Danfoss EKC 366 Media Temperature Controller Installation Guide

EKC 366 Media Temperature Controller
Installation Guide

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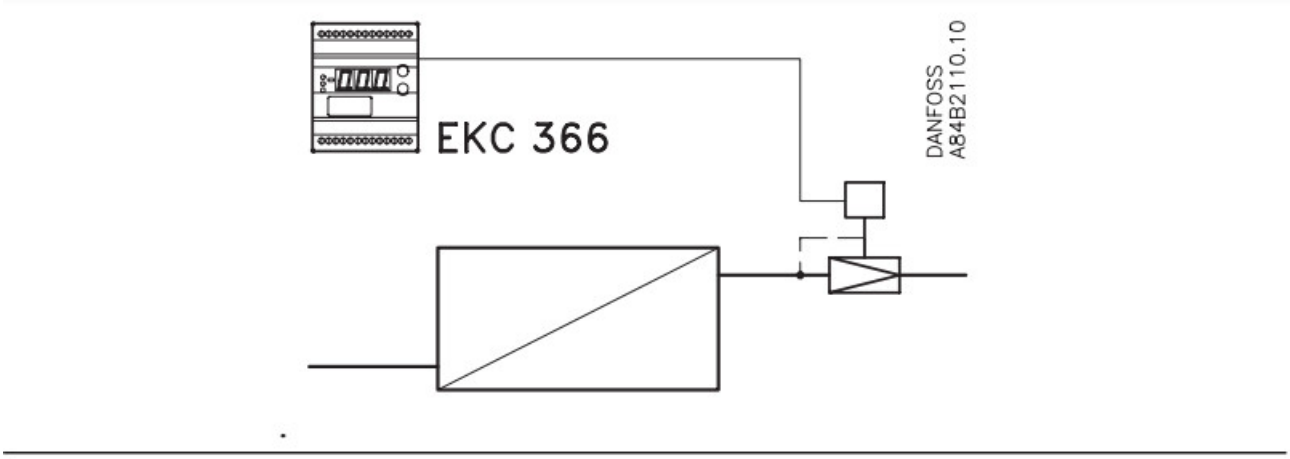
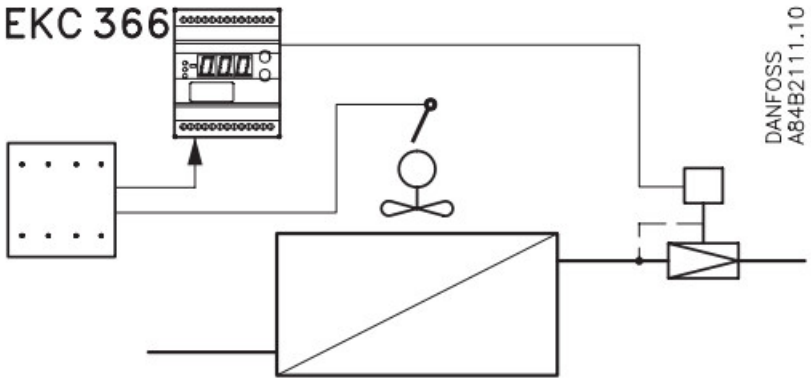
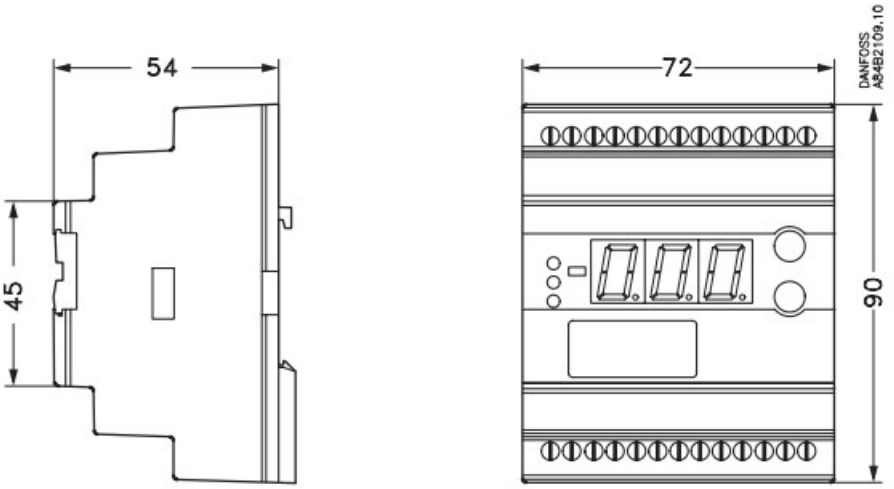
Principle

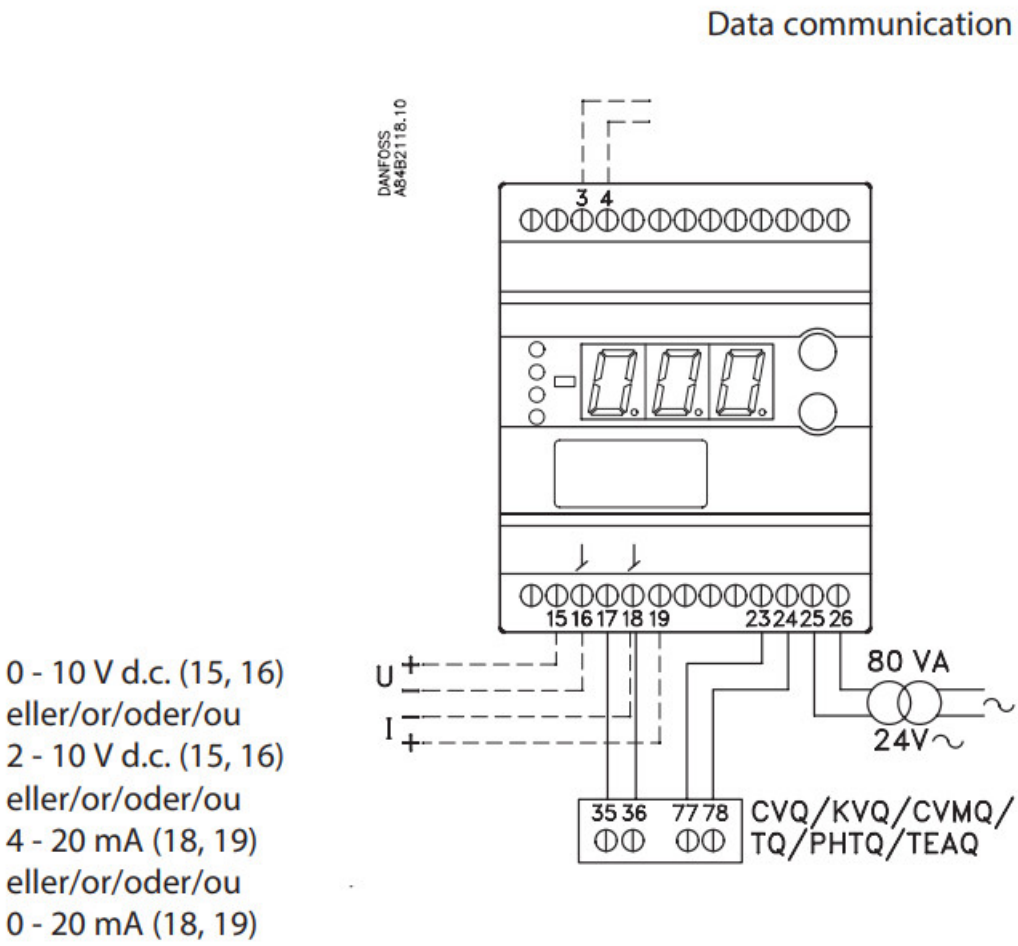




Dimensions



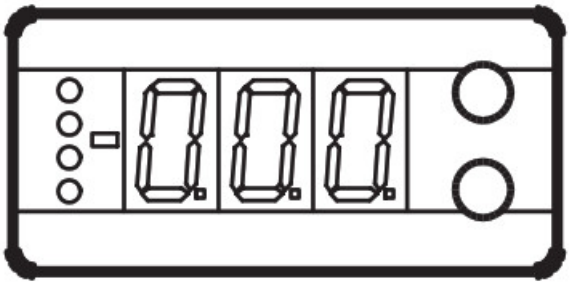
Connection



Operation

Display

The values will be shown with three digits, and with a setting you can determine whether they are to be shown in °C or in °F.



LED's on the front panel

There is one LED on the front panel which will light up when power is sent to the pilot valve. 
There are furthermore three LED s which will flash if there is an error in the regulation. In this situation, you can show the error code on the display and cut out the alarm by giving the upper button a brief push.

The controller can give the following messages:	
EI	Errors in the controller
EII	Valve's actuator temperature is outside its range
0.00E+00	Input signal outside its range

The buttons
When you want to change a setting, the two buttons will give you a higher or lower value depending on the button you are pushing. But before you change the value, you must have access to the menu. You obtain this by pushing the upper button for a couple of seconds – you will then enter the column with parameter codes. Find the parameter code you want to change and push the two buttons simultaneously.
When you have changed the value, save the new value by once more pushing the two buttons simultaneously.

	Gives access to the menu
	Gives access to changes
	Saves a change

Examples of operations
Set the valve's basic temperature reference

1. Push the two buttons simultaneously
2. Push one of the buttons and select the new value
3. Push both buttons again to conclude the setting

Read the valve's regulating reference

1. Push the lower button
   (After approx. 20 seconds the controller automatically returns to its setting, and it again shows the valve's actual temperature)
   Set one of the other menus
2. Push the upper button until a parameter is shown
3. Push one of the buttons and find the parameter you want to change
4. Push both buttons simultaneously until the parameter value is shown
5. Push one of the buttons and select the new value
6. Push both buttons again to conclude the setting

Literature survey:
Mauna 663 CKE
Installation guide, Data communication link

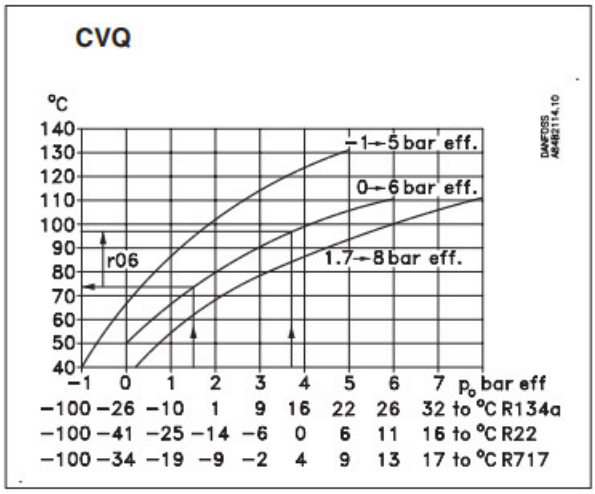
Valve's working temperature

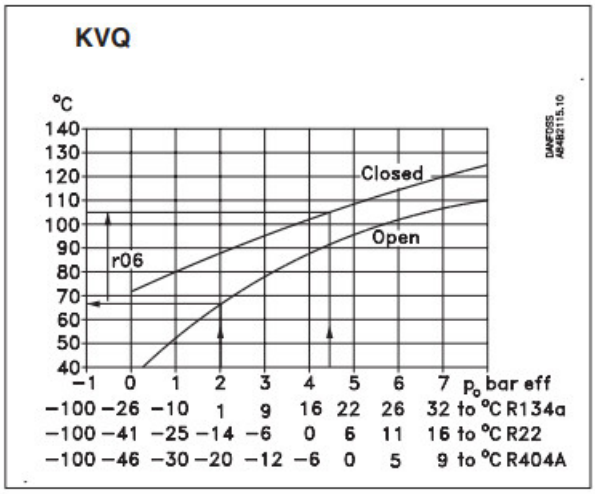
Without external signal

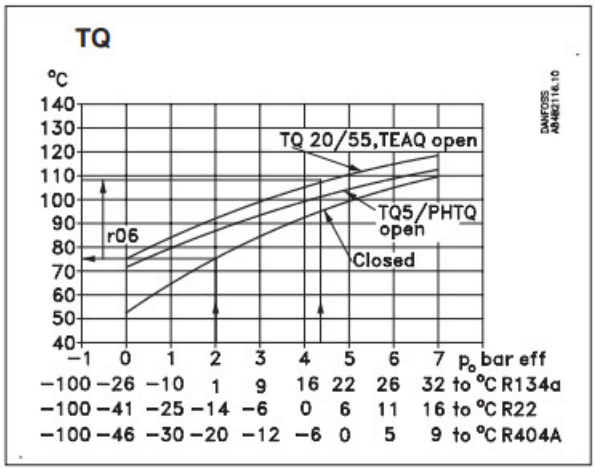
The working temperature must be set on the basis of one of the following curves. Find the actuator temperature corresponding to the required evaporating temperature (push). Set the value in the controller as mentioned under "Set the valve's basic temperature reference".

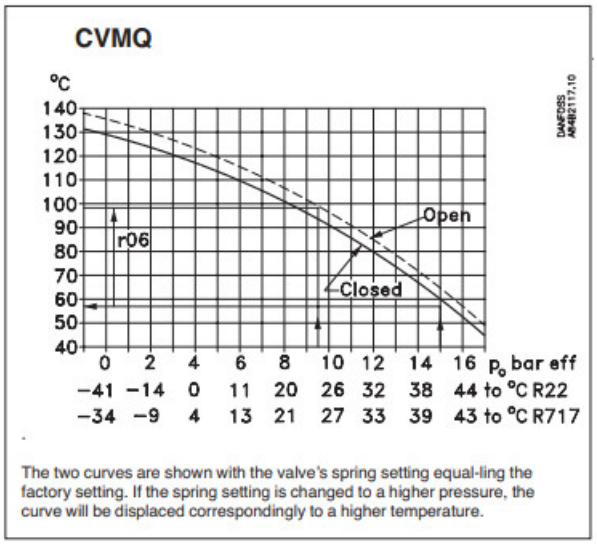
With external signal

If the valve is to be operated with an external signal, two settings have to be made. One is as mentioned to the left, and the other determines how much the signal must be able to raise the temperature in the valve. This value is also read on one of the following curves.
Set the value in the r06 menu.
If the set value is too low, the valve will not be able to close/open fully.









The two curves are shown with the valve's spring setting equal-ling the factory setting. If the spring setting is changed to a higher pressure, the curve will be displaced correspondingly to a higher temperature.

Example

CVQ type = 0-6 bar
Refrigerant = R717
A constant evaporating temperature or input pressure to the valve of -9°C (2 bar) is required.
According to the CVQ curve, this will require a temperature in the actuator of 80°C. Set the valve's basic temperature reference at 80°C.
When the valve has reached its working temperature, it may be necessary to fine-adjust the setting from the system's manometer.

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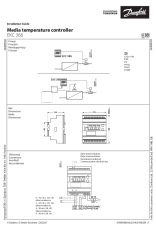
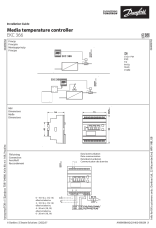
Documents / Resources

	Danfoss EKC 366 Media Temperature Controller [pdf] Installation Guide EKC 366, Media Temperature Controller, EKC 366 Media Temperature Controller, Temperature Controller, Controller
	Danfoss EKC 366 Media Temperature Controller [pdf] Installation Guide EKC 366 Media Temperature Controller, EKC 366, EKC 366 Temperature Controller, Media Temperature Controller, Temperature Controller, Controller