KCDb

INSTALLATION – WIRING



Figure 3.

KCDb

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Registered design. The company reserves the right to make design changes without prior notice.

KCDb

WIRING

Wiring graph shows all components that can be connected to the controller KCD. For details about your specific object we recommend you to use our software "e.r.i.c.elschema" which can be downloaded from our website on Internet. The software have inbuilt double check to prevent impossible combinations of components. Note the description how to connect several active devices to the same controller output.



Figure 4. Wiring diagram.

- Key to figure 4.
- 1 = KCD
- 2 = Room unit KST
- 3 = Active ex: ACK, AKY
- 4 = Occupancy sensor KSO
- 5 = Window switcht
- $6 = CO_2$ sensor KSC
- 7 = Exhaust device or heating radiator control (0-10V DC)
- 8 = Lighting
- 9 = Termo actuator for heating radiator

CABELING AND CABLE AREAS

Cable areas must be used according to cable length and fuse size and especially the 24 V AC power that has to be secured within tolerances most connon 24 V \pm 15%. See data sheets for each eparate product.

As a rule of thumb use this cable data: Signal wire min. 0.75 mm² Power supply 24 V AC 1.5 mm² to the KCD.

The EKKX 0.5 mm (0.2 mm²) is an appropriate type of cable for wiring between the KCD and the KST if the distance between the two is less than 10 metres. An EKKR 1.0 cable must be used if the length of cable required is 10 - 30 metres. The cable described above can be used for wiring C1 and C2 to the KST if the system is not connected to a LON network. In other cases, use a Beldon type 8471 twisted-pair cable for wiring to C1 and C2.

An appropriate type of cable between the other components is the EKKR 3 x Ø1.0 mm – equivalent to 0.75 mm². Alternatives free of halogenated organic materials are the ELQXB for the EKKX and the ELQRB for the EKKR.



Figure 5. Wiring for up to 8 active devices on the same output.

WIRING NOTES

When connecting up to 8 pcs of active devices the cable length tends to be too long. You must devide the cabeling into two groups where the total length is maximized to 25 m. Leather (spring 2003) m the active devices will be delivered with new control circut that can handle up to 50 m cabeling. The products will be marked "Styrkort TYP 2", and the maximum number of devices will inrease to 10 pcs.

- 1. Junction box (not included in delivery)
- 2. Cable with 3 wires min. Ø1.0 mm (0.75 mm²)
- 3. Cable from active device, lenght 3 m. Cut off not neded length.