshold with flashing when «under-voltage» presence
PAN35-05-13T1	PAN35-05-13B1
PAN35-05-13T2	PAN35-05-13B2
PAN35-05-13T3	PAN35-05-13B3

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

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

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

Can monitor two redundante voltages of safety 24Vdc and 230Vac or two power transformer voltages.  
If either of the two voltages controlled disappears, the corresponding relay is deactivated.  
Each of the 2 relays is failsafe (normally activated).



## 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**

### THE «BV» EXTENSIONS :

Allows to associate 3 or 4 usual indicator displays :

«ON / OFF/ ALARM»

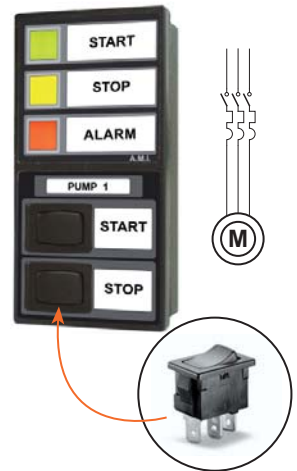
With choice of 2 control units  
(On/off, impulse, Auto/Manu, ...)

#### - Control part :

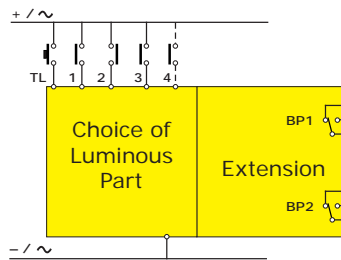
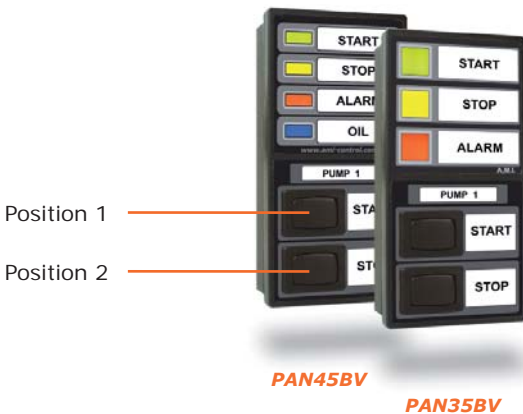
The lower part of the housing has two positions for mounting switches of your choice. The connection can be made directly using «Faston» type terminals on the switches. The upper and lower parts of the housing are completely insulated electrically one from the other.

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

☐ 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 :

**Selector :**

- 1NO impulse switch,  
21 stable NO position + 1 return position,  
3 terminals output  
Ref. : B0001-20-31
- 1NC impulse switch,  
21 stable NC position + 1 return position,  
3 terminals output  
Ref. : B0001-20-32
- 1ON/OFF switch,  
22 stable positions, 2 terminals output  
3Ref. : B0001-20-30

**Selector :**

- 1 Inverter, 2 stable positions, 3 terminals output  
Ref. : B0001-30-30
- 2 or 3 Inverter, 3 stable positions (C+O+C), 3 terminals output  
Ref. : B0001-30-31
- 3 Inverter, 3 stable positions (C+O+Impulse),  
3 terminals output  
Ref. : B0001-30-32

**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

The 2 switches are included in panel.  
Rerference to be specified separately.

## «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)

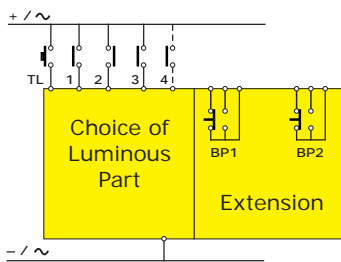


### - Control :

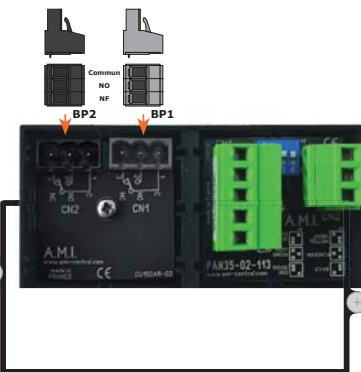
- The control part (on the right side) consists of 2 impulse inverter buttons. These buttons are used to control a contactor or can be used as «Leds Test» via an external wiring.
- The connection is made directly on the unpluggable terminal screwed terminal blocs. A color code on connectors avoided wrong 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)



### Rear side :



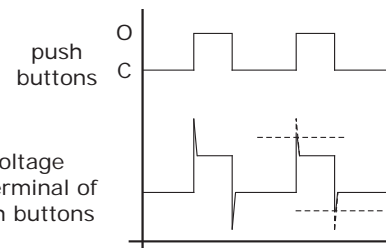
### Power surge protection on pushbuttons :

Contacts :

EN 61058-1 : 6A, 250Vac

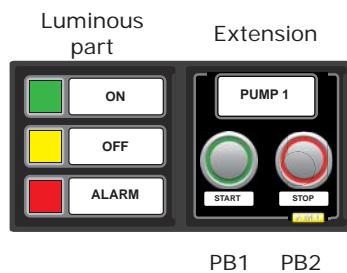
UL 1054 : 5A, 125-250Vac

Mechanical life : without protection 15x10<sup>6</sup>



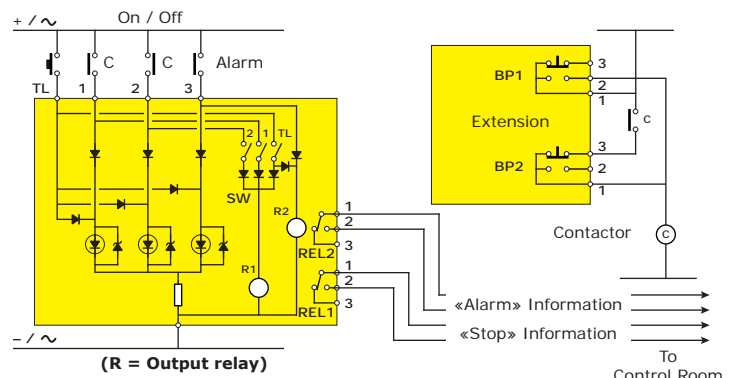
Surges generated by closing / opening of inductive circuits reduce the lifetime of the contacts.

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 :

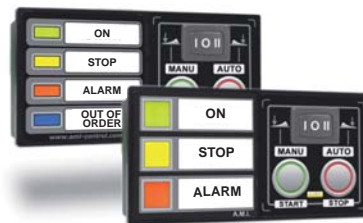
- Luminous Part : 3 indicator displays + 2 output relays, relay 1 is selected on way 1, relay 2 on way 3, the relay test with the "Test LED" is selected.
- BP1 and BP2 will enable/disable the contactor.
- The information «Stop» and «Alarm» will be transmitted in Control room.



## «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.

### Rear side :

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		

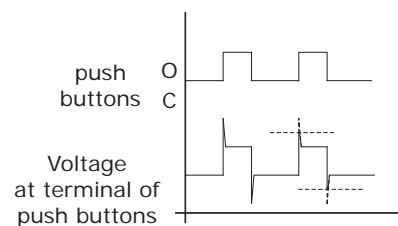
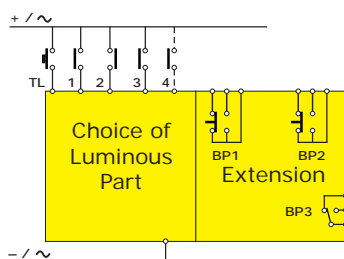


☐ If using AC: 50Hz to 60Hz only (can not be used with a frequency variator ex : variable speed drive)

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

### Power surge protection on pushbuttons :

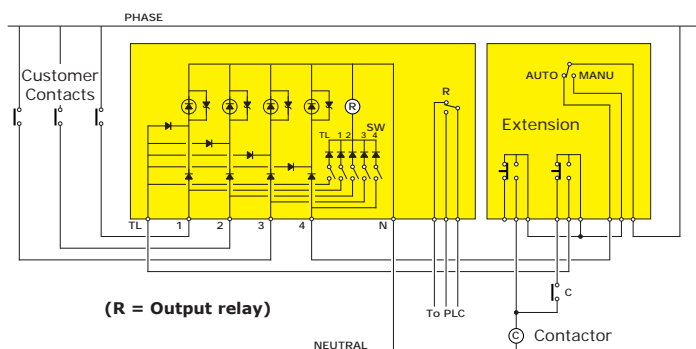
Contacts :  
EN 61058-1 : 6A, 250Vac  
UL 1054 : 5A, 125-250Vac  
Mechanical life : without protection 15x10<sup>6</sup>



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.

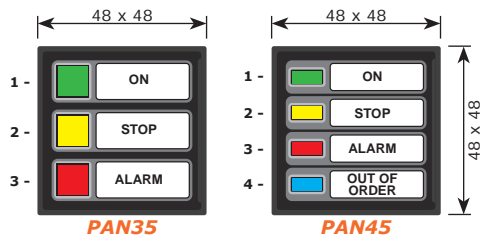


## «SH» EXTENSIONS WITH VERSION RJ :

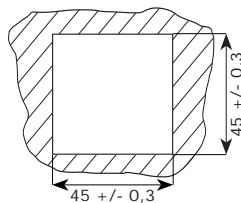
The AA models can be equipped with a coupler in front. This coupler allows to connect easily on an internal automatism in the enclosure without opening the door. Exist in RJ45, USB, optical fiber or audio. (Other on request)



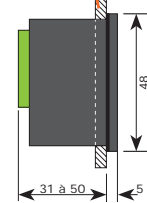
## FRONT FACE : Numbering system



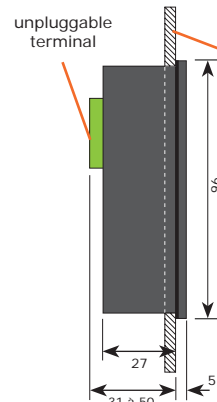
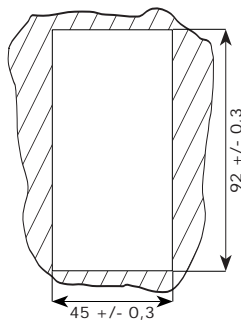
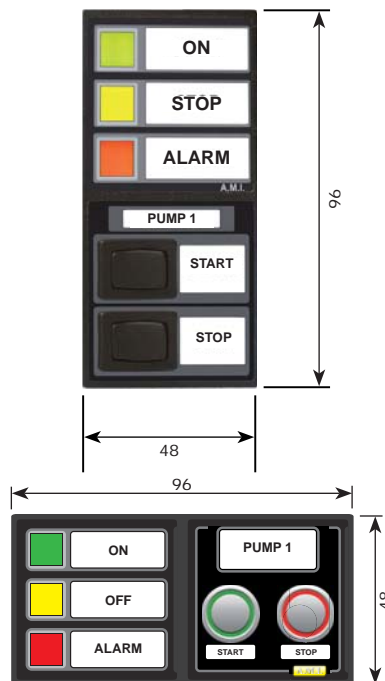
## CUT-OUT :



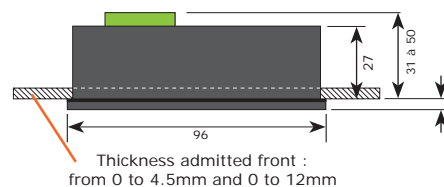
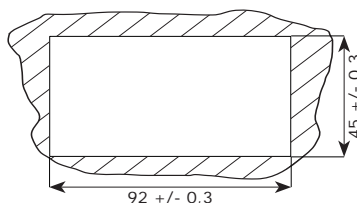
Thickness admitted front : from 0 to 4.5mm



	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



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



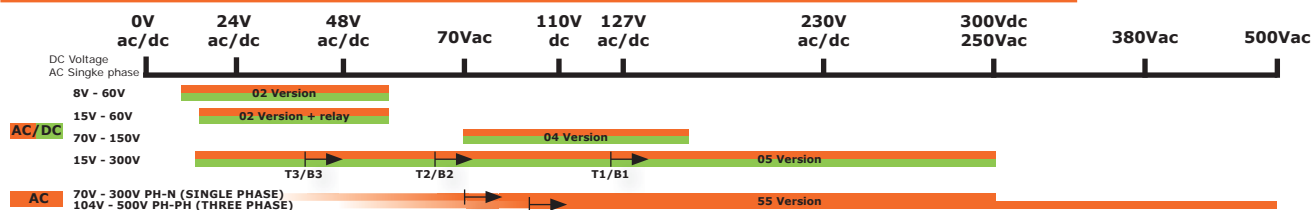
Thickness admitted front : from 0 to 4.5mm and 0 to 12mm

## CHARACTERISTICS :

Box	Polycarbonat Front face, case of polyamide PA66 30gf.
Colour	Black
Leak tightness front face	IP65 (switch IP40/IP54)
Flame resistance	UL94 classe V2
Surface insulation	10 <sup>15</sup> Ohms/cm
Working / storage temperature	-20°C / +60°C / -20°C / +70°C
Working / storage Humidity	90% without condensation / 70%

Weight	45g to 90g depending on version
Push buttons	EN 61058-1 : 6A, 250Vac UL 1054 : 5A, 125-250Vac Mechanical life : without protection 15x10 <sup>6</sup>
Switch	6A-125Vac / 4A-250Vac
Relay contact	1RT - 6A-12Vdc / 0,15A-240Vac For versions PAN45 : 1RT - 2A-30Vdc / 0,25A-250Vac

## THE DIFFERENTS POWER VOLTAGE SUPPLIES OF LUMINOUS PARTS :



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

The 05 version (from 15Vac/dc to 265Vac (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 104V - 500V Ph-Ph	PAN35-55-13 PAN45-55-13*		

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

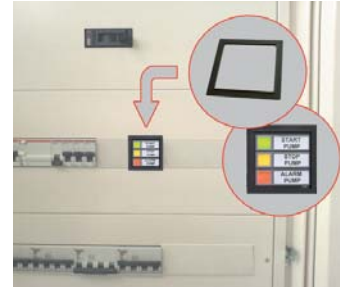
\*only Ph-N

### **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 :**

***Consult our other catalogs***

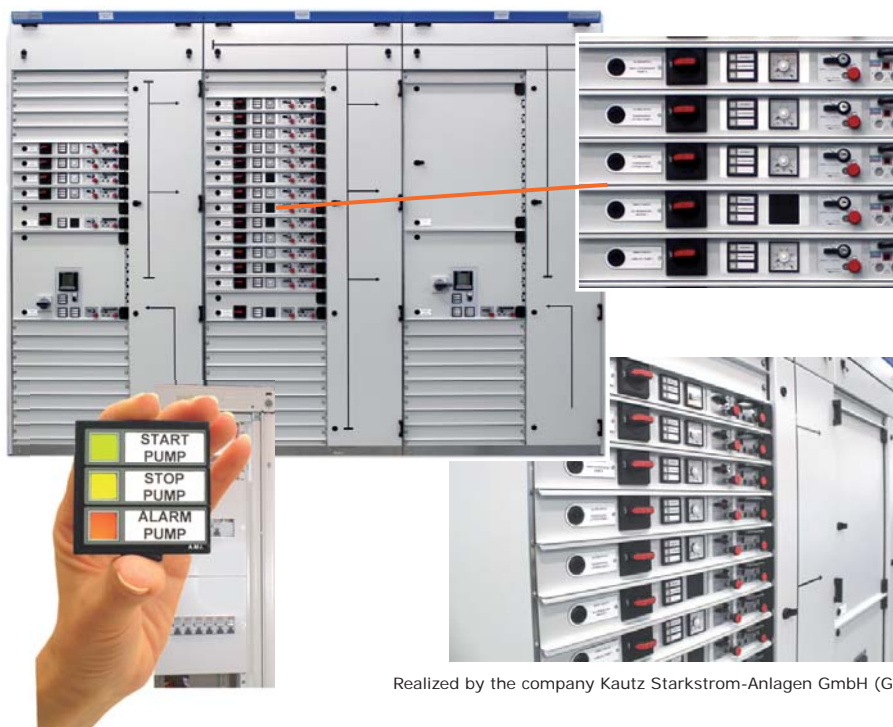


**Available in:**  
**English**  
**Spanish**  
**French**



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

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



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