

# Geniox Core Control system 42.04.02 (Pre-heat)

Dokumenter vist på de nedenstående sider

Projekt forside: side 1

Hurtig vejledning: side 2

Generel beskrivelse: side 3-4

External Tilslutninger: page 10-17

Circuit Diagram: page 18-27

Modbus Guide: page 23

Modbus address list: page 30

Cable plan: page 100-117

AHU med intern indkapsling:

Indkapsling er altid placeret indvendig i AHU

Aggregat data oversigt.

Varmeveksler type:

Se data i vedhæftet bilag - Tekniske data

Varmebatteri type:

Se data i vedhæftet bilag - Tekniske data

Kølebatteri type:

Se data i vedhæftet bilag - Tekniske data

Varmepumpe type:

Se data i vedhæftet bilag - Tekniske data

Elektriske data:

Totalt optaget effekt: Se ordre bekræftelse

Ventilator sikring størrelse: Se ordre bekræftelse

Tilluft ventilator kabel impedans: Se ordre bekræftelse

Fraluft ventilator kabel impedans: Se ordre bekræftelse

Max forsikring Se ordre bekræftelse

Ik max på sikring i anlæg: 6 kA

Producent:

Systemair A/S Danmark

Ved Milepælen 7

8361 Hasselager



Geniox  
Access CU27 Regulator

Forside

Projekt:

Geniox-Core CS 42.04.02 Pre-heat DK

Rev.:

42.04.02

Blad:

1

Dato:

07-08-2020

Initialer:

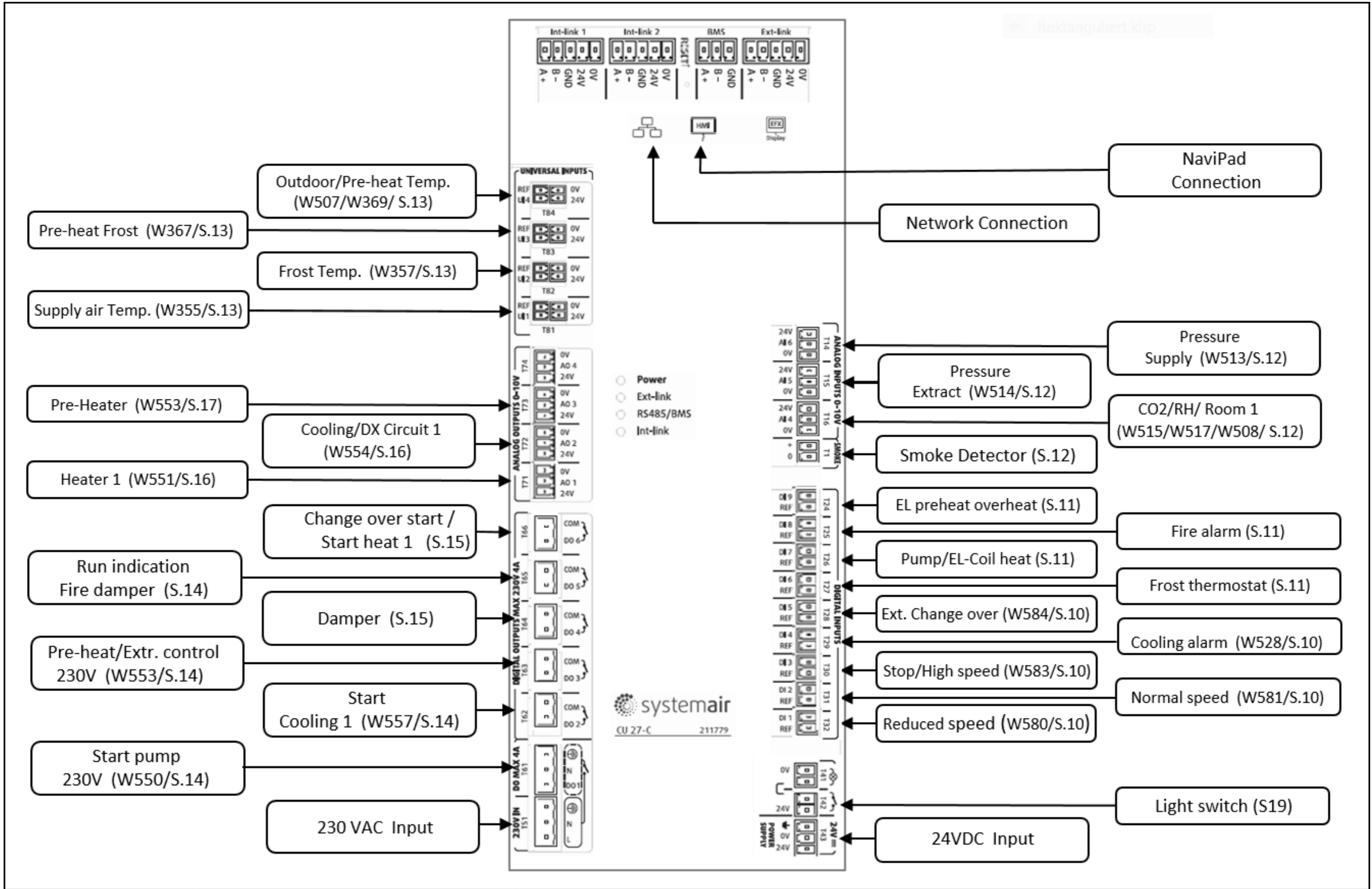
MIKE

Antal sider:

4

Næste side

2



Symboler er iht. IEC 60617.

På de følgende 2 sider, er der beskrivelse af benyttede symboler i projektet.

Lednings farvekode

- Sort - BK
- Brun - BN
- Rød - RD
- Orange - OG
- Gul - YE
- Grøn - GN
- Blå - BU
- Violet - V
- Grå - GY
- Hvid - WH
- Pink - PK
- Transparent - TP
- Grøn/gul - PE

L1:1 > Referencer

-X2:1  Klemme

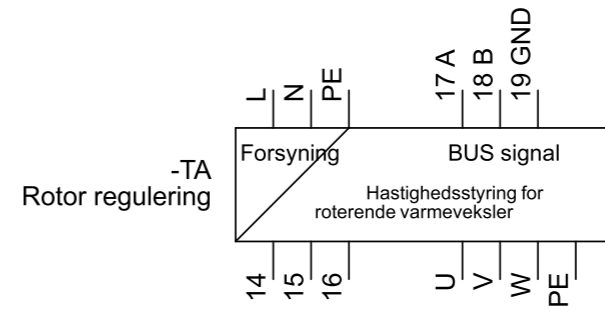
-EA  Lampe

-SF  Koblingsudstyr

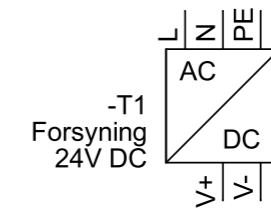
-BP  Tryktransmitter

-BP  Pressostat

-F  Automatsikring,



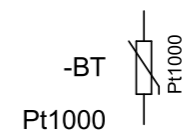
Roterende varmeveksler



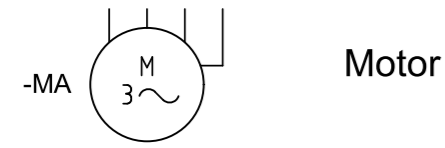
Forsyning



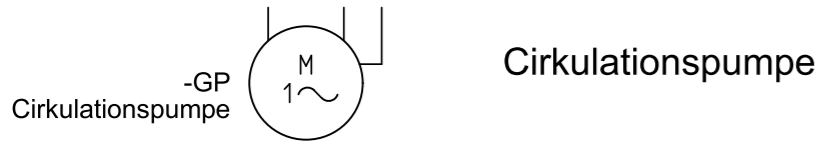
Brandvagt



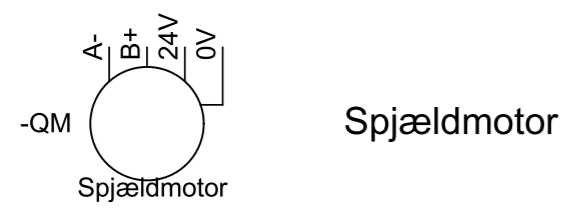
Temperatur (måling)



Motor



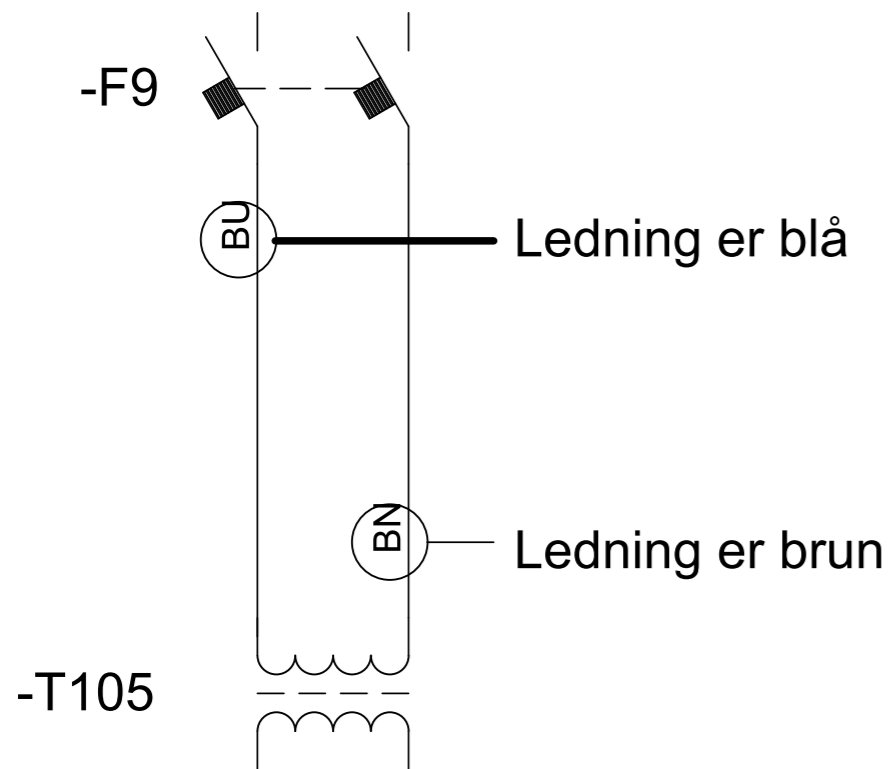
Cirkulationspumpe



Spjældmotor

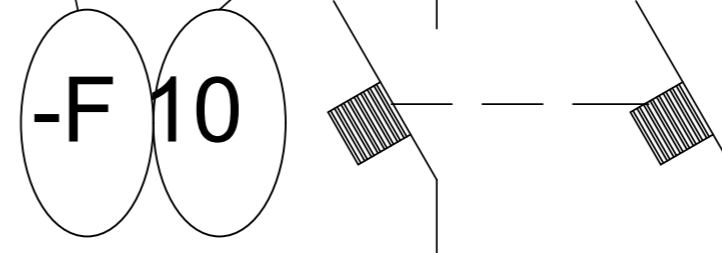
Labeling of wires  
are marked with  
Klemme name

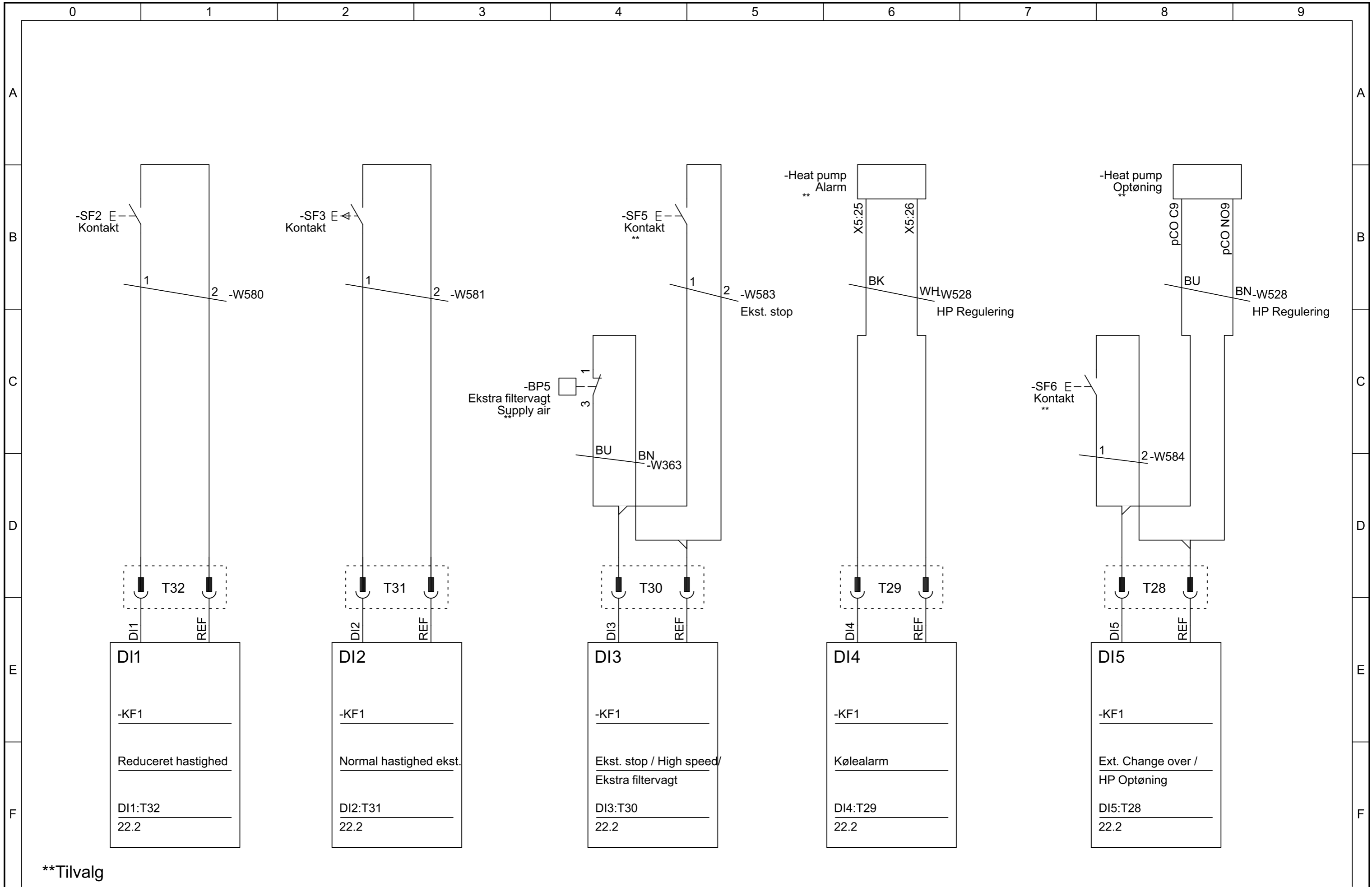
Komponenter er mærket med komponent koder  
efterfulgt af et nummer iht. IEC 61346-1 Tabel 1



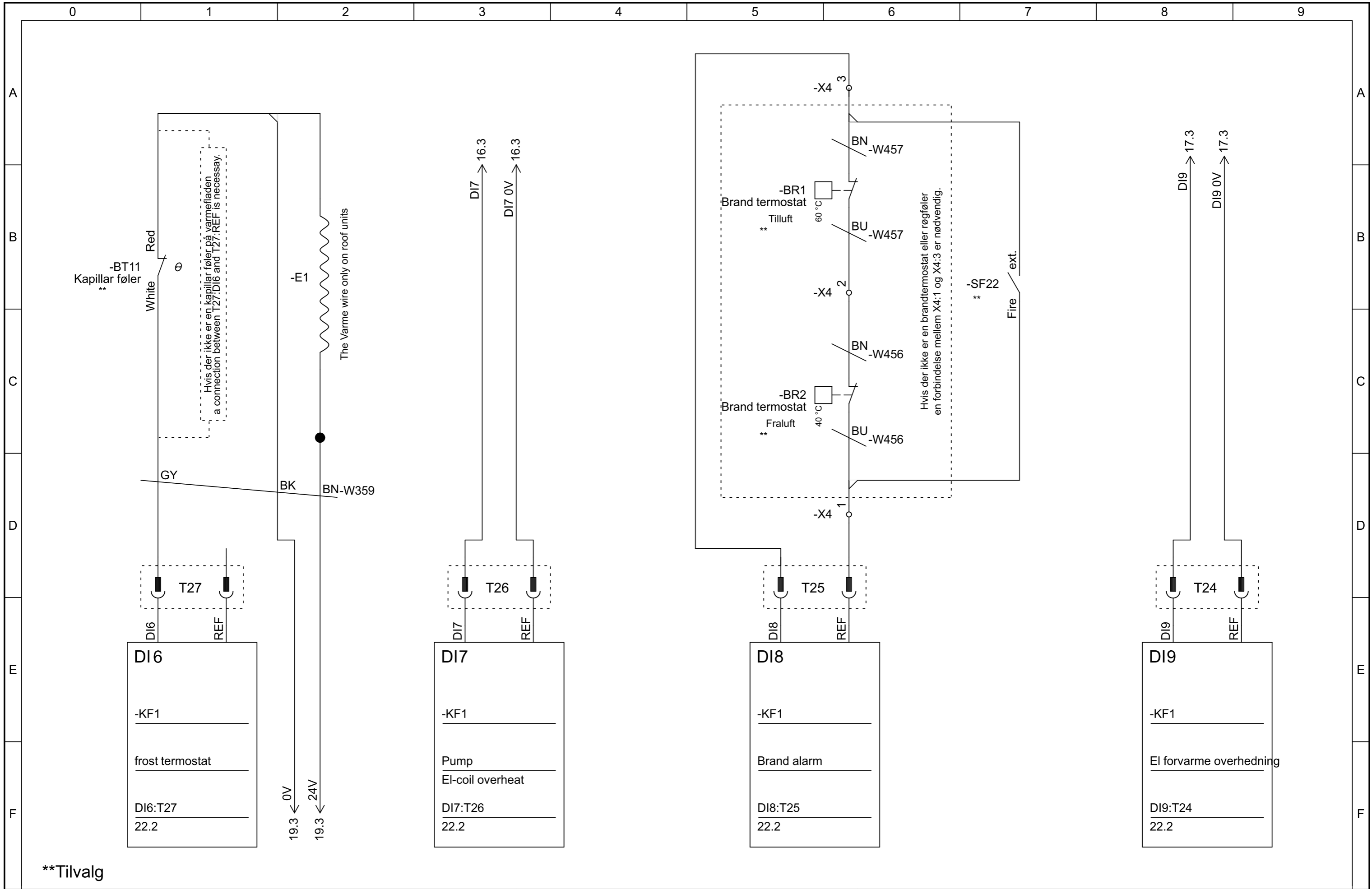
Komponent kode

Nummer

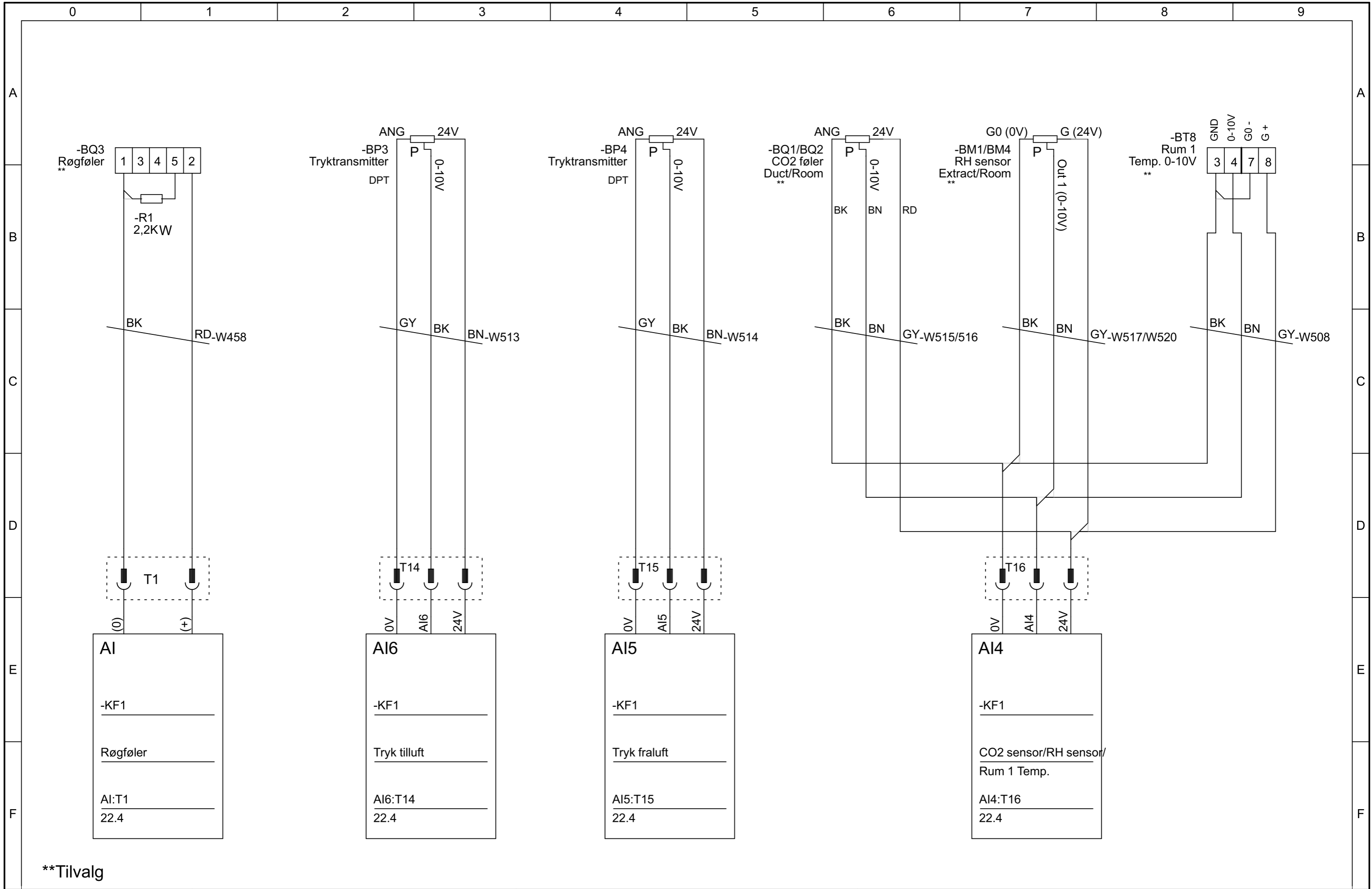


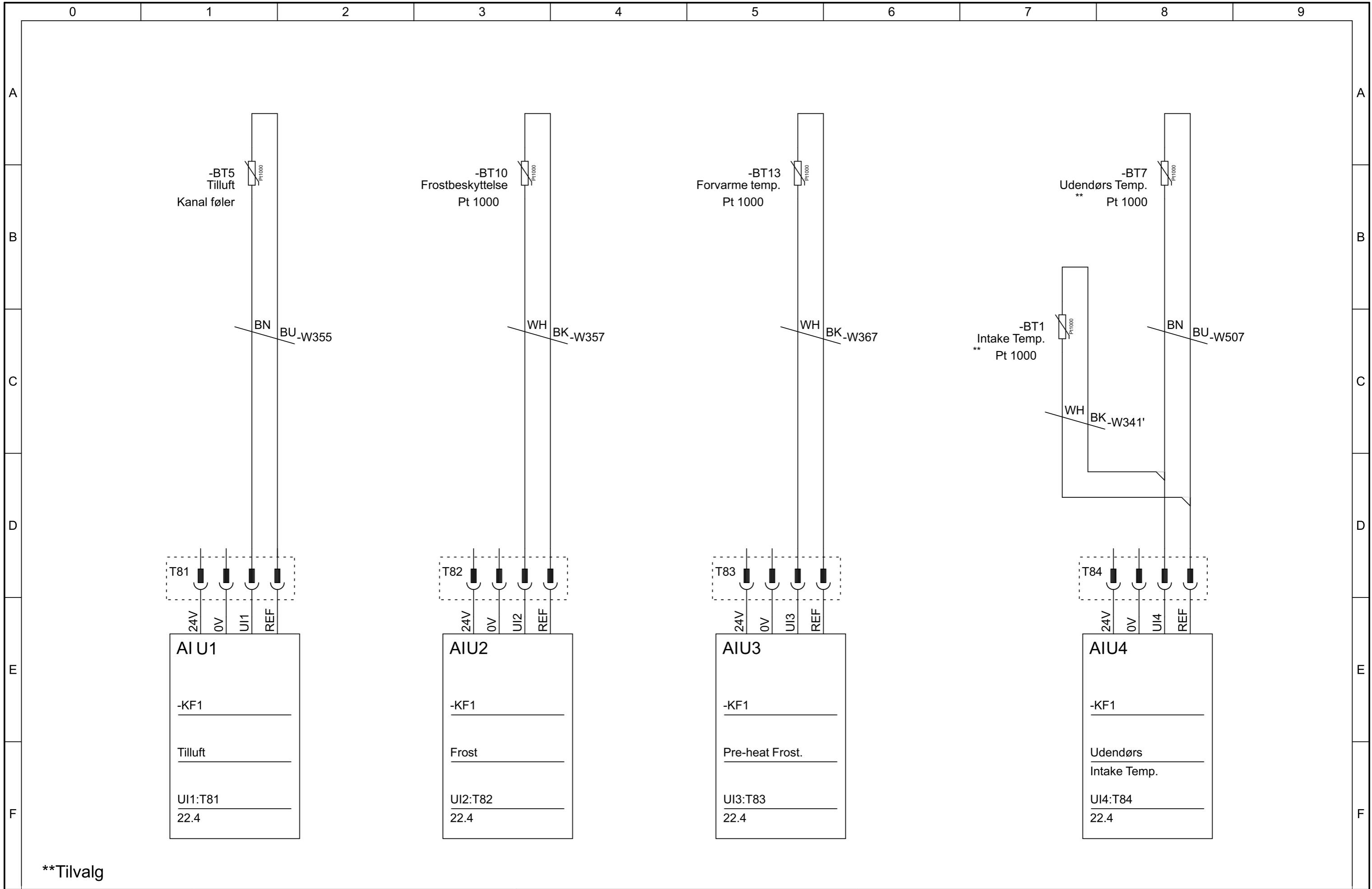


\*\*Tilvalg



\*\*Tilvalg





\*\*Tilvalg

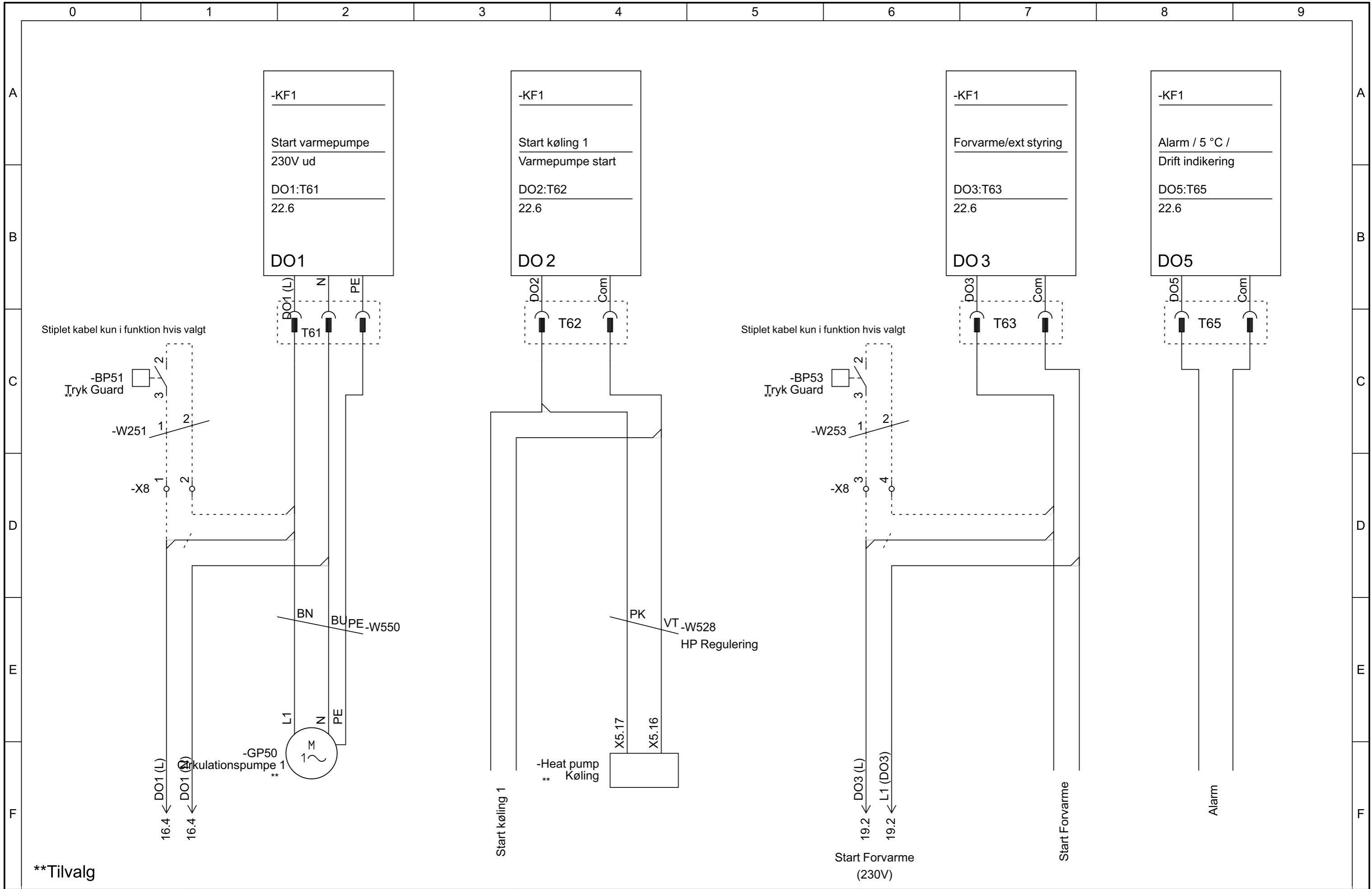


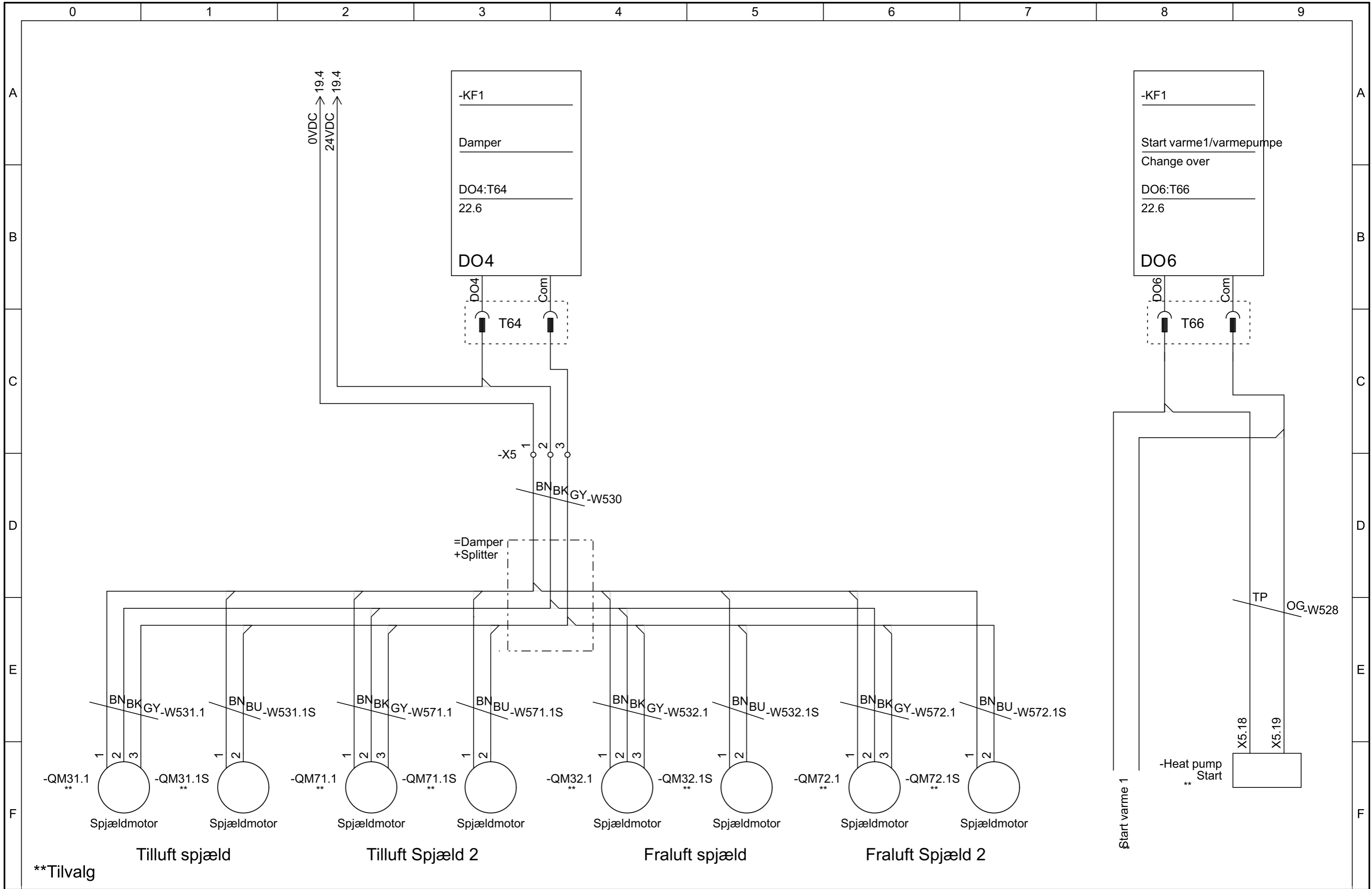
Geniox  
Access CU27 Regulator

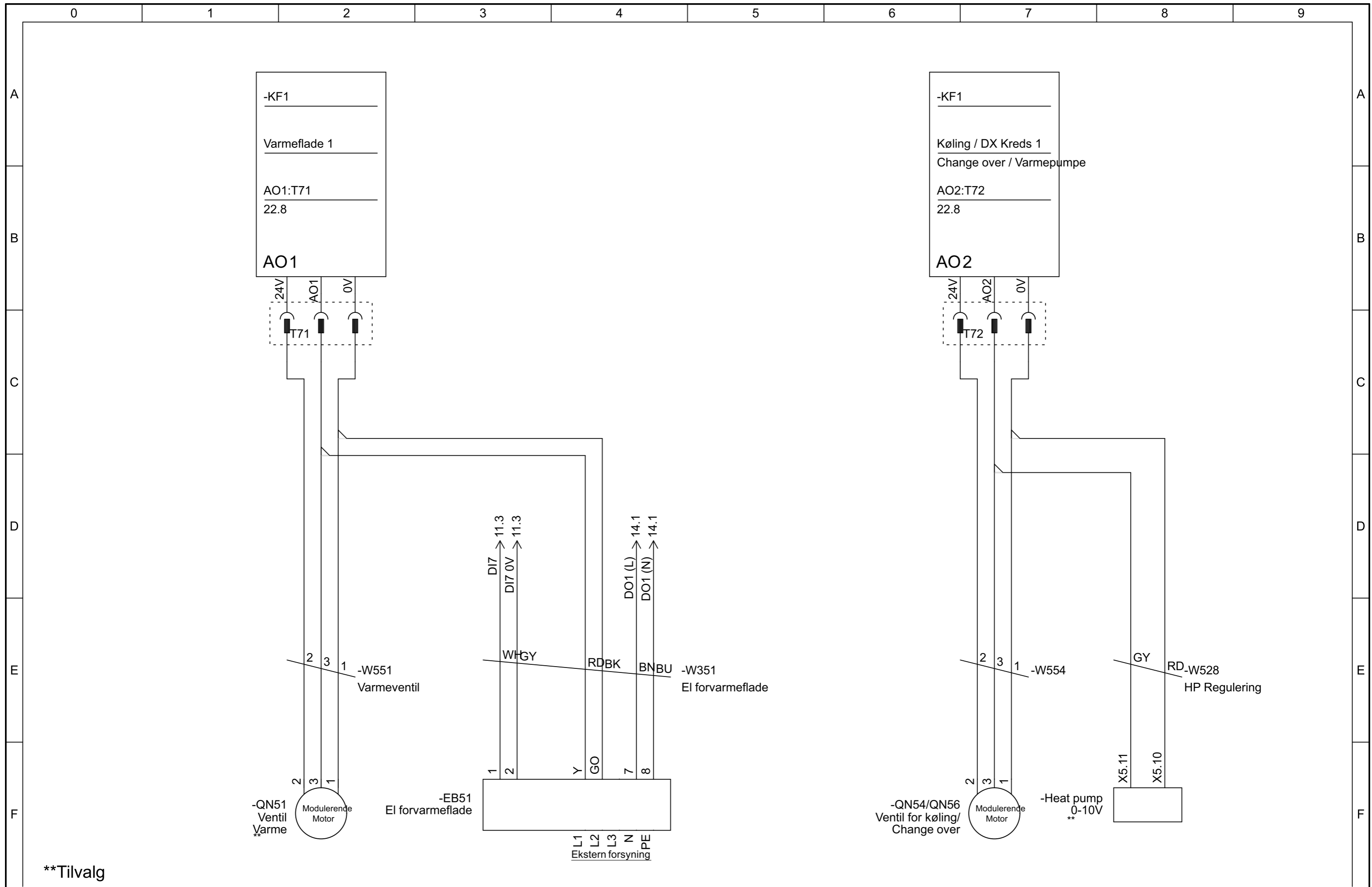
External connections UI

Projekt:	Geniox-Core CS 42.04.02 Pre-heat DK		Rev.:	42.04.02	Blad:	13
Dato:	06-11-2019		Initialer:	MIKE	Antal sider:	19
					Næste side	14

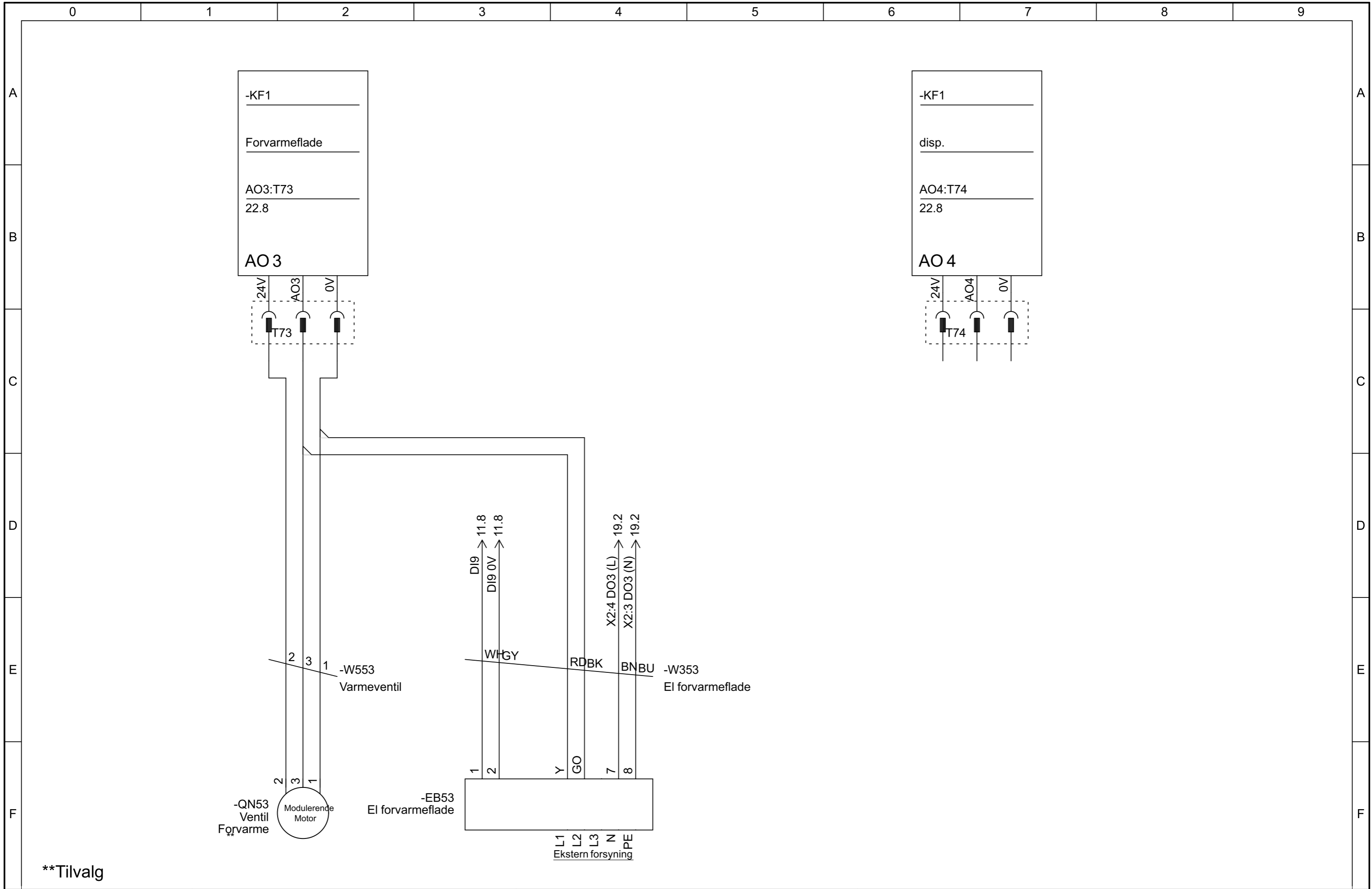




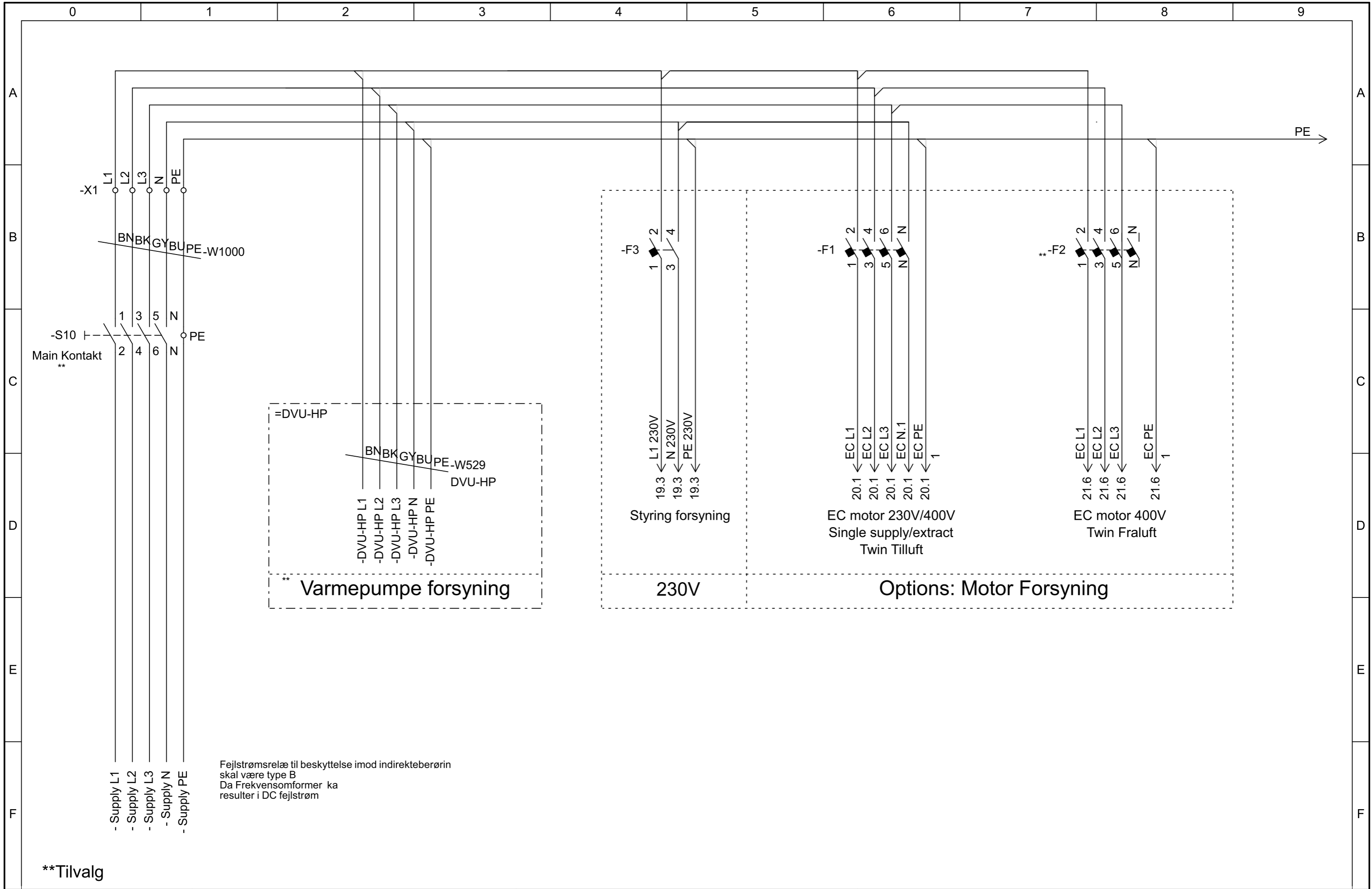


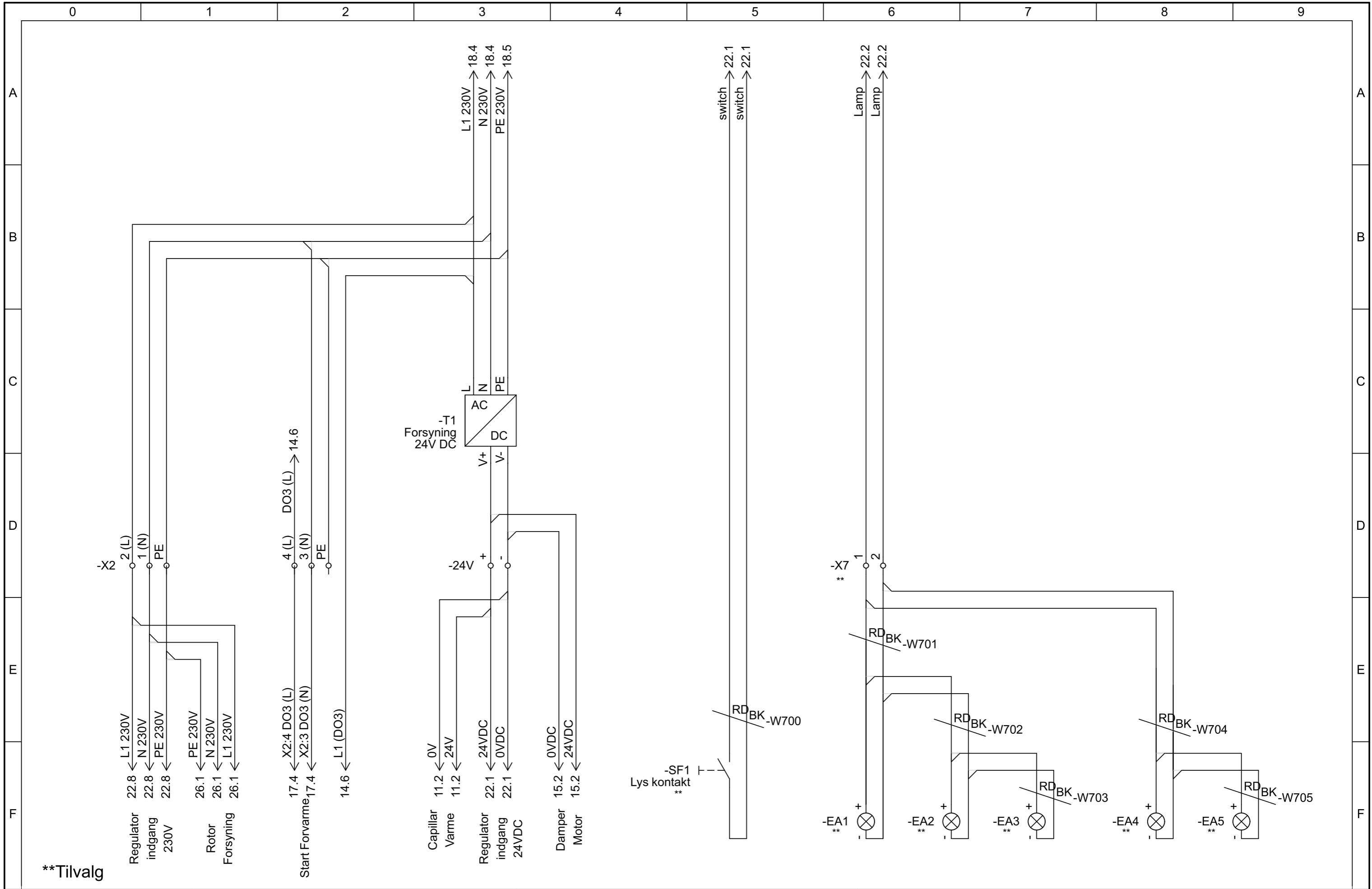


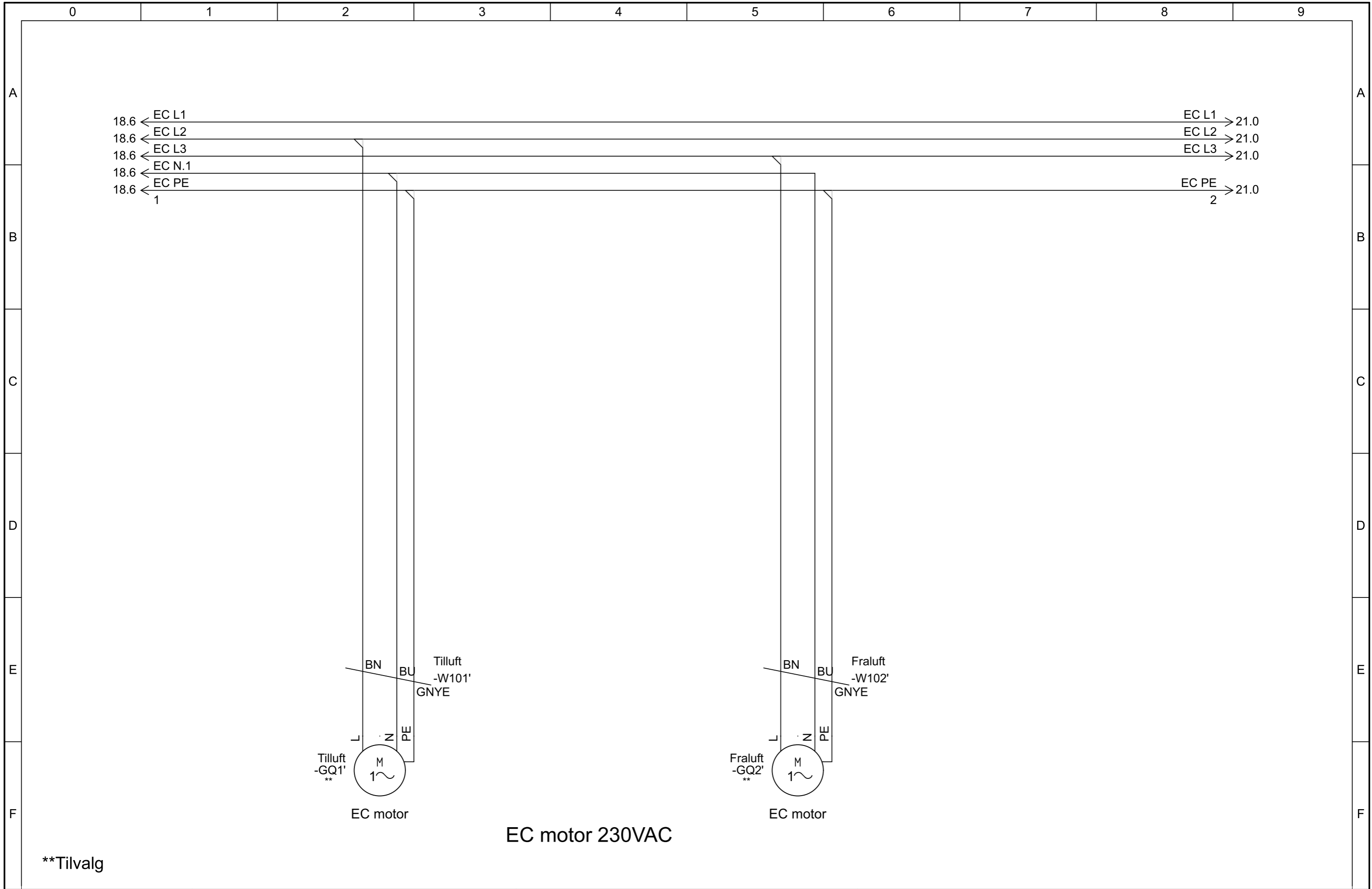
\*\*Tilvalg



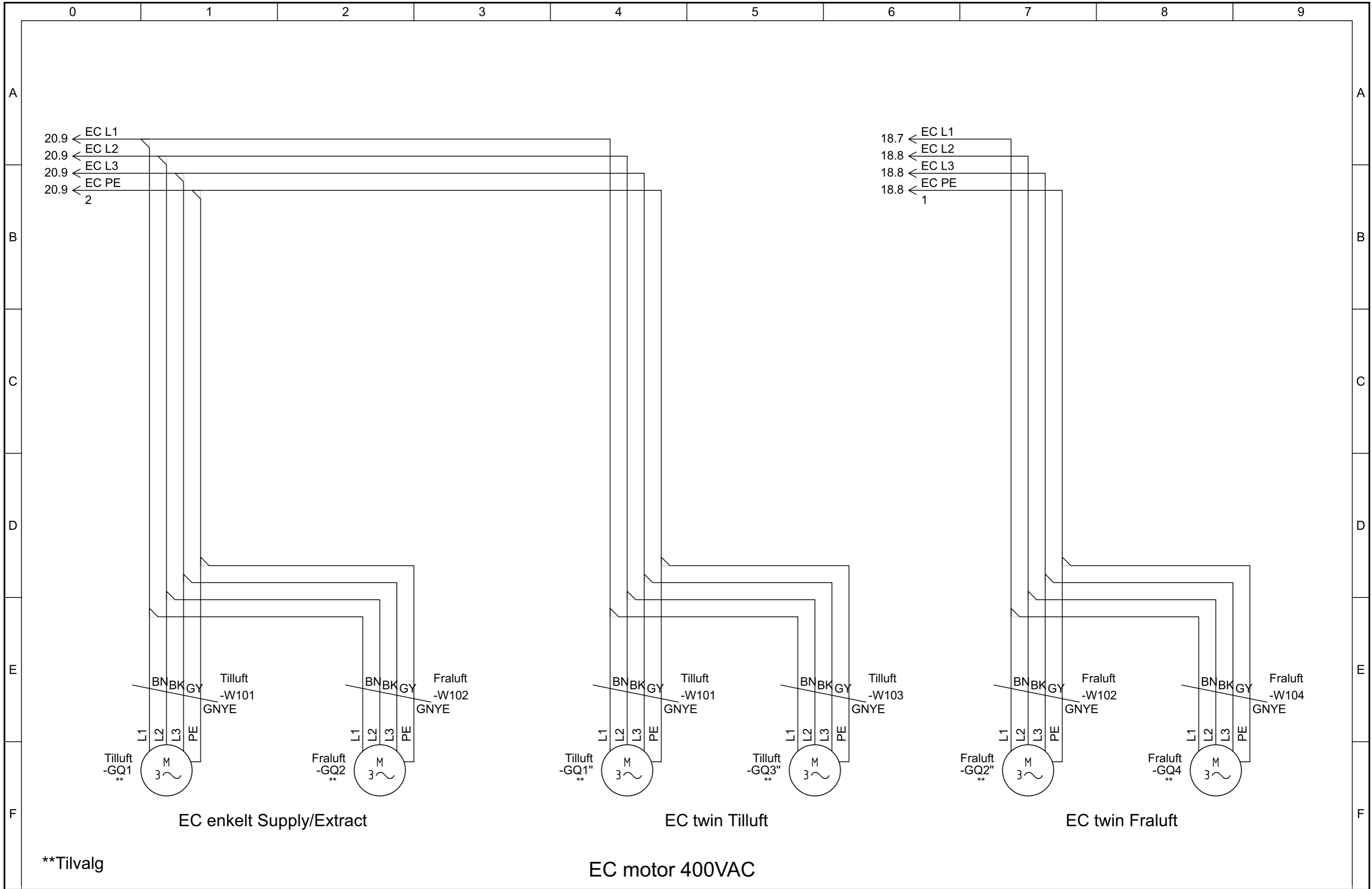
\*\*Tilvalg







\*\*Tilvalg



\*\*Tilvalg

EC motor 400VAC



-KF1

### Access CU27 Regulator

Systemair A/S

DI1:T32 10.1 DI1  
Reduceret hastighed



AI:T1 12.0 (0)  
Røgføler



DO1:T61 14.2 DO1 (L)  
Start varmpumpe  
230V ud



AO1:T71 16.2 24V  
Varmeflade 1



DI2:T31 10.2 DI2  
Normal hastighed ekst.



AI6:T14 12.2 0V  
Tryk tilluft



DO2:T62 14.3 DO2  
Start køling 1  
Varmepumpe start



AO2:T72 16.7 24V  
Køling / DX Kreds 1  
Change over / Varmepumpe



DI3:T30 10.4 DI3  
Ekst. stop / High speed/  
Ekstra filtervagt



AI5:T15 12.4 0V  
Tryk fraluft



DO3:T63 14.7 DO3  
Forvarme/ext styring



AO3:T73 17.1 24V  
Forvarmeblade



DI4:T29 10.6 DI4  
Kølealarm



AI4:T16 12.7 0V  
CO2 sensor/RH sensor/



DO4:T64 15.3 DO4  
Damper



AO4:T74 17.6 24V  
disp.



DI5:T28 10.8 DI5  
Ext. Change over /  
HP Optøning



UI1:T81 13.1 24V  
Tilluft



DO5:T65 14.8 DO5  
Alarm / 5 °C /  
Drift indikering



DI6:T27 11.1 DI6  
frost termostat



UI2:T82 13.3 24V  
Frost



DO6:T66 15.8 DO6  
Start varme1/varmpumpe  
Change over



DI7:T26 11.3 DI7  
Pump  
EI-coil overheat



UI3:T83 13.5 24V  
Pre-heat Frost.



DI8:T25 11.5 DI8  
Brand alarm



UI4:T84 13.8 24V  
Udendørs  
Intake Temp.



DI9:T24 11.8 DI9  
EI forvarme overhedning



24VDC Ind

Light

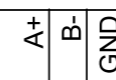
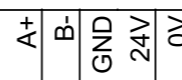
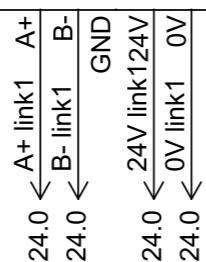
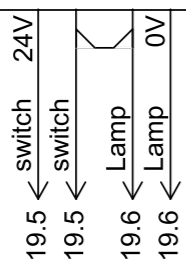
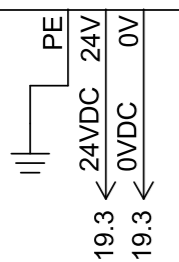
Int-link 1

Int-link 2

Ext-link

BMS

230V Ind



Geniox  
Access CU27 Regulator

Access CU27 Regulator

Projekt: Geniox-Core CS 42.04.02 Pre-heat DK

Rev.: 42.04.02

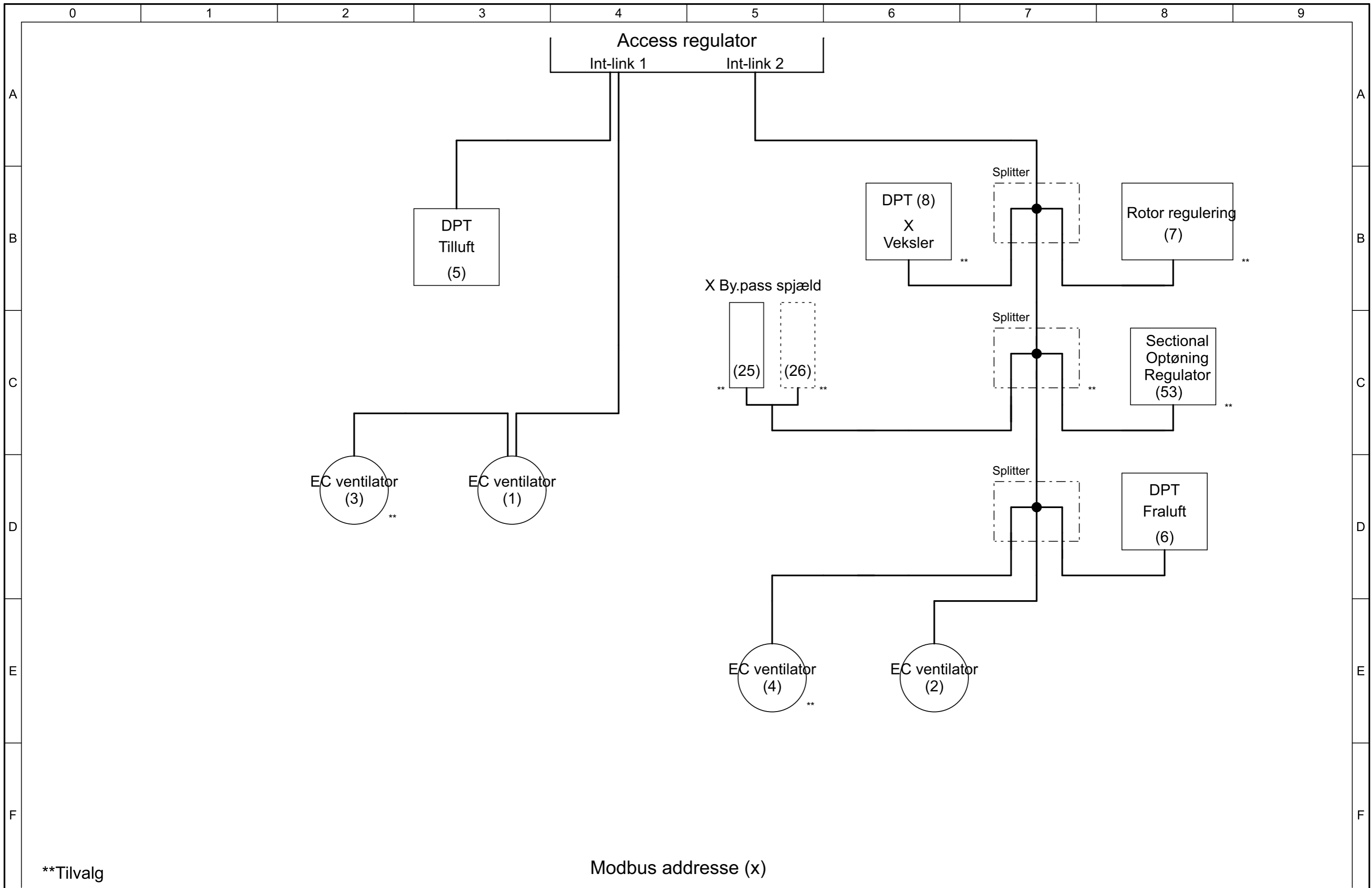
Blad: 22

Dato: 06-11-2019

Initialer: MIKE

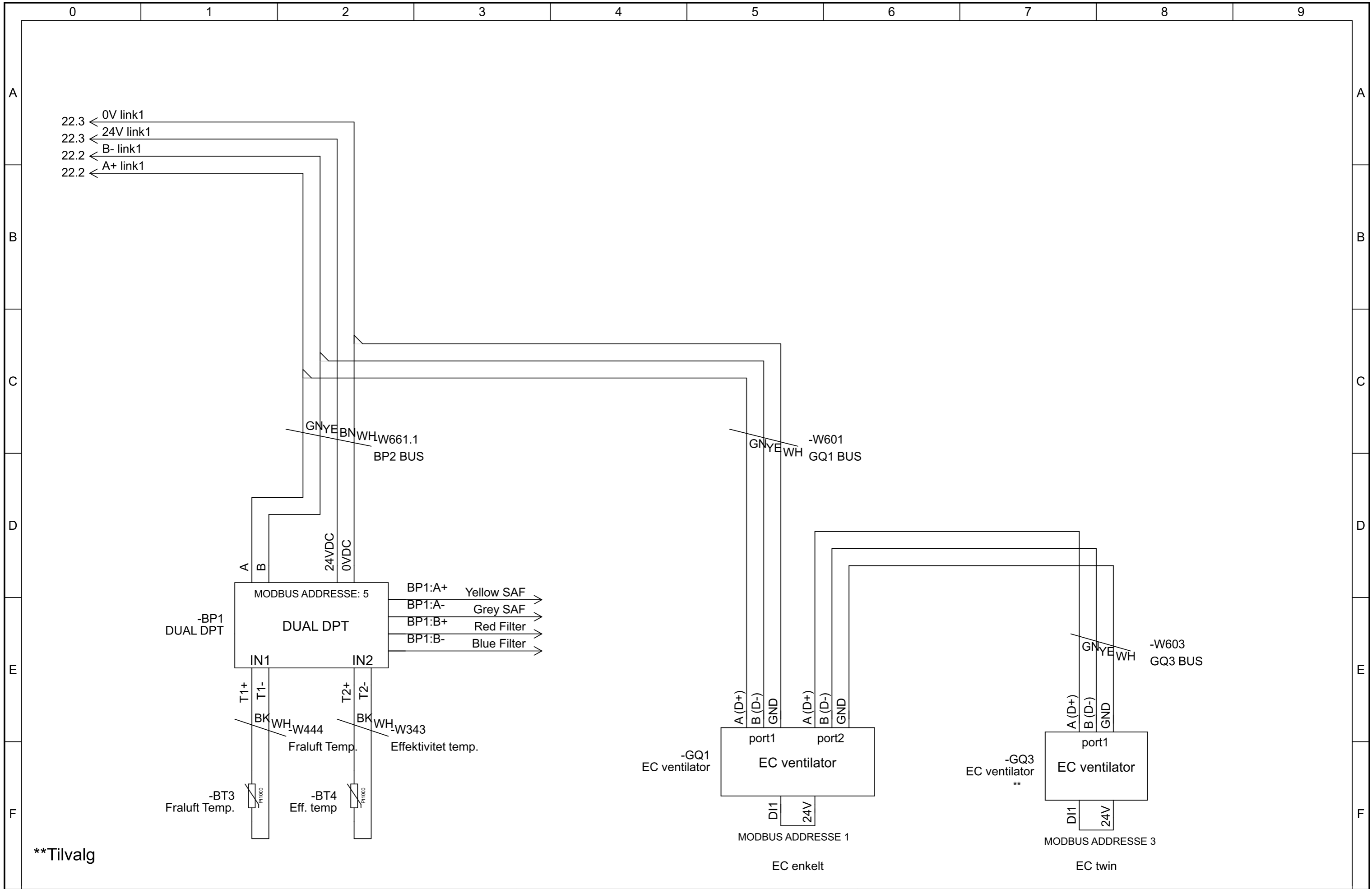
Antal sider: 19

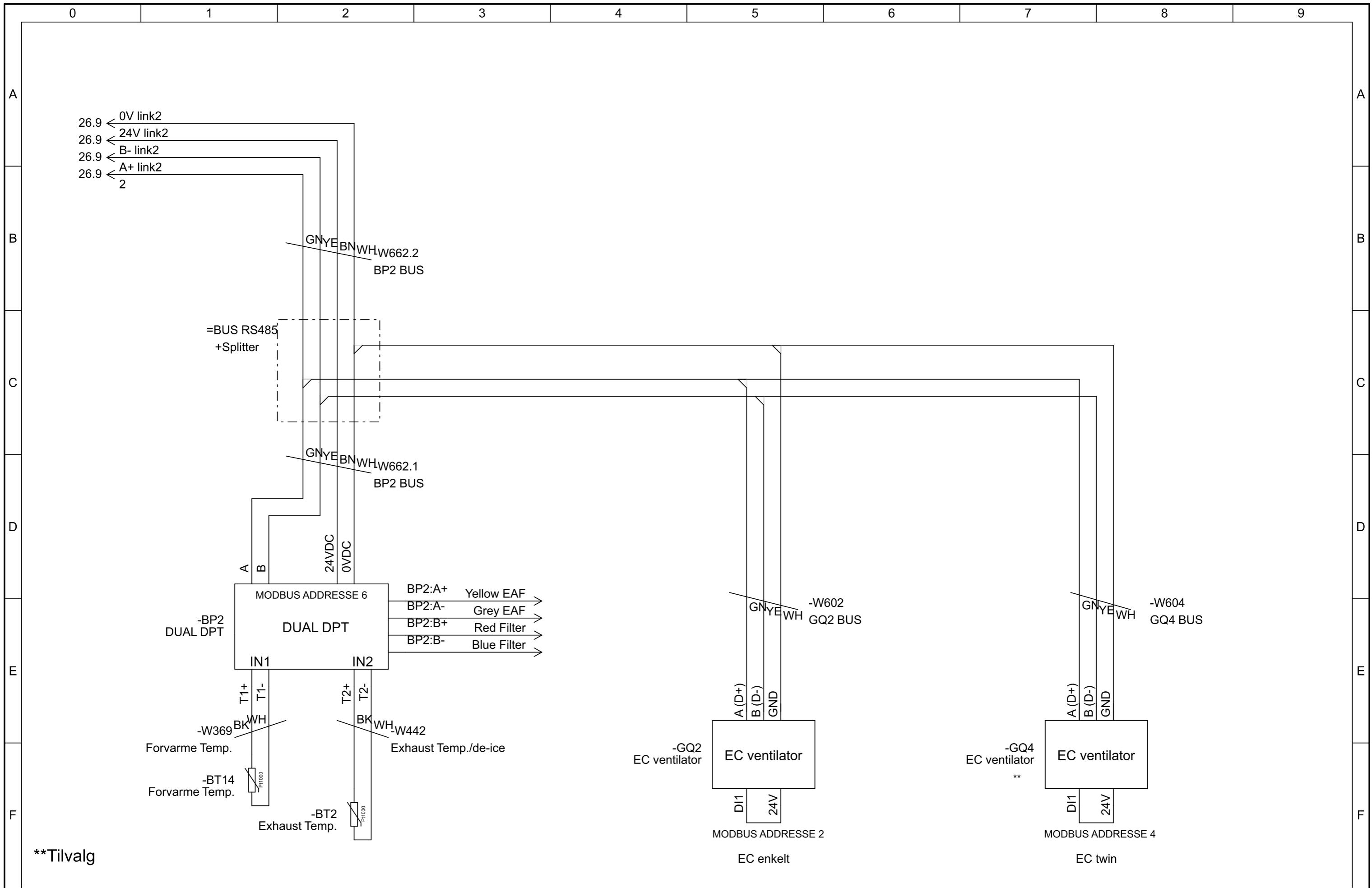
Næste side 23



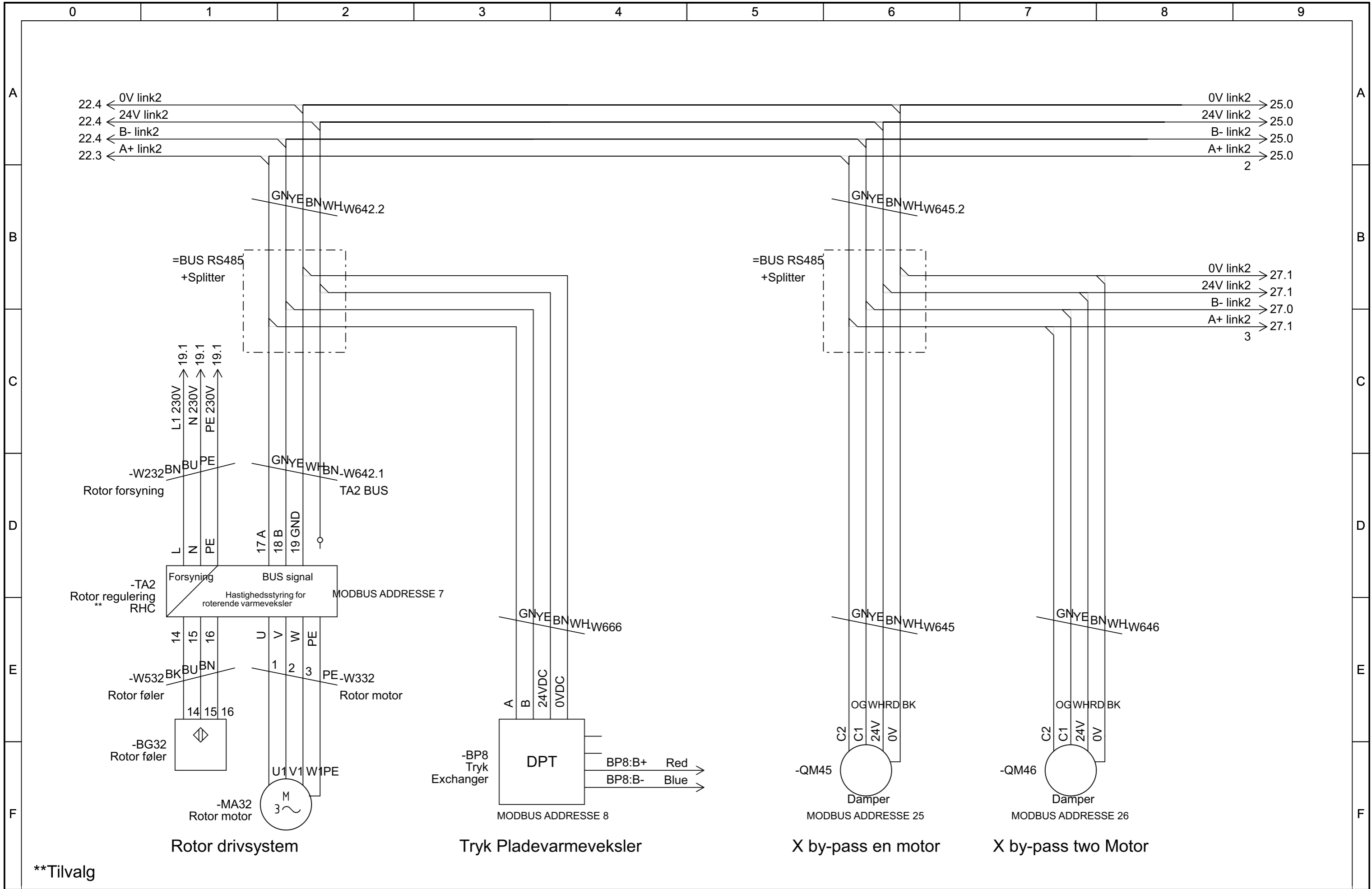
\*\*Tilvalg

Modbus adresse (x)

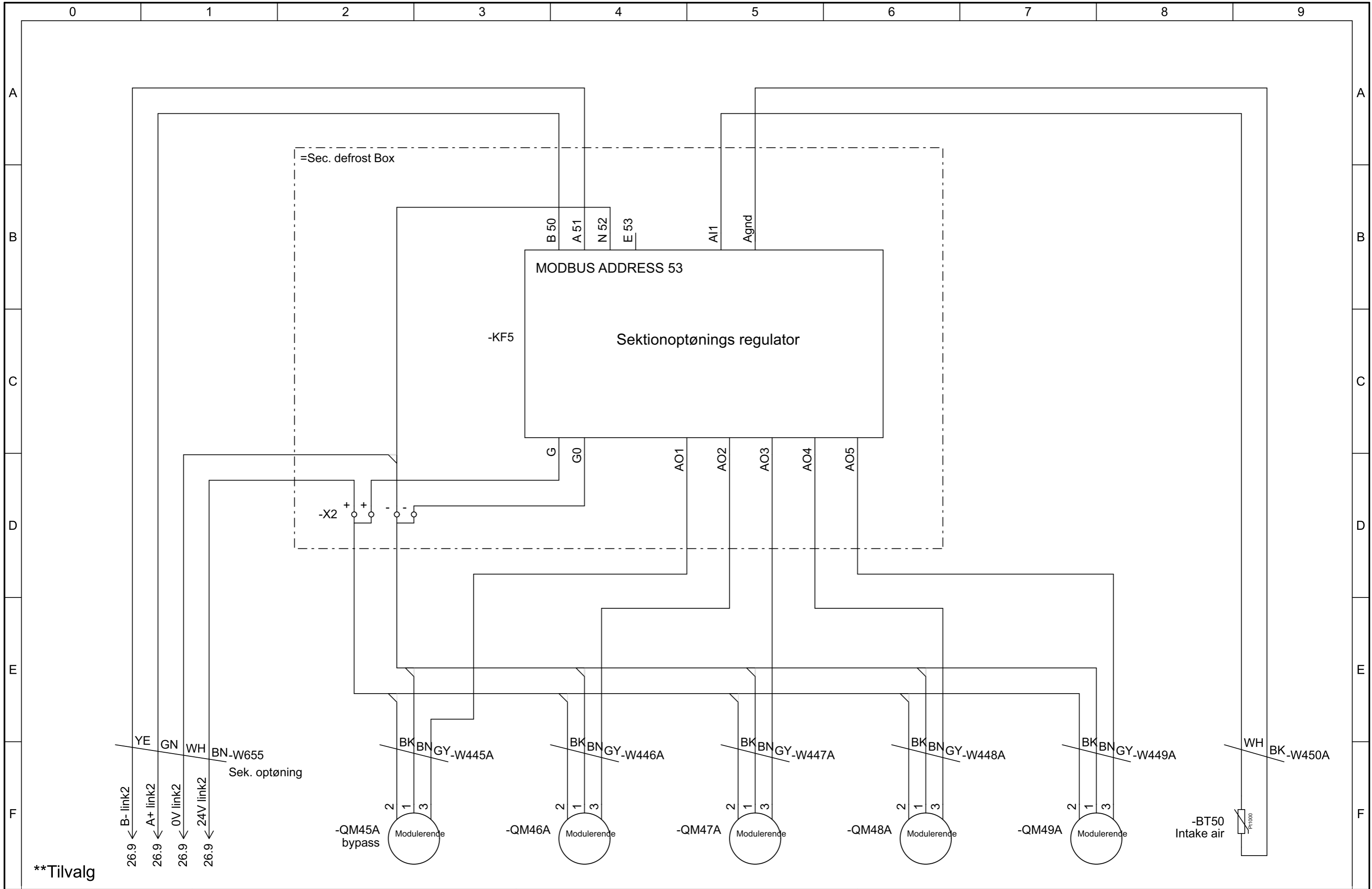




\*\*Tilvalg



\*\*Tilvalg



\*\*Tilvalg

	Geniox Access CU27 Regulator	Setionsoptøning	Projekt: Geniox-Core CS 42.04.02 Pre-heat DK	Rev.: 42.04.02	Blad: 27
			Dato: 06-11-2019	Initialer: MIKE	Antal sider: 19

### Address list

### Systemair settings of ECblue Modbus

Address	Component: Code
1	Supply air fan 1: GQ1
2	Extract air fan 1: GQ2
3	Supply air fan 2: GQ3
4	Extract air fan 2: GQ4
5	Dual pressure transmitter supply: BP1
6	Dual pressure transmitter extract: BP2
7	RHC (Rotor drive system): TA2
8	Pressure Exchanger: BP8
25	Plate exchanger by-pass: QM45
26	Plate exchanger "by-pass" 2: QM46
53	Sectional Defrost control: KF5

COM Baudrate: 9600Bd

COM Mode: 8N1

BUS Address: Supply air, 1 and (3, Twin fans)

Extract air, 2 and (4, Twin fans)

D1: 19D

D1 is set to disable internal safety functions that protects the motor (fire mode)

Normal speed control of the fan is possible in this mode.

Function is active if D1 is open = no signal.



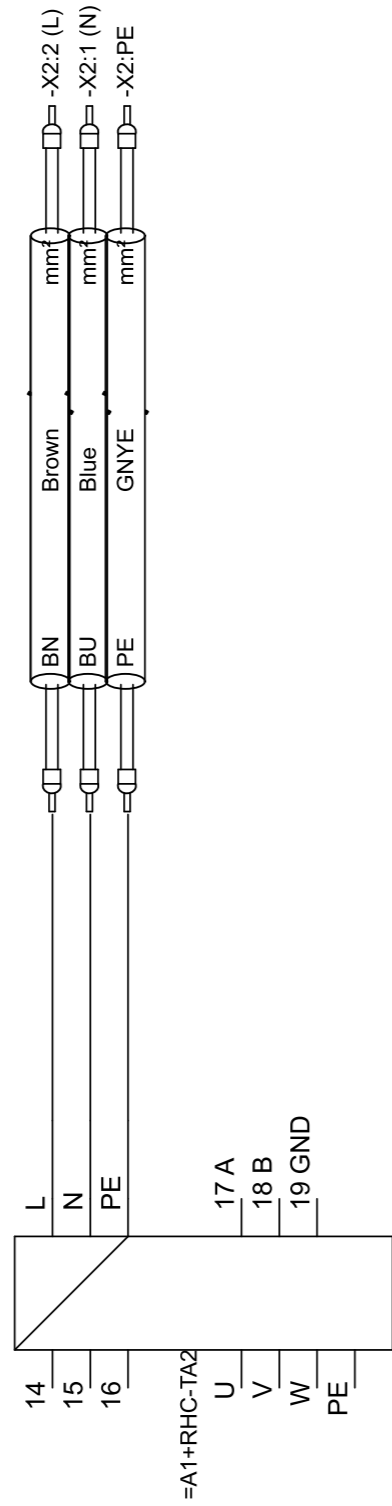
# Kabel plan

Strømvej  
Blad

Bemærk: Rotor forsyning  
Cable-type:

**-W232**

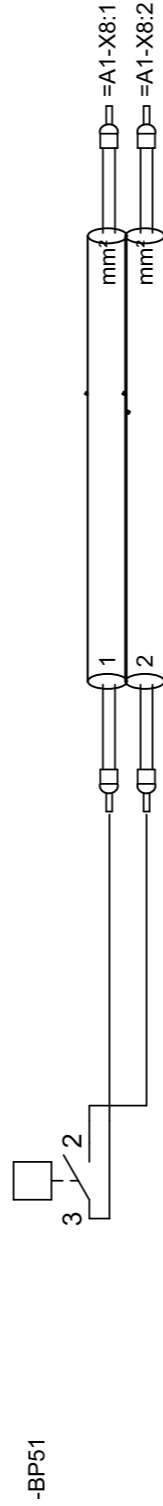
Rotor regulering  
RHC



**-W251**

Bemærk:  
Cable-type:

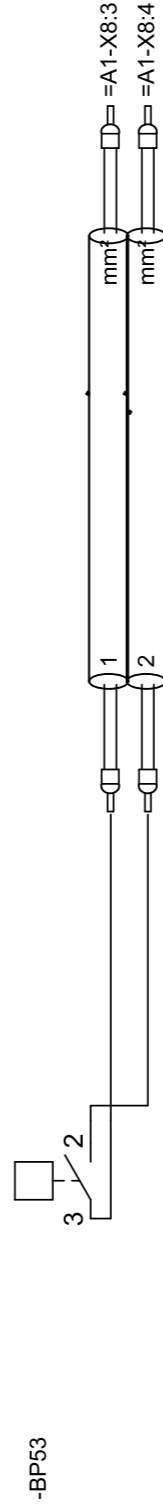
Tryk Guard



**-W253**

Bemærk:  
Cable-type:

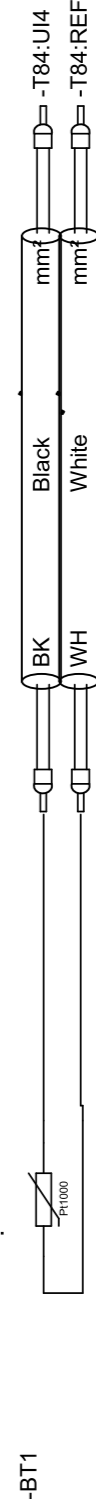
Tryk Guard



**-W341'**

Bemærk: Intake Temp.  
Cable-type:

Intake Temp.  
Pt 1000



26  
26  
26

14  
14

14  
14

13  
13



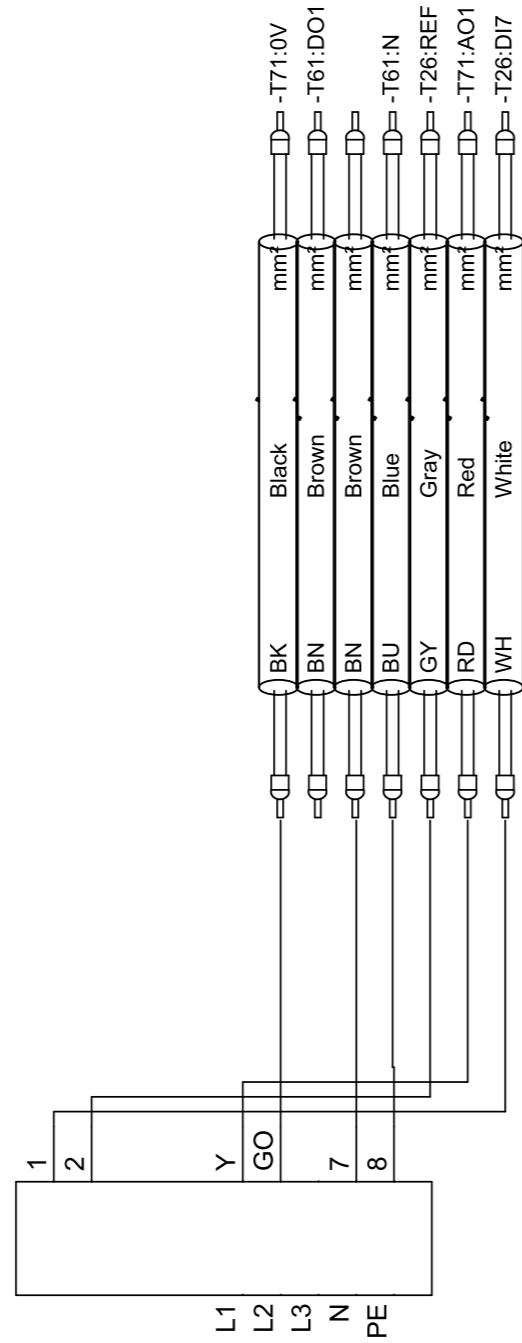
# Kabel plan

Strømvej  
Blad

Bemærk: El varmeplade  
Cable-type:

**-W351**

El forvarmeplade

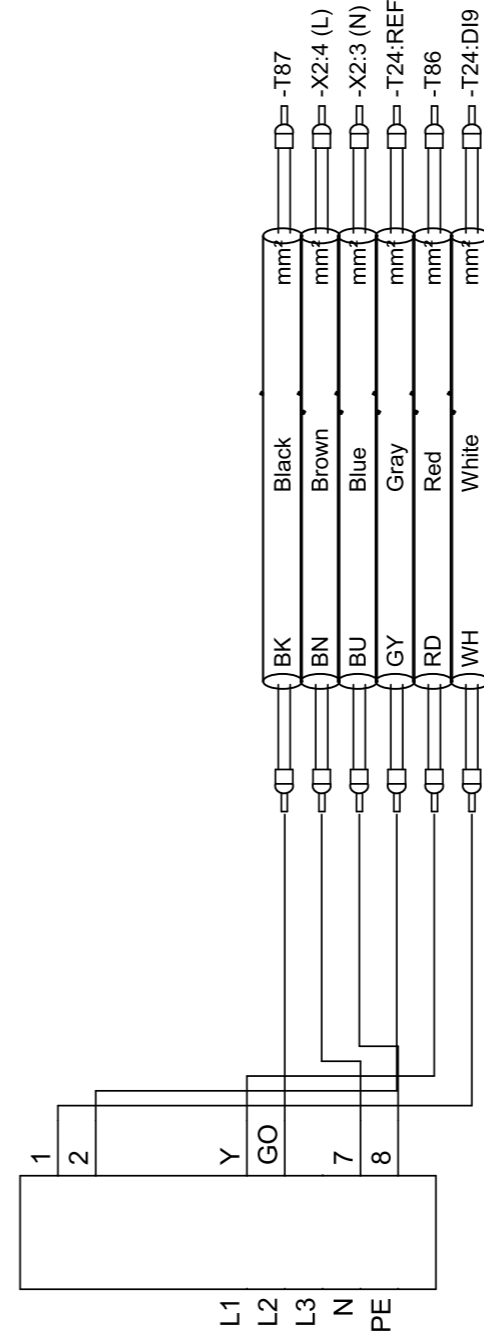


-EB51

**-W353**

Bemærk: El forvarmeplade  
Cable-type:

El forvarmeplade

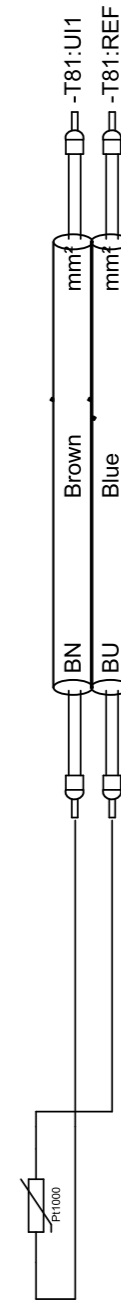


-EB53

**-W355**

Bemærk: Temperatur føler tilluft  
Cable-type:

Tilluft  
Kanal føler



-BT5

16 4  
16 4  
16 4  
16 4  
16 3  
16 4  
16 3

17 4  
17 4  
17 4  
17 3  
17 4  
17 3

13 1  
13 2

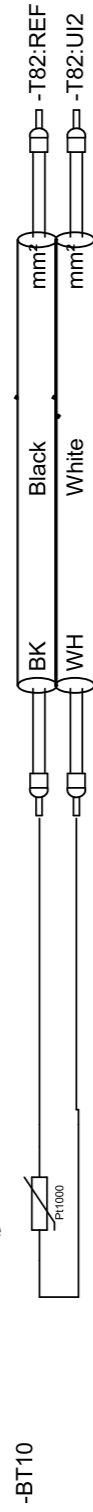
# Kabel plan

Strømvej  
Blad

Bemærk: Frostbeskyttelse varmeklode  
Cable-type:

**-W357**

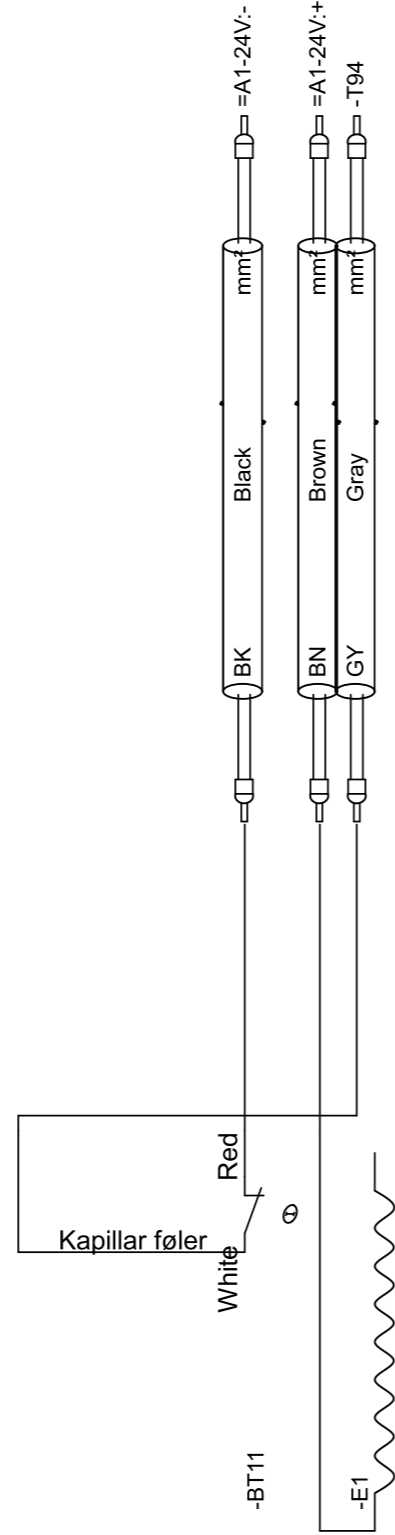
Frostbeskyttelse  
Pt 1000



-BT10

**-W359**

Bemærk: frost termostat  
Cable-type:

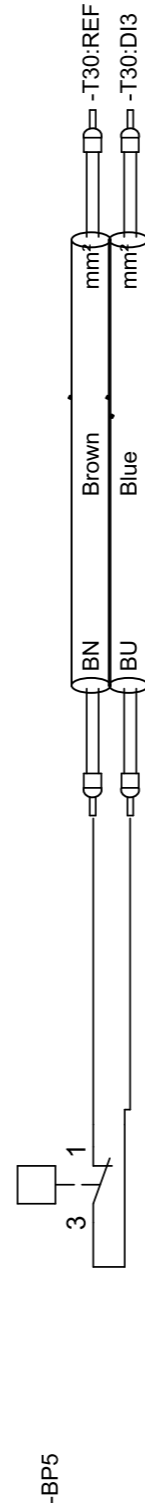


-BT11

**-W363**

Bemærk: Ekstra filtervagt  
Cable-type:

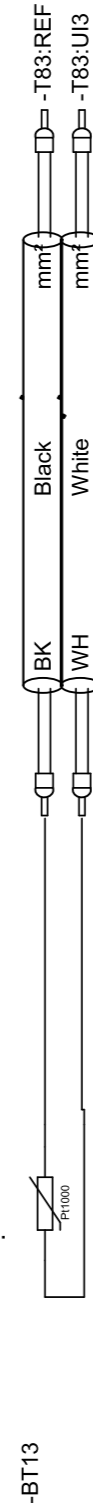
Ekstra filtervagt  
Supply air



-BP5

**-W367**

Forvarme temp.  
Pt 1000

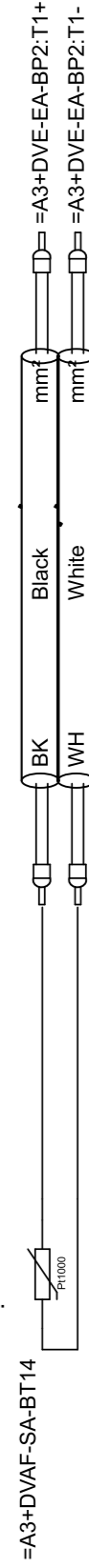


-BT13

**-W369**

Bemærk: Forvarme temp.  
Cable-type:

Forvarme Temp.



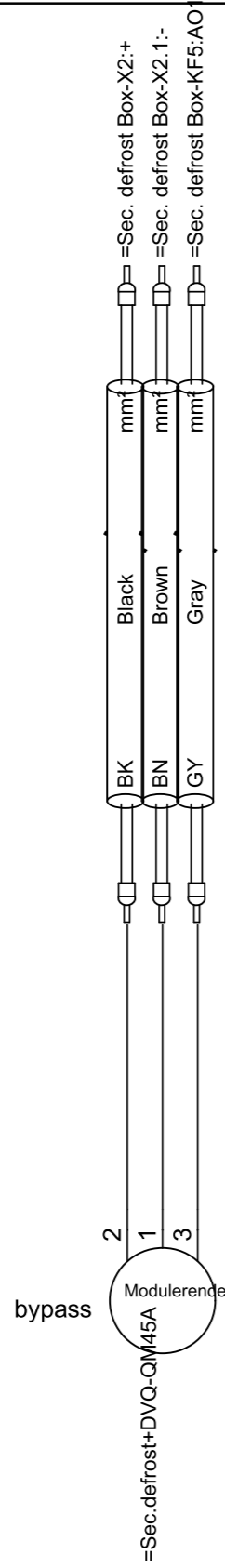
=A3+DVAF-SA-BT14

# Kabel plan

Strømvej  
Blad

**-W445A**

Bemærk:  
Cable-type:

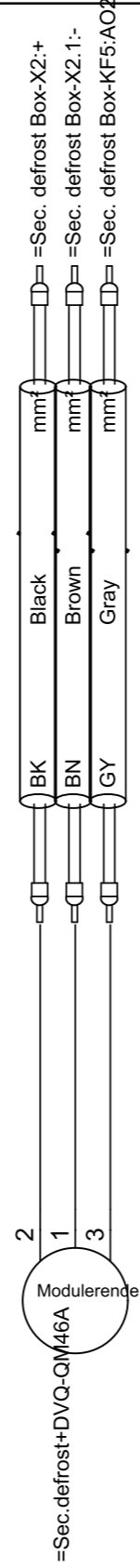


27  
27  
27

2  
3  
3

**-W446A**

Bemærk:  
Cable-type:

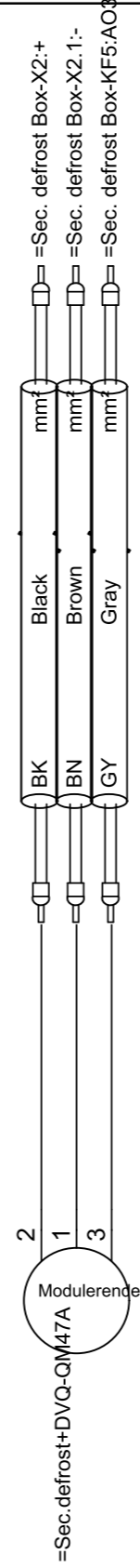


27  
27  
27

4  
4  
4

**-W447A**

Bemærk:  
Cable-type:

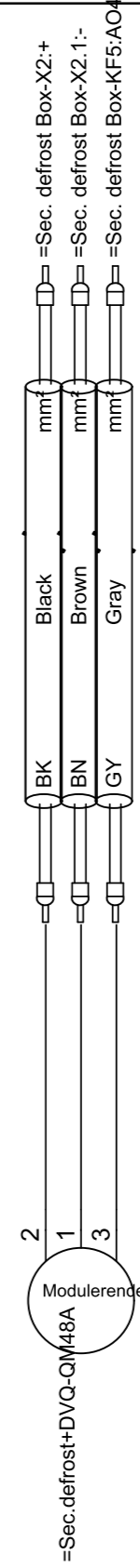


27  
27  
27

5  
5  
5

**-W448A**

Bemærk:  
Cable-type:



27  
27  
27

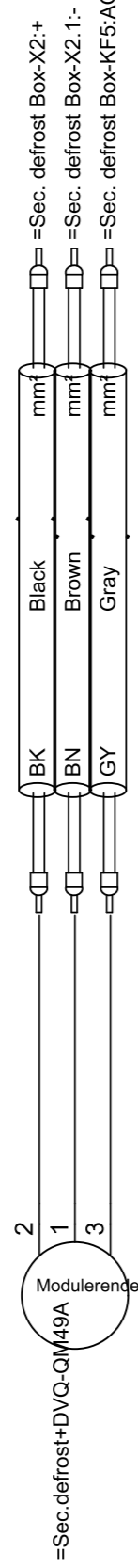
6  
6  
6

# Kabel plan

Strømvej  
Blad

**-W449A**

Bemærk:  
Cable-type:

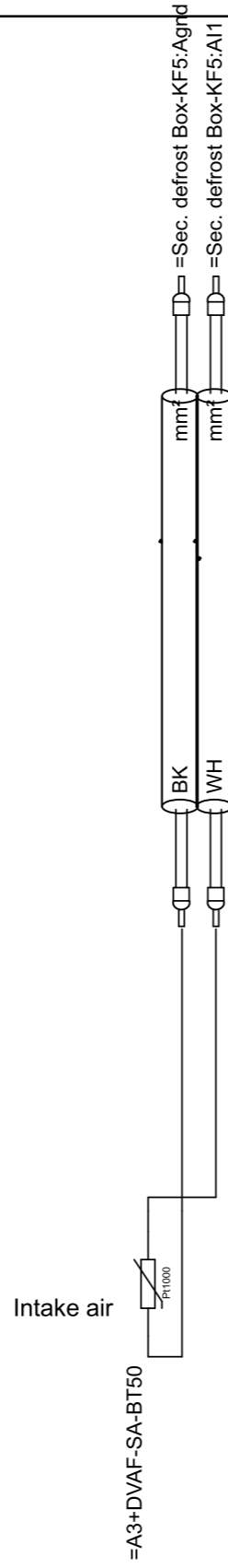


27  
27  
27

7  
8  
8

**-W450A**

Bemærk: Intake air  
Cable-type:

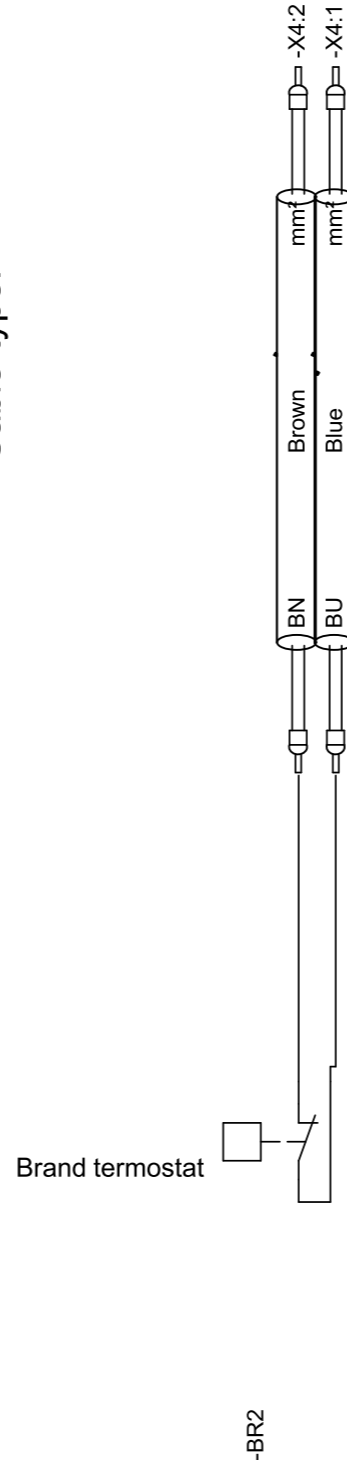


27  
27

9  
9

**-W456**

Bemærk: Brandtermostat fraluft  
Cable-type:

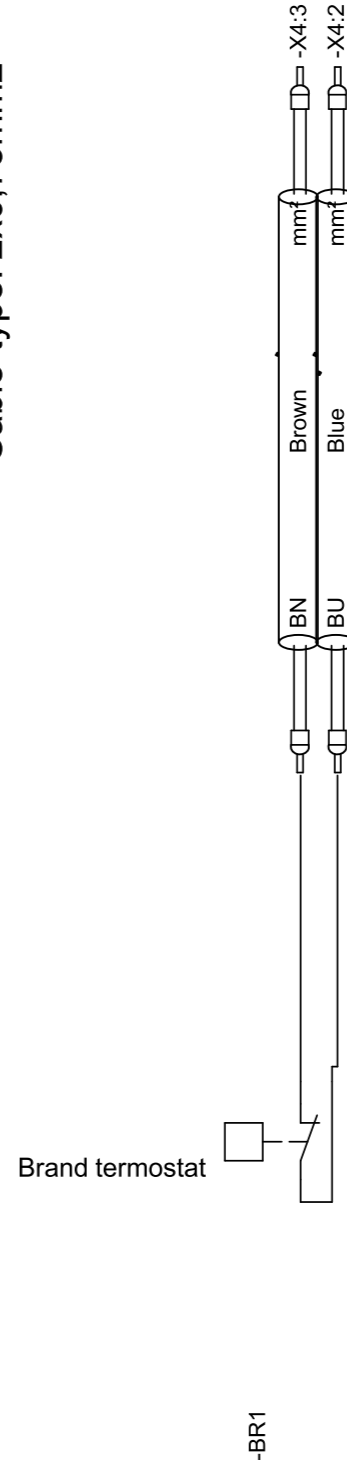


11  
11

6  
6

**-W457**

Bemærk: Brandtermostat  
Cable-type: 2x0,75mm<sup>2</sup>



11  
11

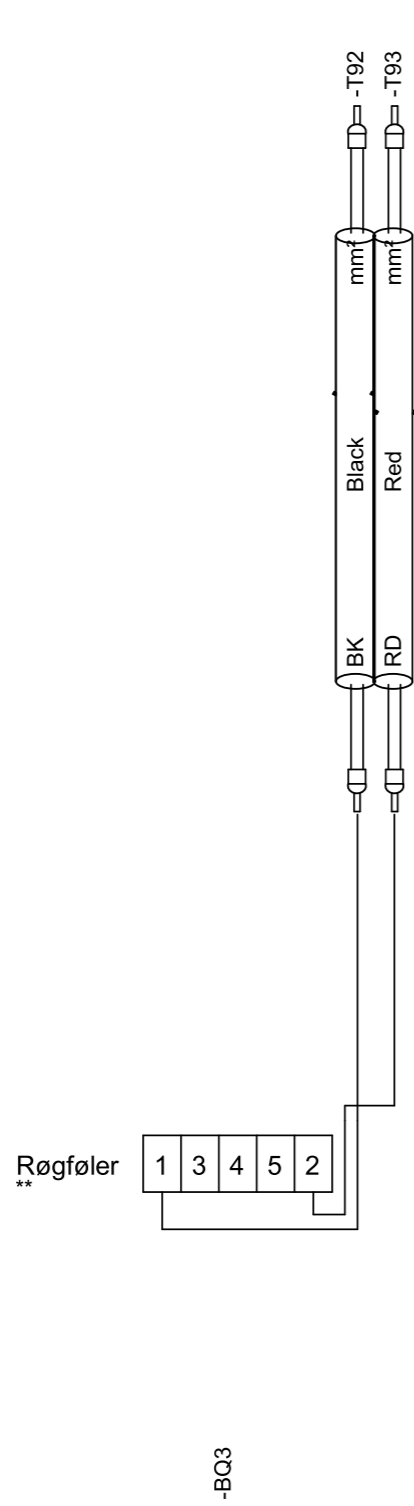
6  
6

# Kabel plan

Strømvej  
Blad

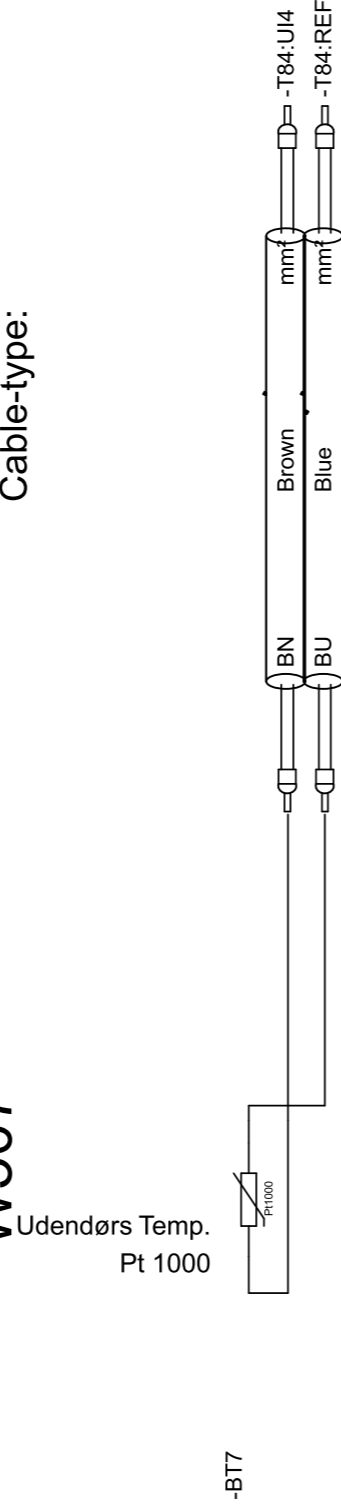
Bemærk: Røg føler  
Cable-type:

**-W458**



Bemærk: Ude føler  
Cable-type:

**-W507**



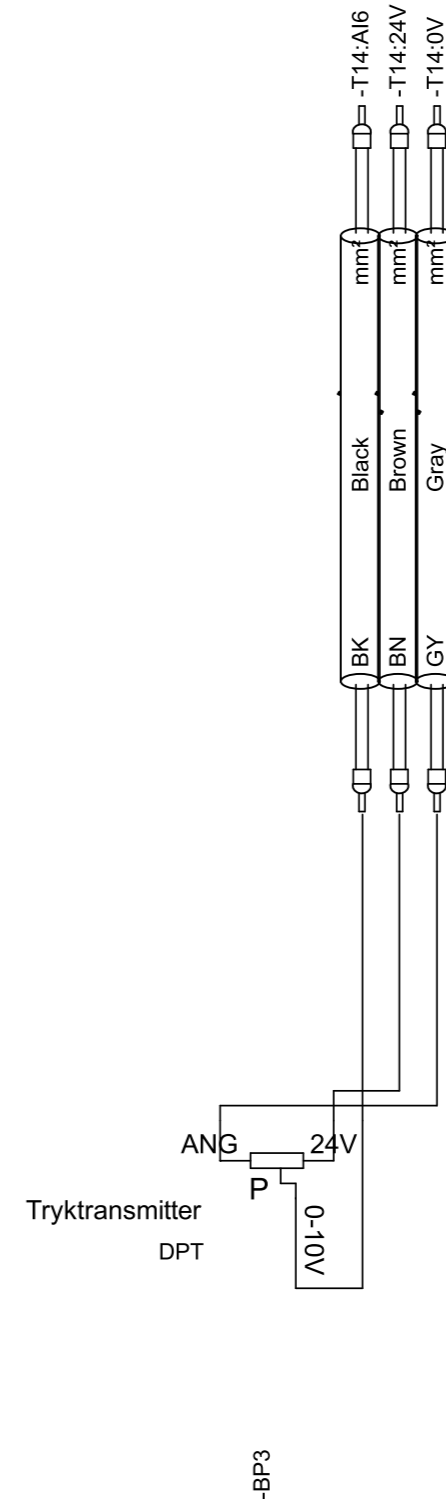
Bemærk: Rum føler 1  
Cable-type:

**-W508**



Bemærk: Tryk Tilluft ekstern  
Cable-type:

**-W513**



0  
12

8  
13

8  
12

3  
12

# Kabel plan

Strømvej  
Blad

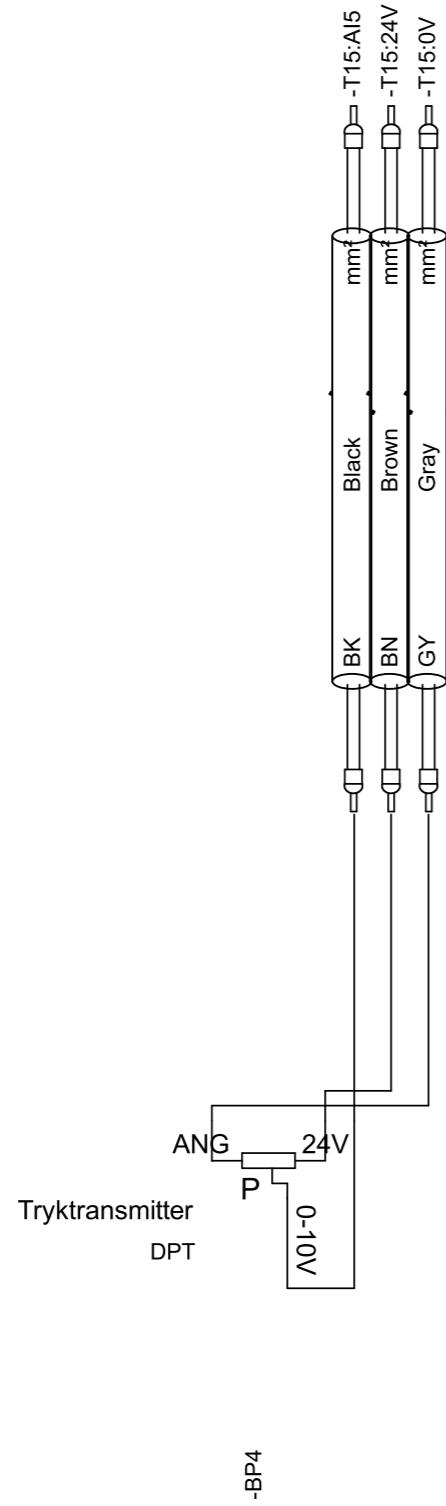
4 5 4  
12 12 12

6 6 6  
12 12 12

7 7 7  
12 12 12

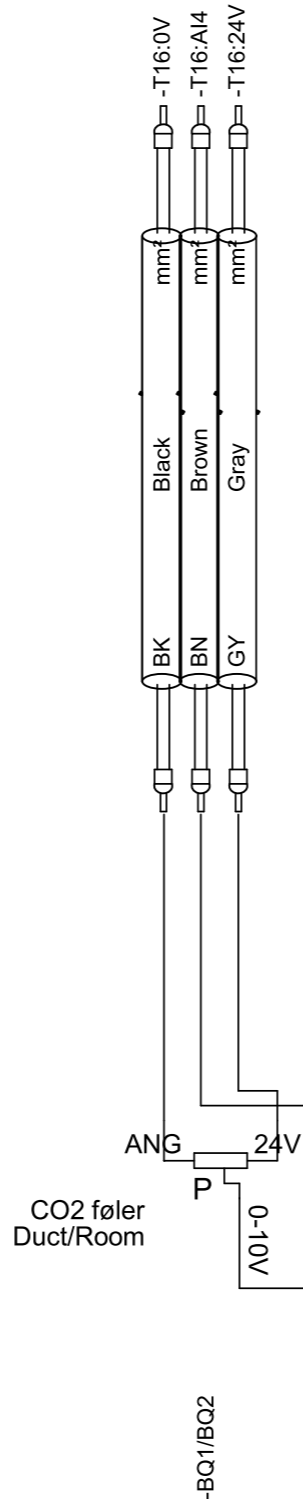
Bemærk: Tryk Fraluft ekstern  
Cable-type:

-W514



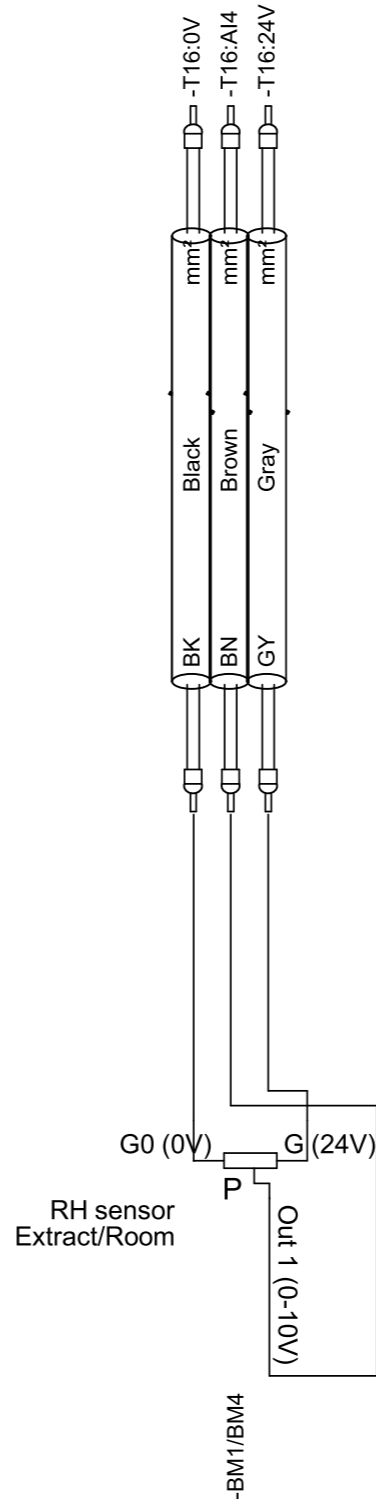
Bemærk: CO2 føler  
Cable-type:

-W515/516



Bemærk: RH sensor  
Cable-type:

-W517/W520



# Kabel plan

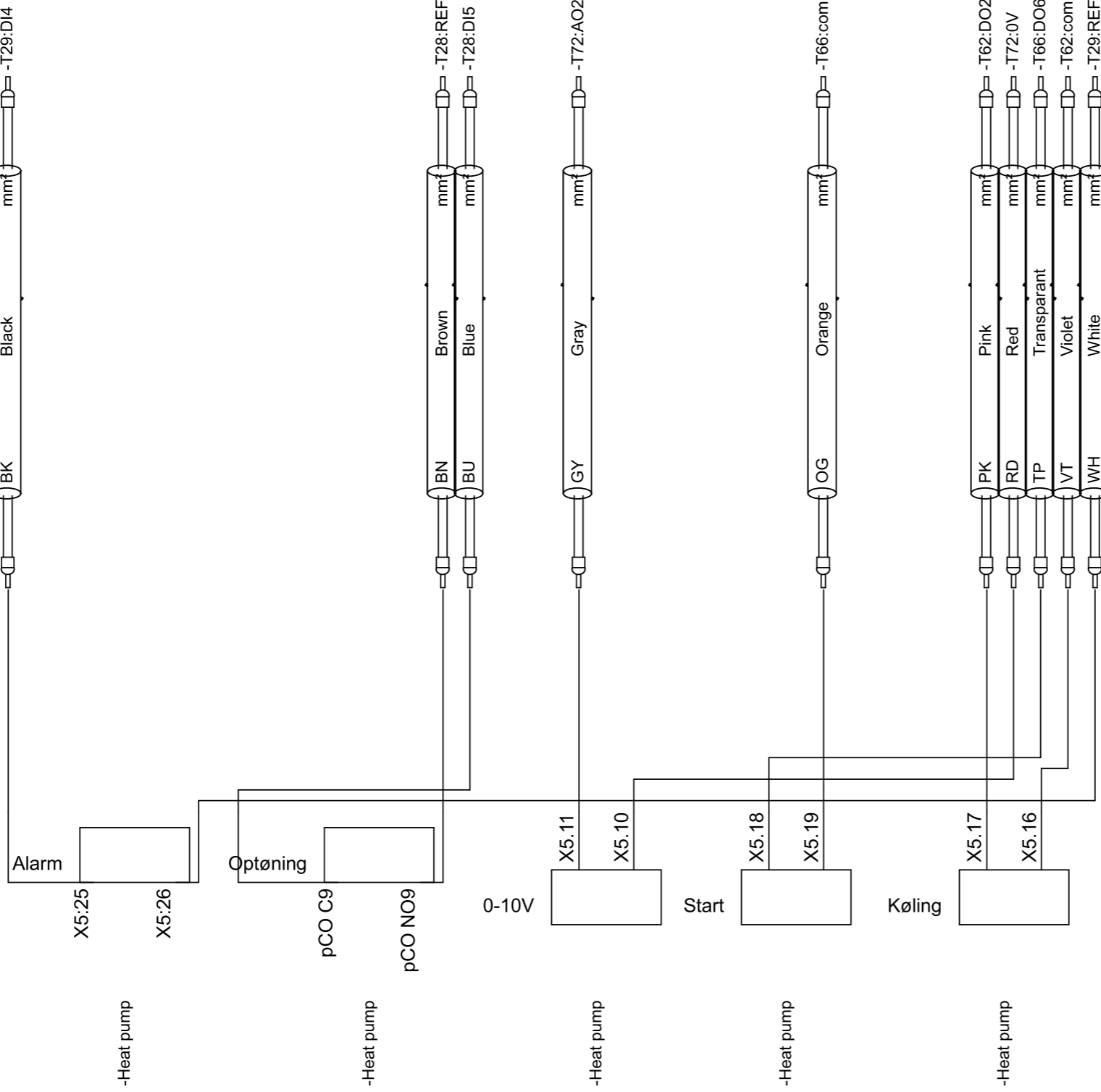
Strømvej  
Blad

6	10	9	8	8	9	4	8	9	4	6	0	0	1	1	1
	10	10	10	16	15	14	16	15	14	10	15	15	15	15	15

Bemærk: HP Regulering  
Cable-type:

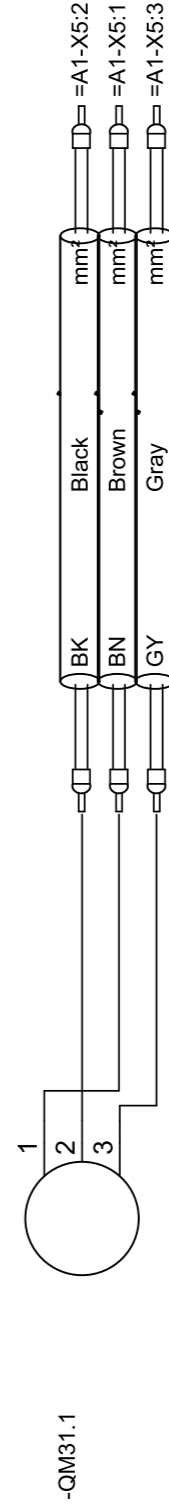


**-W528**



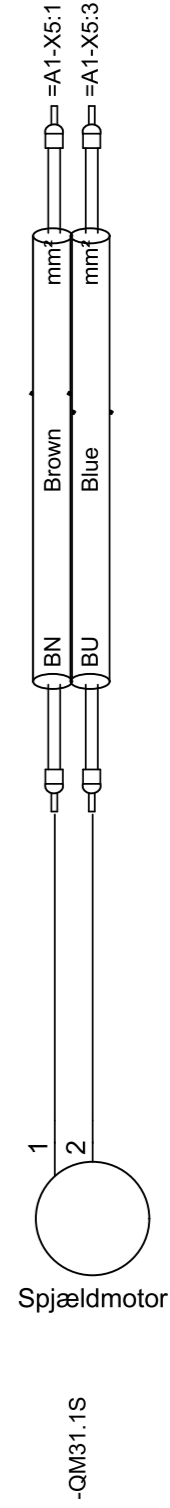
Bemærk: Spjæld Tilluft  
Cable-type:

**-W531.1**



Bemærk: Spjæld Tilluft  
Cable-type:

**-W531.1S**

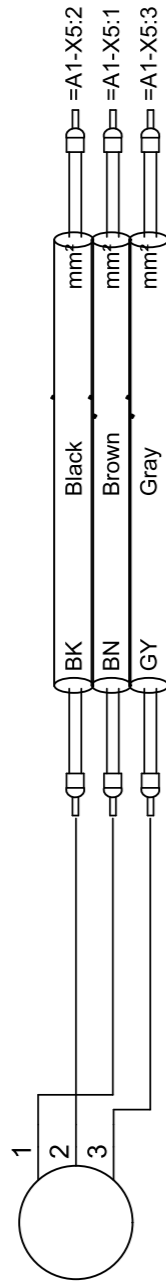


# Kabel plan

Strømvej  
Blad

**-W532.1**

Bemærk: Spjæld Fraluft  
Cable-type:



-QM32.1

**-W532.1S**

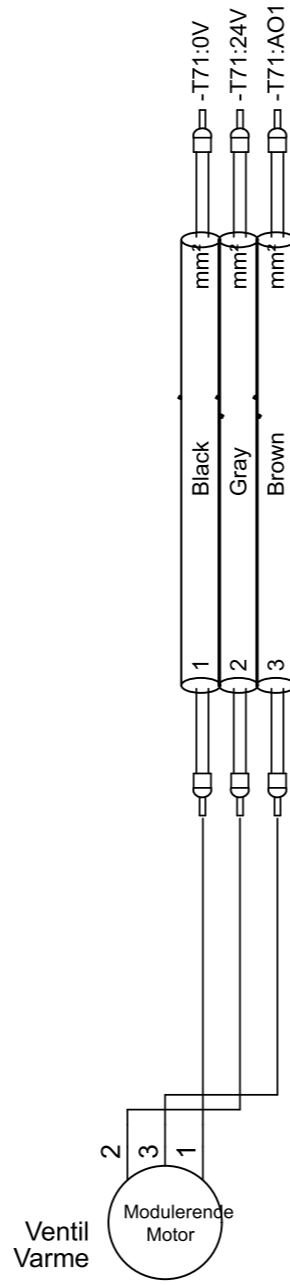
Bemærk: Spjæld Fraluft  
Cable-type:



-QM32.1S

**-W551**

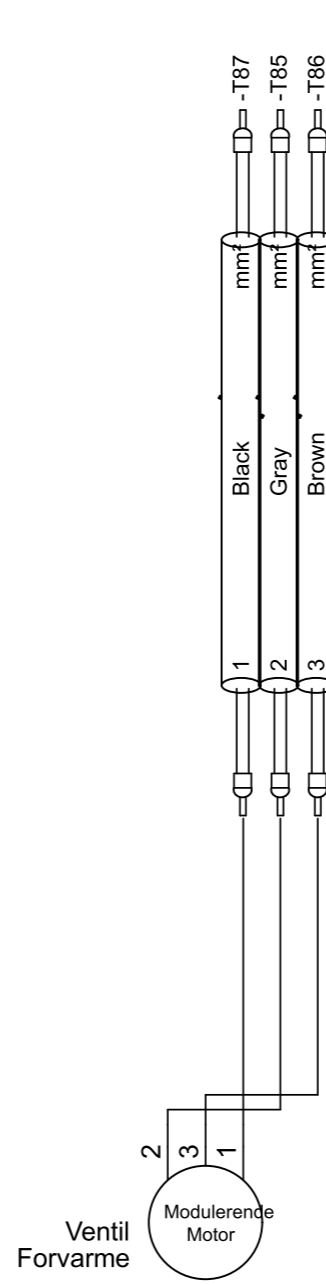
Bemærk: Varme ventil  
Cable-type:



-QN51

**-W553**

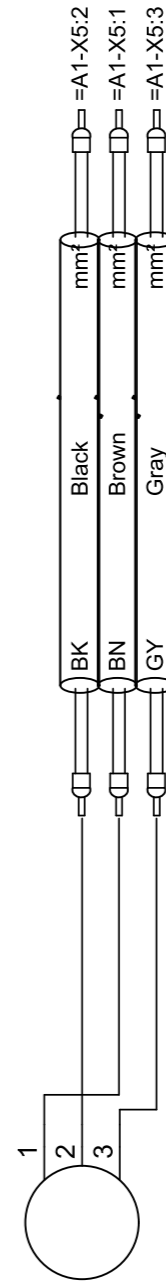
Bemærk: Varme ventil  
Cable-type:



-QN53

**-W571.1**

Bemærk: Spjæld Tilluft 2  
Cable-type:



-QM71.1

**-W571.1S**

Bemærk: Spjæld Tilluft 2  
Cable-type:



-QM71.1S

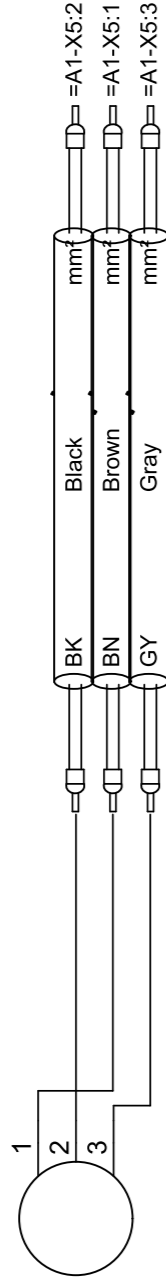


# Kabel plan

Strømvej  
Blad

**-W572.1**

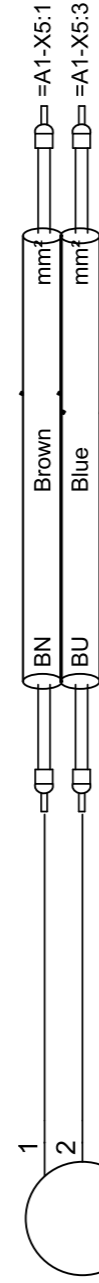
Bemærk: Spjæld Fraluft 2  
Cable-type:



-QM72.1

**-W572.1S**

Bemærk: Spjæld Fraluft 2  
Cable-type:

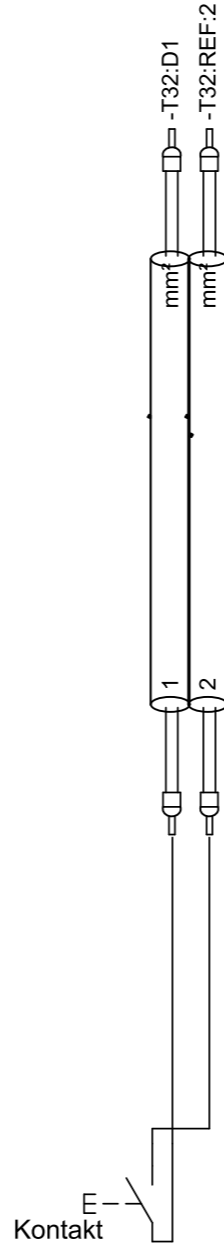


-QM72.1S

Spjældmotor

**-W580**

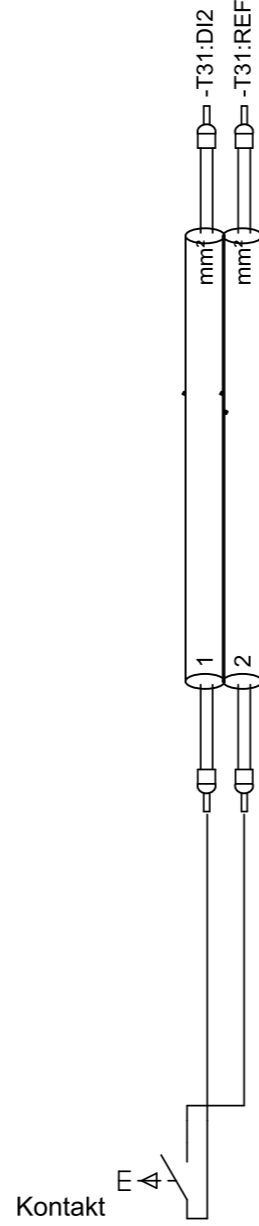
Bemærk: Reduceret hastighed  
Cable-type: 2x0,75mm<sup>2</sup>



-SF2

**-W581**

Bemærk: Normal hastighed-ekst.  
Cable-type:



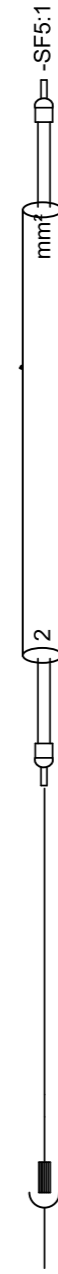
-SF3

**-W583**

Bemærk: Ekst. stop  
Cable-type: 2x0,75mm<sup>2</sup>



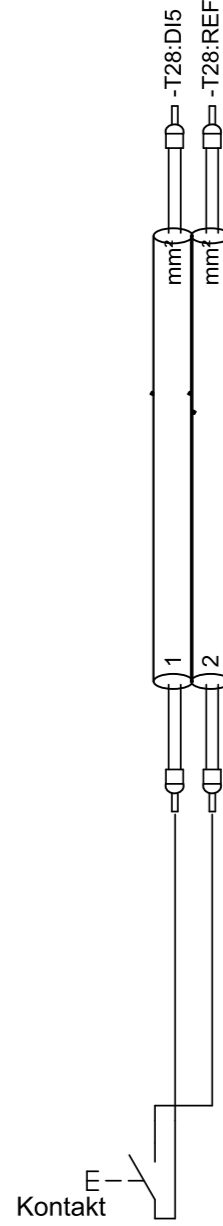
-T30:D13



-T30:REF

**-W584**

Bemærk: Change over  
Cable-type:



-SF6

15	6
15	6
15	6

15	7
15	7

10	1
10	1

10	2
10	3

10	5
----	---

10	5
----	---

10	8
10	8

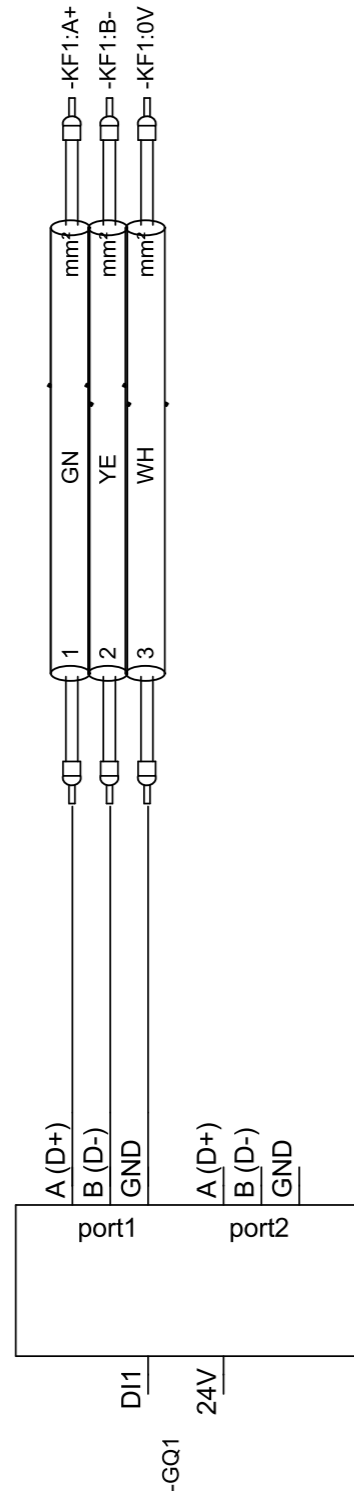
# Kabel plan

Strømvej  
Blad

Bemærk: GQ1 BUS  
Cable-type: 4x0,6mm2

**-W601**

EC ventilator



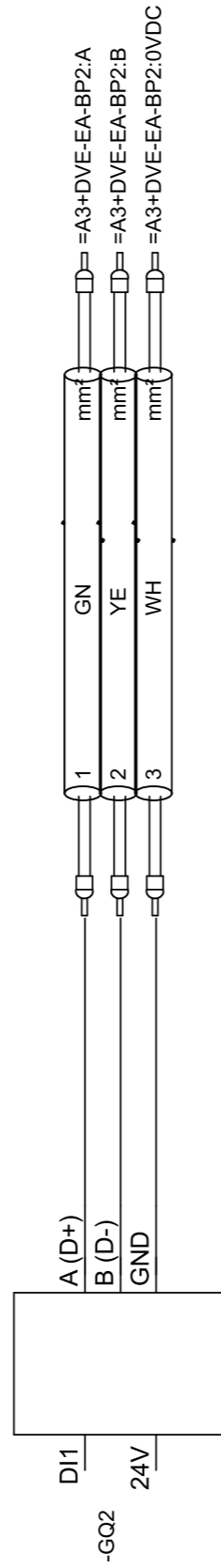
24  
24  
24

5  
5  
5

Bemærk: GQ2 BUS  
Cable-type: 4x0,6mm2

**-W602**

EC ventilator



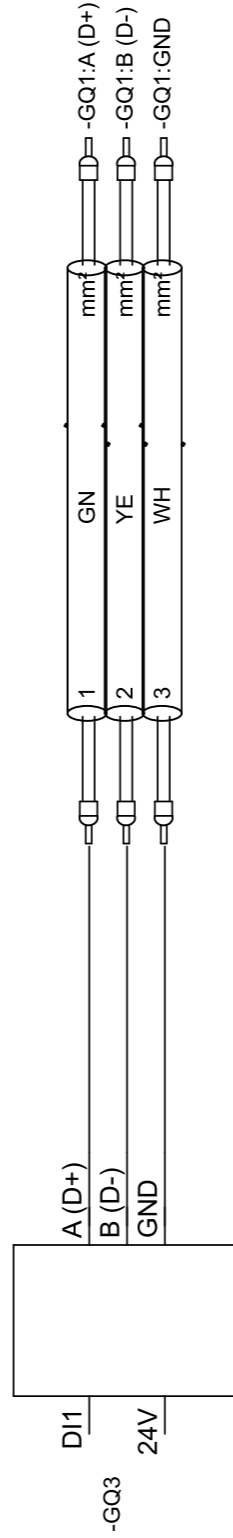
25  
25  
25

5  
5  
5

Bemærk: GQ3 BUS  
Cable-type: 4x0,6mm2

**-W603**

EC ventilator



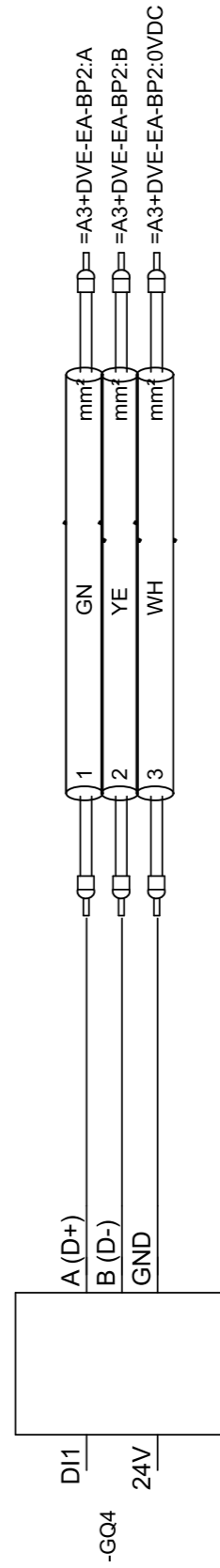
24  
24  
24

7  
8  
8

Bemærk: GQ4 BUS  
Cable-type: 4x0,6mm2

**-W604**

EC ventilator



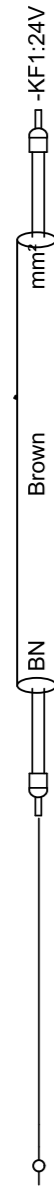
25  
25  
25

7  
8  
8

# Kabel plan

Strømvej  
Blad

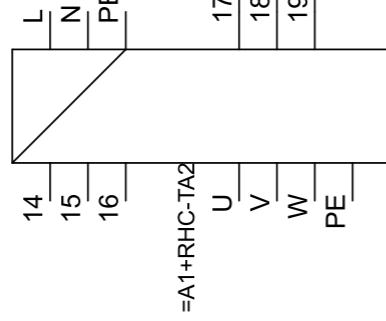
Bemærk: TA2 BUS  
Cable-type:



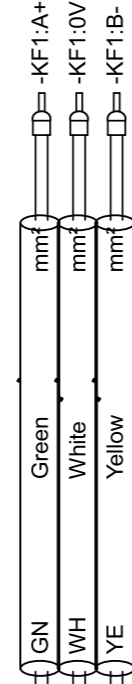
-W642.1

-X1

Rotor regulering  
RHC

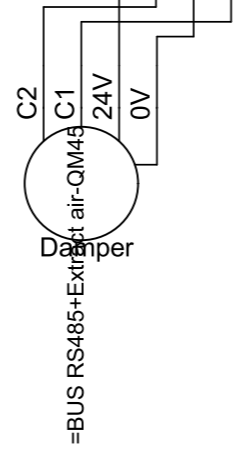


=A1+RHC-TA2



-W645

Bemærk: Fraluft  
Cable-type:

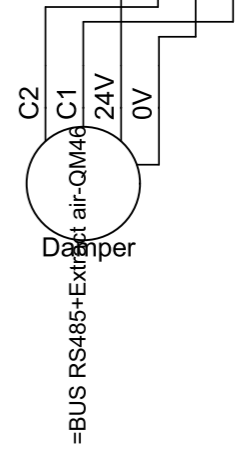


Dæmper

=BUS RS485+Ext

-W646

Bemærk: Fraluft  
Cable-type:



Dæmper

=BUS RS485+Ext

26	2
26	1
26	2
26	2

26	6
26	6
26	6
26	6

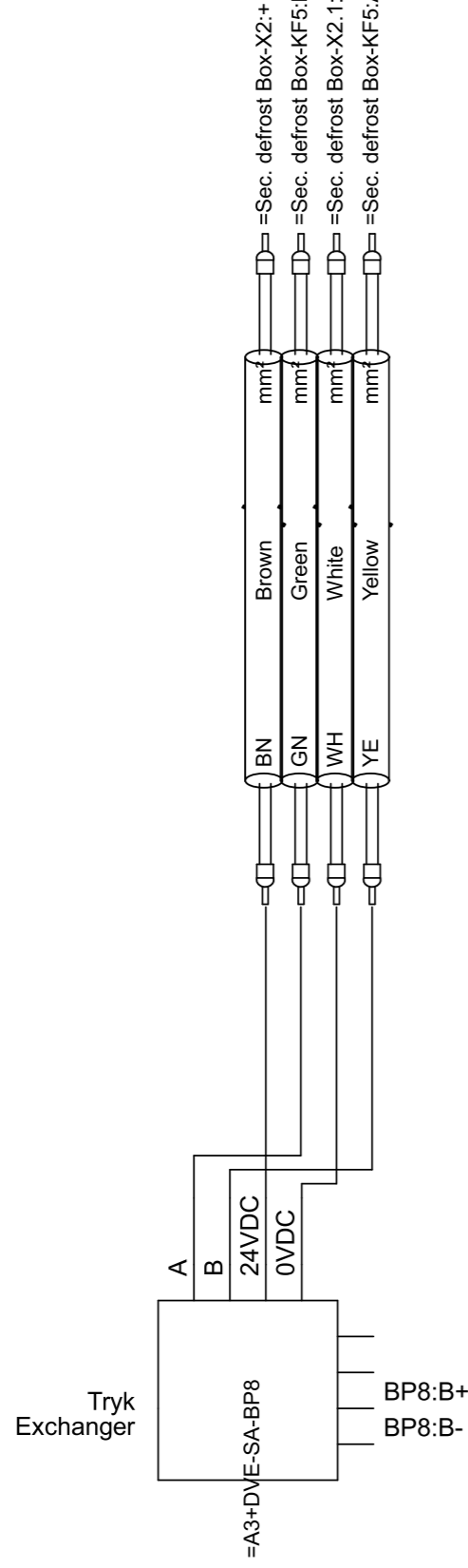
26	7
26	7
26	8
26	7

# Kabel plan

Strømvej  
Blad

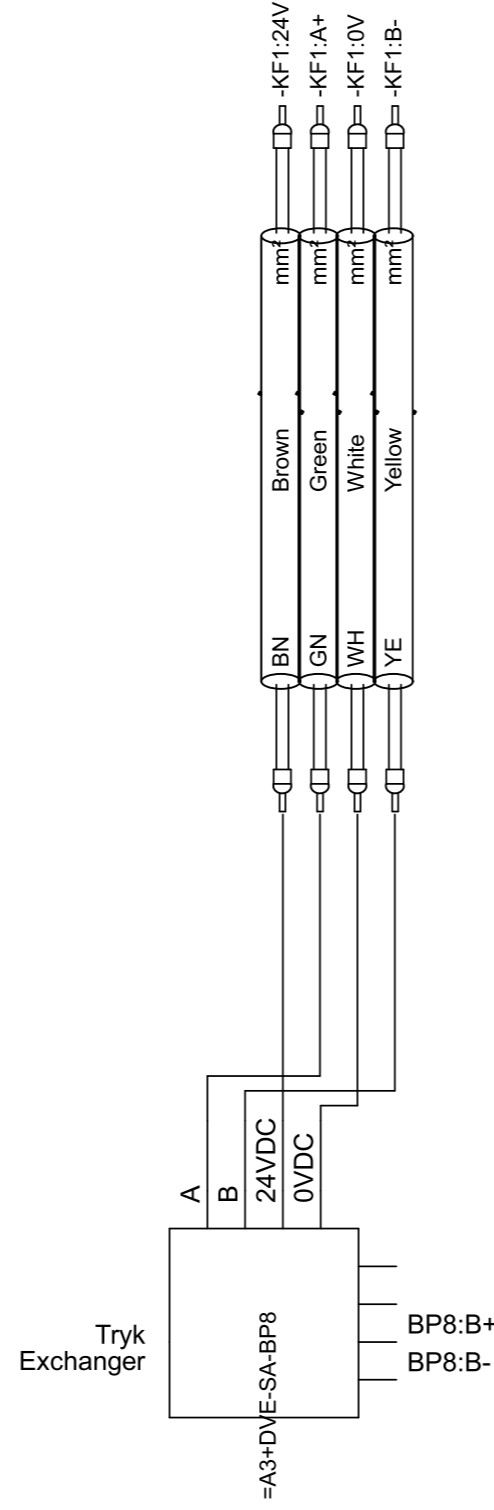
Bemærk: Sek. optøning  
Cable-type:

**-W655**



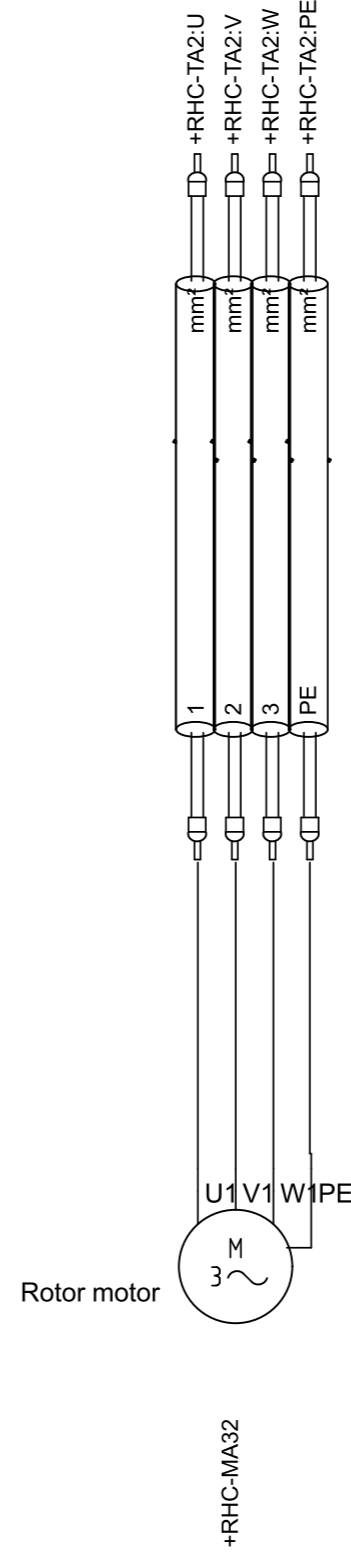
Bemærk: Tryk Pladeveksler  
Cable-type:

**-W666**



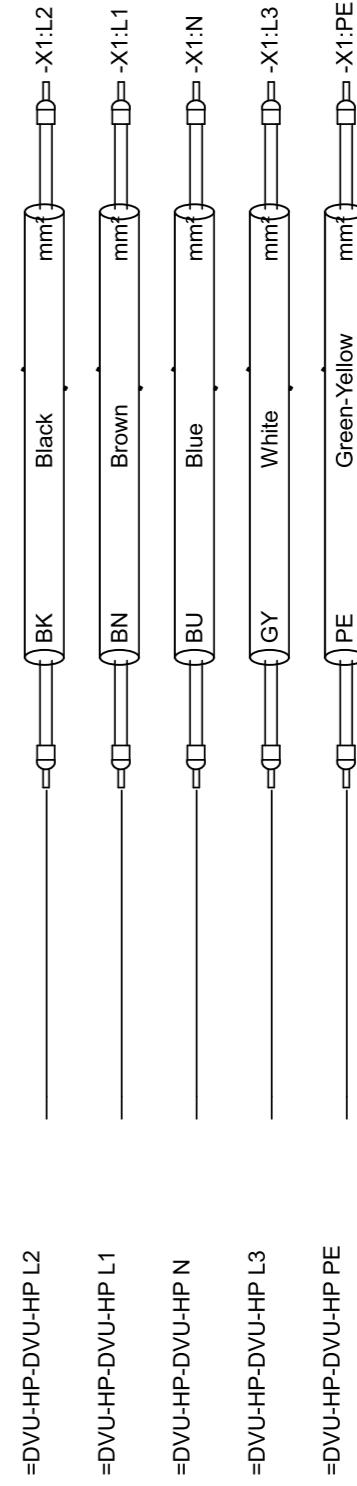
Bemærk: Rotor Motor  
Cable-type:

**=A1-W332**



Bemærk: DVU-HP  
Cable-type:

**=A1-W529**



27  
27  
27  
27

26  
26  
26  
26

26  
26  
26  
26

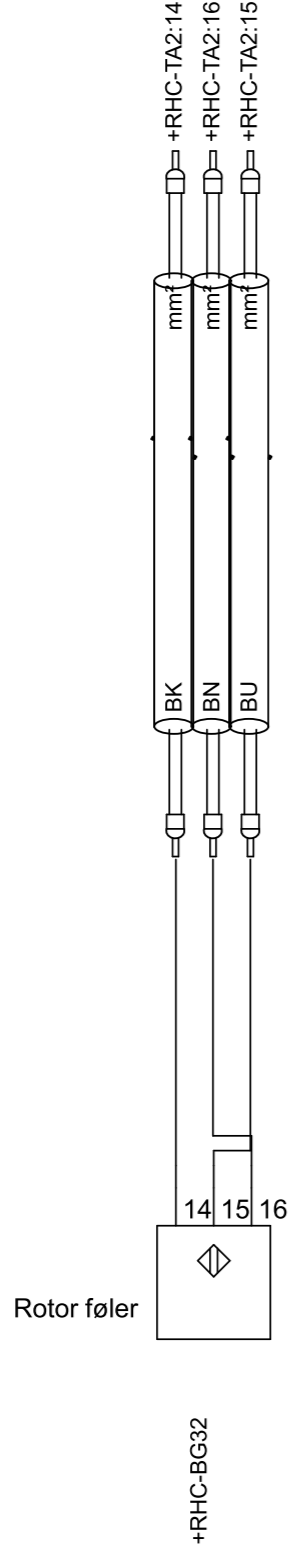
18  
18  
18  
18  
18

# Kabel plan

Strømvej  
Blad

**=A1-W532**

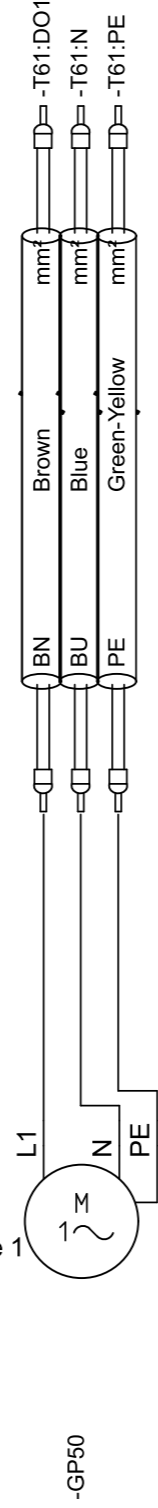
Bemærk: Rotor føler  
Cable-type:



1  
1  
1  
26  
26  
26

**=A1-W550**

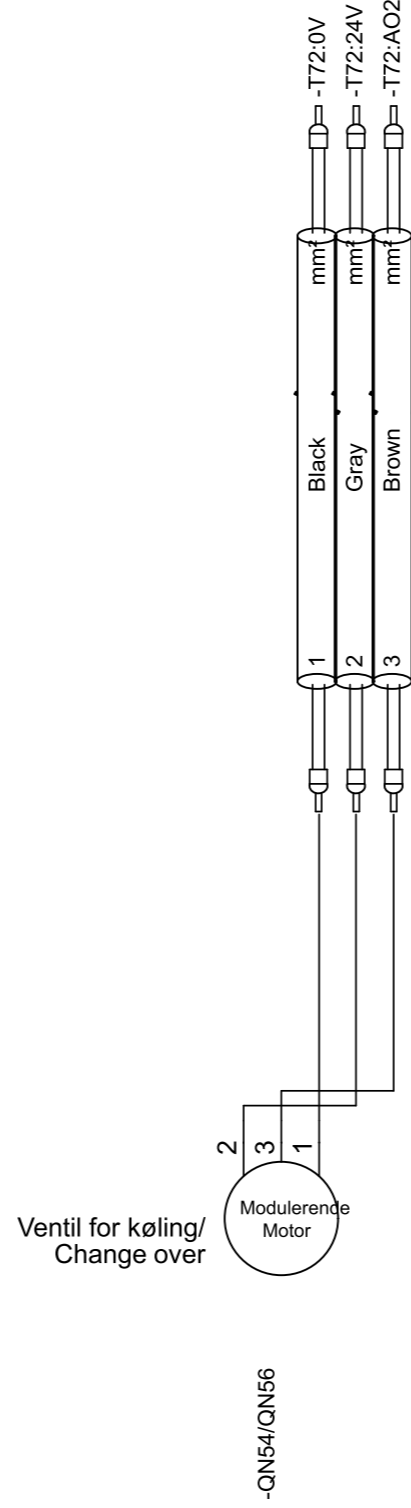
Bemærk: Cirkulationspumpe  
Cable-type:



2  
2  
2  
14  
14  
14

**=A1-W554**

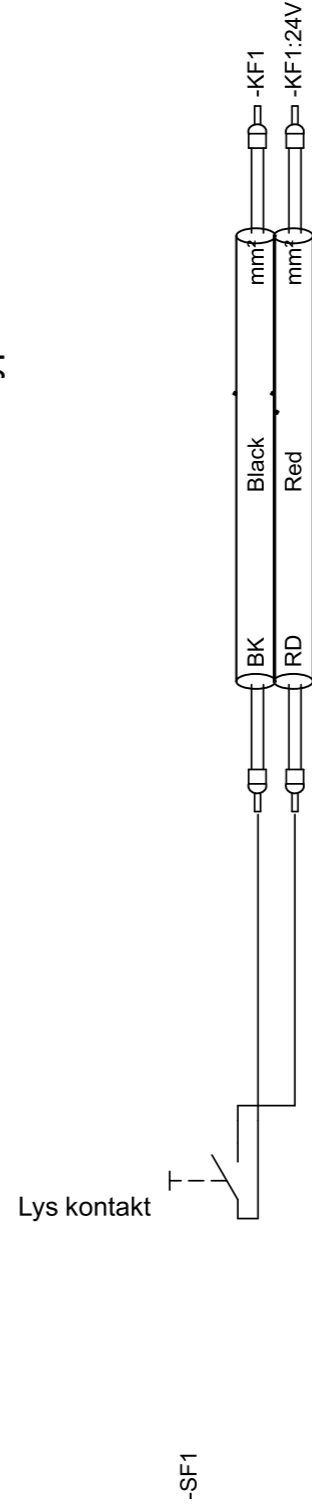
Bemærk: Køleventil  
Cable-type:



7  
7  
7  
16  
16  
16

**=A1-W700**

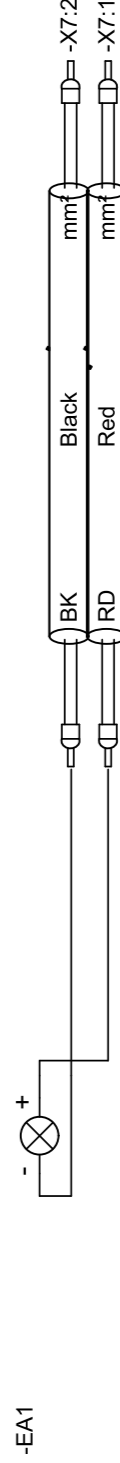
Bemærk: Lys kontakt  
Cable-type:



5  
5

**=A1-W701**

Bemærk: Lys P20  
Cable-type:



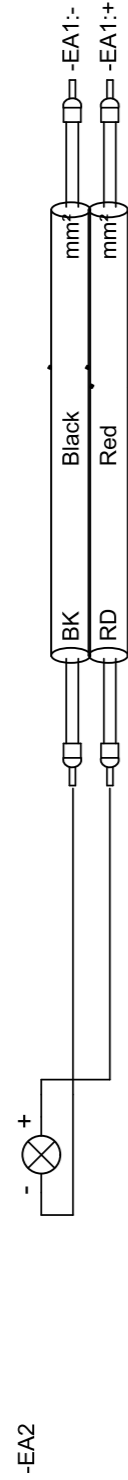
6  
6  
19  
19

# Kabel plan

Strømvej  
Blad

=A1-W702

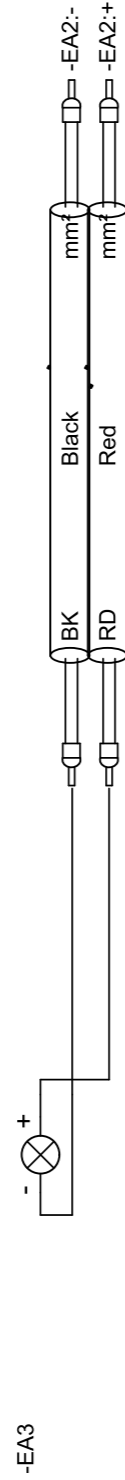
Bemærk: Lys P20  
Cable-type:



-EA2

=A1-W703

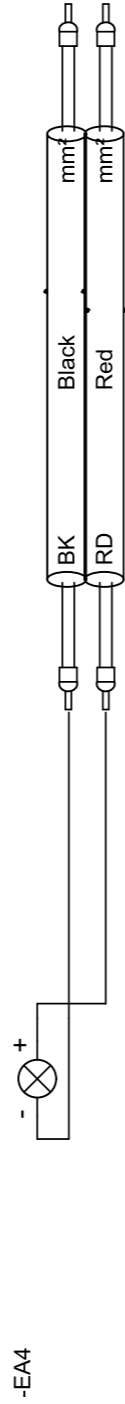
Bemærk: Lys P20  
Cable-type:



-EA3

=A1-W704

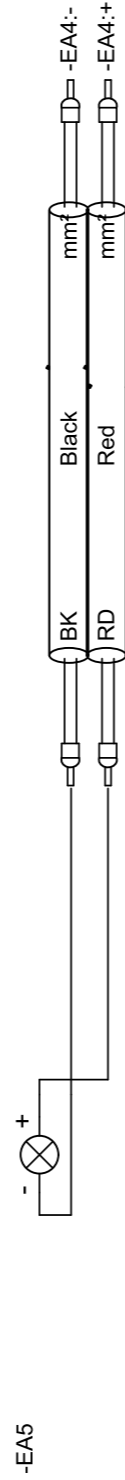
Bemærk: Lys P21  
Cable-type:



-EA4

=A1-W705

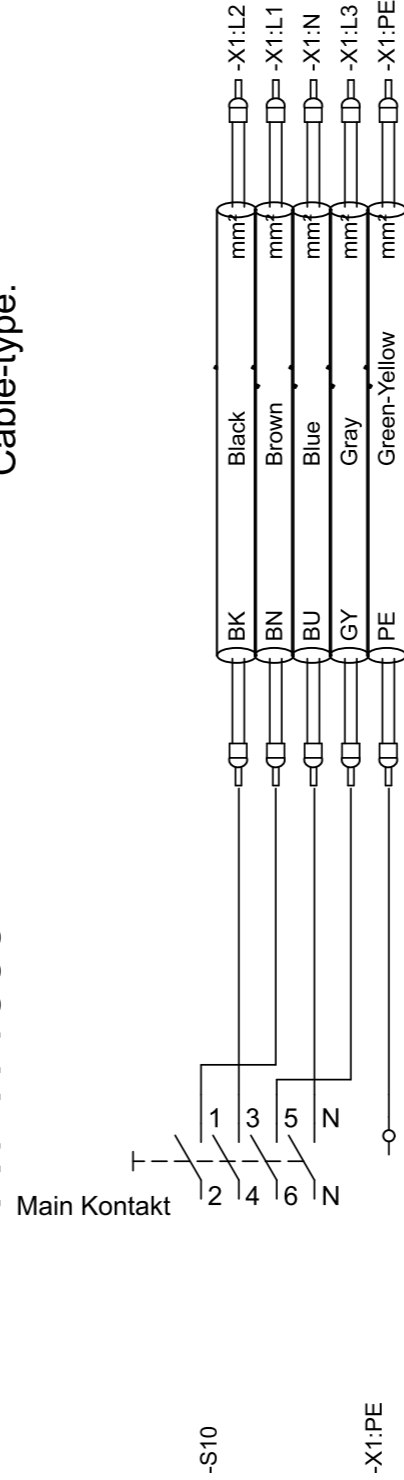
Bemærk:  
Cable-type:



-EA5

=A1-W1000

Bemærk: Hovedforsyning  
Cable-type:



-S10

-X1:PE

19 7  
19 6

19 7  
19 7

19 8  
19 8

19 9  
19 9

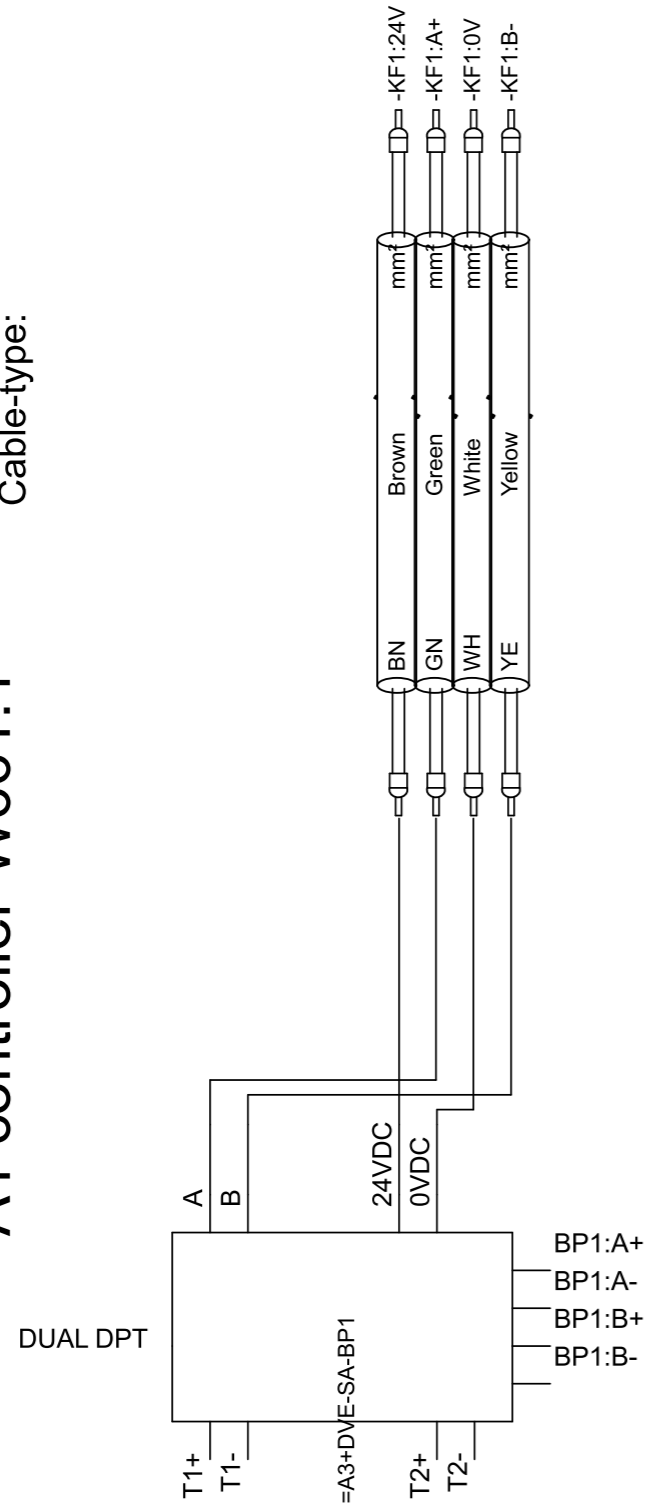
18 0  
18 0  
18 1  
18 1  
18 1

# Kabel plan

Strømvej  
Blad

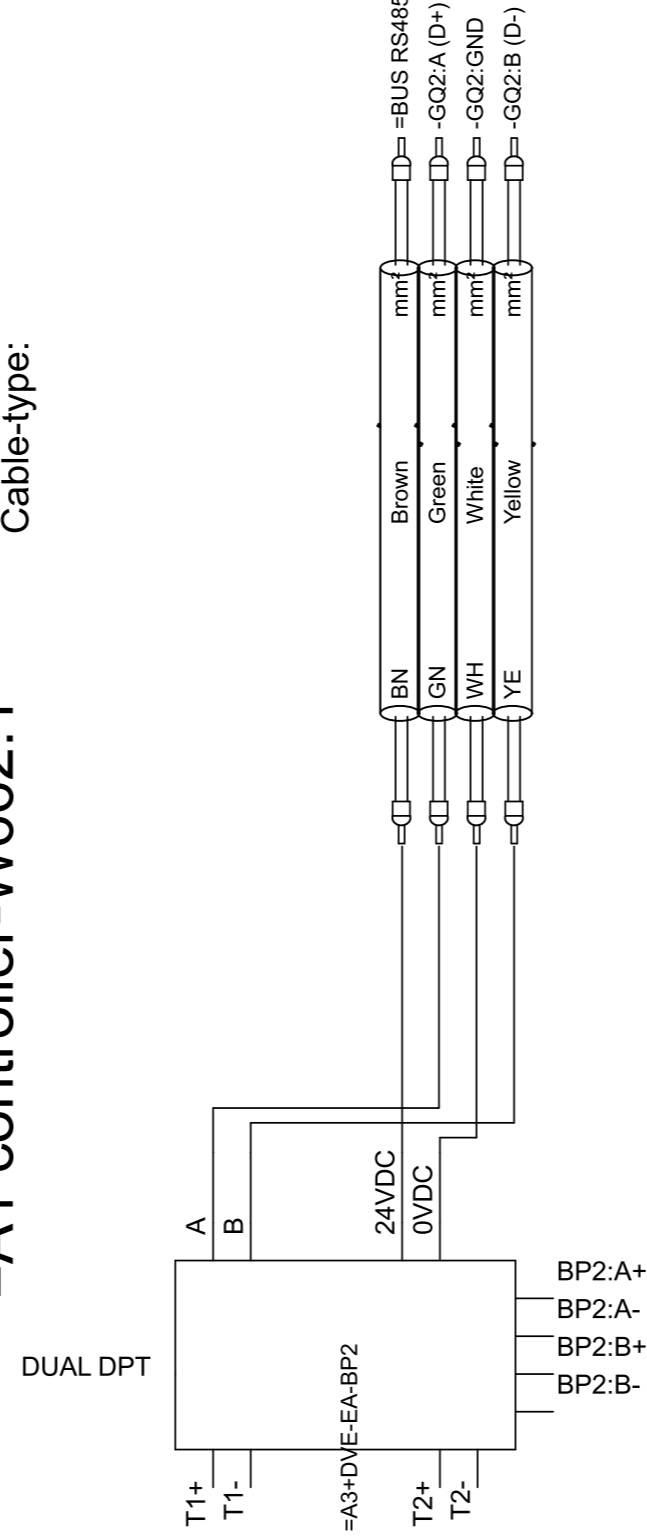
Bemærk: BP2 BUS  
Cable-type:

=A1 controller-W661.1



Bemærk: BP2 BUS  
Cable-type:

=A1 controller-W662.1



Bemærk: BP2 BUS  
Cable-type:

=A1 controller-W662.2



24  
24  
24  
24

25  
25  
25

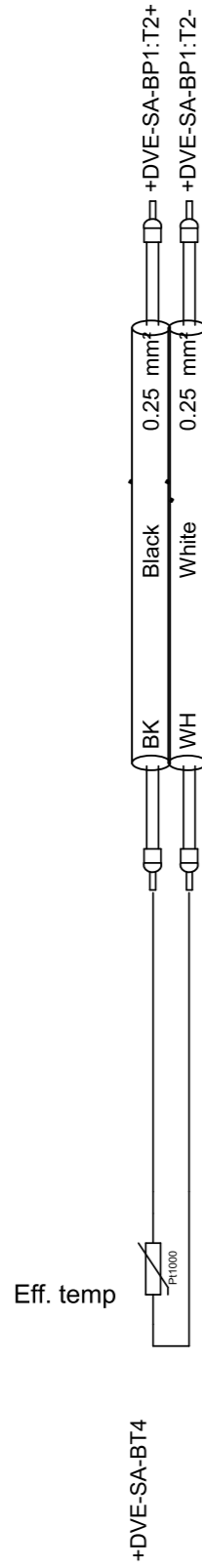
24  
24  
24  
24

# Kabel plan

Strømvej  
Blad

**=A3-W343**

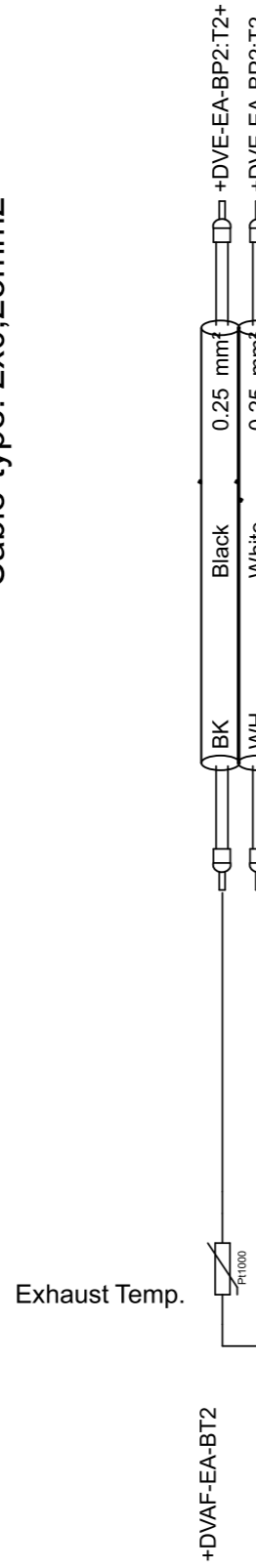
Bemærk: Effektivitet temp.  
Cable-type: 2x0,25mm<sup>2</sup>



+DVE-SA-BT4

**=A3-W442**

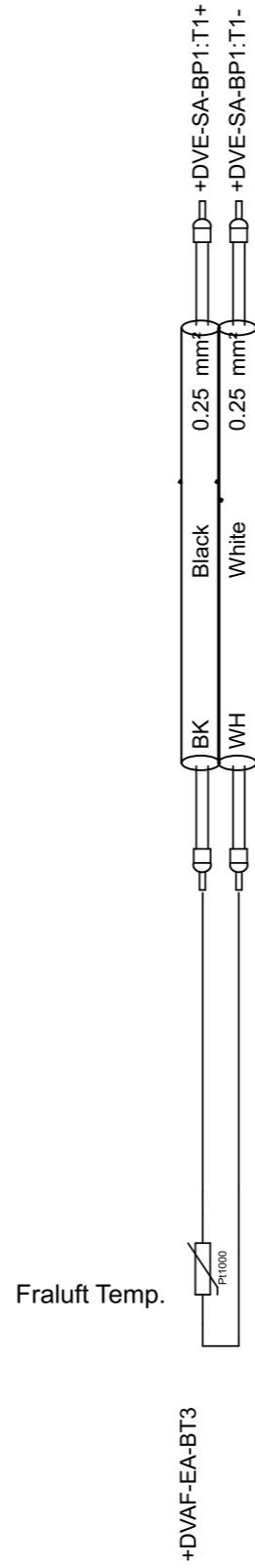
Bemærk: Exhaust Temp./de-ice  
Cable-type: 2x0,25mm<sup>2</sup>



+DVAF-EA-BT2

**=A3-W444**

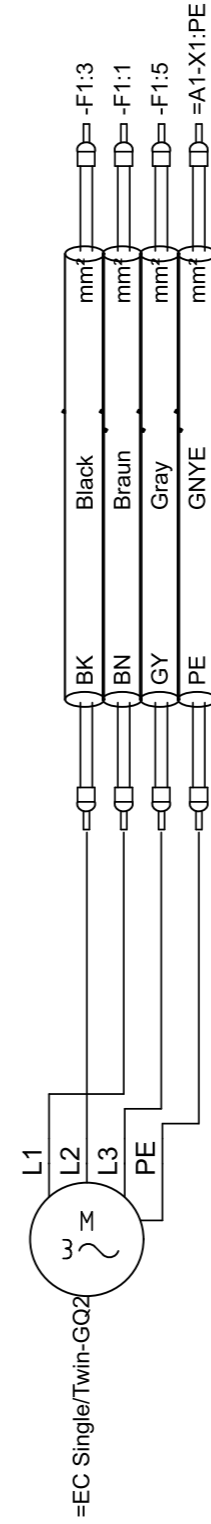
Bemærk: Fraluft Temp.  
Cable-type: 2x0,25mm<sup>2</sup>



+DVAF-EA-BT3

**=EC single+Extract air-W102**

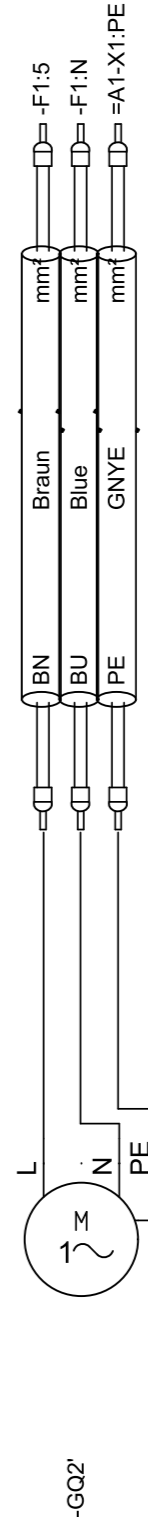
Bemærk: Motor Fraluft  
Cable-type:



=EC Single/Twin-GQ2

**=EC single+Extract air-W102**

Bemærk: Motor Fraluft  
Cable-type:



-GQ2'

24	2
24	2

25	2
25	2

24	1
24	1

21	2
21	2
21	2
21	3

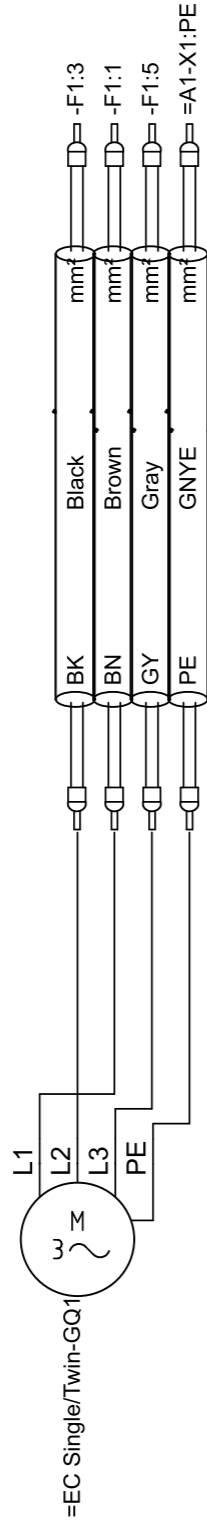
20	5
20	5
20	6



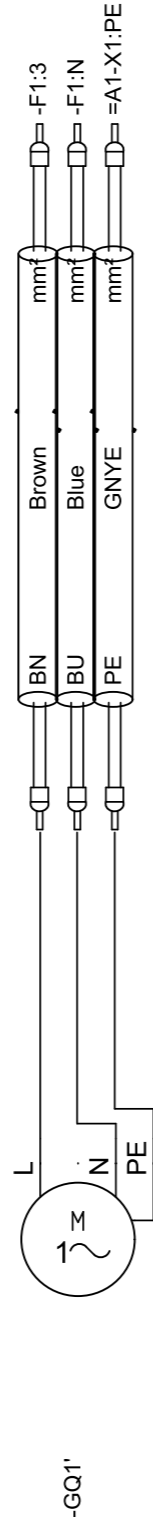
# Kabel plan

Strømvej  
Blad

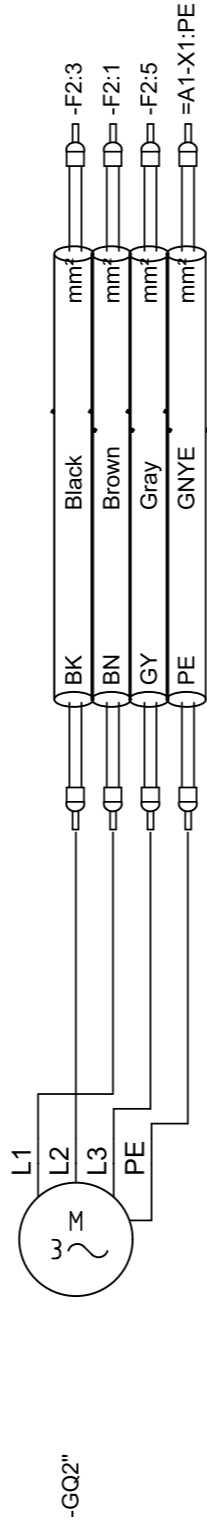
=EC single+Supply air-W101 Bemærk: Motor Tilluft  
Cable-type:



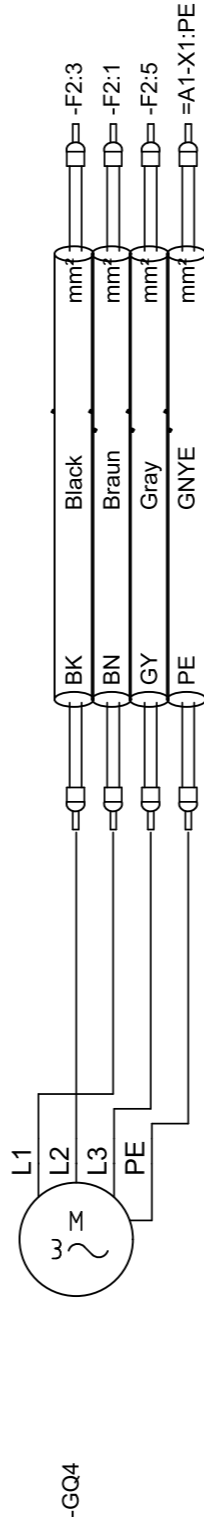
=EC single+Supply air-W101 Bemærk: Motor Tilluft  
Cable-type:



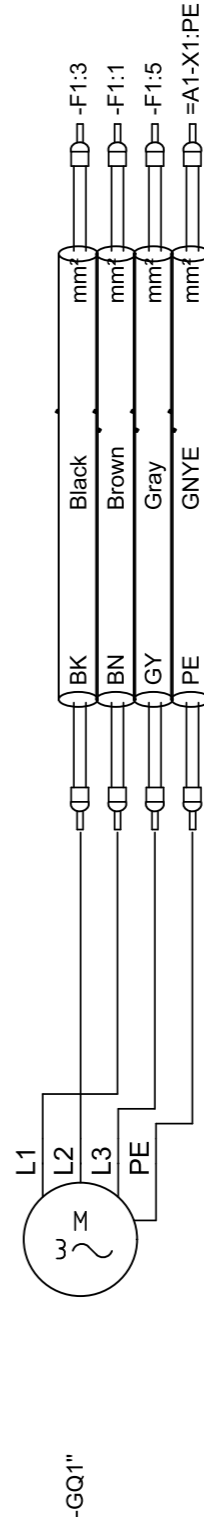
=EC Twin+Extract air-W102 Bemærk: Motor Tilluft  
Cable-type:



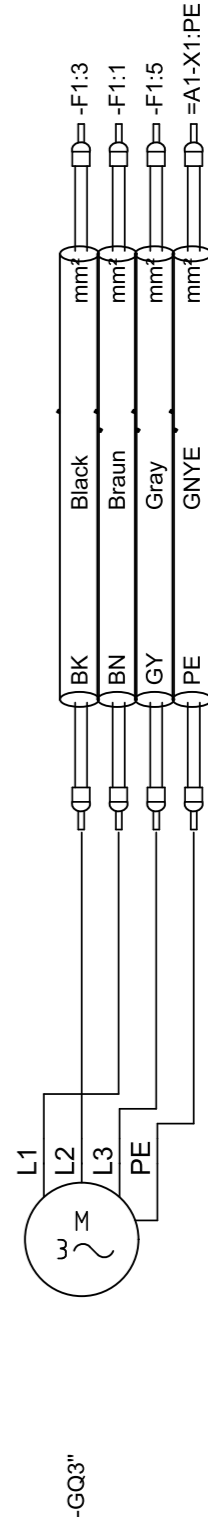
=EC Twin+Extract air-W104 Bemærk: Motor Fraluft  
Cable-type:



=EC Twin+Supply air-W101 Bemærk: Motor Tilluft  
Cable-type:



=EC Twin+Supply air-W103 Bemærk: Motor Tilluft  
Cable-type:



1  
1  
1  
1

2  
2  
3

7  
7  
7  
7

8  
8  
9  
9

4  
4  
4  
4

5  
5  
6  
6

21  
21  
21  
21

20  
20  
20

21  
21  
21  
21

21  
21  
21  
21

21  
21  
21  
21

21  
21  
21  
21