



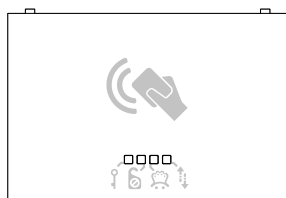
Product manual

Access Control  
Transponder reader  
Transponder holder  
Transponder reader with POS function  
Transponder programming device

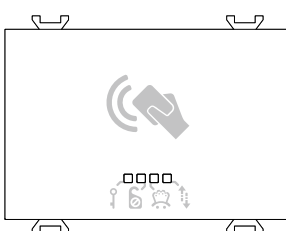
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## 1 Technical features

### 1.1 Transponder reader



**LT/U 1.1.MC**  
**LT/U 1.1.MS**



**LT/U 1.1.CH**



**LT/U 1.1**

The “transponder reader” is a three-module flush-mounting device designed to realise access control systems with a communication support based on KNX bus. It also works without bus support: in this case it is programmed via special transponder cards.

It is equipped with two relays that can be programmed independently to receive switching commands from the device itself (transponder card validation) or from KNX-standard devices. Moreover, three inputs for voltage free contacts are available, which can be programmed freely.

The 4 front LEDs allow you to monitor device operation.

The transponder reader requires an external power supply enabling its operation even without bus.

It is available for three ABB wiring accessories: Mylos (white or black colour) Elos, Chiara.

The following functions are available for each of the two relay outputs:

- Normal switching
- Staircase lighting function with programmable delay
- ON/OFF timers with programmable delay

Relays can be controlled via bus and/or associated with the events for the transponder TAGs validations (Guest and/or Service personnel TAG)

Inputs can be programmed with the following functions:

- ON/OFF Sensor
- Shutter sensor (two channels required)

The 4 front LEDs (two bi-colour) are associated with the operation modes of the device and can be programmed as you wish.

#### 1.1.1 Technical data

<b>Power supply</b>	via Bus
<b>External supply</b>	10 ...32 VDC, 12 ... 24V AC,
<b>BUS cable</b>	ED 063 3 (100m) or ED 064 1 (500m)
<b>Absorption</b>	Max 10mA from the BUS. External supply to be sized for 3-W peak
<b>Number of outputs</b>	2 bistable relays, 8A at 250 V AC
<b>Number of inputs</b>	3 on the rear side, voltage-free (max. connection length 10m)
<b>Use environment</b>	Class 3k5 (inside, dry)
<b>Operating temperature</b>	- 5 ... + 50 °C
<b>Relative humidity</b>	max 93% (non condensating)
<b>Connection to bus</b>	standard bus connector
<b>Electric connections</b>	screw terminal max 0.5 Nm
<b>Protection degree</b>	IP20
<b>Dimensions</b>	66 x 44 x 46 mm (Mylos and Chiara) 74 x 44 x 56 mm (Elos)
<b>Weight</b>	approx. 100 g

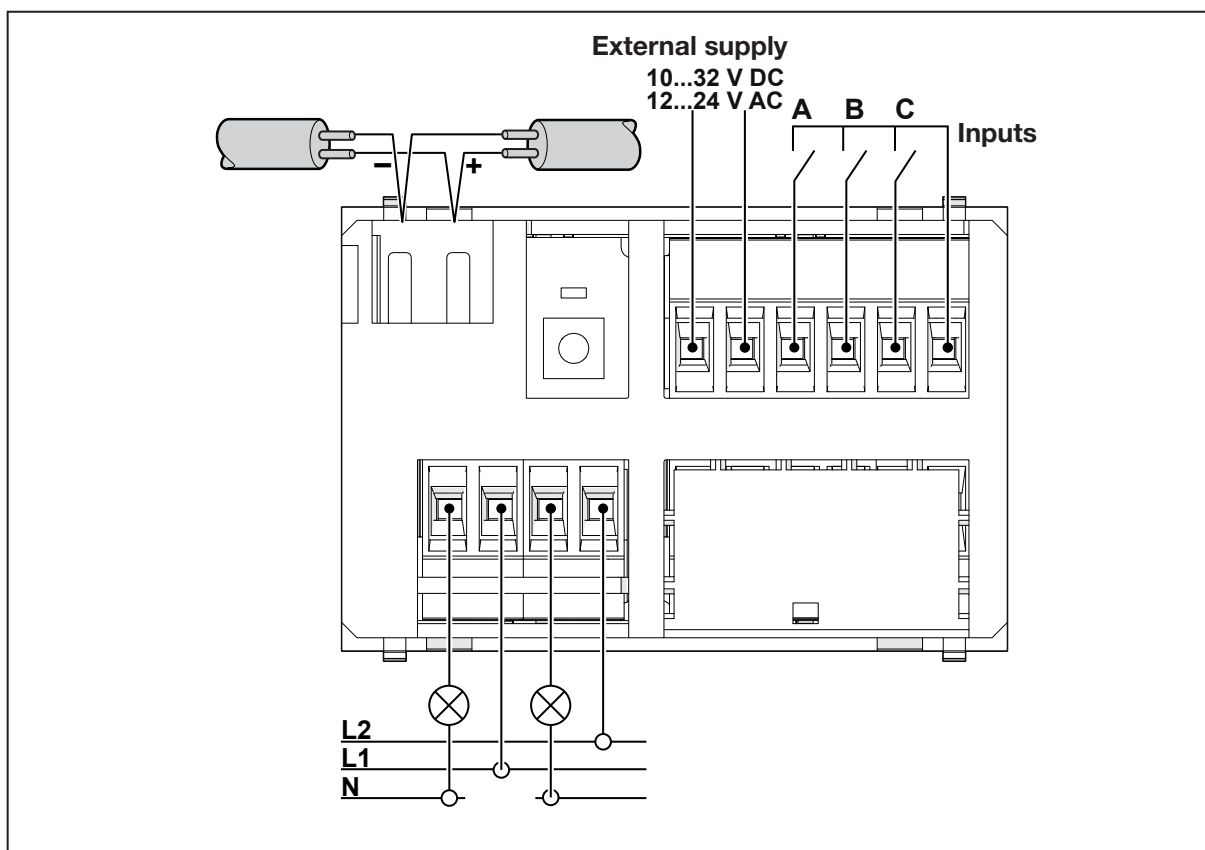
<b>Reference standards</b>	EN50090-2-2, EN 50491
<b>Case, colour</b>	Plastic container, white or black
<b>CE marking</b>	Acc. to EMC and Low-Voltage Directives

Device type	Application program	Maximum number of communication objects	Maximum number of group addresses	Maximum number of associations
LT/U 1.1				
LT/U 1.1.CH	Access control transponder	17	19	19
LT/U 1.1.MC	reader			
LT/U 1.1.MS				

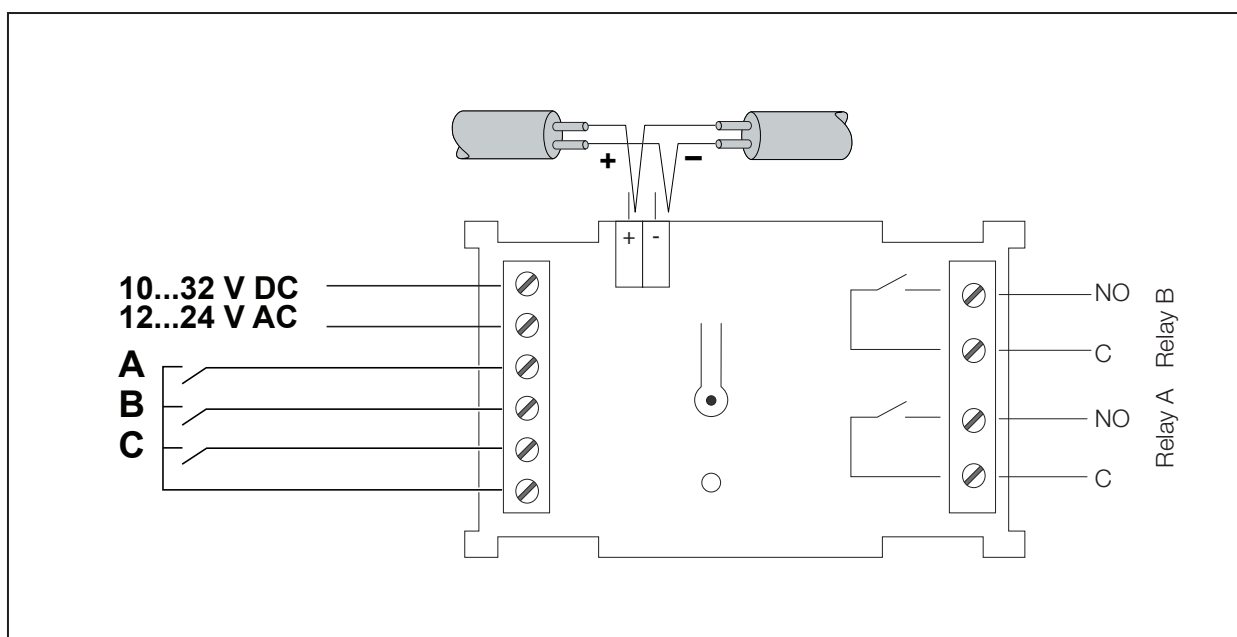
### 1.1.2 Access Control function

<b>TAG validation scheme</b>	White list - local scheme (communication bus not required), Black list - local scheme (communication bus not required) Central scheme (White or Black list) - Requires Konnex Bus
<b>Event notification upon system supervision</b>	Only possible if the communication bus is available. Available modes: <ul style="list-style-type: none"> <li>- Spontaneous Emission</li> <li>- Spontaneous Emission with receipt confirmation request upon supervision (handshake)</li> <li>- Polling</li> </ul>
<b>Notifications and validation events characteristics</b>	Information about: Event time stamp (HH,MM,SS), TAG ID, event outcome (access granted or denied)
<b>Buffer memory for events</b>	The device can store up to 256 events to deal with the communication bus unavailability due to heavy traffic.
<b>Timeslots</b>	On a weekly basis (Sunday-Saturday) A specific access profile can be associated with each different 256 user groups. Each profile can be a combination of 12 simple timeslots (positive and/or negative).
<b>Number of TAGs that can be recognised by an individual reader</b>	16 Million - if in local White list Infinite - if in Local Black list or any central mode
<b>Type of TAGs controlled</b>	Guest TAG (can be associated with relay A or B or both) Service personnel TAG (can be associated with relay A or B or both) Master TAG
<b>TAG data structure</b>	Progressive number (1- 65.535) TAG type (guest, service personnel, Master) Expiration date (YY,MM,DD, HH,MM) System code (1- 16 million) Guest group (256 types of groups available) User rate profile: 1-4LT

## 1.1.3 Connection diagram

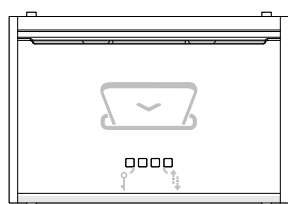


LT/U 1.1.MC  
LT/U 1.1.MS  
LT/U 1.1.CH

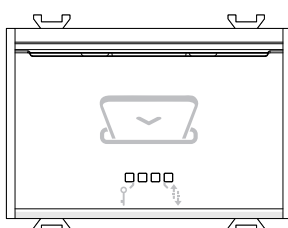


LT/U 1.1

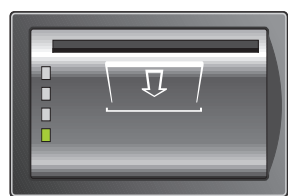
## 1.2 Transponder holder



**PTI/U 1.1.MC**  
**PTI/U 1.1.MS**



**PTI/U 1.1.CH**



**PTI/U 1.1**

The “transponder holder” is a three-module flush-mounting device designed to carry out presence control functions in the room with a communication support based on KNX bus.

It also works without bus support: in this case it is programmed via special transponder cards.

It is equipped with two relays that can be programmed independently to receive switching commands from the device itself (room load activation upon insertion of the transponder card) or from KNX-standard devices. Moreover, three inputs for voltage free contacts are available, which can be programmed freely.

The 4 front LEDs allow you to monitor device operation.

The transponder holder requires an external power supply enabling its operation even without bus.

It is available for three ABB wiring accessories: Mylos (white or black colour) Elos, Chiara.

The following functions are available for each of the two relay outputs:

- Normal switching
- Staircase lighting function with programmable delay
- ON/OFF timers with programmable delay

Relays can be controlled via bus and/or associated with the events for the transponder TAGs validations (Guest and/or Service personnel TAG).

Inputs can be programmed with the following functions:

- ON/OFF Sensor
- Shutter sensor (two channels required)

The 4 front LEDs (two bi-colour) are associated with the operation modes of the device and can be programmed as you wish.

### 1.2.1 Technical data

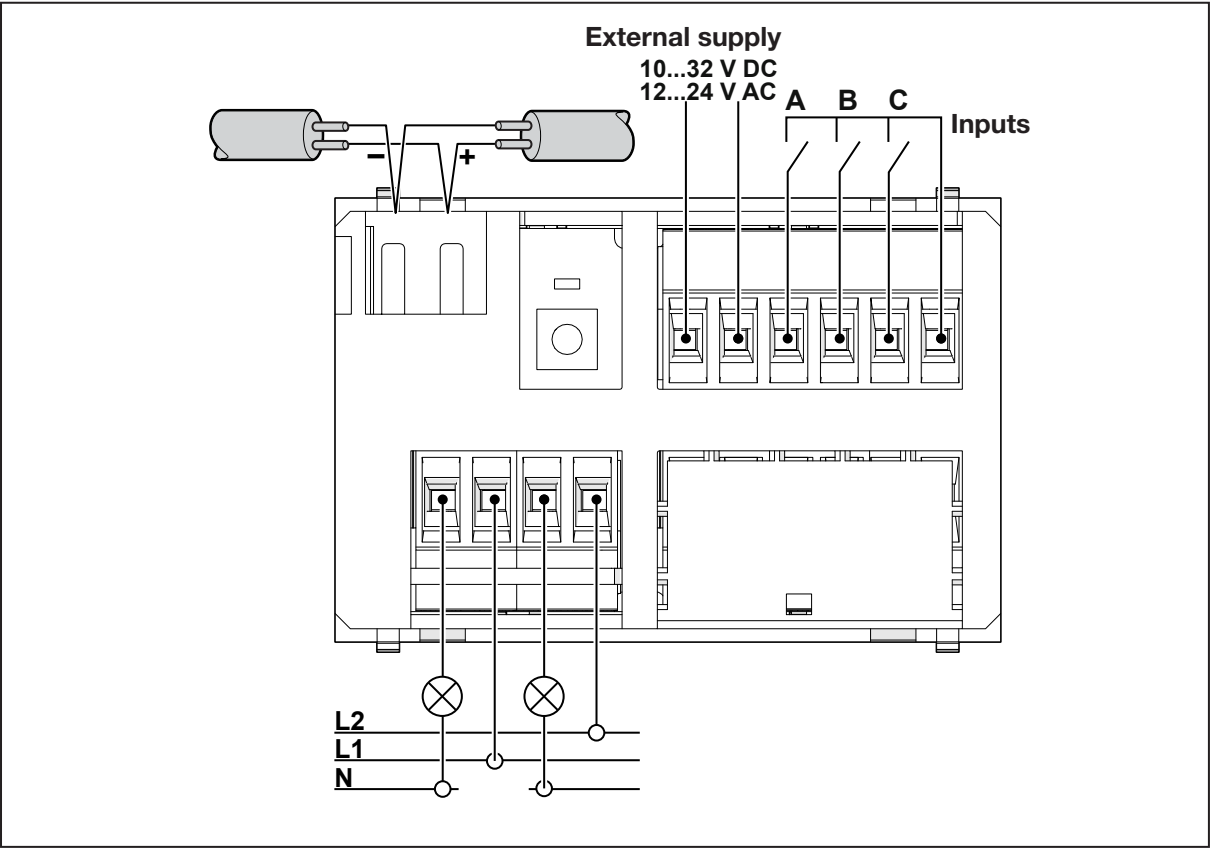
<b>Power supply</b>	via Bus
<b>External supply</b>	10 ...32 VDC, 12 ... 24V AC,
<b>BUS cable</b>	ED 063 3 (100m) or ED 064 1 (500m)
<b>Absorption</b>	External supply: to be sized for 3-W peak From the Bus: 10 mA max.
<b>Number of outputs</b>	2 bistable relays, 8A at 250 V AC
<b>Number of inputs</b>	3 Voltage free inputs NOT optically isolated (max. connection length 10m)
<b>Use environment</b>	Class 3k5 (Indoor use)
<b>Operating temperature</b>	- 5 ... + 50 °C
<b>Relative humidity</b>	max 93% RH
<b>Connection to bus</b>	standard bus connector
<b>Electric connections</b>	screw terminal max 0.5 Nm
<b>Protection degree</b>	IP20
<b>Dimensions</b>	66 x 44 x 46 mm (Mylos and Chiara) 74 x 44 x 56 mm (Elos)
<b>Weight</b>	approx. 100 g
<b>Reference standards</b>	EN50090-2-2, EN 50491
<b>Case, colour</b>	Plastic container, white or black
<b>CE marking</b>	Acc. to EMC and Low-Voltage Directives

Device type	Application program	Maximum number of communication objects	Maximum number of group addresses	Maximum number of associations
PTI/U 1.1				
PTI/U 1.1.CH	Access control transponder	17	19	19
PTI/U 1.1.MC	holder			
PTI/U 1.1.MS				

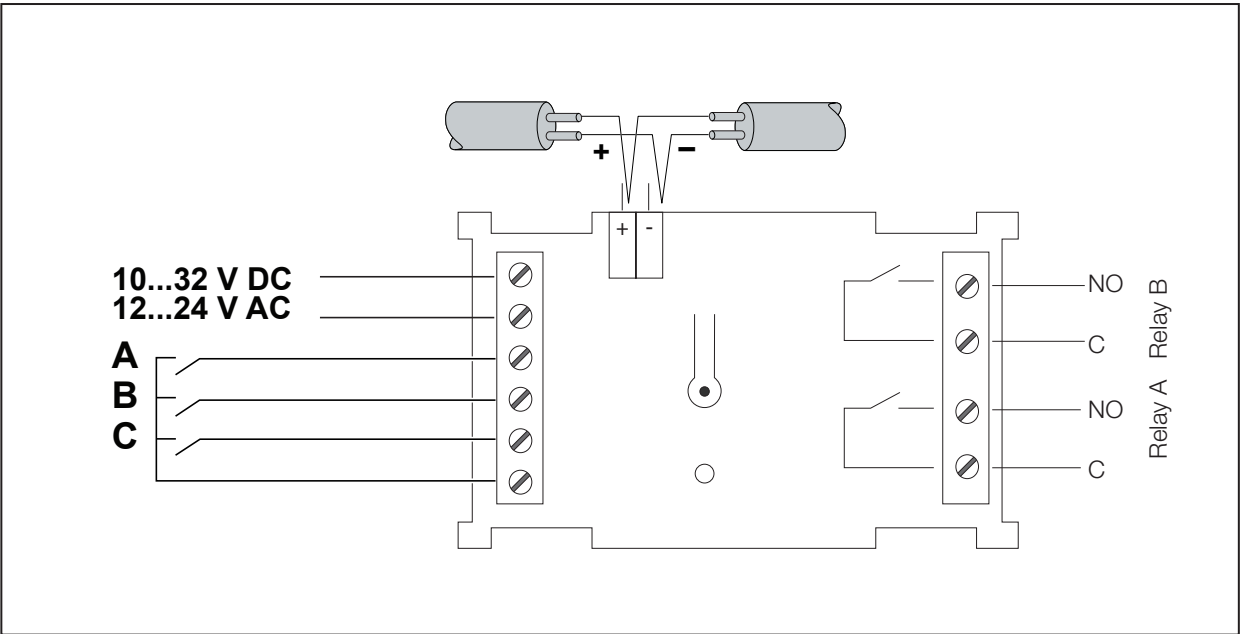
### 1.2.2 Access Control function

<b>TAG validation scheme</b>	Black list and “No TAG” – Local scheme (communication bus not required)
<b>Event notification upon system supervision</b>	Available modes: - Spontaneous emission
<b>Notification characteristics Insertion/removal events</b>	Information about: Event time stamp (HH,MM,SS), TAG ID, event outcome (insertion/removal), room status (Mini-bar, maintenance request, room accessibility, room clean/dirty)
<b>Buffer memory for events</b>	The device can store up to 256 events to deal with the communication bus unavailability due to heavy traffic.
<b>Number of TAGs that can recognised by an individual reader.</b>	16 Million - if in local White list Infinite - if in Local Black list or any central mode
<b>Type of TAGs controlled</b>	Guest TAG (can be associated with relay A or B or both) Service personnel TAG (can be associated with relay A or B or both) Master TAG
<b>TAG data structure</b>	Progressive number (1- 65.535) TAG type (guest, service personnel, Master) Expiration date (YY,MM,DD, HH,MM) System code (1- 16 million) Guest group (256 types of groups available)

1.2.3 Connection diagram



PTI/U 1.1.MC  
PTI/U 1.1.MS  
PTI/U 1.1.CH



PTI/U 1.1

### 1.3 Transponder reader with POS function



**LTP/U 1.1.MC**  
**LTP/U 1.1.MS**



**LTP/U 1.1.CH**



**LTP/U 1.1**

The transponder reader with POS function is a three-module flush-mounting device designed to allow the access from a place (car park, sauna, gym...) upon the payment of a fee.

It is based on the KNX bus communication support, but it can also work without it: in this case, its programming is achieved through special transponder TAGs.

It is equipped with two relays that can be programmed independently to receive switching commands from the device itself (transponder card validation) or from KNX-standard devices.

Moreover, three inputs for voltage free contacts are available, which can be programmed freely.

The 4 front LEDs allow you to monitor device operation.

The transponder reader requires an external power supply enabling its operation even without bus.

It is available for three ABB wiring accessories: Mylos (white or black colour) Elos, Chiara.

The following functions are available for each of the two relay outputs:

- Normal switching
- Staircase lighting function with programmable delay
- ON/OFF timers with programmable delay

Relays can be controlled via bus and/or associated with the events for the transponder TAGs validations (Guest and/or Service personnel TAG)

Inputs can be programmed with the following functions:

- ON/OFF Sensor
- Shutter sensor (two channels required)

The 4 front LEDs (two bi-colour) are associated with the operation modes of the device and can be programmed as you wish.

#### 1.3.1 Technical data

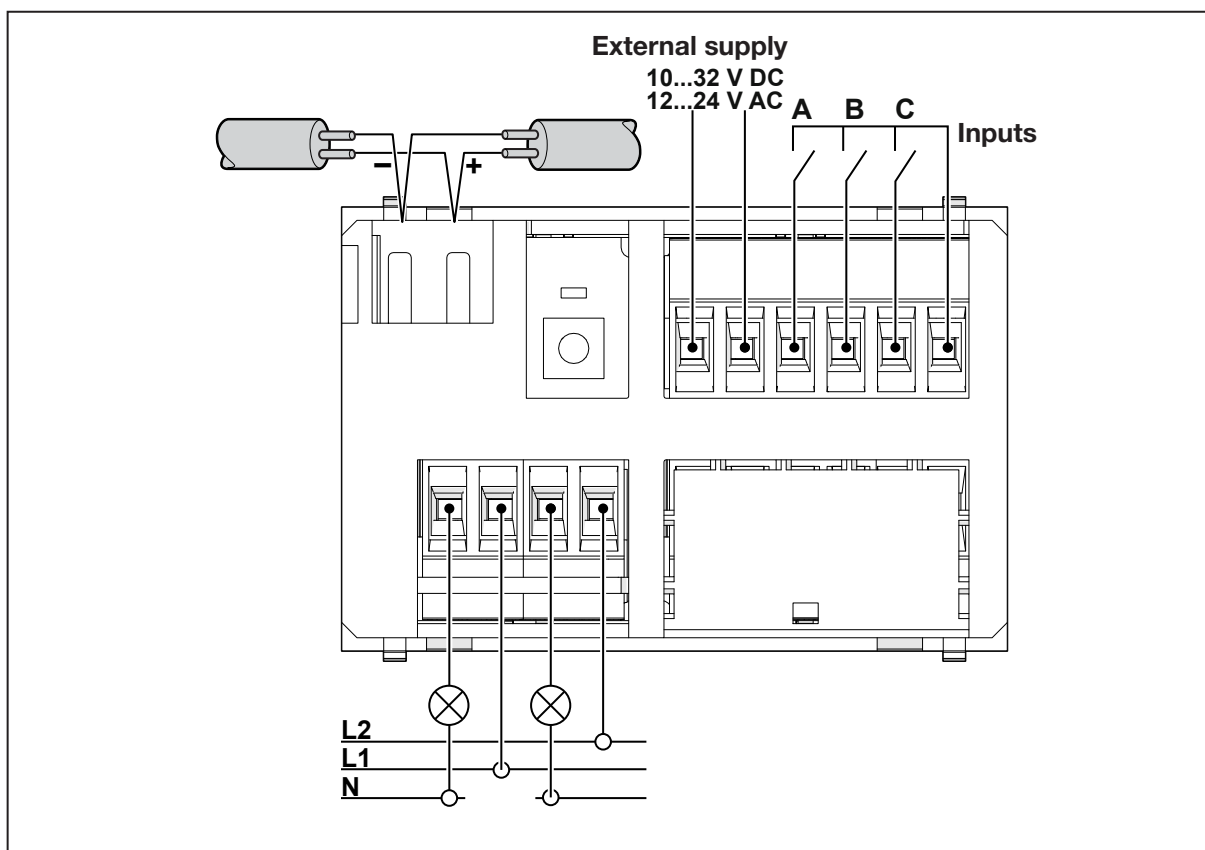
<b>Power supply</b>	via Bus
<b>External supply</b>	10 ...32 VDC, 12 ... 24V AC
<b>BUS cable</b>	ED 063 3 (100m) or ED 064 1 (500m)
<b>Absorption</b>	External supply: to be sized for 3-W peak From the Bus: 10 mA max.
<b>Number of outputs</b>	2 bistable relays, 8A at 250 V AC
<b>Number of inputs</b>	3 Voltage free inputs NOT optically isolated (max. connection length 10m)
<b>Use environment</b>	Class 3k5 (Indoor use)
<b>Operating temperature</b>	- 5 ... + 50 °C
<b>Relative humidity</b>	max 93% RH
<b>Connection to bus</b>	standard bus connector
<b>Electric connections</b>	screw terminal max 0.5 Nm
<b>Protection degree</b>	IP20
<b>Dimensions</b>	66 x 44 x 46 mm (Mylos and Chiara) 74 x 44 x 56 mm (Elos)
<b>Weight</b>	approx. 100 g
<b>Reference standards</b>	EN50090-2-2, EN 50491
<b>Case, colour</b>	Plastic container, white or black
<b>CE marking</b>	Acc. to EMC and Low-Voltage Directives

Device type	Application program	Maximum number of communication objects	Maximum number of group addresses	Maximum number of associations
LTP/U 1.1				
LTP/U 1.1.CH	Transponder reader with POS	17	19	19
LTP/U 1.1.MC	function			
LTP/U 1.1.MS				

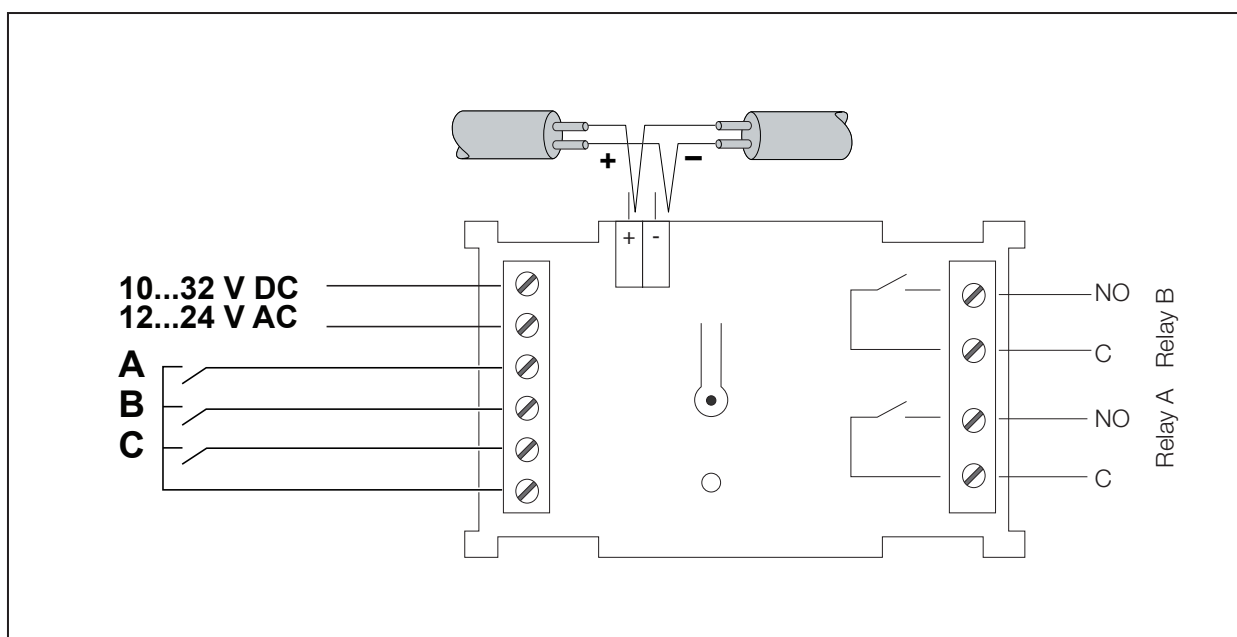
### 1.3.2 Access Control function

<b>TAG validation scheme</b>	White List – Local scheme (communication bus not required) Black List – Local scheme (communication bus not required)
<b>Event notification upon system supervision.</b>	Only possible if the communication bus is available. Available modes: <ul style="list-style-type: none"> <li>- Spontaneous Emission</li> <li>- Spontaneous Emission with receipt confirmation request upon supervision (handshake)</li> <li>- Polling</li> </ul>
<b>Validation event notification characteristics</b>	Information about: Event time stamp (HH,MM,SS), TAG ID, event outcome (access granted or denied)
<b>Buffer memory for events</b>	The device can store up to 256 events to deal with the communication bus unavailability due to heavy traffic.
<b>Timeslots</b>	On a weekly basis (Sunday-Saturday) A specific access profile can be associated with each different 256 user groups. Each profile can be a combination of 12 simple timeslots (positive and/or negative).
<b>POS function</b>	Two modes are available: <ul style="list-style-type: none"> <li>- Electronic wallet (pre-paid card)</li> <li>- Credit card (payment upon check-out)</li> </ul> Four different rates can be applied to 4 guest types.
<b>Number of TAGs that can be recognised by an individual reader</b>	16 Million - if in local White list Infinite - if in Local Black list or any central mode
<b>Type of TAGs controlled</b>	Guest TAG (can be associated with relay A or B or both) Service personnel TAG (can be associated with relay A or B or both) Master TAG
<b>TAG data structure</b>	Progressive number (1- 65.535) TAG type (guest, service personnel, Master) Expiration date (YY,MM,DD, HH,MM) System code (1- 16 million) Guest group (256 types of groups available) Credit, Euro cent. Range: 0 – 167772.15 User rate profile: 1 -4

## 1.3.3 Connection diagram

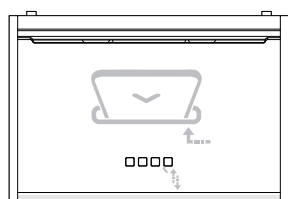


LTP/U 1.1.MC  
LTP/U 1.1.MS  
LTP/U 1.1.CH

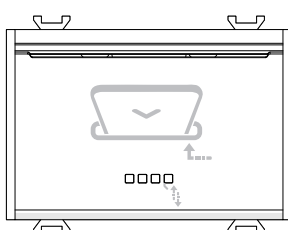


LTP/U 1.1

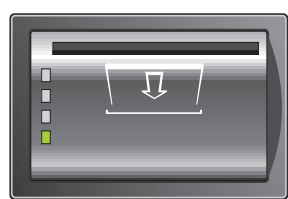
## 1.4 Transponder programming device



**PRT/U 1.1.MC**  
**PRT/U 1.1.MS**



**PRT/U 1.1.CH**



**PRT/U 1.1**

The “transponder programming device” is designed for the programming of transponder keys.

The transponder programming functions are fully accessible only within a KNX bus system, and in combination with the MiniMAC Supervision program.

It is also equipped with two relays that can be programmed independently to receive switching commands from the device itself or from KNX-standard devices.

Moreover, three inputs for voltage free contacts are available, which can be programmed freely.

The 4 front LEDs allow you to monitor device operation.

The transponder programming device needs an external supply.

It is available for three ABB wiring accessories: Mylos (white or black colour) Elos, Chiara.

The following functions are available for each of the two relay outputs:

- Normal switching
- Staircase lighting function with programmable delay
- ON/OFF timers with programmable delay

Relays can be controlled via bus and/or associated with the events for the transponder TAGs validations (Guest and/or Service personnel TAG)

Inputs can be programmed with the following functions:

- ON/OFF Sensor
- Shutter sensor (two channels required)

The 4 front LEDs (two bi-colour) are associated with the operation modes of the device and can be programmed as you wish.

### 1.4.1 Technical data

<b>Power supply</b>	via Bus
<b>External supply</b>	10 ...32 VDC, 12 ... 24V AC
<b>BUS cable</b>	ED 063 3 (100m) or ED 064 1 (500m)
<b>Absorption</b>	External supply: to be sized for 3-W peak From the Bus: 10 mA max.
<b>Number of outputs</b>	2 bistable relays, 8A at 250 V AC
<b>Number of inputs</b>	3 Voltage free inputs NOT optically isolated (max. connection length 10m)
<b>Use environment</b>	Class 3k5 (Indoor use)
<b>Operating temperature</b>	- 5 ... + 50 °C
<b>Relative humidity</b>	max 93% RH
<b>Connection to bus</b>	standard bus connector
<b>Electric connections</b>	screw terminal max 0.5 Nm
<b>Protection degree</b>	IP20
<b>Dimensions</b>	66 x 44 x 46 mm (Mylos and Chiara) 74 x 44 x 56 mm (Elos)
<b>Weight</b>	approx. 100 g

## Access Control

## Technical features

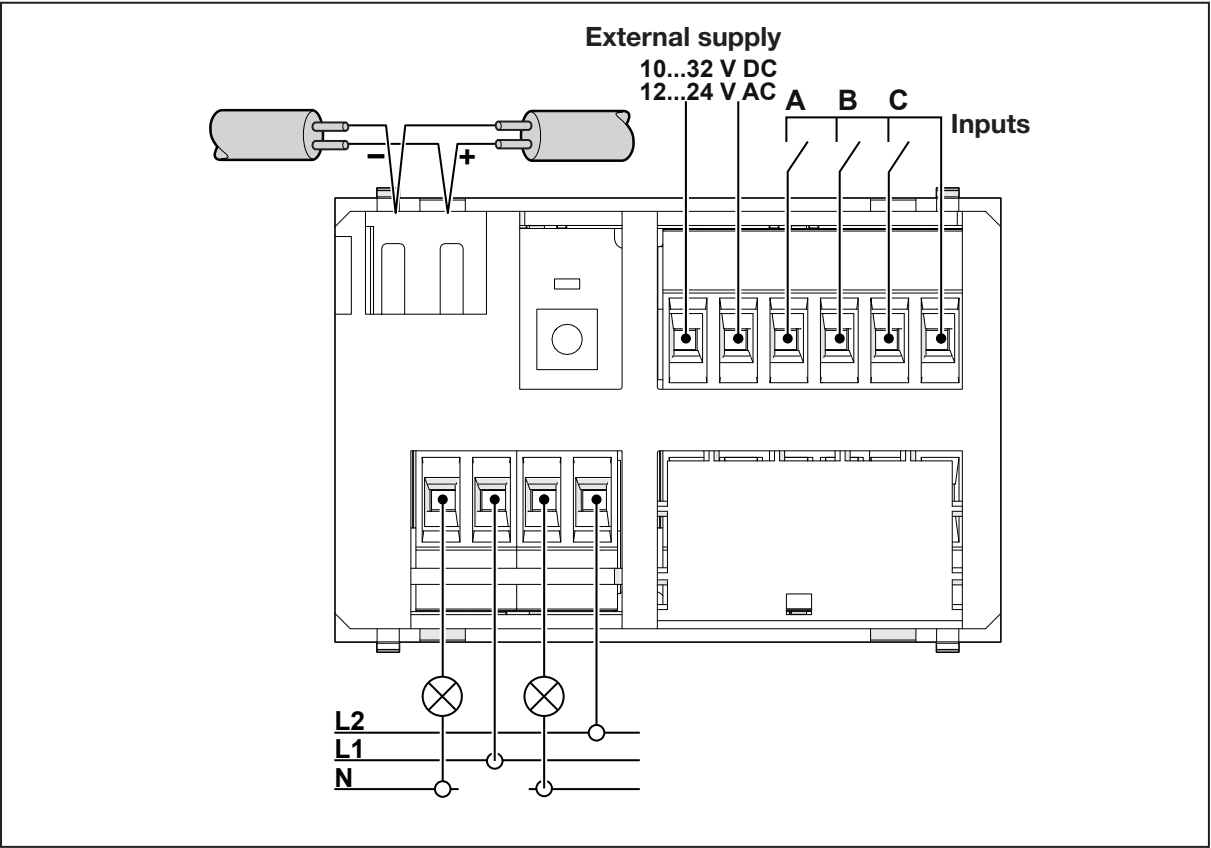
<b>Reference standards</b>	EN50090-2-2, EN 50491
<b>Case, colour</b>	Plastic container, white or black
<b>CE marking</b>	Acc. to EMC and Low-Voltage Directives

Device type	Application program	Maximum number of communication objects	Maximum number of group addresses	Maximum number of associations
PRT/U 1.1 PRT/U 1.1.CH PRT/U 1.1.MC PRT/U 1.1.MS	Transponder programming device	17	19	19

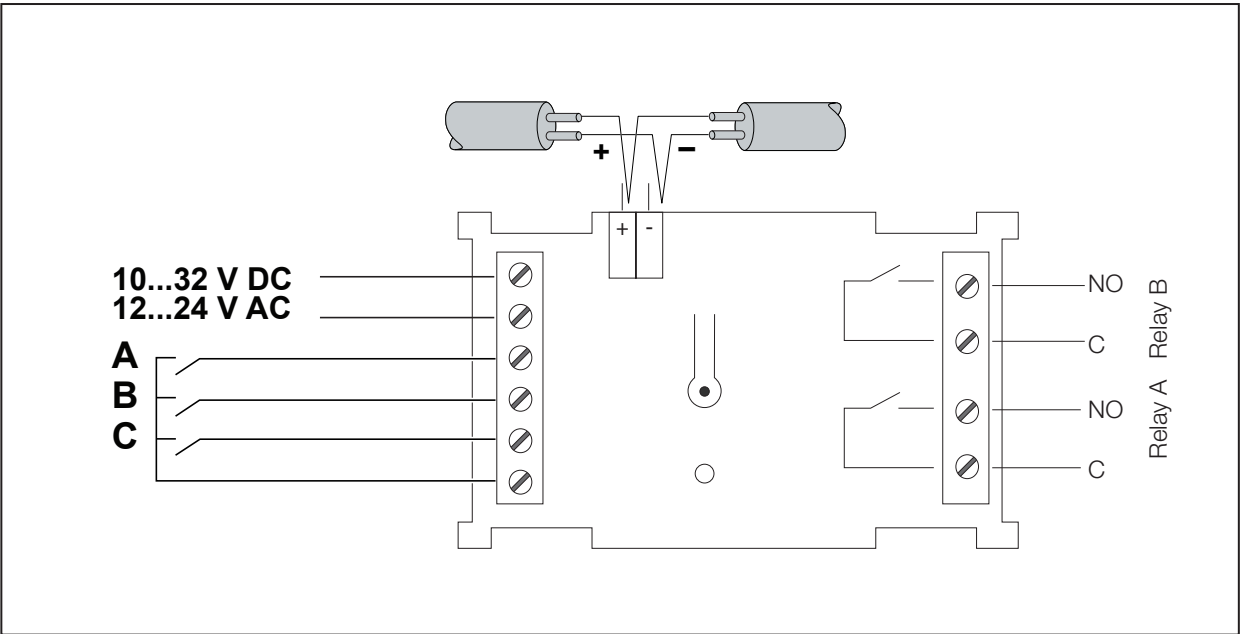
### 1.4.2 Access Control function

<b>Type of TAGs controlled</b>	Guest TAG (can be associated with relay A or B or both) Service personnel TAG (can be associated with relay A or B or both) Master TAG
<b>TAG data structure</b>	Progressive number (1- 65.535) TAG type (guest, service personnel, Master) Expiration date (YY,MM,DD, HH,MM) System code (1- 16 million) Guest group (256 types of groups available)

1.4.3 Connection diagram



PRT/U 1.1.MC  
PRT/U 1.1.MS  
PRT/U 1.1.CH



PRT/U 1.1

### **Supplied state**

The device is provided with the physical address 11.0.2, the application program is preloaded. It is therefore only necessary to load group addresses and parameters during commissioning. However, the complete application program can be reloaded if required. A longer downtime may result if the application program is changed or after a discharge.

### **Assignment of the physical address**

The assignment and programming of the physical address is carried out in the ETS. The device features a Programming button to assign the physical device address.

The red Programming LED lights up, after the button has been pushed. It switches off, as soon as the ETS has assigned the physical address or the Programming button is pressed again.

### **Cleaning**

If devices become dirty, they can be cleaned using a dry cloth or a cloth dampened with a soapy solution. Corrosive agents or solutions should never be used.

### **Download behaviour**

Depending on the PC, which is used, the progress bar for the download may take up to one and a half minutes, before it appears, due to the complexity of the device.

### **Maintenance**

The device is maintenance-free. No repairs should be carried out by unauthorised personnel if damage occurs, e. g. during transport and/or storage.

## 2 Power supply

All devices in the range require an external 10 - 32VDC/12 - 24VAC power supply, allowing them to operate (e.g. opening of electric lock) even in the event of a lack of bus voltage.

For system sizing (number and type of power supplies to use), bear in mind that each access control device draws a peak power of 3W.

ABB recommends using a dedicated power supply/transformer to power the electric lock (not the same one used for the access control devices range), as the power draw of the electric lock is not usually known beforehand and can invalidate the correct sizing of the power supply for the access control devices, causing outages and malfunctions. Where installation requirements should necessitate the use of a common power supply/transformer (for example one in each room for applications such as hotels), it is essential to consider the maximum possible power draw of the electric lock and subtract this from the available power provided by the power supply/transformer: the residual power must be sufficient to power all access control devices running on that power supply/transformer.

For powering the access control devices, ABB recommends the use of stabilised power supplies (for example CP-D from the ABB range) as opposed to transformers. When powering access control devices with alternating current, it is important to remember that transformers for discontinuous loads CANNOT be used to power the access control devices.

An example of an ideal configuration for the sizing of the access control devices' power supply is given below:

- Dedicated power supply/transformer for electric lock
- DC power supply for the access control devices with dedicated stabilised transformer, chosen on the basis of the number of devices to control. The table below provides a summary of ABB's CP-D stabilised power supply models and their characteristics

Power supply type	Output voltage	Output current	Power output	Number of access control devices which can be powered
CP-D 12/0.83	12 V DC	0.83 A	10 W	3
CP-D 12/2.1	12 V DC	2.1 A	25 W	8
CP-D 24/0.42	24 V DC	0.42 A	10 W	3
CP-D 24/1.3	24 V DC	1.3 A	30 W	10
CP-D 24/2.5	24 V DC	2.5 A	60 W	20
CP-D 24/4.2	24 V DC	4.2 A	100 W	33

### 2.1 Connection and wiring

For the supplementary power supply of the devices (10 - 32VDC/12 - 24VAC), a standard cable can be used; the sizing of this must be based on the total length of cable required for the installation. Specifically, ABB recommends a dedicated insulated cable for the power supply of the access control devices, of cross section 1 mm<sup>2</sup>. It is not possible to use the additional pair of conductors present in a KNX 4-wire cable (white-yellow), unless a power supply which meets SELV specifications can be guaranteed on this pair (in particular the presence of a power supply unit with isolation transformer). In general, seeing as it is not always possible to guarantee a SELV power supply beforehand or to know whether a power supply which meets SELV specifications has been supplied, it is in any case recommended to use a dedicated cable to power the access control devices, as indicated above.

### 2.2 Outdoor installation

The access control devices are rated IP20 and therefore cannot be installed outdoors. In the event that an outdoor installation should be necessary, the IP55 containers or waterproof plates indicated below may be used. The best installation solution is the Chiara IP55 waterproof plate (code 2CSK3355CH).

**ELOS RANGE**

- 3-gang IP55 waterproof plate

<b>Code</b>	<b>Description</b>
-------------	--------------------

2CSE3355EL	3G WATERPROOF IP55 RECESSED PLATE, ANTHRACITE.
------------	--

2CSE4355EL	3G WATERPROOF IP55 RECESSED PLATE, WHITE
------------	--

NB → the bulge of the Elos device touches the translucent plastic cover of the plate

- 3-gang IP55 container

<b>Code</b>	<b>Description</b>
-------------	--------------------

2CSE2355EL	3-GANG CONTAINER, IP55
------------	------------------------

NB → the residual space for wiring is particularly limited

**CHIARA RANGE**

- 3-gang IP55 waterproof plate

<b>Code</b>	<b>Description</b>
-------------	--------------------

2CSK3355CH	IP55 RECESSED INSTALLATION PLATE, 3G
------------	--------------------------------------

- 3-gang IP55 container

<b>Code</b>	<b>Description</b>
-------------	--------------------

2CSK2355CH	IP55 CONTAINER, 3 GANG (3 MODULES)
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NB → the residual space for wiring is particularly limited

**MYLOS RANGE**

There are no possible solutions as IP55 plates/containers are not available

### 3 Commissioning

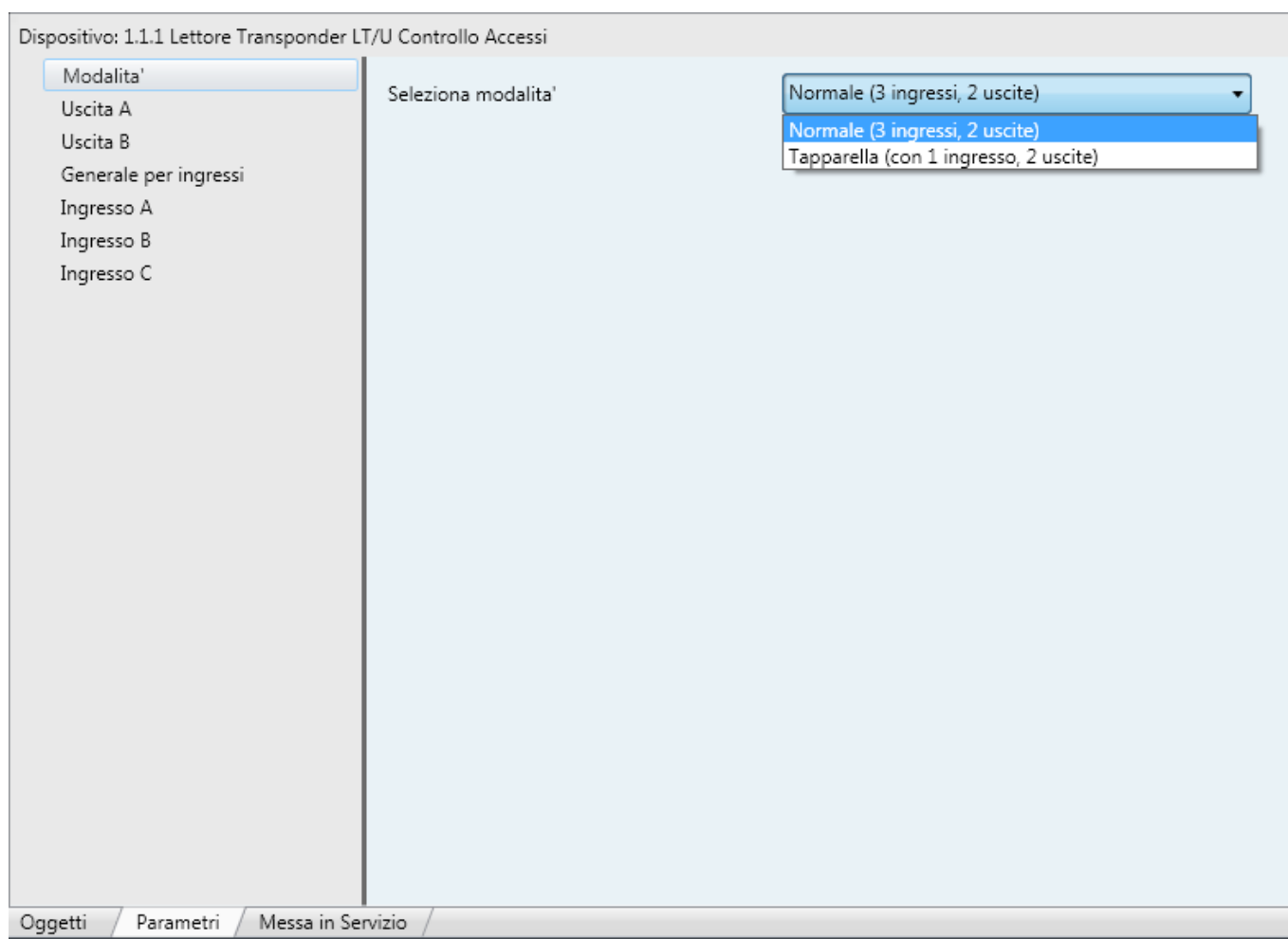
The main functions of the access control devices are described in this section.

Parametrisation is performed via the Engineering Tool ETS Software application program.

For the parametrisation you need a pc desktop or a laptop with ETS and connection to the KNX system (obtainable for example by means of RS232, USB or IP Interface).

All devices of the access control range have the same functions and user interface as regards KNX programming via ETS.

#### 3.1 Mode



#### Select mode

This parameter allows you to define the type of configuration of the 3 binary inputs available.

Options:

- **Normal (3 inputs, 2 outputs)**
- Shutter (with 1 input, 2 outputs)

### 3.2 Output A (Output B)

Output behaviour can be set up in this menu (Output A or B according to the window).

Dispositivo: 1.1.1 Lettore Transponder LT/U Controllo Accessi

Modalita'	
<b>Uscita A</b>	
Uscita B	
Generale per ingressi	
Ingresso A	
Ingresso B	
Ingresso C	

Caratteristiche di comando	Contatto normalmente aperto
Modo di funzionamento	Funzione luci scale
Base dei tempi per la funzione luci scale	130 ms
Parametro per la funzione luci scale (1..127)	8
Posizione predefinita all'accensione. POWER ON	Contatto immutato
Posizione predefinita alla perdita di tensione. POWER OFF	Contatto immutato
Associazione	Tag cliente/Tag servizio

Oggetti / Parametri / **Messa in Servizio**

#### Control features

With this parameter you can determine whether the output works as a "Normally closed contact" or as a "Normally open contact"

Options:

- **Normally open contact**
- Normally closed contact

#### Operation mode

With this parameter you can decide whether to activate the "Staircase lighting function" for the output or to leave the simple ON/OFF switching function (possible delays, with programmable delay)

Options:

- **Staircase lighting function**
- Normal operation

**Pre-set position upon switching on. POWER ON**

With this parameter you can define the output status upon device switch off by means of the object value

Options:

- **Contact unchanged**
- Open contact
- Closed contact

**Pre-set position upon switching off. POWER OFF**

With this parameter you can define the output status upon device switch on by means of the object value

Options:

- **Contact unchanged**
- Open contact
- Closed contact

**Association**

The output A (or B) relay can be configured in order to be associated with the events regarding transponder TAGs validations (only guest TAGs, service personnel TAGs, or both) or to react only to a command sent by a KNX device, by means of group address programming.

Options:

- **TAG guest/TAG service personnel**
- TAG guest
- TAG service personnel
- No TAG

**3.2.1 Staircase lighting function**

Once the output has been configured as “Staircase lighting function” using the “Operation mode” parameter, the staircase lighting duration can be parametrised using two parameters:

**Time base for staircase lighting function****Factor for staircase lighting**

The time interval is calculated as follows: Staircase lighting duration = “Time base for Staircase lighting function” \* “Factor for staircase lighting”

**3.2.2 Delayed switching function**

Once the output has been configured as “Normal operation” using the “Operation mode” parameter, delayed switching can be set, if necessary, using the following parameters:

**Time base for delayed switching ON/OFF****Switching on delay parameter****Switching off delay parameter**

The time interval for delayed switching is calculated as follows:

- Switching ON delay = “Time base for delayed switching ON/OFF” \* “Switching on delay parameter”
- Switching OFF delay = “Time base for delayed switching ON/OFF” \* “Switching off delay parameter”

### 3.3 General instructions for inputs

In this menu you can set up the general parameters of the device inputs.

Dispositivo: 1.1.1 Lettore Transponder LT/U Controllo Accessi

Modalita'	Tempo di rimbalzo	130 ms
Uscita A		
Uscita B	Limite del numero di telegrammi	Si
Generale per ingressi	Massimo numero di telegrammi in 17 s.	127
Ingresso A		
Ingresso B		
Ingresso C		

Oggetti Parametri Messa in Servizio

#### Debounce time

This parameter allows you to prevent undesired multiple operation of the input e.g. by debouncing of the contact. The default value (130 ms) is generally sufficient to prevent this undesired effect.

#### Limit number of sent telegrams

It is possible to define the maximum number of unchanged telegrams during a time interval.

This parameter is important upon bus voltage restoration since many devices can send their status at the same time.

Options:

- **No**
- Yes

**Maximum number of telegrams in 17 seconds** (if the "Limit number of sent telegrams" is set on Yes)

Maximum number of telegrams that can be sent by the device within 17 seconds.

### 3.4 Inputs

#### 3.4.1 Normal mode

When you choose option “Normal (3 inputs, 2 outputs)” in the “Mode” menu, three menus are displayed, each to set up each input (Input A, Input B and Input C) as Switching ON/OFF sensor.

Dispositivo: 1.1.1 Lettore Transponder LT/U Controllo Accessi

Modalita'	Reazione ad un segnale	Salita: INVERSIONE
Uscita A	Invio ciclico	Invio ciclico se ON
Uscita B	Parametro per l'invio ciclico (5..127)	5
Generale per ingressi	Base dei tempi per l'invio ciclico	130 ms
Ingresso A		
Ingresso B		
Ingresso C		

Oggetti / Parametri / Messa in Servizio

#### Reaction on signal

The options available allow you to select the channel behaviour:

- on closure of the input contact (Rise)
- on opening of the input contact (Drop)

For each status (contact closure/opening) you can select whether:

- a telegram with value ON is sent
- a telegram with value OFF is sent
- a telegram with a value opposite to the one sent previously. Typical function of a push-button (switching)

#### Cyclical sending

Options:

- **No**
- Yes

The telegram cyclical transmission is activated only if the “Cyclical sending” parameter is set to Yes.

**Factors for cyclical sending (if “Cyclical sending” is different from No)**

**Time base for cyclical sending (if “Cyclical sending” is different from No)**

These two parameters allow you to determine the time period for message cyclical repetition over the bus. The time interval is calculated as follows: Cyclical sending duration = Time base for cyclical sending \* Factors for cyclical sending

### 3.4.2 Shutter mode

When you choose option “Shutter (with 1 input, 2 outputs)” in the “Mode” menu, the Input C can be set up as Switching ON/OFF sensor (please see previous section 2.4.1).

The “Input A/B” is also displayed to set up the two inputs (A+B) as Shutter sensor.

**Contact type**

Dispositivo: 1.1.1 Lettore Transponder LT/U Controllo Accessi

Modalita'	Tipo di contatto	Contatto normalmente aperto
Uscita A	Reazione ad un segnale breve (movimento della tapparella)	A=OFF / B=ON
Uscita B	Reazione ad un segnale lungo (regolazione delle lamelle)	A=OFF / B=ON
Generale per ingressi	Parametro per la lunga pressione(1..127) Base dei tempi: 130ms	8
Ingresso A/B	Un invio ciclico è richiesto per la regolazione della lamella	NOTA
Ingresso C	Parametro per l'invio ciclico (1..127) Base dei tempi: 130 ms	5

Oggetti / Parametri / Messa in Servizio

With this parameter you can determine whether the output works as a “Normally closed contact” or as a “Normally open contact”

Options:

- **Normally open contact**
- Normally closed contact

### **Factor for long pressing**

This parameter allows you to determine the time above which the pressing on the push-button is considered a long pressing. The time is calculated multiplying the value entered for the time base (fixed to 130 ms)

Long pressing time = Factor for long pressing \* 130 ms

### **Factor for cyclical sending**

Cyclical sending is required for lamella adjustment. This parameter allows you to determine the time period for the telegram cyclical repetition. The time is calculated multiplying the value entered for the time base (fixed to 130 ms)

Time period for cyclical sending = Factor for cyclical sending \* 130 ms

## 4 Operation of communication objects

N...	Nome	Funzione Oggetto	D...	Indirizzi di...	Lunghezza	C	R	W	T	U	Tipo Da...	Priori...
0	Relè A	ON-OFF Relè A			1 bit	C	-	W	T	-		Bassa
1	Relè B	ON-OFF Relè B			1 bit	C	-	W	T	-		Bassa
2	Ingresso A	Telegr. ON/OFF			1 bit	C	R	W	T	-		Bassa
3	Ingresso B	Telegr. ON/OFF			1 bit	C	R	W	T	-		Bassa
4	Ingresso C	Telegr. ON/OFF			1 bit	C	R	W	T	-		Bassa
5	Stato Relè A	Telegr. di stato			1 bit	C	R	-	T	-		Bassa
6	Stato Relè B	Telegr. di stato			1 bit	C	R	-	T	-		Bassa
7	ACC 1 byte	Gestione ACC1			1 Byte	C	R	W	T	-		Bassa
8	ACC 14 byte	Gestione ACC14			14 Byte	C	R	W	T	-		Bassa
9	Data	Invia il telegramma data			3 Byte	C	-	W	T	-		Bassa
10	Ora	Invia il telegramma di tempo			3 Byte	C	-	W	T	-		Bassa
11	LED 3 bi - ON/OFF Giallo	LED 3 bi - ON/OFF Giallo			1 bit	C	-	W	T	-		Bassa
12	LED 3 bi - ON/OFF Rosso	LED 3 bi - ON/OFF Rosso			1 bit	C	-	W	T	-		Bassa
13	LED 4 bi - ON/OFF Rosso	LED 4 bi - ON/OFF Rosso			1 bit	C	-	W	T	-		Bassa
14	LED 4 bi - ON/OFF Verde	LED 4 bi - ON/OFF Verde			1 bit	C	-	W	T	-		Bassa
15	LED 2 mo - ON/OFF Giallo	LED 2 mo - ON/OFF Giallo			1 bit	C	-	W	T	-		Bassa
16	LED 1 mo - ON/OFF Verde	LED 1 mo - ON/OFF Verde			1 bit	C	-	W	T	-		Bassa

No.	Function	Object name	Type of datum	Flags
<b>0</b>	<b>Relay A ON/OFF</b>	<b>Relay A</b>	<b>1 bit</b>	<b>C, W, T</b>
<b>1</b>	<b>Relay B ON/OFF</b>	<b>Relay B</b>	<b>1 bit</b>	<b>C, W, T</b>

This object is used to switch an output ON/OFF.

The device receives a switching command via the communication object. If the output is programmed as “normally open” contact, the relay is closed with a “1” telegram value and opened with a “0” telegram value (and the opposite is true when it is programmed as “normally open” contact).

Moreover, the output can be controlled without communication object, associating it with the transponder TAGs validation events (Guest and/or Service personnel TAGs).

<b>5</b>	<b>Status telegram</b>	<b>Relay A status</b>	<b>1 bit</b>	<b>C, R, T</b>
<b>6</b>	<b>Status telegram</b>	<b>Relay B status</b>	<b>1 bit</b>	<b>C, R, T</b>

These objects are always visible. The object value indicates the relay contact position (open or closed).

<b>2</b>	<b>Telegram ON/OFF</b>	<b>Input A</b>	<b>1 bit</b>	<b>C, R, W, T</b>
<b>3</b>	<b>Telegram ON/OFF</b>	<b>Input B</b>	<b>1 bit</b>	<b>C, R, W, T</b>
<b>4</b>	<b>Telegram ON/OFF</b>	<b>Input C</b>	<b>1 bit</b>	<b>C, R, W, T</b>

The first two out of three objects are only visible when you set the “Normal (3 inputs, 2 outputs)” value in the “Mode” menu.

Telegram value:       “0” OFF  
                              “1” ON

This communication object can be sent according to the input switch and the corresponding parameter setting: ON, OFF or Switching. With Switching a telegram is sent that has an opposite value with respect to the value of the telegram sent previously, i.e. “1” is sent if value “0” was sent previously.

2	Input A / B - Segnale Breve	Telegr. Tapparella SU/GIU	1 bit	C	R	W	T	-	Bassa
3	Input A / B - Segnale Lungo	Telegr. Tapparella SU/GIU	1 bit	C	R	W	T	-	Bassa

<b>2</b>	<b>Telegram Shutter UP/DOWN</b>	<b>Input A/B - Short signal</b>
<b>3</b>	<b>Telegram Shutter UP/DOWN</b>	<b>Input A/B - Long signal</b>

These two objects are only visible when you set the “Shutter (with 1 input, 2 outputs)” value in the “Mode” menu.

Telegram value: “0” OFF  
“1” ON

These communication objects send shutter movement controls over the bus.

Object number 3 (long signal) is associated with the long pressing on a push-button to control shutter movement (UP/DOWN).

Object number 2 (short signal) is associated with the short pressing on a push-button to stop the shutter and carry out plate adjustment by means of a sequence of brief pressing in case of blinds.

<b>7</b>	<b>ACC1 Control</b>	<b>ACC 1 byte</b>	<b>1 byte</b>	<b>C, R, W, T</b>
<b>8</b>	<b>ACC14 Control</b>	<b>ACC 14 byte</b>	<b>14 byte</b>	<b>C, R, T</b>

These communication objects are used to interface access control devices (transponder reader and transponder holder) with MiniMAC supervision and control software.

Objects have to be associated with group addresses which, in turn, are indicated in the MiniMAC software, on displays for configuration of the individual devices.

<b>9</b>	<b>Sends the date telegram</b>	<b>Date</b>	<b>3 byte</b>	<b>C, W, T</b>
<b>10</b>	<b>Sends the time telegram</b>	<b>Hour</b>	<b>3 byte</b>	<b>C, W, T</b>

These communication objects are used to receive date and time updates from the MiniMAC (or KNX clock). These objects are linked to the corresponding Date and Time boxes in the “Settings” menu (tab “Timers”) via group addresses.

<b>11</b>	<b>LED 3 bi ON/OFF yellow</b>	<b>LED 3 bi ON/OFF yellow</b>	<b>1 bit</b>	<b>C, W, T</b>
<b>12</b>	<b>LED 3 bi ON/OFF red</b>	<b>LED 3 bi ON/OFF red</b>	<b>1 bit</b>	<b>C, W, T</b>
<b>13</b>	<b>LED 4 bi ON/OFF red</b>	<b>LED 4 bi ON/OFF red</b>	<b>1 bit</b>	<b>C, W, T</b>
<b>14</b>	<b>LED 4 bi ON/OFF green</b>	<b>LED 4 bi ON/OFF green</b>	<b>1 bit</b>	<b>C, W, T</b>

Through these communication objects you can control the bi-colour LEDs' status directly over the bus. To switch the relevant colour on, you simply need to send a telegram containing the value 1 to switch it on, or value 0 to switch it off. As regards the bi-colour LED number 3 (yellow-red) if you send a telegram with value 1, the LED colour will be orange for both communication objects (number 11 and 12).

<b>15</b>	<b>LED 2 mo ON/OFF yellow</b>	<b>LED 2 mo ON/OFF yellow</b>	<b>1 bit</b>	<b>C, W, T</b>
<b>16</b>	<b>LED 1 mo ON/OFF green</b>	<b>LED 1 mo ON/OFF green</b>	<b>1 bit</b>	<b>C, W, T</b>

Through these communication objects you can control the one colour LEDs' status directly over the bus. To switch the LED on, you simply need to send a telegram containing the value 1 to switch it on, or value 0 to switch it off.

## Notes

# Contact us

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da lunedì al sabato  
dalle ore 9.00 alle ore 19.00

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