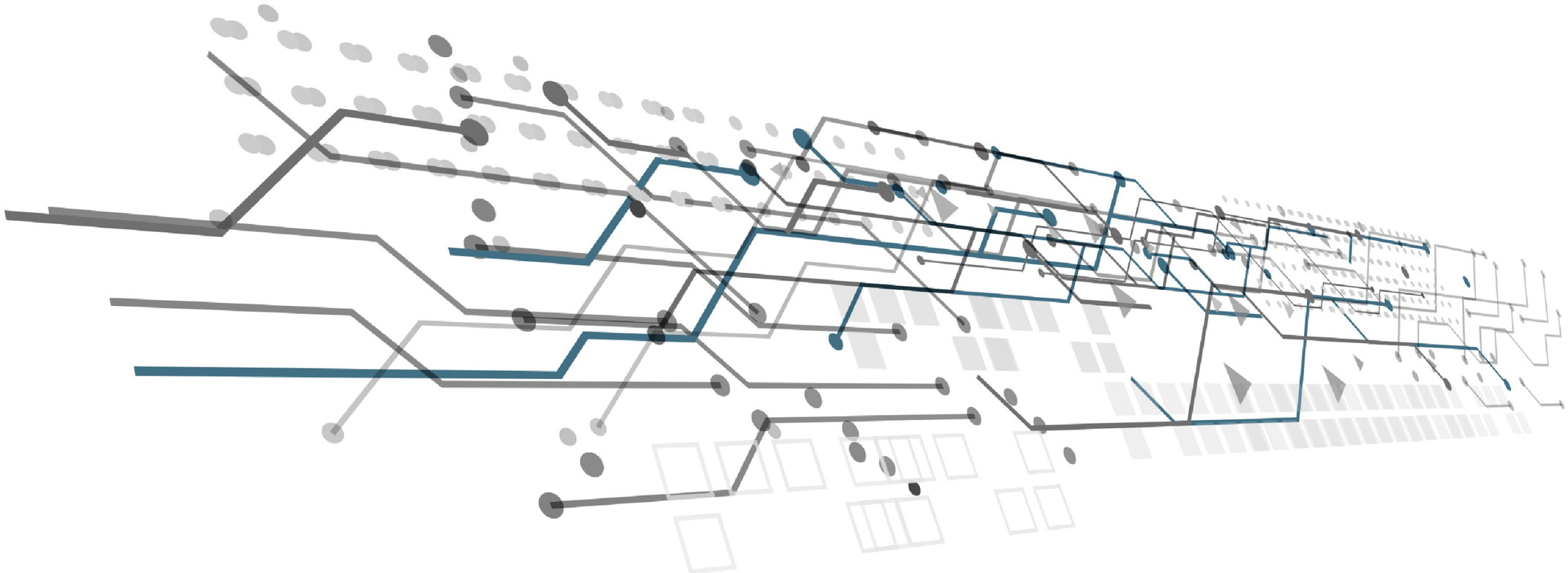
# VEX1000 Wiring diagram

## EXcon+ automatic
## EXcon+ automatik
## Système de règulation EXcon+



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a member of
Soler&Palau Ventilation Group

EXHAUSTO

# VEX1000 - Customized (3x230VAC FANS)

2027960

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Manufactured by: EXHAUSTO | Project: VEX1000 - Customized (3x230VAC FANS) | Start date: | 01-06-2023 | Constructor: | DKTSA | Page: | 1 |
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| 5 | Standards | Standarder | Standarder | 17-08-2026 |
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| 11 | Supplementary selections | Supplerende tilvalg | Kompletterande tillval | 06-08-2026 |
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| 20 | Main current | Hovedstrøm | Huvudström | 06-08-2026 |
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| 27 | Options - Pre-heating controls | Tilvalg - Forvarmestyring | Tillval - Förvärmningsstyrning | 05-08-2026 |
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| 29 | Options - HW/CW/CO controls | Tilvalg - HW/CW/CO-styring | Tillval - HW/CW/CO-styrning | 05-08-2026 |
| 30 | Options - Temperature & CO2 sensors | Tilvalg - Temperatur- og CO2-sensorer | Tillval - Temperatur- och CO2-givare | 05-08-2026 |
| 31 | Standard - Customer connections | Standard - Kundetilslutninger | Standard - Kundanslutningar | 17-08-2026 |
| 40 | Standard - Dual PTH 1 | Standard - Dual PTH 1 | Standard - Dual PTH 1 | 29-07-2026 |
| 41 | Standard - Dual PTH 2 | Standard - Dual PTH 2 | Standard - Dual PTH 2 | 05-08-2026 |
| 42 | Option - ALC™ - Rotor deicing - HR temperature | Tilvalg - ALC™ - Rotorafrimning - VGV-temperatur | Tillval - ALC™ - Rotoravfrostning - ÅV-temperatur | 05-08-2026 |
| 43 | Option - Counter-flow deicing - HR temperature | Tilvalg - Modstrømsafrimning - Varmegenvindingstemperatur | Tillval - Motströmsavfrostning - Återvinningstemperatur | 29-07-2026 |
| 50 | Option – Coil control box layout | Option - Layout af styreboks til flader | Tillval - Layout för batteristyrboxen | 28-07-2026 |
| 51 | Option - Combi Coil (CO) | Tilvalg - Kombiflade (CO) | Tillval - Kombibatteri (CO) | 04-08-2026 |
| 52 | Option - Direct Expansion Heat pump (DX) | Tilvalg - Direkte ekspansion varmepumpe (DX) | Tillval - Direkt expansion värmepump (DX) | 04-08-2026 |
| 53 | Option - Direct Expansion Cooling (DX) | Tilvalg - Direkte ekspansionskøling (DX) | Tillval - Direkt expansionskylning (DX) | 04-08-2026 |
| PARTS | Part list for active components -A1 | Stykliste over aktive komponenter -A1 | Stycklista över aktiva komponenter -A1 | 06-08-2026 |

## Identification of wires by colour (according to EN 60204-1)

| | | | |
|---|---|---|---|
| Main current: | Hovedstrøm: | Huvudström: | 400/230VAC |
| Phase: | Fase: | Fas: | BK |
| Neutral: | Neutral: | Neutral: | BK |
| Earth: | Jord: | Jord: | GNYE |
| Pilot current: | Styrestrøm: | Styrström: | 230/24VAC |
| Phase: | Fase: | Fas: | RD |
| Neutral: | Neutral: | Neutral: | RD |
| Earth: | Jord: | Jord: | GNYE |
| Pilot current: | Styrestrøm: | Styrström: | 24VDC |
| Positive (+): | Positiv (+): | Positiv (+): | BU |
| Negative (-): | Negativ (-): | Negativ (-): | BU |
| Unknown potential: | Ukendt potentiale: | Okänd potential: | |
| All: | Alle: | Alla: | OG |

## Abbreviations of colours (according to IEC 60757)

| | | | |
|---|---|---|---|
| Black | Sort | Svart | BK |
| Brown | Brun | Brun | BN |
| Red | Rød | Röd | RD |
| Orange | Orange | Orange | OG |
| Yellow | Gul | Gul | YE |
| Green | Grøn | Grön | GN |
| Blue | Blå | Blå | BU |
| Light Blue | Lyseblå | Ljusblå | BU |
| Violet | Violet | Violett | VT |
| Gray | Grå | Grå | GY |
| White | Hvid | Vit | WH |
| Pink | Pink | Rosa | PK |
| Green/Yellow | Grøn/Gul | Grön/Gul | GNYE |
| Light- | Lyse- | Ljus- | LT- |

## Labelling of cables and cores (according to IEC 62491)

Method CL

| Method | Description |
|---|---|
| 0 | No labelling |
| A | Use of designated cables or cores |
| R | Identification labelling by means of reference designation (including cable number) |
| CL | Local-end connection labelling |
| CR | Remote-end connection labelling |
| CB | Both-end connection labelling |
| S | Signal labelling |

| Metode | Beskrivelse |
|---|---|
| 0 | Ingen mærkning |
| A | Brug af angivne kabler eller ledere |
| R | Identifikationsmærkning ved hjælp af referencebetegnelse (inklusive kabelnummer) |
| CL | Mærkning ved lokal ende |
| CR | Mærkning ved fjern ende |
| CB | Mærkning i begge ender |
| S | Signalmærkning |

| Metod | Beskrivning |
|---|---|
| 0 | Ingen märkning |
| A | Användning av angivna kablar eller ledare |
| R | Märkning med referensbeteckning |
| CL | Lokal anslutningsmärkning |
| CR | Fjärranslutningsmärkning |
| CB | Märkning i båda ändar |
| S | Signalmärkning |

| Component | Location (en) | Placeringer (da) | Placering (sv) |
|---|---|---|---|
| +A0 | Customer connections | Kundetilslutninger | Kundanslutningar |
| +A1 | Control Panel | Styretavle | Kontrollpanel |
| +A2 | Cable connections to AHU aggregate | Kabelforbindelser til ventilationsaggregat | Kabelanslutningar till ventilationsaggregat |
| +A3 | AHU aggregate | Ventilationsaggregat | ventilationsaggregat |
| +A4 | Outside AHU aggregate | Uden for ventilationsaggregat | Utanför ventilationsaggregat |
| +A5 | Coil control box | Styreboks til flader | Batteristyrbox |

| Component | Object | Examples | Objekt | Eksempler | Objekt | Exempel |
|---|---|---|---|---|---|---|
| -B | Sensing | CO2 & temperature sensors | Føling / Måling | CO2- og temperatursensorer | Avkänning | CO2- & temperaturgivare |
| -C | Storage | USB drives & application keys | Lagring | USB-drev og applikationsnøgler | Lagring | USB-minnen & applikationsnycklar |
| -E | Emitting | Electric heaters | Afgivelse | Elektriske varmelegemer | Avgivning | Elvärmare |
| -F | Protecting | Miniature circuit-breaker | Beskyttelse | Automatsikring | Skydd | Minibrytare |
| -G | Generating | Circulation pumps | Generering | Cirkulationspumper | Generering | Cirkulationspumpar |
| -K | Information processing | AHU Controller | Informationsbehandling | AHU-controller | Informationsbehandling | AHU-styrenhet |
| -M | Driving | Motors | Drivsystem | Motorer | Drivsystem | Motorer |
| -Q | Controlling | Supply disconnecting device | Kobling / Afbrydelse | Forsyningsadskiller | Koppling / Frånskiljning | Frånskiljare |
| -R | Restricting | Valves & dampers | Regulering | Ventiler og spjæld | Reglering | Ventiler & spjäll |
| -S | Human interaction | Touch panel | Betjening | Touchpanel | Mänsklig interaktion | Pekskärm |
| -T | Transforming | Power supply | Transformering | Strømforsyning | Omvandling | Strömförsörjning |
| -U | Holding | Cabinet, wire-duct & DIN-rails | Fastgørelse / Indkapsling | Kabinet, kabelkanal og DIN-skinner | Fastsättning / Kapsling | Skåp, kabelkanal & DIN-skenor |
| -W | Guiding | Cables, wires & tubes | Føring | Kabler, ledninger og rør | Styrning | Kablar, ledare & rör |
| -X | Interfacing | Terminals & plugs | Grænseflade | Klemmer og stik | Gränssnitt | Plintar & kontakter |
| | | | | | | |
| (=) | Function | | Funktion | | Funktion | |
| (+) | Location | | Placering | | Placering | |
| (-) | Product | | Produkt | | Produkt | |
| (.) | Sub name | | Undernavn | | Underbenämning | |

**Principles of structures and reference designations according to ISO/IEC RDS 81346**

**Principper for strukturer og referencebetegnelser i henhold til ISO/IEC 81346.**

**Principer för strukturer och referensbeteckningar enligt ISO/IEC RDS 81346**

| | | | | | | | |
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| Component | Function (en) | Funktion (da) | Funktion (sv) |
|---|---|---|---|
| -0V | Terminals for 0VDC | Klemmer for 0 VDC | Plintar till 0 VDC |
| -24V | Terminals for 24VDC | Klemmer for 24 VDC | Plintar till 24 VDC |
| -B1.1 | Extract air temperature | Fralufttemperatur | Frånluftstemperatur |
| -B1.2 | Exhaust air temperature | Afkasttemperatur | Avluftstemperatur |
| -B2.1 | Outdoor air temperature | Udetemperatur | Uteluftstemperatur |
| -B2.2 | Supply airflow temperature correction | Korrektion af tillufttemperatur | Korrigering av tilluftstemperatur |
| -B3 | Heating return water temperature sensor | Temperaturføler for varmereturvand | Temperaturgivare för värmereturvatten |
| -B4 | CO/CW return water temperature sensor | Temperaturføler for CO/CW returvand | Temperaturgivare för CO/CW returvatten |
| -B5 | Outdoor air temperature sensor (Pre-heater) | Udelufttemperaturføler (forvarmeflade) | Utelufttemperaturgivare (förvärmare) |
| -B6 | CO2 sensor | CO2-sensor | CO2-givare |
| -B7 | Duct temperature sensor | Kanaltemperaturføler | Kanaltemperaturgivare |
| -B8 | CO supply water temperature sensor | Fremløbsvandtemperaturføler CO | Framledningstemperaturgivare CO |
| -B9 | Heat recovery temperature | Varmegenvindingstemperatur | Värmeåtervinningstemperatur |
| -BP1 | Dual PTH 1 | Dual PTH 1 | Dual PTH 1 |
| -BP2 | Dual PTH 2 | Dual PTH 2 | Dual PTH 2 |
| -BP3 | Dual PTH 3 | Dual PTH 3 | Dual PTH 3 |
| -E1 | Cabinet heater | Tavlevarme | Skåpvärmare |
| -E2 | Change over coils | Change-over flade | Change-over batteri |
| -E3 | Electric pre-heating | Elektrisk forvarmeflade | Elektriskt förvärmningsbatteri |
| -E4 | Electric post-heating | Elektrisk eftervarmeflade | Elektriskt eftervärmningsbatteri |
| -F1 | MCB for Exhaust air fan | Automatsikring for afkastventilator | Automatsäkring för frånluftsfläkt |
| -F2 | MCB for Supply air fan | Automatsikring for tilluftsventilator | Automatsäkring för tilluftsfläkt |
| -F3 | MCB for Rotor/Control systems | Automatsikring for rotor-/styresystem | Automatsäkring för rotor-/styrsystem |
| -F4 | MCB for Circulation pumps | Automatsikring for cirkulationspumper | Automatsäkring för cirkulationspumpar |
| -F5 | MCB for power analyzer | Automatsikring for effektanalysator | Automatsäkring för effektanalysator |
| -F10 | MCB for Electric post-heating | Automatsikring for elektrisk eftervarmeflade | Automatsäkring för elektriskt eftervärmningsbatteri |
| -G1 | Heating circulation pump | Cirkulationspumpe varme | Värmecirkulationspump |
| -G2 | CW/CO/DX circulation pump | CW/CO/DX cirkulationspumpe | CW/CO/DX cirkulationspump |
| -K1 | AHU Controller | AHU Controller | AHU-styrenhet |

| Component | Function en | Funktion da | Funktion sv |
|---|---|---|---|
| -K2 | EXT module for Change over | EXT-modul til change-over | EXT-modul för change-over |
| -K10 | Power analyzer main power | Effektanalysator hovedstrøm | Effektanalysator huvudström |
| -K11 | Power analyzer electric heater | Effektanalysator elektrisk eftervarme | Effektanalysator elektrisk eftervärmning |
| -M1.2 | Exhaust air fan | Afkastventilator | Avluftsfläkt |
| -M2.2 | Supply air fan | Tilluftsventilator | Tilluftsfläkt |
| -M3 | Rotor | Rotor | Rotor |
| -PE1 | Earthing terminal block | Jordplint | Jordplint |
| -Q1 | Supply disconnecting device | Forsyningsadskiller | Frånskiljare |
| -R1.1 | Extract air damper (ALC™) | Fraluftspjæld (ALC™) | Frånluftsspjäll (ALC™) |
| -R1.2 | Exhaust air damper | Afkastspjæld | Avluftsspjäll |
| -R2.1 | Outdoor air damper | Udeluftspjæld | Uteluftsspjäll |
| -R2.2 | Supply air damper | Tilluftsspjæld | Tilluftsspjäll |
| -R3 | Bypass damper | Bypass-spjæld | Bypass-spjäll |
| -R4 | Mixing air damper | Blandeluftspjæld | Blandluftsspjäll |
| -R5 | Valve HW | Ventil HW | Ventil HW |
| -R6 | Valve CW | Ventil CW | Ventil CW |
| -R7 | Valve CO/DX | Ventil CO/DX | Ventil CO/DX |
| -S1 | Touch panel | Touchpanel | Pekskärm |
| -S2 | CO system alarm | CO system alarm | Larm för CO-system |
| -S3 | DX control Heat pump | DX-styring varmepumpe | DX-styrning värmepump |
| -T1 | Power supply 230VAC/24VDC | Strømforsyning 230VAC/24VDC | Strömförsörjning 230VAC/24VDC |
| -T10 | Current transformer main power | Strømtransformer hovedstrøm | Strömtransformator huvudström |
| -T11 | Current transformer electric heater | Strømtransformer elektrisk eftervarme | Strömtransformator elektrisk eftervärmning |
| -U1 | Control Panel | Styretavle | Kontrollpanel |
| -X1.1 | Aggregate power plug | Strømstik til aggregat | Strömkontakt aggregat |
| -X1.2 | Aggregate signal plug | Signalstik til aggregat | Signalkontakt aggregat |
| -X1.3 | Modbus splitter 9 x Molex | Modbus-splitter 9 x Molex | Modbus-splitter 9 x Molex |
| -X1 | Aggregate power & signal terminals | Klemmer til aggregatstrøm og signaler | Plintar till aggregatkraft och signaler |
| -X2 | Air dampers terminals | Klemmer til spjæld | Plintar till spjäll |

| Component | Function (en) | Funktion (da) | Funktion (sv) |
|---|---|---|---|
| -X3 | Pre-HE signal terminals | Klemmer til forvarmefladesignaler | Plintar till förvärmningsbatterisignaler |
| -X4 | Electric post-heating terminals | Klemmer til elektrisk eftervarmeflade | Plintar till elektriskt eftervärmningsbatteri |
| -X5 | HW - Power & signal terminals | Klemmer til HW-strøm og signal | Plintar till HW kraft och signal |
| -X6 | CW/CO - Power & signal terminals | Klemmer til CW/CO-strøm og signal | Plintar till CW/CO kraft och signal |
| -X7 | Temperature & CO2 sensors terminals | Klemmer til temperatur- og CO2-sensorer | Plintar till temperatur- och CO2-givare |
| -X8 | Customer connections terminals | Klemmer til kundetilslutning | Plintar till kundanslutning |
| -X9 | Power analyzer terminals | Klemmer til effektanalysator | Plintar till effektanalysator |
| -X10 | Modbus splitter 4 x RJ12 | Modbus-splitter 4 x RJ12 | Modbus-splitter 4 x RJ12 |
| -X51 | CO/DX MODBUS & signal terminals | CO/DX MODBUS- og signalklemmer | CO/DX MODBUS- och signalplintar |
| -X52 | CO/DX Power & signal terminals | CO/DX strøm- og signalklemmer | CO/DX kraft- och signalplintar |
| -X-B3 | Heating return water temperature sensor plug | Stik til føler for varmereturvand | Kontakt för temperaturgivare till värmereturvatten |
| -X-E4.2 | Electric heating plug | Stik til elektrisk varmeflade | Kontakt för elektriskt värmebatteri |
| -X-M1.2 | Exhaust air fan plug | Stik til afkastventilator | Kontakt för avluftsfläkt |
| -X-M2.2 | Supply air fan plug | Stik til tilluftsventilator | Kontakt för tilluftsfläkt |
| -X-M3 | Rotor plug | Stik til rotor | Kontakt för rotor |
| -X-R1.1 | Extract air damper (ALC™) plug | Stik til fraluftspjæld (ALC™) | Kontakt för frånluftsspjäll (ALC™) |
| -X-R1.2 | Exhaust air damper plug | Stik til afkastspjæld | Kontakt för avluftsspjäll |
| -X-R2.1 | Outdoor air damper plug | Stik til udeluftspjæld | Kontakt för uteluftsspjäll |
| -X-R2.2 | Supply air damper plug | Stik til tilluftsspjæld | Kontakt för tilluftsspjäll |
| -X-R3 | Bypass damper plug | Stik til bypass-spjæld | Kontakt för bypass-spjäll |
| -X-R4 | Mixing air damper plug | Stik til blandeluftspjæld | Kontakt för blandluftsspjäll |

# Principles

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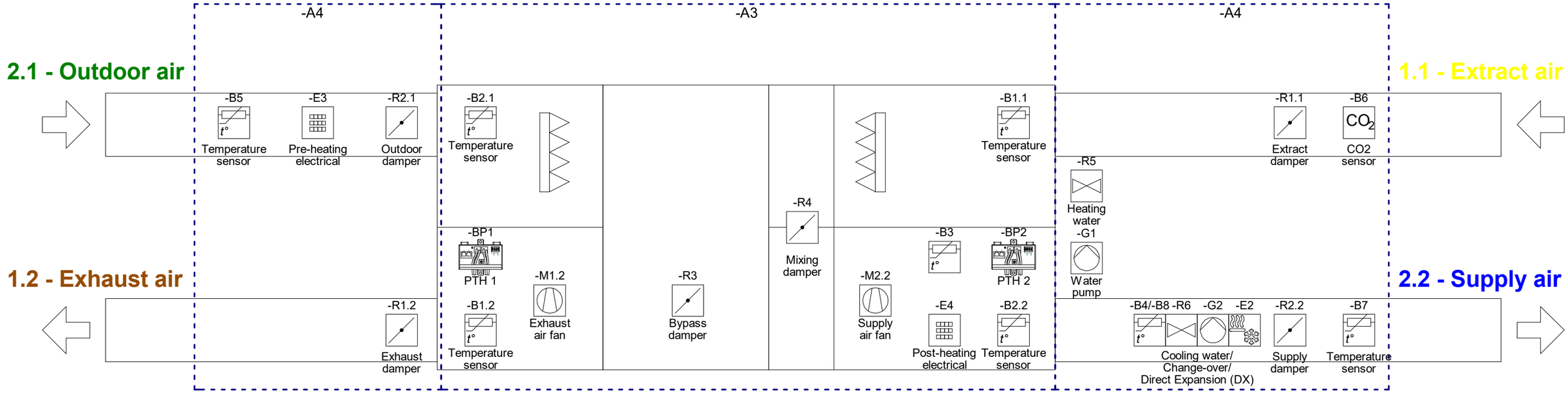
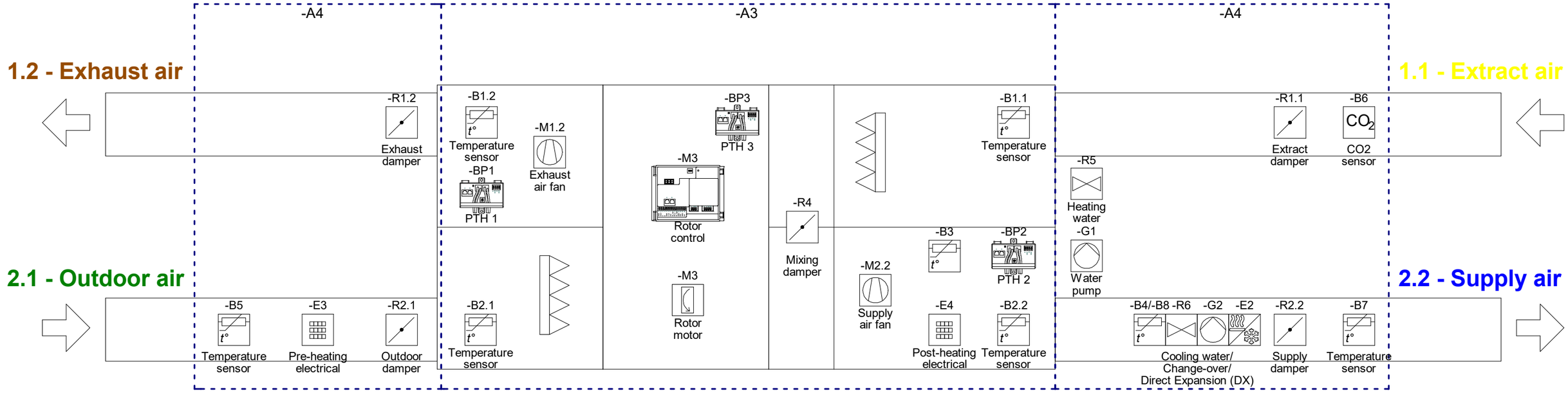
# COUNTER-FLOW




# ROTOR

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# Arrangement drawings

| | | | | | | | |
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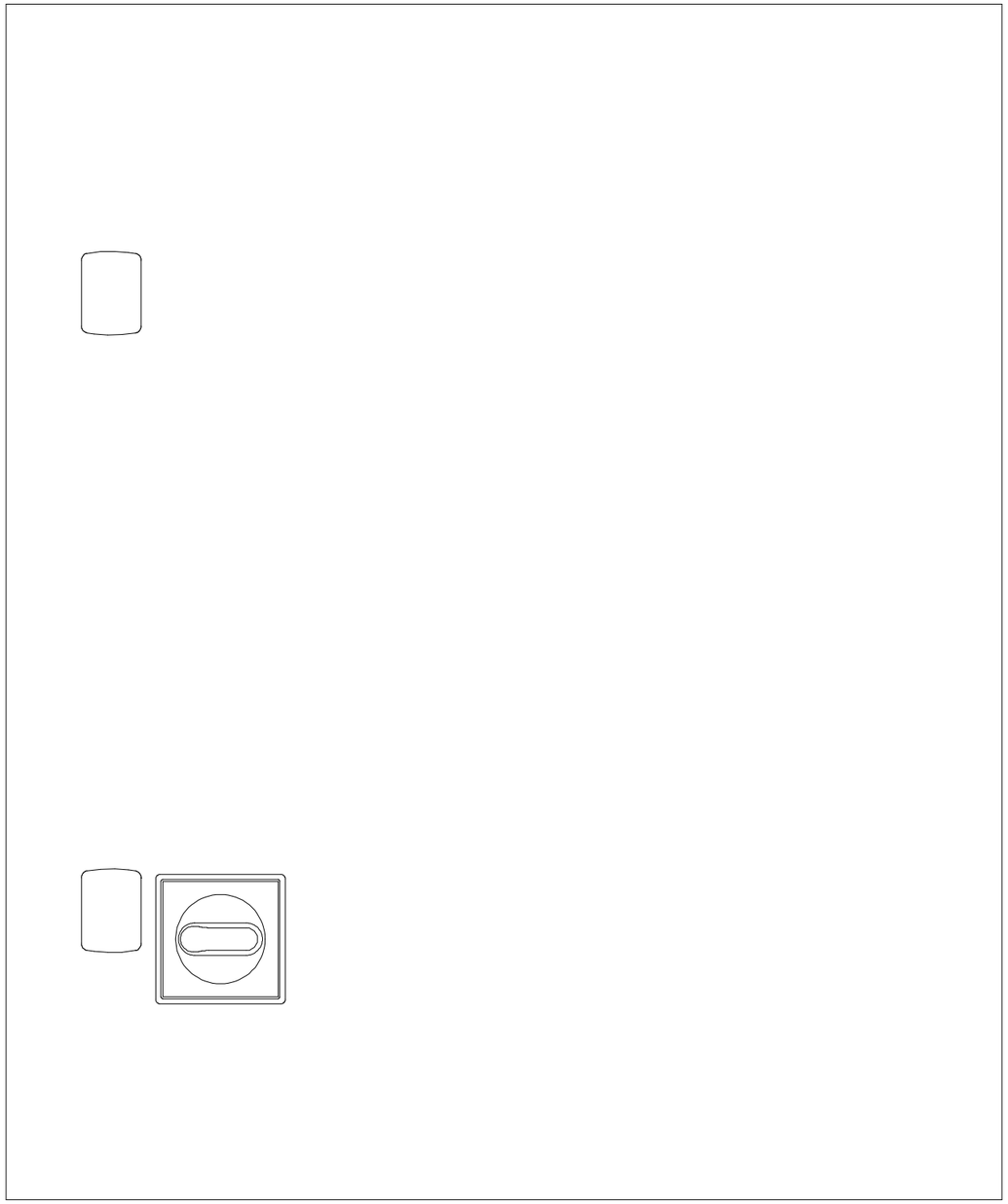

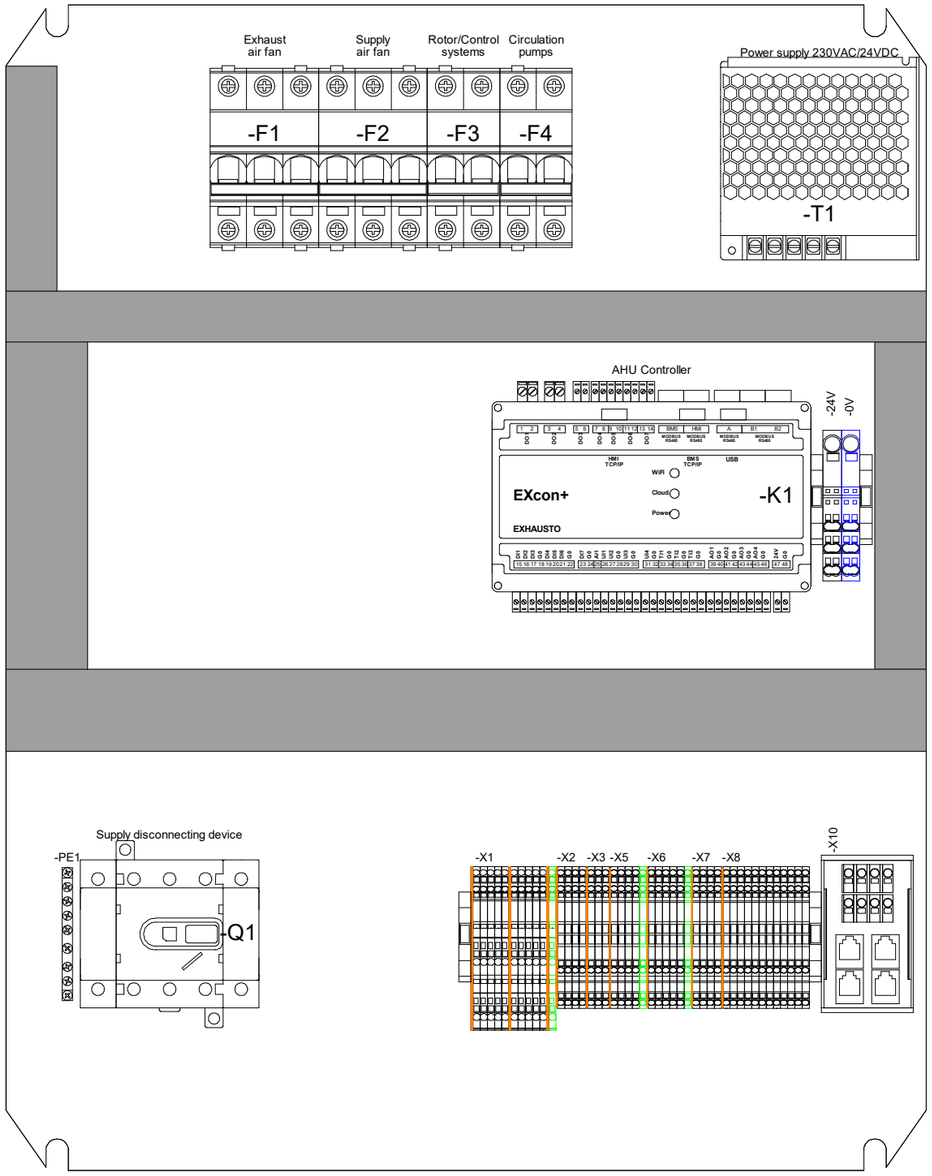


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## Supplementary selections

### Option 1: Power supply Electric heater (HE)

-F10 Circuit breaker 4P
-X4 Wire terminals

### Option 2: Power analyser Main power (PAM)

-K10 Three-phase power analyser
-T10 Three-phase current transformers 125A
-F5 Circuit breaker 4P C2A

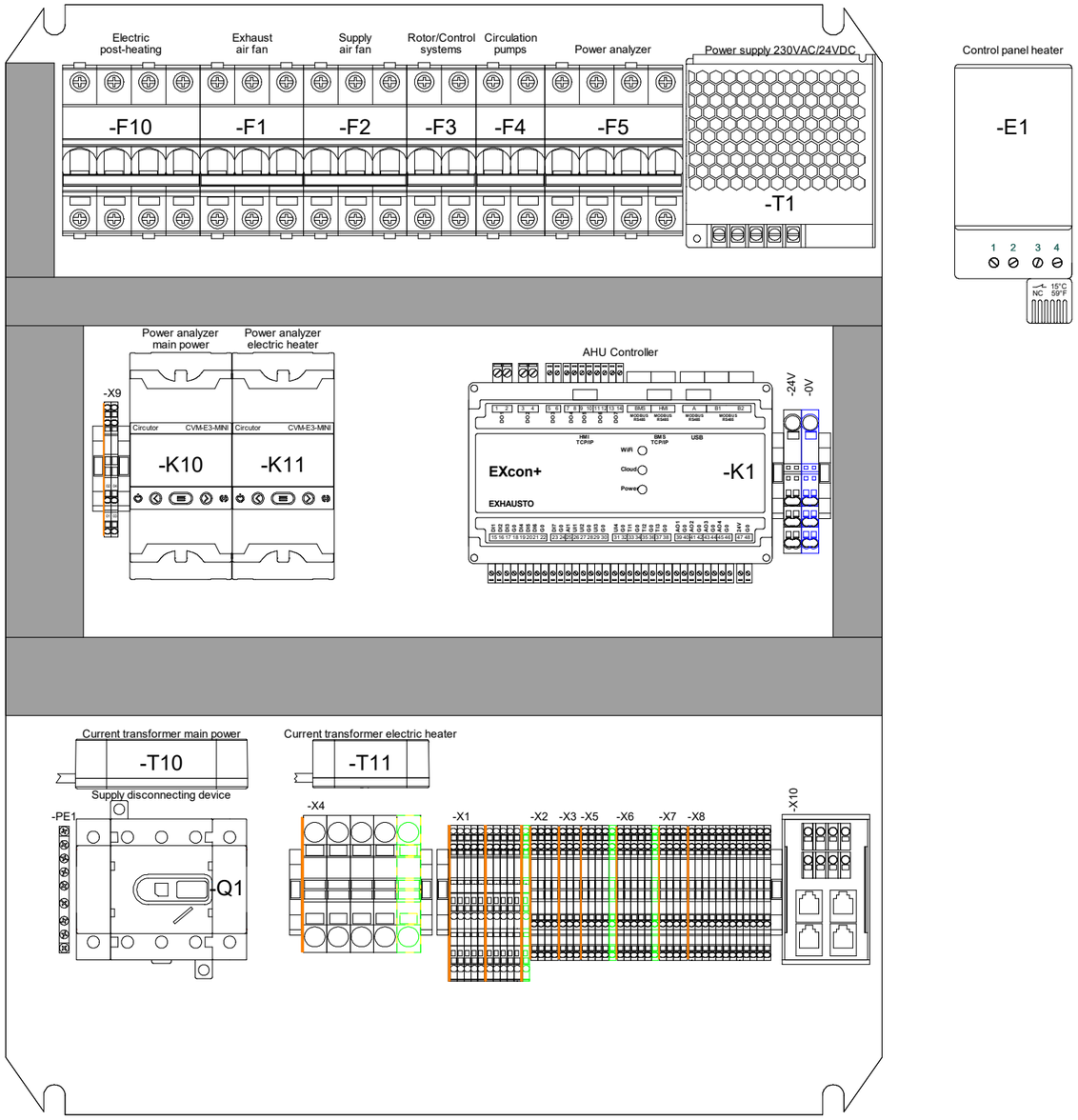
### Option 3: Power analyser Electric heater (PAH)

-K11 Three-phase power analyser
-T11 Three-phase current transformers 63A

Option 3 is not selectable without option 1 and 2.

### Option 4: Control panel heater

-E1 Control panel heater

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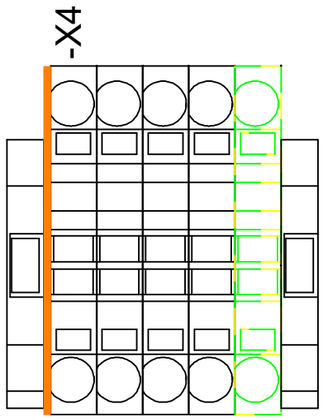
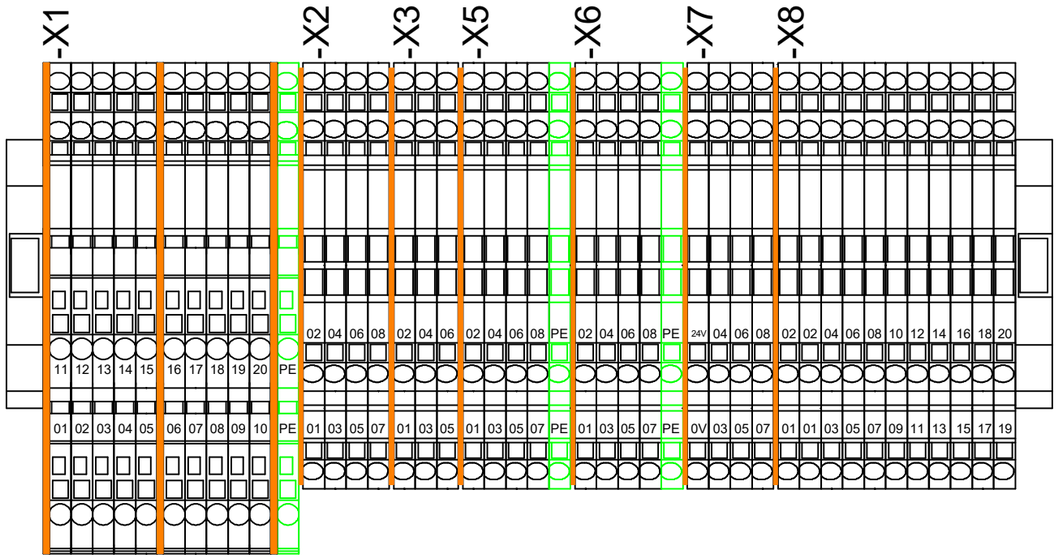
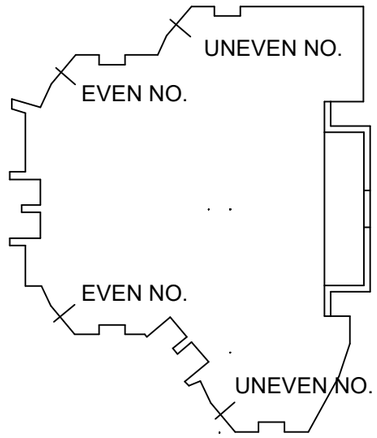
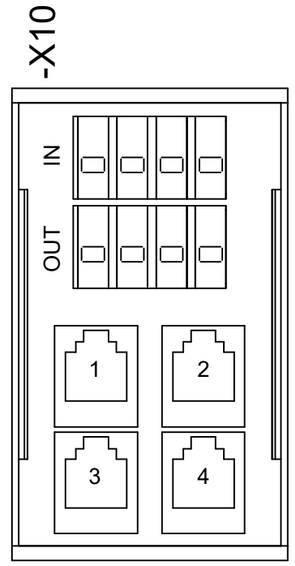
| Drawing number: | Page Title: | Revision: F | Scale: 1:3 | Next page: 12 |
| 2027960 | Supplementary selections | Replaces revision: D | Format: A3 | Pages in total: 40 |




| | | | |
|---|---|---|---|
| -X1:01 | -M1.2 | Exhaust air fan | L1 |
| -X1:02 | -M1.2 | Exhaust air fan | L2 |
| -X1:03 | -M1.2 | Exhaust air fan | L3 |
| -X1:04 | -M2.2 | Supply air fan | L1 |
| -X1:05 | -M2.2 | Supply air fan | L2 |
| -X1:06 | -M2.2 | Supply air fan | L3 |
| -X1:07 | -M3 | Rotor | L |
| -X1:08 | -M3 | Rotor | N |
| -X1:09 | -MB | Modbus | 0V |
| -X1:10 | -MB | Modbus | 24V |
| -X1:11 | -MB | Modbus | B- |
| -X1:12 | -MB | Modbus | A+ |
| -X1:13 | -E4 | Electric post-heating | 0-10V |
| -X1:14 | -E4 | Electric post-heating | GND |
| -X1:15 | -E4 | Electric post-heating | Fire |
| -X1:16 | -E4 | Electric post-heating | Fail |
| -X1:17 | -E4 | Electric post-heating | Run OK |
| -X1:18 | -E4 | Electric post-heating | Run OK |
| -X1:19 | -B3 | Temperature sensor | - |
| -X1:20 | -B3 | Temperature sensor | - |
| -X1:PE | -PE | Protective Earth | PE |

| | | | |
|---|---|---|---|
| -X2:01 | -R1.1 | Extract air damper | 0V |
| -X2:03 | -R1.1 | Extract air damper | 24V |
| -X2:05 | -R1.1 | Extract air damper | B- |
| -X2:07 | -R1.1 | Extract air damper | A+ |
| -X2:02 | -R2.2 | Supply air damper | 0V |
| -X2:04 | -R2.2 | Supply air damper | 24V |
| -X2:06 | -R2.2 | Supply air damper | B- |
| -X2:08 | -R2.2 | Supply air damper | A+ |
| -X3:01 | -E3 | Electric pre-heating | 0-10V |
| -X3:02 | -E3 | Electric pre-heating | GND |
| -X3:03 | -E3 | Electric pre-heating | Fire |
| -X3:04 | -E3 | Electric pre-heating | Fail |
| -X3:05 | -E3 | Electric pre-heating | Run OK |
| -X3:06 | -E3 | Electric pre-heating | Run OK |
| -X4:01 | -E4 | PWR Electric heating | L1 |
| -X4:02 | -E4 | PWR Electric heating | L2 |
| -X4:03 | -E4 | PWR Electric heating | L3 |
| -X4:04 | -E4 | PWR Electric heating | N |
| -X4:PE | -E4 | PWR Electric heating | PE |

| | | | |
|---|---|---|---|
| -X5:01 | -R1 | Valve HW | 0V |
| -X5:02 | -R1 | Valve HW | 24V |
| -X5:03 | -R1 | Valve HW | Signal |
| -X5:04 | -R1 | Valve HW | Not used |
| -X5:05 | -G1 | HW circulation pump | NC |
| -X5:06 | -G1 | HW circulation pump | COM |
| -X5:07 | -G1 | HW circulation pump | L |
| -X5:08 | -G1 | HW circulation pump | N |
| -X5:PE | -G1 | HW circulation pump | PE |
| -X6:01 | -R2 | Valve CW/CO | 0V |
| -X6:02 | -R2 | Valve CW/CO | 24V |
| -X6:03 | -R2 | Valve CW/CO | Signal |
| -X6:04 | -R2 | Valve CW/CO | Not used |
| -X6:05 | -G2 | CW/CO circulation pump | NC |
| -X6:06 | -G2 | CW/CO circulation pump | COM |
| -X6:07 | -G2 | CW/CO circulation pump | L |
| -X6:08 | -G2 | CW/CO circulation pump | N |
| -X6:PE | -G2 | CW/CO circulation pump | PE |

| | | | |
|---|---|---|---|
| -X7:01 | -B5 | Pre-heater temperature sensor | - |
| -X7:02 | -B5 | Pre-heater temperature sensor | - |
| -X7:03 | -B6 | CO2 sensor | GND |
| -X7:04 | -B6 | CO2 sensor | OUT |
| -X7:05 | -B6 | CO2 sensor | +VCC |
| -X7:06 | - | Spare terminal | |
| -X7:07 | -B7 | Duct temperature sensor | - |
| -X7:08 | -B7 | Duct temperature sensor | - |
| -X8:0V | | Customer connections | 24V power supply |
| -X8:24V | | Customer connections | 24V power supply |
| -X8:01 | | Customer connections | Fire alarm input |
| -X8:02 | | Customer connections | Fire alarm input |
| -X8:03 | | Customer connections | Option input 1 |
| -X8:04 | | Customer connections | Option input 1 |
| -X8:05 | | Customer connections | Option input 2 |
| -X8:06 | | Customer connections | Option input 2 |
| -X8:07 | | Customer connections | Option input 3 |
| -X8:08 | | Customer connections | Option input 3 |
| -X8:09 | | Customer connections | Option input 4 |
| -X8:10 | | Customer connections | Option input 4 |
| -X8:11 | | Customer connections | A alarm output |
| -X8:12 | | Customer connections | A alarm output |
| -X8:13 | | Customer connections | Option output 1 |
| -X8:14 | | Customer connections | Option output 1 |
| -X8:15 | | Customer connections | Option output 2 |
| -X8:16 | | Customer connections | Option output 2 |
| -X8:17 | | Customer connections | BMS - RS485 |
| -X8:18 | | Customer connections | BMS - RS485 |
| -X8:19 | | Customer connections | Start signal |
| -X8:20 | | Customer connections | Start signal |

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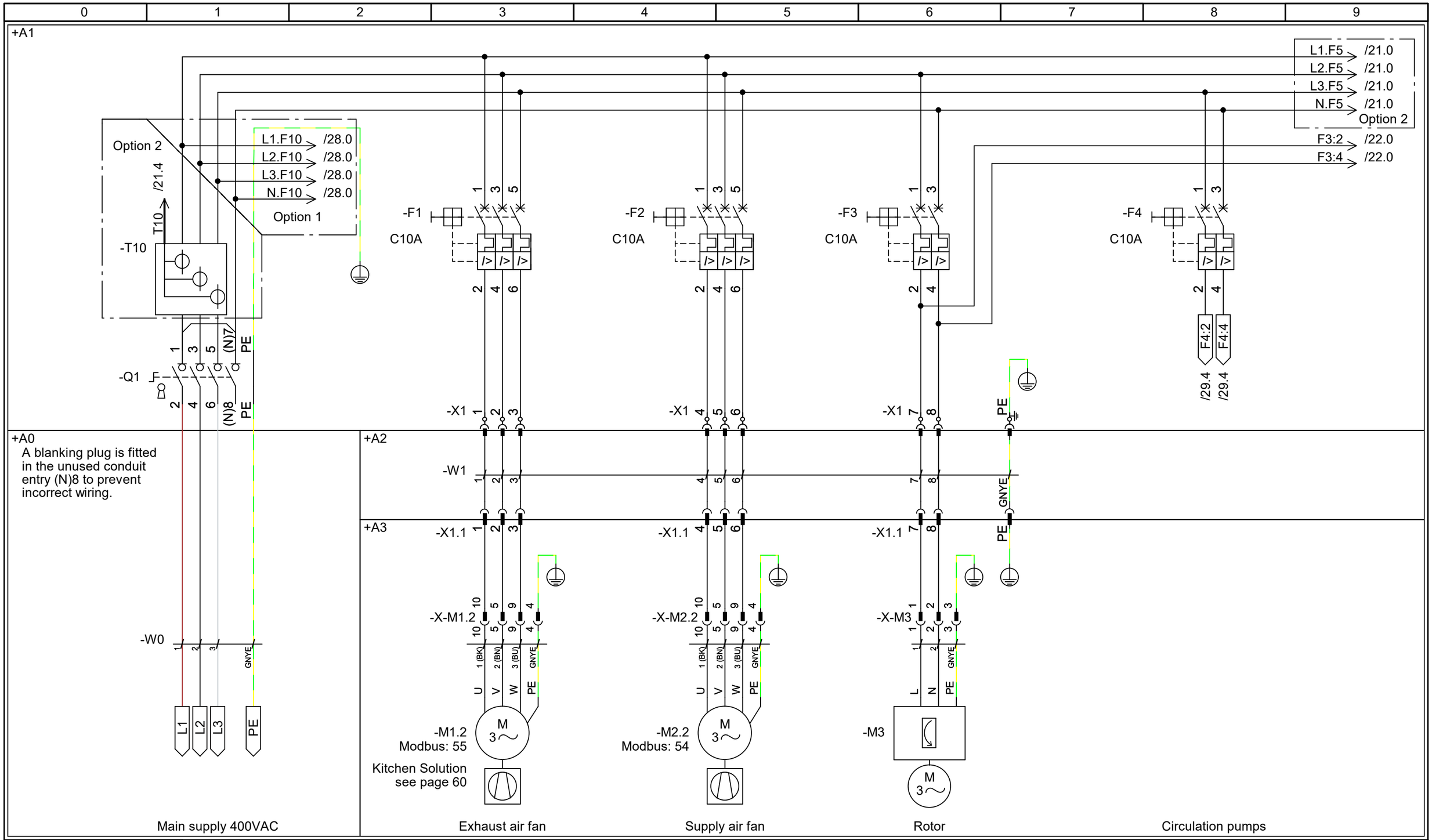
|---|---|---|---|---|---|
| Manufactured by: EXHAUSTO | Project: VEX1000 - Customized (3x230VAC FANS) | Start date: 01-06-2023 | Constructor: DKTSA | Page: 12 |
| | | Revision date: 17-08-2026 | Approved by: DKBP | Previous page: 11 |
| Drawing number: 2027960 | Page Title: Control panel terminals | Revision: F | Scale: 1:1 | Next page: 20 |
| | | Replaces revision: D | Format: A3 | Pages in total: 40 |

# Circuit diagrams

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Manufactured by: | Project: | Start date: | 01-06-2023 | Constructor: | DKTSA | Page: | Circuit diagrams |
| EXHAUSTO | VEX1000 - Customized (3x230VAC FANS) | Revision date: | 17-08-2026 | Approved by: | DKBP | Previous page: | 12 |
| Drawing number: | Page Title: | Revision: | F | Scale: | 1:1 | Next page: | 20 |
| 2027960 | Circuit diagrams | Replaces revision: | D | Format: | A3 | Pages in total: | 40 |

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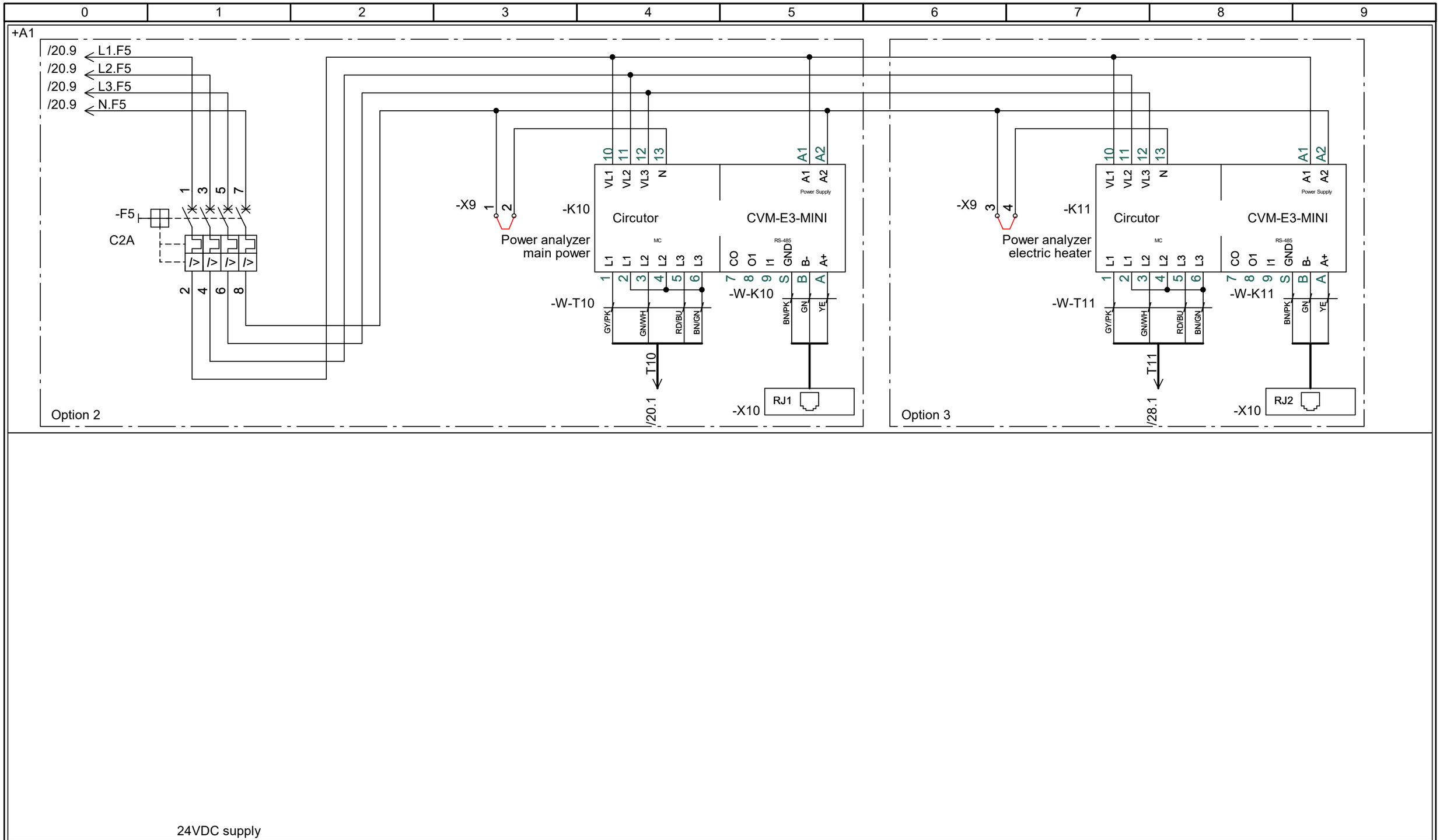


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| | | Revision date: | 17-08-2026 | Approved by: | DKBP | Previous page: | 20 |
| Drawing number: 2027960 | Page Title: Power analyzers - 3 phase | Revision: | F | Scale: | 1:1 | Next page: | 22 |
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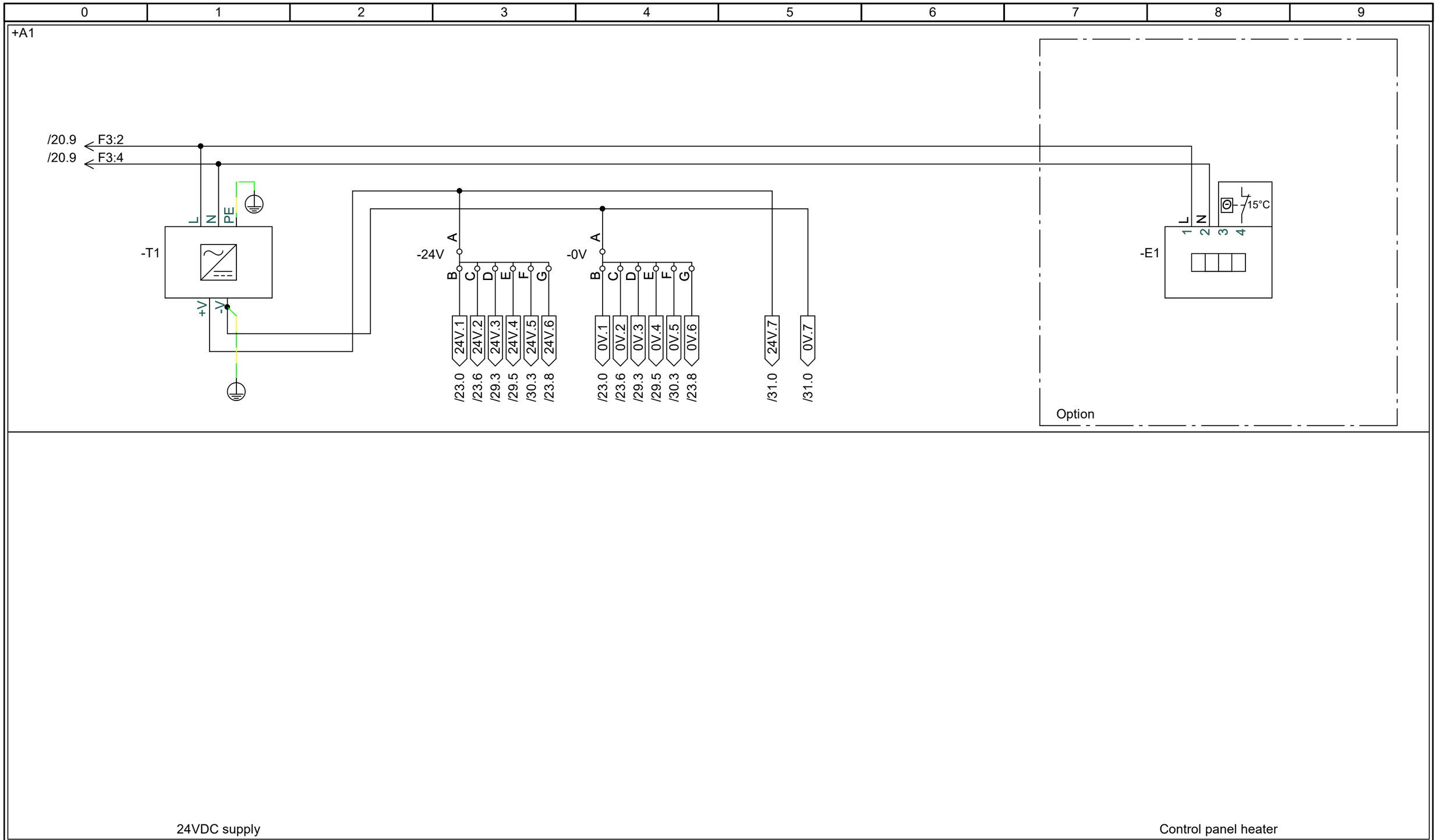


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| | | Revision date: | 17-08-2026 | Approved by: | DKBP | Previous page: 21 |
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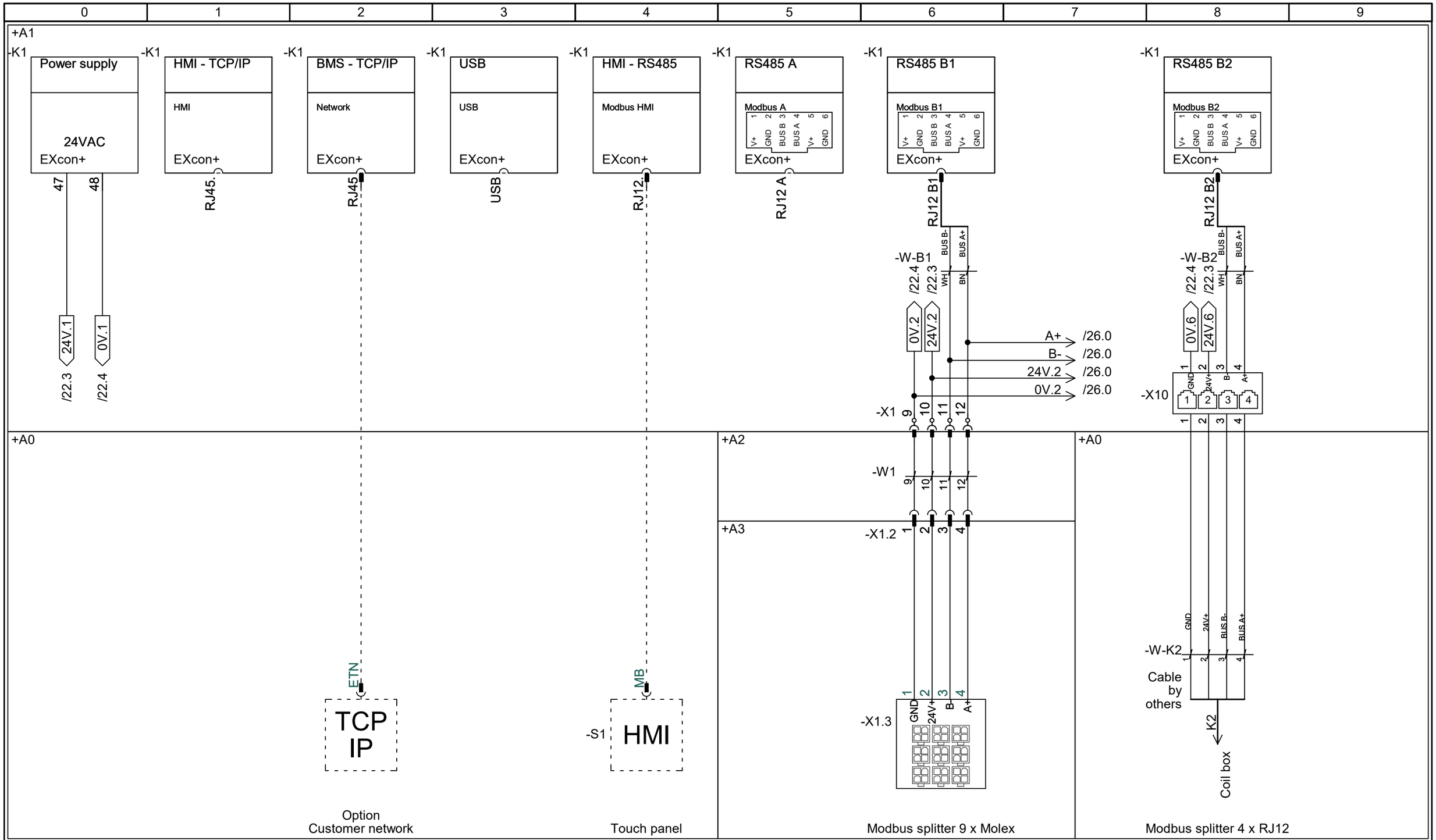


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| | | Revision date: 17-08-2026 | Approved by: DKBP | Previous page: 22 | |
| Drawing number: 2027960 | Page Title: Standard - Modbus connections | Revision: F | Scale: 1:1 | Next page: 24 | |
| | | Replaces revision: D | Format: A3 | Pages in total: 40 | |

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
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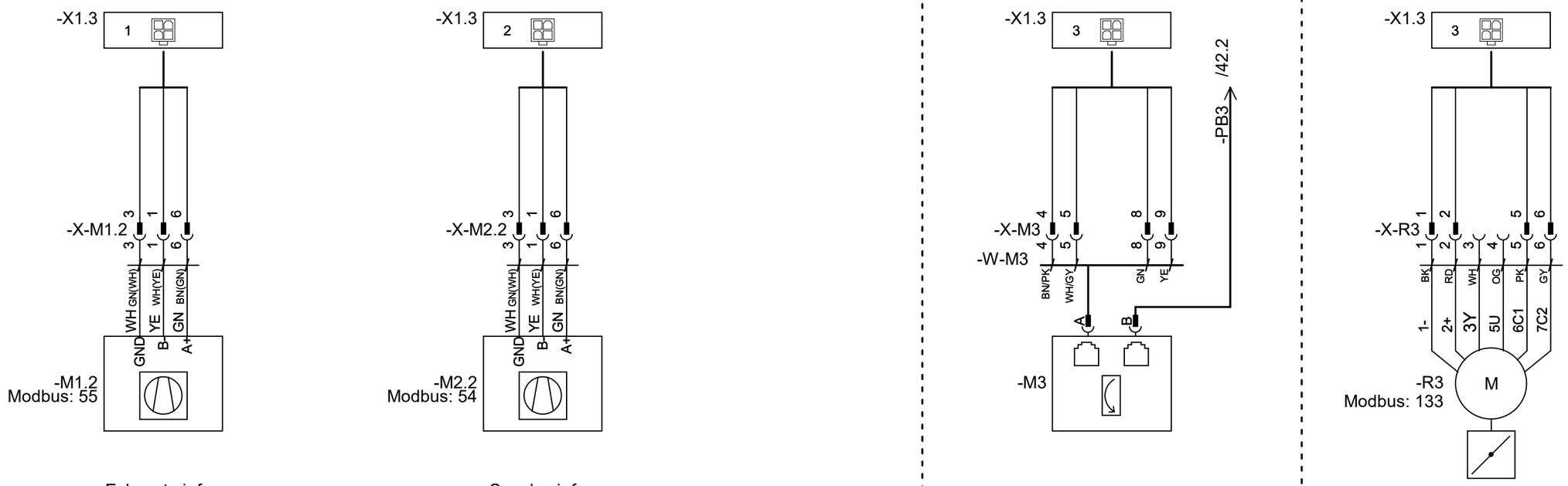
+A1

Rotor drive option

Counter-flow option

+A3




Exhaust air fan Control

Supply air fan Control

Rotor drive

Bypass damper

| Manufactured by: | Project: | Start date: 01-06-2023 | Constructor: DKTSA | Page: 24 |
|---|---|---|---|---|
| EXHAUSTO | VEX1000 - Customized (3x230VAC FANS) | Revision date: 17-08-2026 | Approved by: DKBP | Previous page: 23 |
| Drawing number: | Page Title: | Revision: F | Scale: 1:1 | Next page: 25 |
| 2027960 | Standard - Fan & Rotor/Bypass controls | Replaces revision: D | Format: A3 | Pages in total: 40 |

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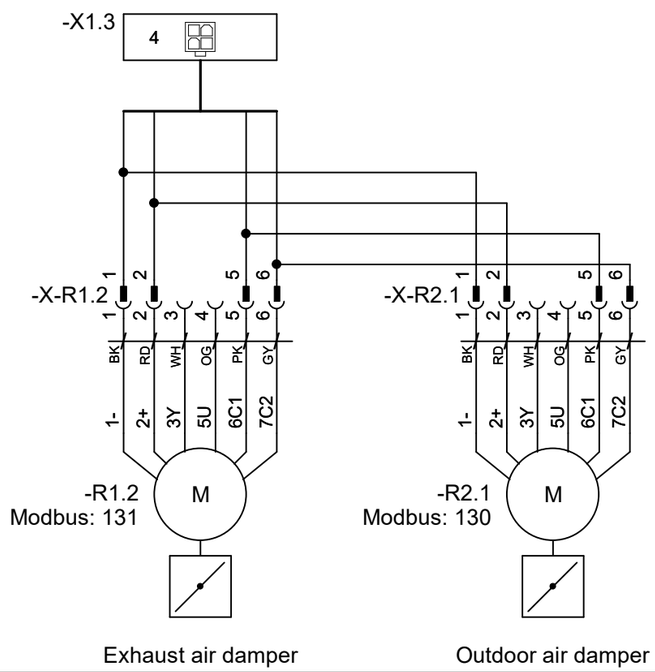
+A1

+A3

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| | | Revision date: | 17-08-2026 | Approved by: | DKBP | Previous page: | 24 |
| Drawing number: 2027960 | Page Title: Standard - Dampers | Revision: | F | Scale: | 1:1 | Next page: | 26 |
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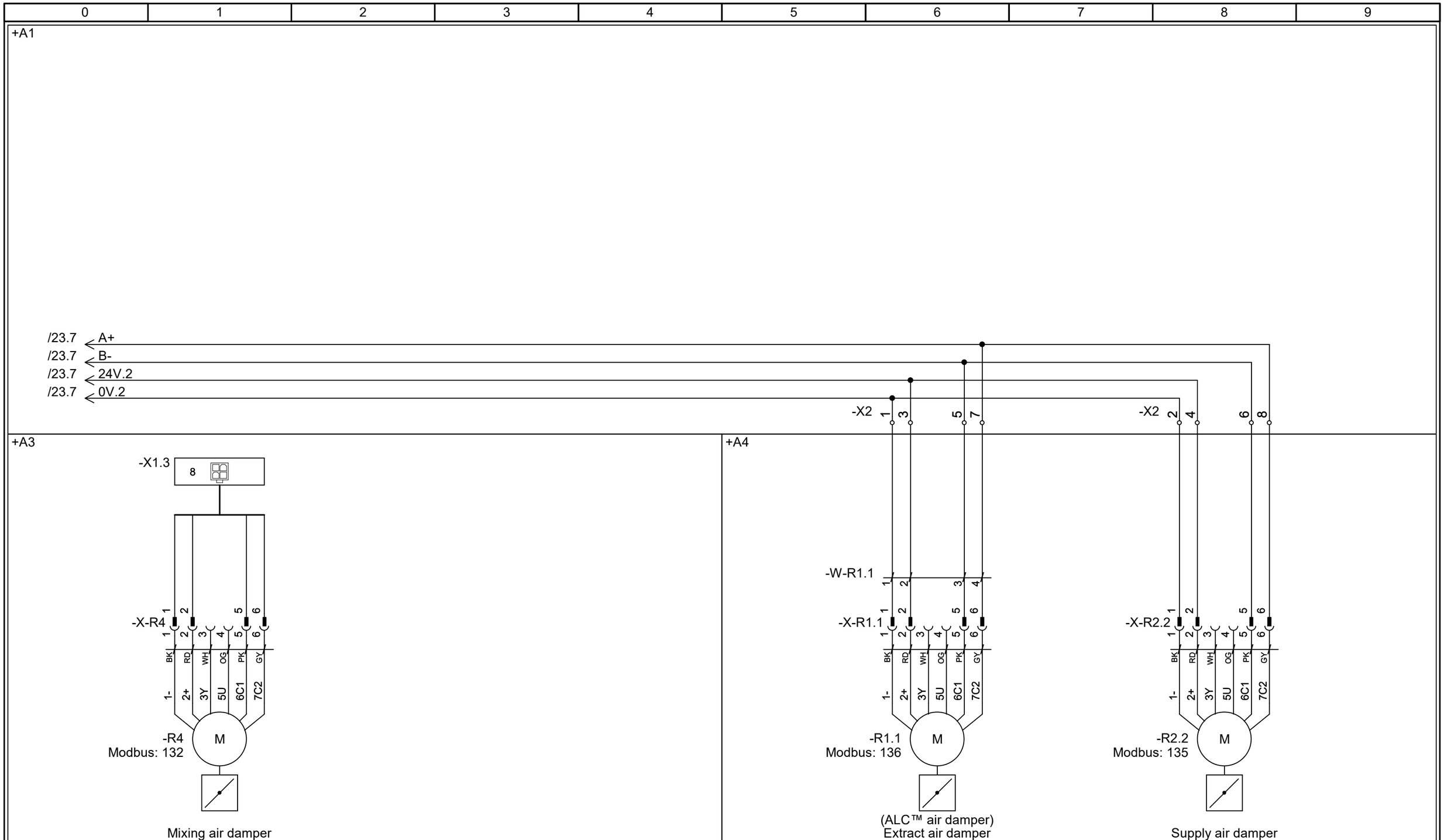


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| Manufactured by: EXHAUSTO | Project: VEX1000 - Customized (3x230VAC FANS) | Start date: | 01-06-2023 | Constructor: | DKTSA | Page: 26 |
| | | Revision date: | 17-08-2026 | Approved by: | DKBP | Previous page: 25 |
| Drawing number: 2027960 | Page Title: Options - Dampers | Revision: | F | Scale: | 1:1 | Next page: 27 |
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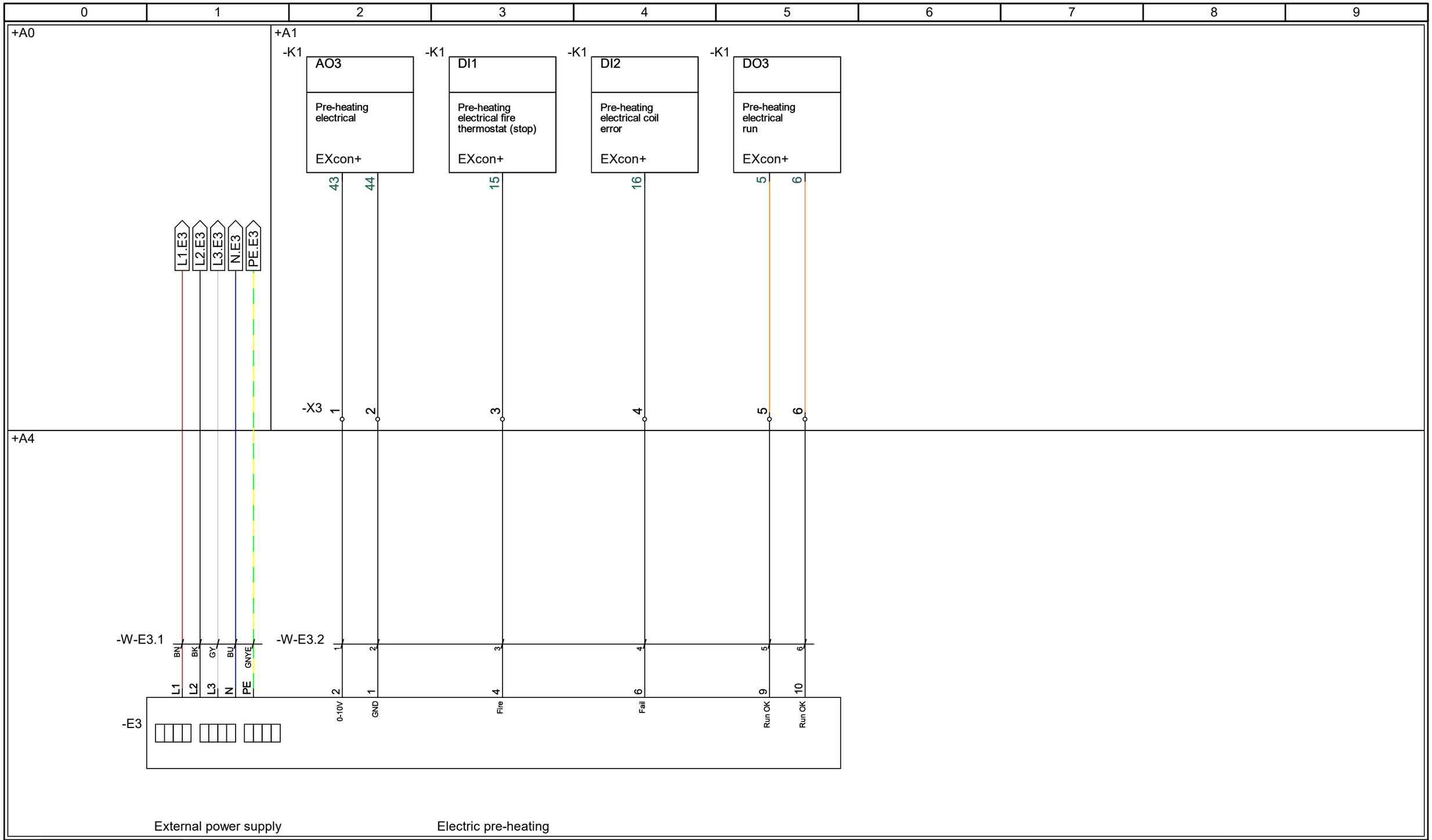


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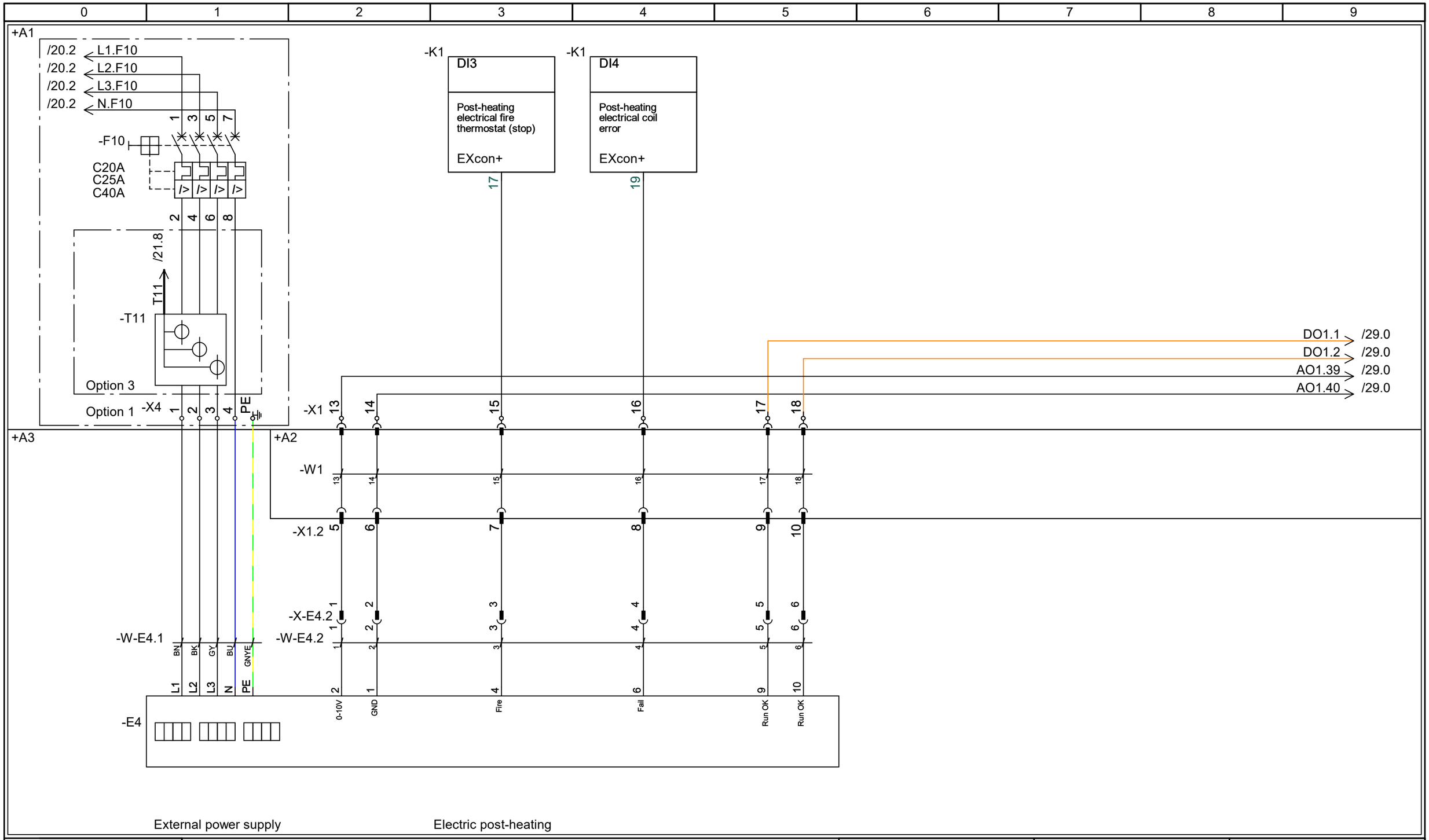
| | | Revision date: | 17-08-2026 | Approved by: | DKBP | Previous page: 26 |
| Drawing number: 2027960 | Page Title: Options - Pre-heating controls | Revision: | F | Scale: | 1:1 | Next page: 28 |
| | | Replaces revision: | D | Format: | A3 | Pages in total: 40 |

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| | | Revision date: | 17-08-2026 | Approved by: | DKBP | Previous page: 27 |
| Drawing number: 2027960 | Page Title: Options - Post-heating controls | Revision: | F | Scale: | 1:1 | Next page: 29 |
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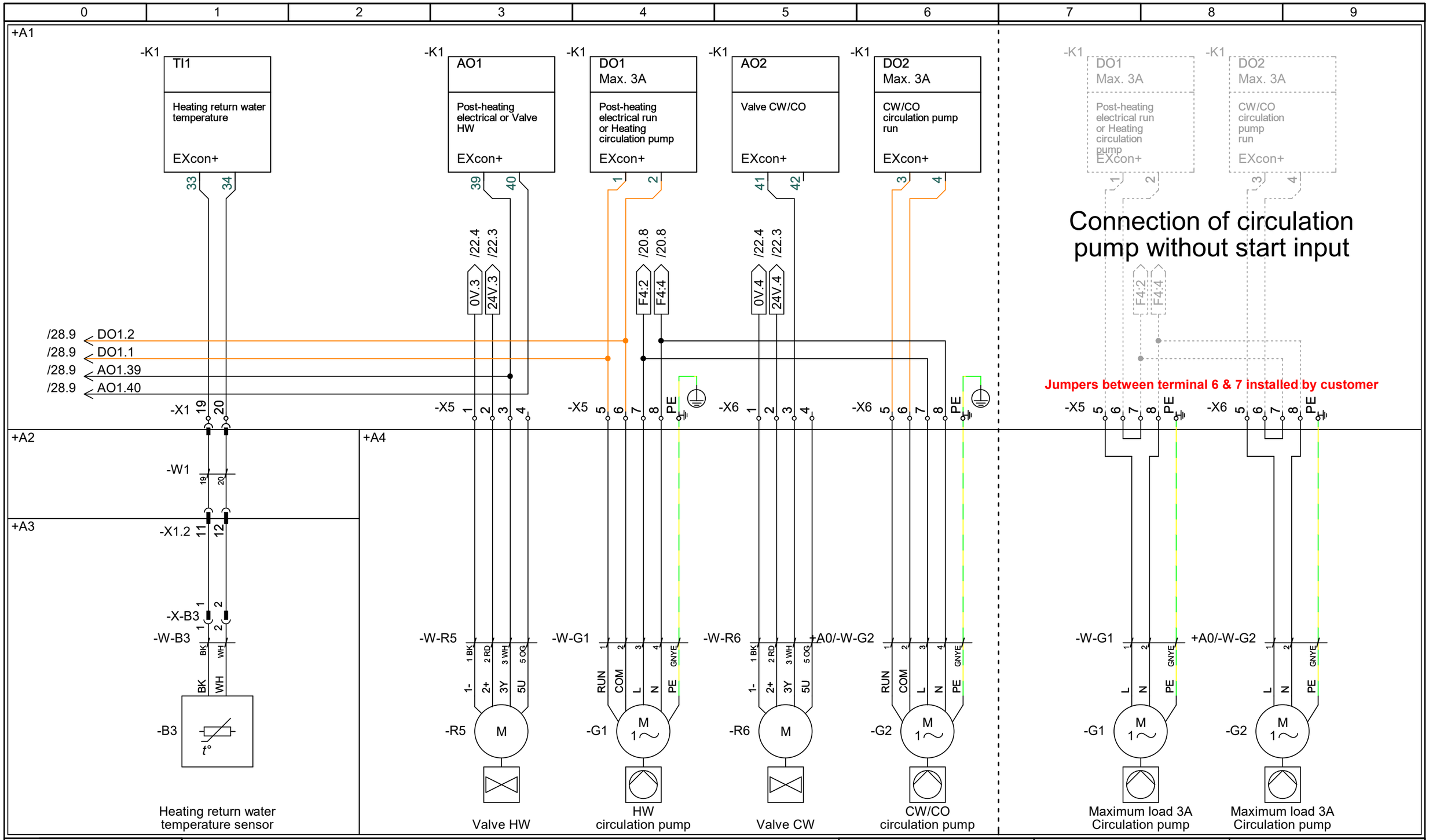


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| Drawing number: 2027960 | Page Title: Options - HW/CW/CO controls | Revision: F | Scale: 1:1 | Next page: 30 | |
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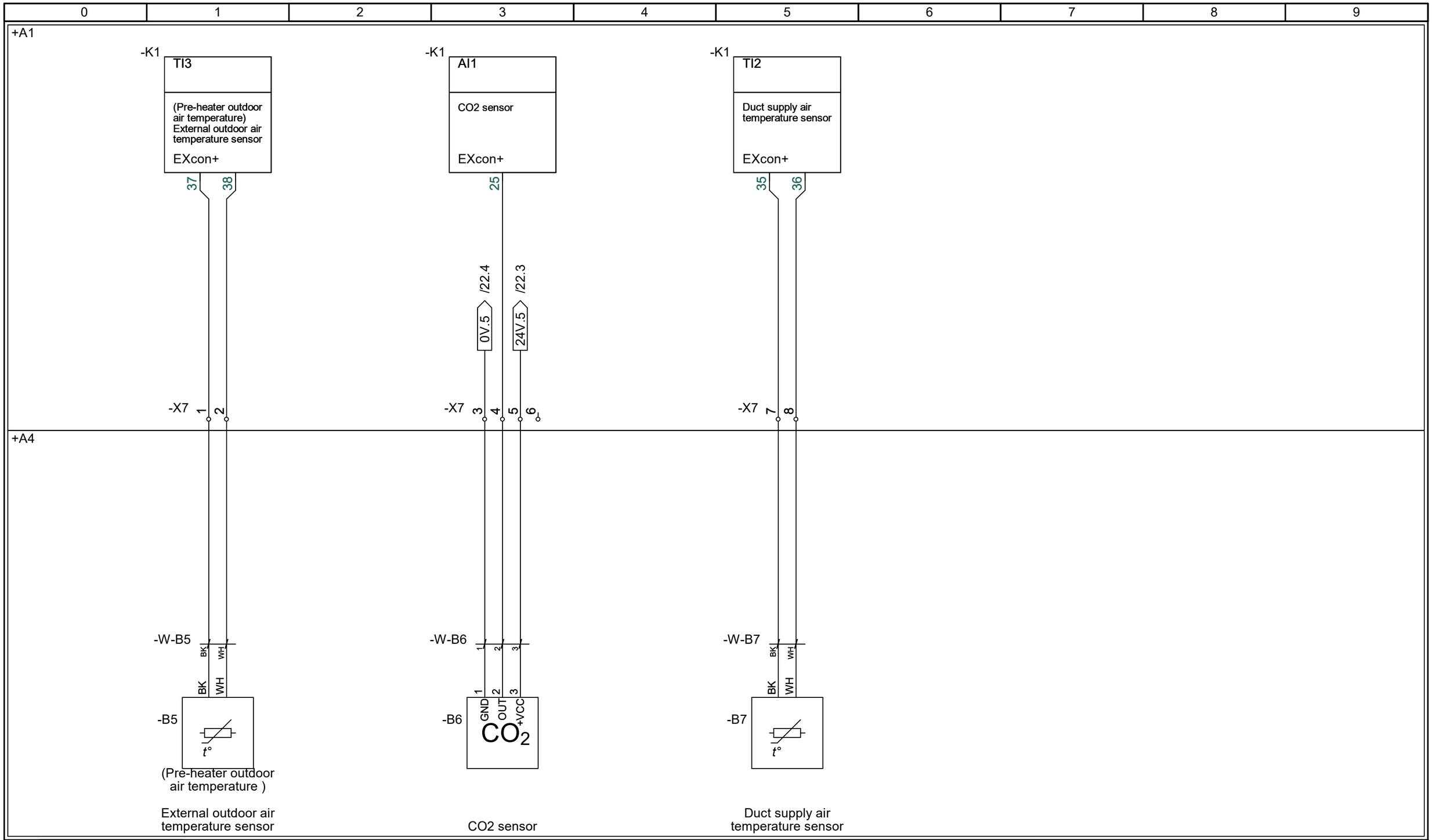


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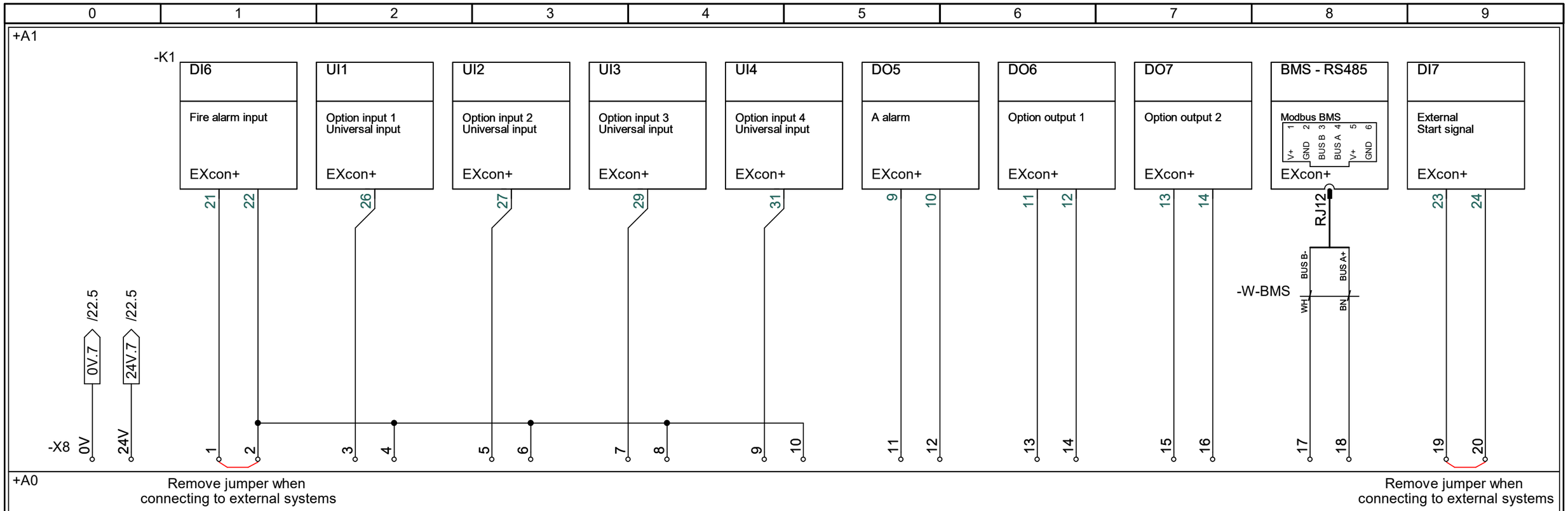
| Manufactured by: EXHAUSTO | Project: VEX1000 - Customized (3x230VAC FANS) | Start date: | 01-06-2023 | Constructor: | DKTSA | Page: 30 |
| | | Revision date: | 17-08-2026 | Approved by: | DKBP | Previous page: 29 |
| Drawing number: 2027960 | Page Title: Options - Temperature & CO2 sensors | Revision: | F | Scale: | 1:1 | Next page: 31 |
| | | Replaces revision: | D | Format: | A3 | Pages in total: 40 |




| IO | Default setting | Comment |
|---|---|---|
| Digital input 6 | Fire alarm | Mandatory |
| Universal input 1 - Option 1 | External High Speed mode | - |
| Universal input 2 - Option 2 | External Medium Speed mode | Can change depending on the coil configuration |
| Universal input 3 - Option 3 | External Low Speed mode | Can change depending on the coil configuration |
| Universal input 4 - Option 4 | External resetting of alarms | Can change depending on the coil configuration |
| Digital output 5 | "A" alarm | Mandatory |
| Digital output 6 - Option 1 | User relay | - |
| Digital output 7 - Option 2 | Operating relay | - |
| RS485 | Modbus BMS | - |
| Digital input 7 | External Start signal | Mandatory |

For further information on connecting accessories, see document 3006851

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|---|---|---|---|---|---|---|
| Manufactured by: EXHAUSTO | Project: VEX1000 - Customized (3x230VAC FANS) | Start date: | 01-06-2023 | Constructor: | DKTSA | Page: 31 |
| | | Revision date: | 17-08-2026 | Approved by: | DKBP | Previous page: 30 |
| Drawing number: 2027960 | Page Title: Standard - Customer connections | Revision: | F | Scale: | 1:1 | Next page: 40 |
| | | Replaces revision: | D | Format: | A3 | Pages in total: 40 |

# Pressure & temperature transmitters

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|---|---|---|---|---|---|---|---|
| Manufactured by: EXHAUSTO | Project: VEX1000 - Customized (3x230VAC FANS) | Start date: | 01-06-2023 | Constructor: | DKTSA | Page: | PTH |
| | | Revision date: | 17-08-2026 | Approved by: | DKBP | Previous page: | 31 |
| Drawing number: 2027960 | Page Title: Pressure & temperature transmitters | Revision: | F | Scale: | 1:1 | Next page: | 40 |
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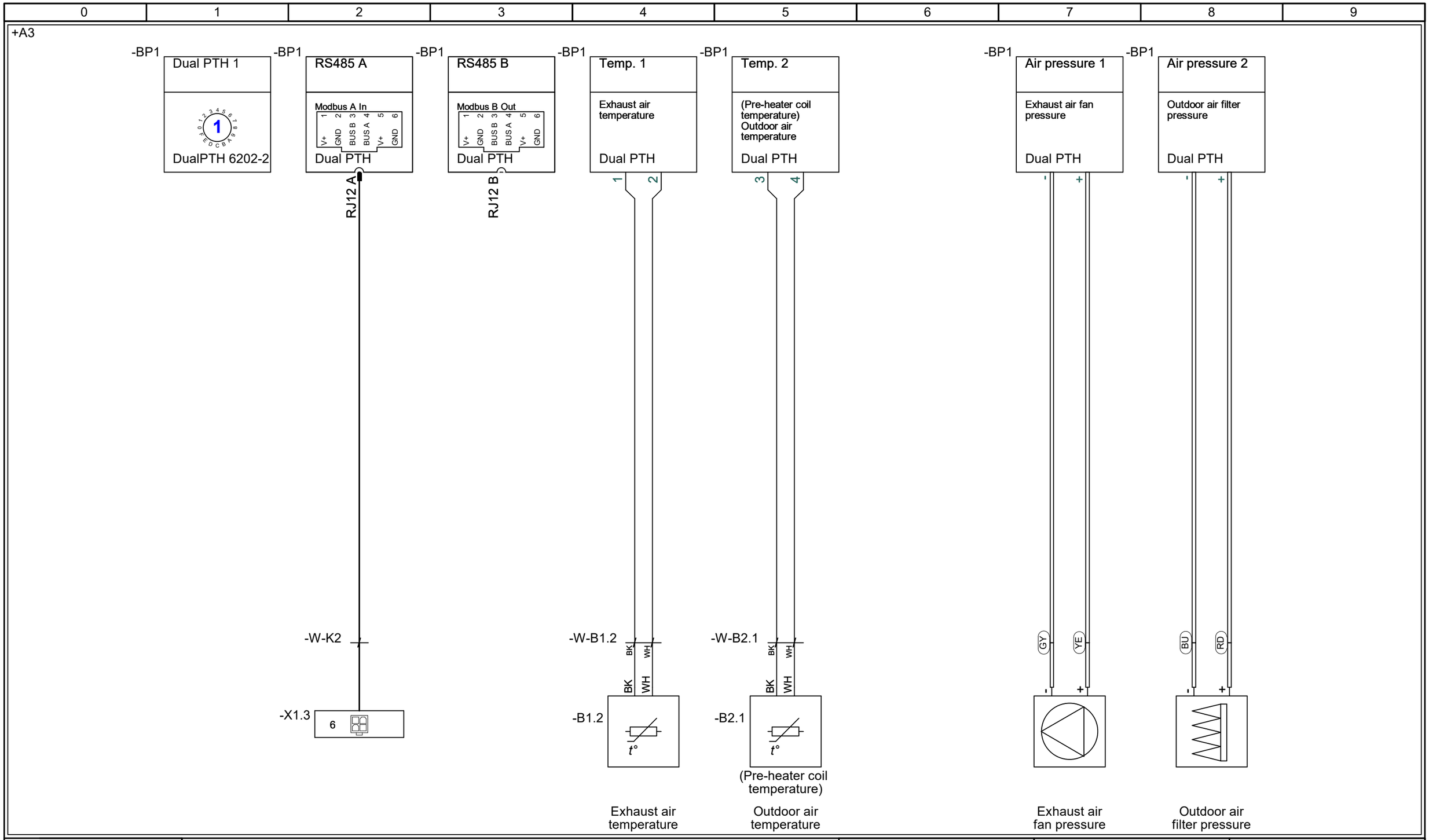


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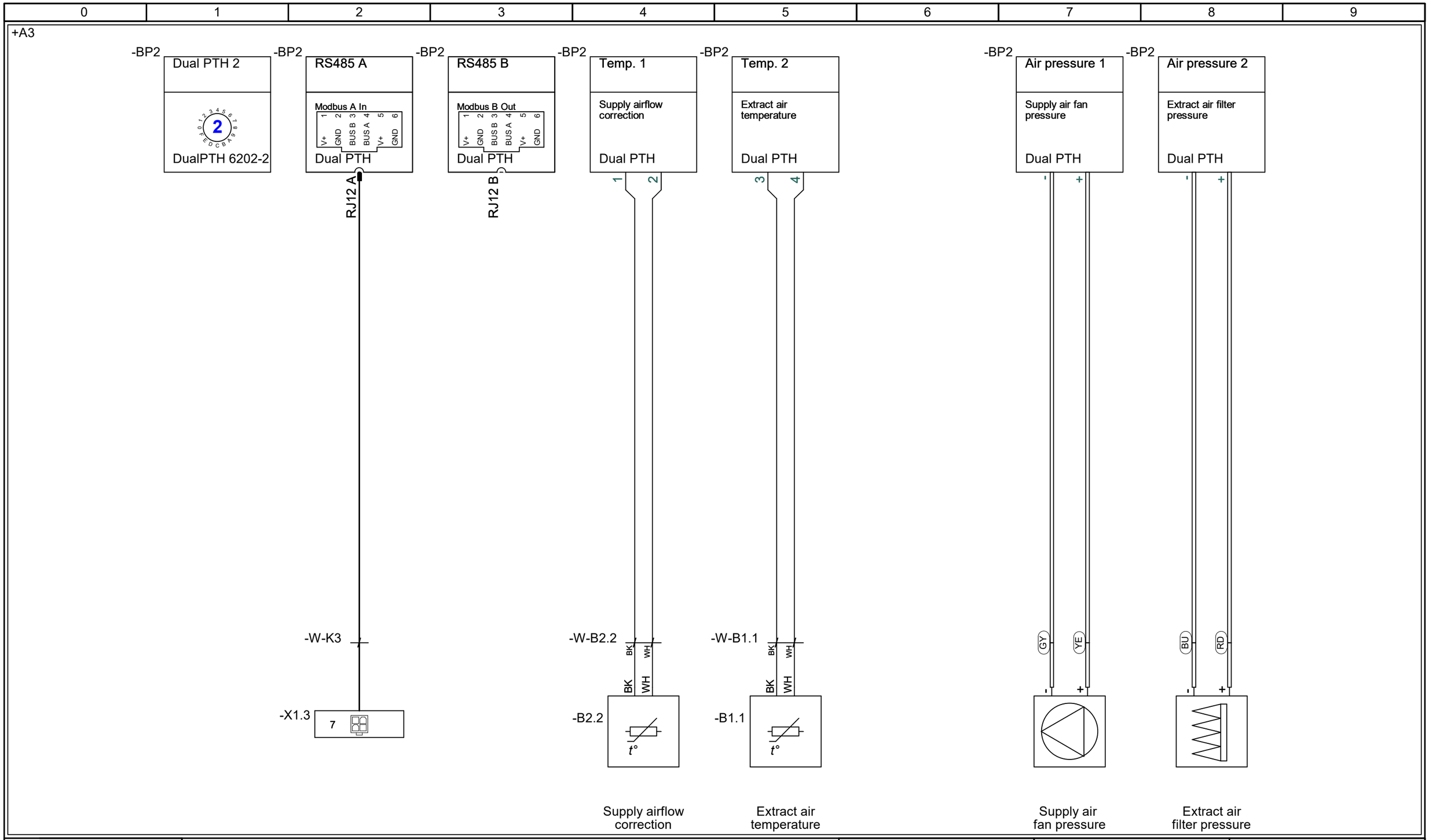
| Manufactured by: EXHAUSTO | Project: VEX1000 - Customized (3x230VAC FANS) | Start date: 01-06-2023 | Constructor: DKTSA | Page: 40 | |
| | | Revision date: 17-08-2026 | Approved by: DKBP | Previous page: 31 | |
| Drawing number: 2027960 | Page Title: Standard - Dual PTH 1 | Revision: F | Scale: 1:1 | Next page: 41 | |
| | | Replaces revision: D | Format: A3 | Pages in total: 40 | |

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| Manufactured by: EXHAUSTO | Project: VEX1000 - Customized (3x230VAC FANS) | Start date: 01-06-2023 | Constructor: DKTSA | Page: 41 | |
| | | Revision date: 17-08-2026 | Approved by: DKBP | Previous page: 40 | |
| Drawing number: 2027960 | Page Title: Standard - Dual PTH 2 | Revision: F | Scale: 1:1 | Next page: 42 | |
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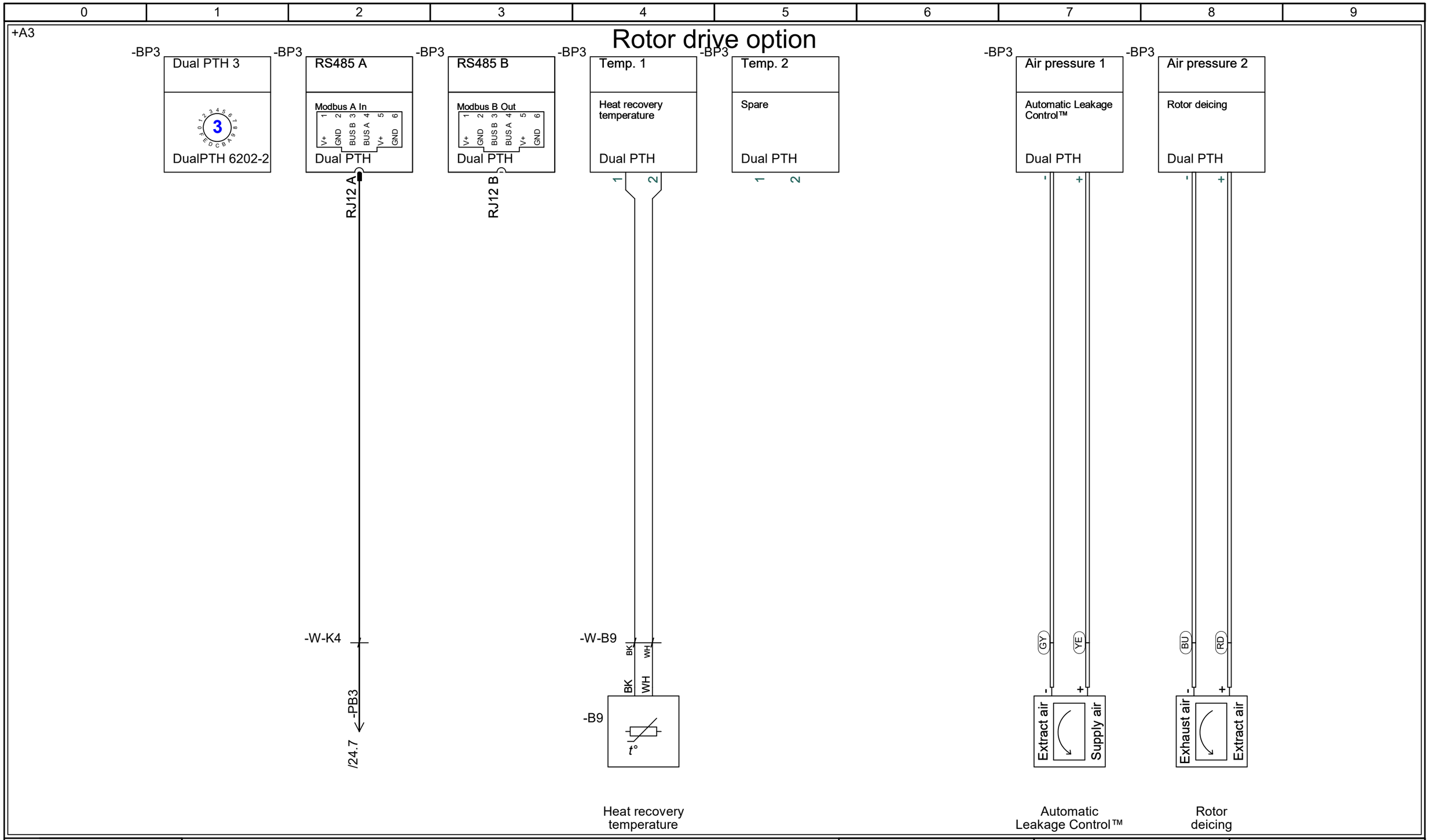


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| | | Revision date: | 17-08-2026 | Approved by: | DKBP | Previous page: 41 |
| Drawing number: 2027960 | Page Title: Option - ALC™ - Rotor deicing - Heat recovery temp. | Revision: | F | Scale: | 1:1 | Next page: 43 |
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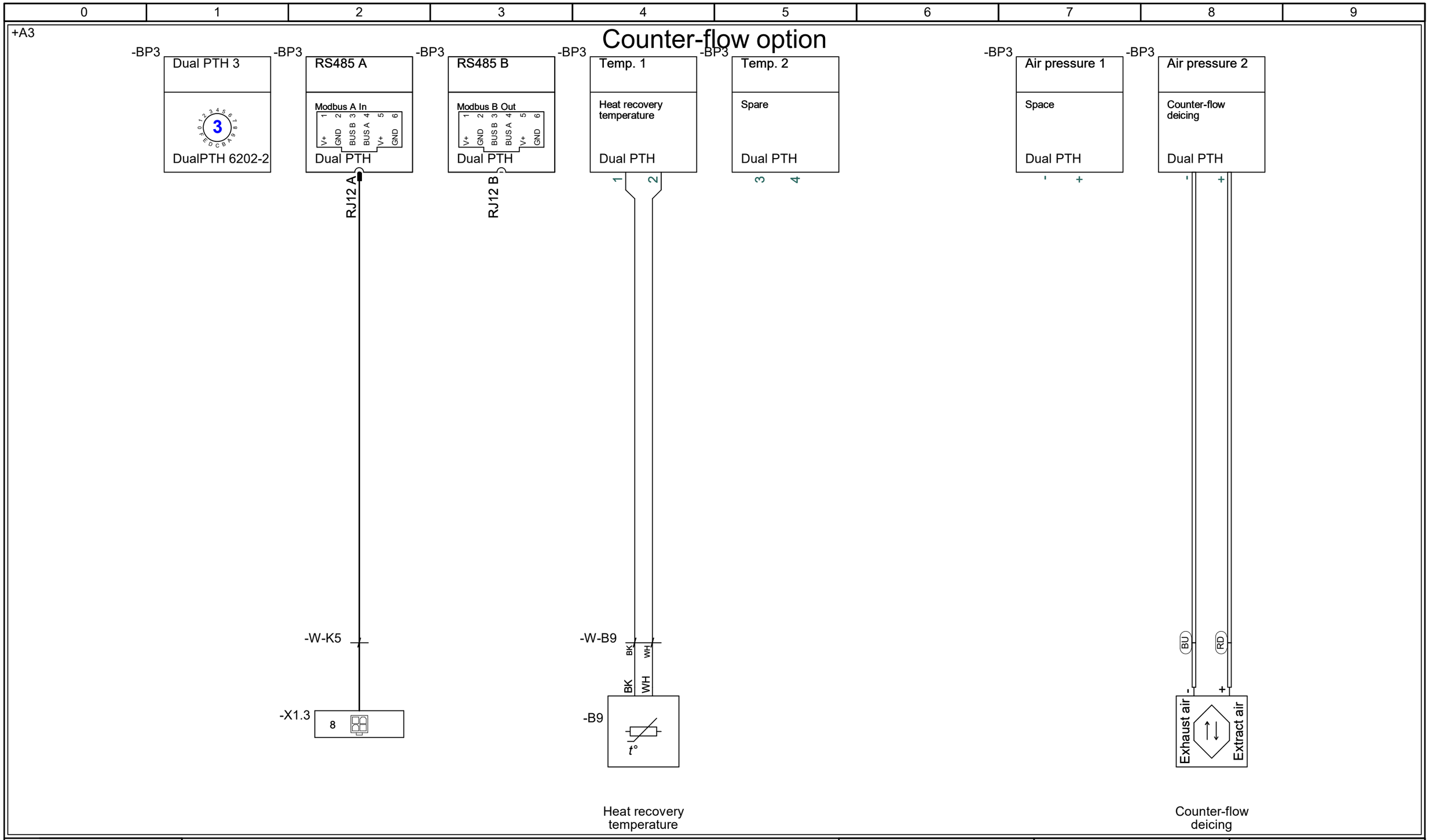


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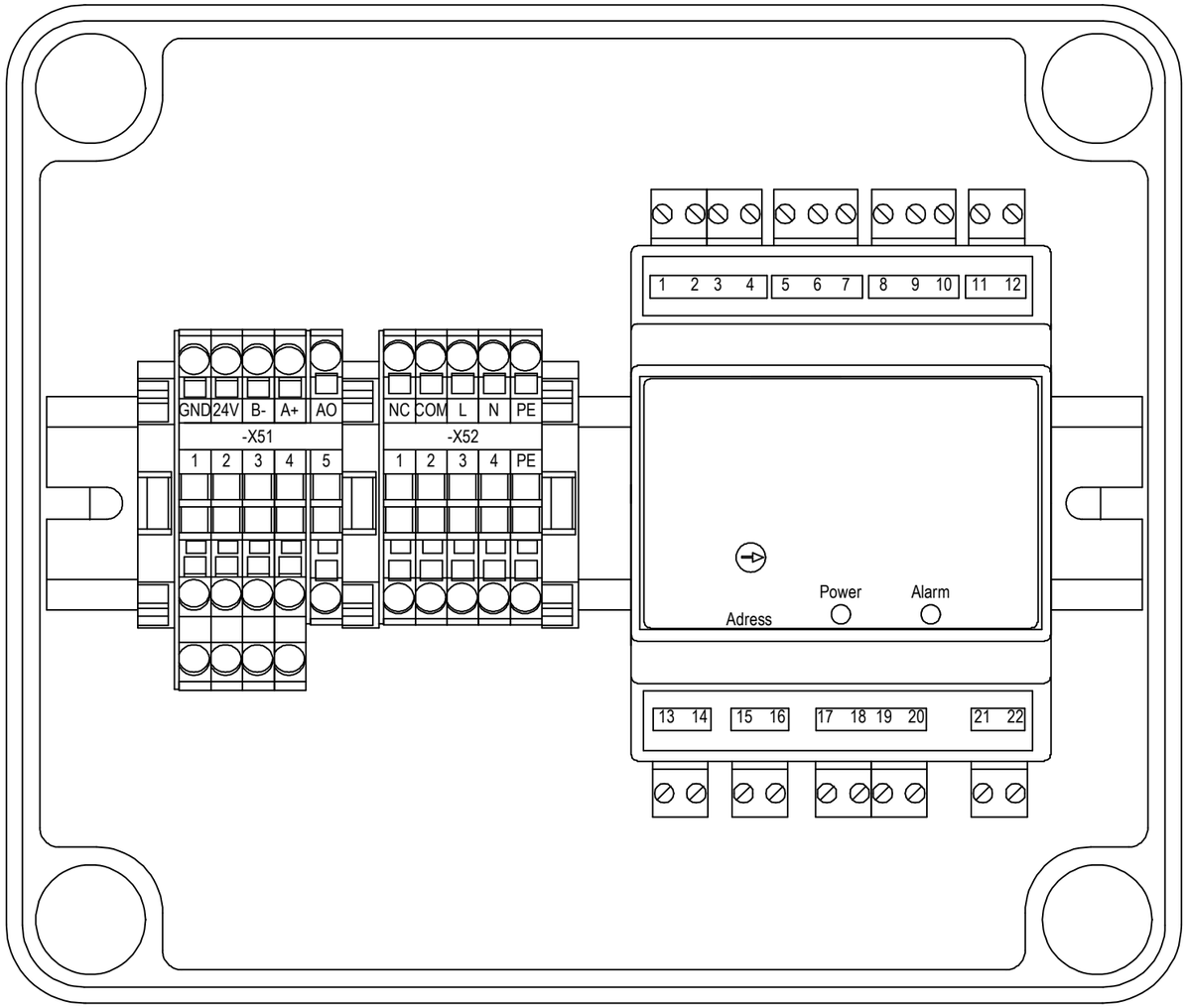
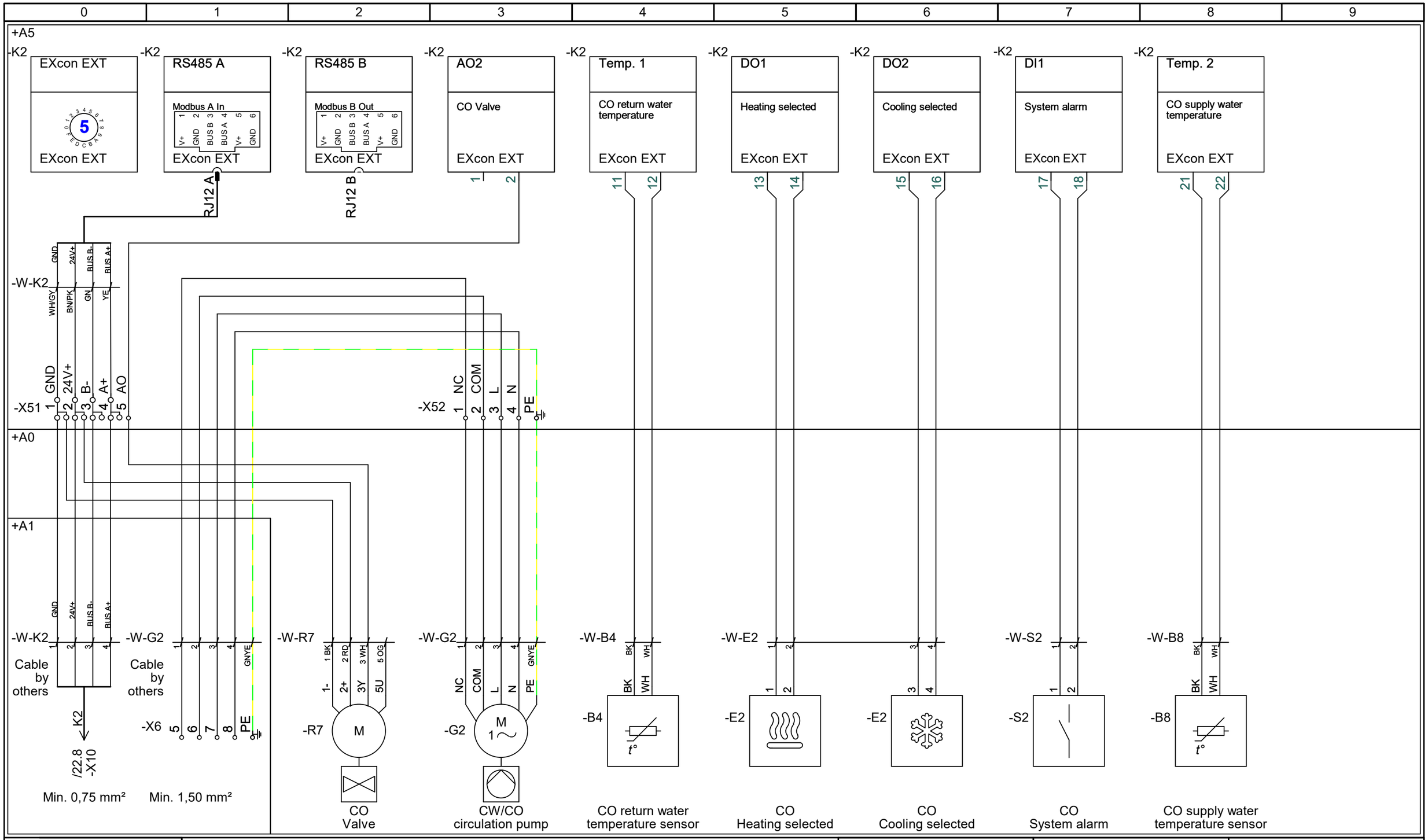
| Manufactured by: EXHAUSTO | Project: VEX1000 - Customized (3x230VAC FANS) | Start date: | 01-06-2023 | Constructor: | DKTSA | Page: 43 |
| | | Revision date: | 17-08-2026 | Approved by: | DKBP | Previous page: 42 |
| Drawing number: 2027960 | Page Title: Option - Counter-flow deicing - Heat recovery temp. | Revision: | F | Scale: | 1:1 | Next page: 50 |
| | | Replaces revision: | D | Format: | A3 | Pages in total: 40 |

# Option - Coil control box

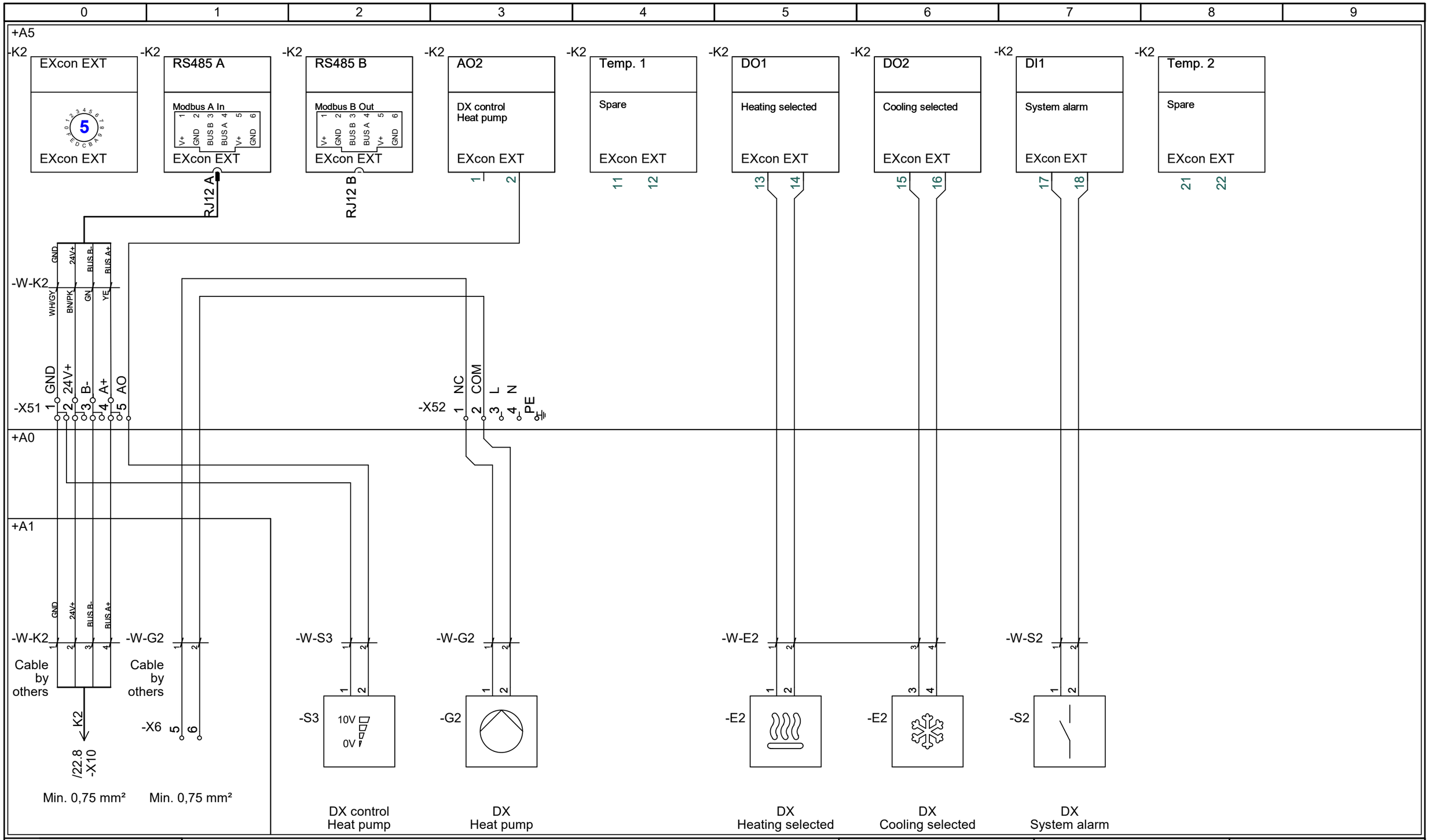
| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Manufactured by: EXHAUSTO | Project: VEX1000 - Customized (3x230VAC FANS) | Start date: | 01-06-2023 | Constructor: | DKTSA | Page: | Coil control box |
| | | Revision date: | 17-08-2026 | Approved by: | DKBP | Previous page: | 43 |
| Drawing number: 2027960 | Page Title: Option - Coil control box | Revision: | F | Scale: | 1:1 | Next page: | 50 |
| | | Replaces revision: | D | Format: | A3 | Pages in total: | 40 |




| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Manufactured by: EXHAUSTO | Project: VEX1000 - Customized (3x230VAC FANS) | Start date: | 01-06-2023 | Constructor: | DKTSA | Page: | 50 |
| | | Revision date: | 17-08-2026 | Approved by: | DKBP | Previous page: | 43 |
| Drawing number: 2027960 | Page Title: Option - Coil control box layout | Revision: | F | Scale: | 1:1 | Next page: | 51 |
| | | Replaces revision: | D | Format: | A3 | Pages in total: | 40 |




| | | | | | | |
|---|---|---|---|---|---|---|
| Manufactured by: EXHAUSTO | Project: VEX1000 - Customized (3x230VAC FANS) | Start date: | 01-06-2023 | Constructor: | DKTSA | Page: 51 |
| | | Revision date: | 17-08-2026 | Approved by: | DKBP | Previous page: 50 |
| Drawing number: 2027960 | Page Title: Option - Combi Coil | Revision: | F | Scale: | 1:1 | Next page: 52 |
| | | Replaces revision: | D | Format: | A3 | Pages in total: 40 |

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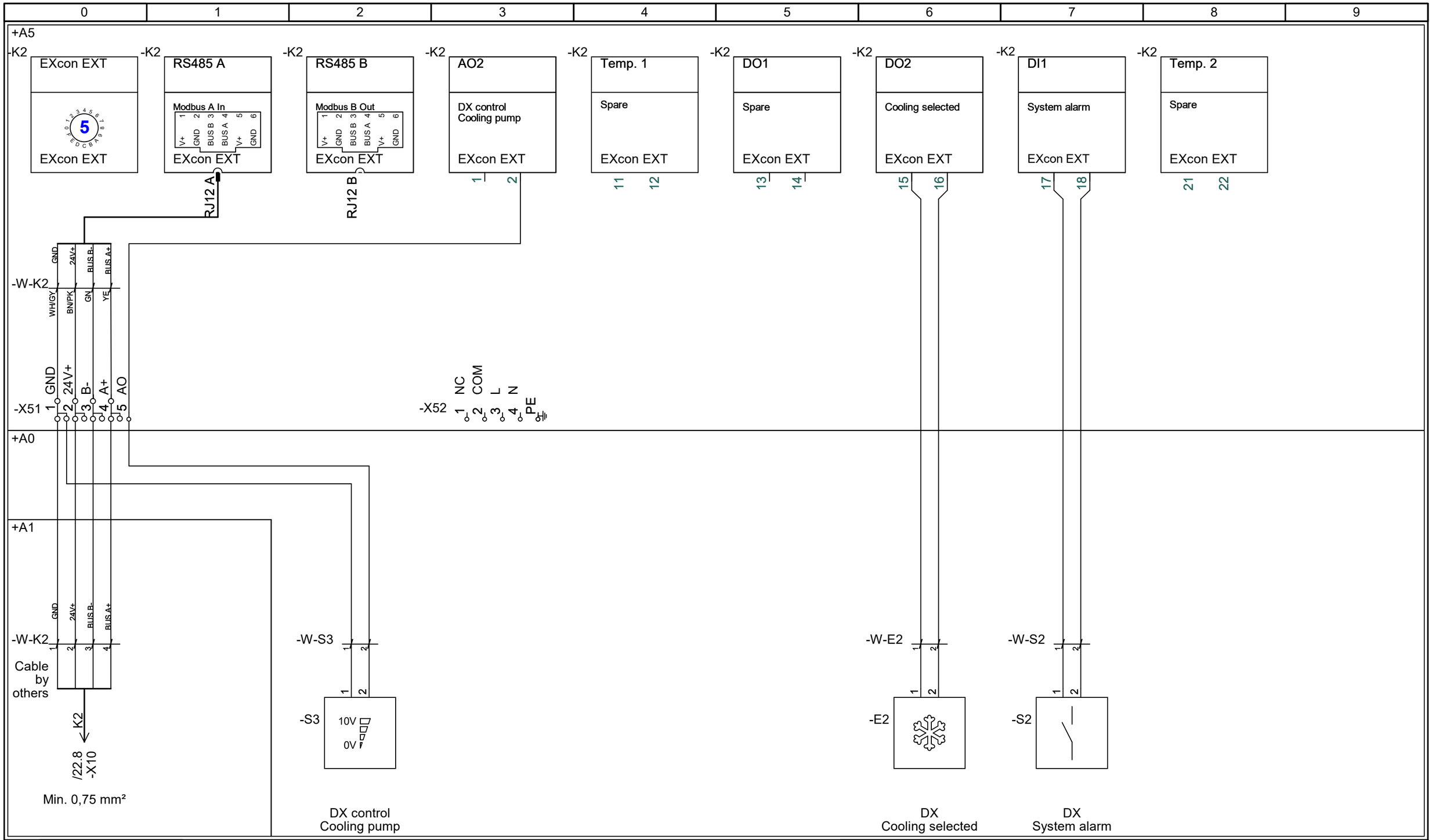
|---|---|---|---|---|---|
| Manufactured by: EXHAUSTO | Project: VEX1000 - Customized (3x230VAC FANS) | Start date: 01-06-2023 | Constructor: DKTSA | Page: 52 |
| | | Revision date: 17-08-2026 | Approved by: DKBP | Previous page: 51 |
| Drawing number: 2027960 | Page Title: Option - Direct Expansion Heat pump | Revision: F | Scale: 1:1 | Next page: 53 |
| | | Replaces revision: D | Format: A3 | Pages in total: 40 |




| Manufactured by: | Project: | Start date: 01-06-2023 | Constructor: DKTSA | Page: 53 |
|---|---|---|---|---|
| EXHAUSTO | VEX1000 - Customized (3x230VAC FANS) | Revision date: 17-08-2026 | Approved by: DKBP | Previous page: 52 |
| Drawing number: | Page Title: | Revision: F | Scale: 1:1 | Next page: PARTS |
| 2027960 | Option - Direct Expansion Cooling | Replaces revision: D | Format: A3 | Pages in total: 40 |

| Article no. | Type | Description | Manufacturer | Quantity |
|---|---|---|---|---|
| 3606480440496 | A9F04210 | Miniature Circuit Breaker iC60N C 10A 2P | Schneider Electric | 2 |
| 3606480440649 | A9F04310 | Miniature Circuit Breaker iC60N C 10A 3P | Schneider Electric | 2 |
| 3606480440755 | A9F04402 | Miniature Circuit Breaker iC60N C 2A 4P | Schneider Electric | 1 |
| 3606480440823 | A9F04420 | Miniature Circuit Breaker iC60N C 20A 4P | Schneider Electric | 1 |
| 3606480440830 | A9F04425 | Miniature Circuit Breaker iC60N C 25A 4P | Schneider Electric | 1 |
| 3606480440854 | A9F04440 | Miniature Circuit Breaker iC60N C 40A 4P | Schneider Electric | 1 |
| 4251823467457 | CSF 060 50W | Enlcosure heater, 120-240V AC 50W with thermostat | STEGO | 1 |
| 4711287434650 | LRS-75-24 | Power supply 230VAC/24VDC | MEAN WELL | 1 |
| 5705100101361 | 2077-0000 | Earth clamp Cu-mini 7 pole | Cubic | 1 |
| 6417019393094 | OT63F4N2 | OT63F4N2 Supply disconnector 3P+N 63A | ABB | 1 |
| 6417019102641 | OTS63T1 | OTS63T1 Terminal shroud 1P | ABB | 1 |
| 6417019102627 | OTS63T3 | OTS63T3 Terminal shroud 3P | ABB | 1 |
| 6417019415604 | OHBS2AJ | OHBS2AJ Handle | ABB | 1 |
| 6417019449500 | OX6X115 | OX6X115 Supply disconnector Shaft 115mm | ABB | 1 |
| 6417019393834 | OTPE80FP | OTPE80FP Earth terminal | ABB | 1 |
| 8433059084073 | MC3-63 | Three-phase current transformer, 63 A | Circutor | 1 |
| 8433059084080 | MC3-125 | Three-phase current transformer, 125 A | Circutor | 1 |
| 8433059279288 | CVM-E3-MINI-MC-485-IC | Three-phase power analyzer for mounting on DIN rail | Circutor | 2 |
| EXno.:2019904 | MODBUS split 4xRJ12 | MODBUS splitter 4x RJ12 connectors, 2x terminal rows | EXHAUSTO | 1 |
| EXno.:2027468 | EXcon+ | AHU Controller | EXHAUSTO | 1 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Manufactured by: EXHAUSTO | Project: VEX1000 - Customized (3x230VAC FANS) | Start date: | 01-06-2023 | Constructor: | DKTSA | Page: | PARTS |
| | | Revision date: | 17-08-2026 | Approved by: | DKBP | Previous page: | 53 |
| Drawing number: 2027960 | Page Title: Active components part list -A1 | Revision: | F | Scale: | 1:5 | Next page: | . |
| | | Replaces revision: | D | Format: | A3 | Pages in total: | 40 |

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