## ForesLift Line – elevator intercom communicator

The lift communicator ForesLift Line (hereinafter FLL) is the successor of LiftCall Line communicator. It uses PSTN to communicate, does not support pulse dialling and it's not considered further. The FLL is available in two models: Basic and Comfort.

## **Basic model**

• Built in microphone and speaker, jumpers to connect external speaker/microphone instead.

External speaker connection can be configured for inductive loop used by disabled persons.

Speaker volume and microphone sensitivity is set locally by potentiometers.

- Up to six numbers for emergency calls, dialled in series when call is not picked-up/confirmed.
- One number for Service calls (functionality check in 1-99 days period)
- One number for Failure calls device can report failure status by DTMF codes
- One number for Technical call for example used by technician on premise to end Alarm state

All phone numbers can be up to 28 digits long and can include #,\* and pause.

Calls can be confirmed either automatically when ring tone lost, automatically by line polarity change on callee pick-up (depends on PBX) or by DTMF code entered by callcenter (personnel or SW).

• Two buttons and one Filter input, all NO/NC (normal open/normal closed) types

Filter can be used to block false alarms (for example by open door switch) or as engineer presence/absence switch.

- Alarm Cabin and Filter inputs are available as optocoupler or non-potential ('contact') type input.
- Technical Alarm input is available only as non-potential (contact') type input.

Technical Alarm input is usually used outside the cabin for service reasons and is not blocked by Filter.

Technical Alarm can initiate emergency call, call to machine room (see further) or call to Technical call number.

- All non-potential inputs are equipped by surge protectors.
- Indication is according to EN81-28 by green and yellow LEDs:

Green LED indicates "Connection Established"

Yellow LED indicates "Alarm status" - emergency call started, lit until the problem is solved.

Opposite blinking Green: Yellow 1:1 "Service call failed"

- Additionally, FLL indicates proper connection to PC by blinking Yellow and Green LED together.
- FLL includes two sets (horizontal/vertical) of Yellow&Green LEDs and optocouplers for connection to external indicators. Selection is realized by jumpers.
- Device parameters can be set remotely by phone (DTMF codes) or locally by connecting to PC via special USB adapter. Password is necessary to enter programming mode by phone. Entering programming mode is possible in first 10 seconds during an incoming call only. Jumper 'Service' enables temporary to enter programming mode without password.
- Device is able to report stuck buttons by failure call.
- Device can do microphone and speaker test and report failure.
- Two connectors for connection to above/under cabin communication units LCL-SPK. LCL SPK includes microphone, speaker and button connected to Technical Alarm input and is used solely by service personnel.
- To realize switching connection between public network and machine room (call to machine room is available by Technical Alarm input only) is used additional SwitchBoard device.
- It's possible to connect up to 5 FLL devices in parallel. It's necessary to use Switchboard device to properly distribute incoming calls. The device address is set by a parameter.

## Comfort model

Comfort model has additional hardware and functions:

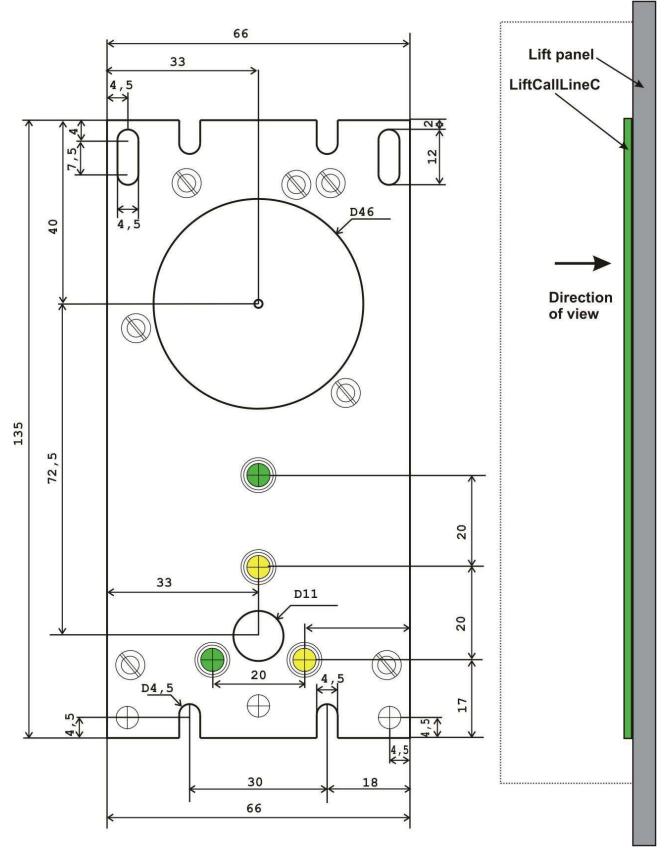
- Digital potentiometers to set speaker volume and microphone sensitivity remotely using parameters.
- Flash memory for saving voice messages and functions for record/playback. There are eight voice messages up to 6 seconds long. The messages are played (optionally) at certain situations:
- #0 <lift address> played together with message #1
- #1 "The location of the elevator is" played after outgoing call established
- #2 "Please wait for connection" played after pickup for outgoing call
- #3 "Call will be terminated in 15 secs" played 15 secs before hangup
- #4 "The call is terminated" played just before hangup

- #5 "Connection was not possible" played in case of unsuccessful call before hangup
- #6 "Programming mode entered" played when entering programming mode
- #7 "Incoming call accepted" played when incoming call picked-up
  - External power (12V to 24V DC) circuitry for indicators power backup. The device is able to
    make two additional types of failure class calls PowerFailure and PowerLost. PowerFailure
    call is initiated when external power is under lower tolerance limit set to indicate that the
    power fluctuations are out of expected tolerances. PowerLost call is initiated when the
    external power is under the minimum level necessary for save indicators operation.
    The Comfort model can be operated also without external power. It then behaves very similar
    way like the Basic model no failed line indication and no PowerFailure/PowerLost calls. Other
    functionalities are maintained.
  - One input with optocoupler and one output also with optocoupler which can be switched ON/OFF.

The Comfort model with external power connected is also able to indicate phone line failure by blinking Yellow/Green in opposite. The green LED makes short blink to differ line failure from failed service call, which uses blinking ratio Yellow:Green 1:1.

## **FLL dimensions**

The device has same dimensions and mount holes as LCL device had. It's 23mm thick.



Be aware! It's mount side view, the user sees the horizontal LEDs flipped!