Radio Receiver EFB-ACLx-USB for Access Systems

Features

- Manage up to 100 or 1,000 wireless hand-held transmitters
- Compatible hand-held radio transmitters EFS-xRP / EFS-xMP / EFS-12MP or EFS-xM / EFS-12HCS
- Keeloq encryption of radio transmission and assignment of a separate Keeloq key possible
- Hand-held radio transmitter cannot be copied/duplicated by third parties
- Password protection and seal (only for version in PS surface-mounted housing)
- Configuration via USB with a computer (Microsoft Windows 7 or higher)
- Available for frequency band 433 MHz (ISM) or 868 MHz (SRD)

Application Expamples

- Barrier systems in car parks
- Gate systems for access roads to company premises / property
- Bollard systems for car parks
- Door/gate opener for underground car parks

Description

The EFB-ACLx-USB series radio receivers are designed for access control systems.
Due to the switching outputs as potential-free contacts, the radio receiver can be connected independently or in parallel to other access systems to most common gate or barrier control systems.

The receiver can be configured quickly and easily using a software and connecting it to a computer via the USB interface. Radio hand-held transmitters can be managed via a list.
So, new hand-held transmitters can be easily added and lost hand-held transmitters can be blocked or deleted. Manipulation of the authorisation list can be prevented by activating a password protection.

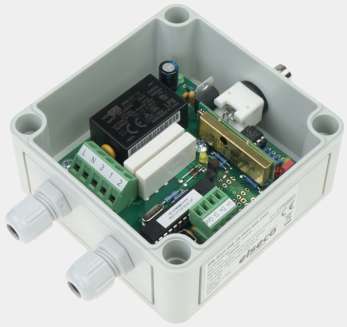
The receivers in the EFB-ACLx-USB series are available in different versions with up to 8 outputs (relay normally open contacts 250 V/6A AC).

Function

Various hand-held transmitters from the series EFS-xRP and EFS-xMP can be assigned to the radio receiver via authorisation management.
It is possible to create authorisation groups and assign one or more buttons of a radio remote control to each relay contact. In turn, one or more relay contacts can be assigned to each button. This enables for expample one radio receiver to be used to operate several adjacent access points (barriers, gates, etc.) with different authorisations.

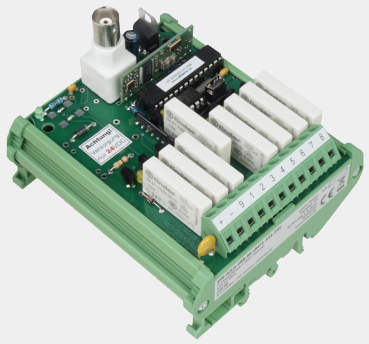
Overview of the main functions:
- Outputs as pulse switching
- Definition of the pulse time for each output separately
- Management of up to 100 or 1,000 radio hand-held transmitters via computer software
- Deactivating, reactivating or deleting the authorisation of individual hand-held transmitters
- Description possible for each hand-held transmitter in the authorisation list (e.g. name)
- No duplication of radio hand-held transmitters by third parties without knowledge of the individual master key possible
- Functional configuration (authorisations, pulse times, ...) also possible without a master key (e.g. by service technicians with limited authorisations)

EFB-ACLH-USB-2K-PS94-BNCL-868-230V



EFB-ACLH-USB-8K-PS130-KL-433-24V

EFB-ACLH-USB-8K-UM72-BNCS-433-24V



Datasheet EFB-ACLx-USB

Technical Data	
Frequency	433,92 MHz or 868,3 MHz (not changeable)
Outputs	2K: potential-free relay contacts (CO) 250 V/6A AC 4/6/8K: potential-free relay contacts (NO) 250 V/6A AC
Coding method	Rolling code (Keeloq)
Configuration	free via computer software
Configuration software	EFB-ACL-USB-Config (version depends on device firmware)
System requirements	Microsoft Windows 7 or higher
Configuration interface	Mini USB socket type B
Antenna connection	For variants see table „Order Code“
Electrical connections	Screw terminals 1,5 mm² ○ 1,5 mm² ▭ 7 mm 0,5 ... 0,6 Nm
Power supply	5 V DC via USB (only with EFB-ACLx-USB-2K) / 12 V DC / 24 V DC / 230 V AC
Current consumption	see adjacent table
Mounting type	35mm mounting rail / surface-mounted
Protection class	see table on next page
Operating temperature	-25...+70 °C

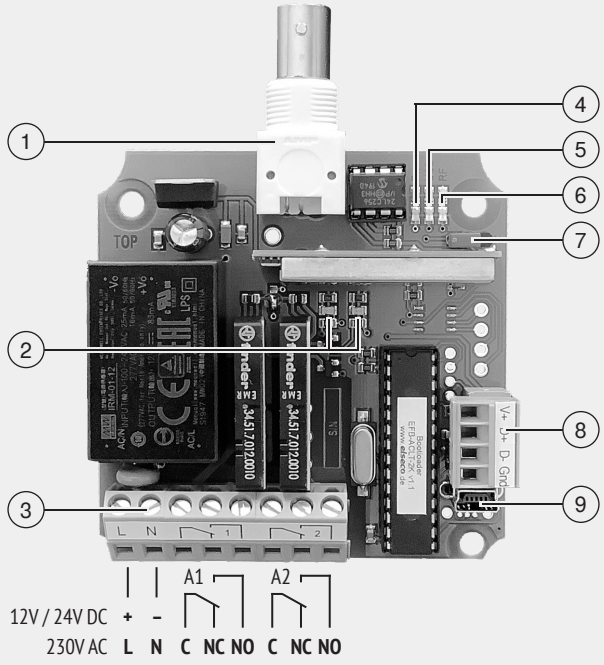
Safety Instructions

- These radio receivers are not authorised for use in safety-relevant systems! (no SIL / PL certification)
- Work on the radio receiver may only be carried out when it is de-energised!

Current Consumption (mA)	12 V	24 V	230 V
Standby	45	45	15
2K (Operation)	77	61	17
4K (Operation)	109	77	19
6K (Operation)	141	93	21
8K (Operation)	173	109	22

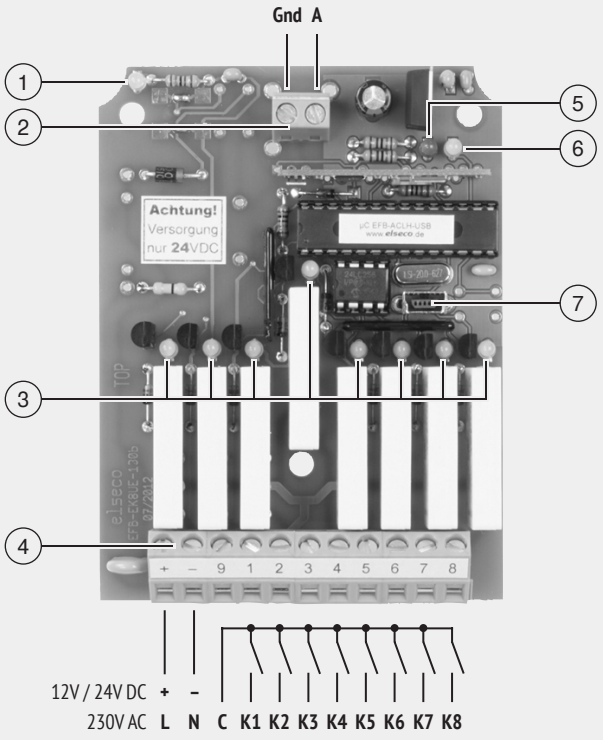
Operation = All relays are active!

Connection Diagram EFB-ACLx-USB-2K



① Antenna connection (fig. with BNC socket), for terminal connection (KE) see connection diagram EFB-ACLx-USB-4K/...
② LED yellow: Relay switching status
③ Screw terminals (angled, 1.5 mm²) for external power supply and relay outputs
④ LED green: Power supply
⑤ LED yellow: USB connection
⑥ LED red: Valid radio reception
⑦ Jumper (change only for firmware update)
⑧ Plug-in screw terminal (1.5 mm²): USB interface (opt.)
⑨ USB socket: Configuration interface

Connection Diagram EFB-ACLx-USB-4K/6K/8K



① LED green: Power supply
② Antenna connection (fig. with terminal connection)
③ LED yellow: Relay switching status
④ Screw terminals (angled, 1.5 mm²) for external power supply and relay outputs
⑤ LED red: Valid radio reception
⑥ LED yellow: USB connection
⑦ USB socket: Configuration interface

Protection Class to DIN EN 60529						
	KL	AI	TNC	SA	BNC	BNCS
PS94	IP66	IP66	IP66	IP40	IP40	-
PS130	IP66	IP66	IP66	IP40	IP40	-
UM72	IP00	IP00	IP00	-	-	IP00

Dimensions (H x W x D)		
	EFB-ACLx-USB-2K	EFB-ACLx-USB-4K/6K/8K
PS94	94 x 94 x 57 mm	-
PS130	-	130 x 94 x 57 mm
UM72	90 x 74 x 70 mm	90 x 97 x 70 mm

Installation Instructions

- Installation/commissioning may only be carried out by specialist companies or appropriately qualified personnel!

Operating Instructions

- The units may only be used as described in the manual.
- Only undamaged units may be used under the specified environmental conditions.

Order Code

Please note the color code in this table!
Color-coded features can only be combined with device versions that have the same color code.

Memory slots
- **ACLH** 100 memory slots
- **ACLT** 1,000 memory slots

Potential-free contacts
- **2K** ● ● 2 relays
- **4K** ● ● 4 relays
- **6K** ● ● 6 relays
- **8K** ● ● 8 relays

Housing
- **PS94** ● Surface-mounted housing 94 x 94 mm (Polystyrol)
- **PS94T** ● Surface-mounted housing 94 x 94 mm (Polystyrol) with transparent cover
- **PS130** ● Surface-mounted housing 130 x 94 mm (Polystyrol)
- **PS130T** ● Surface-mounted housing 130 x 94 mm (Polystyrol) with transparent cover
- **UM72** ● Open housing for 35 mm DIN rail (PVC)

Antenna connection
- **BNCL** ● ● ● BNC socket horizontal
- **BNCS** ● BNC socket vertical
- **TNC** ● ● TNC-socket
- **KL** ● ● ● Terminal connection
- **AI** ● ● ● Terminal connection with antenna wire
- **SA** ● ● Fixed stub antenna

HF module / Frequency band
- **433** 433.92 MHz
- **868** 868.3 MHz

External power supply
- **12V** 12 V DC
- **24V** 24 V DC
- **230V** 230 V AC
- **5VUSB** 5 V DC via USB (only EFB-ACLx-USB-2K)

Cable glands
- **KVxx** ● ● Variants: see datasheet „PS-Surface-Mounted Housing“

E F B – A C L H – U S B – 2 K – P S 9 4 – T N C – 8 6 8 – 2 3 0 V – K V 0 5