## - 16 digital inputs (dry contact)

- 1 output relay per input (copy of status)
- 3 output relays of grouping alarms
- choice of alarm group for each inputs
- tricolour LED for alarm group visualization


## - Memorized and fugitive alarms

- LED status indication memorized for each channel
- Double relays output for alarm groups
(memorized and fugitive)
- Acknowledge in front face or by digital input
- "Test lamps" in front face or by digital input
- Passive technology

Increase functional safety

- Large format : $144 \times 144 \mathrm{~mm}$
- Universal power supply : 20.... $265 \mathrm{Vac} / \mathrm{dc}$

The AFL144 is an alarm annunciator, including all necessary functions to signal alarm locally or remotely: Holding alarm state, Acknowledgement, individual output and alarm groups output with or without self holding. DIN panel enclosure, the device can be directly mounted in cabinet, bay or control panel.

## Principe of operation:

- The apparition of an alarm or a default (contact closing) causes :
- The turning ON the LED of the corresponding channel (holding state)
- The activation of channel relay (not memorized, follow the state of input)
- The activation of alarm group relay selected. 3 alarms group available (named: D, N, U) each channel have a memorized relay and a fugitive relay. (the fugitive relay provide a 3 seconds pulse at every new alarm occurrence on an input, allowing indication of a flood of defaults )
For each input, a switch is used to select the alarm group ( $D, N, U$ ).
At the occurrence of a alarm on input, the colour of the LED show the alarm group selected:
channel D: Green ; channel U : Red; channel N : Yellow
A relay output (normally close) monitor the internal voltage and is activated on internal fault or power loss.
Test Lamp:
The device have a built-in test of front LED.
The outputs are not affected by this test procedure
The "Test Lamps" is possible with the front face button or with digital input at the rear of device.


## Acknowledge:

The reset is made by pressing the front panel button "Acknowledge" or by closing the digital input at the rear. (deactivation of relay and LED are turn OFF). A still active input is not affected by the Acknowledge. At this state, the occurrence of an other default carry the lit ON of the channel LED and the activation of relays.
When the defaults disappear, an action on the button "Acknowledge" turn OFF the LED and deactivate relays.

## Setting:

A switch on the rear face allows the choice of the alarm group or the inhibition of each channel.

## Front face description :

-2 rows of 8 tricolour LED, 5 mm diameter, High luminosity.

- 1 « ACKNOLEDGE » button
- 1 «TEST LAMPS » button
- 1 LED «POWER»
- 16 label holders for custom tag of channel


## Rear face description :

- 16 digital inputs for dry contact or polarized with internal 24 V
- 16 relays outputs, potential free changeover contact (copy of input)
- 3 relays outputs, holding state, changeover contact
(one output for each alarm group)
- 3 relays outputs, fugitive changeover contacts
(one output for each alarm group)
- 1 relays outputs «POWER OK», changeover contact
- 1 digital input, «ACQUITTEMENT », dry contact
- 1 digital input, «TEST LAMPES », dry contact
- 16 switches for alarm group selection.


## Features:

- Long life time for LED,
- Plastic DIN panel case, $144 \times 144 \times 91 \mathrm{~mm}$,
- fixation brackets,
- pluggable spring terminal blocks ( $1 \mathrm{~mm}^{2}$ section),
- conformal coating,
- galvanic isolation input/power supply/relays
- Universal power supply : 20.... $265 \mathrm{Vac}-\mathrm{dc}$

Version and order code:
Request a quote
AFL144 : 16 Digital inputs
option: IP55 front face protective cover, surface mounting bracket


## DIGITAL INPUTS

Type:
polarization internal voltage Input impedance inrush current
dry contact
24Vdc typical +/- 10\%
10Kohms
~ 10 mA
RELAYS
isolated changeover contact
switching power
mechanical life time
electric life time
DC switching power : (graph below)

time rising / falling
Pulse duration (fugitive relay)
Recovery time
$5 \mathrm{~ms} / 5 \mathrm{~ms}$ 3sec typical +/-20\% 10 sec . maxi

## POWER SUPPLY

universal : 20....... $265 \mathrm{Vac} / \mathrm{dc}, 8 \mathrm{VA}$

## ENVIRONMENT

| Operating temperature <br> Storage temperature <br> Humidity (non condensed) |  | $\begin{aligned} & -10 \text { to } 60{ }^{\circ} \mathrm{C} \\ & -20 \text { to }+85{ }^{\circ} \mathrm{C} \\ & 85 \% \end{aligned}$ |  |
| :---: | :---: | :---: | :---: |
| Weight (depend of channels number) Protection rating |  | $\begin{aligned} & \sim 500 \mathrm{~g} \\ & \mathrm{IP} 20 \end{aligned}$ |  |
| Dielectric strength inputs / power supply / relays |  | 2500 Vac continuous |  |
| Electromagnetic compatibility 2004/108/CE/ Low Voltage Directive 2006/95/EC |  |  |  |
| Immunit industria EN 6 | y standard for environments 61000-6-2 | Emiss indust EN | ion standard for ial environments 61000-6-4 |
| EN 61000-4-2 ESD | EN 61000-4-8 AC MF | EN 55011 |  |
| EN 61000-4-3 RF | EN 61000-4-9 pulse MF |  |  |
| EN 61000-4-4 EFT | EN 61000-4-11 AC dips | group 1 |  |
| EN 61000-4-5 CWG | EN 61000-4-12 ring wave | class A |  |

WIRING AND OUTLINE DIMENSIONS:



Material: 20/10 stainless steel sheet

