

## Exempelritningar vent, vs, el

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### Grundförutsättningar för typlägenheter

- Decentraliserad ventilation
- Uteluft/avluft med hjälp av kombihuv på lägenhets yttervägg
- Komfortmoduler monterade vid tak
- Dimensionering av värme/kyla 25/15 w/m<sup>2</sup>
- Luftflödesmål enligt BBR, frånluft: 15 l/s toa & 10 l/s kök, tilluft: 0,35 l/s per m<sup>2</sup> samt 4 l/s per pers i sovrum
- Vattentemperaturer värme/kyla 40/15 °C

#### Förklaringar



Styrpanel ventilationsaggregat



RUMSREGULATOR (TRC)



TRAFÖ 230V/24V, MONTERAS I ELCENTRAL.



LEDNINGAR FÖRLÄGGS UNDER INSTALLATIONSGÖLV.



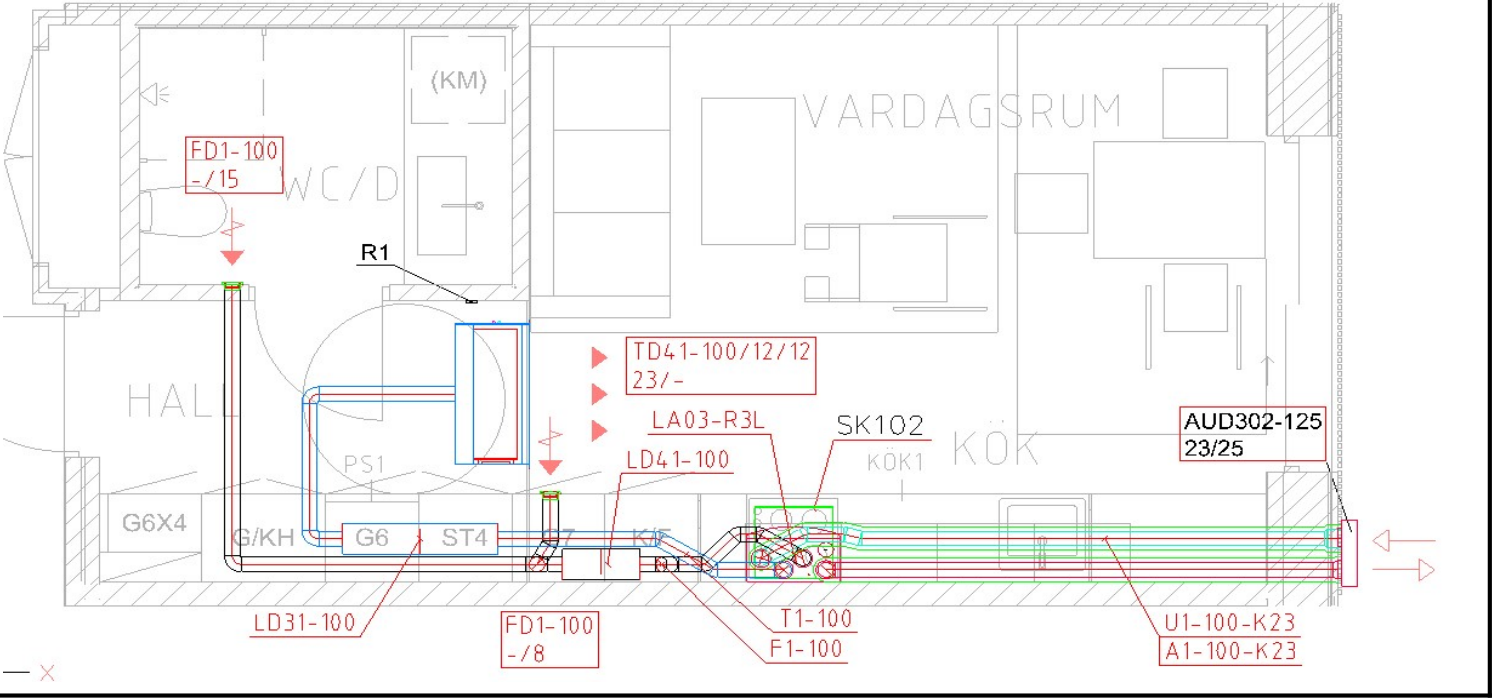
LEDNINGAR FÖRLÄGGS I INSTALLATIONSTAK.

Projekt: 1 Rok

Dat.: 2025-01-29

Ventilation

| Qty | Description               | Size    | Code     | Comment                                    |
|-----|---------------------------|---------|----------|--------------------------------------------|
| 1   | Air handling unit         | 125     | LA03-R3L | Swegon CASA R3 Genius                      |
| 1   | CASA Genius Control Panel |         | LA03-R3L | Art.No. "GC15" inc. junction box+10m cabel |
| 1   | Comfort Module            |         | TD41     | Swegon Casa Climate CCF 1000               |
| 1   | Grille Ceiling            |         |          | Size 1000, grille mounted on TD41          |
| 1   | Leakage Indicator Kit     |         |          | Size 1000 (Recommended with cooling)       |
| 2   | Extract air device        | 100     | FD1      | Swegon EXK-100                             |
| 1   | Cooker hood               | 125     | SK102    | Swegon CASA Jazz Genius                    |
| 1   | Combi hood                | 125     | AUD302   | Swegon ABC-CDF                             |
| 1   | Silencer                  | 100     | LD31     | Swegon CLA-A 100-1000                      |
| 1   | Silencer                  | 100     | LD41     | Swegon CLA-A 100-500                       |
|     | Duct                      | 100     | T1 / F1  |                                            |
| 2   | Bend-15                   | 100     | T1 / F1  |                                            |
| 2   | Bend-30                   | 100     | T1 / F1  |                                            |
| 4   | Bend-45                   | 100     | T1 / F1  |                                            |
| 7   | Bend-90                   | 100     | T1 / F1  |                                            |
| 1   | T-branch-90               | 100/100 | T1 / F1  |                                            |
| 1   | Room controller TRC       |         | R1       | Available in black or white                |
| 6   | Reducer/Expander          | 125/100 | T1 / F1  |                                            |

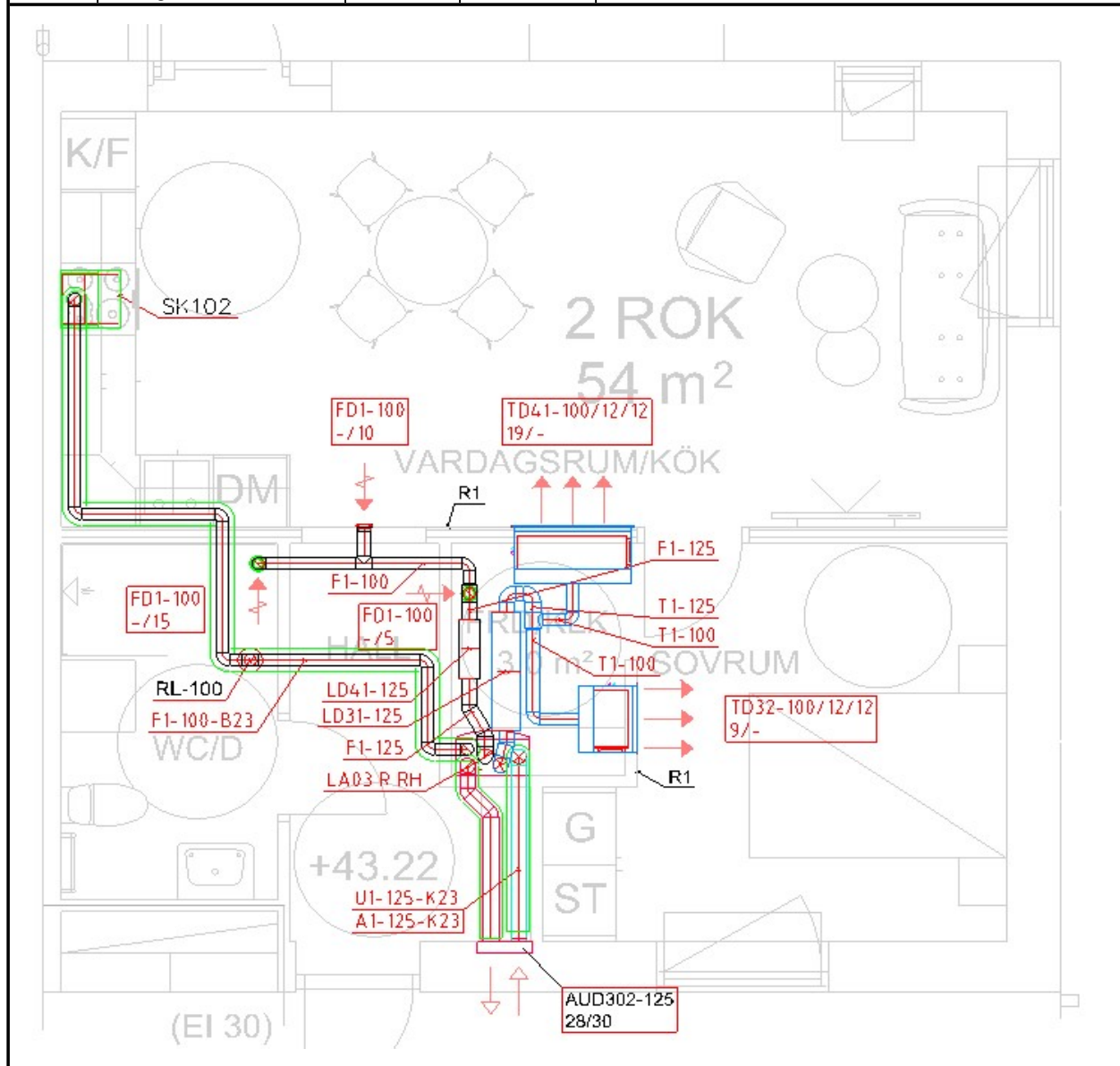


## Projekt: 2 Rok

Dat.: 2025-01-29

### Ventilation

| Qty | Description               | Size    | Code      | Comment                                        |
|-----|---------------------------|---------|-----------|------------------------------------------------|
| 1   | Air handling unit         | 125     | LA03 R RH | Swegon CASA R3 Genius                          |
| 1   | CASA Genius Control Panel |         | LA03-R3L  | Article no: "GC15" inc. junction box+10m cabel |
| 1   | Comfort Module            |         | TD41      | Swegon Casa Climate CCF 1000                   |
| 1   | Comfort Module            |         | TD32      | Swegon Casa Climate CCF 600                    |
| 1   | Grille Ceiling            |         |           | Size 1000, grille mounted on TD41              |
| 1   | Grille Ceiling            |         |           | Size 600, grille mounted on TD32               |
| 1   | Leakage Indicator Kit     |         |           | Size 1000 (Recommended with cooling)           |
| 1   | Leakage Indicator Kit     |         |           | Size 600 (Recommended with cooling)            |
| 3   | Extract air device        | 100     | FD1       | Swegon EXK-100                                 |
| 1   | Cooker hood               | 125     | SK102     | CASA Tango (+) Genius                          |
| 1   | Combi hood                | 125     | AUD302    | Swegon ABC-CDF                                 |
| 1   | Silencer                  | 100     | LD31      | Swegon CLA-A 125-1000                          |
| 1   | Silencer                  | 100     | LD41      | Swegon CLA-A 125-500                           |
|     | Duct                      | 100     | T1 / F1   |                                                |
|     | Duct                      | 125     | T1 / F1   |                                                |
| 3   | Bend-15                   | 100     | T1 / F1   |                                                |
| 4   | Bend-30                   | 100     | T1 / F1   |                                                |
| 20  | Bend-90                   | 100     | T1 / F1   |                                                |
| 3   | T-branch-90               | 100/100 | T1 / F1   |                                                |
| 2   | Reducer/Expander          | 125/100 | T1 / F1   |                                                |
| 1   | Room controller TRC       |         | R1        | Available in black or white                    |
| 1   | Cleaning hatch            | 100     | RL        |                                                |

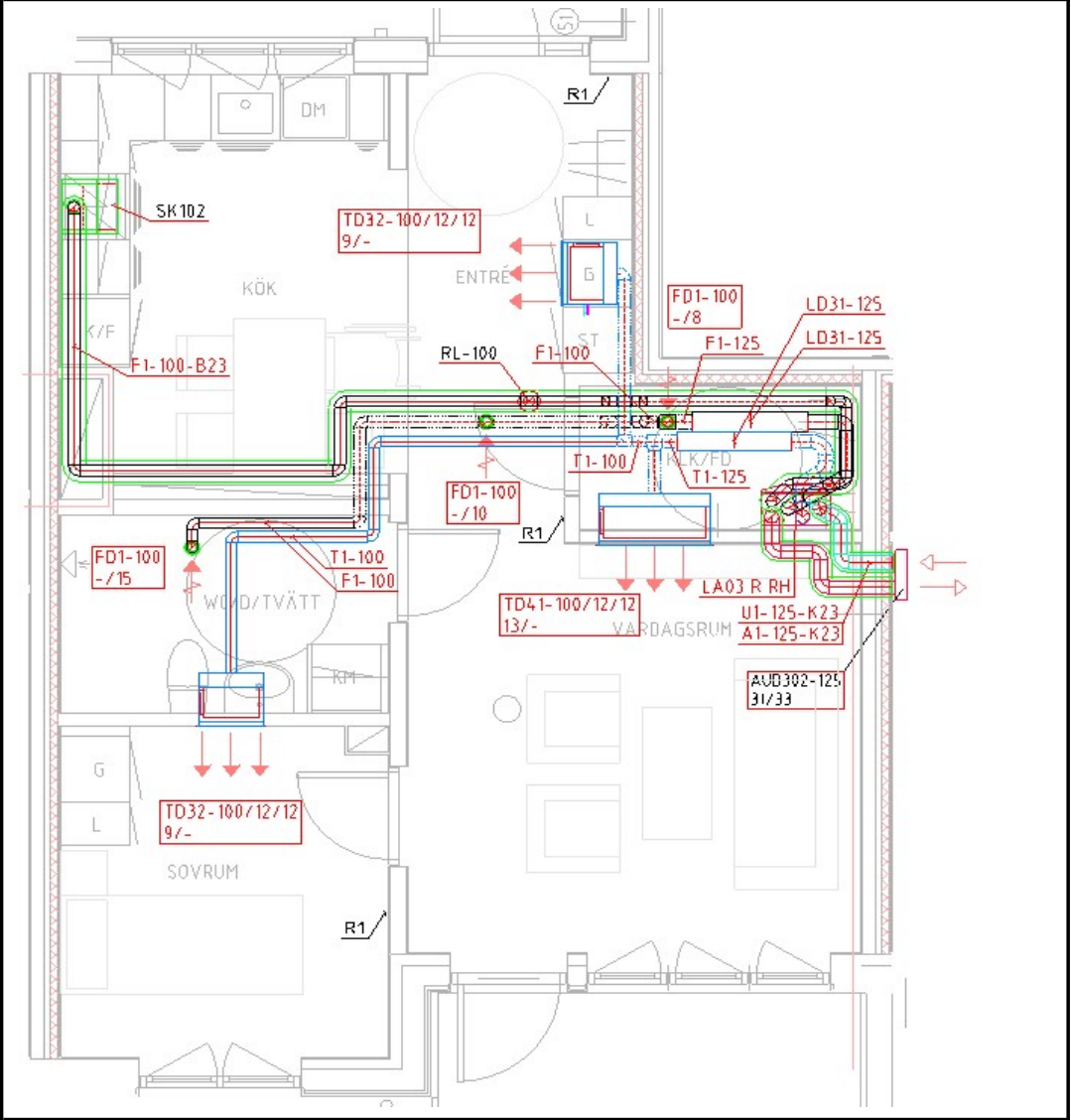


Projekt: 3 Rok

Dat.: 2025-01-29

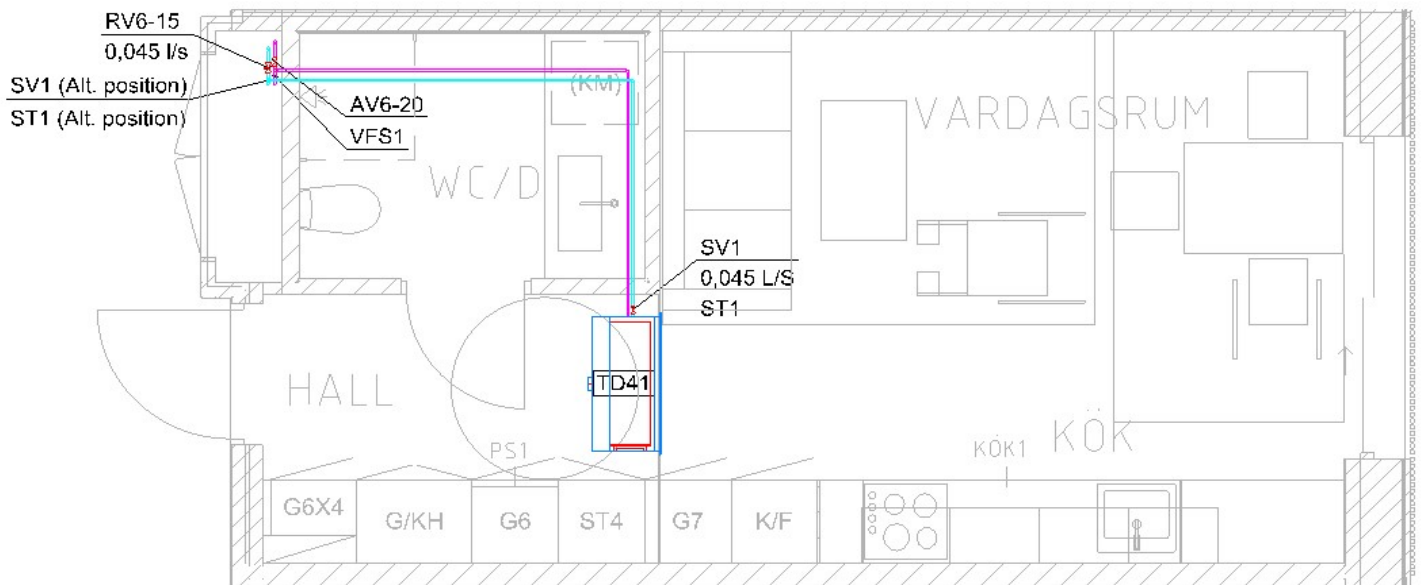
Ventilation

| Qty | Description               | Size    | Code      | Comment                                        |
|-----|---------------------------|---------|-----------|------------------------------------------------|
| 1   | Air handling unit         | 125     | LA03 R RH | Swegon R3 CASA R RH                            |
| 1   | CASA Genius control panel |         | LA03-R3L  | Article no: "GC15" inc. Junction box+10m cabel |
| 1   | Comfort Module            |         | TD41      | Swegon CASA Climate CCF 1000                   |
| 2   | Comfort Module            |         | TD32      | Swegon CASA Climate CCF 600                    |
| 1   | Grille Ceiling            |         |           | Size 1000, grille mounted on TD41              |
| 2   | Grille Ceiling            |         |           | Size 600, grille mounted on TD32               |
| 1   | Leakage indicator         |         |           | Size 1000 (Recommended with cooling)           |
| 1   | Leakage indicator         |         |           | Size 600 (Recommended with cooling)            |
| 3   | Extract air device        | 100     | FD1       | Swegon EXK-100                                 |
| 1   | Cooker hood               | 125     | SK102     | CASA Tango (+) Genius                          |
| 1   | Combi hood                | 125     | AUD302    | Swegon ABC-CDF                                 |
| 1   | Silencer                  | 100     | LD31      | Swegon CLA-A 125-1000                          |
| 1   | Silencer                  | 100     | LD41      | Swegon CLA-A 125-500                           |
|     | Duct                      | 100     |           |                                                |
|     | Duct                      | 125     |           |                                                |
| 1   | Bend-30                   | 100     |           |                                                |
| 14  | Bend-45                   | 100     |           |                                                |
| 2   | Bend-60                   | 100     |           |                                                |
| 2   | Bend-60                   | 100     |           |                                                |
| 2   | Bend-90                   | 100     |           |                                                |
| 23  | Bend-90                   | 100     |           |                                                |
| 5   | T-branch-90               | 100/100 |           |                                                |
| 2   | Reducer/Expander          | 125/100 |           |                                                |
| 1   | Room controller TRC       |         | R1        | Available in black or white                    |
| 1   | Cleaning hatch            | 100     | RL        |                                                |



**Date: 2025-01-29**

| Qty                                              | Description       | Size  | Code | Comment                            |
|--------------------------------------------------|-------------------|-------|------|------------------------------------|
|                                                  | Pipe (Alt. 1)     | 15    |      | Galvanized steel pipe              |
|                                                  | Insulation Alt.1  | 50    |      | Fiberglass pipe insulation         |
|                                                  | Pipe (Alt. 2)     | 16    |      | Pipe in Pipe (PiP) with insulation |
| 1                                                | Water distributor | 10    | VFS1 |                                    |
| 1                                                | Valve             | 10    | SV1  | Swegon Syst VDN 110 932469001      |
| 1                                                | Actuator          |       | ST1  | Swegon ACTUATOR c 24V NC 82084001  |
| 2                                                | Shut-off valve    | 20    | AV6  |                                    |
| 1                                                | Control valve     | 15    | RV6  | Only one per main pipe             |
| <b>Products below is included in Ventilation</b> |                   |       |      |                                    |
| 1                                                | Comfort Module    | Cu 12 | TD41 | Swegon CASA Climate CCF 1000       |

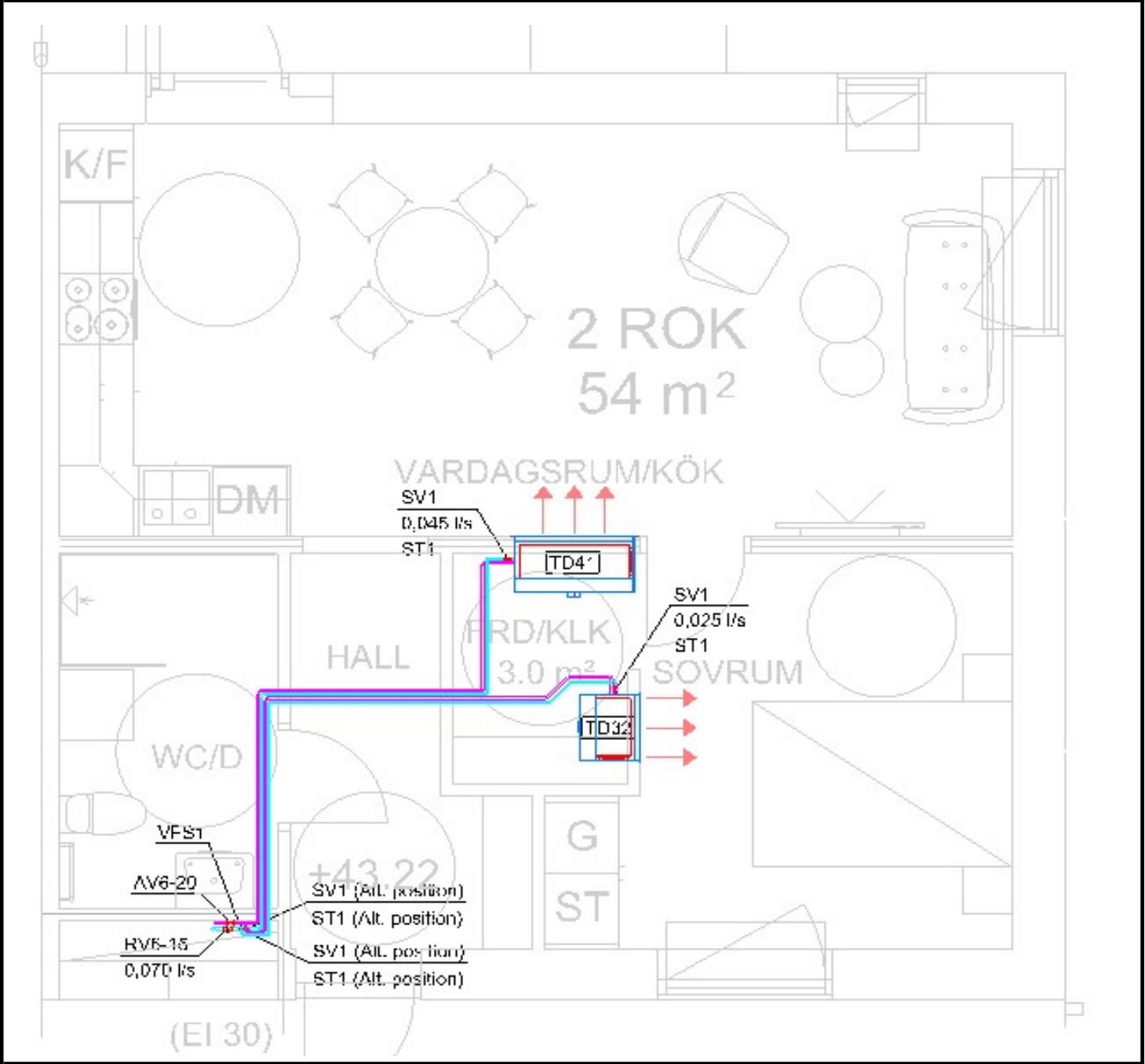


Projekt: 2 Rok

Date: 2025-01-29

Water: Heating & Cooling (dry cooling & 2-pipe system)

| Qty                                       | Description          | Size  | Code | Comment                            |
|-------------------------------------------|----------------------|-------|------|------------------------------------|
|                                           | Pipe (Alt.1 )        | 15    |      | Galvanized steel pipe              |
|                                           | Insulation if Alt. 1 |       |      | Fiberglass pipe insulation         |
|                                           | Pipe (Alt. 2)        | 16    |      | Pipe in pipe (Pip) with insulation |
| 1                                         | Water distributor    | 10    | VFS1 |                                    |
| 2                                         | Valve                | 10    | SV1  | Swegon Syst VDN 110 932469001      |
| 2                                         | Actuator             |       | ST1  | Swegon ACTUATOR c 24V NC 82084001  |
| 2                                         | Shut off valve       | 20    | AV6  |                                    |
| 1                                         | Control valve        | 15    | RV6  | Only one per main pipe             |
| Products below is included in Ventilation |                      |       |      |                                    |
| 1                                         | Comfort Module       | Cu 12 | TD41 | Swegon CASA Climate CCF 1000       |
| 1                                         | Comfort Module       | Cu 12 | TD32 | Swegon CASA Climate CCF 600        |

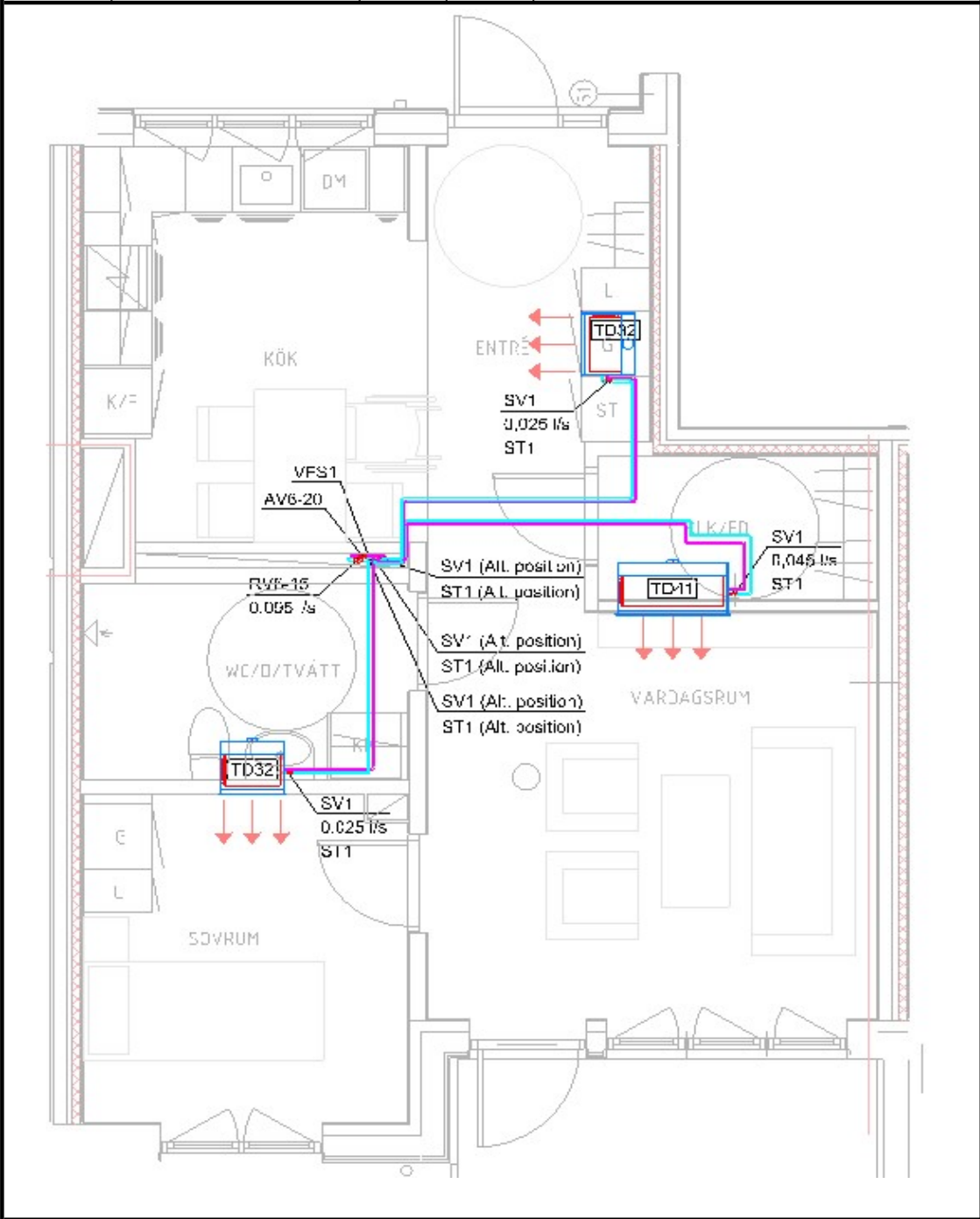


Projekt: 3 Rok

Date: 2025-01-29

Water: Heating & Cooling (dry cooling & 2-pipe system)

|                                           | Description          | Size  | Code | Comment                            |
|-------------------------------------------|----------------------|-------|------|------------------------------------|
|                                           | Pipe (Alt.1 )        | 15    |      | Galvanized steel pipe              |
|                                           | Insulation if Alt. 1 |       |      | Fiberglass pipe insulation         |
|                                           | Pipe (Alt. 2)        | 16    |      | Pipe in pipe (Pip) with insulation |
| 1                                         | Water distributor    | 10    | VFS1 |                                    |
| 3                                         | Valve                | 10    | SV1  | Swegon Syst VDN 110 932469001      |
| 3                                         | Actuator             |       | ST1  | Swegon ACTUATOR c 24V NC 82084001  |
| 2                                         | Shut off valve       | 20    | AV6  |                                    |
| 1                                         | Control valve        | 15    | RV6  | Only one per main pipe             |
| Products below is included in Ventilation |                      |       |      |                                    |
| 1                                         | Comfort Module       | Cu 12 | TD41 | Swegon CASA Climate CCF 1000       |
| 1                                         | Comfort Module       | Cu 12 | TD32 | Swegon CASA Climate CCF 600        |

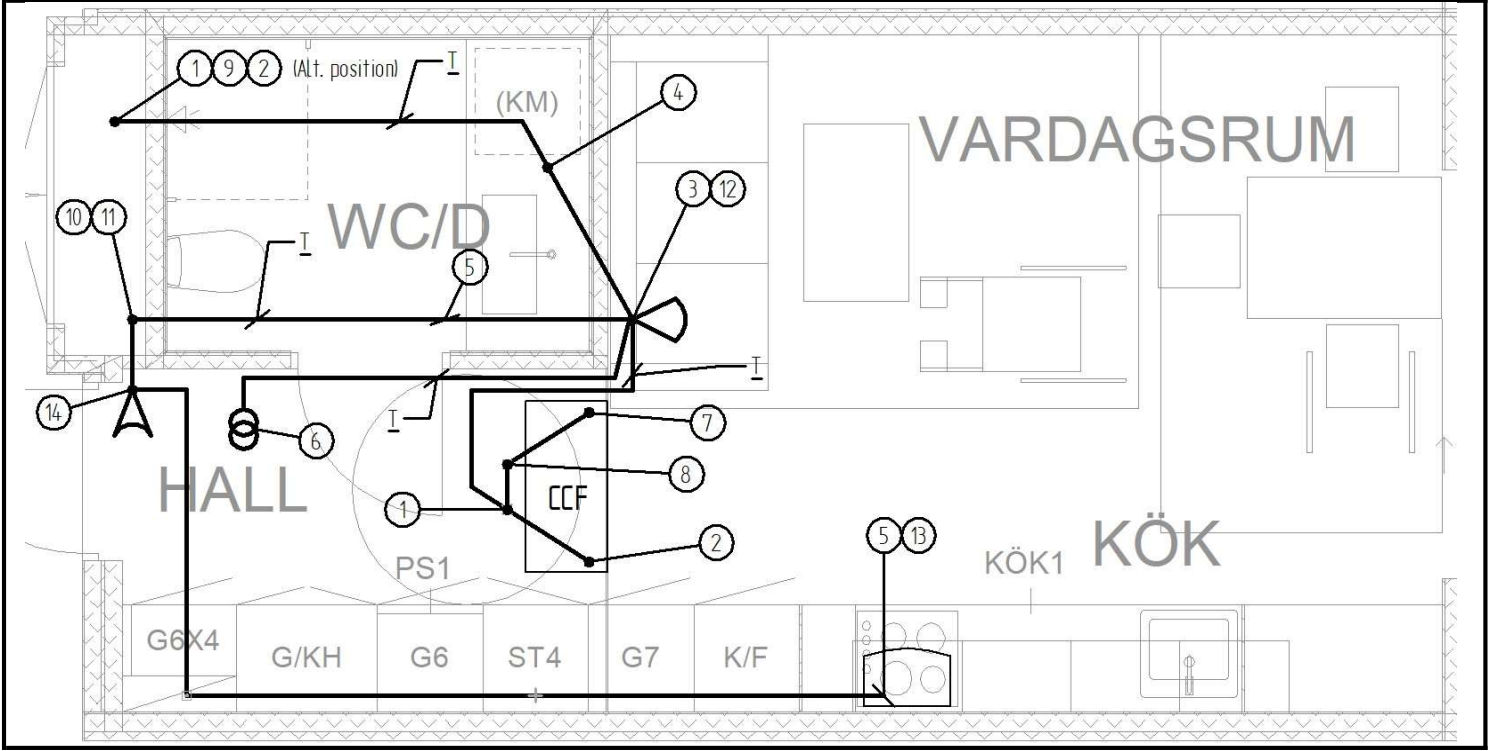


Projekt: 1 Rok

Dat.: 2024-10-22

Electrical

| Pos                                                          | Qty | Description                              | Comment                                         | Article number         |
|--------------------------------------------------------------|-----|------------------------------------------|-------------------------------------------------|------------------------|
| 1                                                            | 3   | INFÄLLD APP.DOSA                         |                                                 |                        |
| 2                                                            | 1   | Ställdon 24V (NC)                        |                                                 | 932469001              |
| 3                                                            | 1   | INFÄLLD KOPPLINGDOSA                     |                                                 |                        |
| 4                                                            |     | TOMRÖR ø16                               |                                                 |                        |
| 5                                                            |     | TOMRÖR ø20                               |                                                 |                        |
| 6                                                            | 1   | TRAFO 24V AC                             | ELQRB 2x1 förläggs mellan regulator och trafo   |                        |
| Tillägg om kyla, enligt nedan                                |     |                                          |                                                 |                        |
| 7                                                            | 1   | Kondenssensor                            | Del av kit 82227401                             | 82227401               |
| 8                                                            | 1   | RELÄ KONDENSSENSOR                       | Del av kit 82227401                             | 82227401               |
| 9                                                            | 1   | Anligningsgivare                         | Monteras på stam vid värme/kyla                 | 942449002              |
| Tillägg om Modbus kontroll via CASA Genius App, enligt nedan |     |                                          |                                                 |                        |
| 10                                                           | 1   | UTANPÅLIGGANDE KOPPLINGSDOSA FÖR MOD-BUS |                                                 |                        |
| 11                                                           | 1   | SCB MODBUSADAPTER                        | Kabel mellan adapter och panel medföljer        | SCB                    |
| Produkter nedan ingår i ventilation                          |     |                                          |                                                 |                        |
| 12                                                           | 1   | RUMSREGULATOR TRC                        | Vit alt. Svart, monteras 1400 ÖFG               | 82223401 alt. 82223402 |
| 13                                                           | 1   | CASA R3 Genius                           |                                                 |                        |
| 14                                                           | 1   | CASA GENIUS STYRPANEL                    | ink. 10m kabel&kopplingsdosa, monteras 1400 ÖFG | GC15                   |

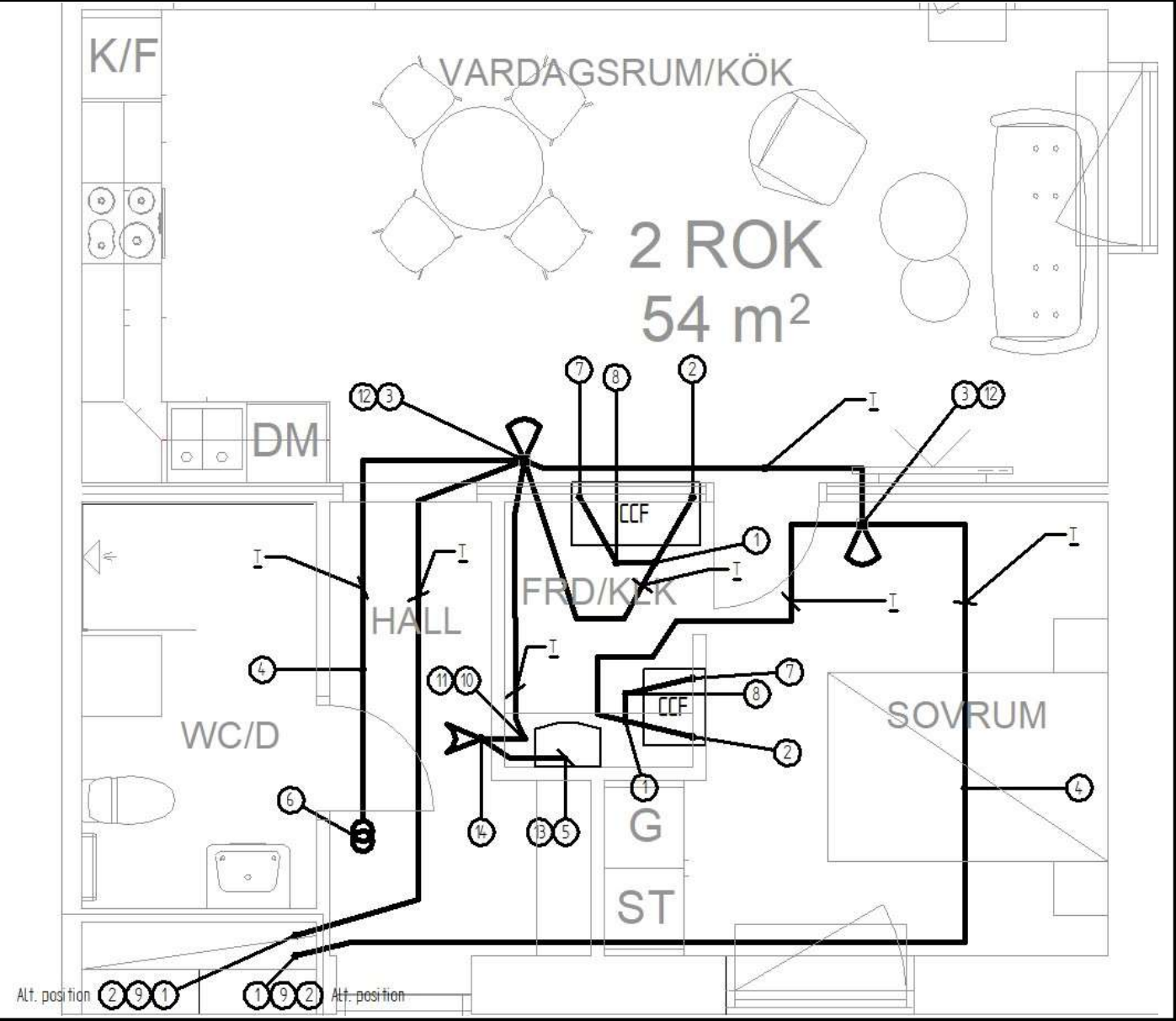


Projekt: 2 Rok

Dat.: 2024-10-22

Electrical

| Pos                                                          | Qty | Description                              | Comment                                       | Article number         |
|--------------------------------------------------------------|-----|------------------------------------------|-----------------------------------------------|------------------------|
| 1                                                            | 5   | INFÄLLD APP.DOSA                         |                                               |                        |
| 2                                                            | 2   | STÄLLDON 24V (NC)                        |                                               | 932469001              |
| 3                                                            | 2   | INFÄLLD KOPPLINGDOSA                     |                                               |                        |
| 4                                                            |     | TOMRÖR ø16                               |                                               |                        |
| 5                                                            |     | TOMRÖR ø20                               |                                               |                        |
| 6                                                            | 1   | TRAFO 24V AC                             | ELQRB 2x1 förläggs mellan regulator och trafo |                        |
| Tillägg om kyla, enligt nedan                                |     |                                          |                                               |                        |
| 7                                                            | 2   | KONDENSSENSOR                            | Del av kit 82227401                           | 82227401               |
| 8                                                            | 2   | RELÄ KONDENSSENSOR                       | Del av kit 82227401                           | 82227401               |
| 9                                                            | 2   | Anligningsgivare                         | Monteras på stam vid värme/kyla               | 942449002              |
| Tillägg om Modbus kontroll via CASA Genius App, enligt nedan |     |                                          |                                               |                        |
| 10                                                           | 1   | UTANPÅLIGGANDE KOPPLINGSDOSA FÖR MOD-BUS |                                               |                        |
| 11                                                           | 1   | SCB MODBUSADAPTER                        | Kabel mellan adapter och panel medföljer      | SCB                    |
| Produkter nedan ingår i ventilation                          |     |                                          |                                               |                        |
| 12                                                           | 2   | RUMSREGULATOR TRC                        | Vit alt. Svart, monteras 1400 ÖFG             | 82223401 alt. 82223402 |
| 13                                                           | 1   | CASA R3 Genius                           |                                               |                        |
| 14                                                           | 1   | CASA GENIUS STYRPANEL                    | inklusive 10m kabel & ram, monteras 1400 ÖFG  | GC15                   |

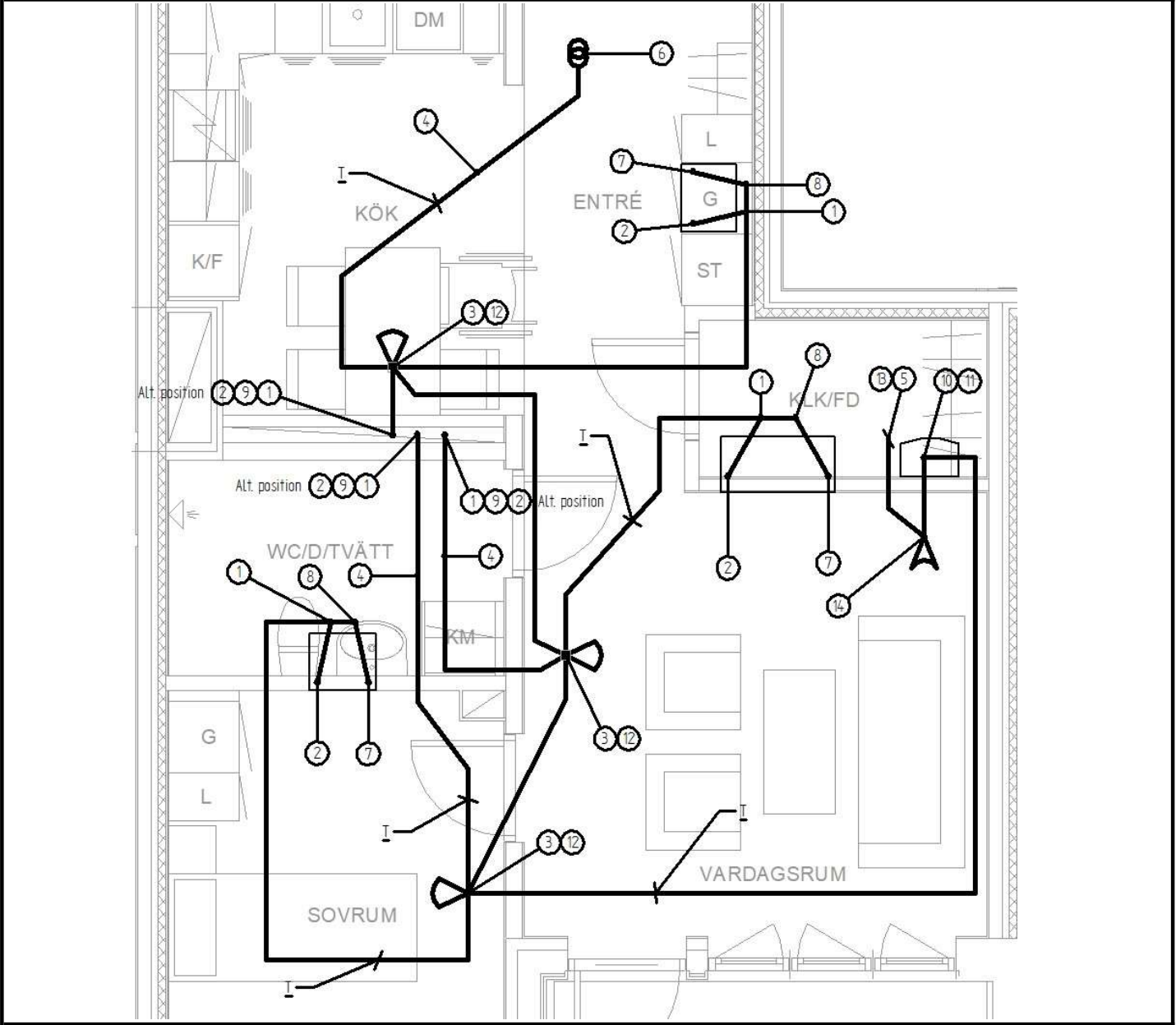


Projekt: 3 Rok

Dat.: 2024-10-22

Electrical

| Pos                                                          | Qty | Description                              | Comment                                       | Article number         |
|--------------------------------------------------------------|-----|------------------------------------------|-----------------------------------------------|------------------------|
| 1                                                            | 7   | INFÄLLD APP.DOSA                         |                                               |                        |
| 2                                                            | 3   | STÄLLDON 24V (NC)                        |                                               | 932469001              |
| 3                                                            | 3   | INFÄLLD KOPPLINGDOSA                     | Monteras 1400 ÖFG                             |                        |
| 4                                                            |     | TOMRÖR ø16                               |                                               |                        |
| 5                                                            |     | TOMRÖR ø20                               |                                               |                        |
| 6                                                            | 1   | TRAFO 24V AC                             | ELQRB 2x1 förläggs mellan regulator och trafo |                        |
| Tillägg om kyla, enligt nedan                                |     |                                          |                                               |                        |
| 7                                                            | 3   | KONDENSSENSOR                            | Del av kit 82227401                           | 82227401               |
| 8                                                            | 3   | RELÄ KONDENSSENSOR                       | Del av kit 82227401                           | 82227401               |
| 9                                                            | 3   | Anligningsgivare                         | Monteras på stam vid värme/kyla               | 942449002              |
| Tillägg om Modbus kontroll via CASA Genius App, enligt nedan |     |                                          |                                               |                        |
| 10                                                           | 1   | UTANPÅLIGGANDE KOPPLINGSDOSA FÖR MOD-BUS |                                               |                        |
| 11                                                           | 1   | SCB MODBUSADAPTER                        | Kabel mellan adapter och panel medföljer      | SCB                    |
| Produkter nedan ingår i ventilation                          |     |                                          |                                               |                        |
| 12                                                           | 3   | RUMSREGULATOR TRC                        | Vit alt. Svart                                | 82223401 alt. 82223402 |
| 13                                                           | 1   | CASA R3 Genius                           |                                               |                        |
| 14                                                           | 1   | CASA GENIUS STYRPANEL                    | inklusive 10m kabel & ram                     | GC15                   |



Projection

TOLERANCE IN GENERAL:  
ISO 2768-1

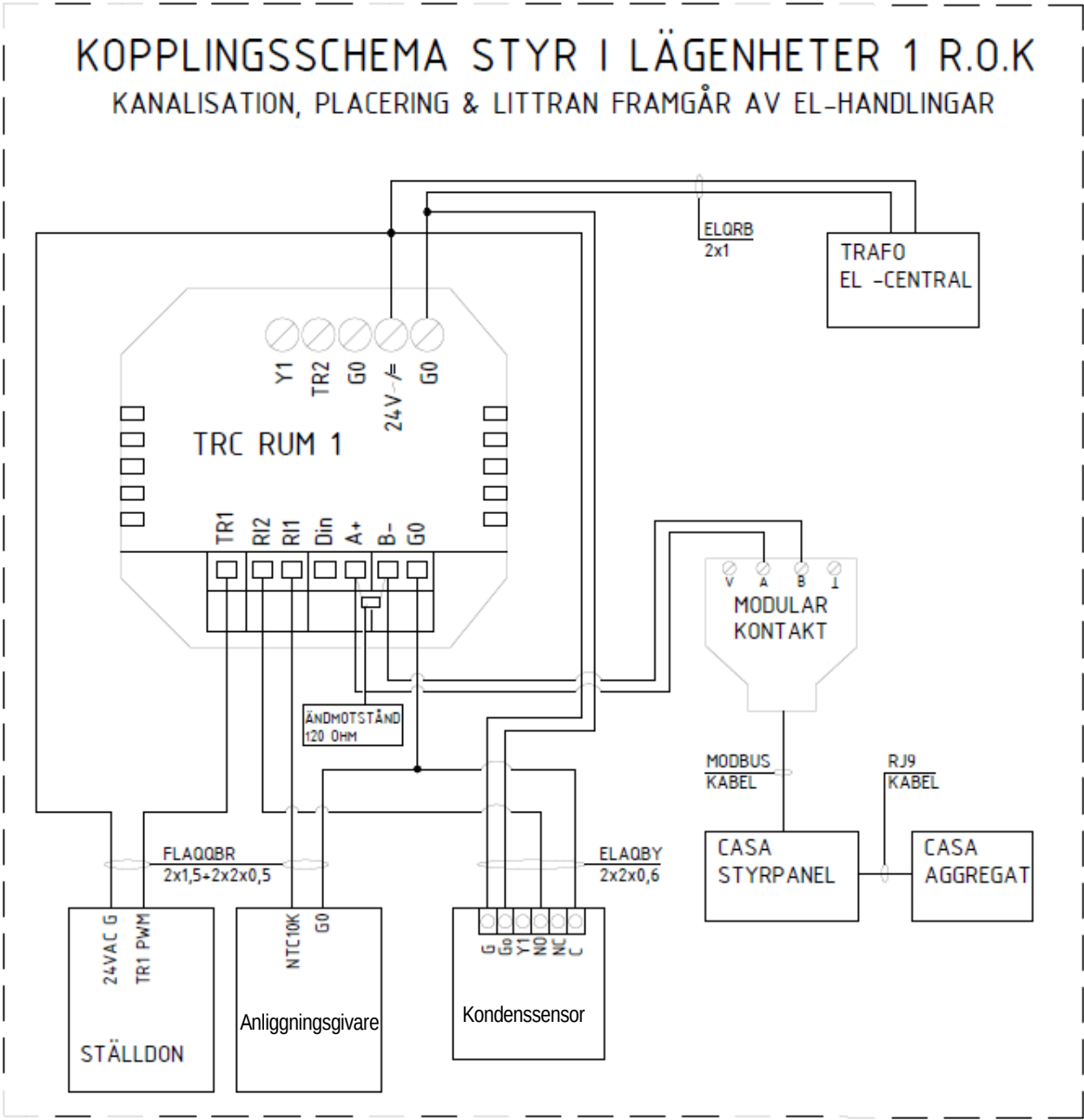
☐ Fine

☒ Medium

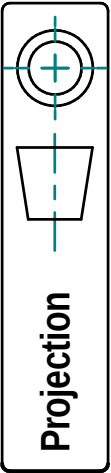
☐ Coarse

☐ Very Coarse

Scale 2:1



|                   |         |          |                     |               |         |
|-------------------|---------|----------|---------------------|---------------|---------|
| Item no           |         | Material | Note                |               |         |
| Status            | Working | Weight   | Kopplingsschema TRC |               |         |
|                   |         | N/A      |                     |               |         |
| <div>Swegon</div> |         |          | Drawn by            | Drawn date    | Site    |
|                   |         |          | APN                 | 2024-10-08    | Arvika  |
|                   |         |          | Edit by             | Released date | Sheet   |
|                   |         |          | APN                 | 2024-11-22    | 1/3     |
|                   |         |          | Drawing No.         |               | Edition |
|                   |         |          | 000735              |               | 001     |



Projection

Scale 1:1

TOLERANCE IN GENERAL:

ISO 2768-1

☐ Fine

☒ Medium

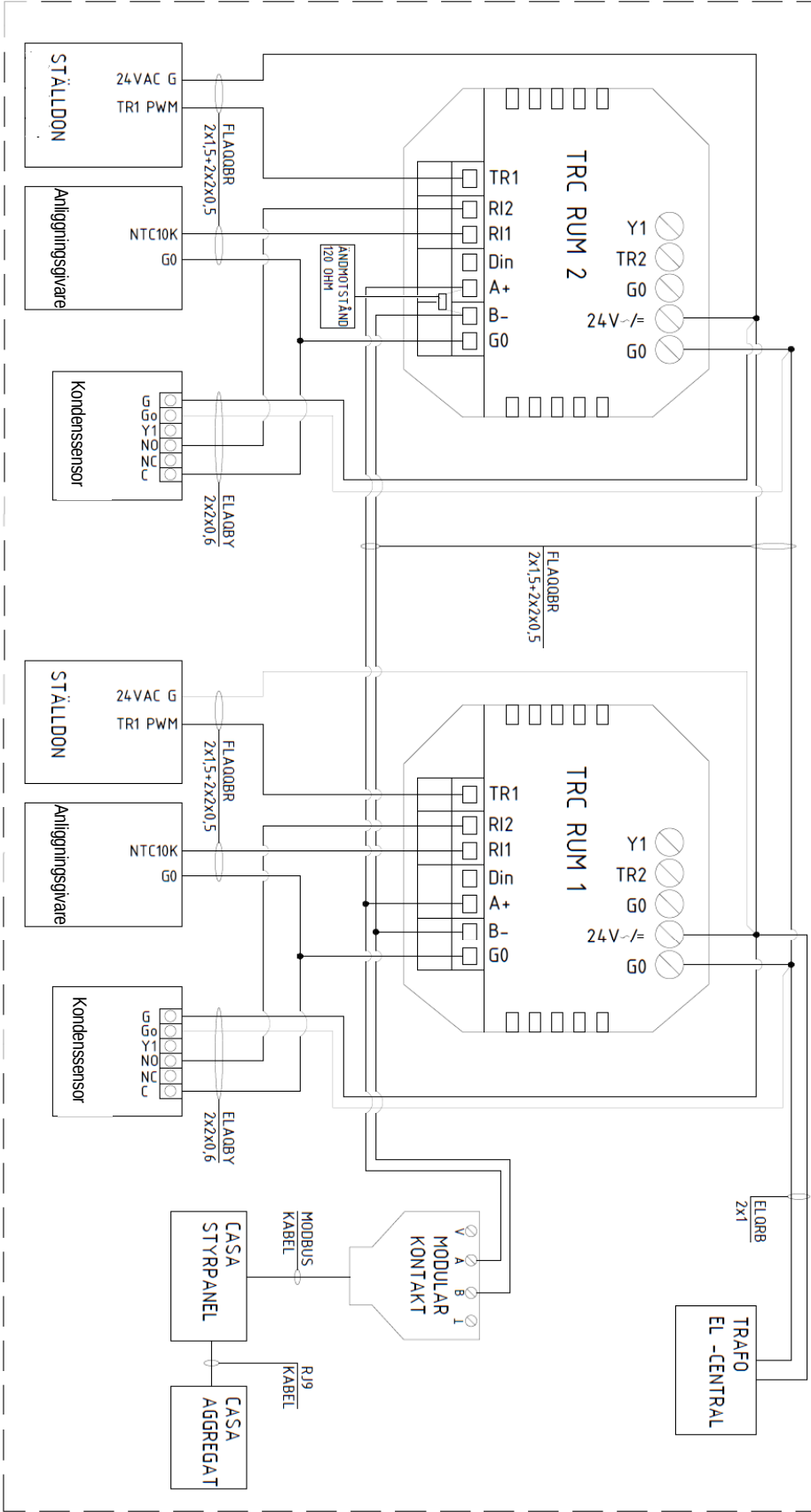
☐ Coarse

☐ Very Coarse

|         |         |          |                     |               |         |
|---------|---------|----------|---------------------|---------------|---------|
| Item no |         | Material | Note                |               |         |
| Status  | Working | Weight   | Kopplingsschema TRC |               |         |
|         |         | N/A      |                     |               |         |
|         |         |          | Drawn by            | Drawn date    | Site    |
|         |         |          | APN                 | 2024-10-08    | Arvika  |
|         |         |          | Edit by             | Released date | Sheet   |
|         |         |          | APN                 | 2024-11-22    | 2/3     |
|         |         |          | Drawing No.         |               | Edition |
|         |         |          | 000735              |               | 001     |

# KOPPLINGSSCHEMA STYR I LÄGENHETER 2 R.O.K

## KANALISATION, PLACERING & LITTRAN FRAMGÅR AV EL-HANDLINGAR

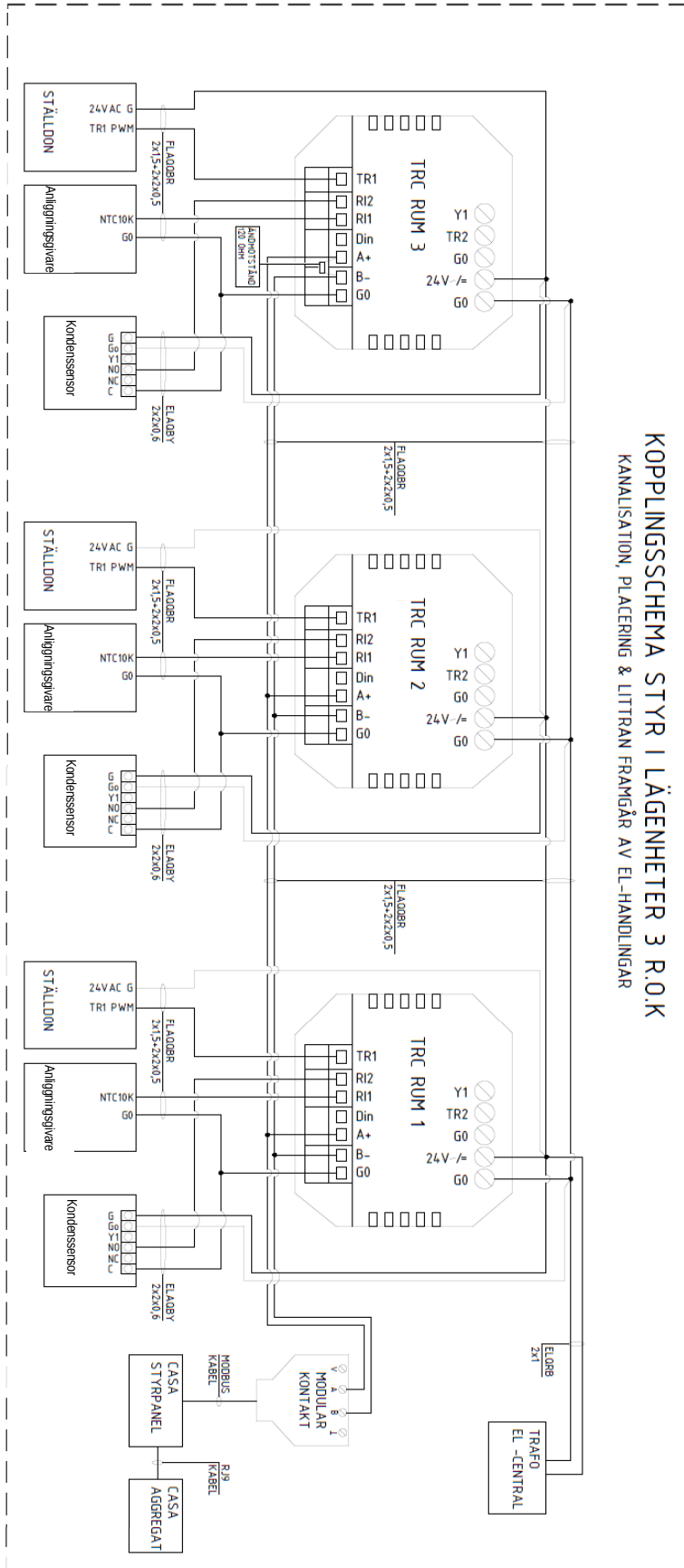
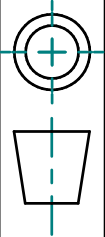


TOLERANCE IN GENERAL:

ISO 2768-1 ☐ Fine ☒ Medium ☐ Coarse ☐ Very Coarse

Scale 1:1

Projection



KOPPLINGSSCHEMA STYR I LÄGENHETER 3 R.O.K  
KANALISATION, PLACERING & LITTRAN FRAMGÅR AV EL-HANDLINGAR

| Item no |         | Material | Note                |               |         |
|---------|---------|----------|---------------------|---------------|---------|
| Status  | Working | Weight   | Kopplingsschema TRC |               |         |
|         |         | N/A      |                     |               |         |
|         |         |          | Drawn by            | Drawn date    | Site    |
|         |         |          | APN                 | 2024-10-08    | Arvika  |
|         |         |          | Edit by             | Released date | Sheet   |
|         |         |          | APN                 | 2024-11-22    | 3/3     |
|         |         |          | Drawing No.         |               | Edition |
|         |         |          | 000735              |               | 001     |