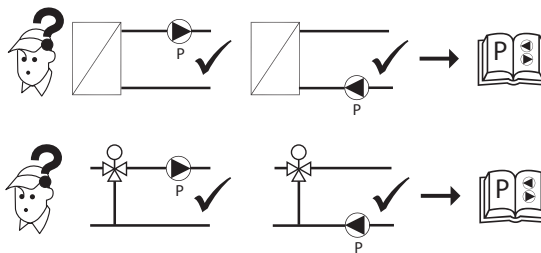
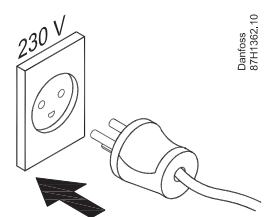
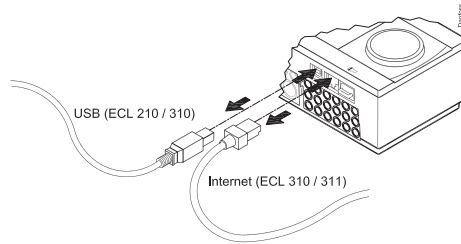
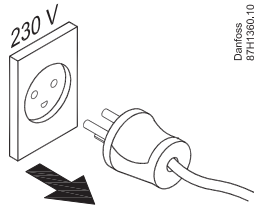
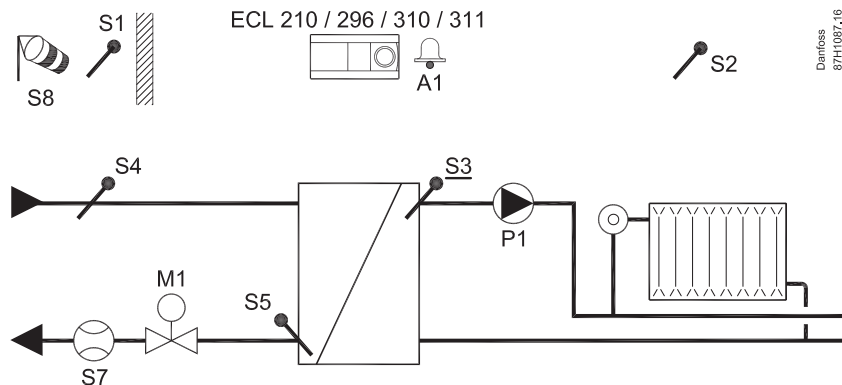


Installation Guide

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

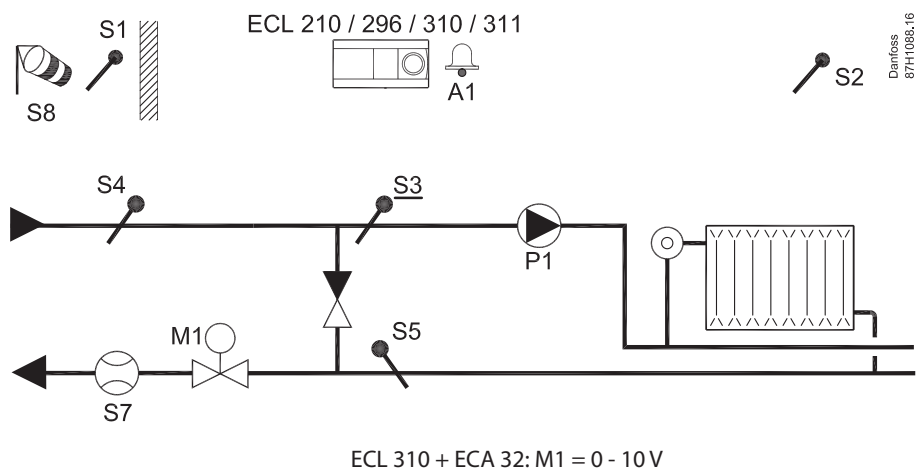


A230.1 ex. a

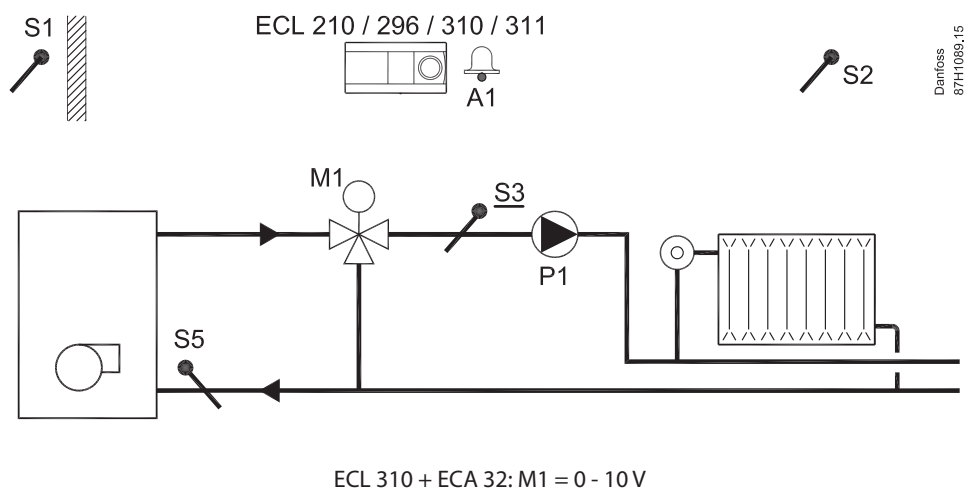


ECL 310 + ECA 32: M1 = 0 - 10 V

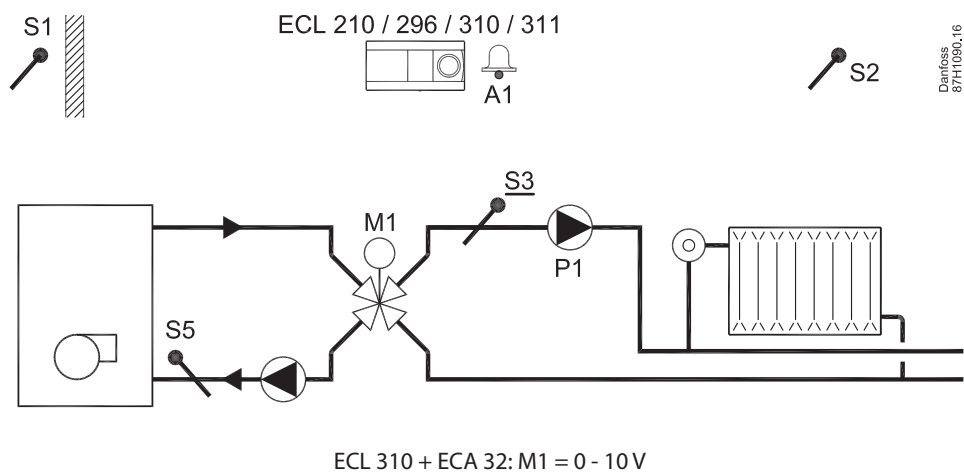
A230.1 ex. b:



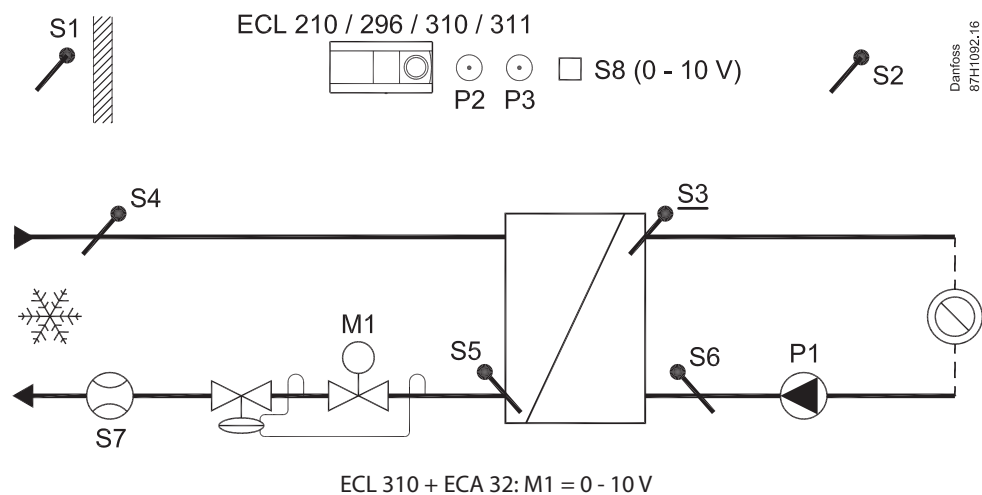
A230.1 ex. c:



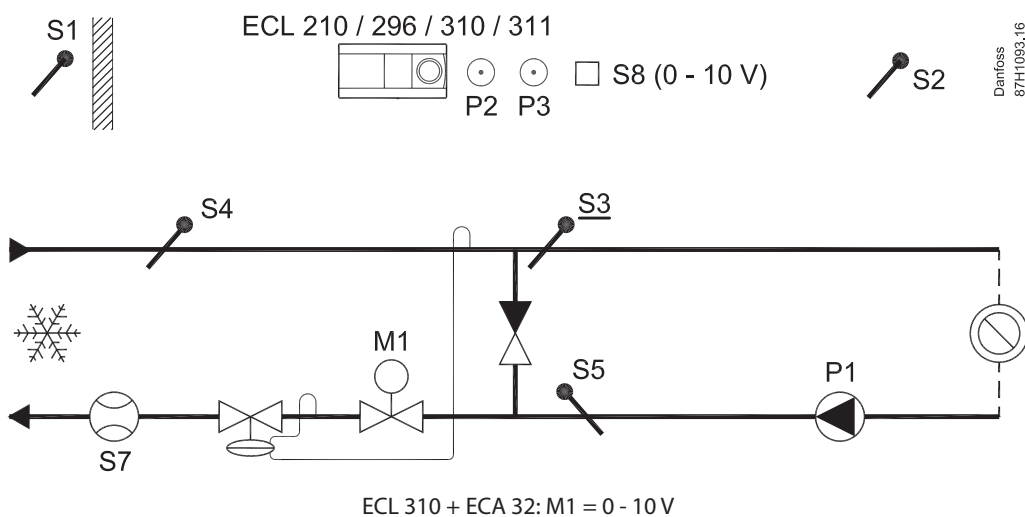
A230.1 ex. d:



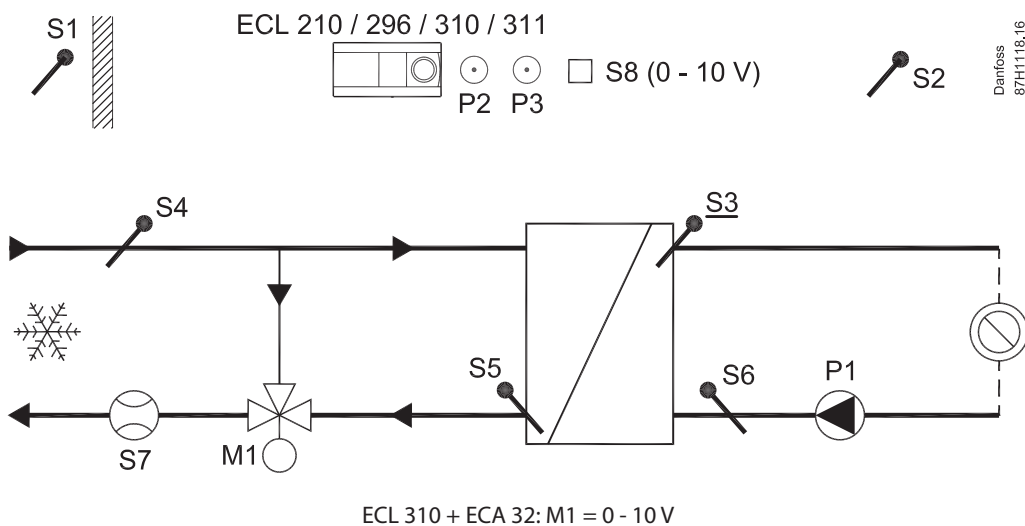
A230.2 ex. a:



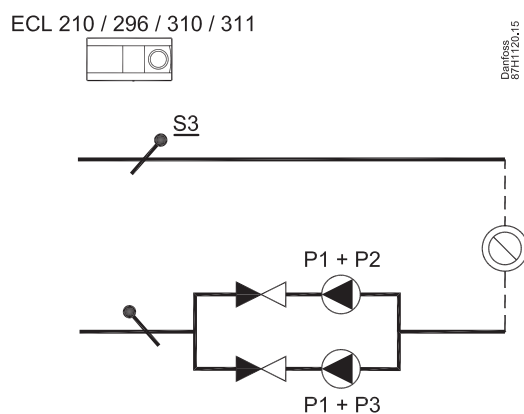
A230.2 ex. b:



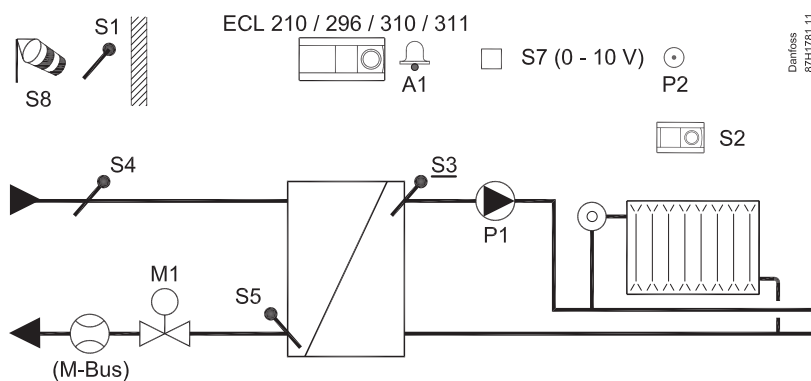
A230.2 ex. c:



A230.2 ex. d:

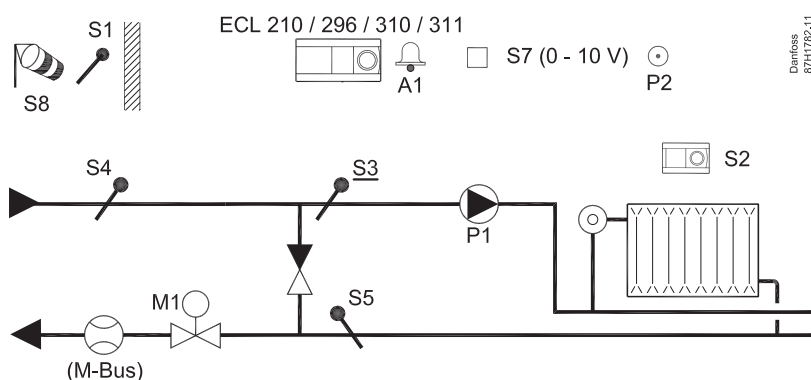


A230.3, ex. a



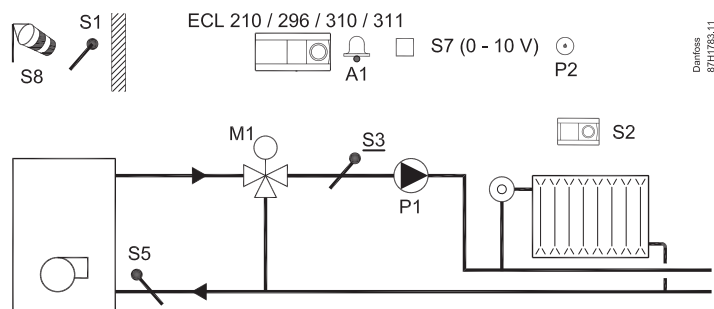
ECL 310 + ECA 32: M1 = 0 - 10 V

A230.3, ex. b



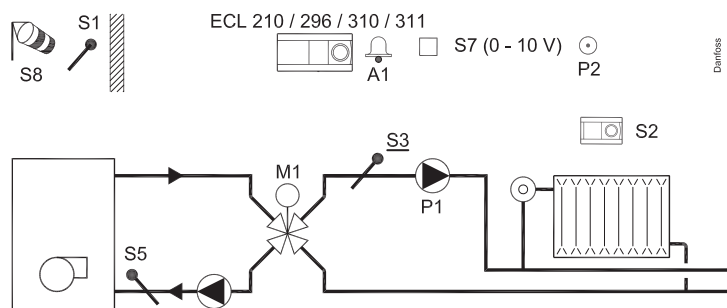
ECL 310 + ECA 32: M1 = 0 - 10 V

A230.3, ex. c



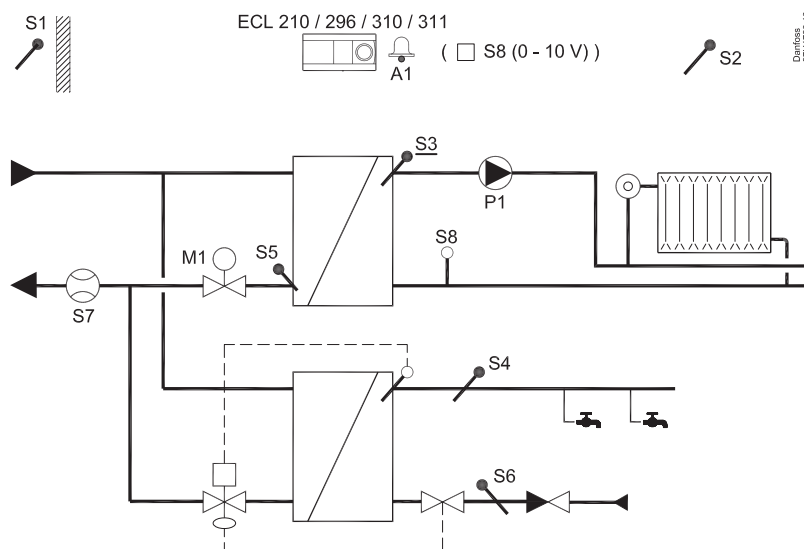
ECL 310 + ECA 32: M1 = 0 - 10 V

A230.3, ex. d



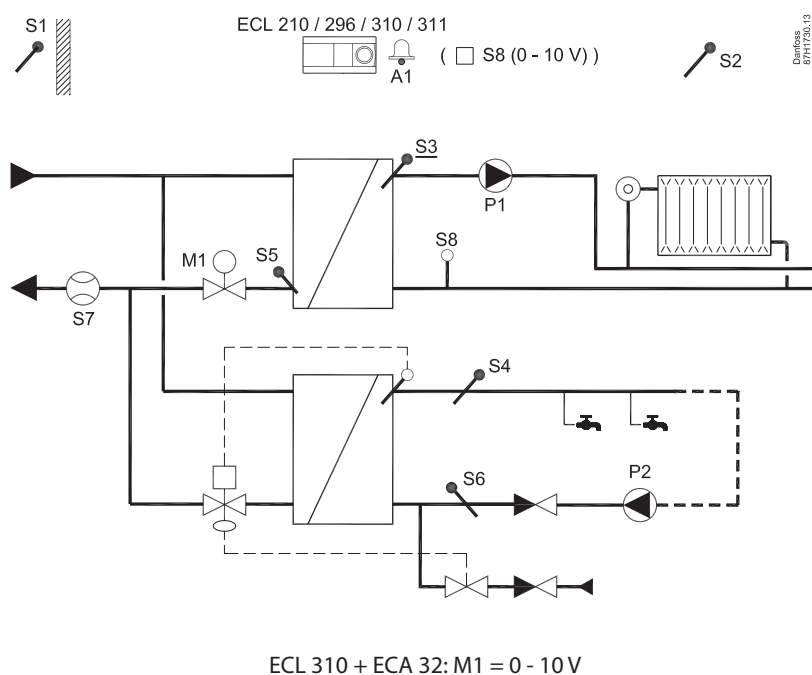
ECL 310 + ECA 32: M1 = 0 - 10 V

A230.4, ex. a

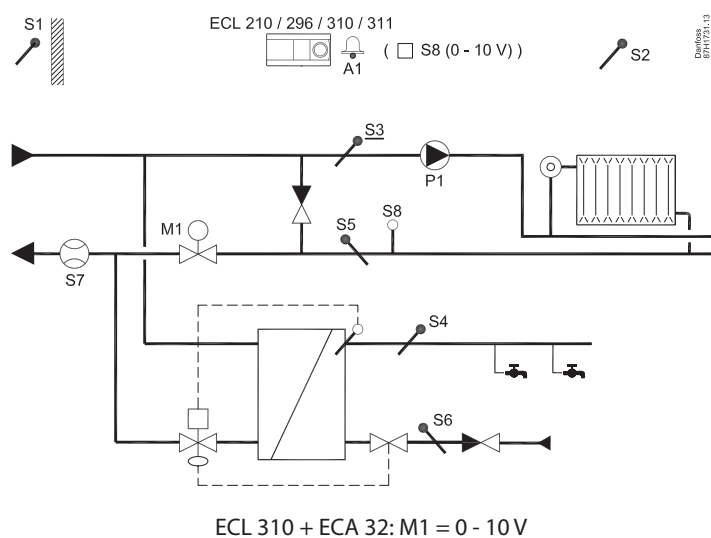


ECL 310 + ECA 32: M1 = 0 - 10 V

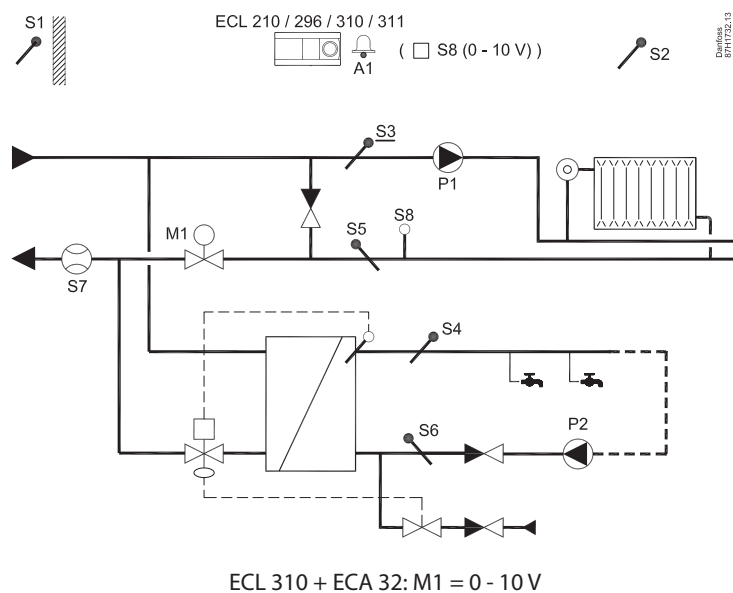
A230.4, ex. b



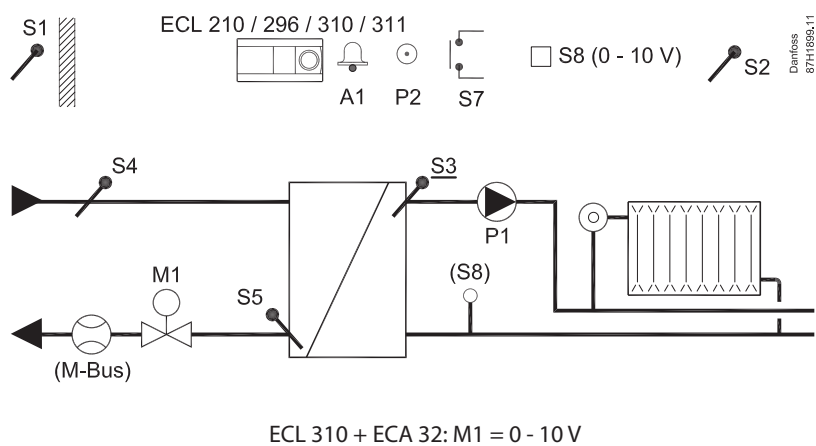
A230.4, ex. c



A230.4, ex. d



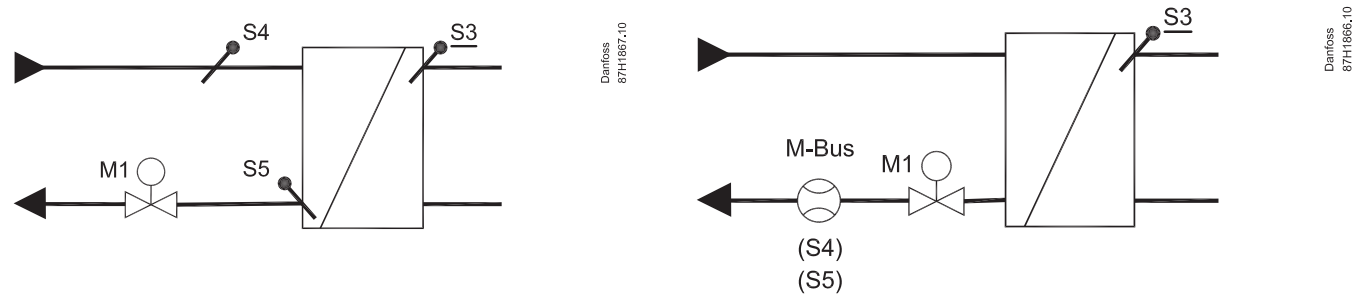
A230.5, ex. a



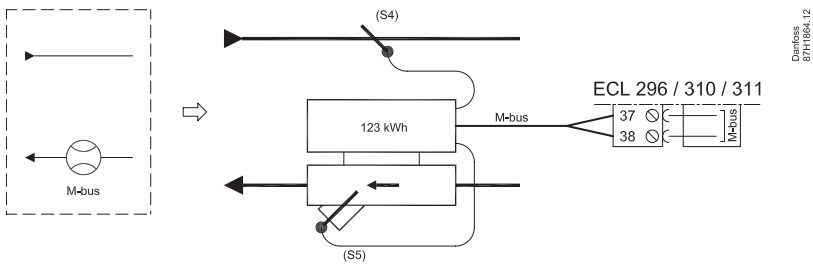
A230.1, A230.3, A230.5
S4, S5



A:



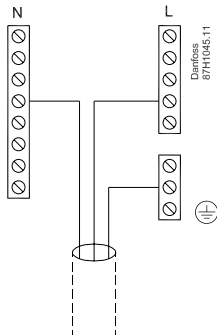
B:



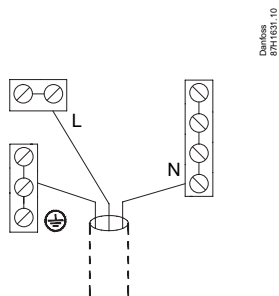
ECL Comfort 210 / 296 / 310:
230 V a.c.

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

ECL 210 / 310:

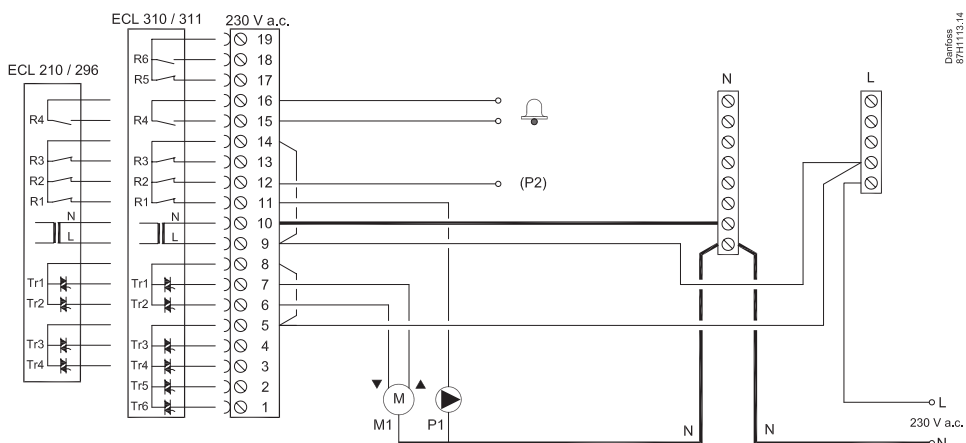


ECL 296:



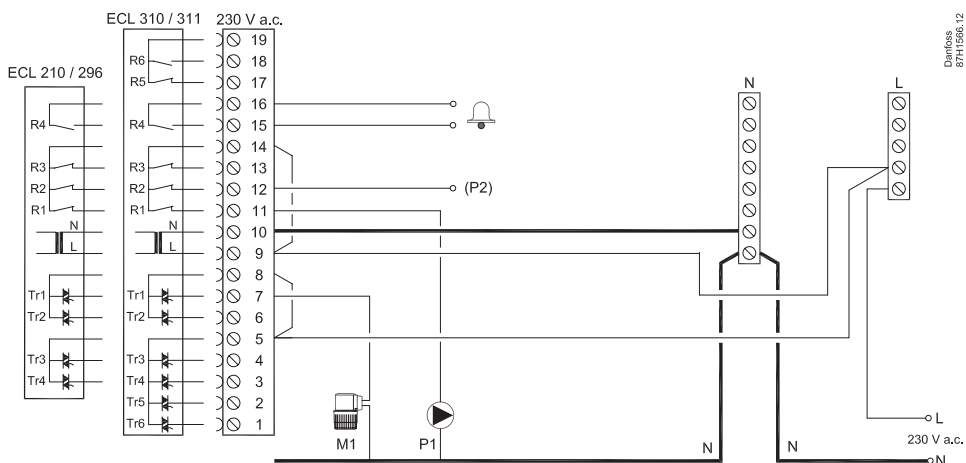
	R1	R2	R3	R4
A230.1	P1	(P2)		A1 ()
A230.2	P1	(P2)	(P3)	
A230.3	P1	(P2)		A1 ()
A230.4	P1	(P2)		A1 ()
A230.5	P1	(P2)		A1 ()

230 V a.c.



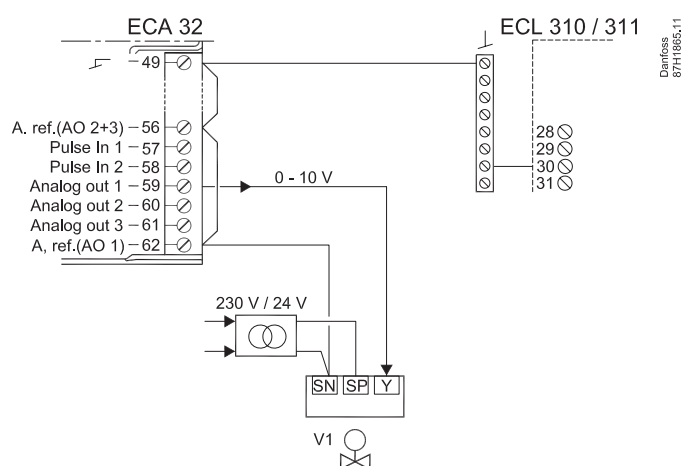
230 V a.c.

(Danfoss thermo-actuator ABV)

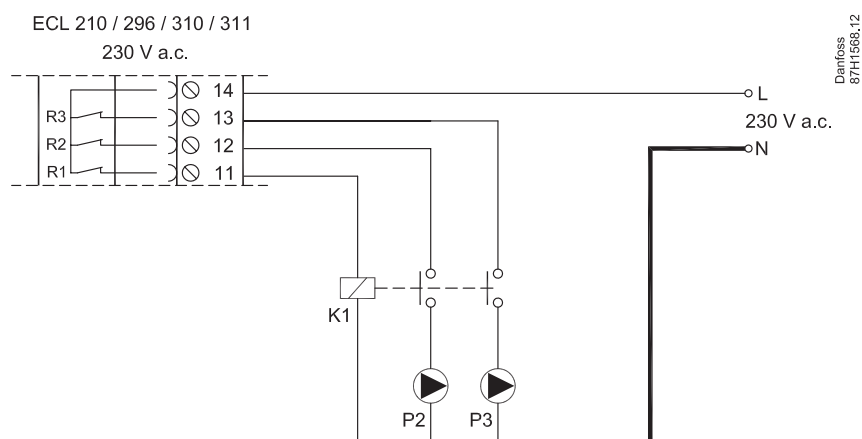


ECL 310 + ECA 32

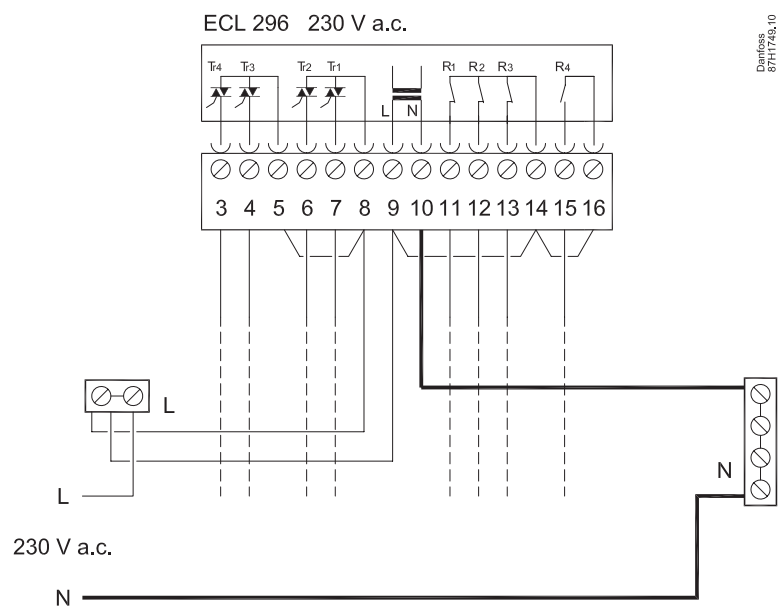
M1 = V1 (0 - 10 V)



A230.2, P2 + P3



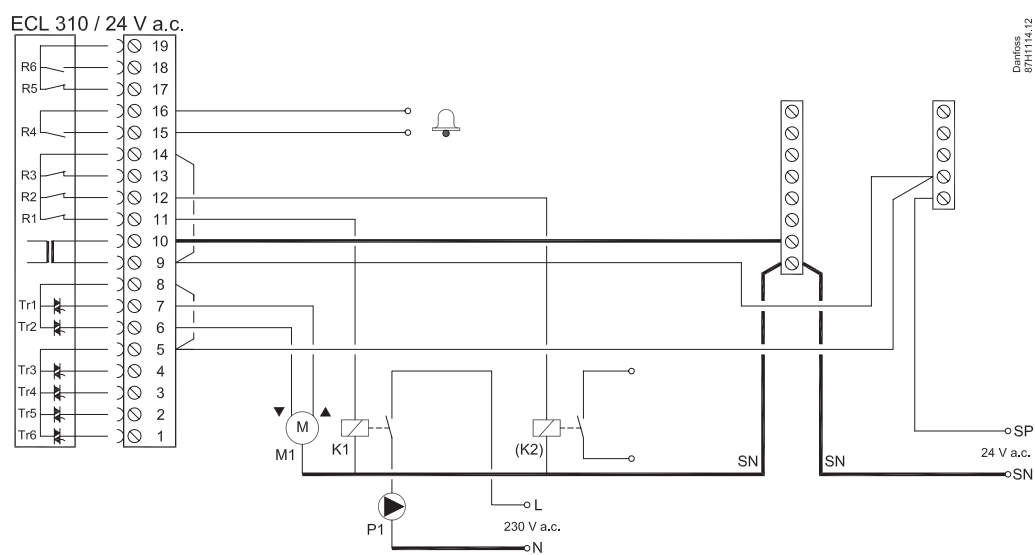
ECL Comfort 296:
230 V a.c.



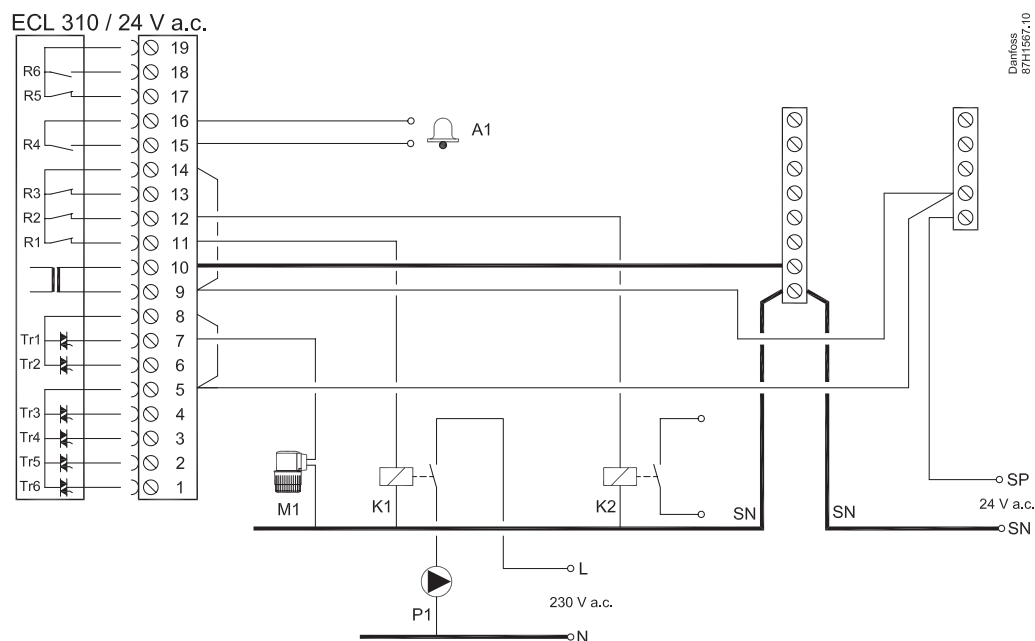
ECL Comfort 310:
24 V a.c.

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

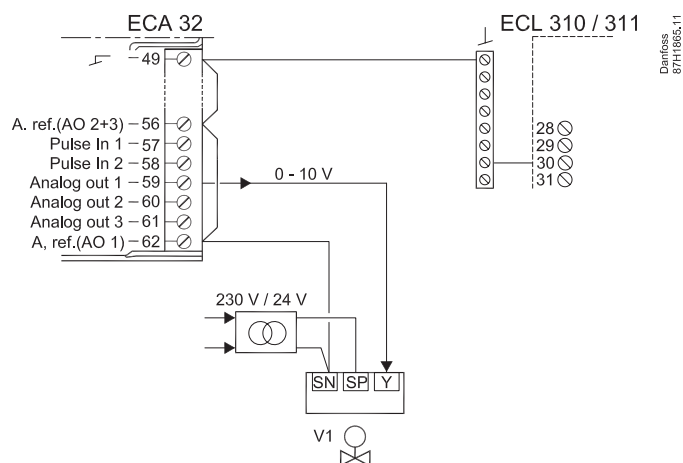
24 V a.c.



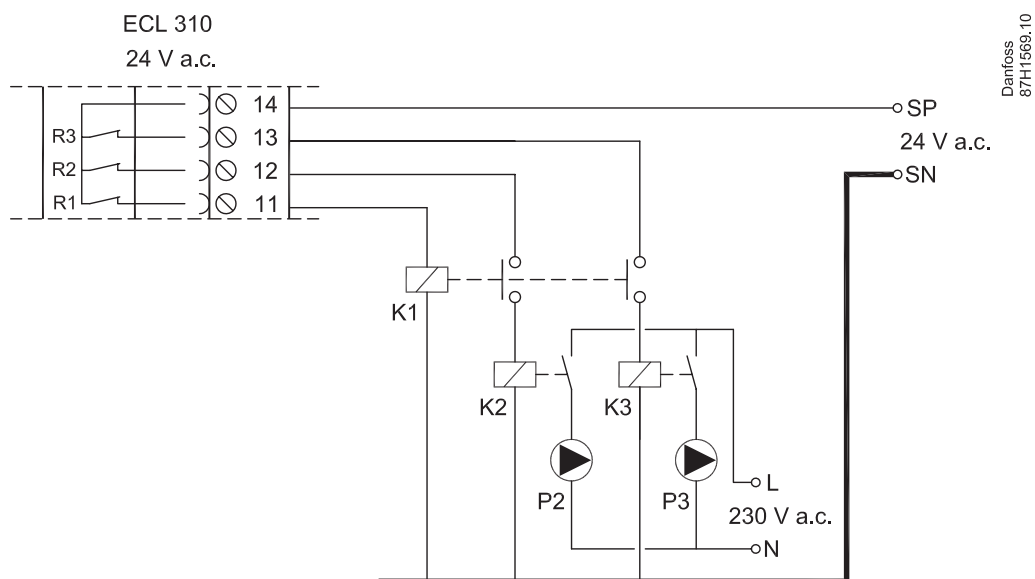
24 V a.c.
(Danfoss thermo-actuator ABV)



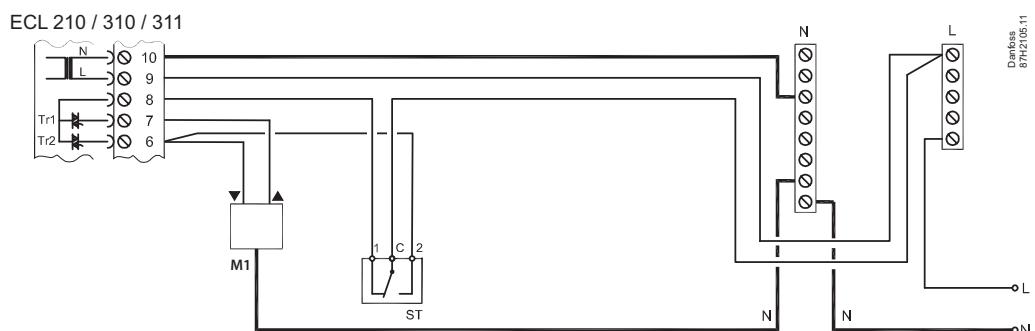
ECL 310 + ECA 32
M1 = V1 (0 - 10 V)



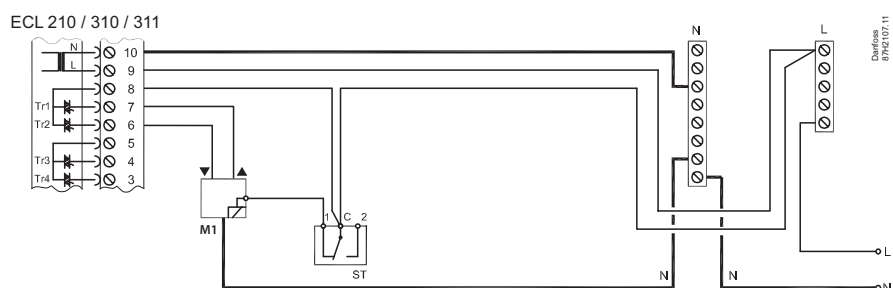
A230.2, P2 + P3



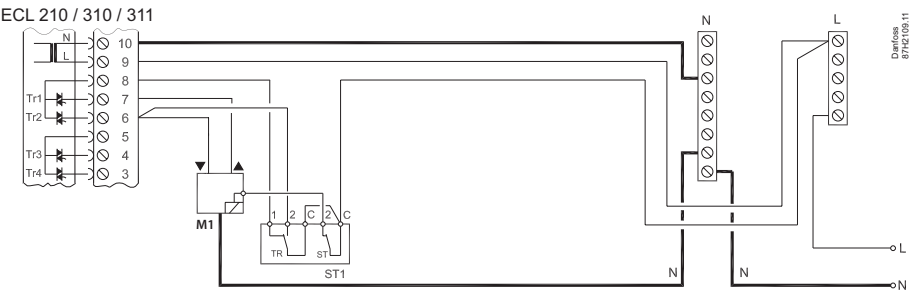
**230 V a.c. / 24 V a.c. , safety thermostat
1-step closing**



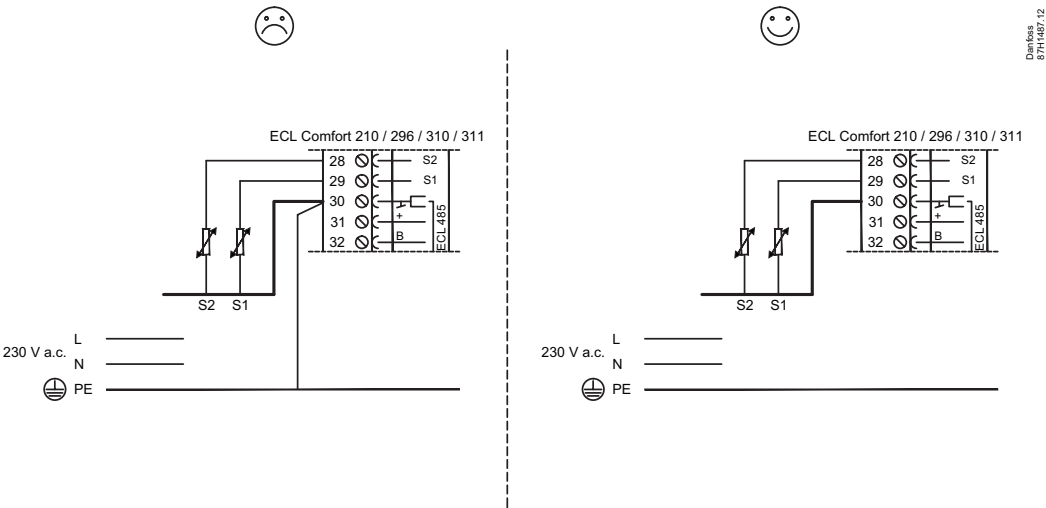
**230 V a.c. / 24 V a.c. , safety thermostat
1-step closing**



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			

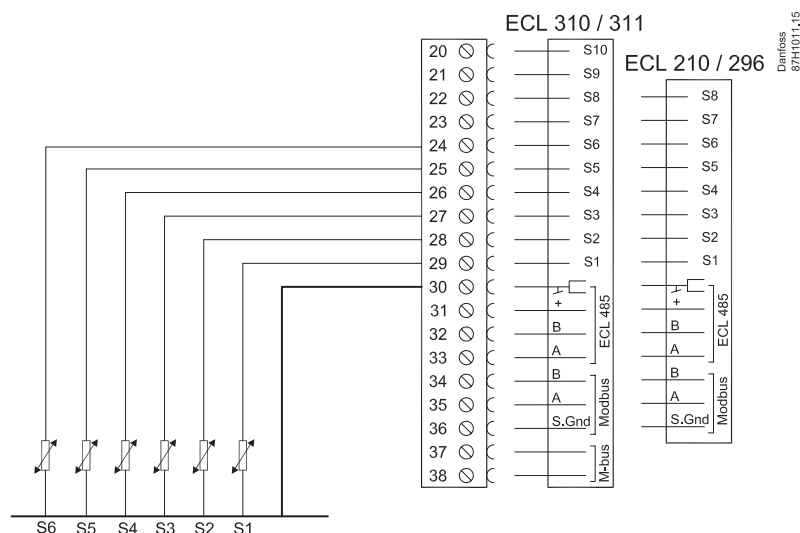
Pulse

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

0 - 10 V

	S7	S8
A230.1		0 - 10 V ⇒ 
A230.2		0 - 10 V ⇒  S3 (x °C!)
A230.3	0 - 10 V ⇒ % RH	0 - 10 V ⇒ 
A230.4		 / 0 - 10 V ⇒  S3 (x °C!)
A230.5		 / 0 - 10 V ⇒  S3 (x °C!)

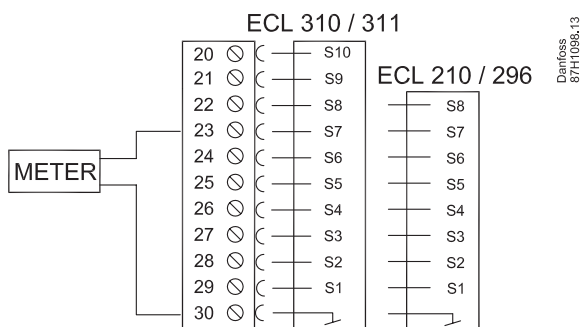
A230



A230.1, A230.2, A230.4



S7



A230.1, A230.2, A230.4

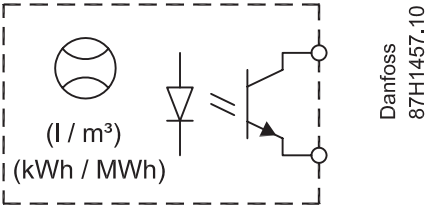


S7

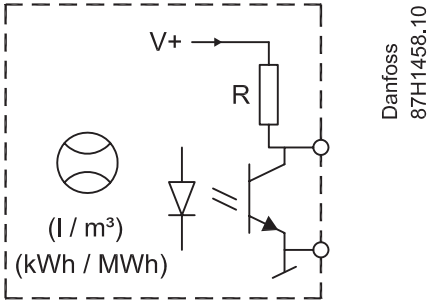


A / B ?

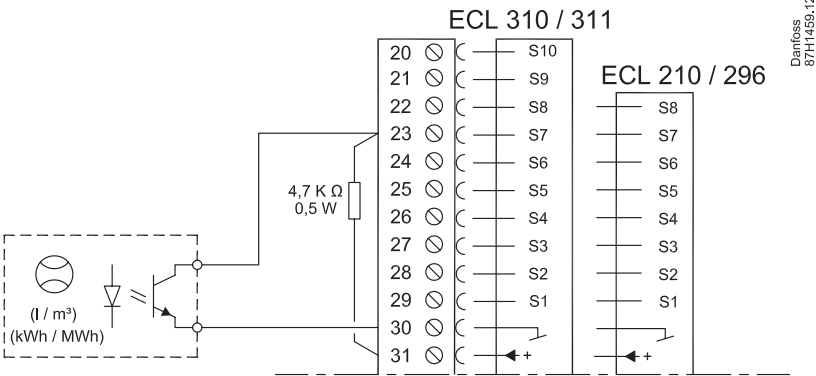
A:



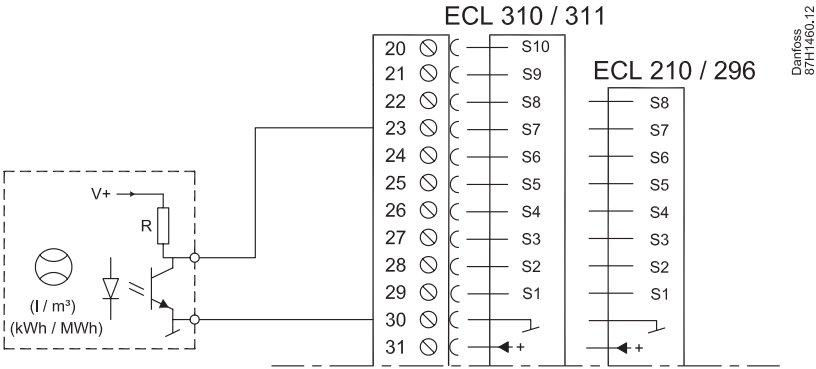
B:



A:

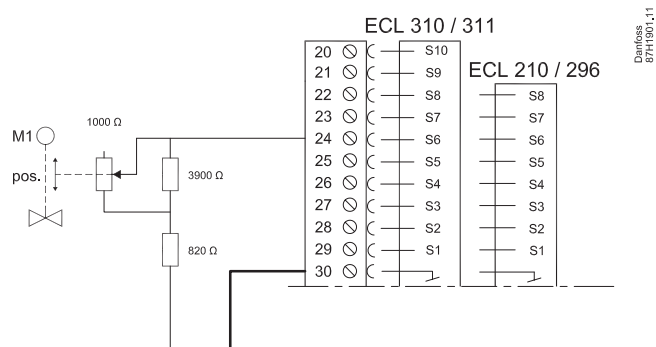


B:



A230.5

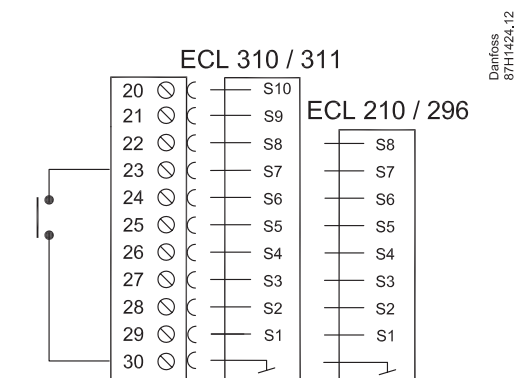
S6



A230.5



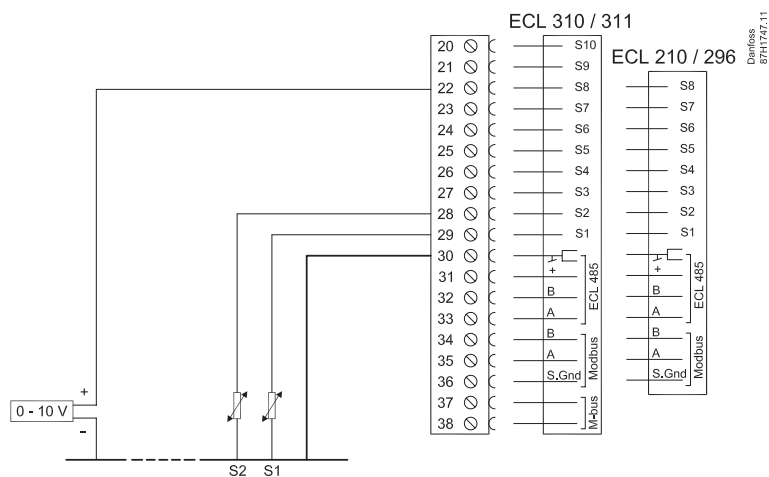
S7



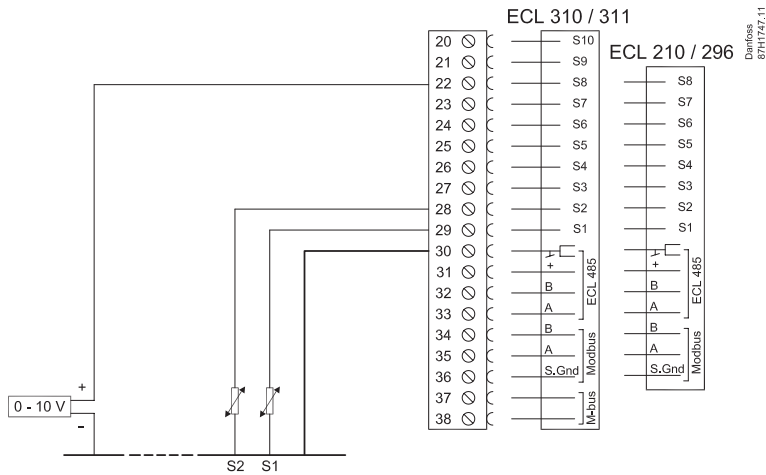
A230.1, A230.3



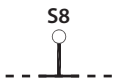
58



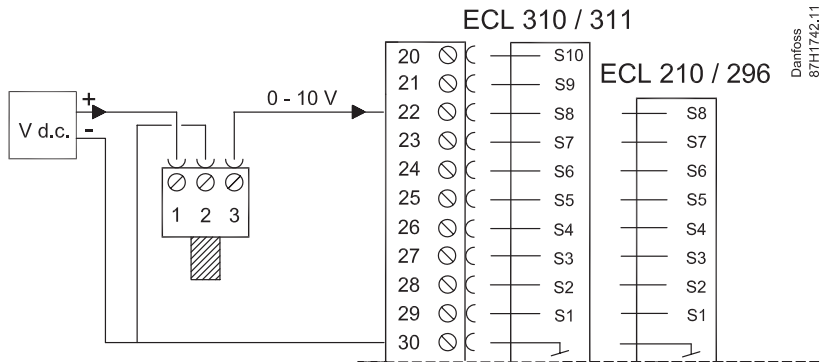
A230.2
0 – 10 V



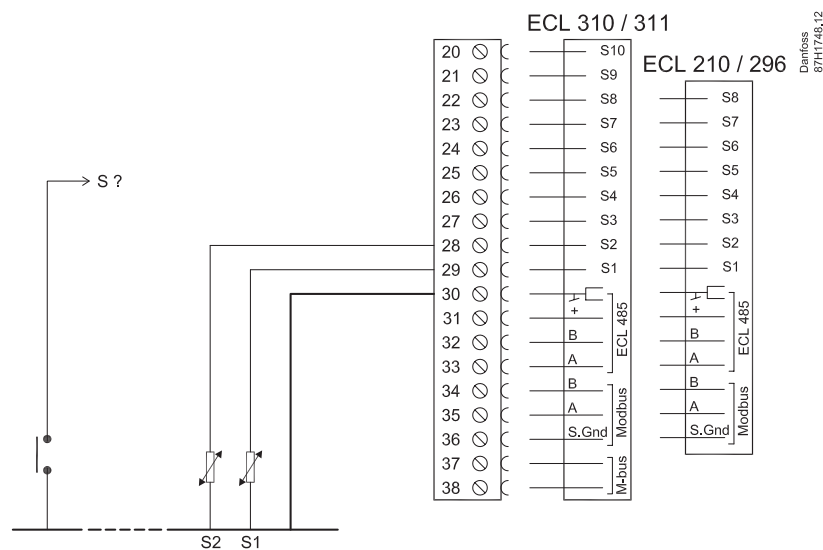
A230.4, A230.5



S8

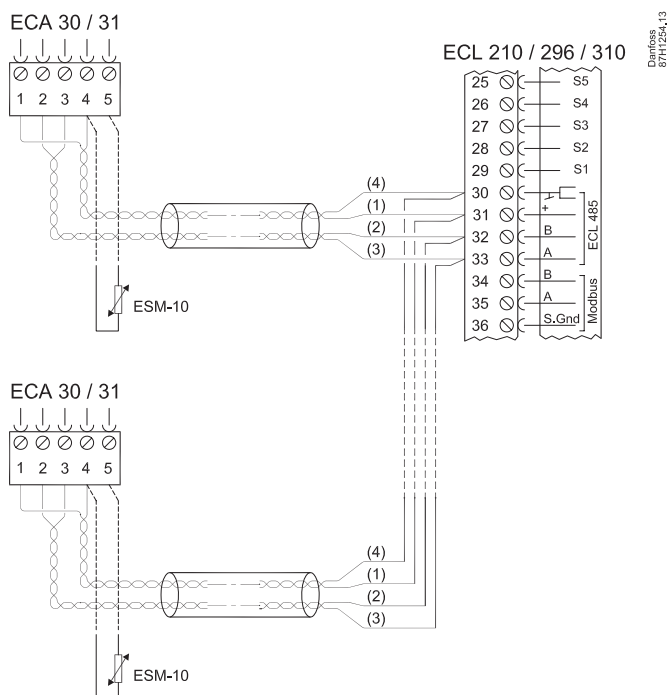


A230.1, A230.2, A230.3, A230.4, A230.5

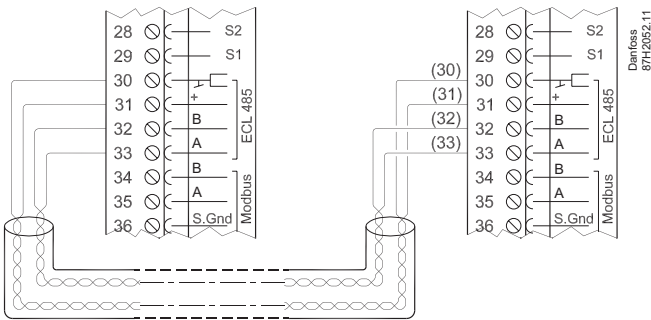


?
 ECL 210 / 296: S7 - S8
 ECL 310: S7 - S10
 ECL 310 + ECA 32: S7 - S16

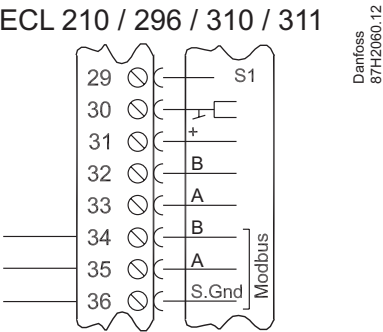
ECA 30 / 31



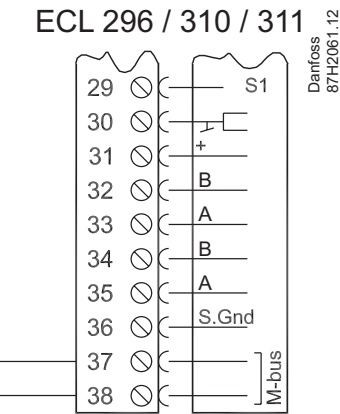
Master / slave



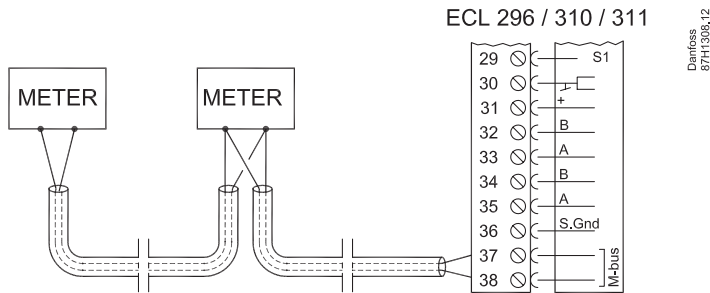
Modbus



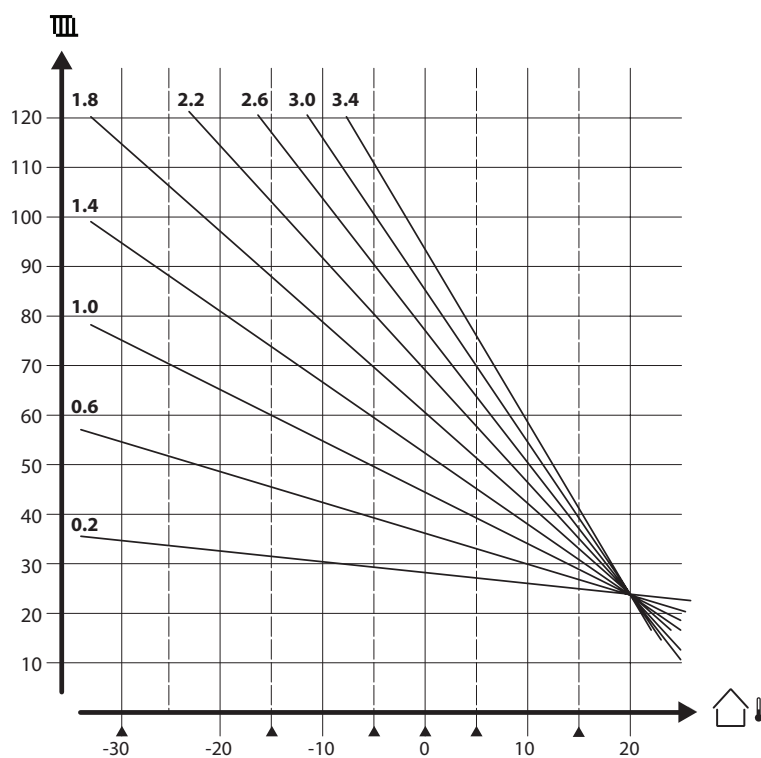
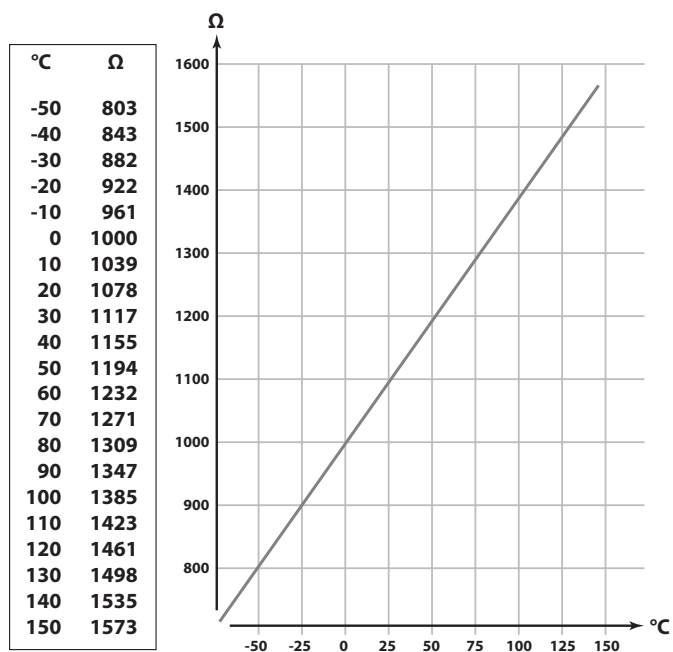
M-bus



M-bus

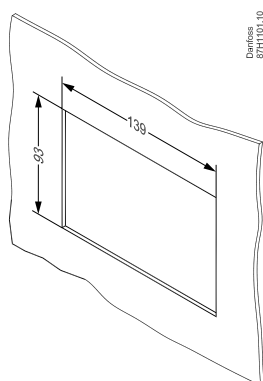


Pt 1000 (IEC 751B, 1000 Ω / 0 °C)

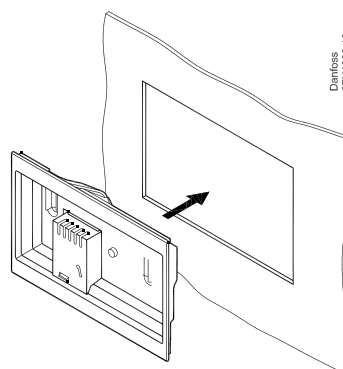


ECA 30

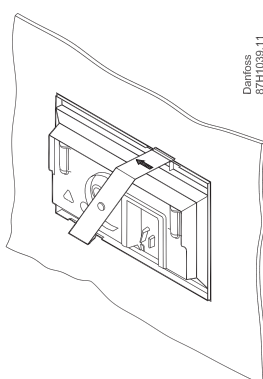
1



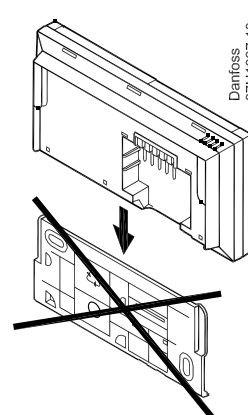
2



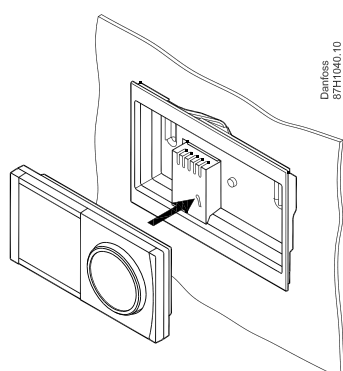
3



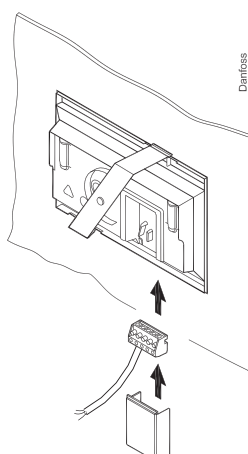
4



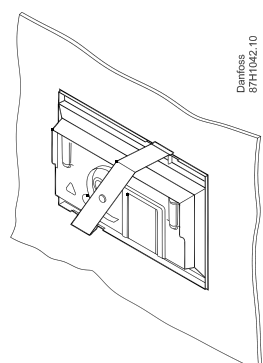
5



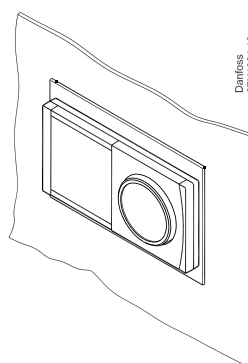
6



7

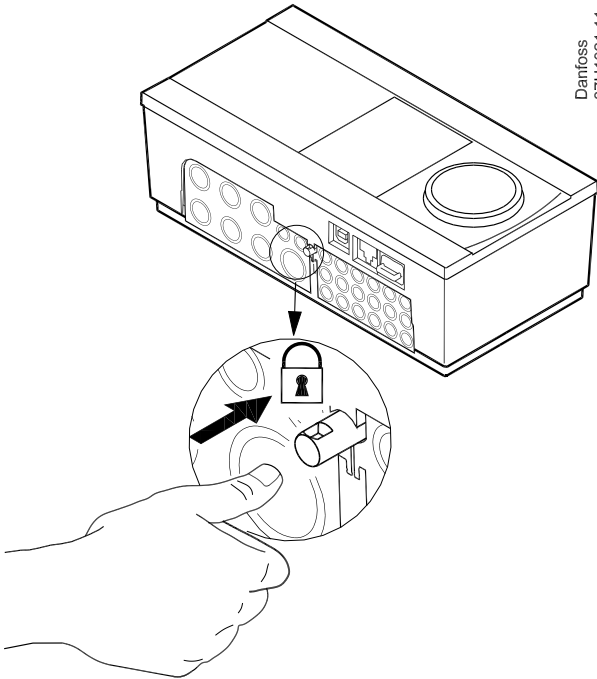


8

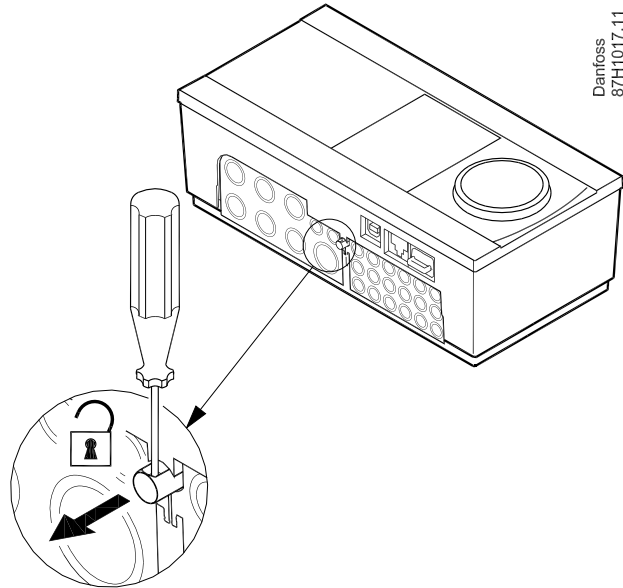


Installation Guide, ECL Comfort 210 / 296 / 310, A230

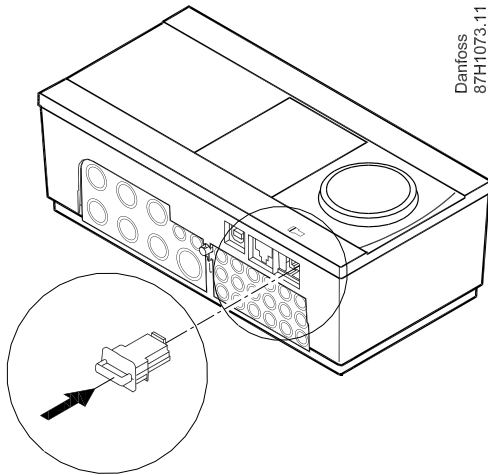
Danfoss
87H1021.11



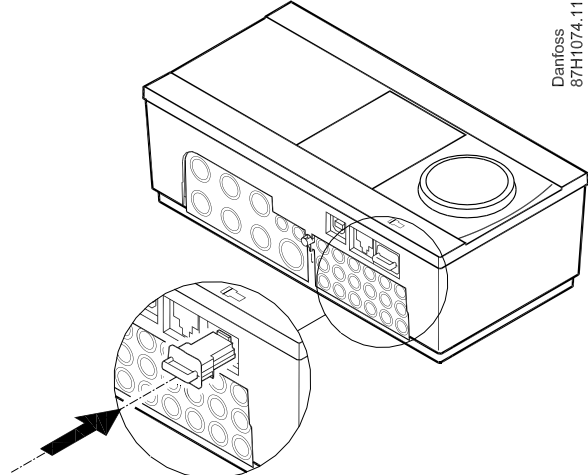
Danfoss
87H1017.11



Danfoss
87H1073.11



Danfoss
87H1074.11



?  **ECL Comfort 210 / 296 / 310, A230: www.danfoss.com or store.danfoss.com**

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



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