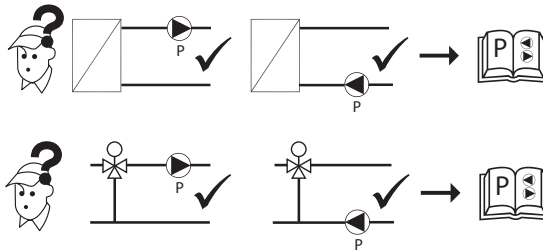
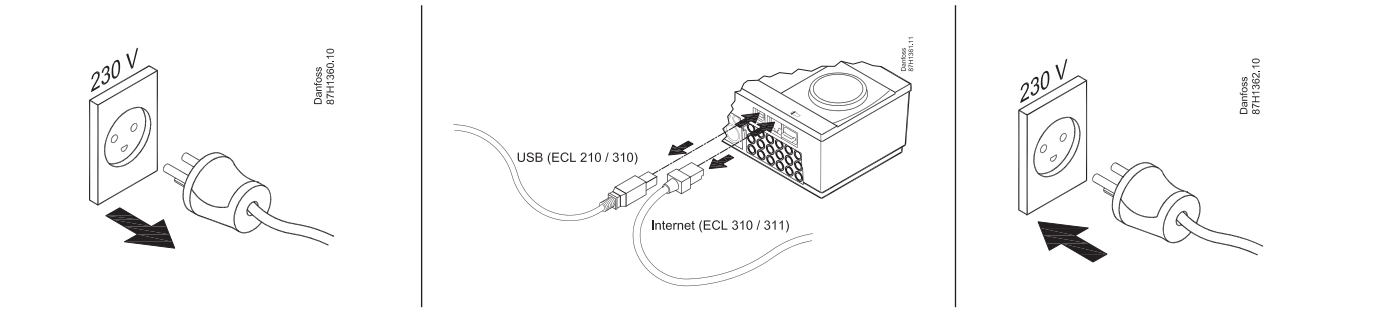
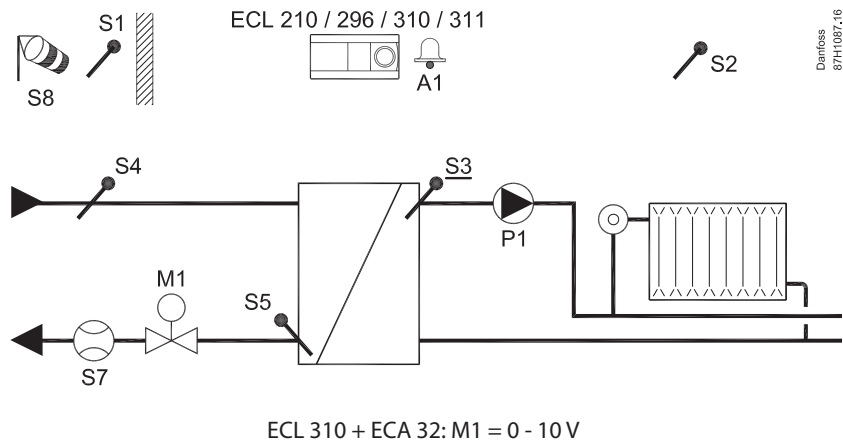


Installation Guide

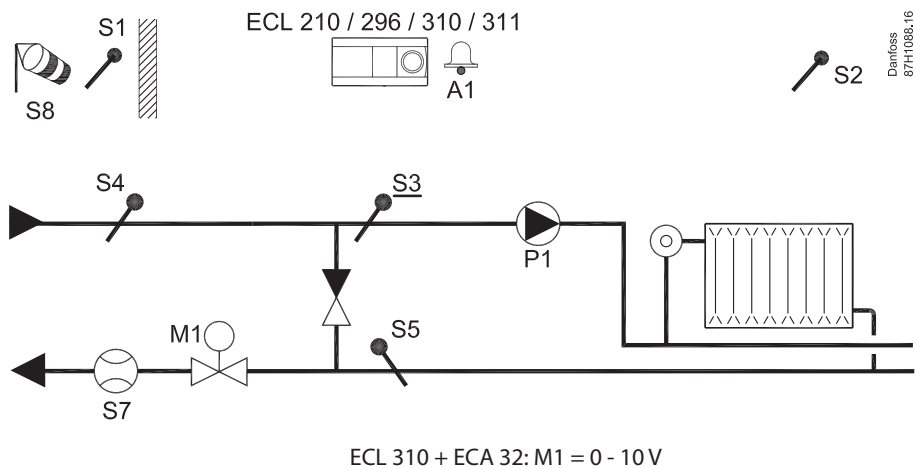
# ECL Comfort 210 / 296 / 310, A230 (code no. 087H3802) (A230.1, A230.2, A230.3, A230.4, A230.5)



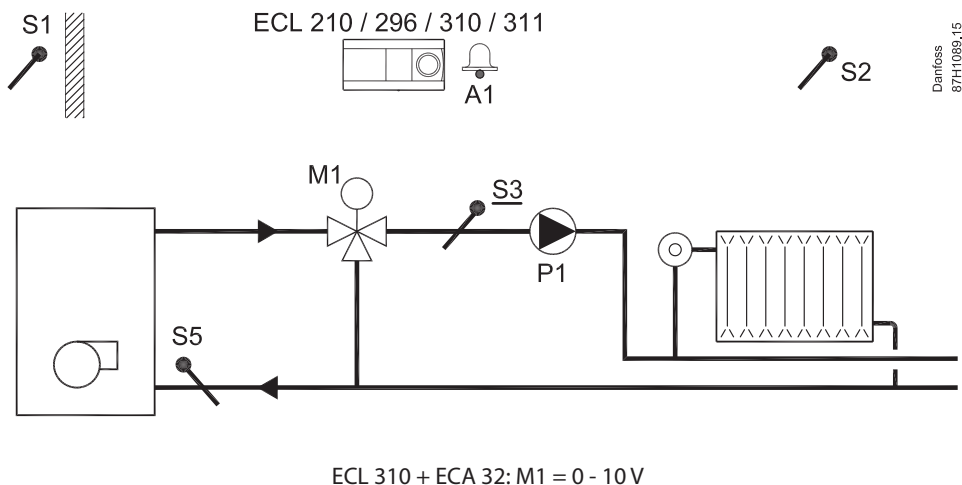
A230.1 ex. a



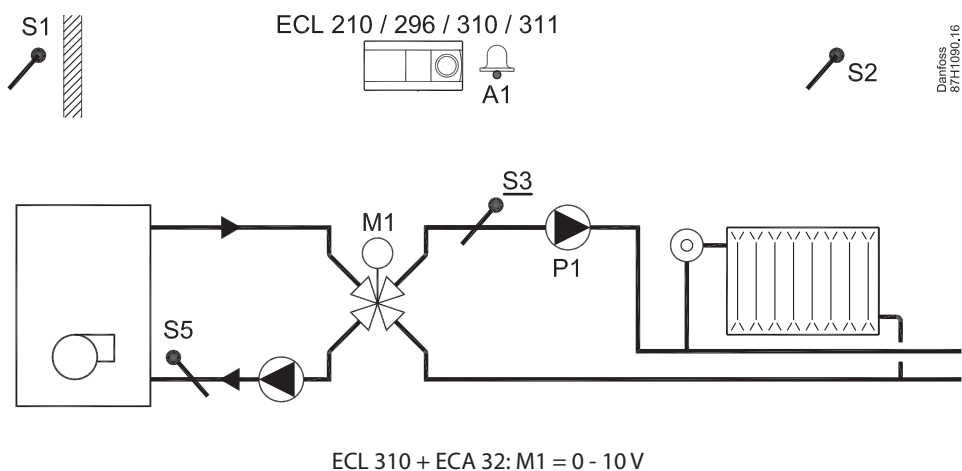
A230.1 ex. b:



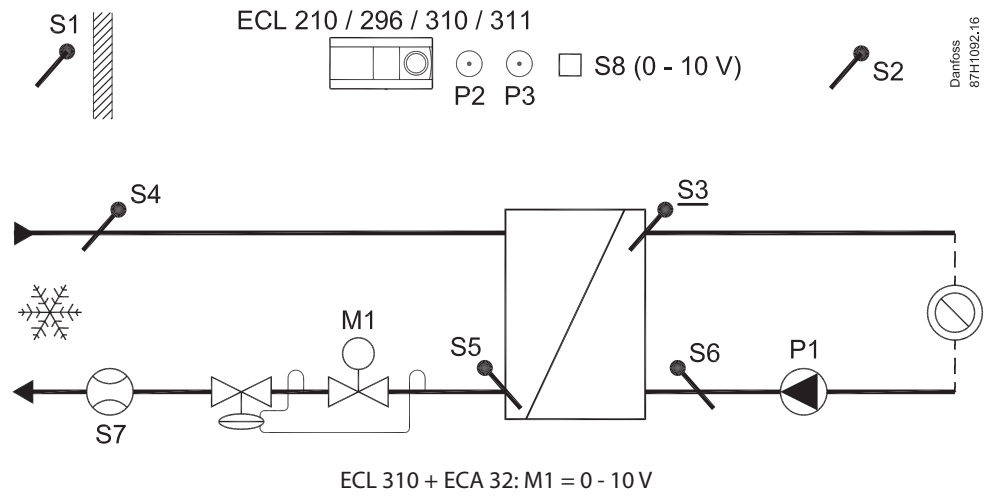
A230.1 ex. c:



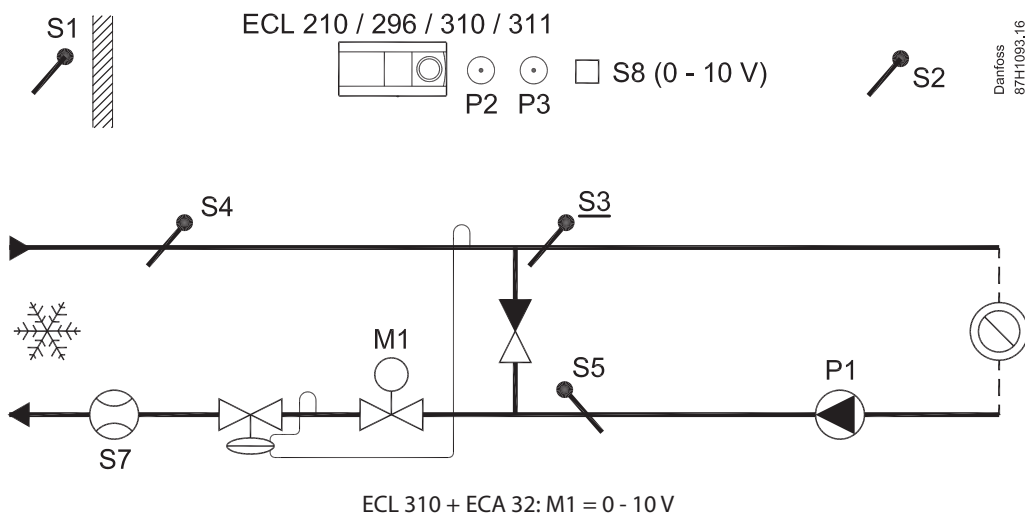
A230.1 ex. d:



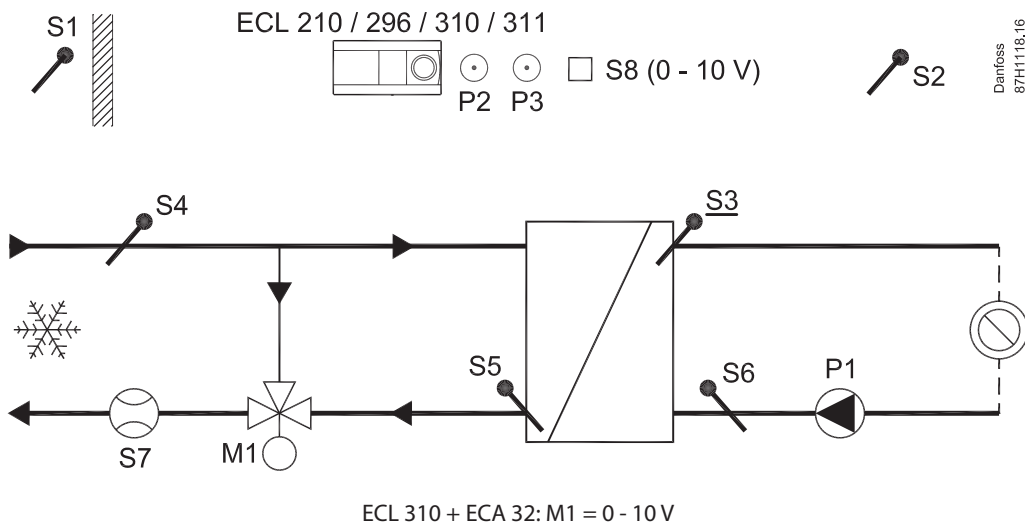
**A230.2 ex. a:**



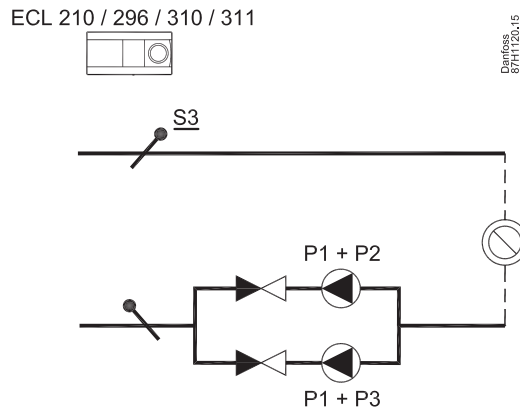
**A230.2 ex. b:**



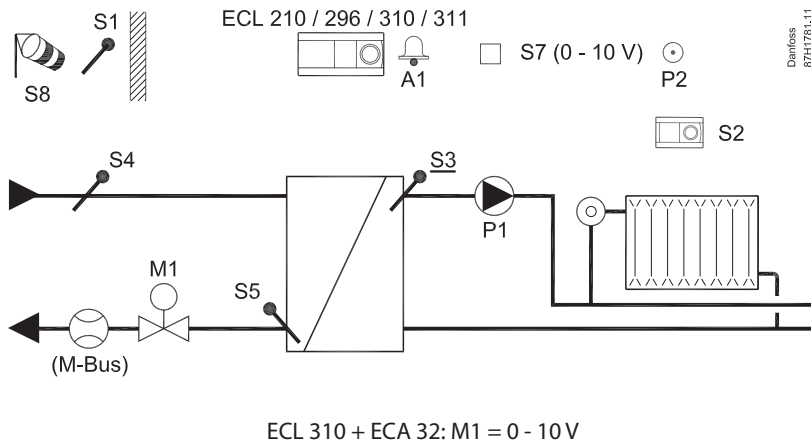
**A230.2 ex. c:**



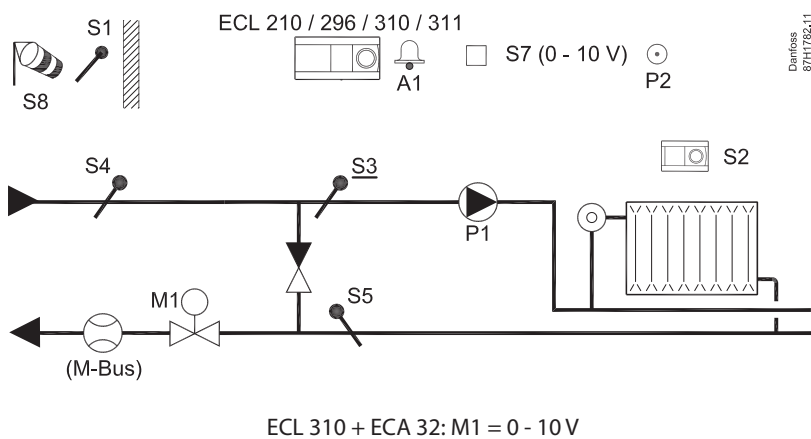
A230.2 ex. d:



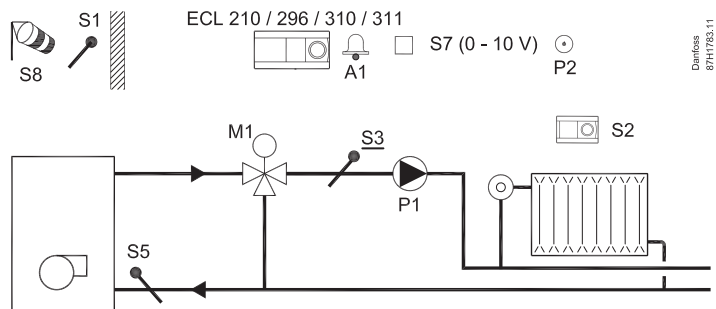
A230.3, ex. a



A230.3, ex. b

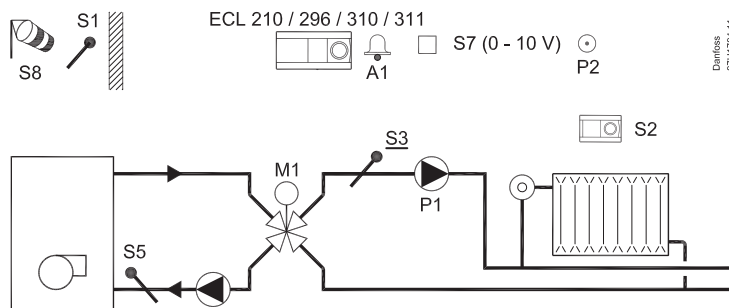


A230.3, ex. c



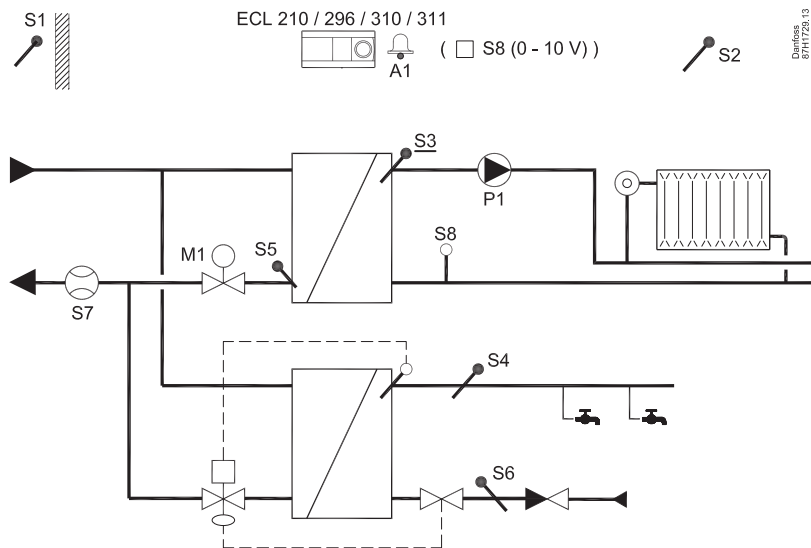
ECL 310 + ECA 32: M1 = 0 - 10 V

A230.3, ex. d



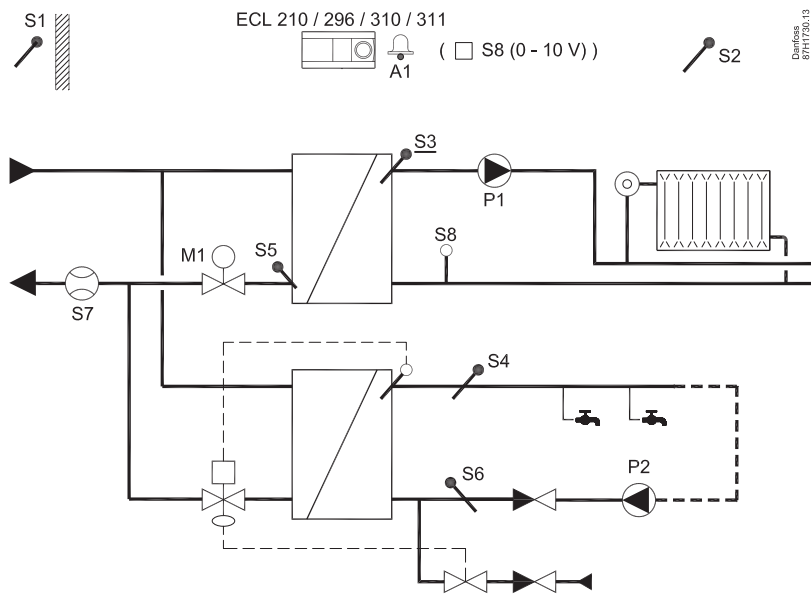
ECL 310 + ECA 32: M1 = 0 - 10 V

A230.4, ex. a



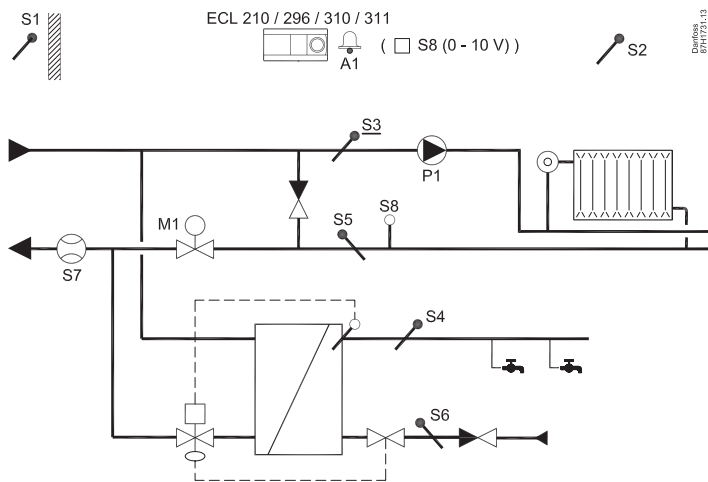
ECL 310 + ECA 32: M1 = 0 - 10 V

A230.4, ex. b



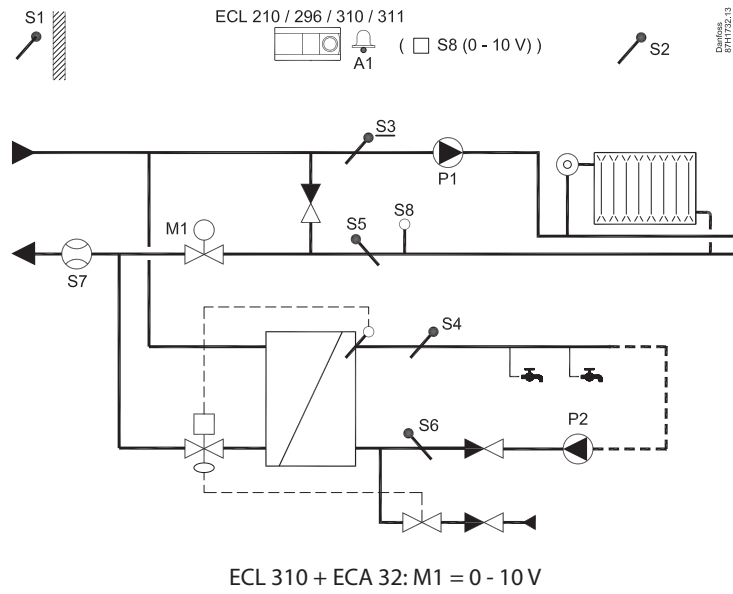
ECL 310 + ECA 32: M1 = 0 - 10 V

A230.4, ex. c

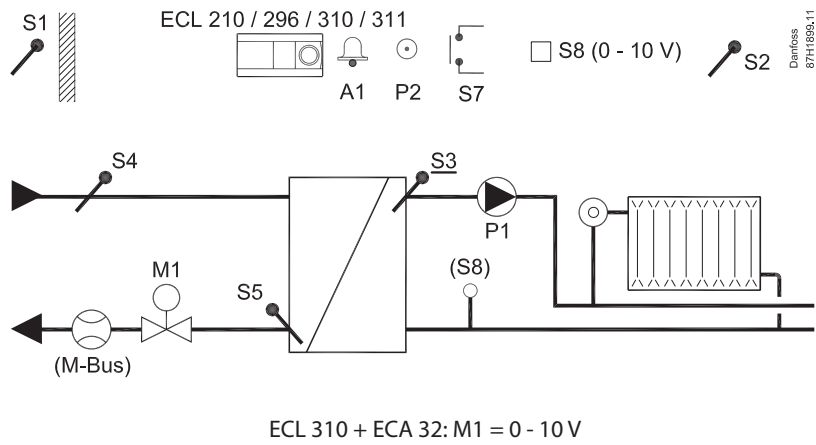


ECL 310 + ECA 32: M1 = 0 - 10 V

**A230.4, ex. d**



**A230.5, ex. a**

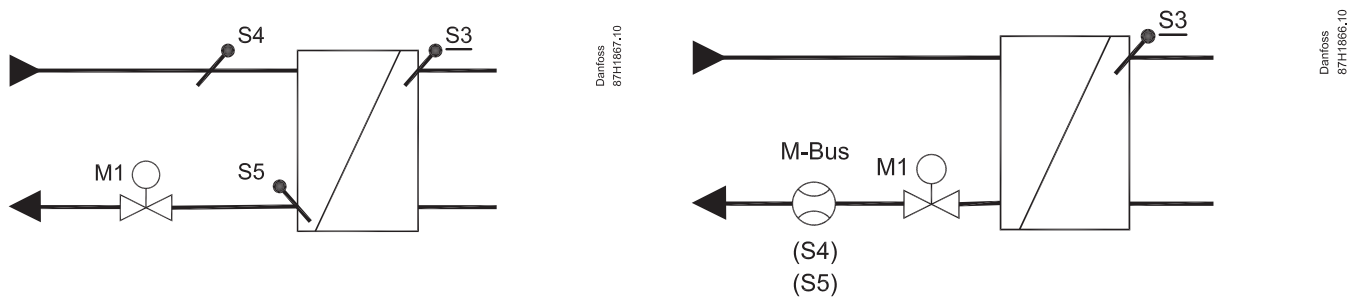


Installation Guide, ECL Comfort 210 / 296 / 310, A230

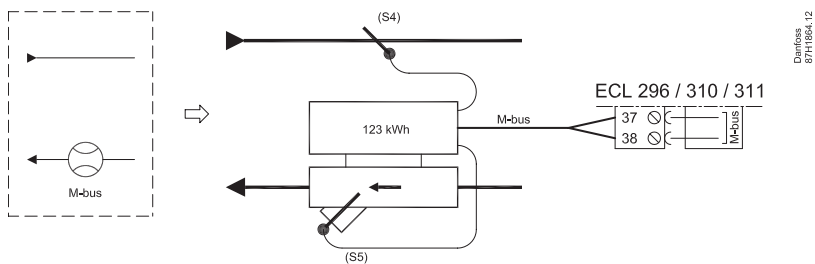
A230.1, A230.3, A230.5  
S4, S5



A:



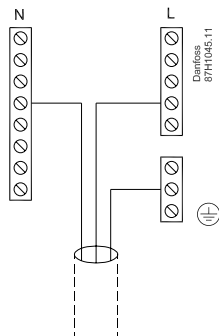
B:



ECL Comfort 210 / 296 / 310:  
230 V a.c.

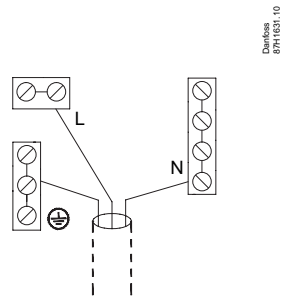
R		4 (2) A / 230 V a.c.
R		
Tr		0,2 A / 230 V a.c.

ECL 210 / 310:



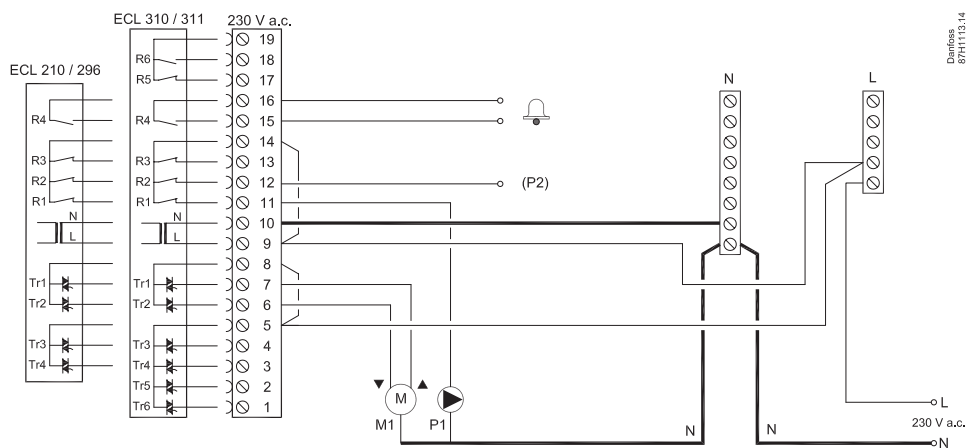


**ECL 296:**



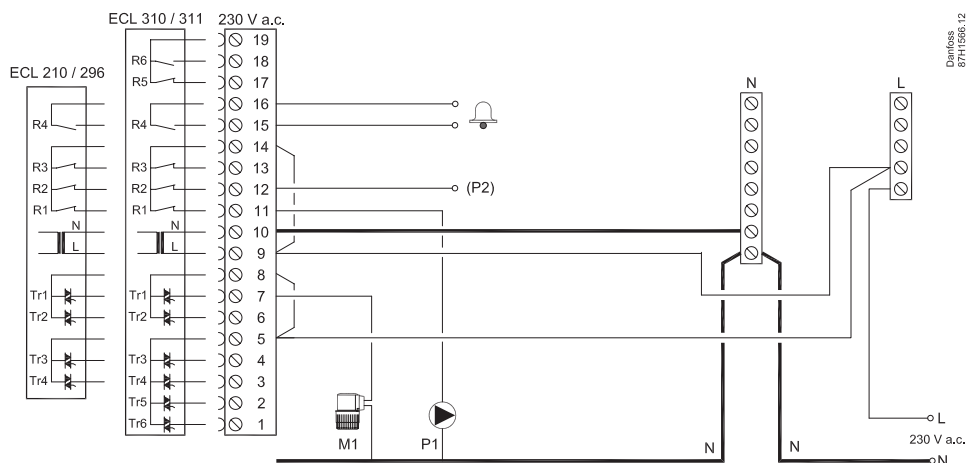
	R1	R2	R3	R4
<b>A230.1</b>	P1	(P2)		A1 (🔔)
<b>A230.2</b>	P1	(P2)	(P3)	
<b>A230.3</b>	P1	(P2)		A1 (🔔)
<b>A230.4</b>	P1	(P2)		A1 (🔔)
<b>A230.5</b>	P1	(P2)		A1 (🔔)

**230 V a.c.**

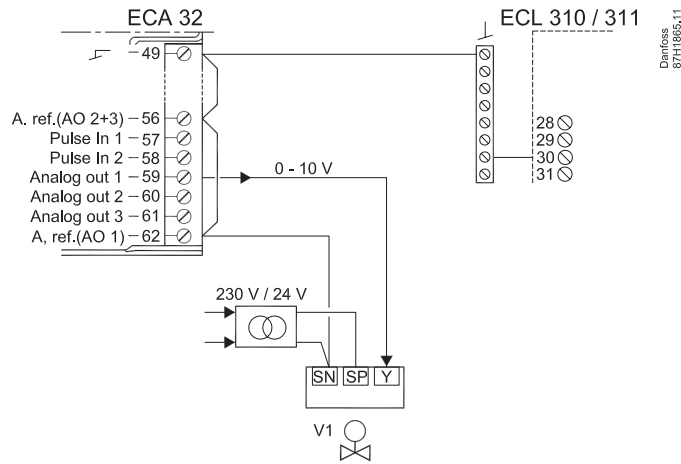


**230 V a.c.**

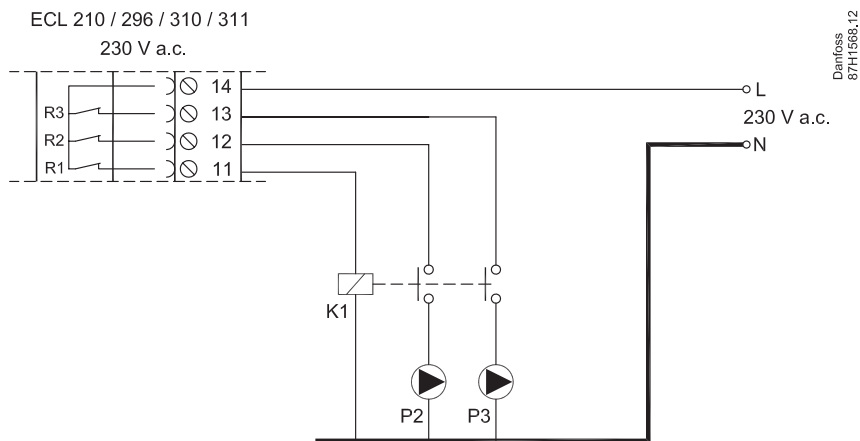
**(Danfoss thermo-actuator ABV)**



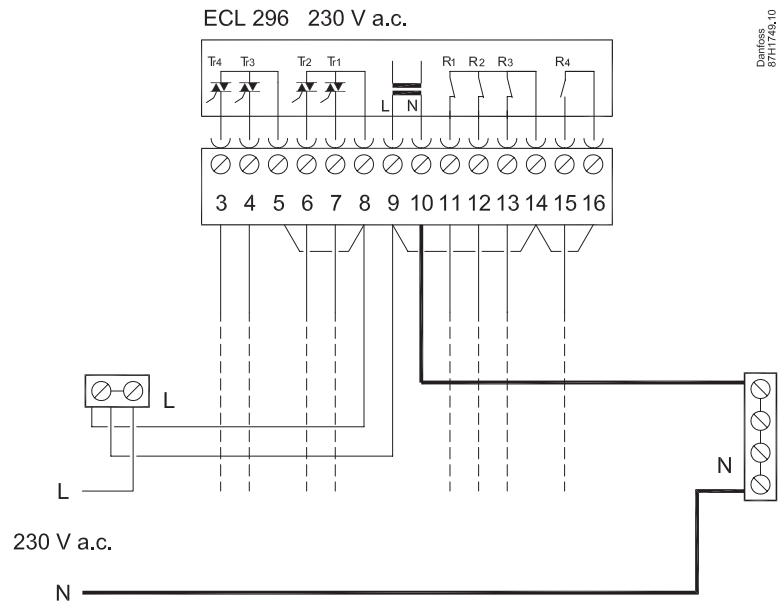
**ECL 310 + ECA 32**  
**M1 = V1 (0 - 10 V)**



**A230.2, P2 + P3**



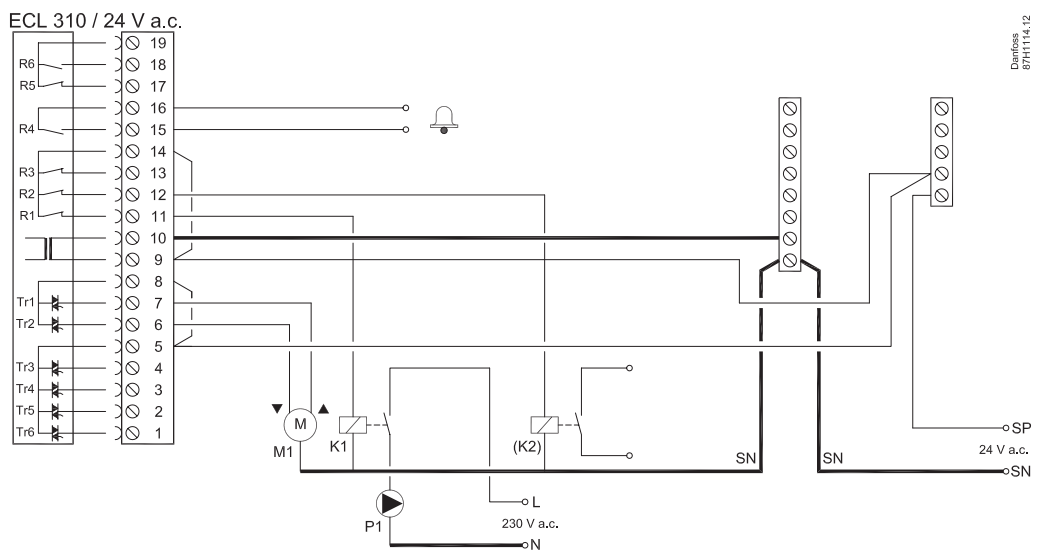
**ECL Comfort 296:  
230 V a.c.**



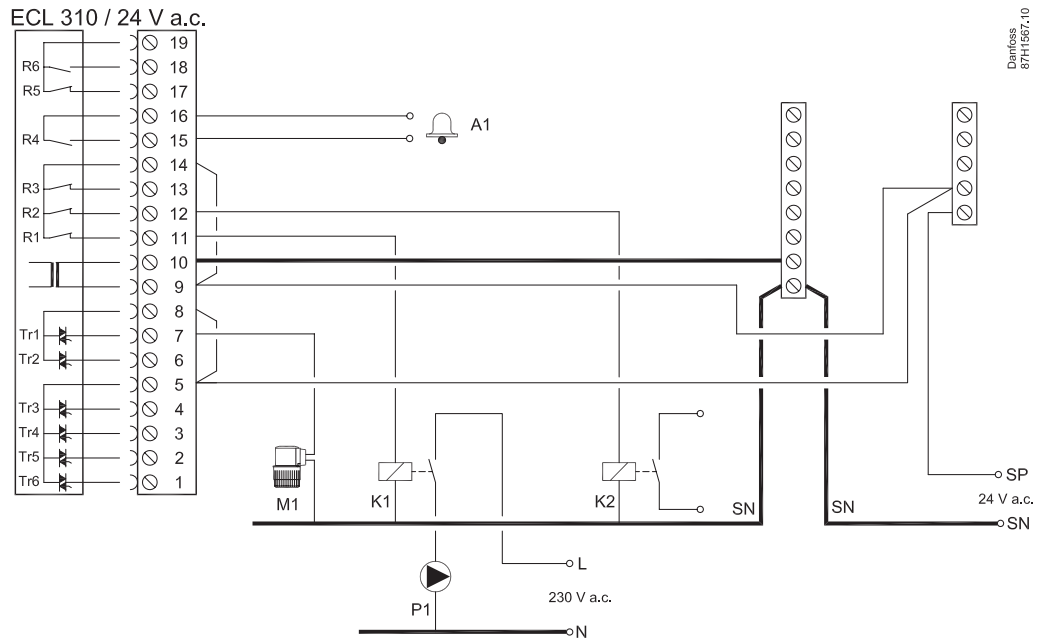
**ECL Comfort 310:  
24 V a.c.**

R	4 (2) A / 24 V a.c.
Tr	1 A / 24 V a.c.

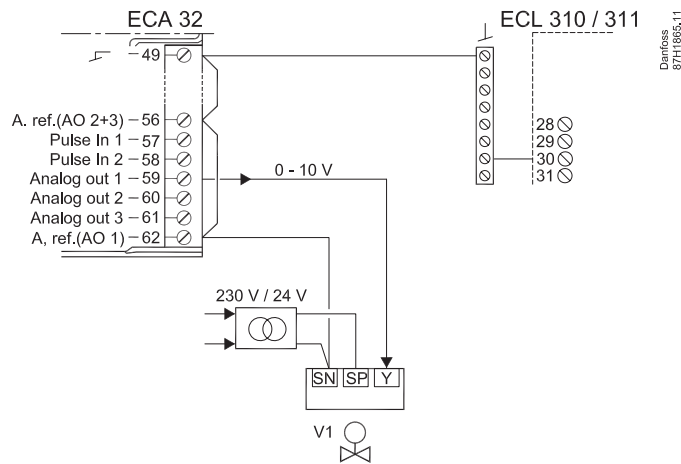
**24 V a.c.**



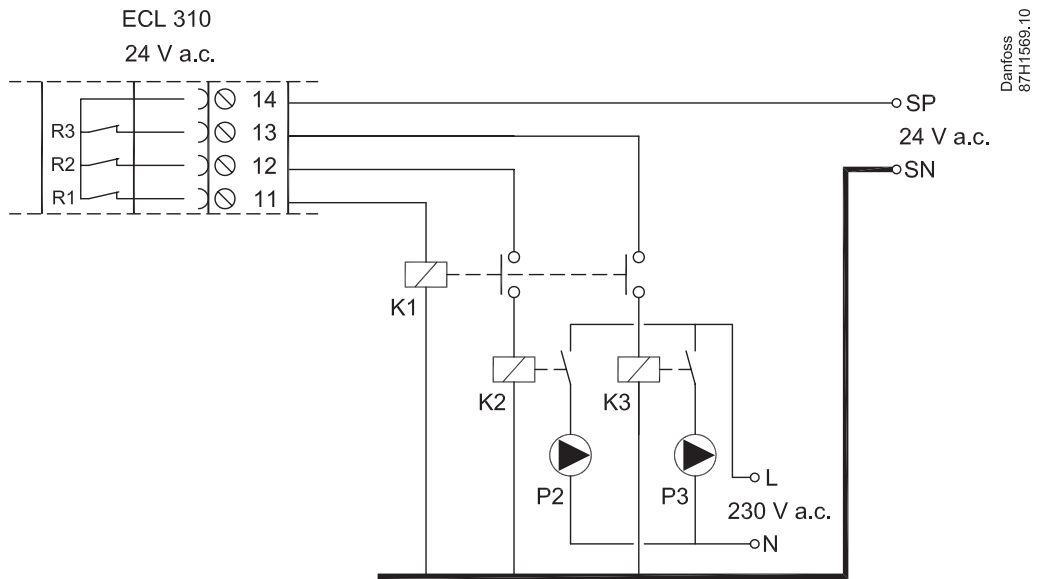
**24 V a.c.**  
**(Danfoss thermo-actuator ABV)**



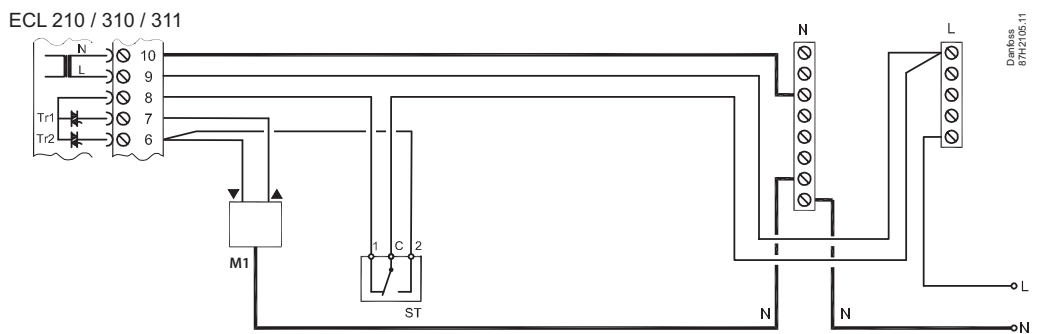
**ECL 310 + ECA 32**  
**M1 = V1 (0 - 10 V)**



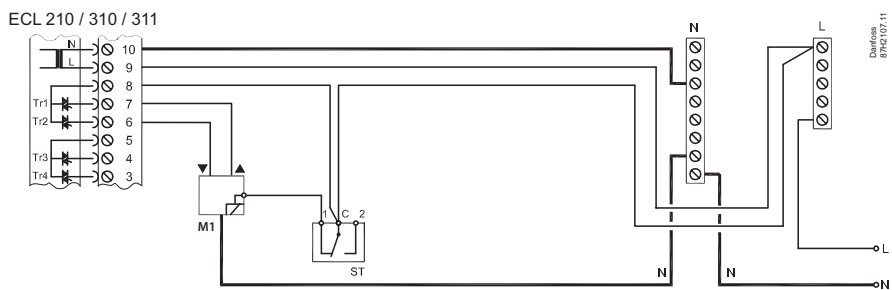
**A230.2, P2 + P3**



**230 V a.c. / 24 V a.c. , safety thermostat  
1-step closing**



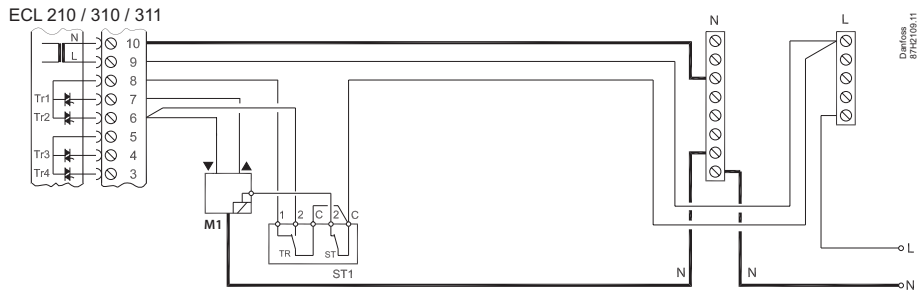
**230 V a.c. / 24 V a.c. , safety thermostat  
1-step closing**



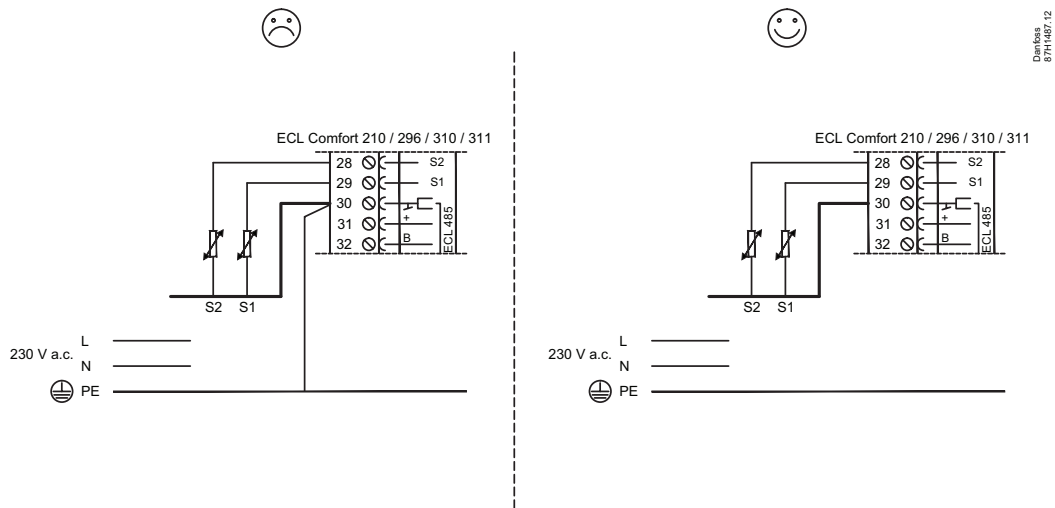
# Installation Guide, ECL Comfort 210 / 296 / 310, A230

## 230 V a.c. / 24 V a.c. , safety thermostat

### 2-step closing



### Pt 1000 (1000 Ω / 0 °C)



### Pt 1000 (1000 Ω / 0 °C)

#### ECL 210 / 296 / 310

	S1	S2	S3	S4	S5	S6	S7	S8
A230.1	X	X	X	X	X			
A230.2	X	X	X	X	X	X		
A230.3	X	(X)	X	X	X			
A230.4	X	X	X	X	X	X		
A230.5	X	X	X	X	X			

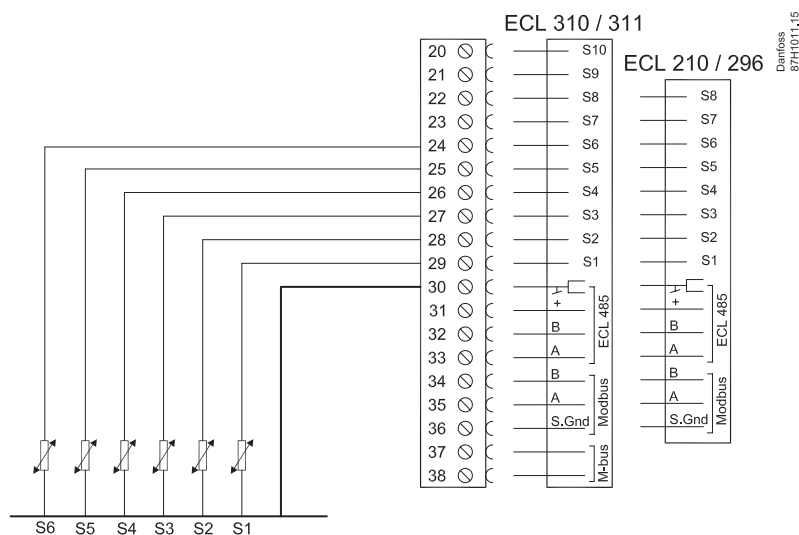
### Pulse

	S7
A230.1	X
A230.2	X
A230.3	
A230.4	X
A230.5	

0 - 10 V

	S7	S8
A230.1		0 - 10V ⇒
A230.2		0 - 10V ⇒
A230.3	0 - 10V ⇒ % RH	0 - 10V ⇒
A230.4		/ 0 - 10V ⇒
A230.5		/ 0 - 10V ⇒

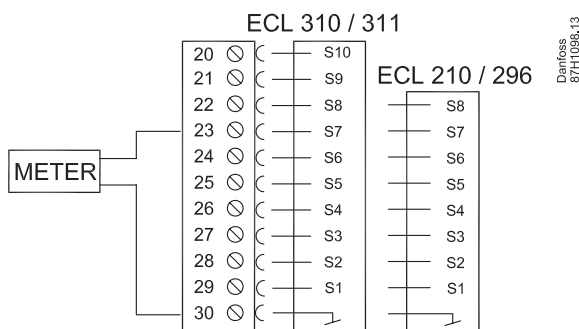
A230



A230.1, A230.2, A230.4



S7



A230.1, A230.2, A230.4

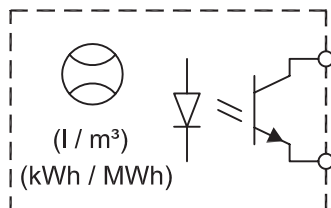


S7



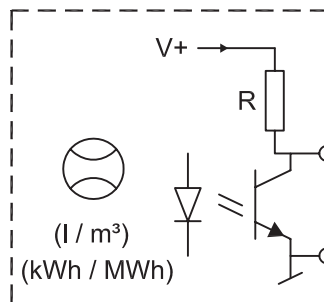
A / B ?

A:



Danfoss  
87H1457.10

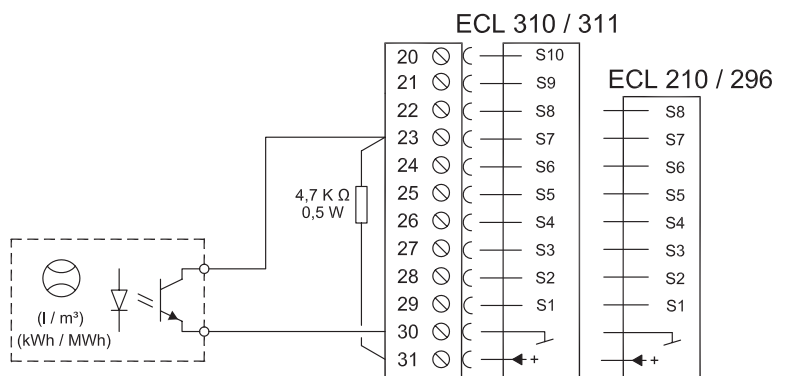
B:



Danfoss  
87H1458.10

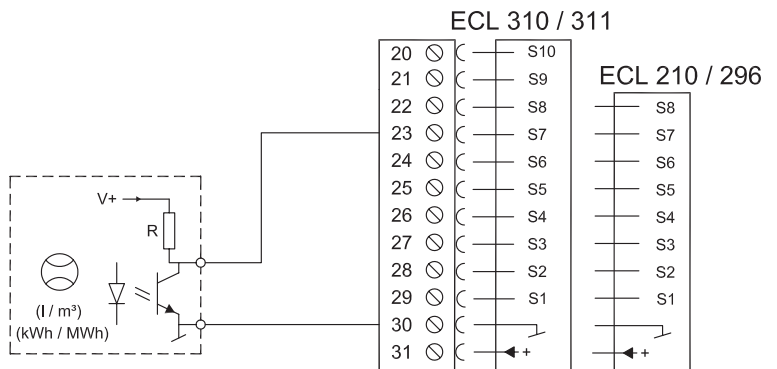


A:



Danfoss  
87H1459.12

B:

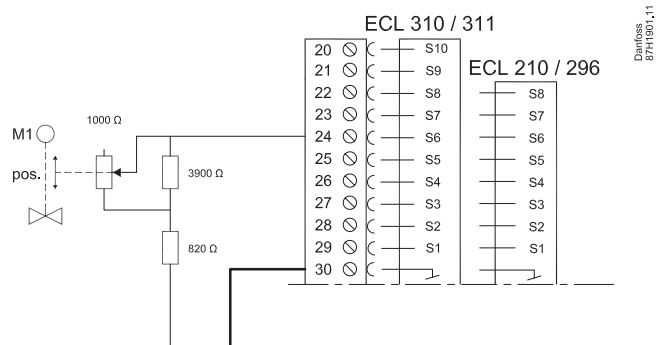


Danfoss  
87H1460.12



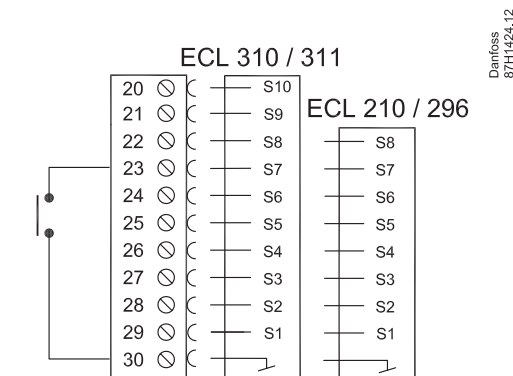
**A230.5**

**S6**



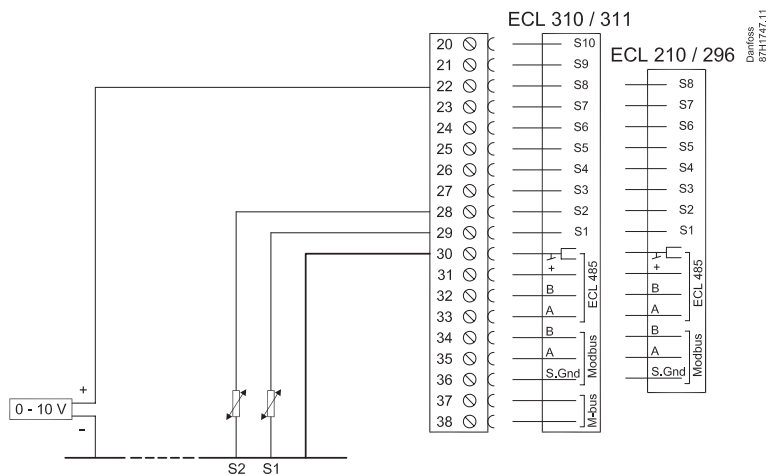
**A230.5**

**S7**

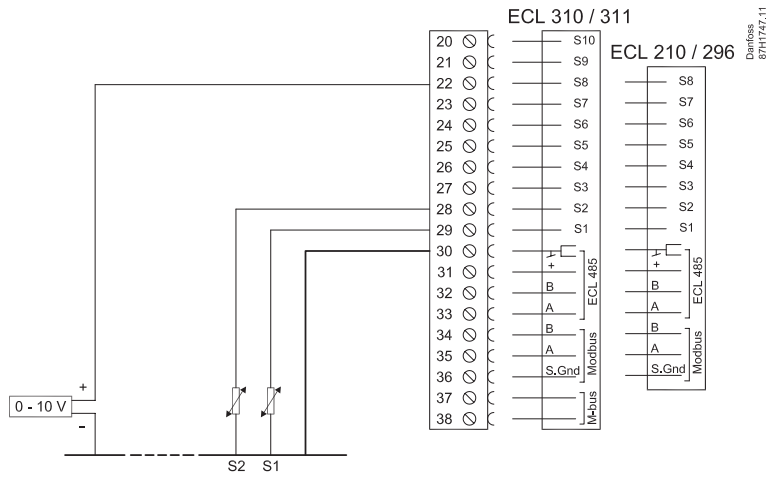


**A230.1, A230.3**

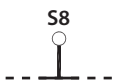
**S8**



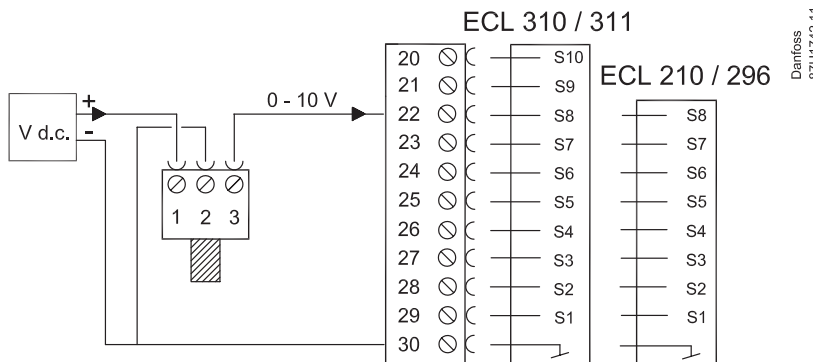
**A230.2**  
**0 - 10 V**



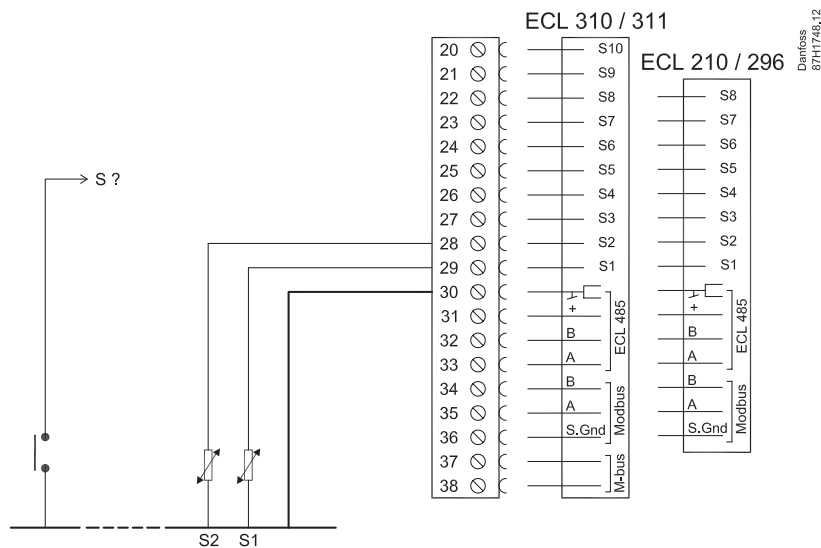
**A230.4, A230.5**



S8

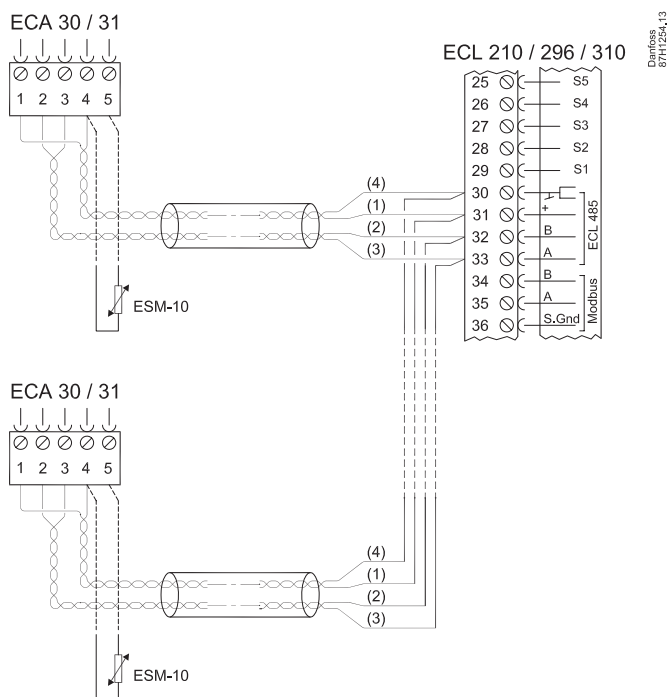


A230.1, A230.2, A230.3, A230.4, A230.5

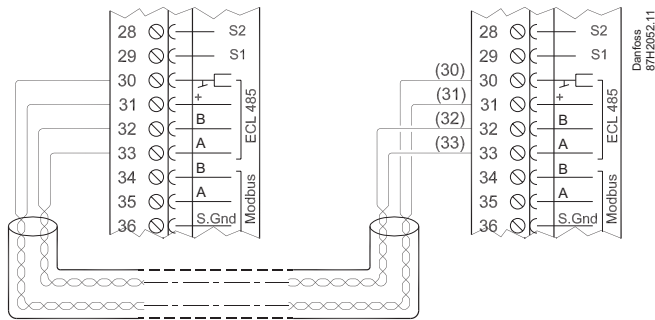


- ?  
ECL 210 / 296: S7 - S8
- ECL 310: S7 - S10
- ECL 310 + ECA 32: S7 - S16

ECA 30 / 31

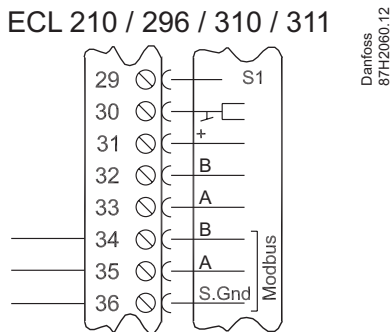


Master / slave



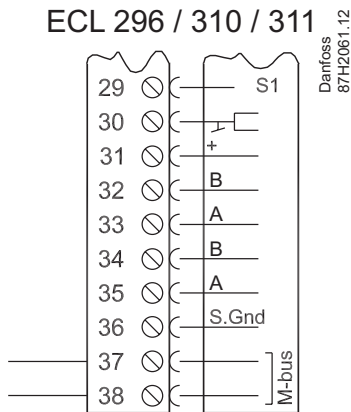
Modbus

ECL 210 / 296 / 310 / 311

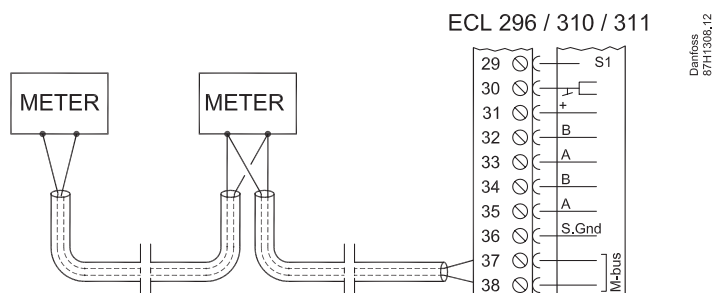


M-bus

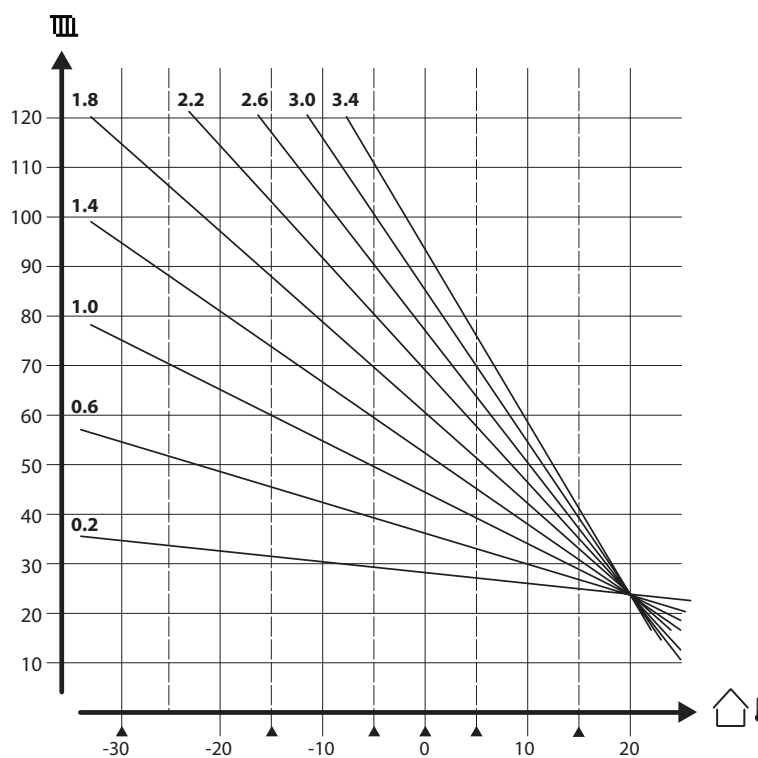
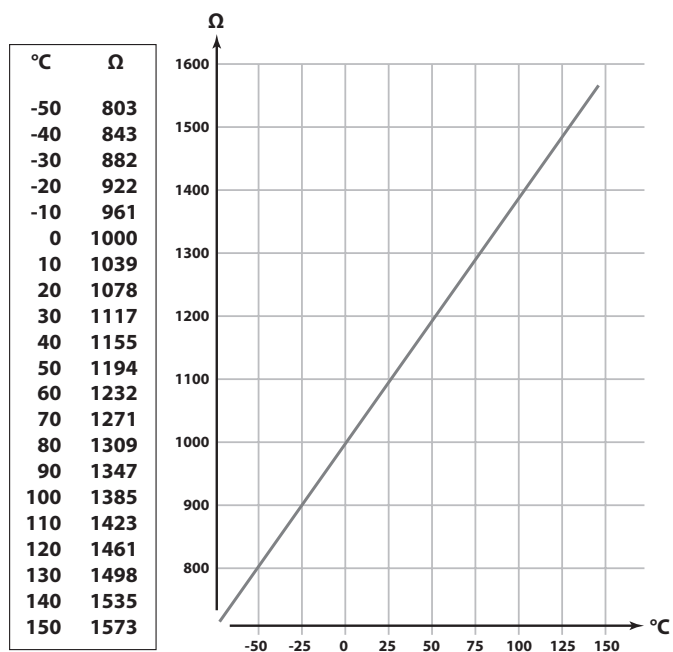
ECL 296 / 310 / 311



M-bus

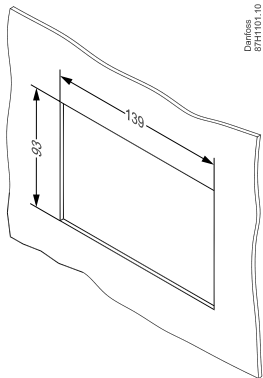


Pt 1000 (IEC 751B, 1000  $\Omega$  / 0 °C)

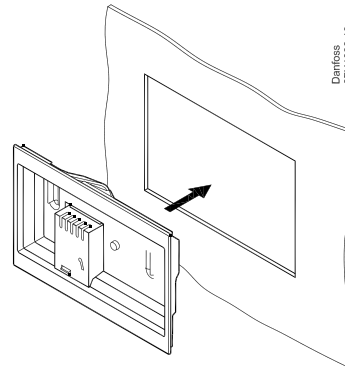


ECA 30

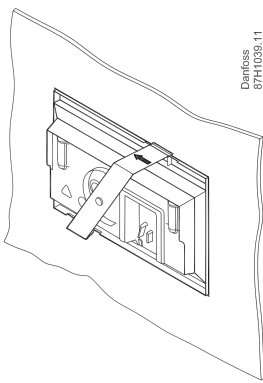
1



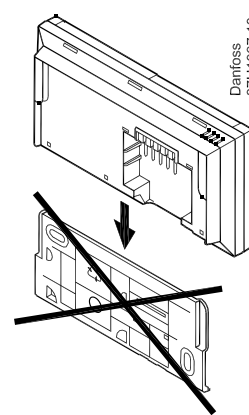
2



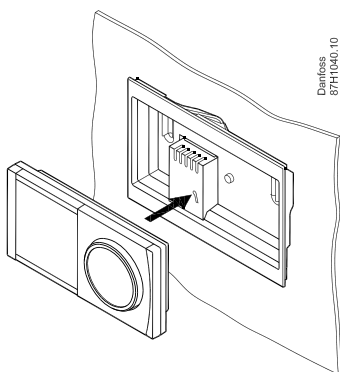
3



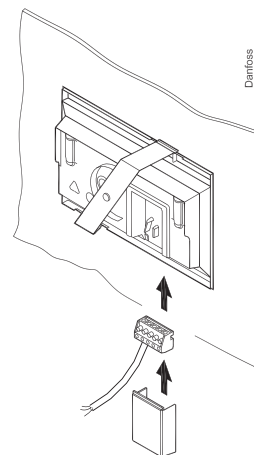
4



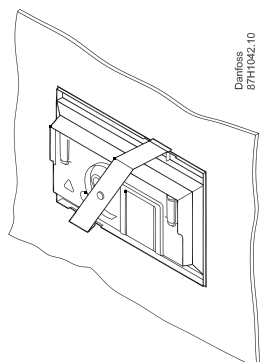
5



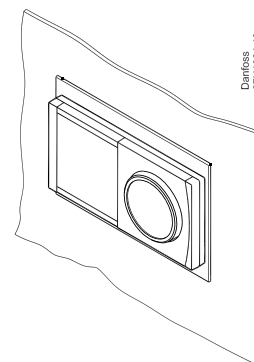
6



7

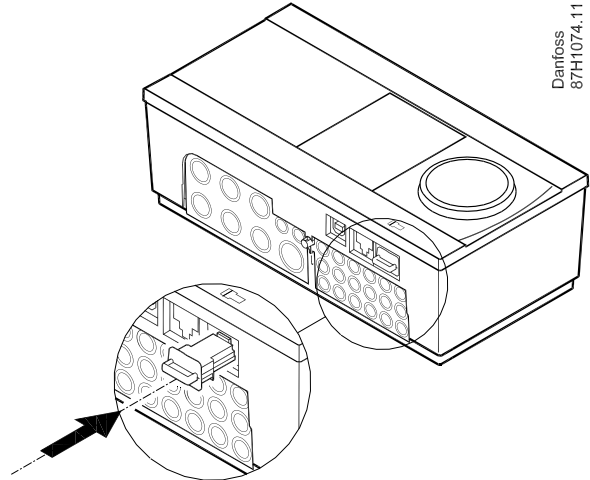
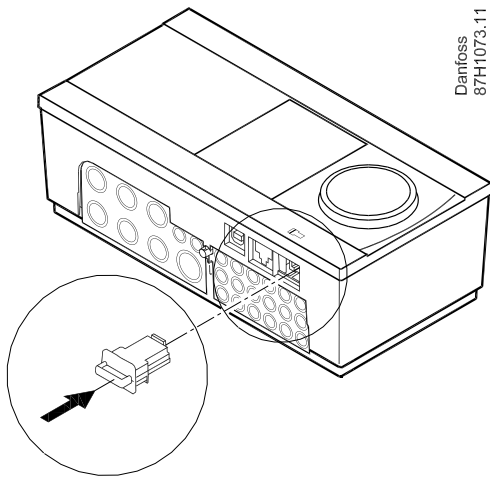
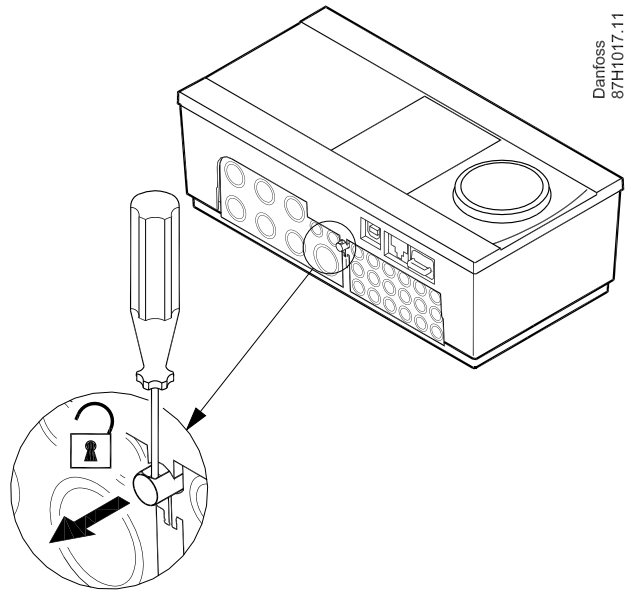
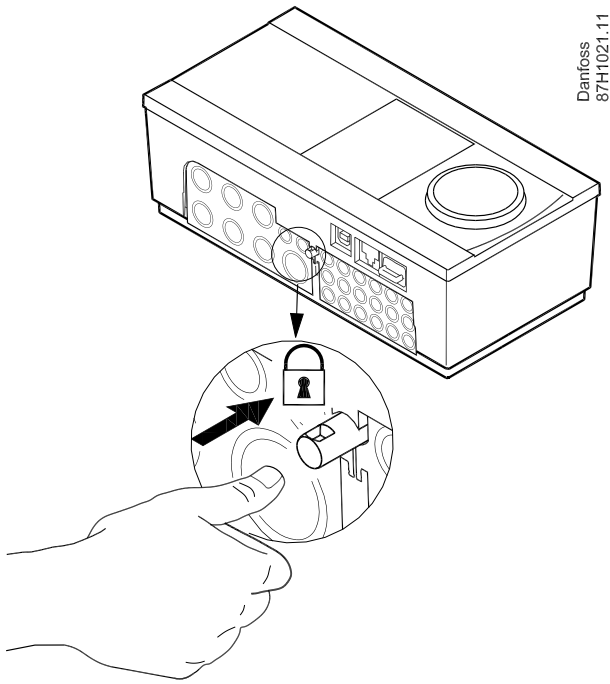


8





Installation Guide, ECL Comfort 210 / 296 / 310, A230



? **ECL Comfort 210 / 296 / 310, A230: [www.danfoss.com](http://www.danfoss.com) or [store.danfoss.com](http://store.danfoss.com)**

? **<https://www.youtube.com/user/DanfossHeating>  
-> Playlists -> How-to Videos -> District Energy installation videos**



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