Honeywell ESSER 808623 Esserbus Alarm Transponder

Honeywell ESSER 808623 Esserbus Alarm Transponder Installation Guide

Contents

ESSER by Honeywell

Honeywell ESSER 808623 EsserbusAlarm Transponder

Specifications

- Input Voltage: 8 Vcc to 42 Vcc
- Consumption:
  - Average: 10 Vcc to 28 Vcc
  - Max. Consumption: 120 mA @ 12 Vcc
  - Standby Consumption: approx. 12 mA @ 12 Vcc
- Cable Length: max. 1,000 m
- Contact: 30 Vcc / 1 A
- Operating Temperature: Ambient – Not specified; Storage – Not specified
- Relative Humidity: Up to 95% (non-condensing)
- IP Rating: IP40 (with enclosure)
- Weight: approx. 28 g
- Dimensions (W x H x L): 82 x 72 x 20 mm
- Certifications:
  - VdS Certificate: G 210020
  - CPD Certificate: 0786-CPD-20947 / -21057

Product Usage Instructions

System Requirements
Compatible with IQ8Control, FlexES control, and specific detectors and devices as listed in the manual.

Installation
Follow the provided fixing holes dimensions for mounting.

Power Supply
Ensure the input voltage is within the specified range. Connect as per the labeled inputs.

Cable Connection
Use I-Y (St) Y n x 2 x 0.8 mm cable with proper shielding for communication. Terminate unused zone inputs with a 10 kOhm End-of-line resistor.

Identification
Place the supplied adhesive label on the transponder or module housing for mounting guidance.

System Limitations:
Observe the maximum number of transponders, zones, and detectors per loop as specified in the manual.

Relay Outputs
Connect designated peripheral devices to the relay outputs of the transponder.

Frequently Asked Questions (FAQ):

- **What are the system software requirements?**

  The system software FACP/transponder should be at least Version V3.09 or higher.
- **What is the maximum number of transponders per fire alarm control panel?**

  The maximum is 100 transponders per fire alarm control panel.
- **How should I terminate unused zone inputs?**

  Unused zone inputs must be terminated with a 10 kOhm End-of-line resistor.

Installation Instruction esserbus® alarm transponder
(Art.-№ / Part No. 808623)

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Neuss Internet: **www.esser-systems.de**
E-Mail: **info@esser-systems.de**

Dimension

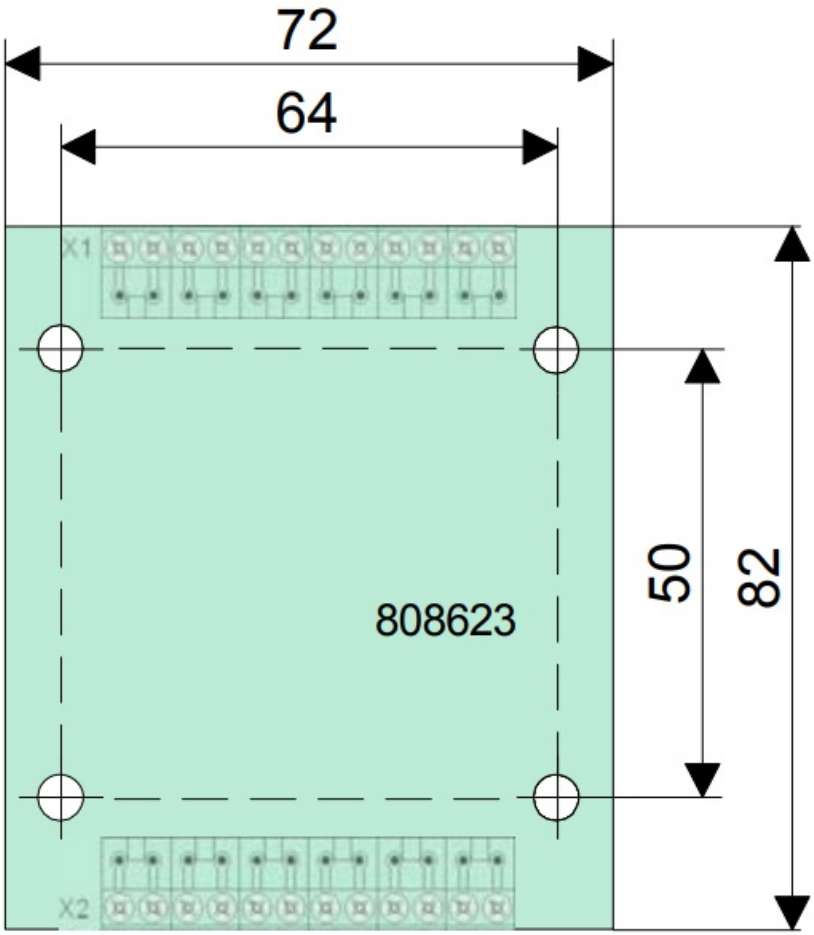

Fig. 1: Dimensiones y orificios de montaje (mm)
Fig. 1: Dimensions and fixing holes (mm)

Warning!
These instructions must be studied carefully before commissioning. Any damage caused by failure to observe the installation instructions voids the warranty. No liability is accepted for any resulting consequential loss.
General
The esserbus ® alarm transponder (Part No. 808623) with integrated isolator is designed for operation only as loop device (esserbus® / esserbus®-PLus) of the Fire Alarm Control Panel IQ8Control and FlexES control. The programming software tools 8000 is required for the device configuration.

System requirements

Panel/transponder	System software FACP / transponder	Programming software tools 8000
IQ8Control	from Version V3.09	from Version V1.15
FlexES control	from Version V04.01	from Version V1.16
esserbus® transponder	from Version V3.0	from Version V1.15

System restrictions

- max. 100 transponders per fire alarm control panel
- max. 31 transponders per loop
- max. 127 detector zones per loop

- Detector numbers per zone input of the transponder:
- max. 30 conventional detectors (without SOC)
- max. 10 conventional detectors (with SOC)
- max. 10 Manual call points
- max. 10 Technical Alarm Modules (TAM)
- max. 5 audible alarm device (observe calculation table in tools 8000)

Installation

The esserbus ®-alarm transponder (Part No. 808623) with housing (e.g. Part No. 788600) must be mounted in a close range to the ext. power supply unit or voltage converter (Part No. 761336 or 761337). Alternatively it is possible to mount the transponder inside of the ext. power supply unit or the Fire Alarm Control Panel.
For easy installation the terminals may be removed with a suitable tool, such as needle-nose pliers. When the loops have been connected, attach the terminal strip to the plug contact again.

Connection cable
Use cable I-Y (St) Y n x 2 x 0.8 mm with special designation or fire detection cable!
The shielding must be connected for EMI protection of the communication cable!

End-of-line resistor / end-of-line unit
Free and not connected zone inputs must be terminated with an 10 kOhm End-of-line resistor or EOL-I end-of-line unit.
Insert 10 kOhm End-of-line resistor or EOL-I and ELO-O end-of-line unit for connected devices (third-party detector or audible / optical indicator). Observe required polarity (+/-) of the EOL-device. Refer to wiring page 2.

External power supply / Monitoring
The external power supply (+UBext = 12 V DC or 24 V DC) must always be connected to this device. In accordance to VDE 0833-2 a mains supply fault must be remedied within 24 hour. If this is not ensured a DC/DC converter (Part. No. 761336 or 761337) must be installed!
The third party detector must be wired as shown in Fig. 9 to 14.

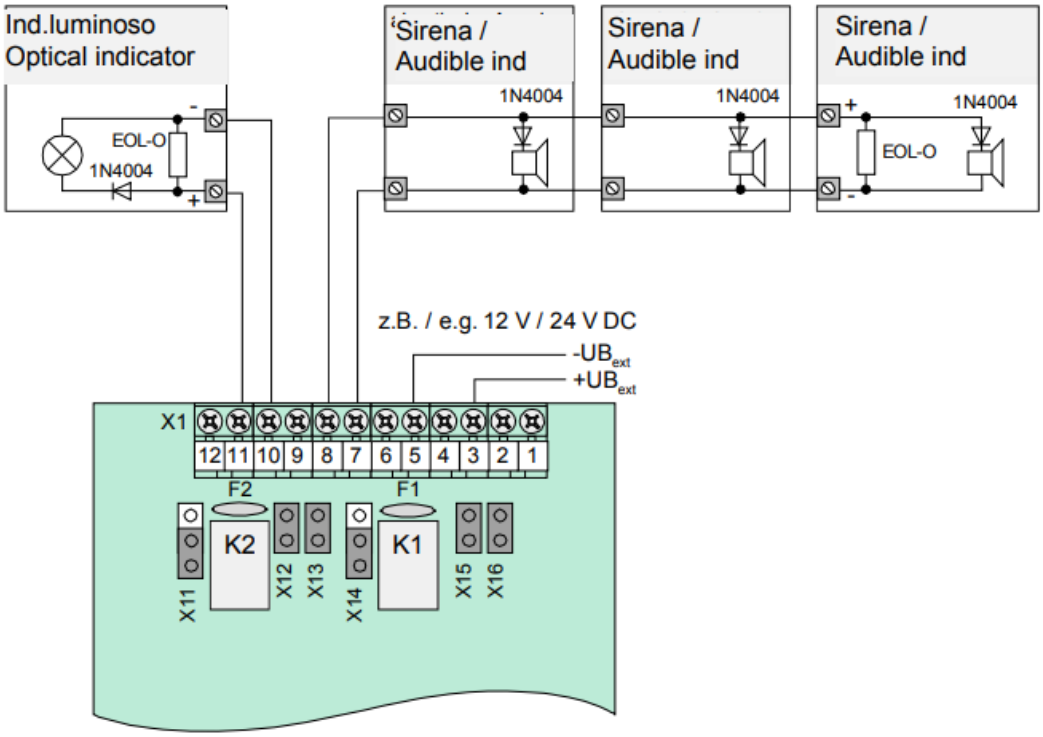

Fig. 5: Relays 1 + 2 monitored

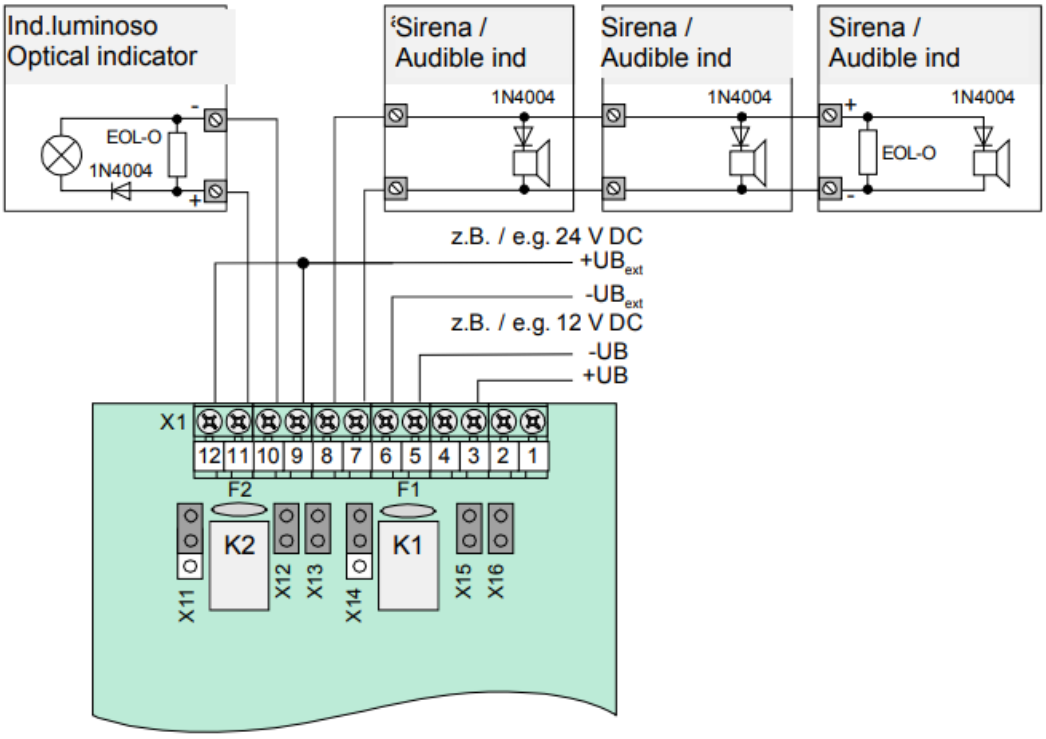

Fig. 6: Relays 1 + 2 monitored and external power supply, 24 V DC

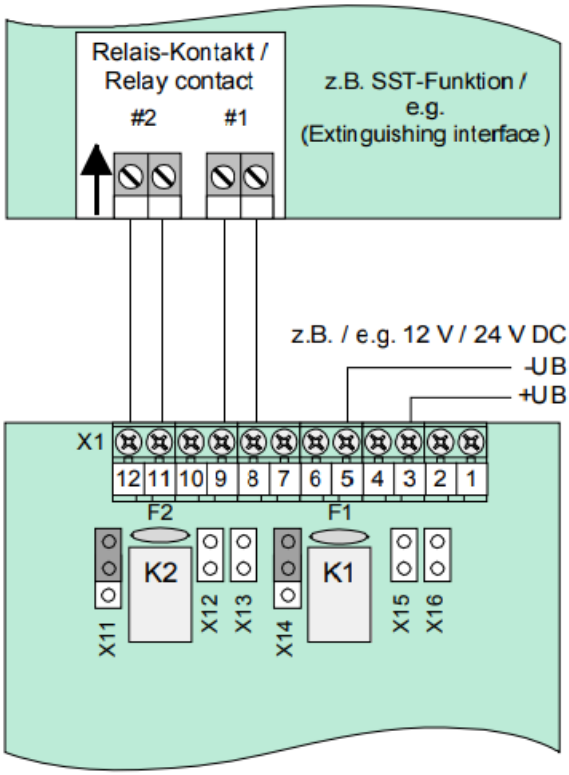

Abb. 7: Relais 1 + 2 potentialfrei, nicht überwacht
Fig. 7: Relays 1 +2 dry contact, not monitored

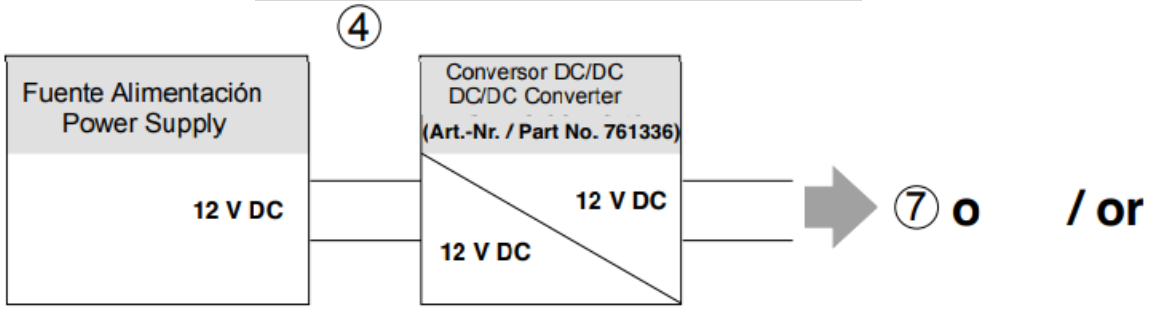

Abb. 8: Cableado VDE con conversor 12V
Fig. 8: Wiring standard operation

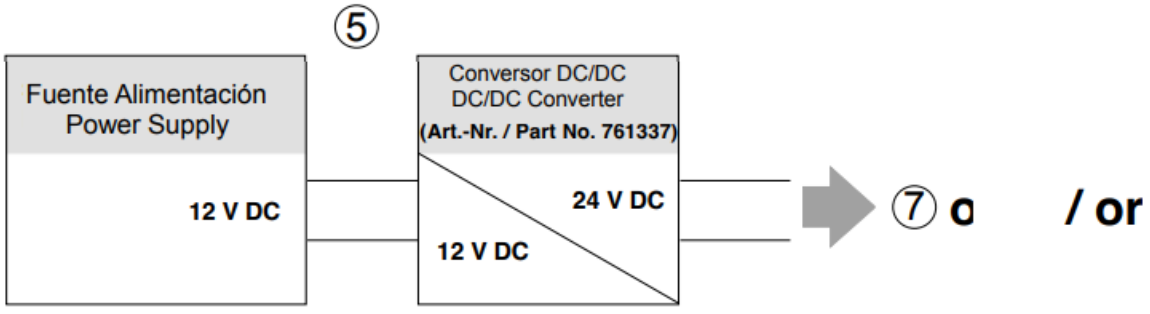

Abb. 9: Alimentación VDE conconversor 12 a 24 Vcc
Fig. 9: Wiring third party detector

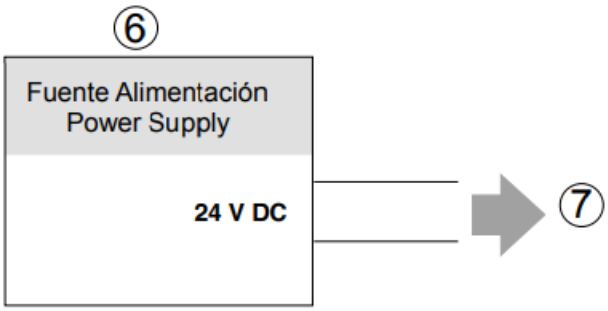

Abb. 10: Alimentación directa 24Vcc
Fig. 10: Alternative wiring third party detector

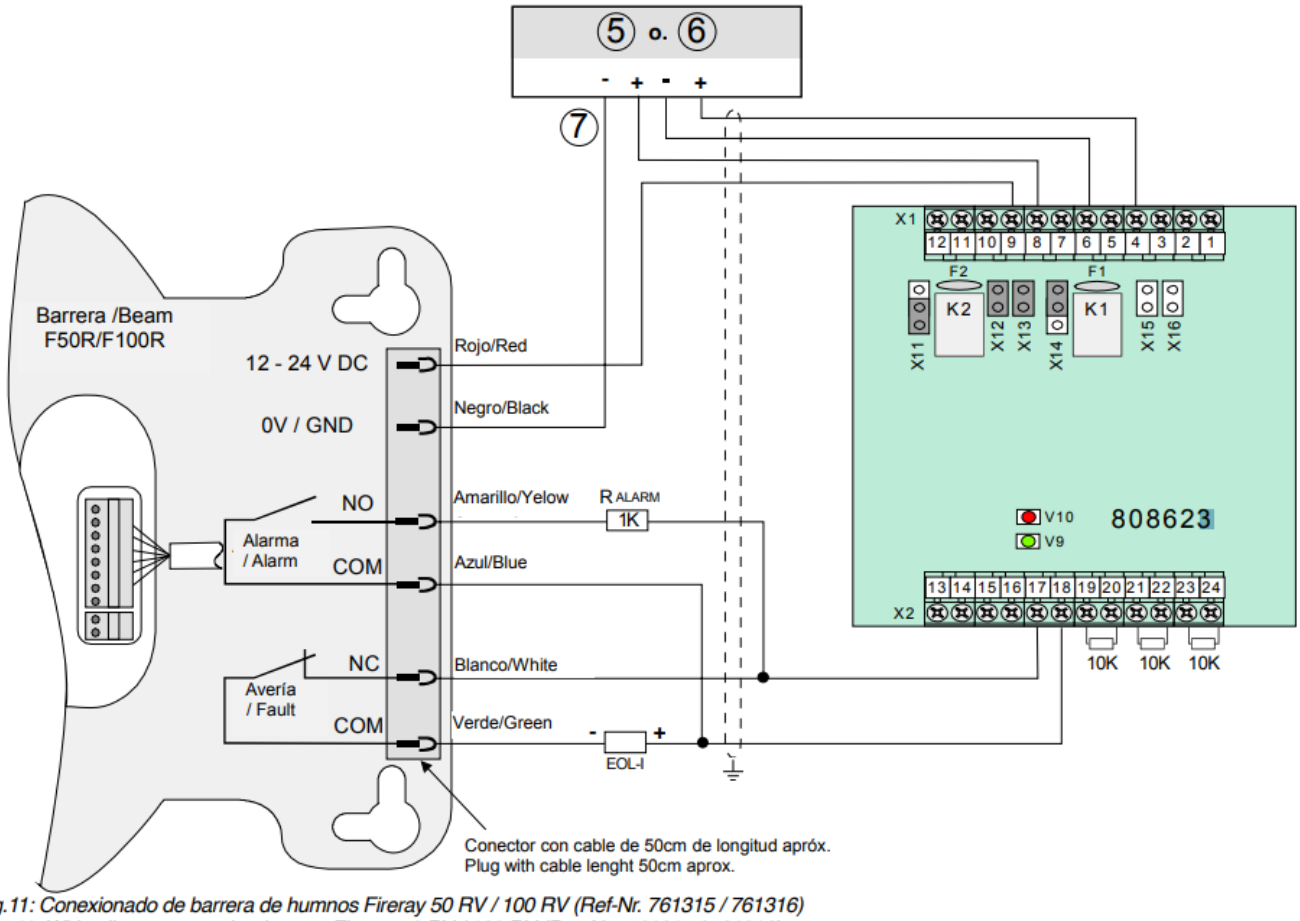

Fig.11: Conexionado de barrera de humnos Fireray 50 RV / 100 RV (Ref-Nr. 761315 / 761316)
Fig. 11: Wiring line- type smoke detector Fireray 50 RV / 100 RV (Part No. 761315 / 761316)

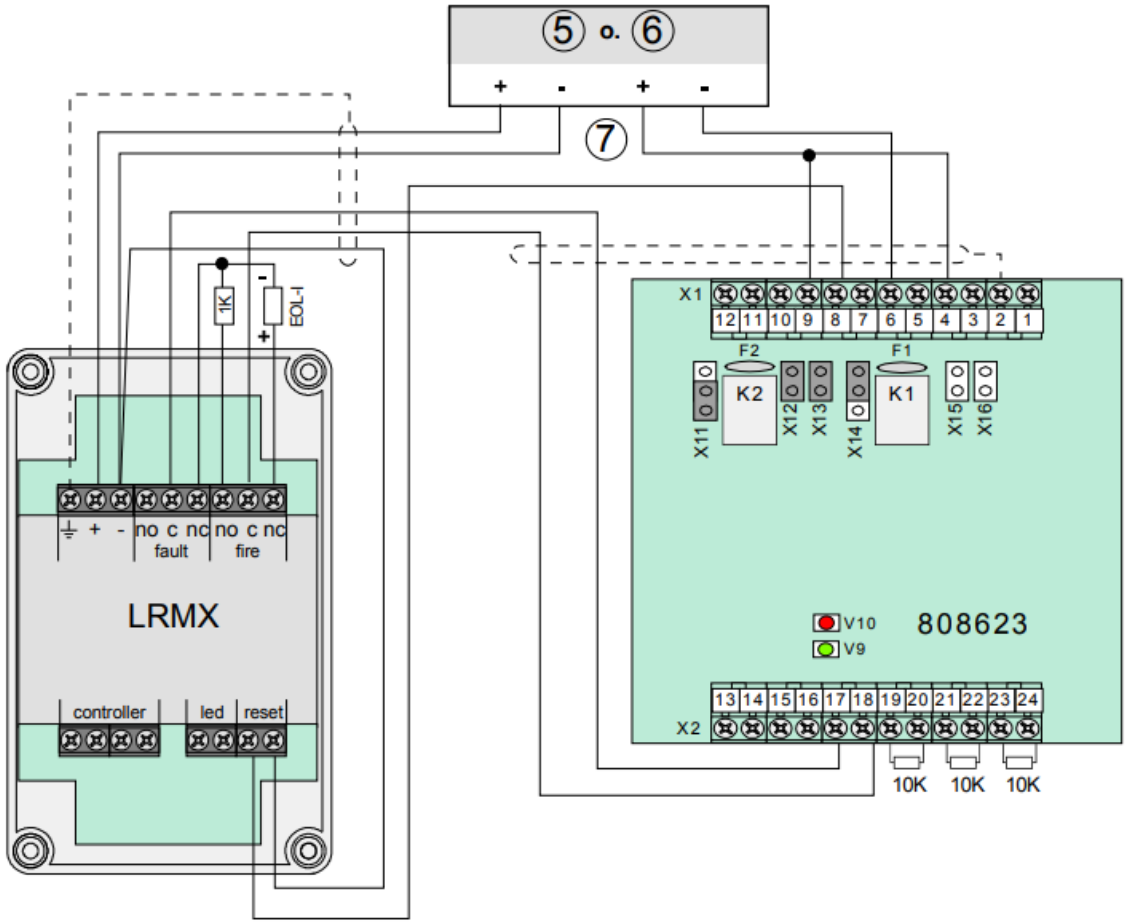

Abb. 12: Conexionado unidad de control Barreara LRMX (Ref.-Nr. 761400.10)
Fig. 12: Wiring line- type smoke detector LRMX (Part No. 761400.10)

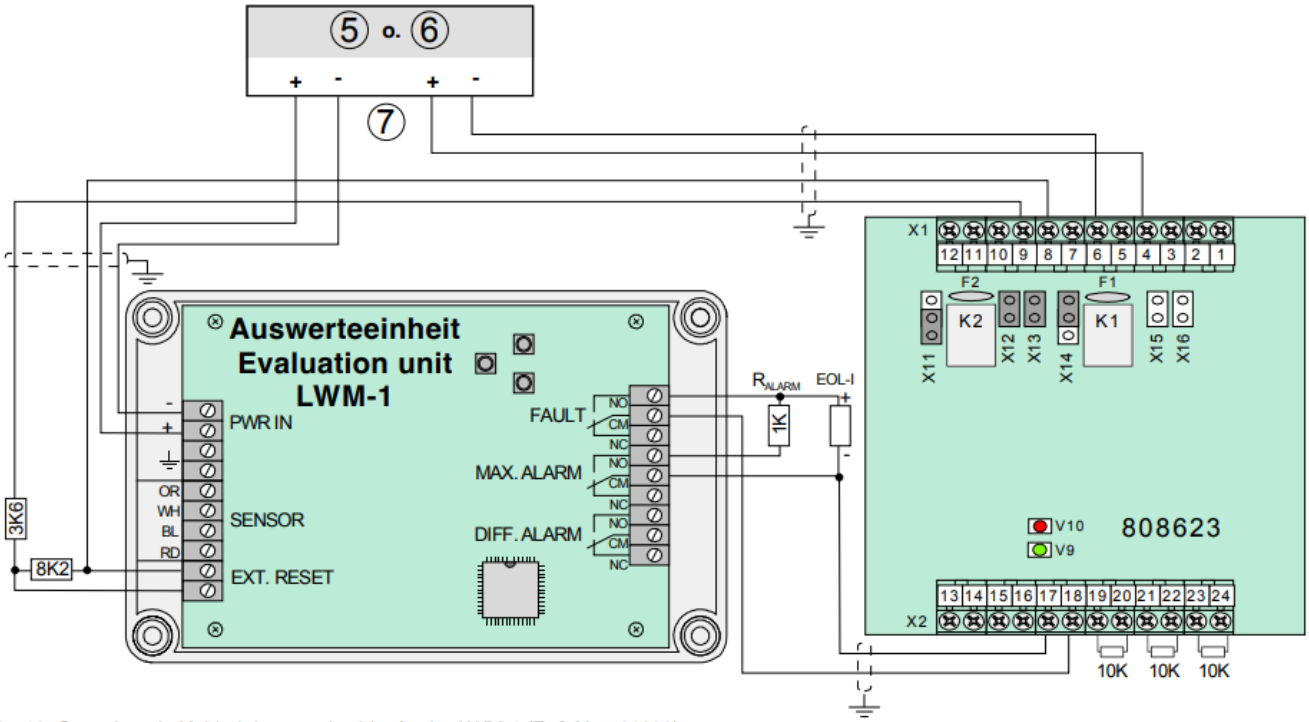

Fig. 13: Conexionado Unidad de control cable térmico LWM-1 (Ref.-Nr. 761290)
Fig. 13: Wiring line- type head detector LWM-1 (Part No. 761290)

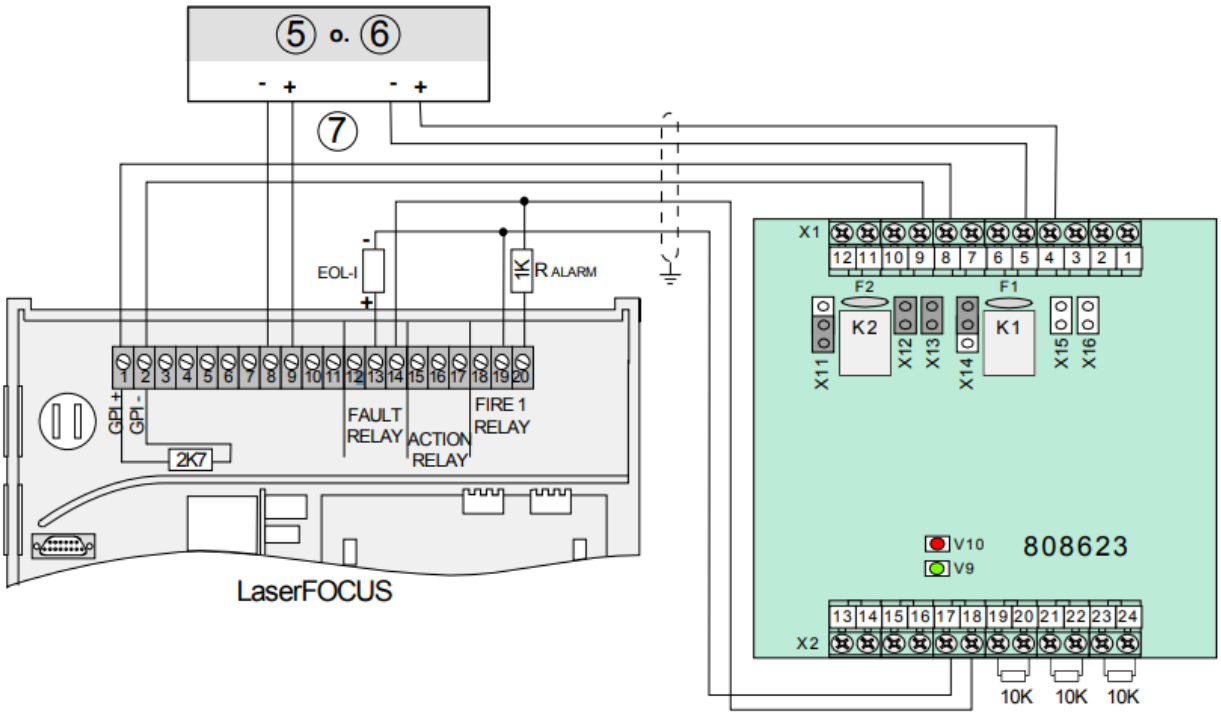

Fig. 14: Conexionado Detector de Aspiración LaserFOCUS (ref.-Nr. 761519)
Fig. 14: Wiring Aspirating system LaserFOCUS (Part No. 761519)

The external operating voltage may be programmed in supervised mode. An interruption of the supply voltage or voltage drop below the permitted tolerance level (-10%) will cause a fault message of the fire alarm control panel.

Identification (Fig. 2)
The supplied adhesive label ? must be placed onto the transponder housing ? or module housing ? for C- or snap on rail mounting (refer to arrows in Fig. 2).

Fig. 2: Etiquetado
Fig. 2: Identification

Zone inputs
All designated peripheral devices of the Fire Alarm system and listed components in the corresponding approval of the Fire alarm System IQ8Control / FlexES control must be terminated and monitored with an End-of-Line (EOL-I/EOL-O) –device.

Designated devices for the zone input of the alarm transponder:

- Intelligent fire detectors and Manual call points from series 9000
- Intelligent addressable fire detectors from series 9100 in conventional mode
- Third party detectors (e.g. wiring page 2)
- These zone must be terminated with an EOL-I (in the last detector / device).

Relay outputs
Designated peripheral devices for the relay output of the alarm transponder:
Conventional audible alarm devices (Type ROSHNI and ROLP) and beacons (Type SOLEX) these relay outputs must be terminated with an EOL-O (to be configured with programming software tools 8000).

Each not listed audible alarm device is no component of the Fire Alarm System IQ8Control / FlexES control and may be connected only in the >dry/not monitored< mode to the relay contacts!

Relay contact operation
The relays K1 and K2 may be programmed as NC (normally closed) or NO (normally open) contacts.

Operating mode

Available operating modes for each relay:

- Relay 1+2 supervised (Fig. 5)
- Relay 1+2 supervised + external power supply (Fig. 6)
- Relay 1+2 relay dry contact, not supervised (Fig. 7)

Reset-Relay Functionality

Both relay outputs of the transponder may be used to reset a connected third-party detector. The reset function relates to the corresponding detector, e.g. by switching the appropriate input to GND or by a short interruption of the detectors supply voltage.
Therefore the control mode >Reset-Relay< as well as the desired relay operation mode (normally closed or open) must be configured with the programming software tools 8000 from V1.14. The relay output will be activated for the selected reset time (1 to 14 seconds) if the assigned input (G1 for relay 1 / G2 for relay 2) of the transponder is reset. Refer to the detectors manual for the required reset time.

Detector type	**Operation mode of the Reset relay * / function**	**Reset time**	**Fig. No.**
Fireray 50/100	Dry contact – not monitored – normally closed D etectors supply voltage switched by the relay	6 s	11
LRMX	Dry contact – not monitored – normally open Res et via the control input of the detector	5 s	12
LWM-1	Dry contact – not monitored – normally open Reset via the appropriate detector input	2 s	13
LaserFOCUS	Dry contact – not monitored – normally open Res et via the appropriate detector input	2 s	14

* Observe jumper setting on the transponder – Customer data configuration required.

Specifications

Loop

- Rated voltage : 8 V DC to 42 V DC
- Rated current : approx. 90 µA @ 19 V DC
- External power supply
- Operating voltage : 10 V DC to 28 V DC
- Current consumption : max. 120 mA @ 12 V DC
- Quiescent current : approx. 12 mA @ 12 V DC

Inputs

- Current consumption : max. 25 mA @ 9 V DC
- Length of connection cable : max. 1.000 m
- Monitoring detector input : EOL-I or 10 k? / ±40%

Relays

- Contact rating : 30 V DC / 1 A
- monitoring relay : EOL-O or 10 k? / ±40%
- Ambient temperature : -10 °C to +50 °C
- Storage temperature : -25 °C to +75 °C
- Rel. humidity : ? 95% (no condensation)
- Protection rating : IP 40 (with housing)
- Weight: : approx. 28 g
- Dimensions (w x h x d) : 82 x 72 x 20 (mm)
- Specification : EN 54-17 : 2005
- VdS Approval : G 210020
- CE certificate : 0786-CPD-20947 / -21057

Additional and updated Information
The product specification relate to the date of issue and may differ due to modifications and/or amended Standards and Regulations from the given information. For updated information and declaration of conformity refer to **www.esser-systems.de**.
Observe technical manuals of the FACP to ensure compliance to standards and local requirements of Systems features!
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Refer to the Fire Alarm System Catalogue for additional accessories.

- Connection terminals for relay K1 + K2, ext. power supply +/- UBext
- Connection terminals of the loop, zone inputs
- Relay K 1
- Configuration of operating mode refer to Fig. 5 – 7
- Relay K 2
- Green
- LED indicator for communication to the FACP, flashes sporadically
- Red
- Electronic fuse (Multifuse) for relay output K1 and K2
- Electronic fuse (Multifuse) for ext. power supply of the transponder +/- UBext
- Relay contacts K1 and K2 for activating an external field device
- Jumper open / close

Typical wiring

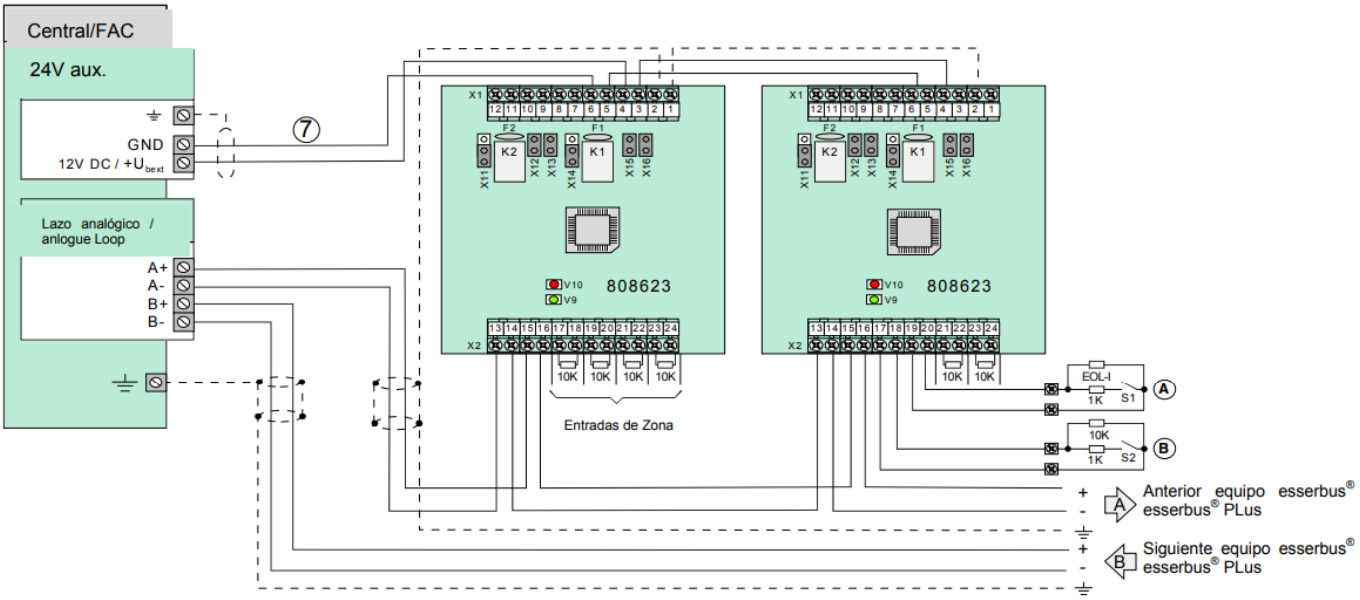

Fig. 3: Conexionado general trasnponder esserbus® a central de detección de incendios
Fig. 3: Principal wiring, esserbus® alarm transponder to FACP

Additional wiring examples for third-party detectors refer to documentation 798961.GB0 at www.essersystems.de.

- Observe installation information in this documentation on page 1!
- If the transponder is powered by the supply voltage of the FACP, the cable shielding must be connected to the terminal X1/1, e.g. as shown in Fig. 3.

Wiring zone input

- A Alarm → 1 k??/ EOL-I
- Quiescent → EOL-I
- Fault → wire breakage / short circuit

Wiring contact input

- Alarm → 1 k??/ 10 k?
- Quiescent → 10 k?
- Fault → wire breakage / short circuit

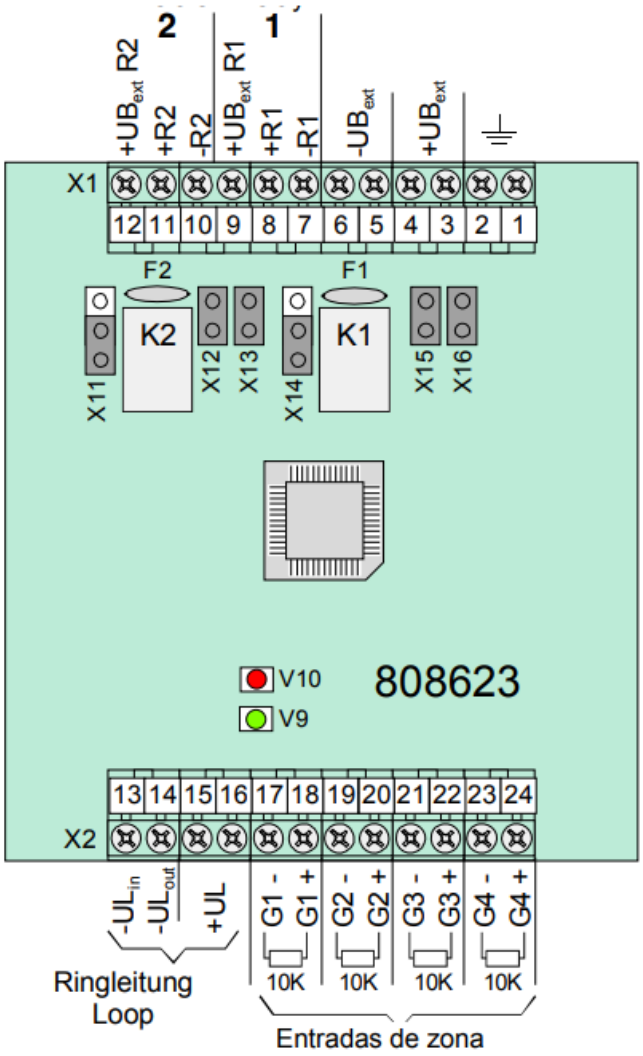

Fig. 4: esserbus® alarm transponder

Connecting inductive loads
A recovery diode (e.g. type 1N400x) must be connected for each external inductive load (e.g. door control magnets, valves, relays or audible alarm devices).

Documents / Resources

	Honeywell ESSER 808623 Esserbus Alarm Transponder [pdf] Installation Guide 808623, 798885, ESSER 808623 Esserbus Alarm Transponder, ESSER 808623, ESSER, ESSER Alarm Transponder, 808623 Alarm Transponder, Esserbus Alarm Transponder, Esserbus, Alarm Transponder, Transponder

References

- User Manual