

• 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

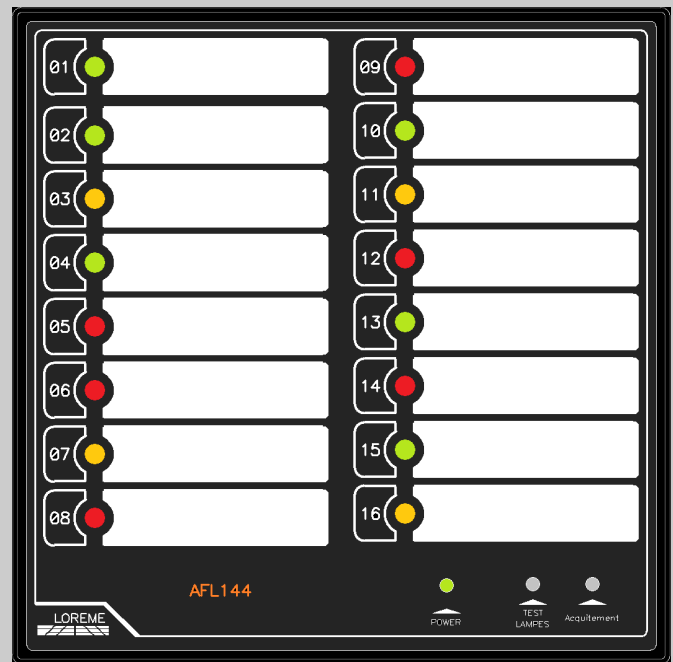
- LED status indication memorized for each channel
- Double relays output for alarm groups (memorized and fugitive)
- Acknowledge in front face or by digital input
- "Test lamps" in front face or by digital input

• Passive technology

Increase functional safety

• Large format : 144 x 144 mm

• Universal power supply : 20....265 Vac/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.

Principle 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, 5mm diameter, High luminosity.
- 1 « ACKNOWLEDGE » button
- 1 « TEST LAMPES » 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 24V
- 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.

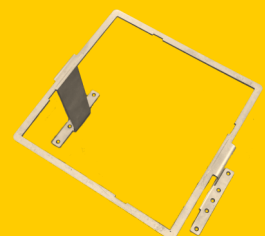
Features :

- Long life time for LED,
- Plastic DIN panel case, 144 x 144 x 91 mm,
- fixation brackets,
- pluggable spring terminal blocks (1 mm² section),
- conformal coating,
- galvanic isolation input/power supply/relays
- Universal power supply : 20....265Vac-dc

Version and order code:

AFL144 : 16 Digital inputs

option: IP55 front face protective cover, surface mounting bracket

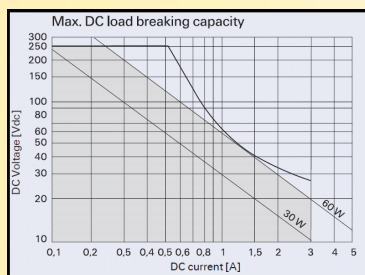


DIGITAL INPUTS

Type : dry contact
 polarization internal voltage 24Vdc typical +/- 10%
 Input impedance 10Kohms
 inrush current ~ 10 mA

RELAYS

isolated changeover contact 2500 Vac
 switching power 3A / 250 Vac
 mechanical life time 15 x 10⁶ operations
 electric life time 3 x 10⁵ @ 230Vac 0.5A
 DC switching power : (graph below)



time rising / falling
 5ms / 5ms

Pulse duration (fugitive relay) 3sec typical +/-20%
 Recovery time 10 sec. maxi

POWER SUPPLY

universal : 20.....265 Vac/dc, 8 VA

ENVIRONMENT

Operating temperature -10 to 60 °C
 Storage temperature -20 to +85 °C
 Humidity (non condensed) 85 %

Weight (depend of channels number) ~ 500 g
 Protection rating IP20

Dielectric strength
 inputs / power supply / relays 2500 Vac continuous

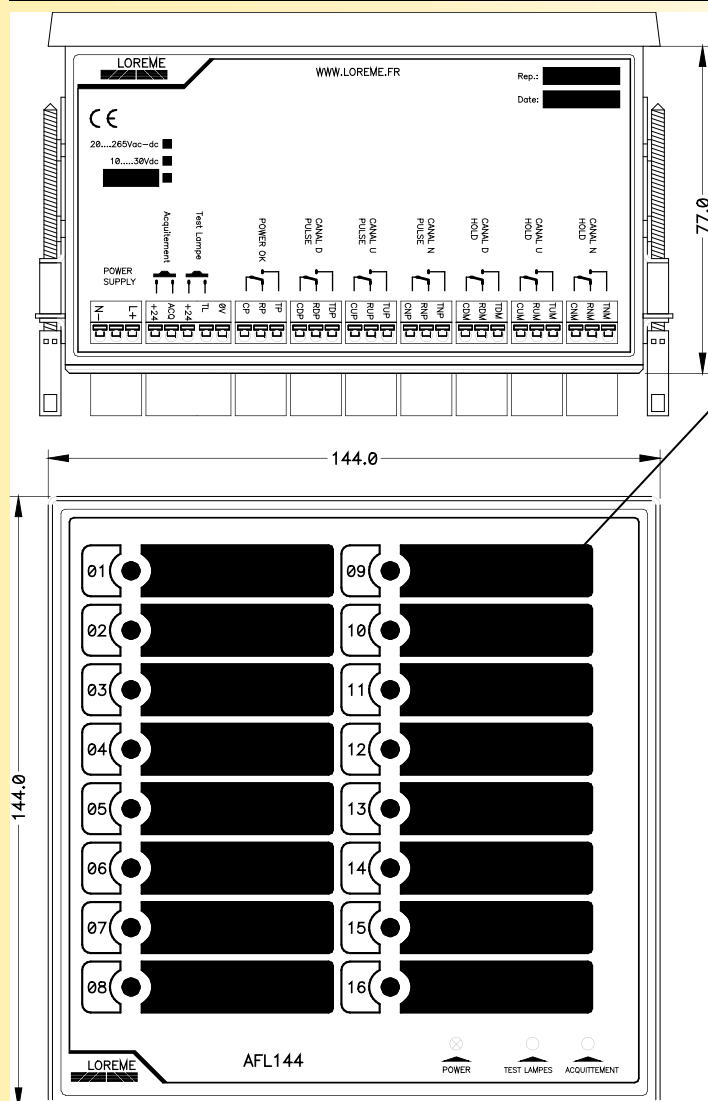
Electromagnetic compatibility 2004/108/CE / Low Voltage Directive 2006/95/EC

Immunity standard for
 industrial environments
EN 61000-6-2

Emission standard for
 industrial environments
EN 61000-6-4

EN 61000-4-2 ESD	EN 61000-4-8 AC MF
EN 61000-4-3 RF	EN 61000-4-9 pulse MF
EN 61000-4-4 EFT	EN 61000-4-11 AC dips
EN 61000-4-5 CWG	EN 61000-4-12 ring wave
EN 61000-4-6 RF	EN 61000-4-29 DC dips

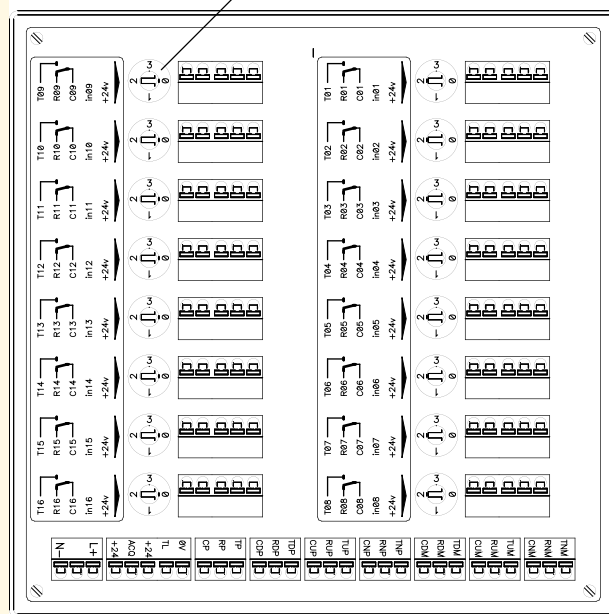
EN 55011
 group 1
 class A

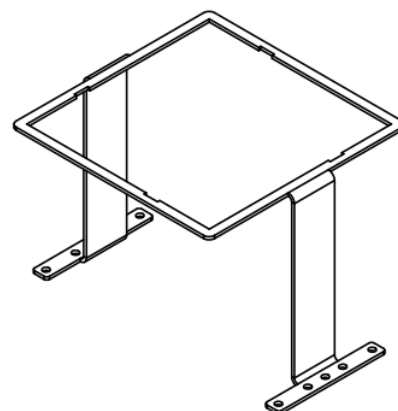
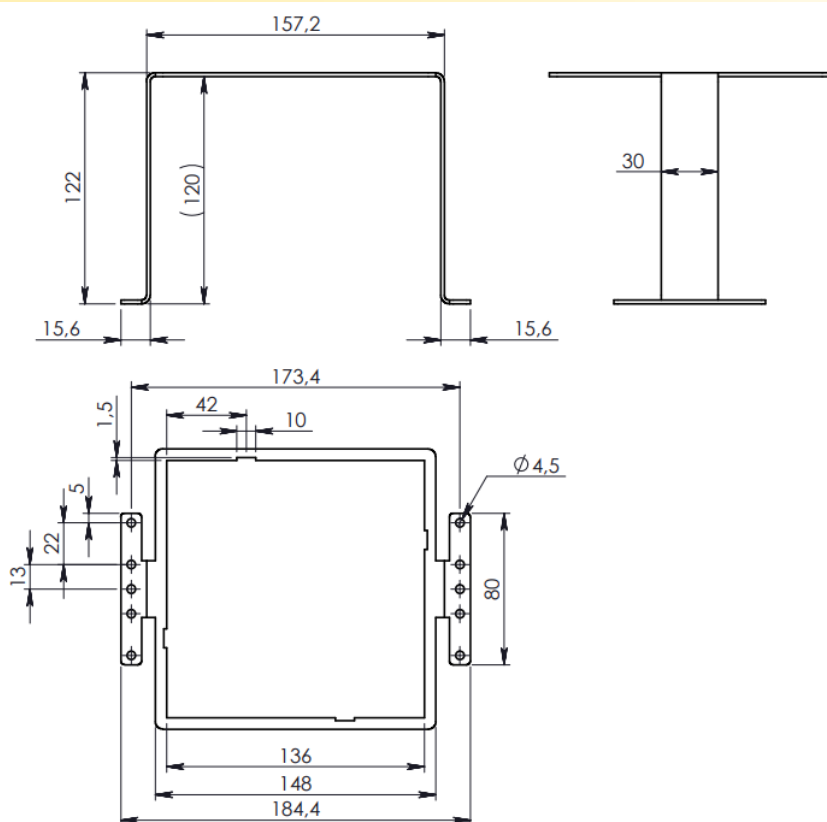
**WIRING AND OUTLINE DIMENSIONS:**

panel cut-off l x h: 137 x 136 mm
 depth : 90 mm

label holder

Selection switch
 for alarm group
 "0" position: no alarm group selected
 "1" position: D alarm group (green led)
 "2" position: U alarm group (red led)
 "3" position: N alarm group (yellow led)





Material: 20/10 stainless steel sheet