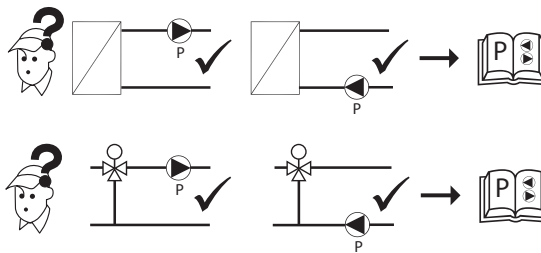
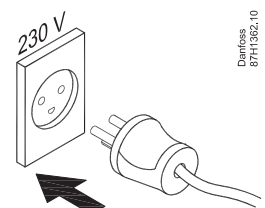
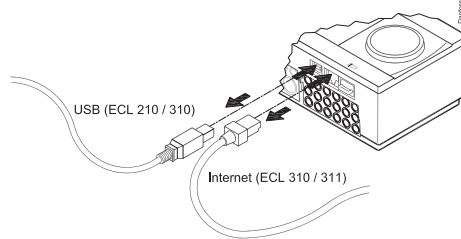
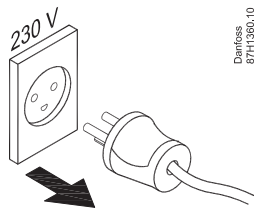
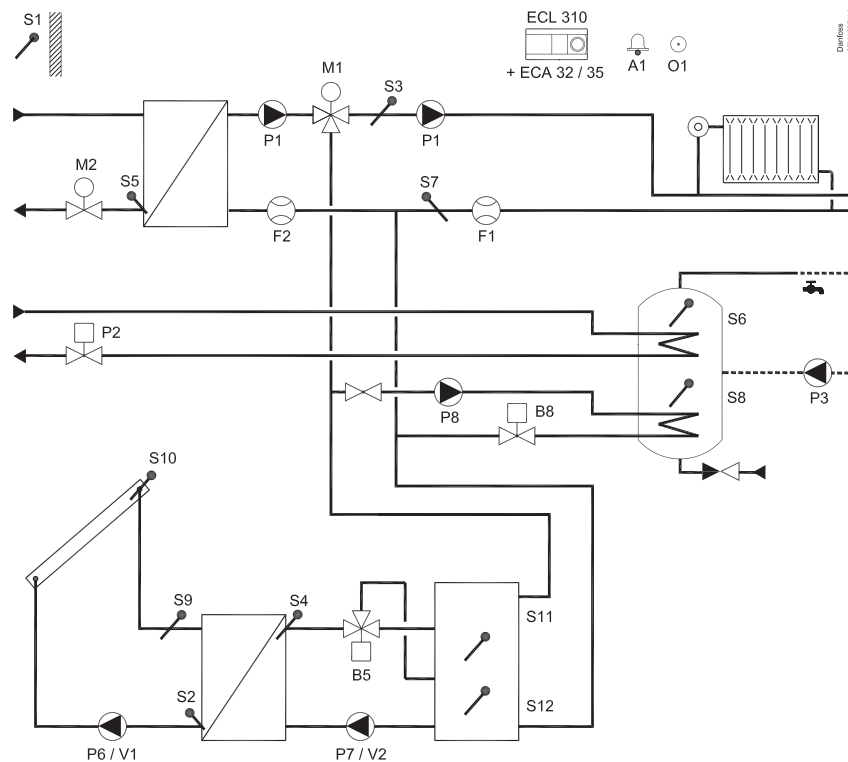


Installation Guide

# ECL Comfort 310, P501, 230 Volt (code no. 087H3842)

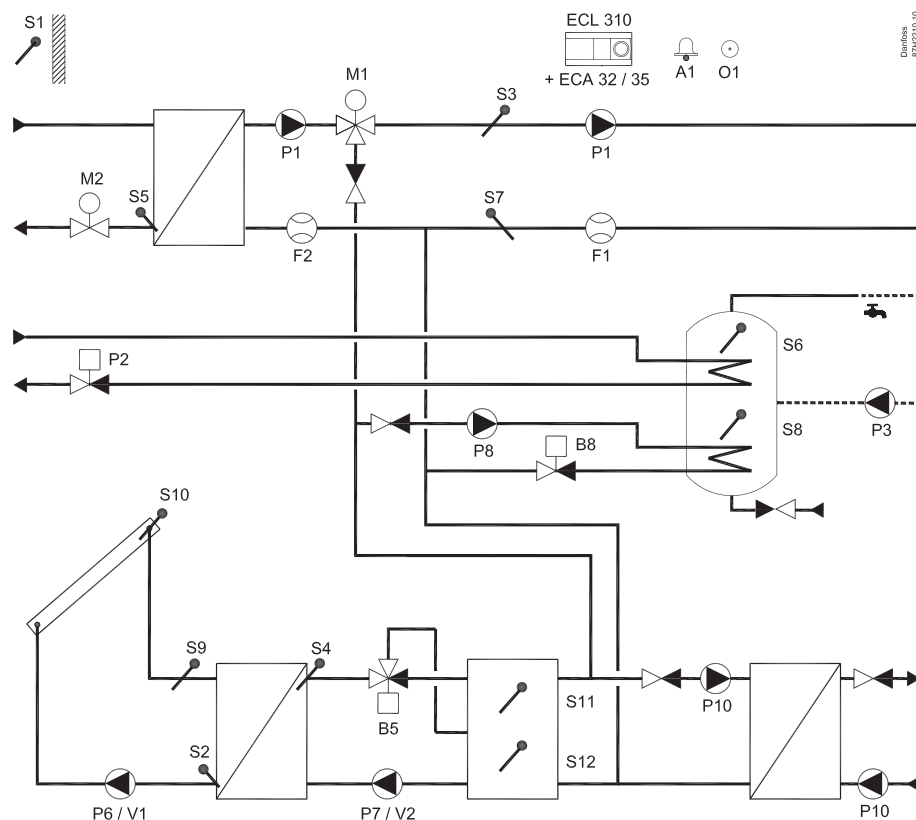


**P501.1, ex. a:**  
**P501.2, ex. a:**

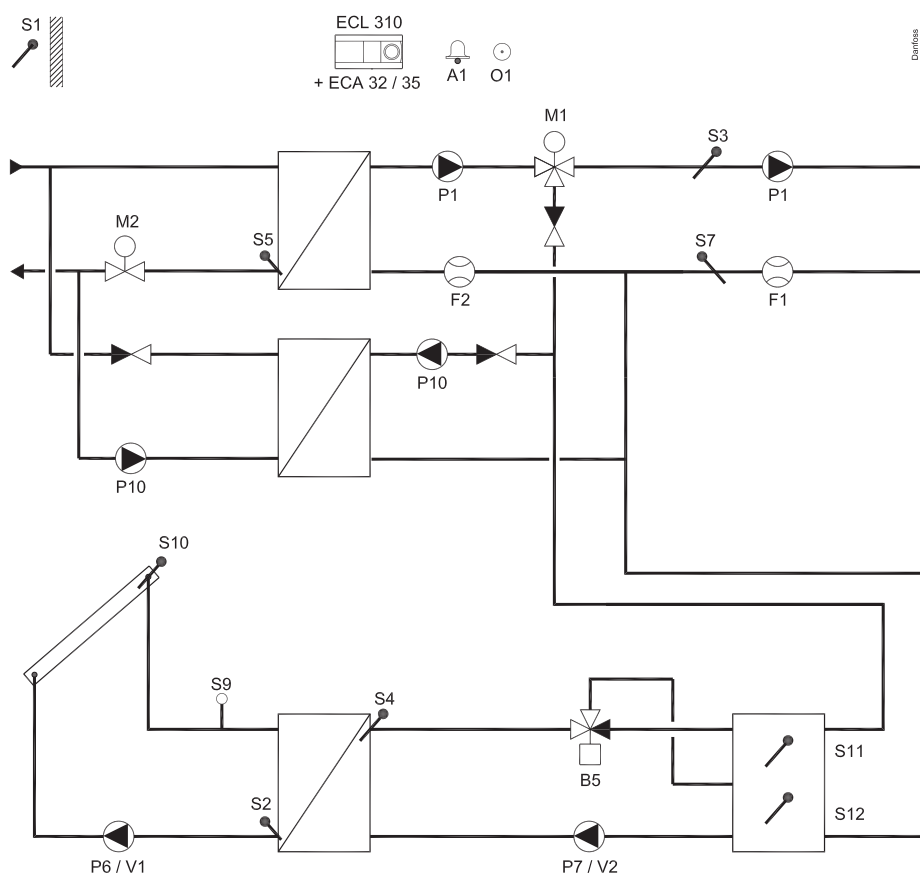


# Installation Guide, ECL Comfort 310, P501

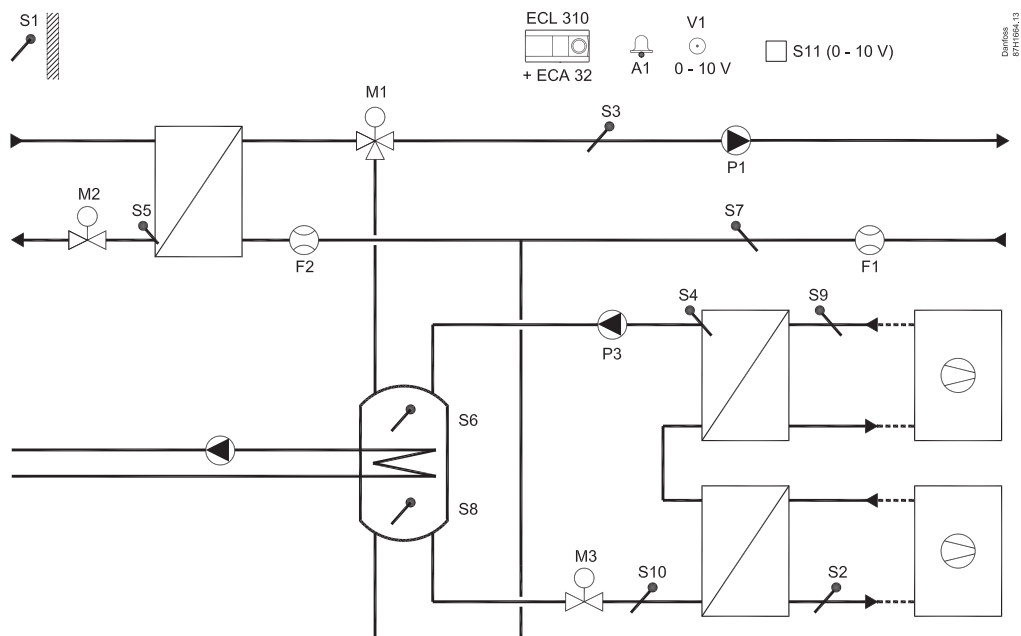
**P501.1, ex. b:**  
**P501.2, ex. b:**



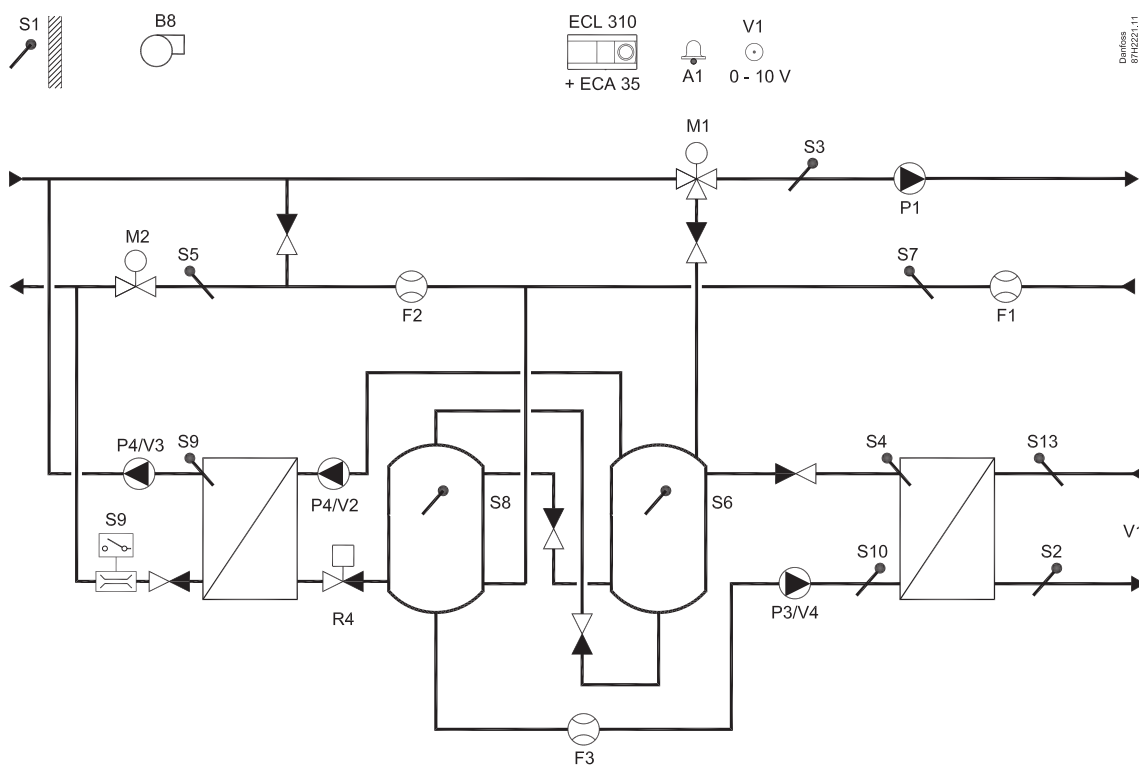
**P501.1, ex. c:**  
**P501.2, ex. c:**



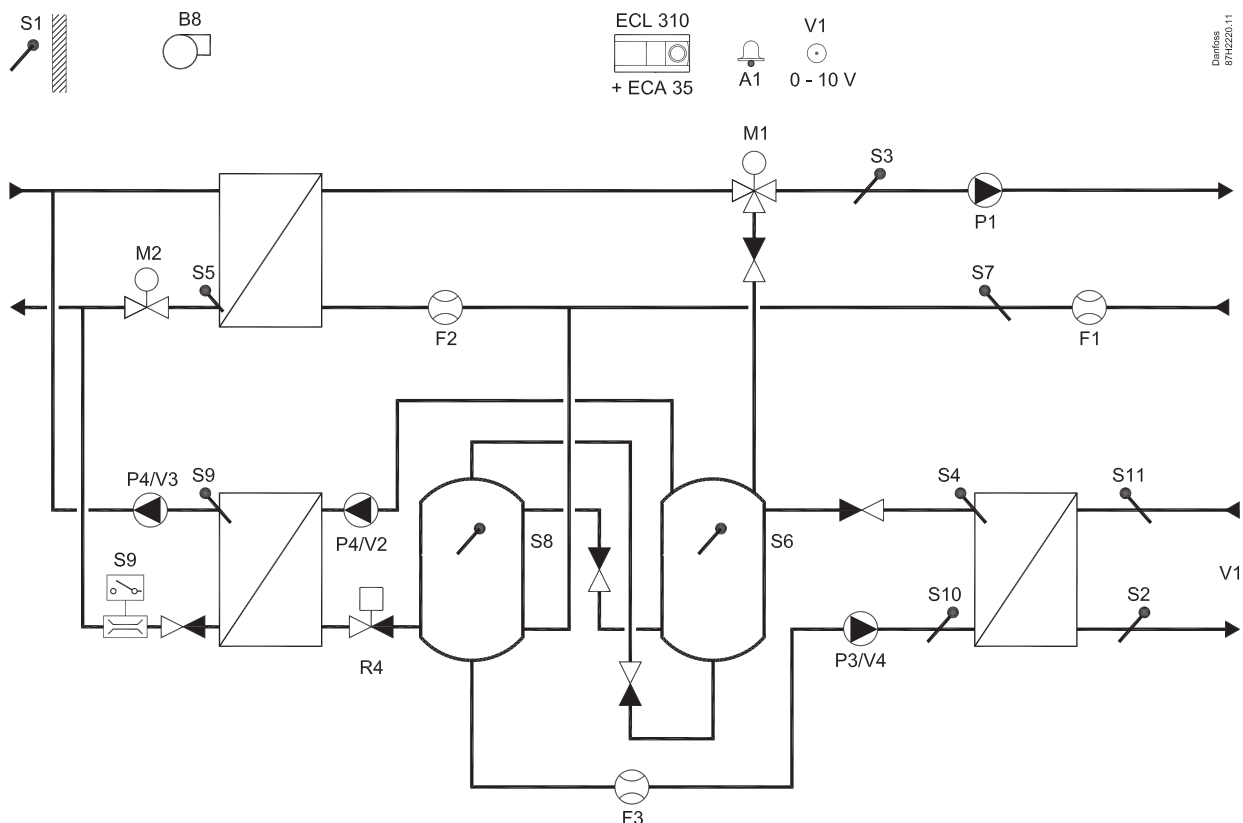
P501.11, ex. a:



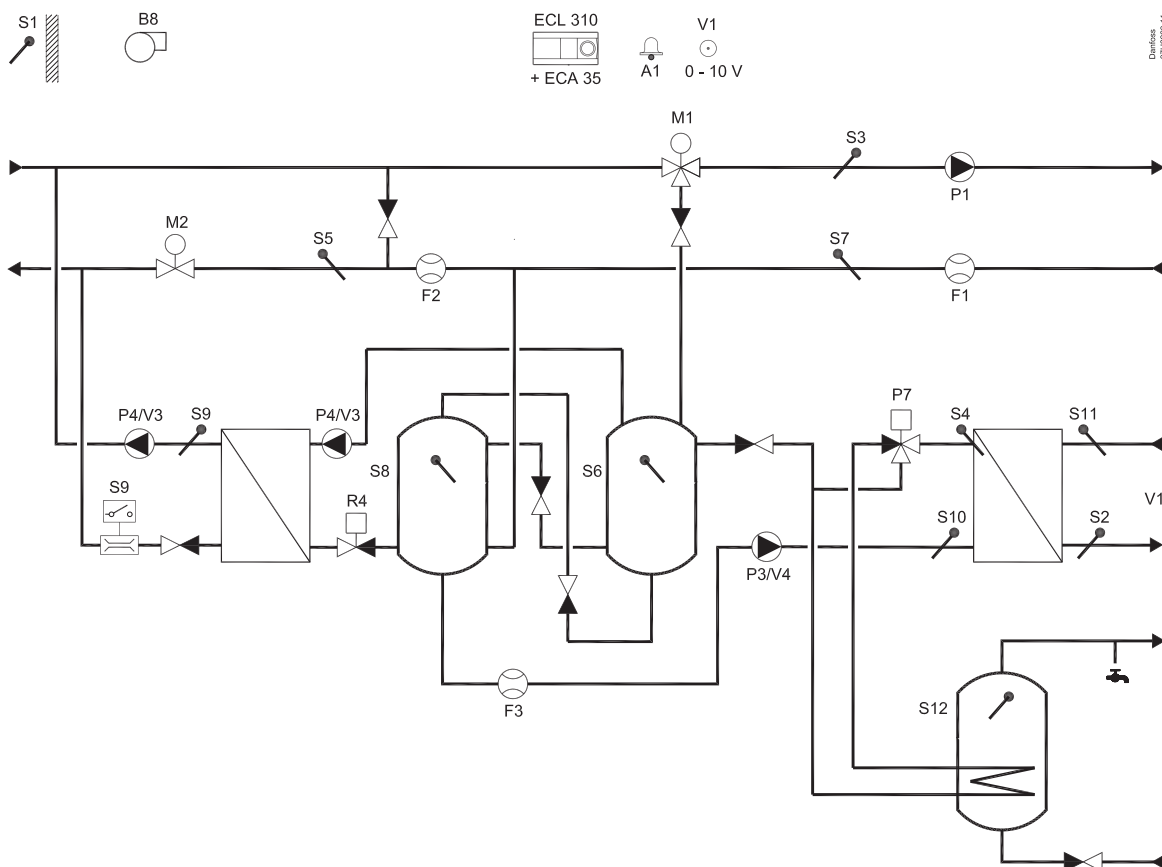
P501.12, ex. a:



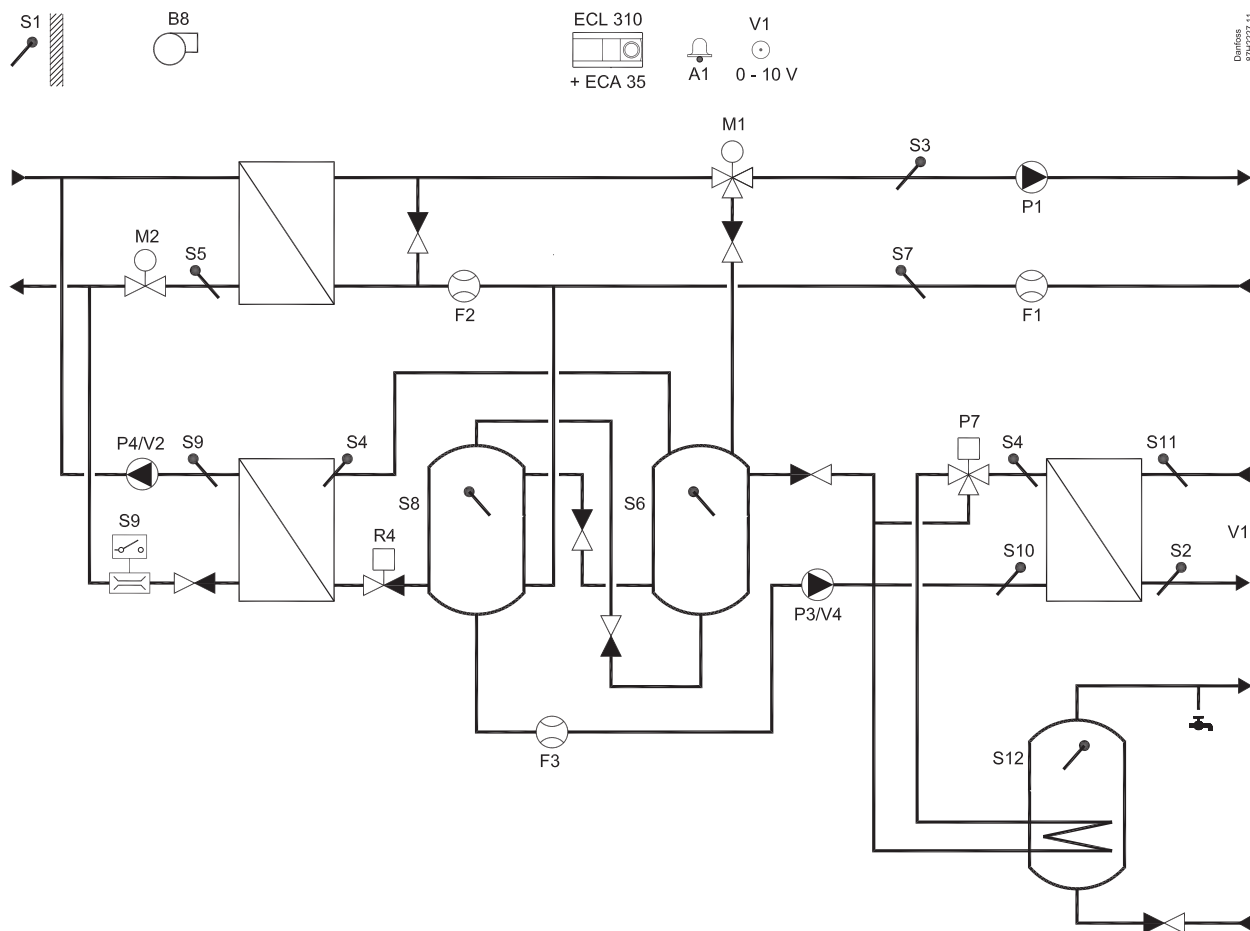
**P501.12, ex. b:**



**P501.12, ex. c:**

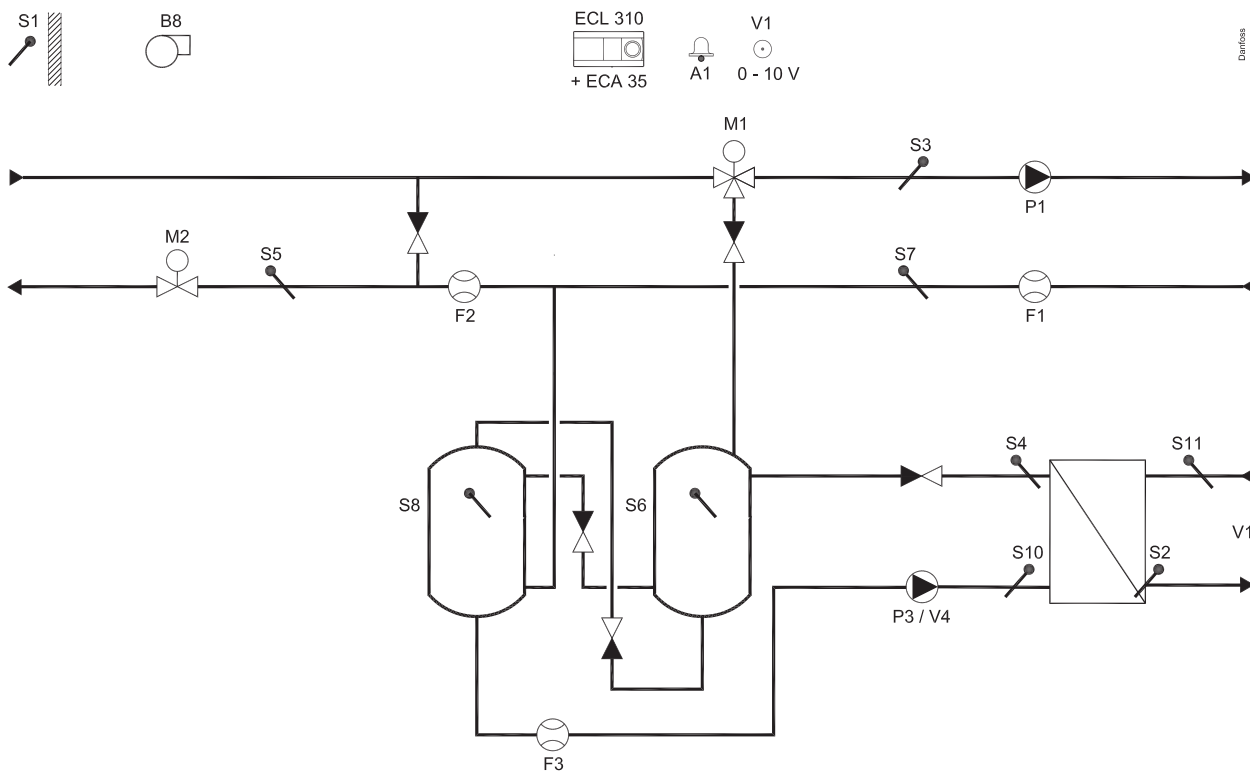


**P501.12, ex. d:**



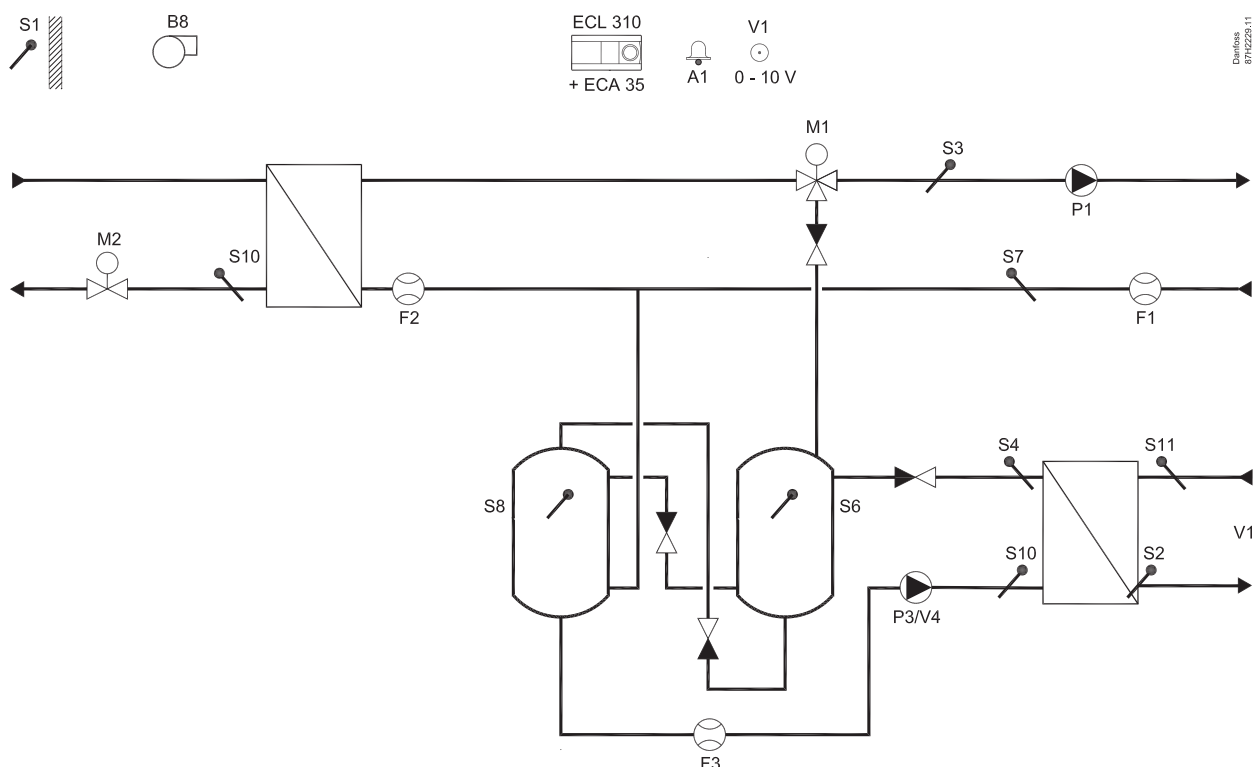
Danfoss  
8714227.11

**P501.12, ex. e:**

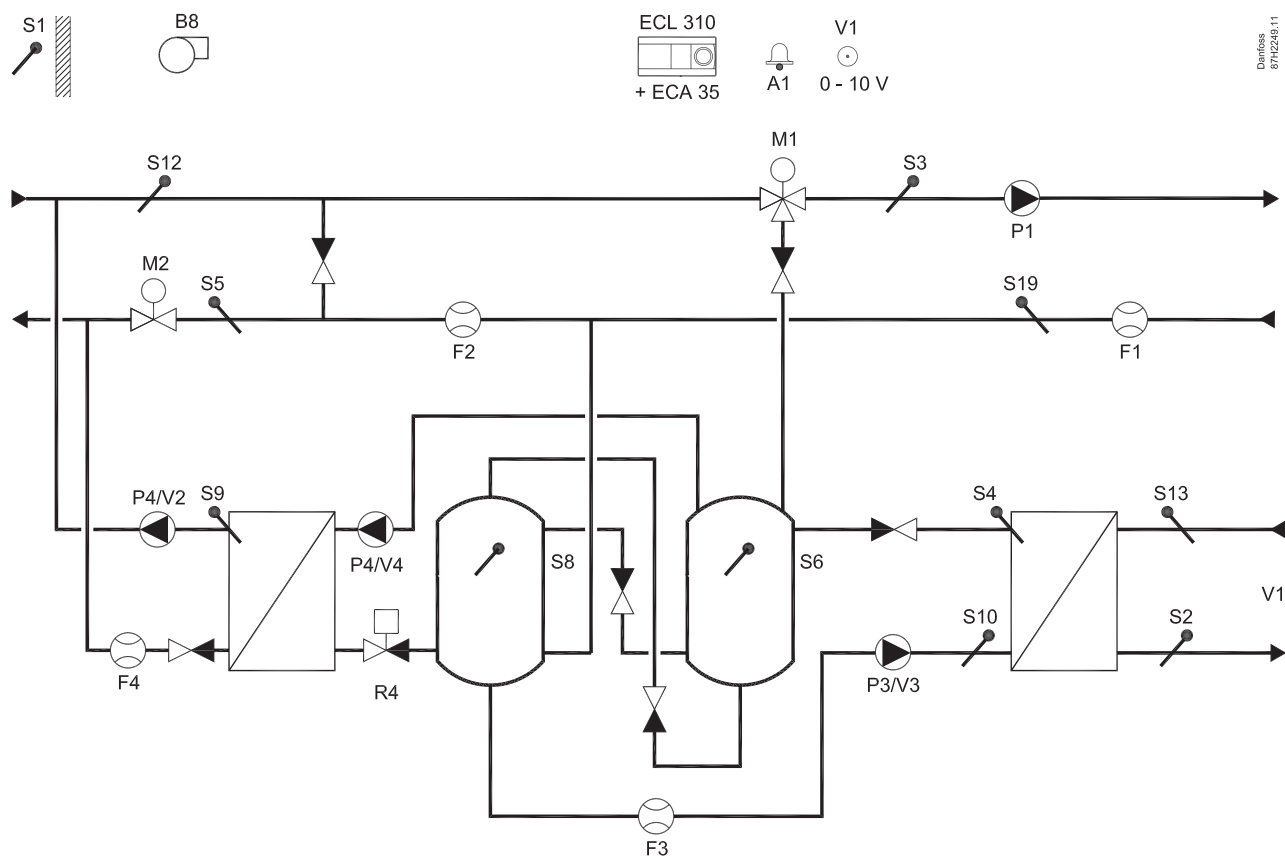


Danfoss  
8714228.11

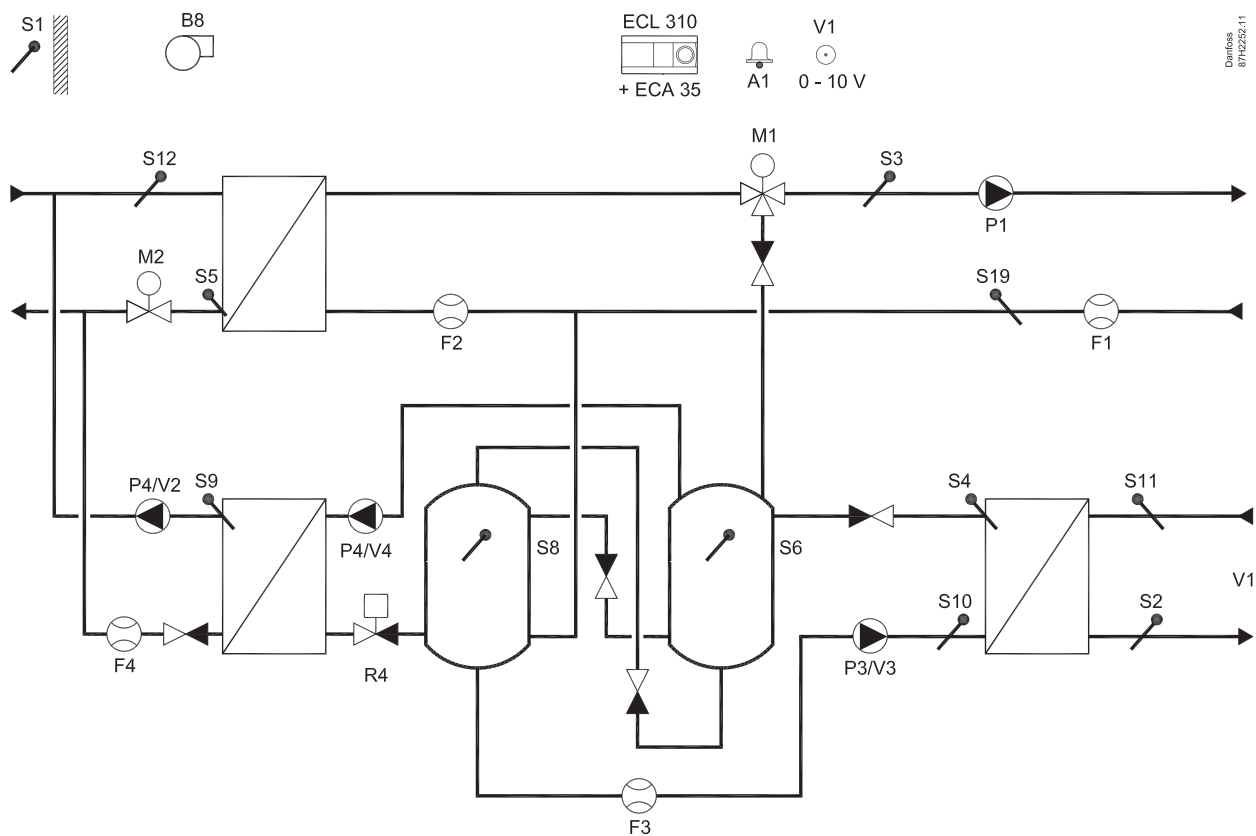
**P501.12, ex. f:**



**P501.13, ex. a:**

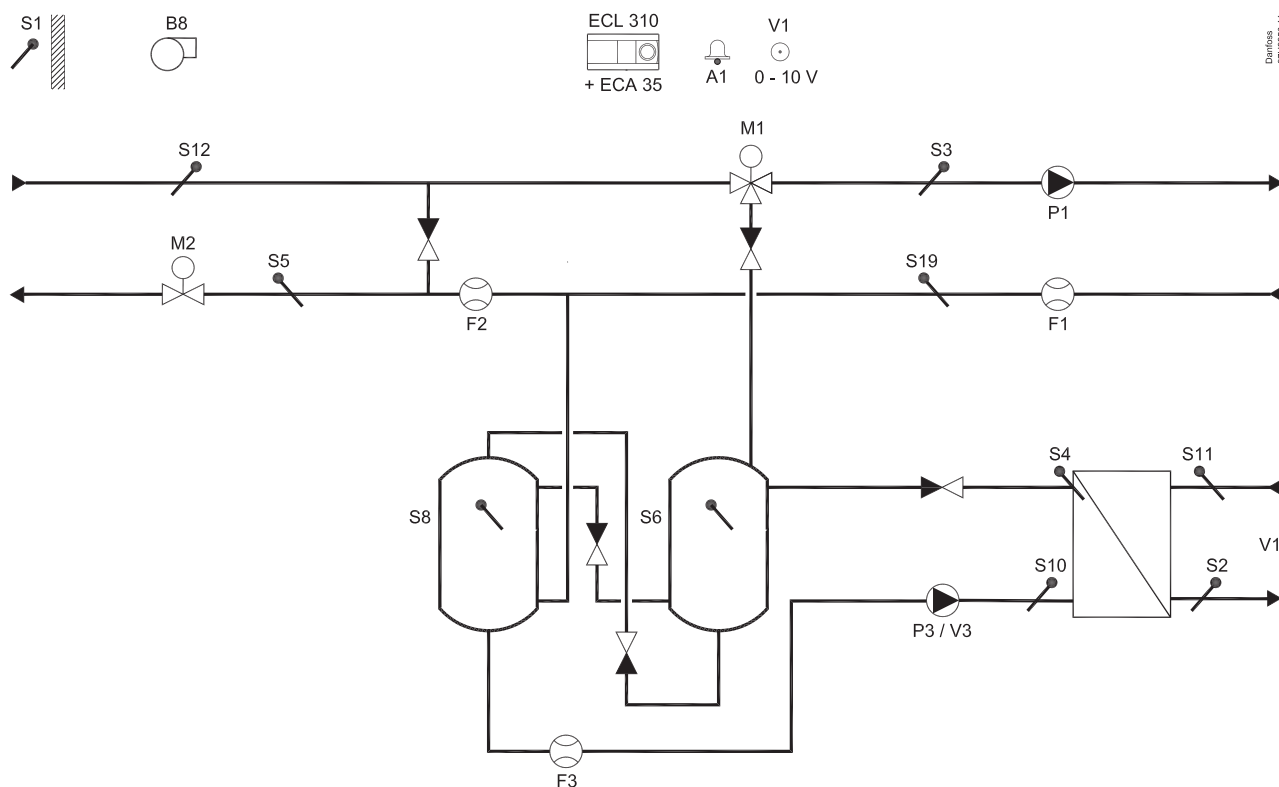


P501.13, ex. b:



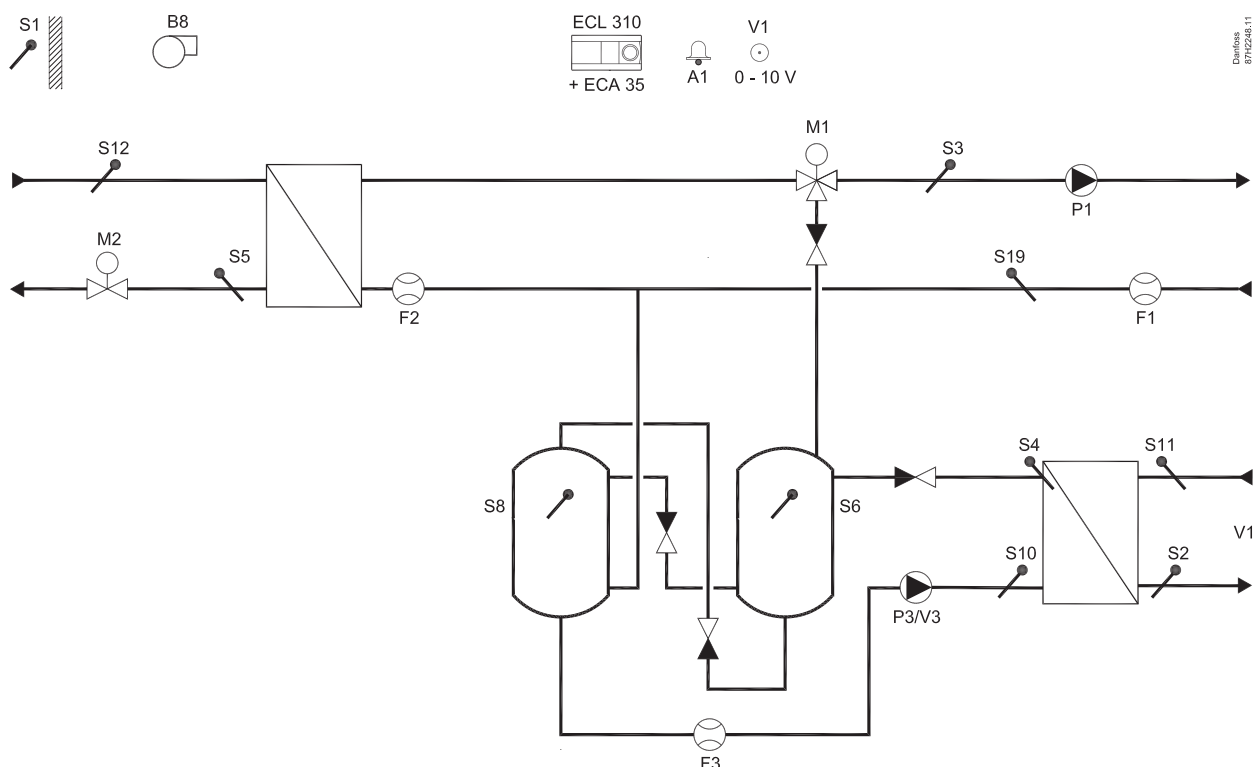
Danfoss  
87H2252.11

P501.13, ex. e:



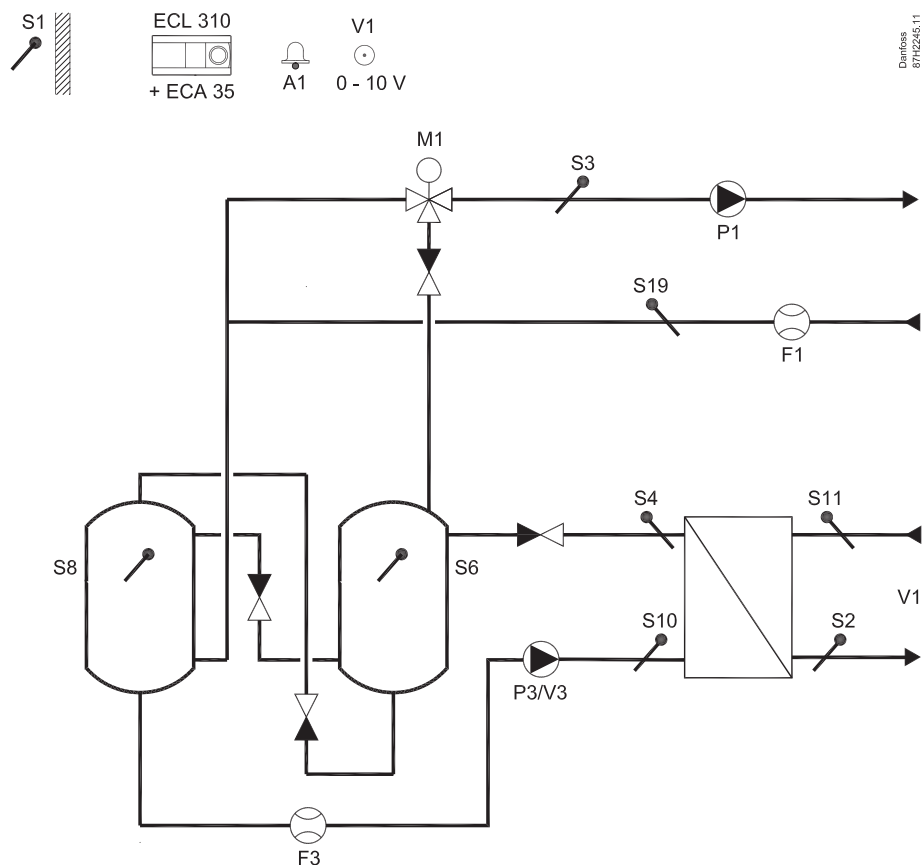
Danfoss  
87H2250.11

**P501.13, ex. f:**



Danfoss  
87H2248.11

**P501.13, ex. i1:**

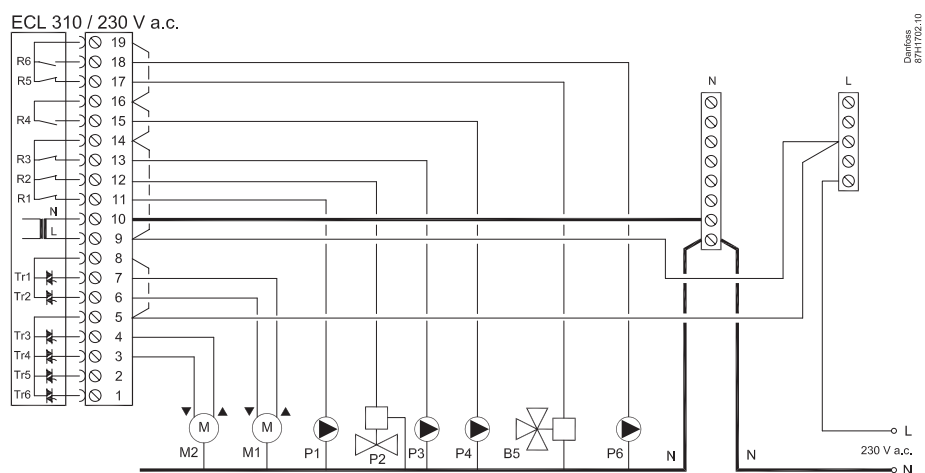


Danfoss  
87H2245.11

## P501.1

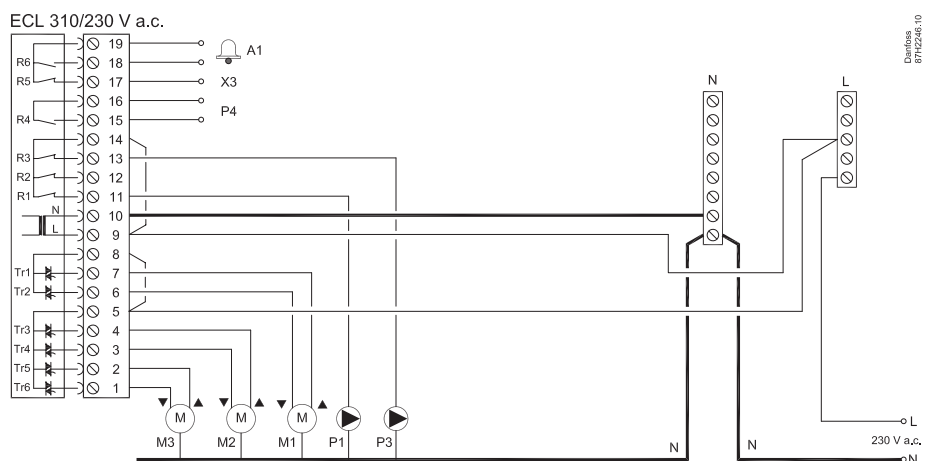
**P501.2**

**ECL 310, 230 V a.c.:**



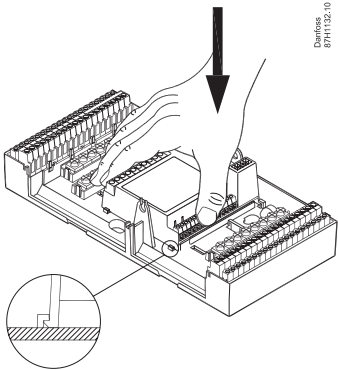
**P501.13**

**ECL 310, 230 V a.c.:**

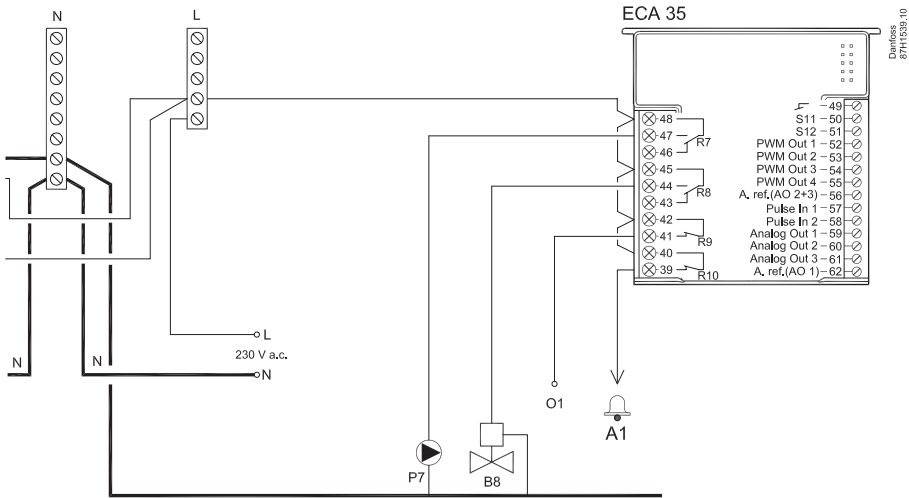


|         | ECA 32 | ECA 35 |
|---------|--------|--------|
| P501.1  | X      | X      |
| P501.2  | X      | X      |
| P501.11 | X      |        |
| P501.12 |        | X      |
| P501.13 |        | X      |

ECA 32 / 35



P501.1  
P501.2  
ECA 32 / ECA 35  
P7, B8, O1, A1



**P501.12**

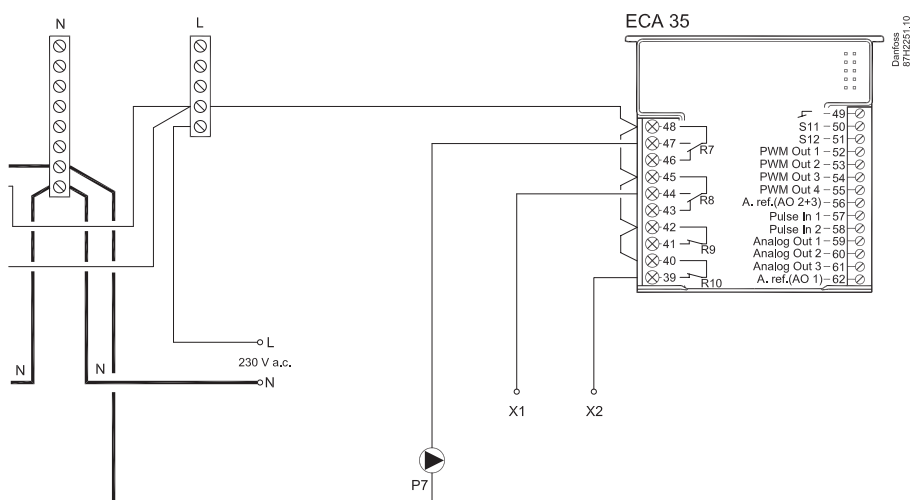
**P501.13**

**ECA 35**

**P7 (P501.12)**

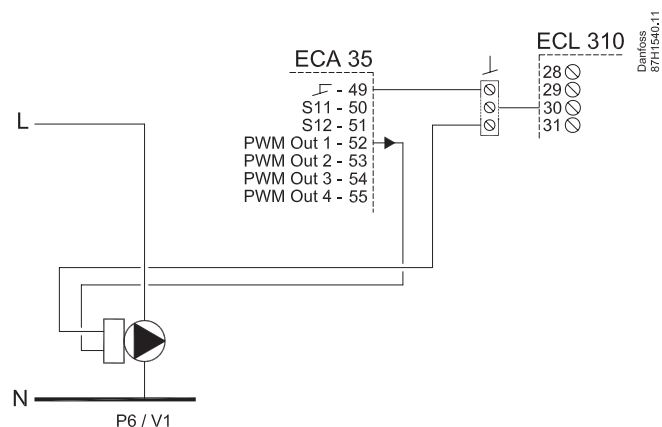
**X1 (B8)**

**X2 (P501.13)**

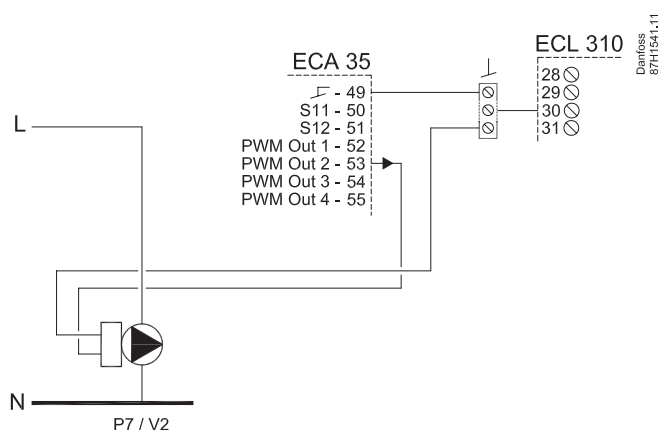


# Installation Guide, ECL Comfort 310, P501

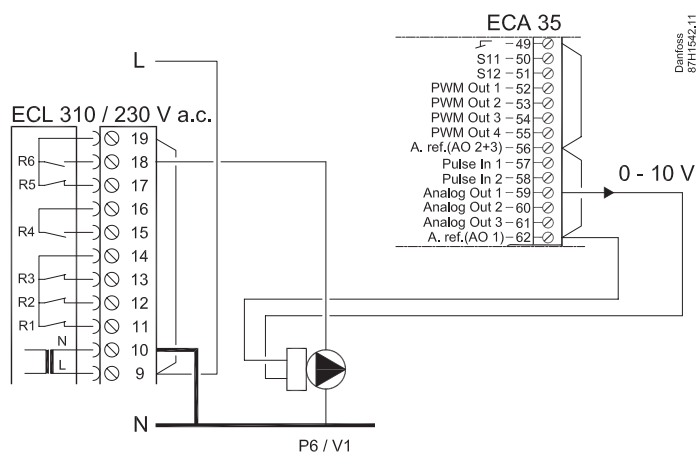
**P501.1**  
**P501.2**  
**ECA 35**  
**PWM Out 1**



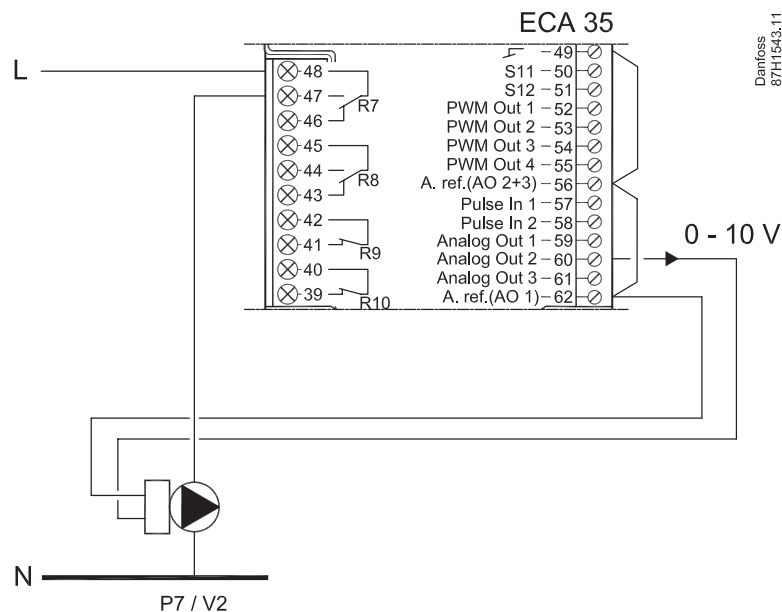
**P501.1**  
**P501.2**  
**ECA 35**  
**PWM Out 2**



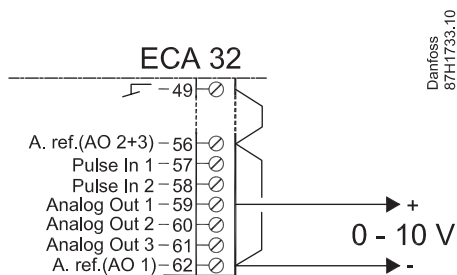
**P501.1**  
**P501.2**  
**ECA 32 / 35**  
**P6 / V1, Analog Out 1**  
**0 - 10 V**



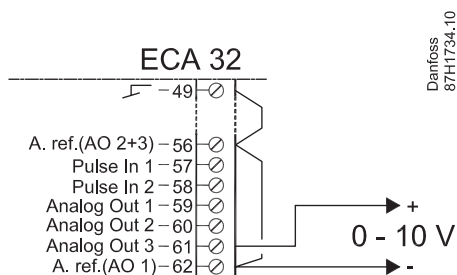
**P501.1**  
**P501.2**  
**ECA 32 / 35**  
**P7 / V2, Analog Out 2**  
**0 - 10 V**



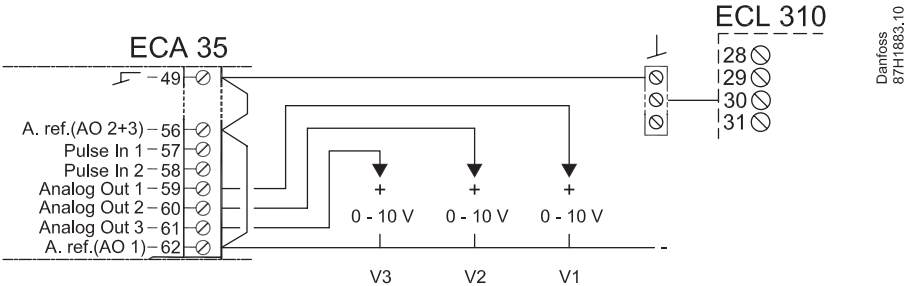
**P501.11**  
**ECA 32**  
**V1, Analog Out 1**  
**0 - 10 V**



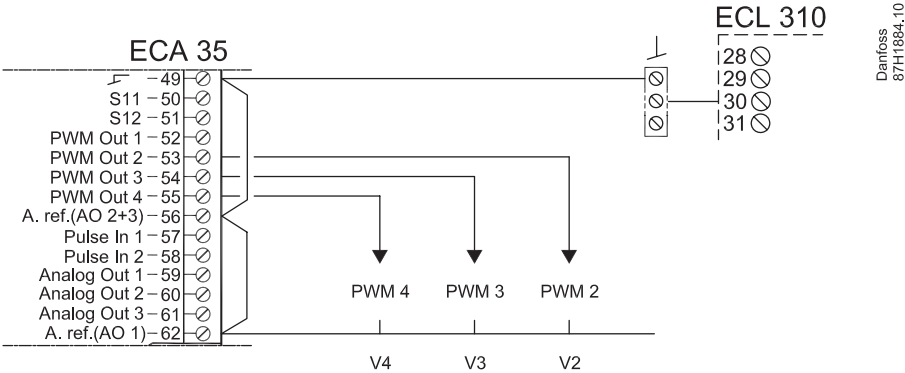
**P501.11**  
**ECA 32**  
**V3, Analog Out 3**  
**0 - 10 V**



P501.12  
P501.13  
ECA 35  
V1, V2, V3  
0-10 V



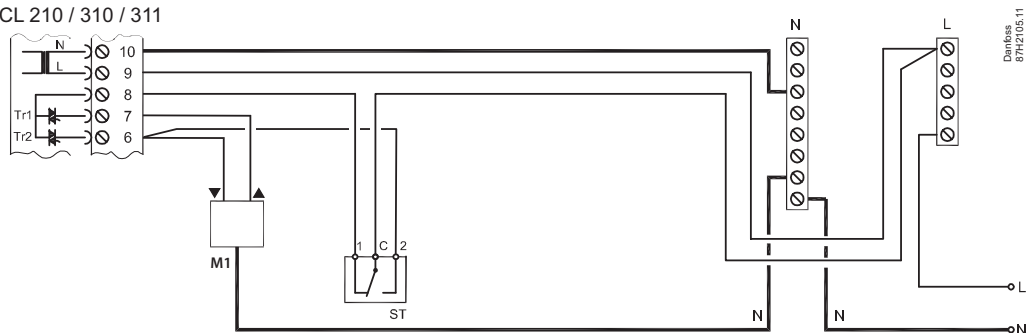
P501.12  
P501.13  
ECA 35  
V2, V3, V4  
PWM



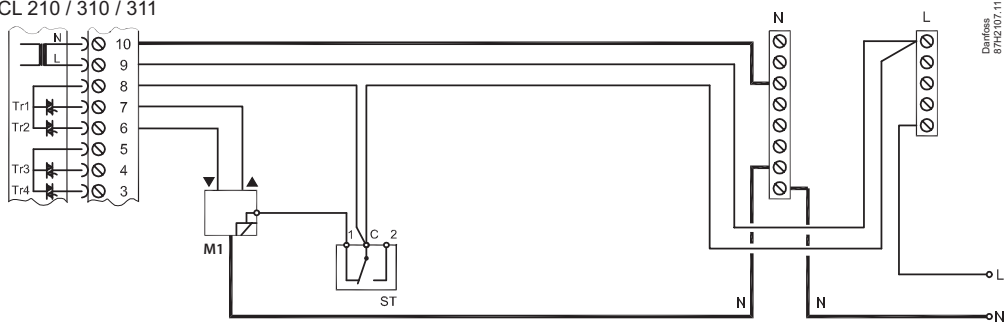
**230 V a.c. / 24 V a.c., safety thermostat**

**1-step closing**

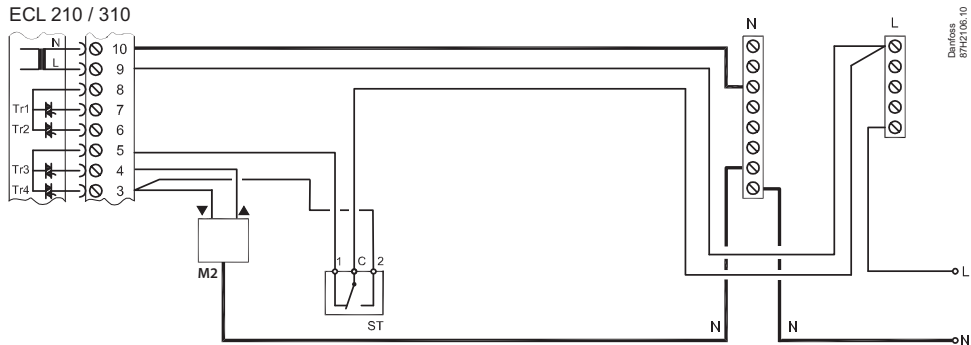
ECL 210 / 310 / 311



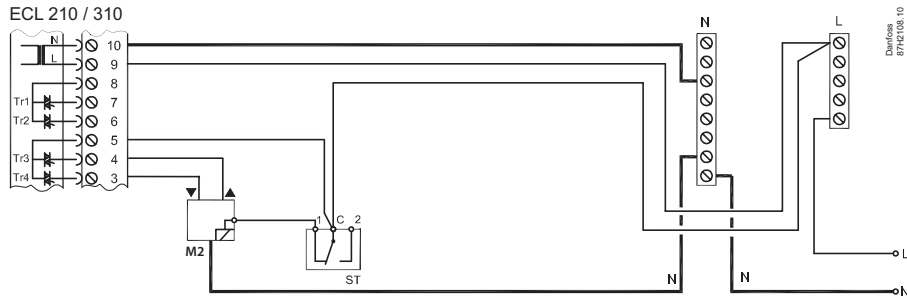
ECL 210 / 310 / 311



ECL 210 / 310

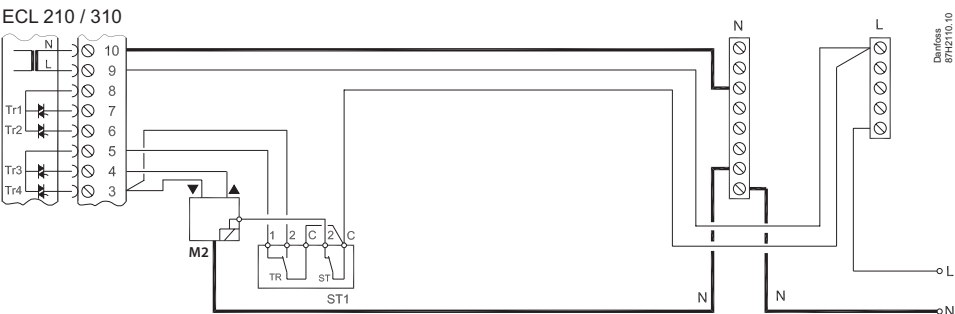
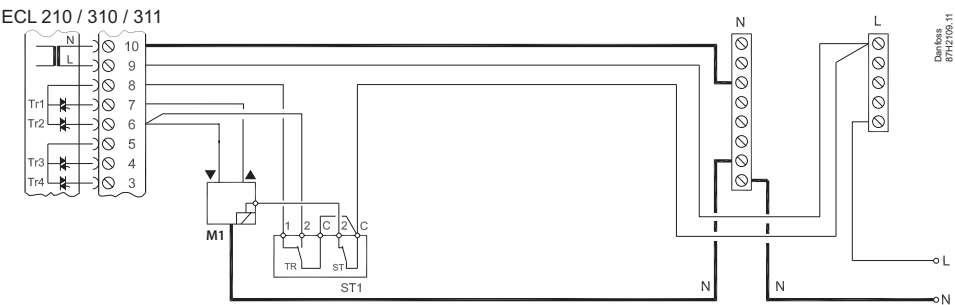


ECL 210 / 310

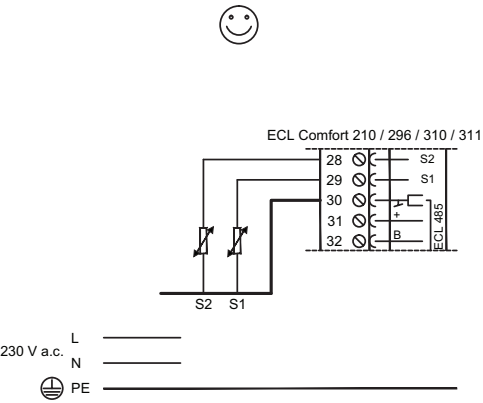
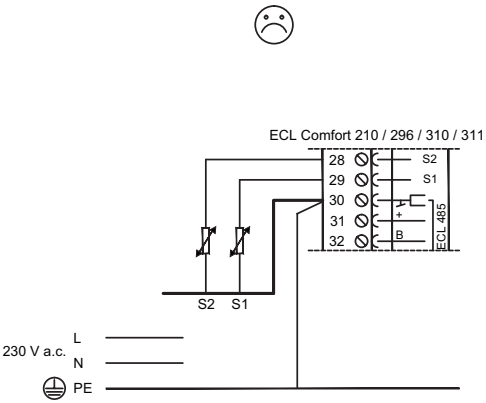


Installation Guide, ECL Comfort 310, P501

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



Pt 1000 (1000 Ω / 0 °C)

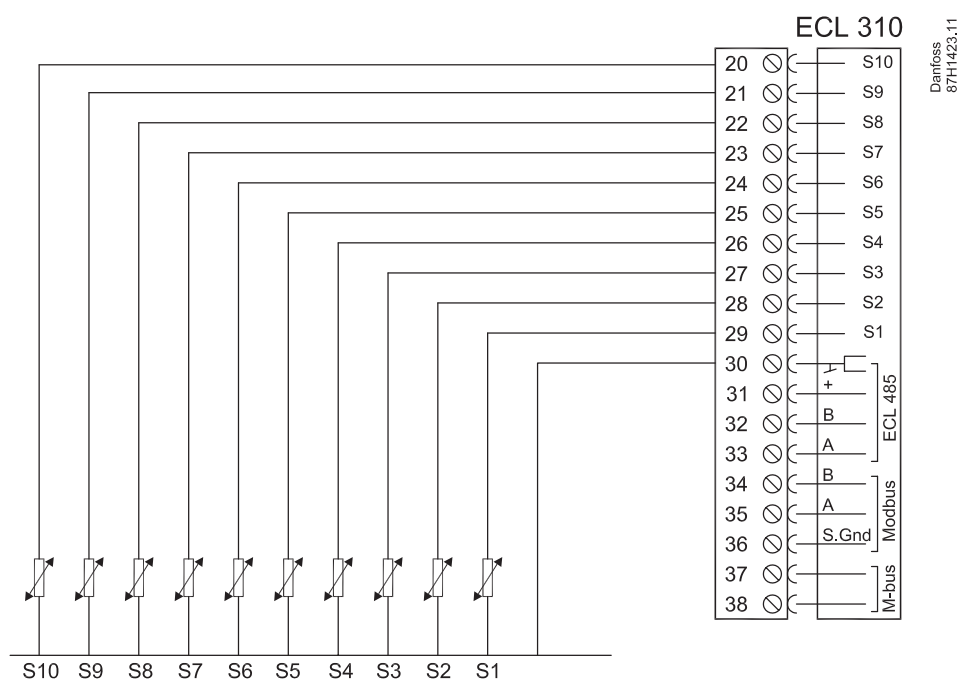


**Pt 1000**

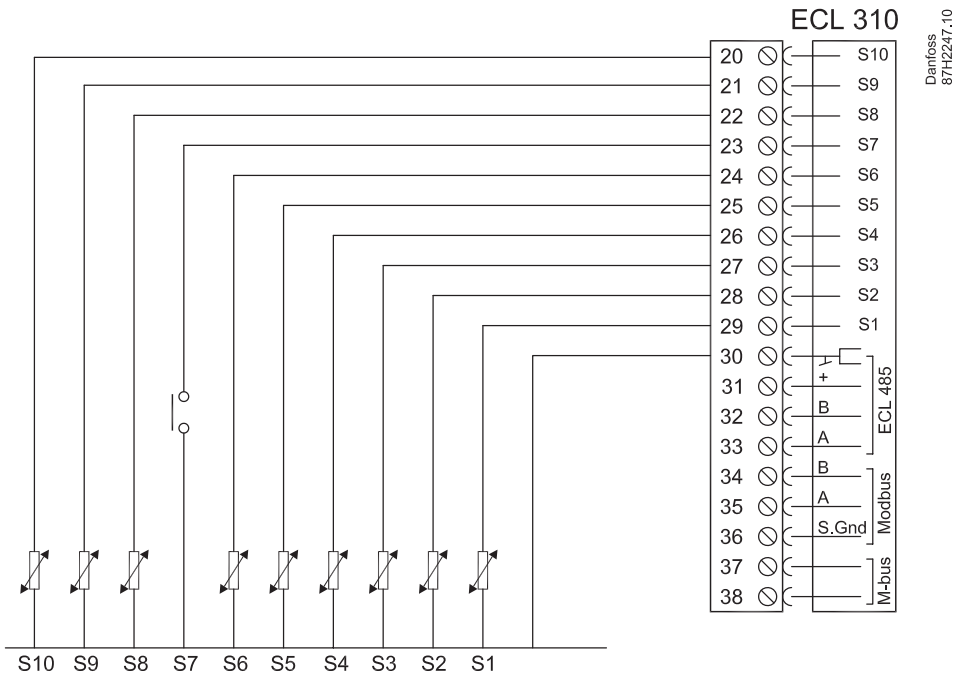
|                | S1 | S2 | S3 | S4 | S5 | S6 | S7 | S8 | S9 | S10 |
|----------------|----|----|----|----|----|----|----|----|----|-----|
| <b>P501.1</b>  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x   |
| <b>P501.2</b>  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x   |
| <b>P501.11</b> | x  | x  | x  | x  | x  | x  | x  | x  | x  | x   |
| <b>P501.12</b> | x  | x  | x  | x  | x  | x  | x  | x  | x  | x   |
| <b>P501.13</b> | x  | x  | x  | x  | x  | x  |    | x  | x  | x   |

**P501.1, P501.2, P501.11, P501.12**

**Pt 1000 (1000  $\Omega$  / 0 °C)**



P501.13  
Pt 1000 (1000 Ω / 0 °C)

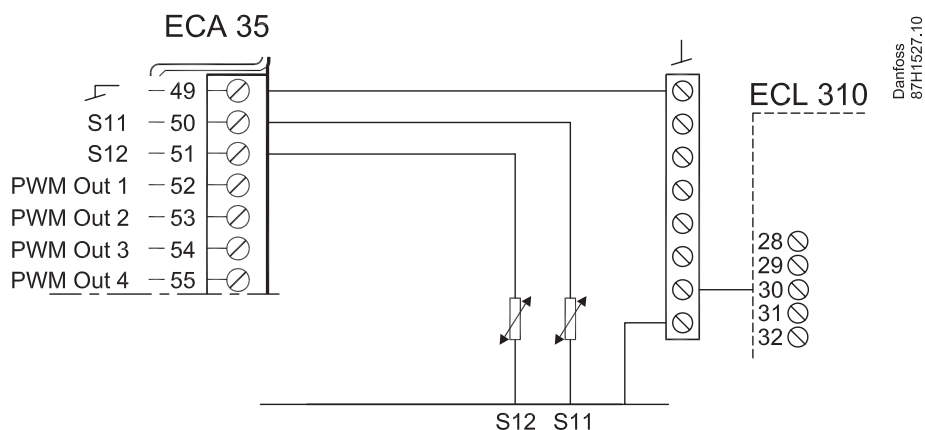


|         | ECA 32   |         |         |     |         |     |
|---------|----------|---------|---------|-----|---------|-----|
|         | S11      | S12     | S13     | S14 | S15     | S16 |
| P501.1  | Pt 1000  | Pt 1000 |         |     |         |     |
| P501.2  | Pt 1000  | Pt 1000 |         |     |         |     |
| P501.11 | 0 – 10 V |         | Pt 1000 |     | Pt 1000 |     |
| P501.12 |          |         |         |     |         |     |
| P501.13 |          |         |         |     |         |     |

|         | ECA 35   |         |     |     |     |     |
|---------|----------|---------|-----|-----|-----|-----|
|         | S11      | S12     | S13 | S14 | S15 | S16 |
| P501.1  | Pt 1000  | Pt 1000 |     |     |     |     |
| P501.2  | Pt 1000  | Pt 1000 |     |     |     |     |
| P501.11 | 0 - 10 V |         |     |     |     |     |
| P501.12 | Pt 1000  | Pt 1000 |     |     |     |     |
| P501.13 | Pt 1000  | Pt 1000 |     |     |     |     |

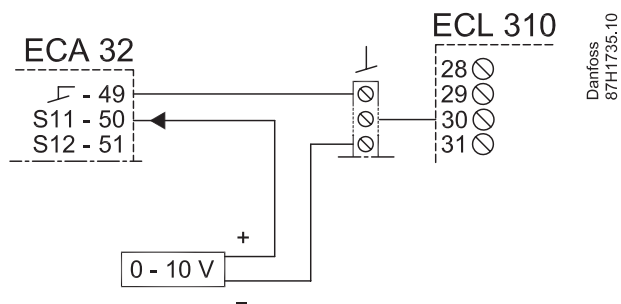
**P501.1**

**ECA 32 / 35, S11, S12, Pt 1000**



**P501.11**

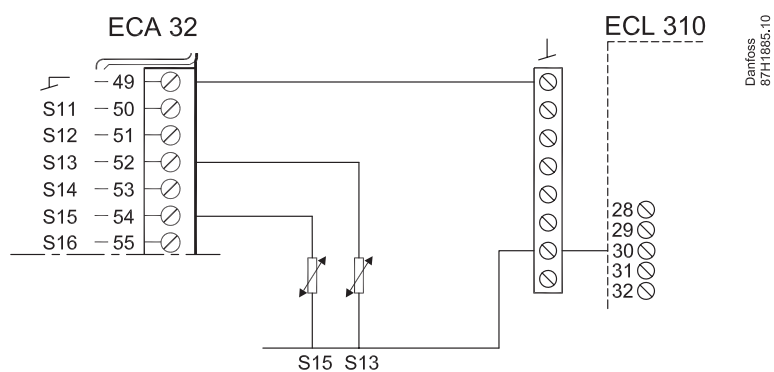
**ECA 32, S11, 0 - 10 V**



**P501.11**

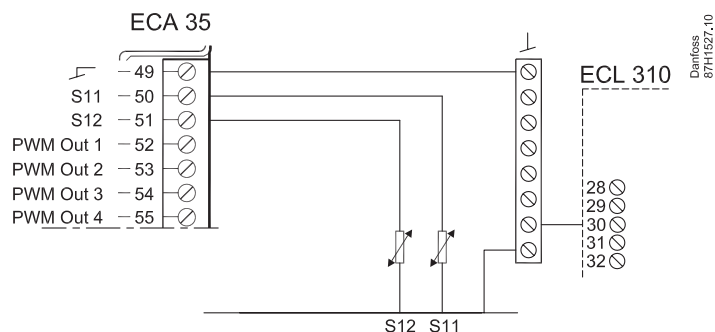
**ECA 32**

**S13, S15, Pt 1000**

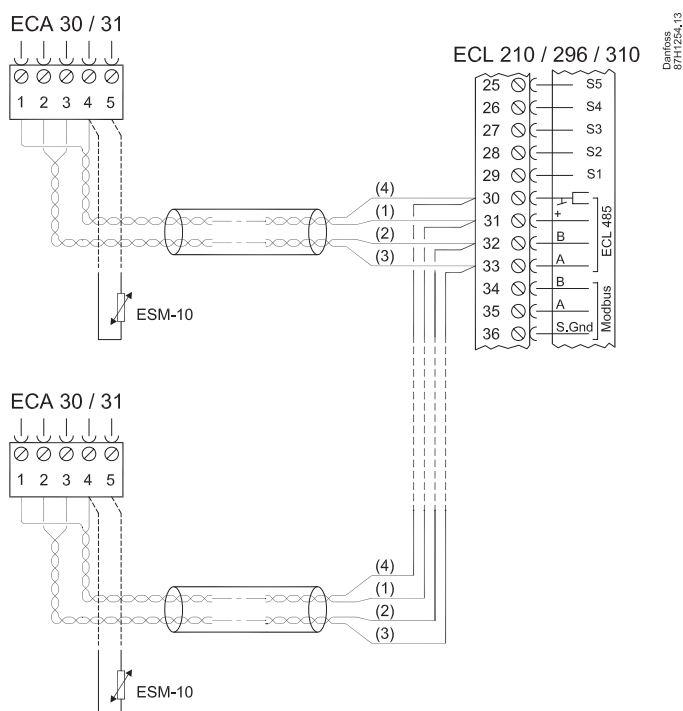


## Installation Guide, ECL Comfort 310, P501

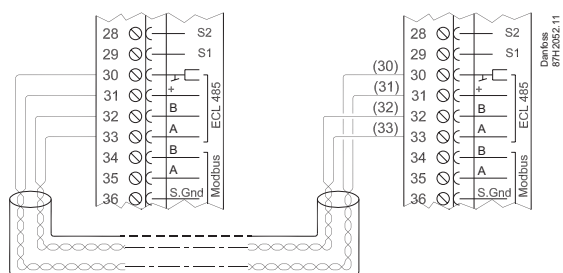
**P501.12**  
**P501.13**  
**ECA 35**  
**S11, S12**



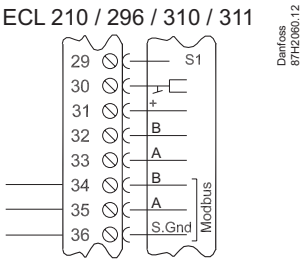
## ECA 30 / 31



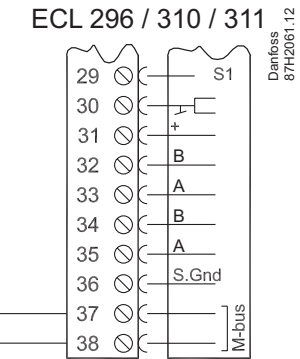
## Master / slave



# Modbus



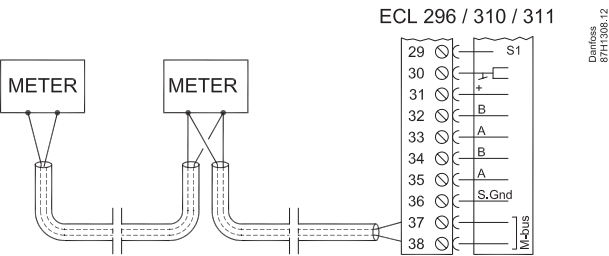
# M-bus



**P501.1, P501.2, P501.11, P501.12, P501.13:**

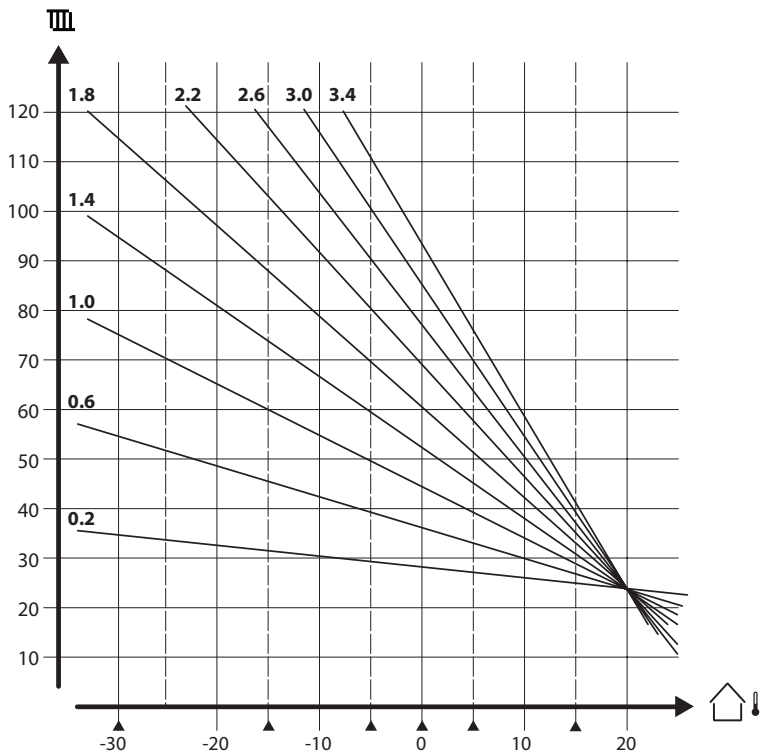
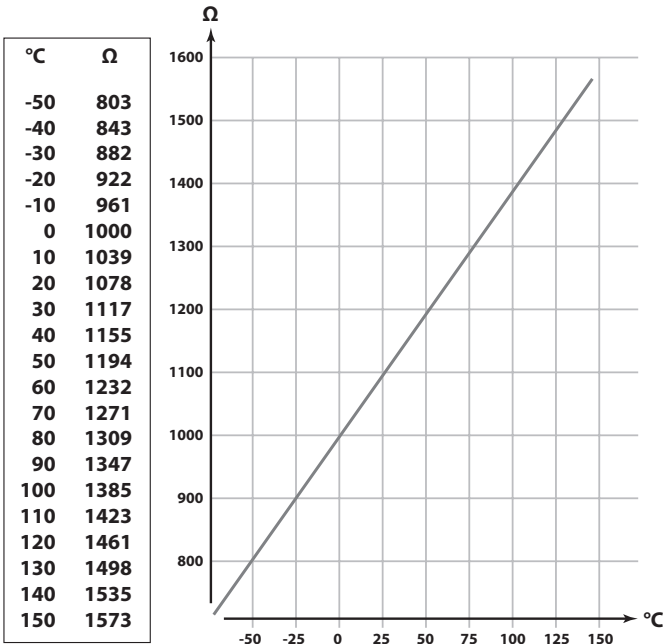
**F1+ F2+F3+F4**

**M-bus**



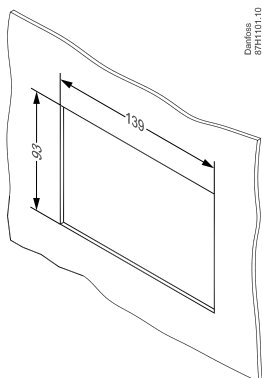
|         | F1      | F2 | F3 | F4 |
|---------|---------|----|----|----|
| P501.1  | x       | x  |    |    |
| P501.2  | x       | x  |    |    |
| P501.11 | x       | x  | x  |    |
| P501.12 | x       | x  | x  |    |
| P501.13 | x (S19) | x  | x  | x  |

Pt 1000 (IEC 751B, 1000 Ω / 0 °C)

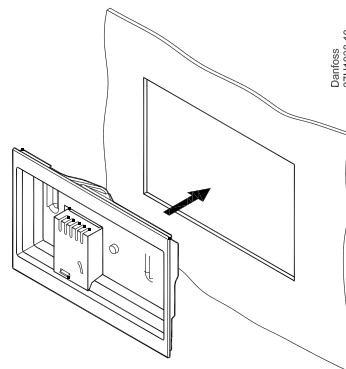


ECA 30

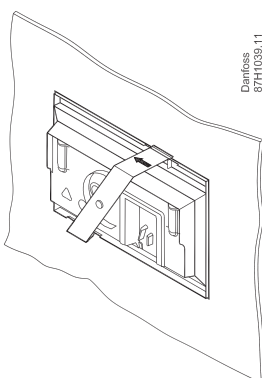
1



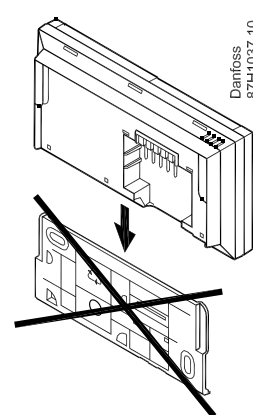
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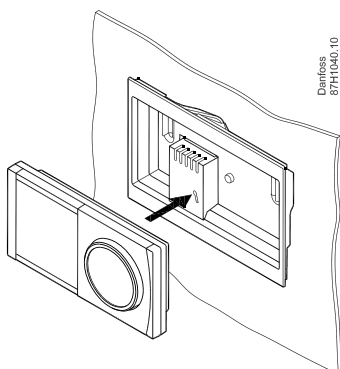
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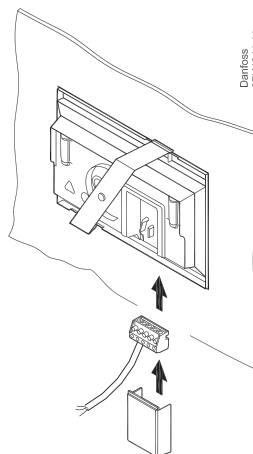
4



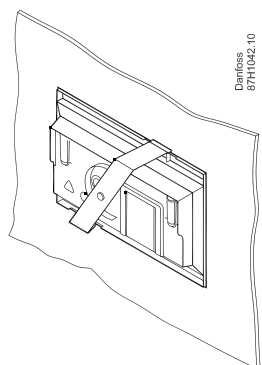
5



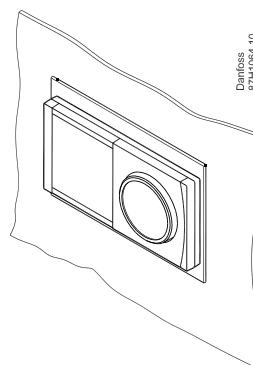
6



7

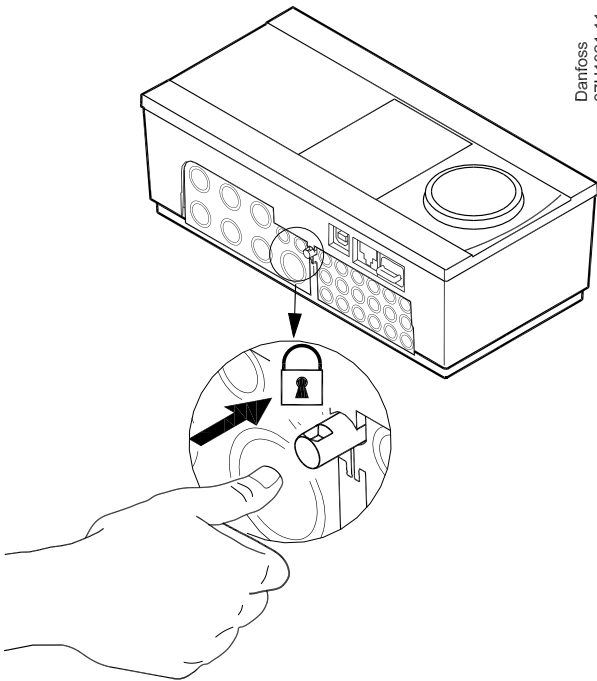


8

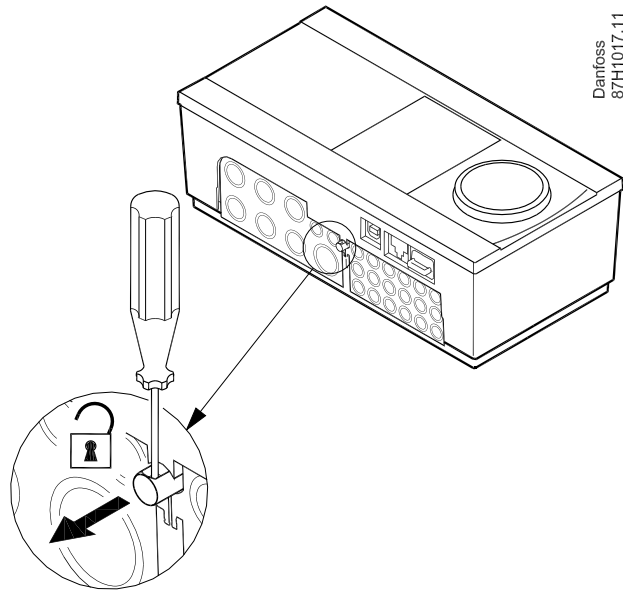


# Installation Guide, ECL Comfort 310, P501

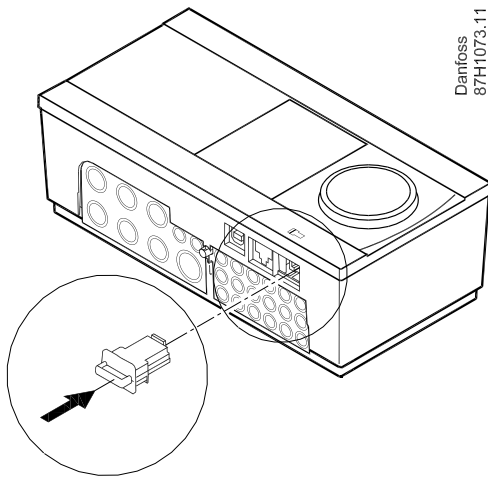
Danfoss  
87H1021.11



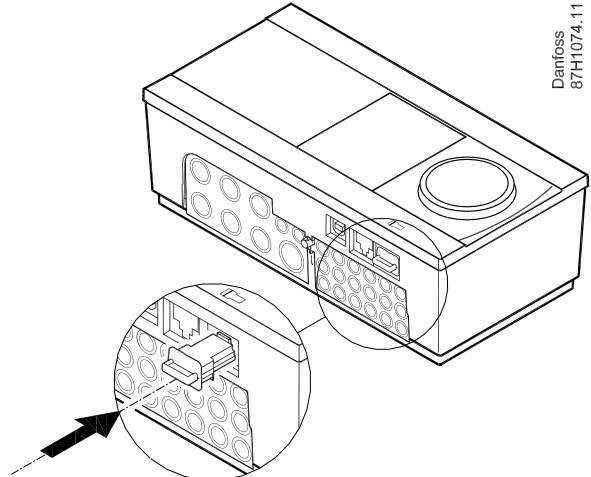
Danfoss  
87H1017.11



Danfoss  
87H1073.11



Danfoss  
87H1074.11



?  **ECL Comfort 310, P501: [www.danfoss.com](http://www.danfoss.com)**

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



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