

Danfoss AK-SM 810 System Manager



# Danfoss AK-SM 810 System Manager Instruction Manual

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## Danfoss AK-SM 810 System Manager



## General mounting

Instructions for the general mounting of the System Manager AK-SM 810 include diagrams illustrating the process. The diagrams show the unit being inserted into a mounting rack, the dimensions for the cutout in the mounting surface, and the attachment of cables and connectors.

### Mounting Details

- Mounting of the unit into a rack or frame.
- Required cutout dimensions: 280 mm x 241 mm.
- Cable connections for Alarm, Modbus, and LON interfaces.

### Specifications

<b>Temperature</b>	-10°C to +55°C
<b>Humidity</b>	0-95% RH, non-condensing
<b>Protection</b>	IP20

### US mounting

The US mounting section includes instructions and diagrams for the proper installation of the unit within a US-based system. It also provides safety and compliance information for the installation.

### Compliance Information

- UL Listed, file: E131024.
- Class 2 or LPS in accordance with NEC.
- Use 16 AWG or larger wires rated for at least 75°C.

### Panel mounting

Panel mounting instructions provide detailed steps and diagrams for inserting the unit into a panel and connecting various cables.

### Terminating

Terminating instructions cover the setup of communication protocols such as Modbus and LON, as well as the termination of a TCP/IP network with an ethernet cable and RJ 45 connectors.

### Communication Setup

- Termination switch settings for Modbus and LON.
- Use of a repeater if necessary, including the correct placement of 120 Ohm terminators.
- TCP/IP network termination with LAN and shielded ethernet cable.

### Initial Settings for TCP/IP

1. Check address setting (Factory IP address = 192.168.1.161).
2. Download “StoreView Desktop” from the provided website to a PC.
3. Run “StoreView Desktop”.
4. Connect to the device’s IP address.
5. Set Engineering unit preferences.
6. Set Users/Password (default: User = Supervisor / Password = 12345).
7. Set Communications settings.
8. Set address setting (0 = master).
9. Confirm settings and reset.

## **Environmental and Safety Information**

The product contains electrical components and must be disposed of separately from domestic waste. Collection must be in accordance with local and currently valid legislation for electrical and electronic waste.

## **FAQ**

**What are the temperature and humidity operating conditions for the AK-SM 810?**

**The operating temperature range is -10°C to +55°C, and the humidity range is 0-95% RH, non-condensing.**

**What are the IP protection and compliance standards?**

**The unit has an IP20 protection rating and is UL listed with specific compliance to NEC standards.**

**How should the AK-SM 810 be mounted?**

**It should be mounted in a rack or frame with specified cutout dimensions, and all cables should be connected according to the instructions.**

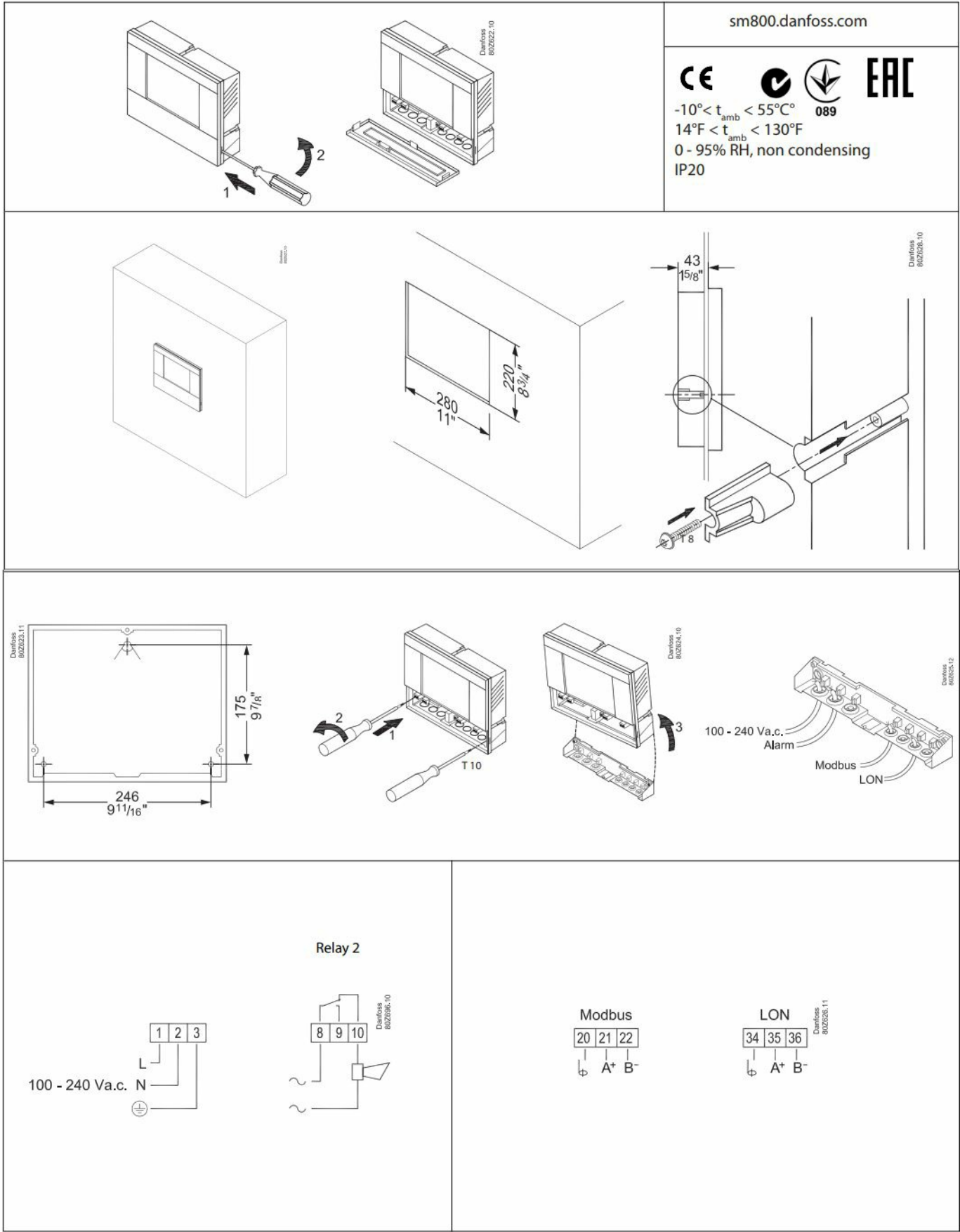
**What should be done if a repeater is used in the network setup?**

**If a repeater is used, ensure that terminators are used as instructed, with a 120 Ohm terminator on the last device.**

**How do I access the device settings?**

**Use the “StoreView Desktop” software to access and configure the device settings.**

## **General mounting**



US mounting

UL<sub>us</sub> Listed

UL file: E31024

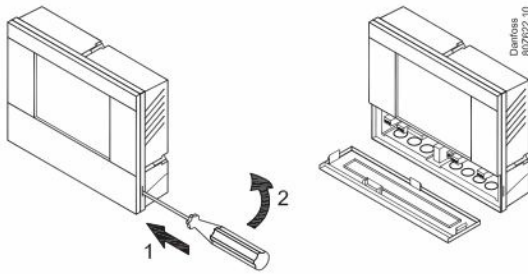
61B5

Class 2 or LPS in accordance with NEC.  
For supply connections, use 16 AWG or  
larger wires rated for at least 75°C (167°F).  
Use copper conductors only.

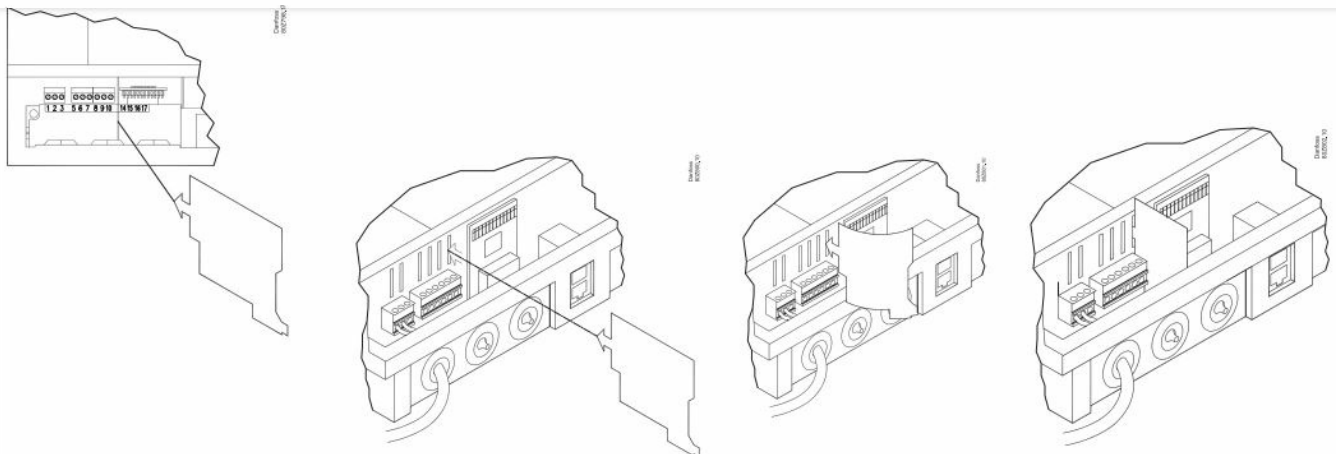
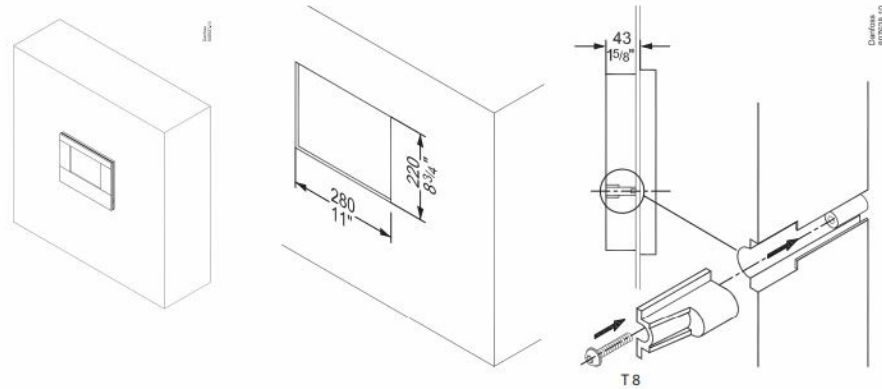
$14^{\circ}\text{F} < t_{\text{amb}} < 130^{\circ}\text{F}$

0 - 95% RH, non condensing

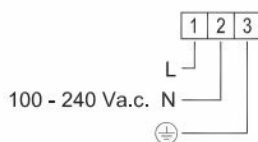
IP20



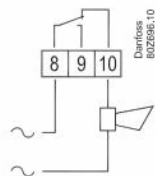
## Panel mounting



## Supply



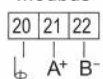
## Relay 2



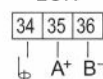
For safety reasons both supply  
voltage and relay voltage must be  
the same voltage.

## Modbus, Lon-version



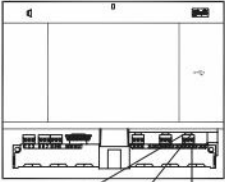
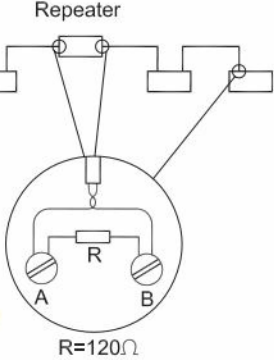
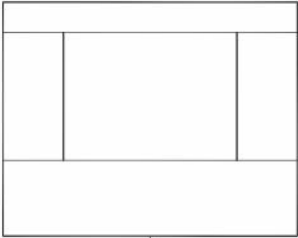

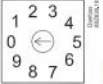
### Modbus



### LON

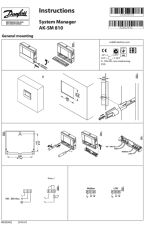


The actual installation of the data communication cable must comply with the requirements mentioned in the

<div>Terminering Termination Terminierung Terminaison Terminación</div> <div><div><div>OFF ←</div><div>→ ON</div><div></div><div>Modbus</div></div><div><div>OFF ←</div><div>→ ON</div><div></div><div>LON</div></div></div> <div><div><div>Term. switch off on</div></div><div><div>Repeater</div><div>If a repeater is used, make sure the terminators are used (included with repeater).</div><div>Use the included 120 Ohm terminator on last device.</div><div>R=120Ω</div></div><div><div>Danfoss 800281.10</div></div></div>	<div>TCP/IP</div> <div><div><div>LAN</div></div><div><div>RJ 45</div><div>Use shielded ethernet cable</div></div><div><div>Danfoss 800281.10</div></div></div>	<div>Initial settings</div> <div><div><div>1 2 3 0 9 4 9 8 7 6</div></div><div>1. Check address setting = 9 (9 = Factory IP address = 192.168.1.161)</div><div>2. Download "StoreView Desktop" (sm800.danfoss.com) to PC</div><div>3. Run "StoreView Desktop"</div><div>4. Connect to 192.168.1.161</div><div>5. Set Engineering unit preferences</div><div>6. Set Users / Password Default: User = Supervisor / Password = 12345</div><div>7. Set Communications</div><div><div><div>1 2 3 0 0 4 9 8 7 6</div></div><div>8. Set address setting = 0 (0 = master)</div><div>9. OK and Finish (reset)</div></div></div>	<div>Konfiguration Configuration Konfiguration Configuration Configuración</div> <div>See manual: USCO.PI.R1.E9.--</div>
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## Documents / Resources

	<p><a href="#">Danfoss AK-SM 810 System Manager</a> [pdf] Instruction Manual AK-SM 810 System Manager, AK-SM 810, System Manager, Manager</p>
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## References

- [User Manual](#)

### Manuals+, [Privacy Policy](#)

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