

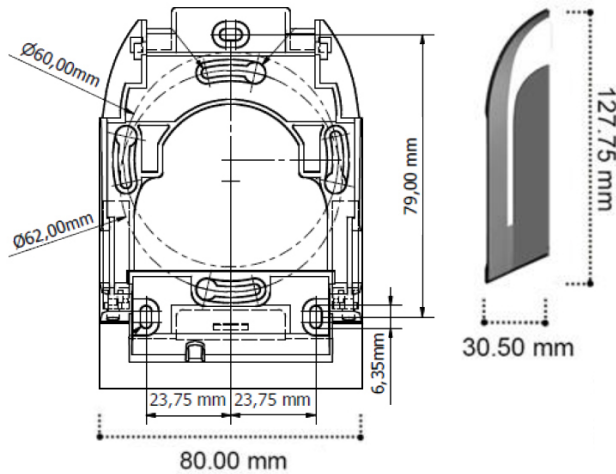


## Dimensions

### EVOLUTION TL

SSCPV1 : LEC05XF422x-NB5

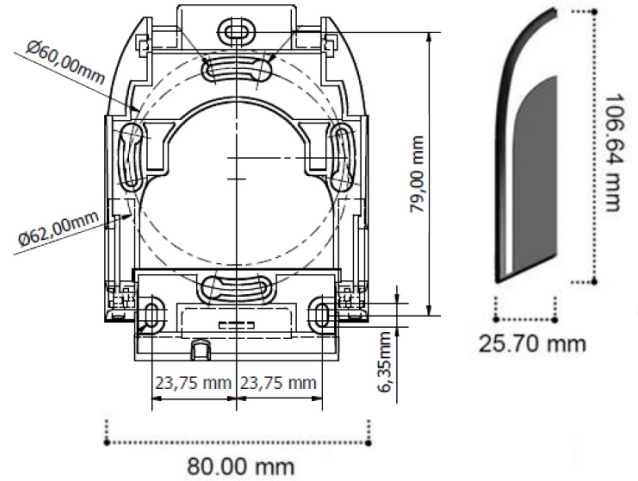
SSCPV2 : LEC05XF522x-NB5



### EVOLUTION ST, KB

SSCPV1 : LEC05XF420x-NB5, LEC05XF424x-NB5

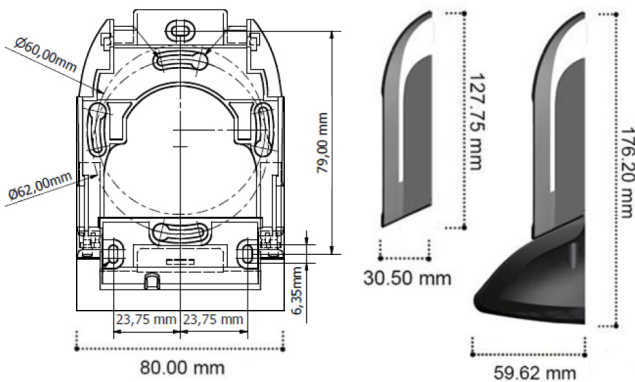
SSCPV2 : LEC05XF520x-NB5, LEC05XF524x-NB5



### EVOLUTION TL BIOMETRIE

SSCPV1 : LEC72ST042x-NB5

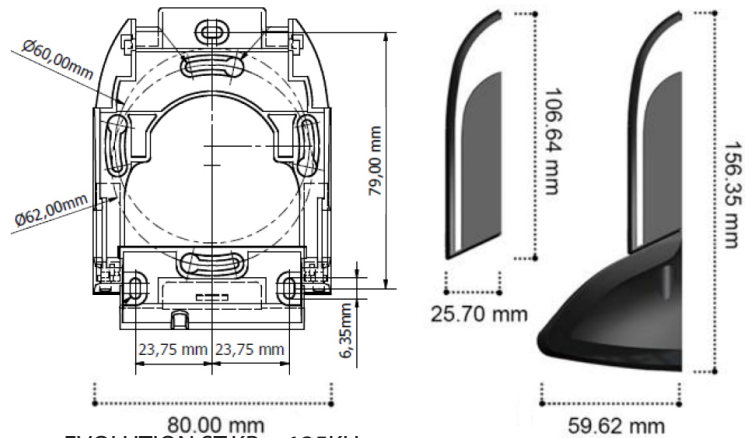
SSCPV2 : LEC72ST052x-NB5



### EVOLUTION ST, KB BIOMETRIE

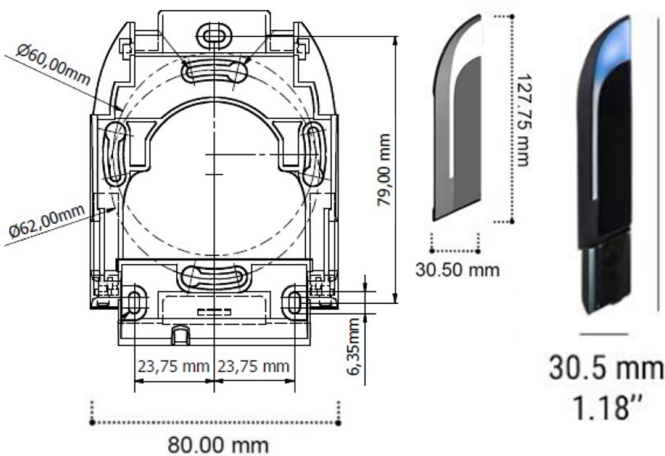
SSCPV1 : LEC72ST040x-NB5, LEC72ST044x-NB5

SSCPV2 : LEC72ST050x-NB5



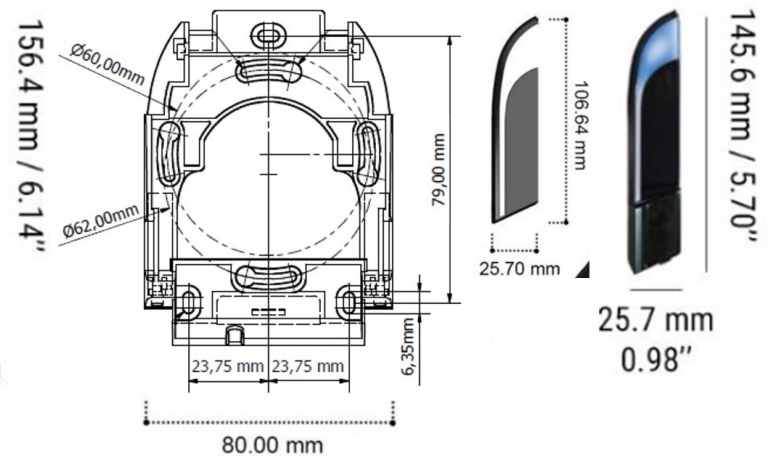
### EVOLUTION TL + 125KHz

Module 125KHz: LEC05TI0300-NCX



### EVOLUTION ST,KB + 125KHz

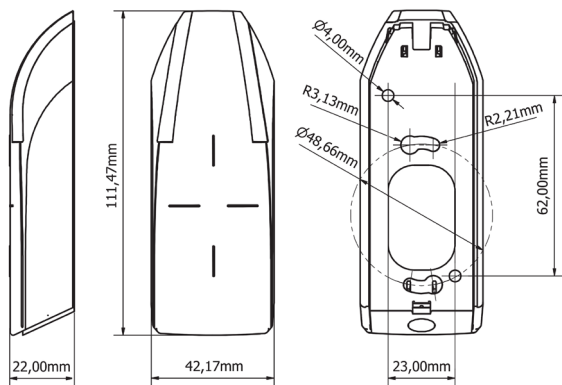
Module 125KHz: LEC05TI0300-NCX



## EVOLUTION XS

SSCPV1 : LEC05XF4000-NL5

SSCPV2 : LEC05XF5000-NL5



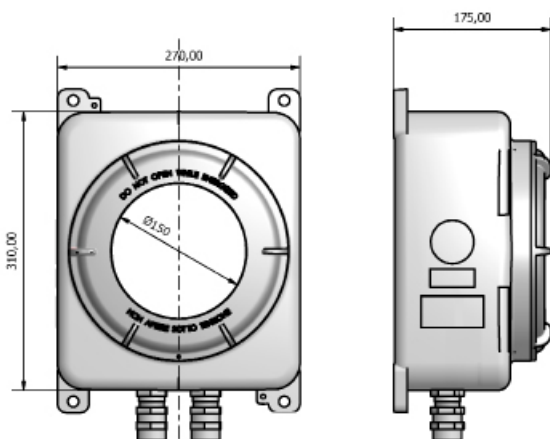
It is **mandatory** to respect all recommendations listed below when installing EVOLUTION XS readers on site.

Evolution XS Specific recommendations
Not compatible with installation on a high traffic access
Not compatible with MLP-UPDATER modules
Not compatible with metal bracket mounting (in default of other options, the use of an offset bracket is mandatory, REF: SOC05XF1XXX-N)

## EVOLUTION ATEX

SSCPV1 : LEC05XF4300-GB5

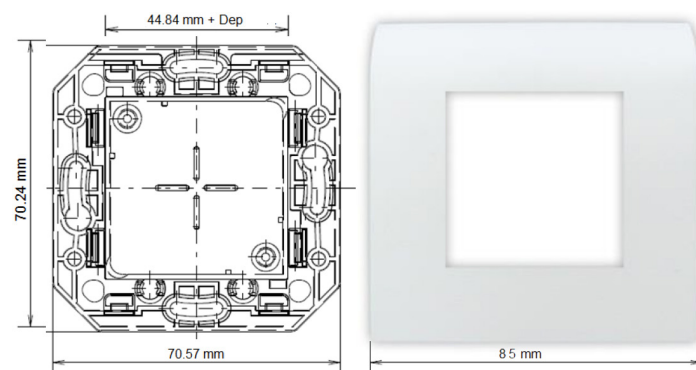
SSCPV2 : LEC05XF5300-GB5



## EVOLUTION IN

SSCPV1 : LEC05XF4100-BB5

SSCPV2 : LEC05XF5100-BB5



## Technical details

Power supply voltage	+12 VDC to +15 VDC : LEC05XF4000-NL5, LEC05XF5000-NL5 +12VDCto+28VDC:LEC05XF410x-BB5, LEC05XF42xx-NB5, LEC05XF510x-BB5, LEC05XF52xx-NB5, LEC72ST050x-NB5, LEC72ST040x-NB5, LEC72ST042x-NB5, LEC72ST044x-NB5, LEC72ST052x-NB5, LEC05TI0300-NCX
Consumption	130 mA to 360 mA (+12 VDC typ.), depending on the reader model.
Wiring distance	SSCPv1 : up to 300 m. (2 pairs of AWG20, SYT1, shielded F/TPU minimum) SSCPv2 : up to 300 m. (2 pairs of AWG20, SYT1, shielded F/TPU minimum)
Distance between readers	Parallel plan : 30 cm, same plan : 40 cm, perpendicular plan : 25 cm.
Reading distance	Reading distance is variable, depending on the type of installation and the card read.
TILLYS NG driver	HEXADECIMAL : 74 ou 87 to support a 125K module. DECIMAL : 83 - Proxil10 for ML ou 84 - Proxil10 reverse for ML Output format can be set up via an applet (to be loaded on the MLP module via the TILLYS NG web interface).
Protocole lecteur	SSCPV1 : EVOLUTION TRANSPARENT SSCPv1 (W33 7AA) SSCPV2 : EVOLUTION TRANSPARENT SSCPv2 (W33 7AD)
minimum versions	The following <b>firmware</b> versions (or higher) are required : Fimware <b>Biometric</b> readers v. 14 min. Firmware <b>Bluetooth and TL</b> readers v. 15 min. Firmware <b>125KHz</b> readers v Z8 min. TILLYS NG firmware v. 3.2.0 min. MLDSx/MLPSx firmware v. 2.2.0 min. / MLDSx/MLPSx firmware v. 1.12.0 min.

## Wiring

### Evolution XS

READER	MLP1/MLP2
Brown (0 VDC)	GND
Red (+VCC)	+V
Blue (L+)	A
Yellow (L-)	B

### Evolution ST, KB, TL

READER	MLP1/MLP2
1 (0 VDC)	GND
2 (+VCC)	+V
6 (L+)	A
7 (L-)	B

### Evolution ATEX, IN

READER	MLP1/MLP2
1 (0 VDC)	GND
2 (+VCC)	+V
4 (L+)	A
5 (L-)	B

**Attention:** In the case of 2 EVOLUTION QR code or 2 EVOLUTION BIOMETRIC readers wired on a single MLP2 module (one reader on each head), please follow the specific rules described in the dedicated section at the end of the datasheet.

## Choosing the reader protocol

The reader protocol used for communication can be selected from the MICRO-SESAME configuration interface or from the TILLYS NG web interface.

## Tamper management

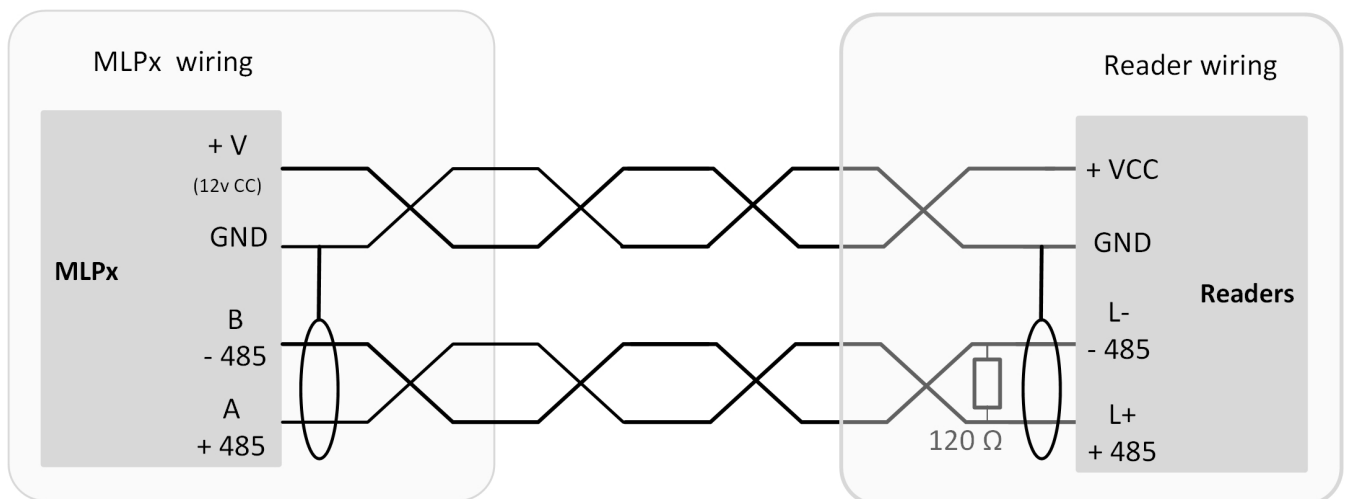
Tamper management is available from firmware 1.9 of the MLPx module.

Important : Power the reader once it is placed in its final position.

## Recommendations : connecting equipments outside the secure areas

It is strongly recommended to protect the reader power supply with a dedicated fuse (Example : 500 mA fuse). By doing so, intrusion attempts by short circuiting readers placed outside the secure areas are prevented.

## End of line resistance



## Wiring rules

The list below reminds some of the main wiring rules to be followed :

- The wiring cable must be AWG20 (8/10e), SYT1, shielded F/UTP pairs minimum.
- Cable shield must be connected to the power supply GND on the reader side AND on the MLPx module side.
- A 120  $\Omega$  end of line resistance must be used on the reader side.
- BUS RS485 A and B signals must be connected on the same twisted pairs.
- Power supply +V and GND must be connected on the same twisted pairs.
- Any wires that are not used must be connected to GND on each cable ends.
- Any cable conduct must be connected to GND on each cable ends.
- The power supply GND must be connected to the GROUND.

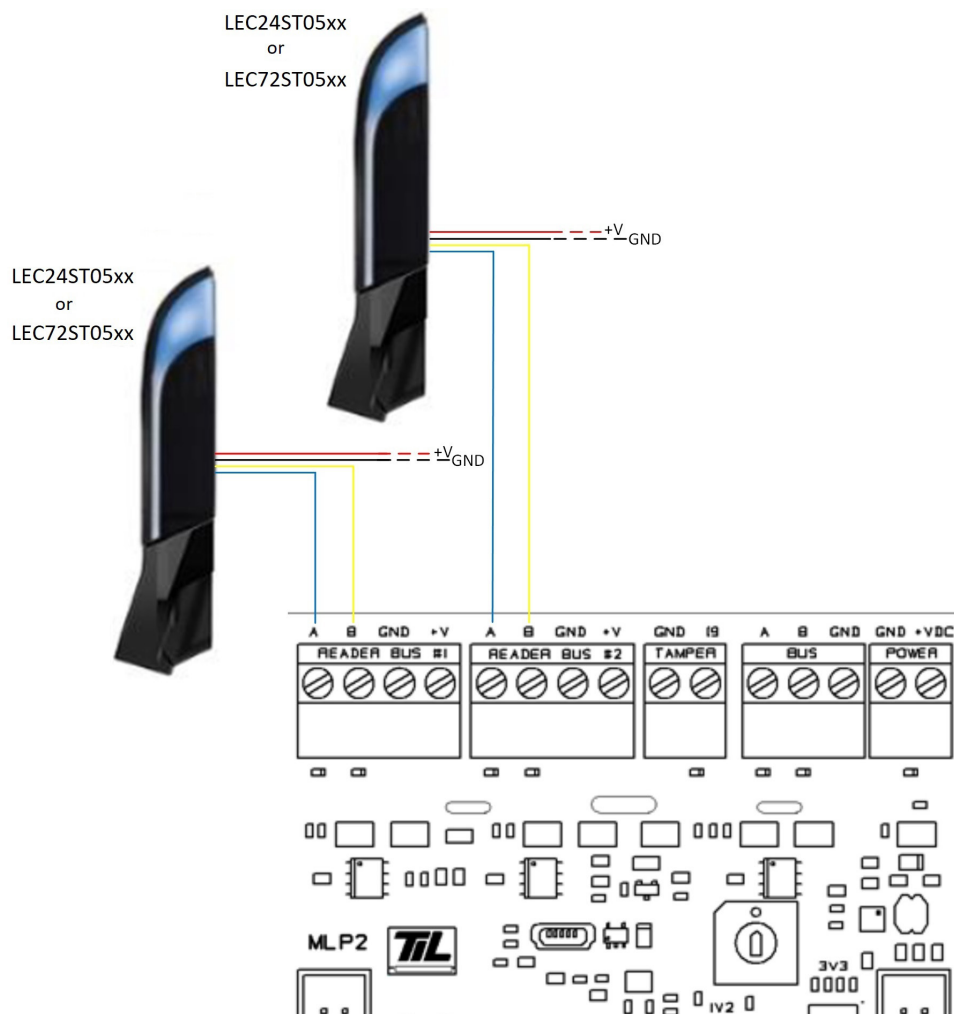
## Important

By default, MCEZ-3R is not needed on the MLP1 and MLP2 modules.

Only the first versions of MLP2 (with reference 12-011-F) must be equipped with a MCEZ-3R.

## Specific wiring configuration : EVOLUTION QR code or BIOMETRIC readers on MLP2 module

In case 2 EVOLUTION QR code or 2 EVOLUTION BIOMETRIC readers are connected to a single MLP2 module (one on each head), It is necessary to power at least one of the readers independantly from the module.



## Recommendation for all reader models : limit of internal buzzer usage

To avoid any malfunction of the reader, it is advisable not to continuously use its internal buzzer.

If the buzzer needs to sound throughout the duration of an alarm, for example (a function defined during programming) :

- Do not program a continuous buzzer function
- Program an intermittent sound, for example a half-second beep generated intermittently, throughout the duration of the alarm.