Alarm Annunciator, Indicator Panel

AFL100   LOREME

- **AFL100/8:**   *8 digital inputs*
- **AFL100/16:**   *16 digital inputs*
- **AFL100L:**   *low cost version (LED display only)*

- **Option AFL100/R:** *1 feedback relay per digital input*

- **Communication**
    AFL100/CP: *RS485 Profibus-DP link*
    AFL100/CM: *RS485 Modbus link*
    AFL100/CMTCP: *Ethernet Modbus-TCP link*

- **Universal power supply :** *20 .... 265 Vac-dc*

AFL100 is an alarm annunciator, intended to replace the lamps on the frontage of cabinets and witch integrates all the functions necessary for local or remote signaling: memorization, blinking, acknowledge and alarm. Directly embedded, it can be mounted on a rack, on a reading desk or in a cabinet. Different options allows a fully adaptation: number of inputs, of relay outputs and a communication link available with different protocols.

PRINCIPLE OF OPERATION:

- The occurrence of an alarm or a fault causes, after a delay filtering, the blinking of the LED and switching of the "horn" and "synthesis" output relays. This action will be stored, even if the input fault disappears.
Reset will be done progressively, after activation of the acknowledge push buttons (HORN / SYNTHESIS).
At this point, any other fault activates the relay outputs.
When the faults have disappeared, pressing the RESET button turns off the corresponding indicators.

- The avalanche defect allows the differentiation between the first default and the following. (first fault is displayed flashing quickly, following faults are shown flashing slow).
The avalanche starts with the arrival of the fist alarm considered until the acknowledge made by the operator (passage to the fixed light). After the release, a new alarm will be considered as the 1st fault.
The different states of a led:
Rapid Blinking = 1st fault
Slow Blinking = next fault in the avalanche
Fixed light = stored and released channel (acknowledge).
light off = return to normal condition.

- Simple signaling function: <<indicator>> type treatment and display for the selected channels. These channels will return directly in fixed light, without audible alarm and synthesis output. The input memorization is inoperative (input temporization stays active).

- Integrated Buzzer (Option).
It is activated like the horn output relay.

Configuration:

The device can interact via the serial RS232 link with any terminal emulating software, example: Hyperterminal program in Windows.
Free supply of cable on simple request.
(Warning the RS232 link is not insulated from input).

- Temporization of each input from 20ms to 60 sec.
- <<alarm>> or <<simple indication >> selection for each channel.
- Automatic alarm revival after temporization.
- Deactivation, inhibition, put out of order of the channel.
- Deactivation of the front face buttons.....
- Auto test program: (accessible by PC) allows the test of all the inputs/outputs and LEDs of the device.

Front face description:

- 1 or 2 columns of 8 «high luminosity» red LEDs, 5mm diameter.
(light up blinking on default, fixed after acknowledge)
(rapid blinking after the 1st fault)
- 1 push button *«HORN ACKNOWLEDGE»*
- 1 push button *«DEFAULTS ACKNOWLEDGE»*
- 1 push button « *RESET DEFAULTS* »
- 1 push button « *LAMP TEST* »
- 1 LED POWER
- RS232 LINK FOR CONFIGURATION
- Front face marking with personal print (on request).
  Option: other LED color for a best visual distinction of indication type.

Back face description:

- 8 or 16 digital inputs from 5 to 200 Vdc (internal common 0V)
- Direction (NO or NC) / Temporization: configurable
- 1 24 Vdc output (polarization of the digital inputs)
- 1 reverser DEFAULT RELAY output (synthesis)
- 1 reverser HORN RELAY output
- Each relay can be configured in positive or negative safety (NO/NC)
- Dry contact input « *ACKNOWLEDGE* »
- Dry contact input « *RESET DEFAULTS* »
- Dry contact input « *HORN ACKNOWLEDGE* »
- Dry contact input « *LAMPS TEST* »
Option: Output relay as a copy of each logical input, allowing the local signaling while ensuring a report by contact of the local information to a supervisor.

Realization and general characteristics:

- Very long life of the leds (Avoiding the disadvantages of lamps).
- plastic DIN panel case, 96 x 96 x 91mm.
- Fixing by clamp.
- Plug-in connector with screw terminal.
- Conformal coating.
- Galvanic insulation input / power supply / relay.

Version and order code:

Request a quote ✉

- **AFL100/8:** *8 digital inputs.*
- **AFL100/16:** *16 digitals inputs.*
- **Option AFL100/R:** *1 relay output per input*
- **Option AFL100/CP:** *profibus-DP link*
- **Option AFL100/CM:** *modbus link*
- **Option AFL100/CMTCP:** *Modbus-TCP link*

- **AFL100L/8:** *8 indicators*
- **AFL100L/16:** *16 indicators*

DIGITAL INPUTS

level 1	from 4 to 200 Vdc
level 0	< 3Vdc
Input impedance	50 kOhms
Time possible discrimination	
between the 1st and 2nd fault:	5 ms

RELAYS

HORN & SYNTHESIS RELAYS

Inverter contact insulation	1500 Vac
Switching power	1 A / 250 Vac

COPY RELAY OF THE INPUT

NO contact	1500 Vac
Switching power	5 A / 250 Vac

COMMUNICATION (option)

Modbus	1200 to 38400 bds.	RS485
Profibus-DP	9600 to 1.5M bds.	RS485
Modbus TCP	Ethernet (10/100)	RJ45

POWER SUPPLY
(To be define at order)
standard: 20 to 265 Vac/dc, 4 VA
or
Low voltage: 9 to 30 Vdc, 4 W

RECOMMENDED OPERATING CONDITIONS

Operating temperature	-10 à 60 °C
Storage temperature	-20 à 85 °C
Relative humidity	85 % not condensed
Weight	~500 g
Protection	IP20 in standard
	IP65 with protection cap
Dielectric strength	1500 Vrms continuous
	Inputs / Power / Relays / RS485
MTBF (MIL HDBK 217F)	> 1000000 Hrs @ 25°C
Service life	> 130 000 Hrs @ 30°C

Electromagnetic compatibility
Generic standards: **NFEN50081-2 /NFEN50082-2**

CE

EN55011	meet	group 1 / classe A			
EN61000-4-2	no influence	B	EN61000-4-3	< +/- 5 %	A
EN61000-4-4	< +/- 5 %	B	EN61000-4-6	< +/- 5 %	A
EN61000-4-5	< +/- 5 %	B			
EN61000-4-8	no influence	A			
EN61000-4-11	< +/- 5 %	B	DBT	2006/95/CE	

WIRING AND OUTLINE DIMENSIONS:

On account of the constant technologies and standards evolution, LOREME keeps the possibility to modify the specifications of the included products without notice.