

Ref.-No.

KNX Alarm central unit EAM 4000

ETS-product family: Alarm system

Product type: Alarm central unit

The alarm central unit is a modern alarm system using the KNX system. Detailed knowledge about planning, designing and commissioning of alarm systems are absolutely required.

The alarm central unit is a modern intruder alarm system using the KNX system for the transmission of information. It keeps an object under surveillance and detects and signals intrusion attempts. The system is no substitute for any mechanical safeguarding devices which prevent intrusion into your property.

You can use the alarm central unit as a comfortable extension for any existing KNX installations.

The alarm central unit has been designed in compliance with VdS (German Association of the Damage/Loss Insurers) guidelines.

The functionality of the device is dependent on the parameters of the software application. To install and configurate the software it requires at least the ETS 2 1.2a version.

By using the KNX the additional wiring and cabling effort of a separate alarm system can be reduced to a minimum. This is achieved by using sensors, i.e. movement detector not just purely for lighting control or alarm systems.

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Technical data

Input supplying

Voltage: 230 V AC, \pm 10 %, 50/60 HZ

Power consumption: max. 24 W

Current secondary: max. 50 mA; during changing process approx. 200 mA

Fuses: F1 = T 100 mA (5 V supply of central unit)

F2 = T 100 mA (12 V power supply) F3 = T 100 mA (supply for telephone dialer)

F4 = T 3.15 A (main fuse 230 V)

F5 = T 3.15 A (protection of accumulator)

Output voltage for alarm device: SELV 12 V DC, ± 2 V

Max. capacity of outputs: Telephone dialer: 100 mA

12 V supply 100 mA

Sirens/flash in total 1.6 A (electronic overload protection)

Capacity of relay: SELV 12 V (AC/DC), 5 A (min. 30 mA)

Storage battery:12 V / 1.2 ÅhCharge voltage:approx. 13.4 VCharge current:approx. 150 mASupply KNX:SELV 21 V - 32 VPower consumption:max. 240 mW

Connection

KNX: KNX connection block mains: screw terminals up to 1.5 mm²
Spare accumulator: 12 V/1,2 Ah, ref.-no. DAS 4512

Technical data

Protection: IP 20

 $\begin{array}{lll} \textbf{Operation temperature:} & -5^{\circ}\text{C} \dots +45^{\circ}\text{C} \\ \textbf{Storing temperature:} & -25^{\circ}\text{C} \dots +70^{\circ}\text{C} \\ \textbf{Dimension:} & 210 \times 270 \times 73 \text{ mm} \\ \end{array}$

Weight: approx. 1500 g (including accumulator)
Event memory: min. 80 events per security area
40 events for each fire and alarm

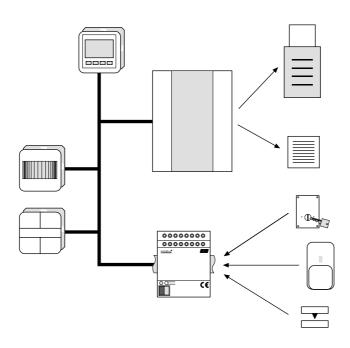
Length of wires: to alarm devices: 100 m at 0.8 mm diameter

to telephone dialer: 200 m at 0.6 mm diameter to wired detectors: 200 m at 0.8 mm diameter to sabotage line: 600 m at 0.8 mm diameter

Resistance of wired detectors: max. 1 kOhm

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System configuration:



Note: For the planning and programming of the whole system it is absolutely necessary to have the knowledge about alarm systems and the specific terminology as well as a product training on the alarm central unit.

Functional features:

- Up to 160 sensors can be administrated and integrated in up to 4 separate safeguarding areas.
- All sensors are connected via the KNX to the alarm central unit. Hence, the identification and monitoring of all sensors is obtained.
- All events (as arming, alarm, failure) are saved with time and date in a protocol.
- Alarm devices (as siren, flash or telephone dialer) can be connected directly to the alarm central unit or can be controlled via KNX.
- The alarm central unit has an integrated floating storage battery which, in case of mains failure, guarantees a back-up time of approx. 12 hours.
- The displaying and operation is done by external KNX devices like Info Display, push-buttons, etc. In one armd area several operation units can be applied.
- An additional local sensor input can be used to protect the location where the alarm central unit is mounted.
- Furthermore, a relay contact can be used to connect additional alarm devices.

The alarm central unit is developed for different applications. It starts in residential buildings with the protection of the outside body (windows, doors) and the interior and ends in office buildings, whereby up to 4 different security areas can be defined and protected separately or linked together.

Alarm system configurations:

Due to many different parameterisation options, the KNX alarm central unit can be used in various objects – from the detached family house with outer shell and inner room safeguarding up to the office building where up to four arming areas (AA) can be safeguarded individually or in groups linked up with one another.

The following list shows the basic configurations which may also be combined with one another:

1 x inner room, 1 x outer shell (nested)*:

Detached family house, flat. (AA1 = outer shell, AA2 = inner room; AA 1 can be armed individually or together with AA2).



2 x [1 x inner room, 1 x outer shell (nested)*]:

Two-family house, house with granny flat, 2 separate safeguarding areas (workshop with flat).



Up to 4 separate areas:

Shopping arcade, holiday houses, hotel/pension, trade fair/exhibition halls.

AA1 AA2 AA3 AA4

Up to 4 separate areas (cascaded)**:

Office/industrial building, sports hall. (AA4 only to be armed if AA1 to AA3 have already been armed).



* nested: The subordinate area is armed together with the higher-order area.

** cascaded: The higher-order area can only be armed if the subordinate areas have already been armed.

Fire and attack detectors:

Regardless of the configuration of the system, the fire and attack areas are always active. If a fire or attack detector is activated, the system will immediately set off an alarm, regardless of what its state is.

As a special variant, the alarm central unit can also be solely used for "attack" and "fire".

Security

Accessories

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Ref.-No.

2601

Outdoor siren with flash light DAS 4110
Rated voltage: 12 V DC

Protection: IP 34
Indoor siren DAS 4120

Rated voltage: 10 – 28 V DC

Protection: IP 32

TC Plus KNX analog

(more details please refer to pages 217/218)

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Ref.-No.

Automatic alarm dialer, Digital only on special request

The digital automatic dialer provides a silent transmission

of an alarm or malfunction to a permanent available security service.

Automatic alarm dialer, Analog FUS 4620

The analog automatic dialer provides a silent transmission of an alarm or malfunction.

4 alarm inputs

4 outputs to be switched via phone





 $\begin{array}{ccc} & & & \text{Ref.-No.} \\ \hline \text{Surface mounted key switch,} & & \text{DAS 4300 A} \end{array}$

For activating and deactivating of alarm systems

Front plate material: Pressure casted aluminium

Flush-mounted key switch DAS 4300 U

Front plate material: Lost-wax casted aluminium

(profile cylinder lock is not included!)

Movement detector DAS 4210

Passive infrared detection principle

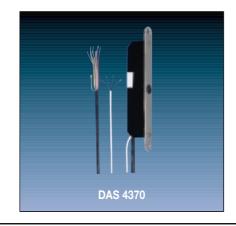
Detected area: 90° (volumetric)

34 double zones in 3 levels

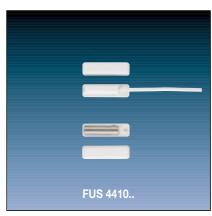
Maximum detected area approx. 15 x 5 m

1

brown







Pef.-No.
Locking unit DAS 4370

Frame joint switch contact DAS 4360

Glass-break sensor, passive FUS 4415 WW

Magnet contact
white FUS 4410 WW

FUS 4410 BR