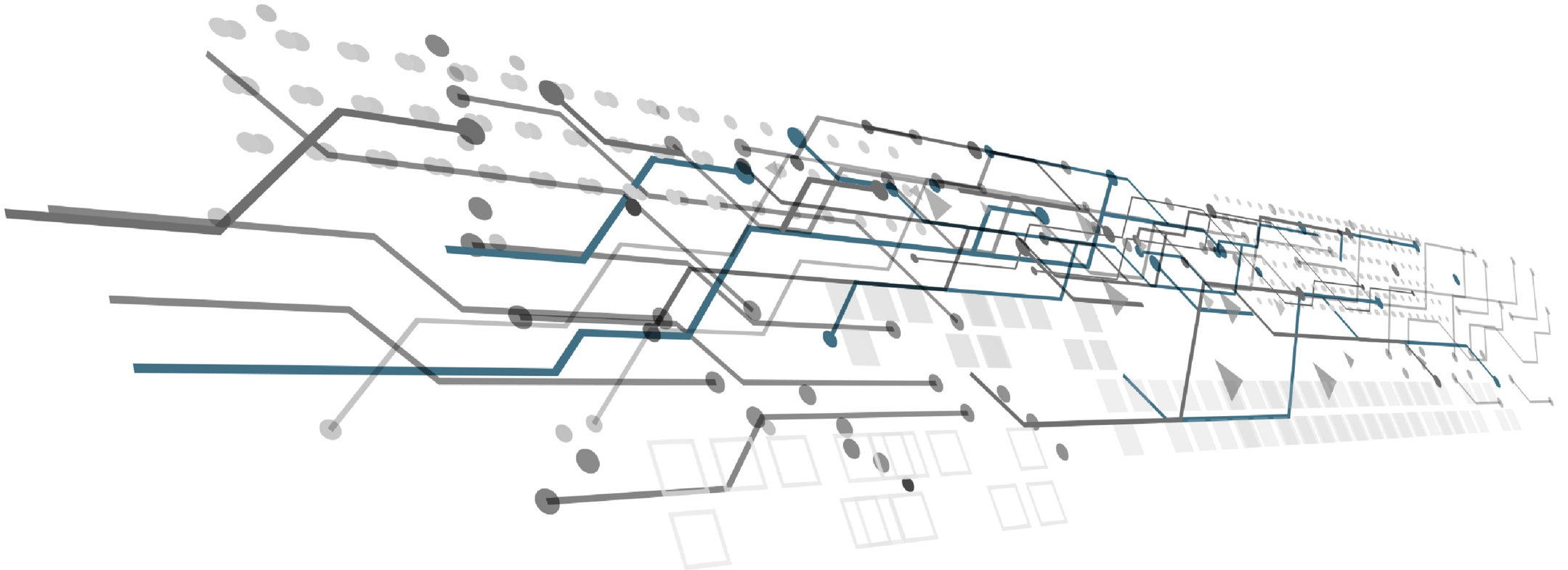
VEX1000 Wiring diagram

EXcon+ automatic
EXcon+ automatik
Système de règulation EXcon+



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EXHAUSTO

VEX1000 - Control panel (1x230V+HE)

2028125

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

Main current:	Hauptstrom:	Courant principal:	400/230VAC
Phase:	Phase:	Phase :	BK
Neutral:	Neutral:	Neutre :	BK
Earth:	Erde:	Terre :	GNYE
Pilot current:	Steuerstrom:	Courant pilote:	230/24VAC
Phase:	Phase:	Phase :	RD
Neutral:	Neutral:	Neutre :	RD
Earth:	Erde:	Terre :	GNYE
Pilot current:	Steuerstrom:	Courant pilote:	24VDC
Positive (+):	Positiv (+):	Positif (+) :	BU
Negative (-):	Negativ (-):	Négatif (-) :	BU
Unknown potential:	Unbekanntes Potenzial:	Potentiel inconnu:	
All:	Alle:	Tout:	OG

Abbreviations of colours (according to IEC 60757)

Black	Schwarz	Noir	BK
Brown	Braun	Marron	BN
Red	Rot	Rouge	RD
Orange	Orange	Orange	OG
Yellow	Gelb	Jaune	YE
Green	Grün	Vert	GN
Blue	Blau	Bleu	BU
Light Blue	Hellblau	Bleu clair	BU
Violet	Violett	Violet	VT
Gray	Grau	Gris	GY
White	Weiß	Blanc	WH
Pink	Rosa	Rose	PK
Green/Yellow	Grün/Gelb	Vert/Jaune	GNYE
Light-	Hell-	-clair	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

Methode	Beschreibung
0	Keine Kennzeichnung
A	Verwendung vorgesehener Kabel oder Adern
R	Identifikationskennzeichnung mittels Referenzbezeichnung (inkl. Kabelnummer)
CL	Kennzeichnung der lokalen Verbindung
CR	Kennzeichnung der Remote-End-Verbindung
CB	Beidseitige Anschlussbeschriftung
S	Signalbeschriftung

Méthode	Description
0	Pas d'étiquetage
A	Utilisation de câbles ou per fil dédiés
R	Marquage d'identification au moyen d'une désignation de référence
CL	Étiquetage des connexions locales
CR	Étiquetage des connexions distantes
CB	Étiquetage des connexions aux deux extrémités
S	Étiquetage des signaux

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Component	Location (GB)	Standort (DE)	Emplacement (FR)
+A0	Customer connections	Kundenanschlüsse	Raccordements du client
+A1	Control Panel	Schaltschrank	Tableau de commande
+A2	Cable connections to AHU aggregate	Kabelverbindungen zum RLT-Lüftungsgerät	Raccordements de câbles à l'appareil CTA
+A3	AHU aggregate	RLT-Lüftungsgerät	Appareil CTA
+A4	Outside AHU aggregate	Außenseite des RLT-Lüftungsgeräts	À l'extérieur de l'appareil CTA

Component	Object	Examples	Objekt	Beispiele	Objet	Exemples
-B	Sensing	CO2 & temperature sensors	Sensorik	CO2- und Temperatursensoren	Détection	Sondes de CO2 et de température
-C	Storage	USB drives & application keys	Speicher	USB-Sticks und Anwendungsschlüssel	Stockage	Clés USB et clés d'application
-E	Emitting	Electric heaters	Emission	Elektrische Heizgeräte	Émetteur	Chauffages électriques
-F	Protecting	Miniature circuit-breaker	Schutz	Miniaturleistungsschalter	Protection	Disjoncteur à maximum miniature
-G	Generating	Circulation pumps	Erzeugung	Umwälzpumpen	Générateur	Pompes de circulation
-K	Information processing	AHU Controller	Informationsverarbeitung	RLT-Lüftungsgerätesteuerung	Traitement de l'information	Cerveau de l'appareil CTA
-M	Driving	Motors	Antrieb	Motoren	Entrainement	Moteurs
-Q	Controlling	Supply disconnecting device	Steuerung	Versorgungstrennvorrichtung	Commande	Dispositif de déconnexion de l'alimentation
-R	Restricting	Valves & dampers	Drosselung	Ventile und Register	Limitation	Vannes et volets
-S	Human interaction	Touch panel	Menschliche Interaktion	Bedienfeld mit Touchscreen	Interaction humaine	Écran tactile
-T	Transforming	Power supply	Transformation	Stromversorgung	Transformation	Alimentation électrique
-U	Holding	Cabinet, wire-duct & DIN-rails	Halten	Schrank, Kabelkanal und DIN-Schienen	Maintien	Cabinet de ventilateur, gaine de câbles et rails DIN
-W	Guiding	Cables, wires & tubes	Führung	Kabel, Drähte und Rohre	Guidage	Câbles, fils & tubes
-X	Interfacing	Terminals & plugs	Schnitstellen	Klemmen und Stecker	Interface	Terminaux & bornes
(=)	Function		Funktion		Fonction	
(+)	Location		Standort		Lieu	
(-)	Product		Produkt		Produit	
(.)	Sub name		Unterbezeichnung		Sous-titre	

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

Grundlagen von Strukturen und Referenzbezeichnungen gemäß ISO/IEC RDS 81346

Principes de structures et désignations de référence selon ISO/IEC RDS 81346

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Component	Function (GB)	Funktion (DE)	Fonction (FR)
-0V	Terminals for 0VDC	Anschlüsse für 0 V DC	Bornes pour 0VDC
-24V	Terminals for 24VDC	Anschlüsse für 24 V DC	Bornes pour 24VDC
-B1.1	Extract air temperature	Außenlufttemperatur	Température de l'air extrait
-B1.2	Exhaust air temperature	Fortlufttemperatur	Température de l'air rejeté
-B2.1	Outdoor air temperature	Außenlufttemperatur	Température de l’air extérieur
-B2.2	Supply airflow temperature correction	Zulufttemperatur-Korrektur	Correction de la température de l'air soufflé
-B3	Heating return water temperature sensor	Temperatursensor Heizungsrücklaufwasser	Sonde de température de l’eau de retour (chauffage)
-B4	CO/CW return water temperature sensor	CO/CW-Rücklauf-Temperatursensor	Capteur de température de retour eau chaude / eau froide
-B5	Outdoor air temperature sensor (Pre-heater)	Außenluft-Temperatursensor (Vorwärmgerät)	Capteur de température de l'air extérieur (pré-chauffage)
-B6	CO2 sensor	CO2-Sensor	Capteur CO2
-B7	Duct temperature sensor	Kanaltemperatursensor	Capteur de température de conduit
-B8	CO supply water temperature sensor	CO-Vorlauf-Temperatursensor	Capteur thermique d’alimentation en CO
-B9	Heat recovery temperature	Wärmerückgewinnungstemperatur	Température de récupération de chaleur
-BP1	DualPTH 1	Doppel-PTH 1	Double PTH 1
-BP2	DualPTH 2	Doppel-PTH 2	Double PTH 2
-BP3	DualPTH 3	Doppel-PTH 3	Double PTH 3
-BP4	PTH for Kitchen solution	PTH für Küchenlösungen	PTH pour solution de cuisine
-E1	Cabinet heater	Schaltschrankheizung	Chauffage de l’armoire
-E2	Change over coils	Change-Over-Register	Serpentin de commutation
-E3	Electric pre-heating	Elektrisches Vorheizen	Préchauffage électrique
-E4	Electric post-heating	Elektrisches Nachheizen	Post-chauffage électrique
-F1	MCB for Exhaust air fan	Miniaturleistungsschalter für Fortluftventilator	MCB pour ventilateur de rejet extérieur
-F2	MCB for Supply air fan	Miniaturleistungsschalter für Zuluftventilator	MCB pour ventilateur d’air soufflé
-F3	MCB for Rotor/Control systems	Miniaturleistungsschalter für Rotor-/Reglersysteme	MCB pour rotor/systèmes de régulation
-F4	MCB for Circulation pumps	Miniaturleistungsschalter für Umwälzpumpe	MCB pour pompe de circulation
-F5	MCB for Electric post-heating	Miniaturleistungsschalter für Elektrisches Vorheizen	MCB pour préchauffage électrique
-G1	Heating circulation pump	Heizungsumwälzpumpe	Pompe de circulation du chauffage
-G2	CW/CO/DX circulation pump	CW/CO/DX-Umwälzpumpe	Pompe de circulation CW/CO/DX
-K1	AHU Controller	Regler für RLT	Contrôleur CTA

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Component	Function (GB)	Funktion (DE)	Fonction (FR)
-K2	EXT module for Change over	EXT-Modul für Change-Over	Module EXT pour inversion
-M1.2	Exhaust air fan	Fortluftventilator	Ventilateur d'évacuation de l'air
-M2.2	Supply air fan	Zuluftventilator	Ventilateur d'air soufflé
-M3	Rotor	Rotor	Rotor
-M4	Exhaust air fan - Box ventilator	Fortluftventilator - Boxventilator	Ventilateur d'extraction - Ventilateur de caisson
-Q1	Supply disconnecting device	Versorgungstrennvorrichtung	Dispositif de coupure de l'alimentation
-Q2	Supply disconnecting device for Box ventilator	Versorgungstrenneinrichtung für Boxventilator	Dispositif de coupure de l'alimentation pour ventilateur de caisson
-R1.1	Extract air damper (ALC™)	Abluftregister (ALC™)	Registre d'air extrait (ALC™)
-R1.2	Exhaust air damper	Fortluftregister	Registre d'air rejeté
-R2.1	Outdoor air damper	Außenluftregister	Registre d'air extérieur
-R2.2	Supply air damper	Zuluftregister	Registre d'air soufflé
-R3	Bypass damper	Bypassregister	Registre de dérivation
-R4	Mixing air damper	Mischluftregister	Registre d'air de recirculation
-R5	Valve HW	Ventil HW	Vanne HW
-R6	Valve CW	Ventil CW	Vanne CW
-R7	Valve CO/DX	Ventil CO/DX	Vanne CO/DX
-S1	Touch panel	Bedienfeld mit Touchscreen	Écran tactile
-S2	CO system alarm	CO-Systemalarm	Système d'alarme CO
-S3	DX control Heat pump	DX-Steuerung Wärmepumpe	Pompe à chaleur à régulation DX
-S4	Air speed regulator	Luftstromregler	Régulateur de débit d'air
-T1	Power supply 230VAC/24VDC	Stromversorgung 230 V AC/24 V DC	Alimentation 230 V CA/24 V CC
-T2	DV controls for Box ventilator	DV-Regelung für Boxventilatoren	Régulation DV pour ventilateurs de caisson
-U1	Automation board	Automatisierungsplatine	Carte d'automatisation
-X1.1	Aggregate power terminals	Klemmen für Gerätestrom	Bornes de puissance agrégées
-X1.2	Aggregate signal terminals	Klemmen für Gerätesignal	Bornes de signal agrégées
-X1.3	Modbus splitter 9 x Molex	Modbus-Splitter 9 x Molex	Répartiteur Modbus 9 x Molex
-X1	Aggregate power & signal terminals	Klemmen für Gerätestrom und -signal	Bornes d'alimentation et de signal agrégées
-X2	Air dampers terminals	Klemmen für Luftklappen	Bornes des volets d'air
-X3	Pre-HE signal terminals	Vor-HE-Signalklemmen	Bornes de signal de pré-CH

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Component	Function (GB)	Funktion (DE)	Fonction (FR)
-X4	Post-HE power terminals	Post-HE Stromklemmen	Bornes d’alimentation de post-CH
-X5	HW - Power & signal terminals	HW – Strom- und Signalklemmen	HW – Bornes d’alimentation et de signal
-X6	CW/CO - Power & signal terminals	CW/CO – Strom- und Signalklemmen	CW/CO – Bornes d’alimentation et de signal
-X7	Temperature & CO2 sensors terminals	Klemmen für Temperatur- und CO2-Sensoren	Bornes d’alimentation et de signal agrégées
-X8	Customer connections terminals	Kundenseitige Anschlussklemmen	Bornes de raccord client
-X10	Modbus splitter 4 x RJ12	Modbus-Splitter 4 x RJ12	Répartiteur Modbus 4 x RJ12
-X51	CO/DX – MODBUS & signal terminals	CO/DX – MODBUS- und Signalklemmen	CO/DX – Bornes d’MODBUS et signaux
-X52	CO/DX - Power & signal terminals	CO/DX – Strom- und Signalklemmen	CO/DX – Bornes d’alimentation et de signal
-X-B3	Heating return water temperature sensor plug	Stecker für Temperatursensor Heizungsrücklauf	Connecteur capteur de température retour eau de chauffage
-X-E4.2	HE - Signal plug	Stecker für HE – Signal	HE – Connecteur de signal
-X-M1.2	Exhaust air fan plug	Stecker für Fortluftventilator	Connecteur de ventilateur de rejet extérieur
-X-M2.2	Supply air fan plug	Stecker für Zuluftventilator	Connecteur de ventilateur d’air soufflé
-X-M3	Rotor plug	Stecker für Rotor	Connecteur de rotor
-X-R1.1	Extract air damper (ALC™) plug	Stecker für Abluftregister (ALC™)	Connecteur des registres d’air extrait (ALC™)
-X-R1.2	Exhaust air damper plug	Stecker für Fortluftregister	Connecteur des registres d’air rejeté
-X-R2.1	Outdoor air damper plug	Stecker für Außenluftregister	Connecteur des registres d'air extérieur
-X-R2.2	Supply air damper plug	Stecker für Zuluftregister	Connecteur des registres d’air soufflé
-X-R3	Supply air damper plug	Stecker für Zuluftregister	Connecteur des registres d’air soufflé
-X-R4	Mixing air damper plug	Stecker für Mischluftregister	Connecteur des registres d’air mélangé

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Principles

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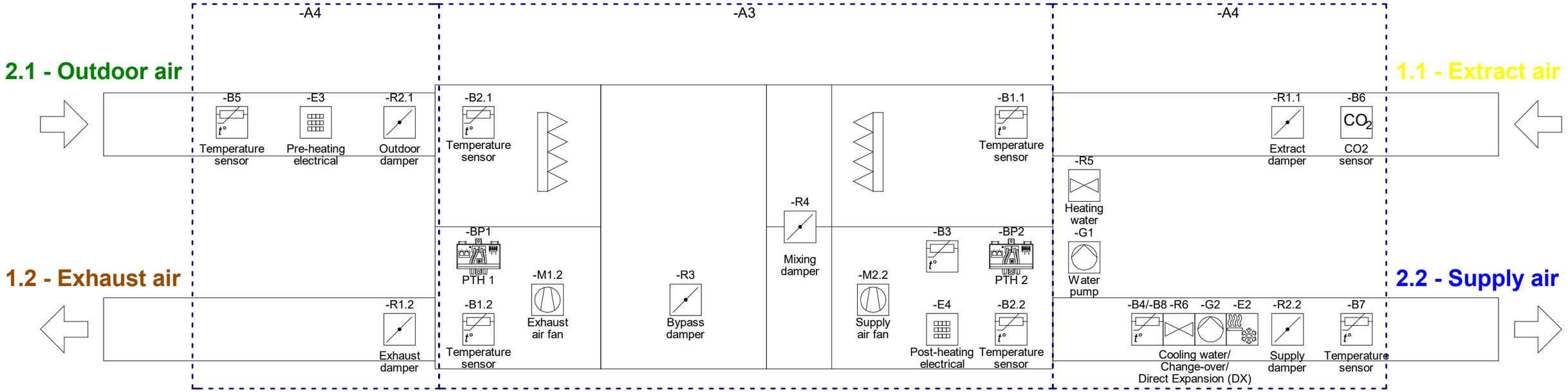
COUNTER-FLOW



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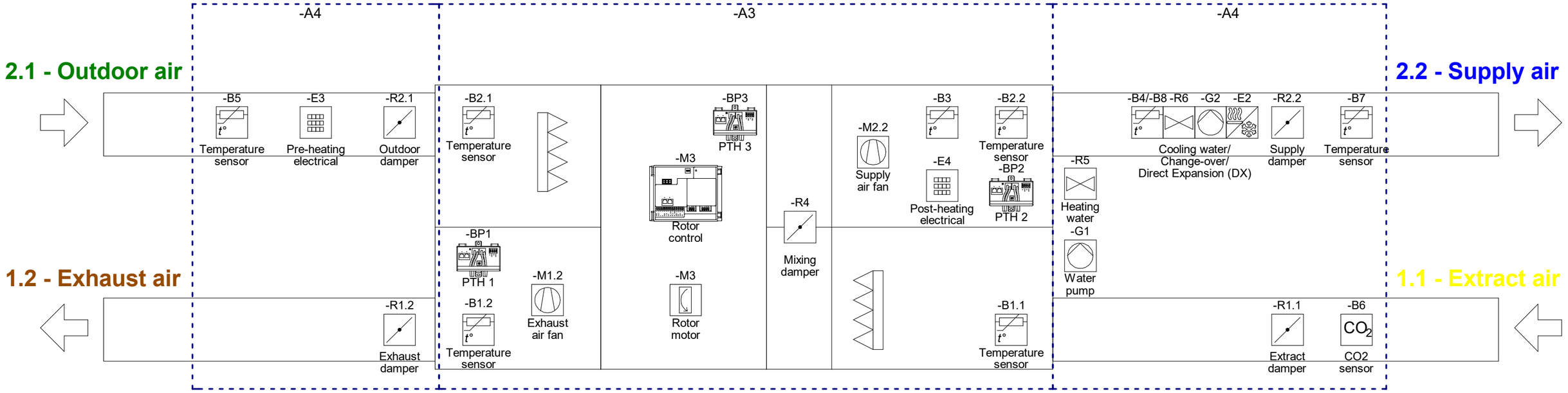

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Arrangement drawings

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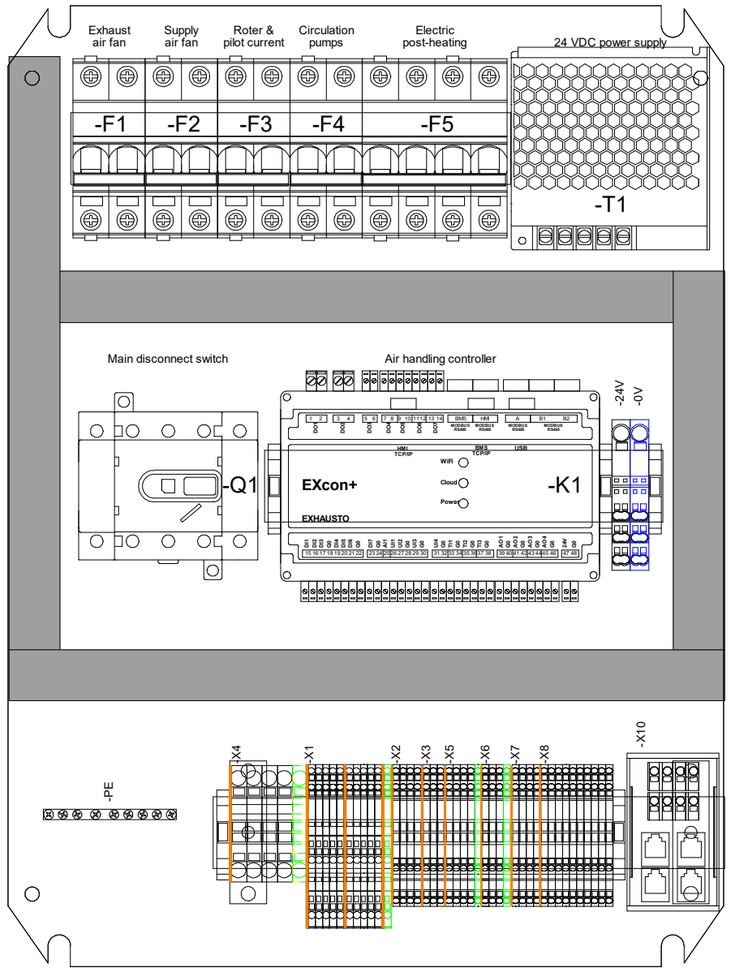

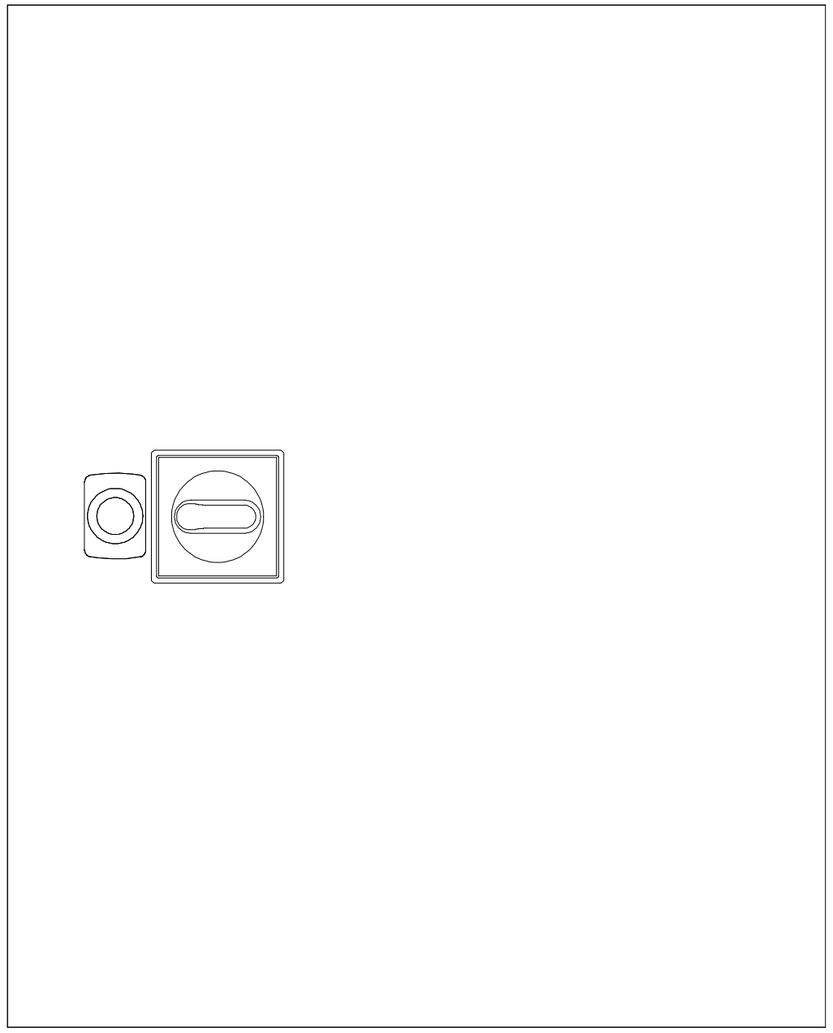

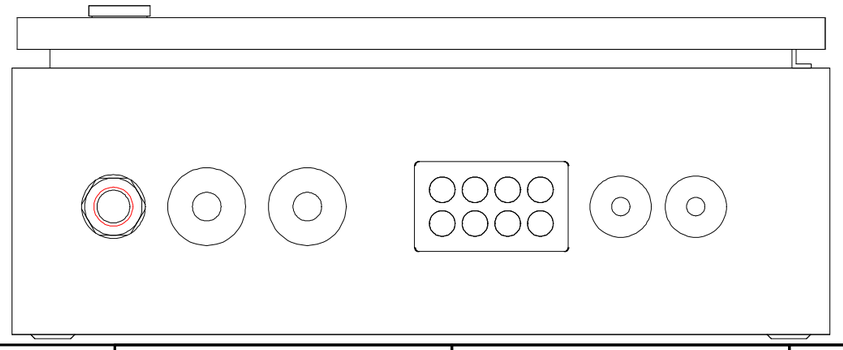

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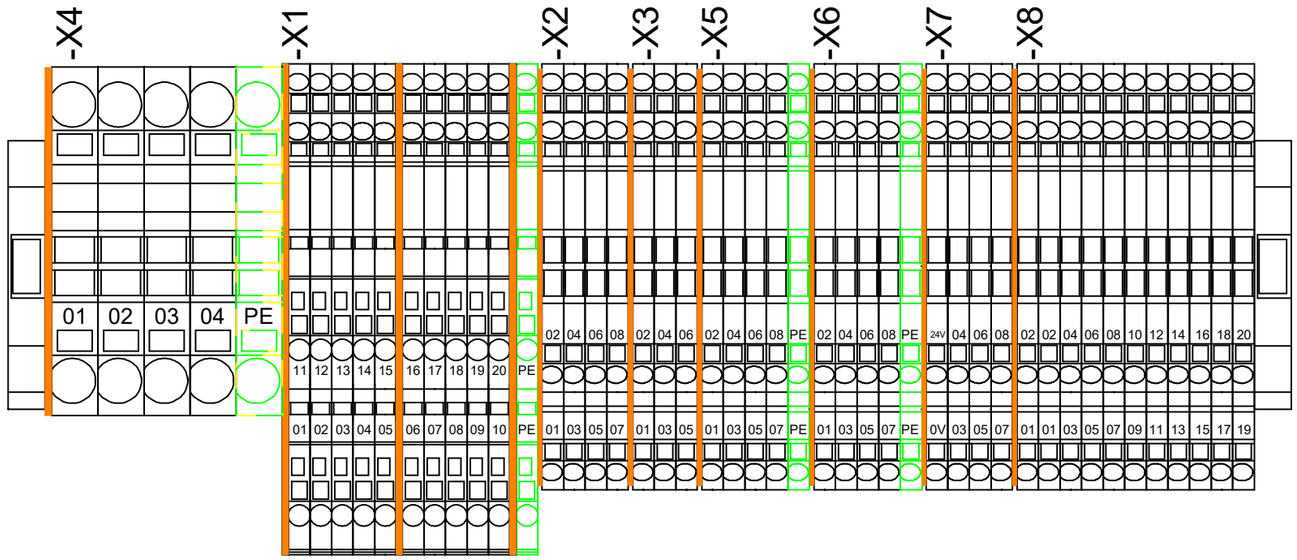
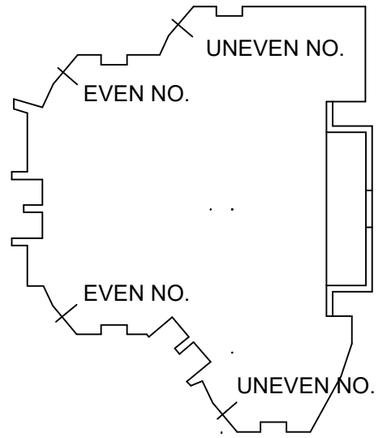
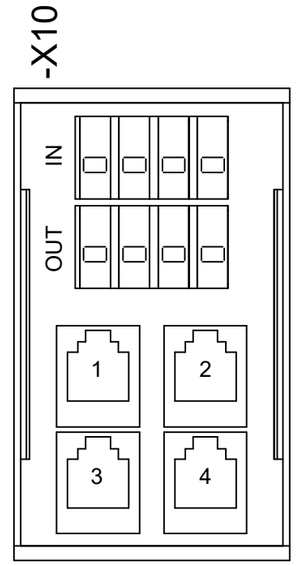




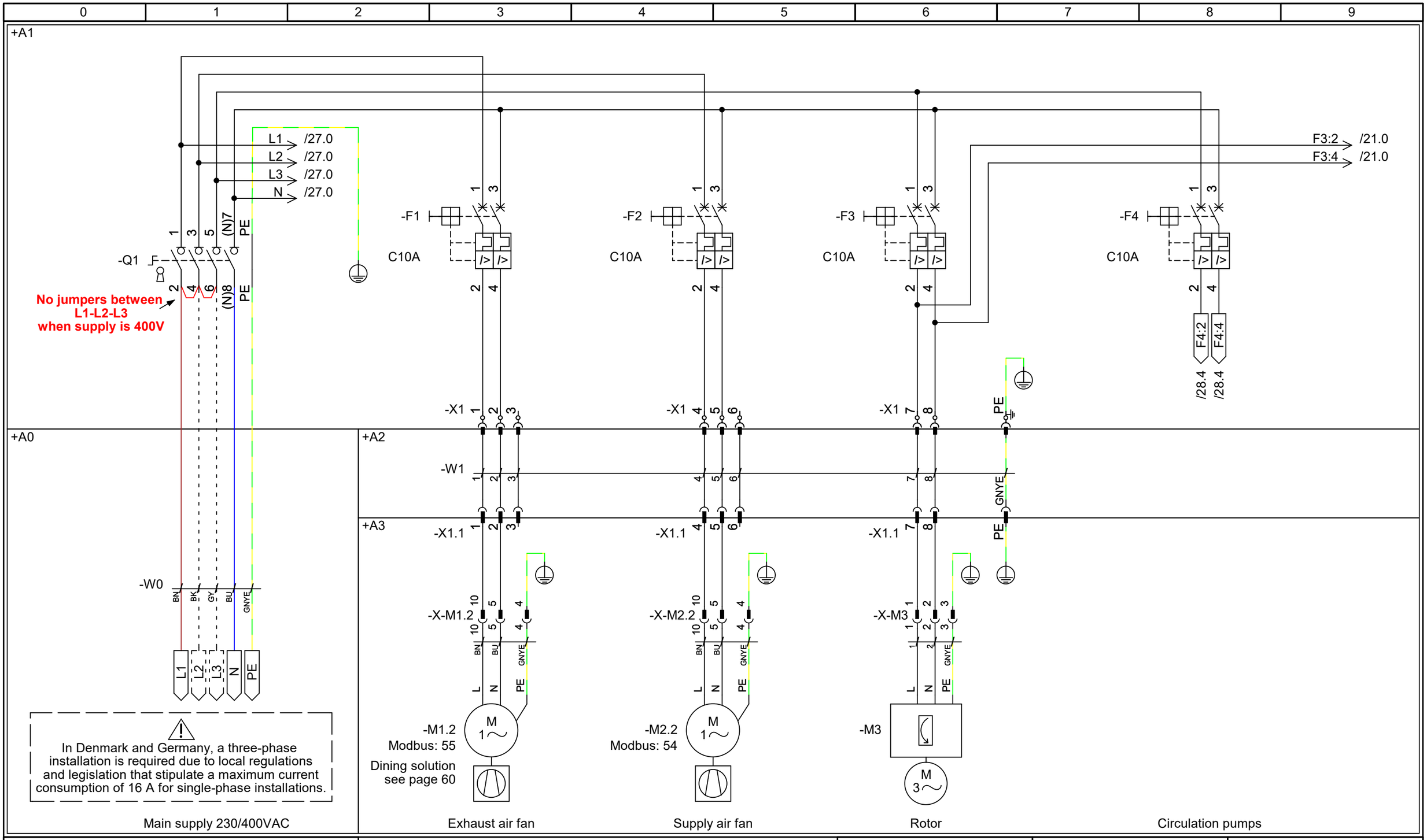


-X1:01	-M1.2	Exhaust air fan	L	-X2:01	-R1.1	Extract air damper	0V	-X5:01	-R1	Valve HW	0V	-X7:01	-B5	Pre-heater temperature sensor	-	-X8:0V		Customer connections	24V power supply
-X1:02	-M1.2	Exhaust air fan	N	-X2:03	-R1.1	Extract air damper	24V	-X5:02	-R1	Valve HW	24V	-X7:02	-B5	Pre-heater temperature sensor	-	-X8:24V		Customer connections	24V power supply
-X1:03	-M1.2	Spare	-	-X2:05	-R1.1	Extract air damper	B-	-X5:03	-R1	Valve HW	Signal	-X7:03	-B6	CO2 sensor	GND	-X8:01		Customer connections	Fire alarm input
-X1:04	-M2.2	Supply air fan	L	-X2:07	-R1.1	Extract air damper	A+	-X5:04	-R1	Valve HW	Not used	-X7:04	-B6	CO2 sensor	OUT	-X8:02		Customer connections	Fire alarm input
-X1:05	-M2.2	Supply air fan	N	-X2:02	-R2.2	Supply air damper	0V	-X5:05	-G1	HW circulation pump	NC	-X7:05	-B6	CO2 sensor	+VCC	-X8:03		Customer connections	Option input 1
-X1:06	-M2.2	Spare	-	-X2:04	-R2.2	Supply air damper	24V	-X5:06	-G1	HW circulation pump	COM	-X7:06	-	Spare terminal		-X8:04		Customer connections	Option input 1
-X1:07	-M3	Rotor	L	-X2:06	-R2.2	Supply air damper	B-	-X5:07	-G1	HW circulation pump	L	-X7:07	-B7	Duct temperature sensor	-	-X8:05		Customer connections	Option input 2
-X1:08	-M3	Rotor	N	-X2:08	-R2.2	Supply air damper	A+	-X5:08	-G1	HW circulation pump	N	-X7:08	-B7	Duct temperature sensor	-	-X8:06		Customer connections	Option input 2
-X1:09	-MB	Modbus	0V					-X5:PE	-G1	HW circulation pump	PE					-X8:07		Customer connections	Option input 3
-X1:10	-MB	Modbus	24V	-X3:01	-E3	Electric pre-heating	0-10V									-X8:08		Customer connections	Option input 3
-X1:11	-MB	Modbus	B-	-X3:02	-E3	Electric pre-heating	GND	-X6:01	-R2	Valve CW/CO	0V					-X8:09		Customer connections	Option input 4
-X1:12	-MB	Modbus	A+	-X3:03	-E3	Electric pre-heating	Fire	-X6:02	-R2	Valve CW/CO	24V					-X8:10		Customer connections	Option input 4
-X1:13	-E4	Electric post-heating	0-10V	-X3:04	-E3	Electric pre-heating	Fail	-X6:03	-R2	Valve CW/CO	Signal					-X8:11		Customer connections	A alarm output
-X1:14	-E4	Electric post-heating	GND	-X3:05	-E3	Electric pre-heating	Run OK	-X6:04	-R2	Valve CW/CO	Not used					-X8:12		Customer connections	A alarm output
-X1:15	-E4	Electric post-heating	Fire	-X3:06	-E3	Electric pre-heating	Run OK	-X6:05	-G2	CW/CO circulation pump	NC					-X8:13		Customer connections	Option output 1
-X1:16	-E4	Electric post-heating	Fail					-X6:06	-G2	CW/CO circulation pump	COM					-X8:14		Customer connections	Option output 1
-X1:17	-E4	Electric post-heating	Run OK	-X4:01	-E4	PWR Electric heating	L1	-X6:07	-G2	CW/CO circulation pump	L					-X8:15		Customer connections	Option output 2
-X1:18	-E4	Electric post-heating	Run OK	-X4:02	-E4	PWR Electric heating	L2	-X6:08	-G2	CW/CO circulation pump	N					-X8:16		Customer connections	Option output 2
-X1:19	-B3	Temperature sensor	-	-X4:03	-E4	PWR Electric heating	L3	-X6:PE	-G2	CW/CO circulation pump	PE					-X8:17		Customer connections	BMS - RS485
-X1:20	-B3	Temperature sensor	-	-X4:04	-E4	PWR Electric heating	N									-X8:18		Customer connections	BMS - RS485
-X1:PE	-PE	Protective Earth	PE	-X4:PE	-E4	PWR Electric heating	PE									-X8:19		Customer connections	Start signal
																-X8:20		Customer connections	Start signal

Manufactured by: EXHAUSTO	Project: VEX1000 - Control panel (1x230V+HE)	Start date: 01-06-2023	Constructor: DKTSA	Page: 11
		Revision date: 12-05-2026	Approved by: DKBP	Previous page: 10
Drawing number: 2028125	Page Title: Control panel terminals	Revision: D	Scale: 1:1	Next page: 20
		Replaces revision: C	Format: A3	Pages in total: 40

Circuit diagrams

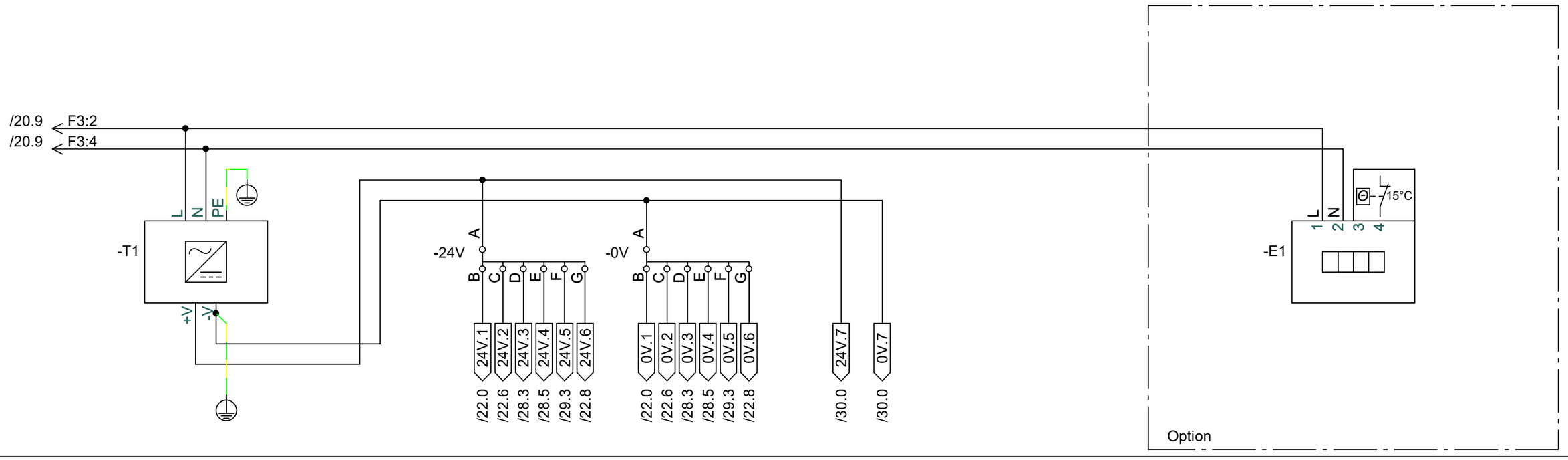
Manufactured by: EXHAUSTO	Project: VEX1000 - Control panel (1x230V+HE)	Start date:	01-06-2023	Constructor:	DKTSA	Page:	Circuit diagrams
		Revision date:	12-05-2026	Approved by:	DKBP	Previous page:	11
Drawing number: 2028125	Page Title: Circuit diagrams	Revision:	D	Scale:	1:1	Next page:	20
		Replaces revision:	C	Format:	A3	Pages in total:	40



EXHAUSTO	Project: VEX1000 - Control panel (1x230V+HE)	Start date: 01-06-2023	Constructor: DKTSA	Page: 20
		Revision date: 12-05-2026	Approved by: DKBP	Previous page: 11
Drawing number: 2028125	Revision: D	Page Title: Main current	Replaces: C	Scale: 1:1	Next page: 21
			EC no.:	Format: A3	Pages in total: 40

0	1	2	3	4	5	6	7	8	9

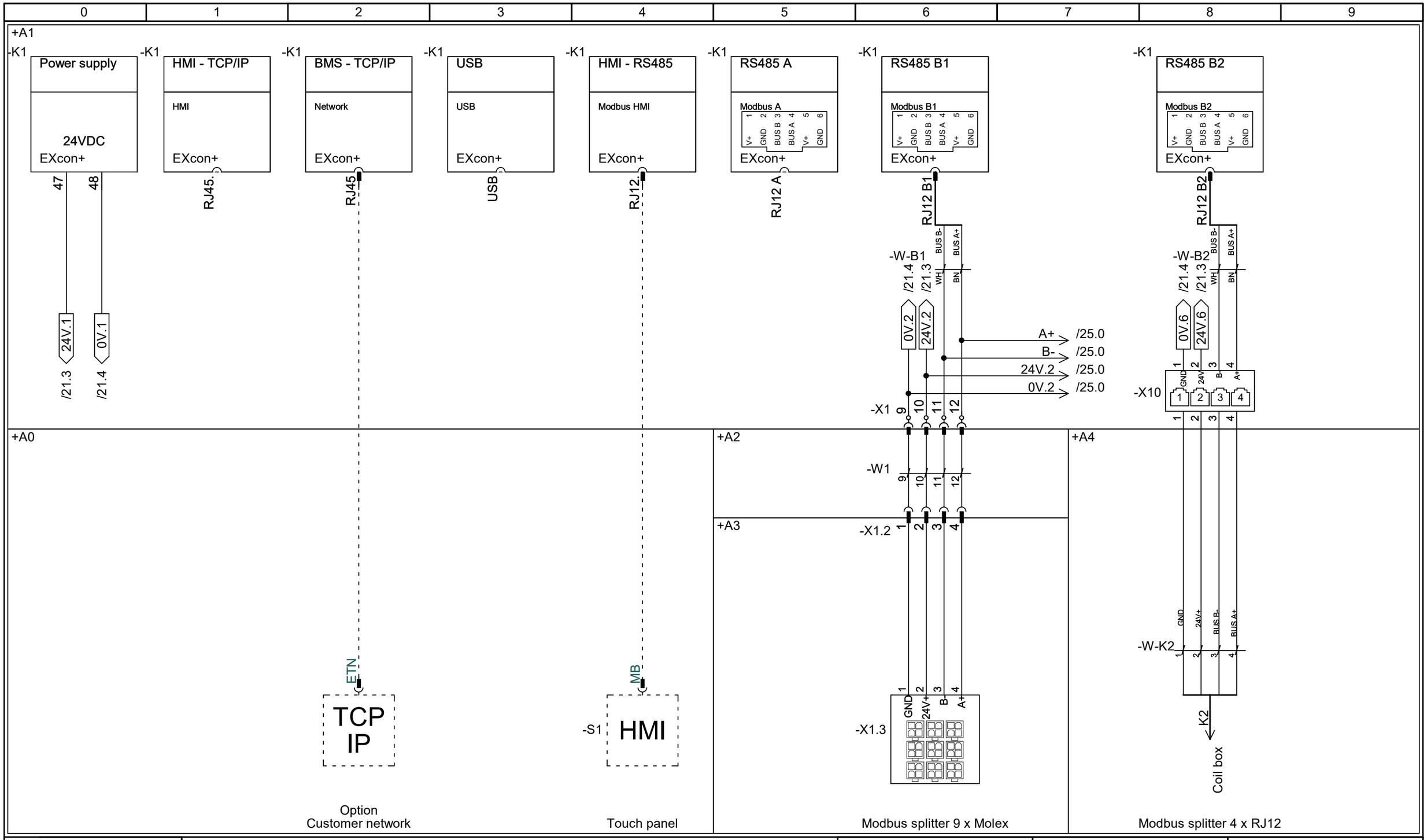
+A1



24VDC supply

Control panel heater

Manufactured by: EXHAUSTO	Project: VEX1000 - Control panel (1x230V+HE)	Start date: 01-06-2023	Constructor: DKTSA	Page: 21
		Revision date: 12-05-2026	Approved by: DKBP	Previous page: 20
Drawing number: 2028125	Page Title: Pilot current	Revision: D	Scale: 1:1	Next page: 22
		Replaces revision: C	Format: A3	Pages in total: 40



Manufactured by: EXHAUSTO	Project: VEX1000 - Control panel (1x230V+HE)	Start date: 01-06-2023	Constructor: DKTSA	Page: 22
		Revision date: 12-05-2026	Approved by: DKBP	Previous page: 21
Drawing number: 2028125	Page Title: Standard - Modbus connections	Revision: D	Scale: 1:1	Next page: 23
		Replaces revision: C	Format: A3	Pages in total: 40

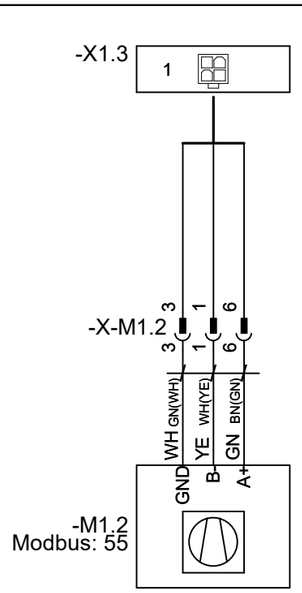
0	1	2	3	4	5	6	7	8	9

+A1

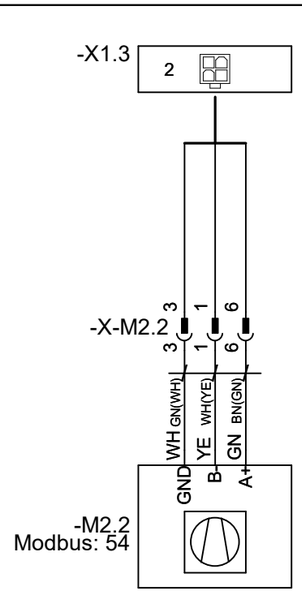
Rotor drive option

Counter-flow option

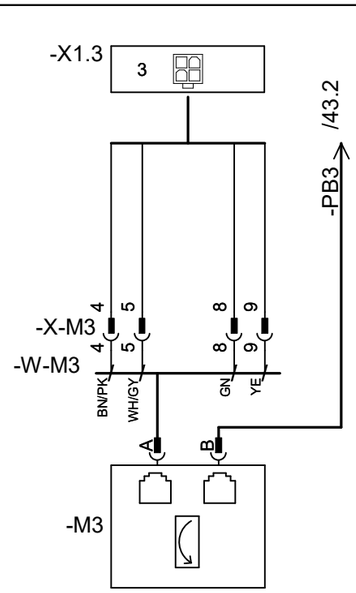
+A3



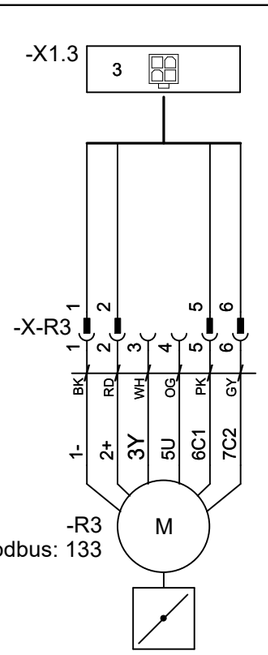
Exhaust air fan
Control



Supply air fan
Control



Rotor drive



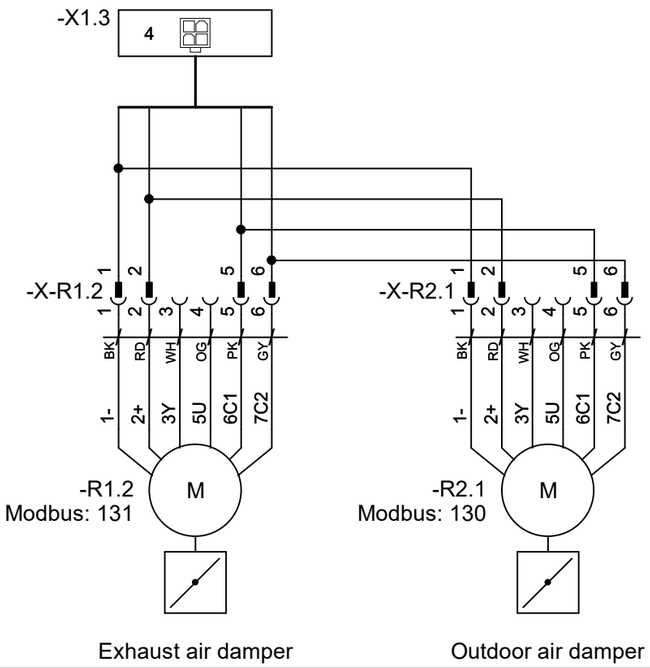
Bypass damper

Manufactured by: EXHAUSTO	Project: VEX1000 - Control panel (1x230V+HE)	Start date:	01-06-2023	Constructor:	DKTSA	Page:	23
		Revision date:	12-05-2026	Approved by:	DKBP	Previous page:	22
Drawing number: 2028125	Page Title: Standard - Fan & Rotor/Bypass controls	Revision:	D	Scale:	1:1	Next page:	24
		Replaces revision:	C	Format:	A3	Pages in total:	40

0	1	2	3	4	5	6	7	8	9

+A1

+A3



Manufactured by: EXHAUSTO	Project: VEX1000 - Control panel (1x230V+HE)	Start date: 01-06-2023	Constructor: DKTSA	Page: 24
		Revision date: 12-05-2026	Approved by: DKBP	Previous page: 23
Drawing number: 2028125	Page Title: Standard - Dampers	Revision: D	Scale: 1:1	Next page: 25
		Replaces revision: C	Format: A3	Pages in total: 40

0	1	2	3	4	5	6	7	8	9

+A1

/22.7 A+
/22.7 B-
/22.7 24V.2
/22.7 0V.2

-X2 1 3 5 7

-X2 2 4 6 8

+A3

-X1.3 8

-X-R4 1 2 3 4 5 6

BK RD WH OG PK GY

1- 2+ 3Y 5U 6C1 7C2

-R4 M

Modbus: 132

Mixing air damper

+A4

-W-R1.1 1 2 3 4

-X-R1.1 1 2 3 4 5 6

BK RD WH OG PK GY

1- 2+ 3Y 5U 6C1 7C2

-R1.1 M

Modbus: 136

(ALC™ air damper)
Extract air damper

-X-R2.2 1 2 3 4 5 6

BK RD WH OG PK GY

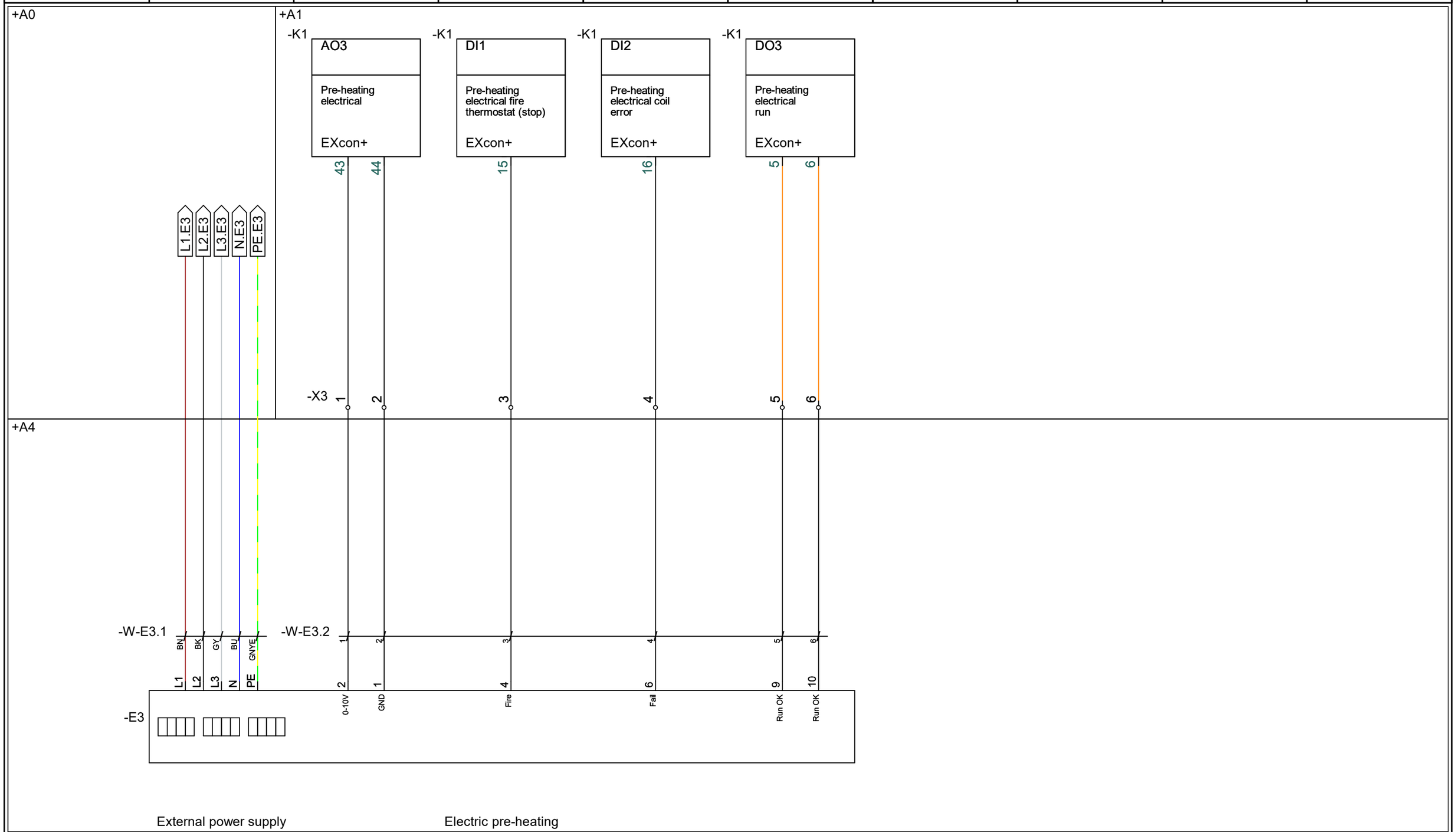
1- 2+ 3Y 5U 6C1 7C2

-R2.2 M

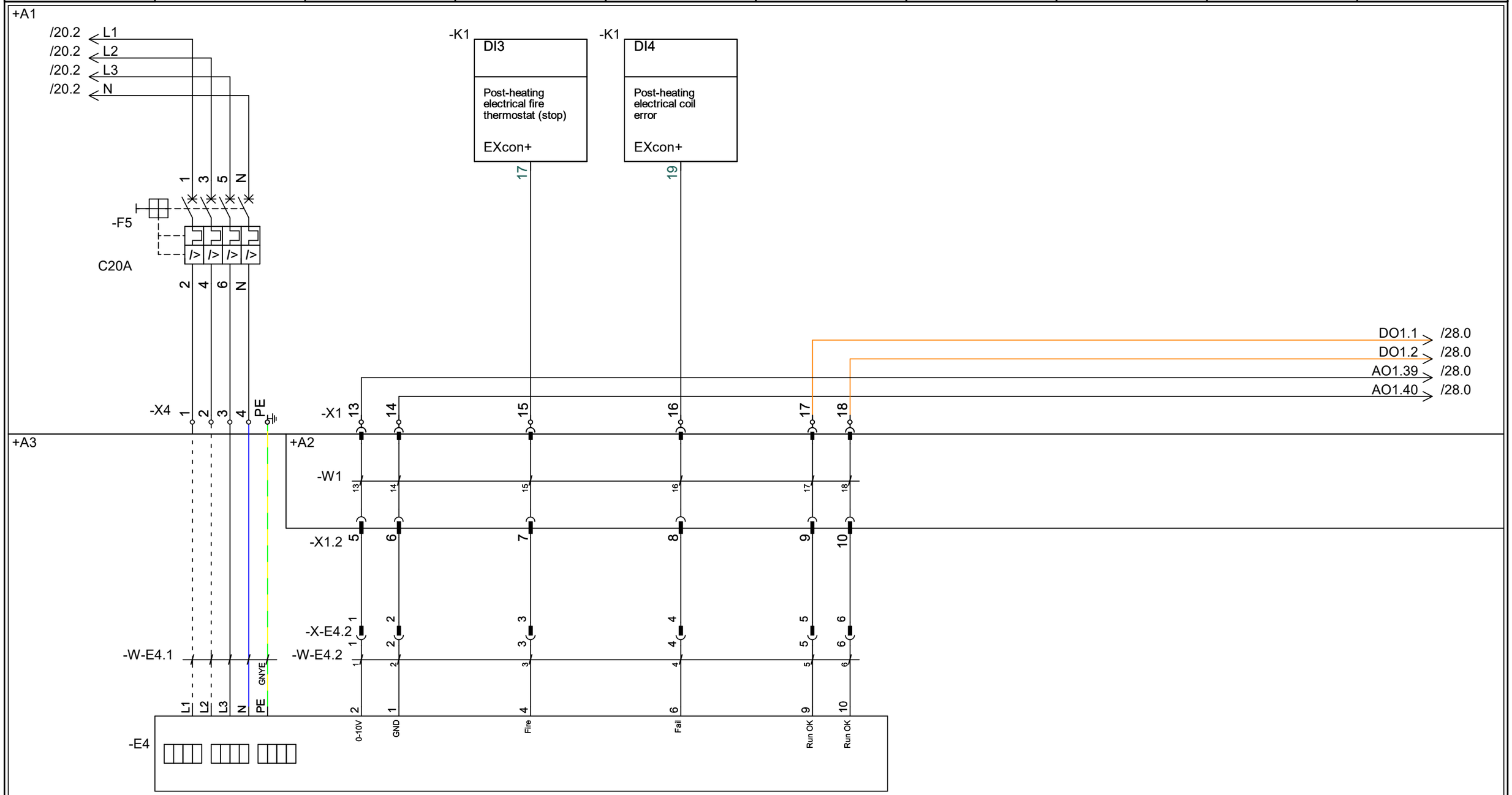
Modbus: 135

Supply air damper

Manufactured by: EXHAUSTO	Project: VEX1000 - Control panel (1x230V+HE)	Start date: 01-06-2023	Constructor: DKTSA	Page: 25
		Revision date: 12-05-2026	Approved by: DKBP	Previous page: 24
Drawing number: 2028125	Page Title: Options - Dampers	Revision: D	Scale: 1:1	Next page: 26
		Replaces revision: C	Format: A3	Pages in total: 40



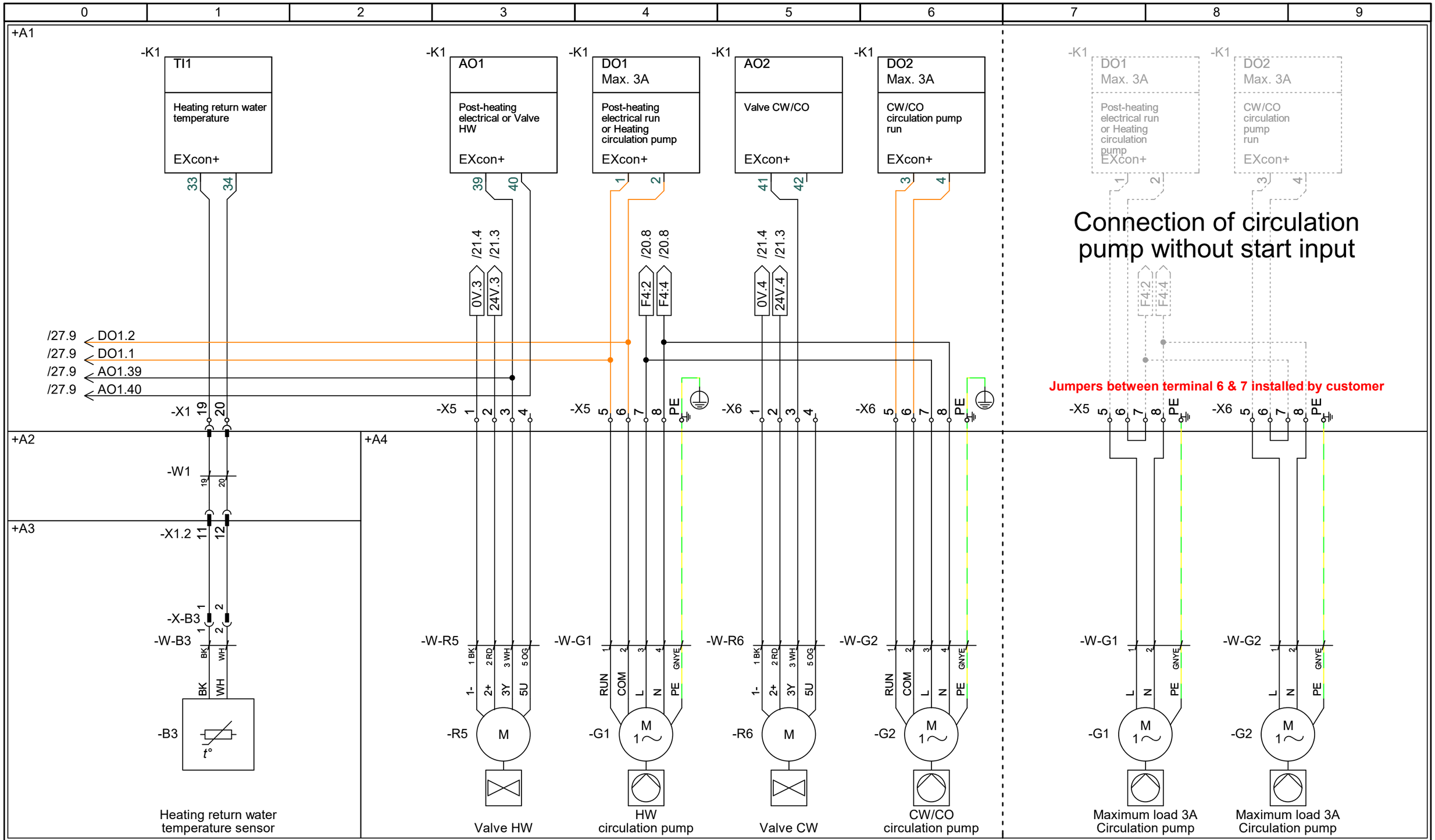
Manufactured by: EXHAUSTO	Project: VEX1000 - Control panel (1x230V+HE)	Start date: 01-06-2023	Constructor: DKTSA	Page: 26
		Revision date: 12-05-2026	Approved by: DKBP	Previous page: 25
Drawing number: 2028125	Page Title: Options - Pre-heating controls	Revision: D	Scale: 1:1	Next page: 27
		Replaces revision: C	Format: A3	Pages in total: 40



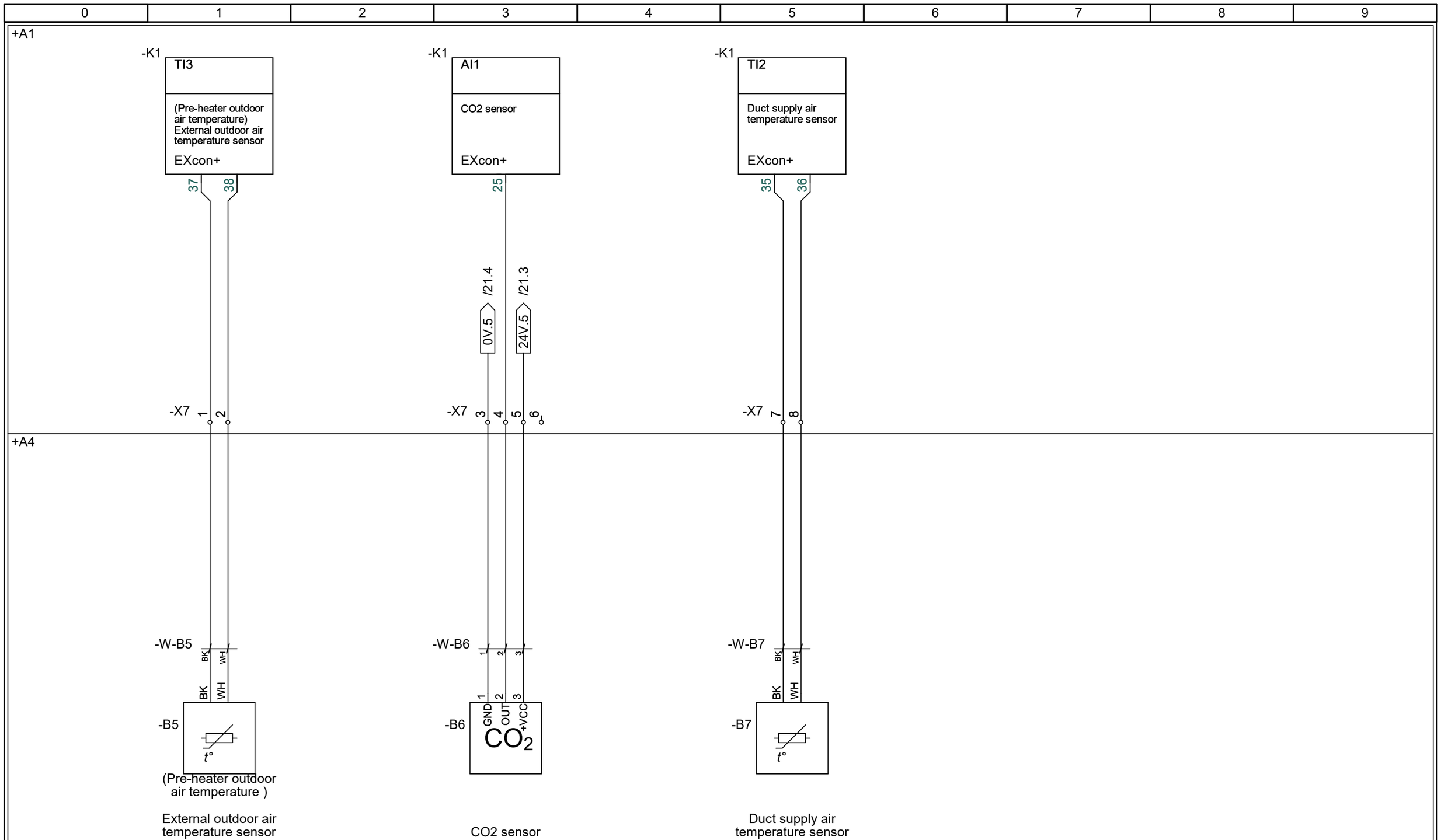
External power supply

Electric post-heating

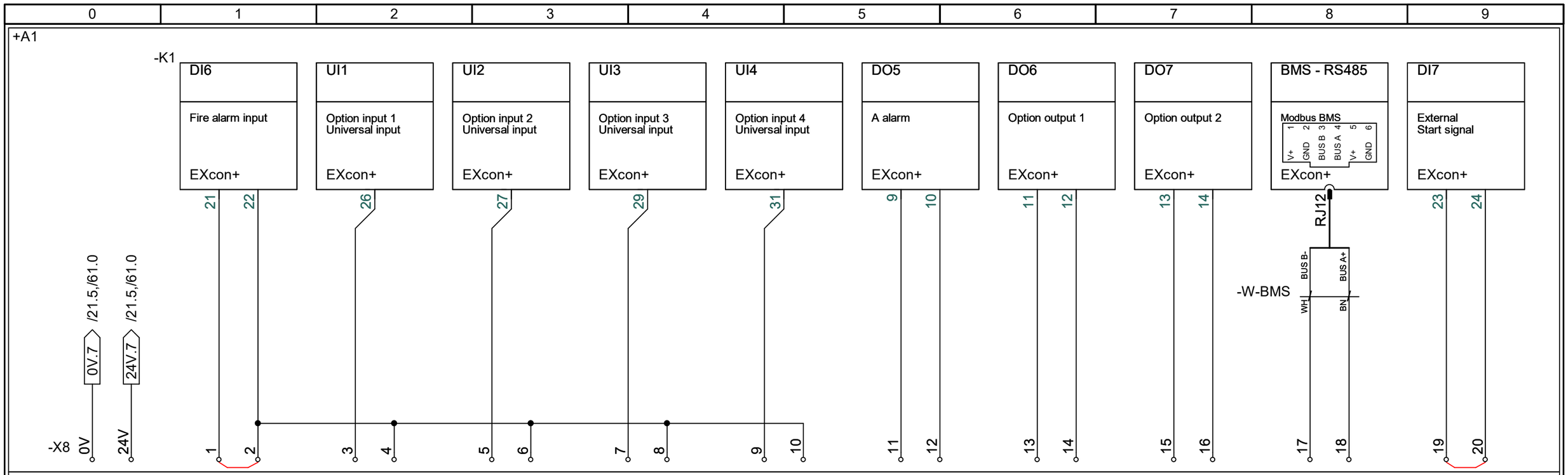
Manufactured by: EXHAUSTO	Project: VEX1000 - Control panel (1x230V+HE)	Start date: 01-06-2023	Constructor: DKTSA	Page: 27
		Revision date: 12-05-2026	Approved by: DKBP	Previous page: 26
Drawing number: 2028125	Page Title: Options - Post-heating controls	Revision: D	Scale: 1:1	Next page: 28
		Replaces revision: C	Format: A3	Pages in total: 40



Manufactured by: EXHAUSTO	Project: VEX1000 - Control panel (1x230V+HE)	Start date: 01-06-2023	Constructor: DKTSA	Page: 28
		Revision date: 12-05-2026	Approved by: DKBP	Previous page: 27
Drawing number: 2028125	Page Title: Options - HW/CW/CO controls	Revision: D	Scale: 1:1	Next page: 29
		Replaces revision: C	Format: A3	Pages in total: 40



Manufactured by: EXHAUSTO	Project: VEX1000 - Control panel (1x230V+HE)	Start date:	01-06-2023	Constructor:	DKTSA	Page:	29
		Revision date:	12-05-2026	Approved by:	DKBP	Previous page:	28
Drawing number: 2028125	Page Title: Options - Temperature & CO2 sensors	Revision:	D	Scale:	1:1	Next page:	30
		Replaces revision:	C	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

Manufactured by: EXHAUSTO	Project: VEX1000 - Control panel (1x230V+HE)	Start date:	01-06-2023	Constructor: DKTSA	Page: 30
		Revision date:	12-05-2026	Approved by: DKBP	Previous page: 29
Drawing number: 2028125	Page Title: Standard - Customer connections	Revision:	D	Scale: 1:1	Next page: 40
		Replaces revision:	C	Format: A3	Pages in total: 40

Pressure & temperature transmitters

Manufactured by: EXHAUSTO	Project: VEX1000 - Control panel (1x230V+HE)	Start date:	01-06-2023	Constructor:	DKTSA	Page:	PTH
		Revision date:	12-05-2026	Approved by:	DKBP	Previous page:	30
Drawing number: 2028125	Page Title: Pressure & temperature transmitters	Revision:	D	Scale:	1:1	Next page:	40
		Replaces revision:	C	Format:	A3	Pages in total:	40

0	1	2	3	4	5	6	7	8	9

+A3

-BP1 DualPTH 1

DualPTH

-BP1 RS485 A

Modbus A In

1	2	3	4	5	6
V+	GND	BUS B	BUS A	V+	GND

DualPTH

-BP1 RS485 B

Modbus B Out

1	2	3	4	5	6
V+	GND	BUS B	BUS A	V+	GND

DualPTH

-BP1 Temp. 1

Exhaust air temperature

DualPTH

-BP1 Temp. 2

(Pre-heater coil temperature)
Outdoor air temperature

DualPTH

-BP1 Air pressure 1

Exhaust air fan pressure

DualPTH

-BP1 Air pressure 2

Outdoor air filter pressure

DualPTH

RJ12 A

RJ12 B

1 2

3 4

\- +

\- +

-W-K2

-X1.3

6

-W-B1.2

BK WH

-B1.2

t°

Exhaust air temperature

-W-B2.1

BK WH

-B2.1

t°

(Pre-heater coil temperature)

Outdoor air temperature

GY YE

\- +

Exhaust air fan pressure

BU RD

\- +

Outdoor air filter pressure

Manufactured by: EXHAUSTO	Project: VEX1000 - Control panel (1x230V+HE)	Start date:	01-06-2023	Constructor: DKTSA	Page: 40
		Revision date:	12-05-2026	Approved by: DKBP	Previous page: 30
Drawing number: 2028125	Page Title: Standard - Dual PTH 1	Revision:	D	Scale: 1:1	Next page: 41
		Replaces revision:	C	Format: A3	Pages in total: 40

0	1	2	3	4	5	6	7	8	9

+A3

-BP2 DualPTH 2

DualPTH

-BP2 RS485 A

Modbus A In

1 V+ 2 GND 3 BUS B 4 BUS A 5 V+ 6 GND

DualPTH

RJ12 A

-BP2 RS485 B

Modbus B Out

1 V+ 2 GND 3 BUS B 4 BUS A 5 V+ 6 GND

DualPTH

RJ12 B

-BP2 Temp. 1

Supply airflow correction

DualPTH

1 2

-BP2 Temp. 2

Extract air temperature

DualPTH

3 4

-BP2 Air pressure 1

Supply air fan pressure

DualPTH

- +

-BP2 Air pressure 2

Extract air filter pressure

DualPTH

- +

-W-K3

-X1.3 7

-W-B2.2 BK WH

BK WH

-B2.2 t°

Supply airflow correction

-W-B1.1 BK WH

BK WH

-B1.1 t°

Extract air temperature

GY YE

- +

Supply air fan pressure

BU RD

- +

Extract air filter pressure

Manufactured by: EXHAUSTO	Project: VEX1000 - Control panel (1x230V+HE)	Start date: 01-06-2023	Constructor: DKTSA	Page: 41
		Revision date: 12-05-2026	Approved by: DKBP	Previous page: 40
Drawing number: 2028125	Page Title: Standard - Dual PTH 2	Revision: D	Scale: 1:1	Next page: 42
		Replaces revision: C	Format: A3	Pages in total: 40

+A3

Rotor drive option

-BP3 DualPTH 3

DualPTH

-BP3 RS485 A

Modbus A In

1 V+ 2 GND 3 BUS B 4 BUS A 5 V+ 6 GND

DualPTH

RJ12 A

-W-K4

-PB3

/23.7

-BP3 RS485 B

Modbus B Out

1 V+ 2 GND 3 BUS B 4 BUS A 5 V+ 6 GND

DualPTH

RJ12 B

-BP3 Temp. 1

Heat recovery temperature

DualPTH

1 2

-W-B9

BK WH

-B9

t°

Heat recovery temperature

-BP3 Temp. 2

Spare

DualPTH

3 4

-BP3 Air pressure 1

Automatic Leakage Control™

DualPTH

\- +

GY YE

Extract air Supply air

Automatic Leakage Control™

-BP3 Air pressure 2

Rotor deicing

DualPTH

\- +

BU RD

Exhaust air Extract air

Rotor deicing

Manufactured by: EXHAUSTO	Project: VEX1000 - Control panel (1x230V+HE)	Start date:	01-06-2023	Constructor: DKTSA	Page: 42
		Revision date:	12-05-2026	Approved by: DKBP	Previous page: 41
Drawing number: 2028125	Page Title: Option - ALC™ - Rotor deicing - Heat recovery temp.	Revision:	D	Scale: 1:1	Next page: 43
		Replaces revision:	C	Format: A3	Pages in total: 40

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

+A3

Counter-flow option

-BP3 DualPTH 3 — DualPTH

-BP3 RS485 A — Modbus A In (1 V+, 2 GND, 3 BUS B, 4 BUS A, 5 V+, 6 GND) — DualPTH

-BP3 RS485 B — Modbus B Out (1 V+, 2 GND, 3 BUS B, 4 BUS A, 5 V+, 6 GND) — DualPTH

-BP3 Temp. 1 — Heat recovery temperature — DualPTH

-BP3 Temp. 2 — Spare — DualPTH

-BP3 Air pressure 1 — Space — DualPTH

-BP3 Air pressure 2 — Counter-flow deicing — DualPTH

RJ12 A

RJ12 B

1 2 3 4

\- +

\- +

-W-K4

-PB3

/23.7

-W-B9

BK WH

BK WH

-B9

t°

Heat recovery temperature

BU RD

\- +

Exhaust air

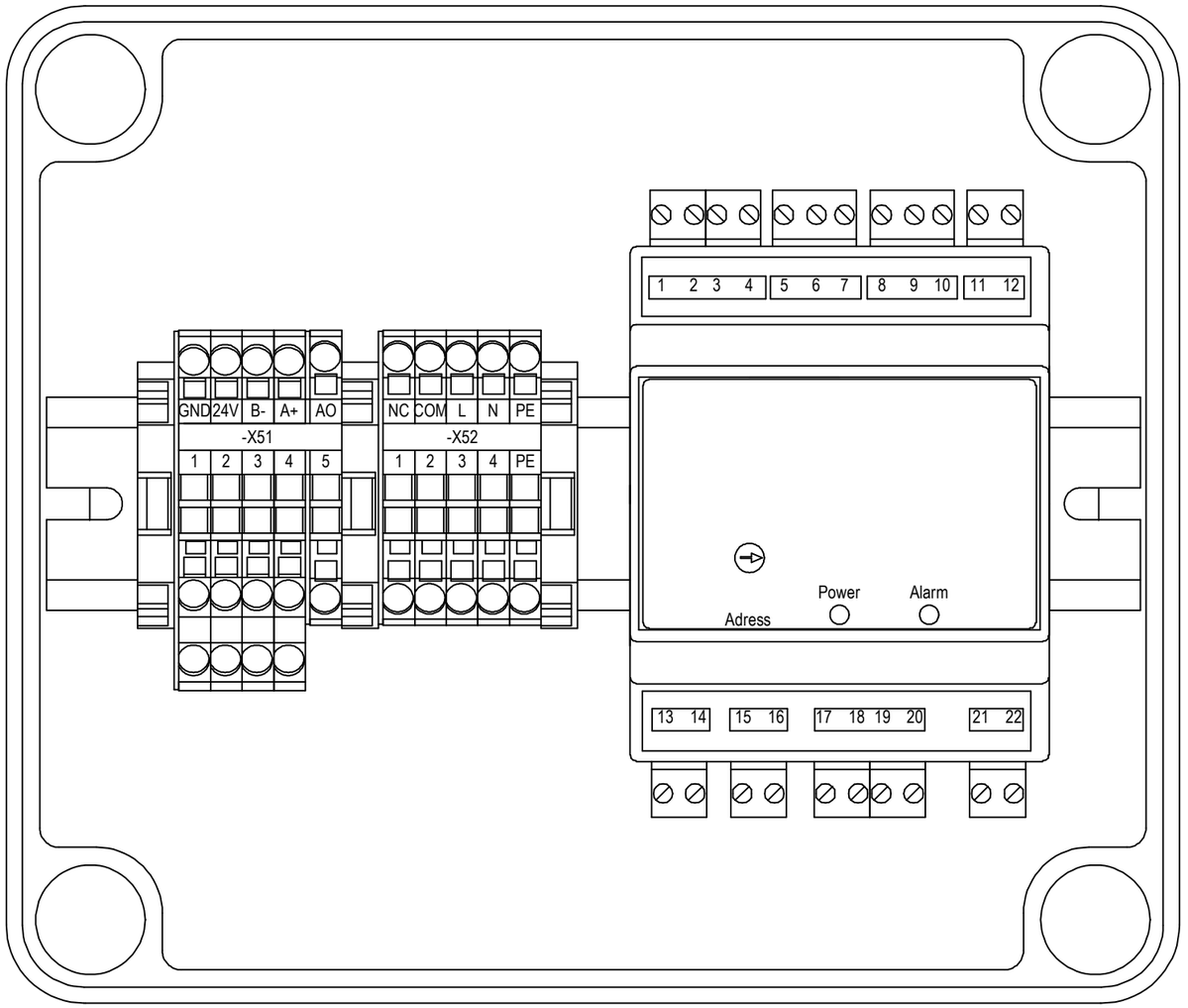
Extract air

Counter-flow deicing

Manufactured by: EXHAUSTO	Project: VEX1000 - Control panel (1x230V+HE)	Start date:	01-06-2023	Constructor: DKTSA	Page: 43
		Revision date:	12-05-2026	Approved by: DKBP	Previous page: 42
Drawing number: 2028125	Page Title: Option - Counter-flow deicing - Heat recovery temp.	Revision:	D	Scale: 1:1	Next page: 50
		Replaces revision:	C	Format: A3	Pages in total: 40

Extension modules

Manufactured by: EXHAUSTO	Project: VEX1000 - Control panel (1x230V+HE)	Start date:	01-06-2023	Constructor:	DKTSA	Page:	EXT
		Revision date:	12-05-2026	Approved by:	DKBP	Previous page:	43
Drawing number: 2028125	Page Title: Extension modules	Revision:	D	Scale:	1:1	Next page:	50
		Replaces revision:	C	Format:	A3	Pages in total:	40



Manufactured by: EXHAUSTO	Project: VEX1000 - Control panel (1x230V+HE)	Start date: 01-06-2023	Constructor: DKTSA	Page: 50
		Revision date: 12-05-2026	Approved by: DKBP	Previous page: 43
Drawing number: 2028125	Page Title: Option - Coil control box layout	Revision: D	Scale: 1:1	Next page: 51
		Replaces revision: C	Format: A3	Pages in total: 40

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

+A4

-K2 EXcon EXT

-K2 RS485 A — Modbus A In — EXcon EXT

-K2 RS485 B — Modbus B Out — EXcon EXT

-K2 AO2 — CO Valve — EXcon EXT

-K2 Temp. 1 — CO return water temperature — EXcon EXT

-K2 DO1 — Heating selected — EXcon EXT

-K2 DO2 — Cooling selected — EXcon EXT

-K2 DI1 — System alarm — EXcon EXT

-K2 Temp. 2 — CO supply water temperature — EXcon EXT

RJ12 A

RJ12 B

1 2

11 12

13 14

15 16

17 18

21 22

-W-K2 GND 24V+ BUS B- BUS A+ — WH/GY BN/PK GN YE

-X51 1 GND 2 24V+ 3 B- 4 A+ 5 AO

-X52 1 NC 2 COM 3 L 4 N PE

+A1

-W-K2 GND 24V+ BUS B- BUS A+ 1 2 3 4

-W-G2 1 2 3 4 GNYE

-W-R7 1 BK 2 RD 3 WH 5 OG

-W-G2 NC COM L N PE GNYE

-W-B4 BK WH

-W-E2 1 2 / 3 4

-W-S2 1 2

-W-B8 BK WH

K2 /22.8 -X10

-X6 5 6 7 8 PE

-R7 1- 2+ 3Y 5U M

-G2 M 1~

-B4 t°

-E2

-E2

-S2

-B8 t°

Min. 0,75 mm²

Min. 1,50 mm²

CO Valve

CW/CO circulation pump

CO return water temperature sensor

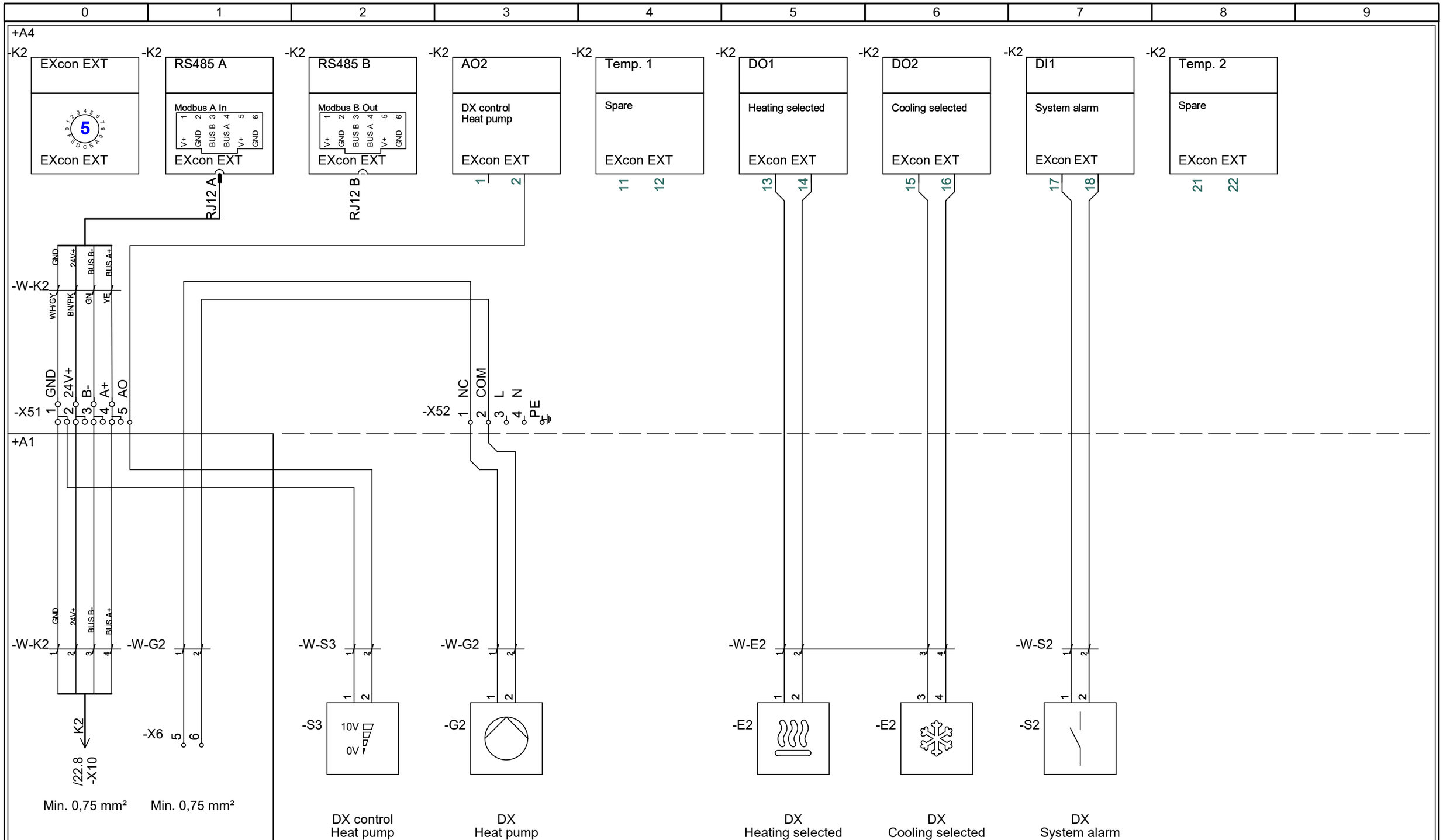
CO Heating selected

CO Cooling selected

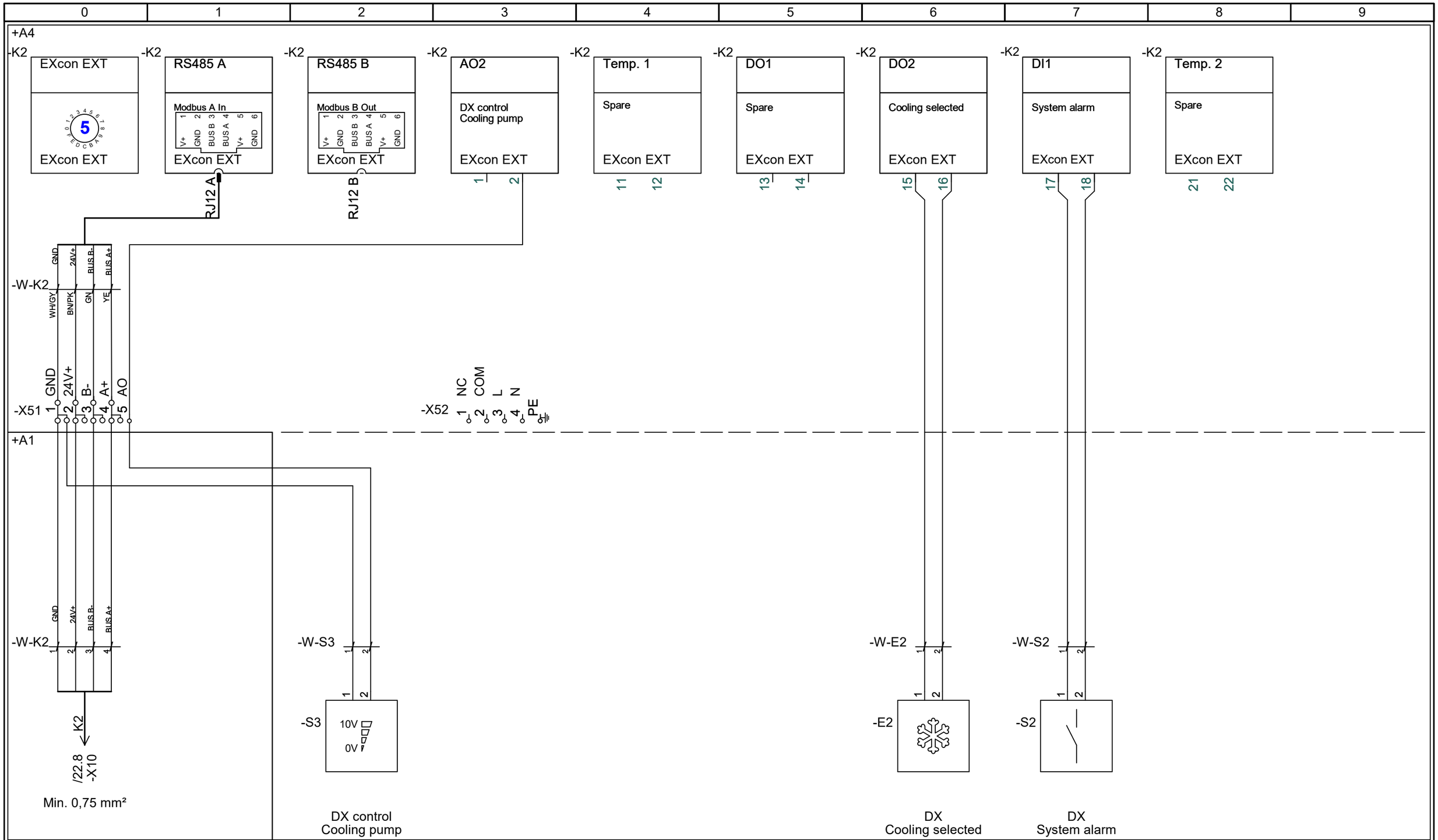
CO System alarm

CO supply water temperature sensor

Manufactured by: EXHAUSTO	Project: VEX1000 - Control panel (1x230V+HE)	Start date:	01-06-2023	Constructor: DKTSA	Page: 51
		Revision date:	12-05-2026	Approved by: DKBP	Previous page: 50
Drawing number: 2028125	Page Title: Option - Combi Coil	Revision:	D	Scale: 1:1	Next page: 52
		Replaces revision:	C	Format: A3	Pages in total: 40



Manufactured by: EXHAUSTO	Project: VEX1000 - Control panel (1x230V+HE)	Start date: 01-06-2023	Constructor: DKTSA	Page: 52
		Revision date: 12-05-2026	Approved by: DKBP	Previous page: 51
Drawing number: 2028125	Page Title: Option - Direct Expansion Heat pump	Revision: D	Scale: 1:1	Next page: 53
		Replaces revision: C	Format: A3	Pages in total: 40



Manufactured by:	Project:	Start date:	01-06-2023	Constructor:	DKTSA	Page:	53
EXHAUSTO	VEX1000 - Control panel (1x230V+HE)	Revision date:	12-05-2026	Approved by:	DKBP	Previous page:	52
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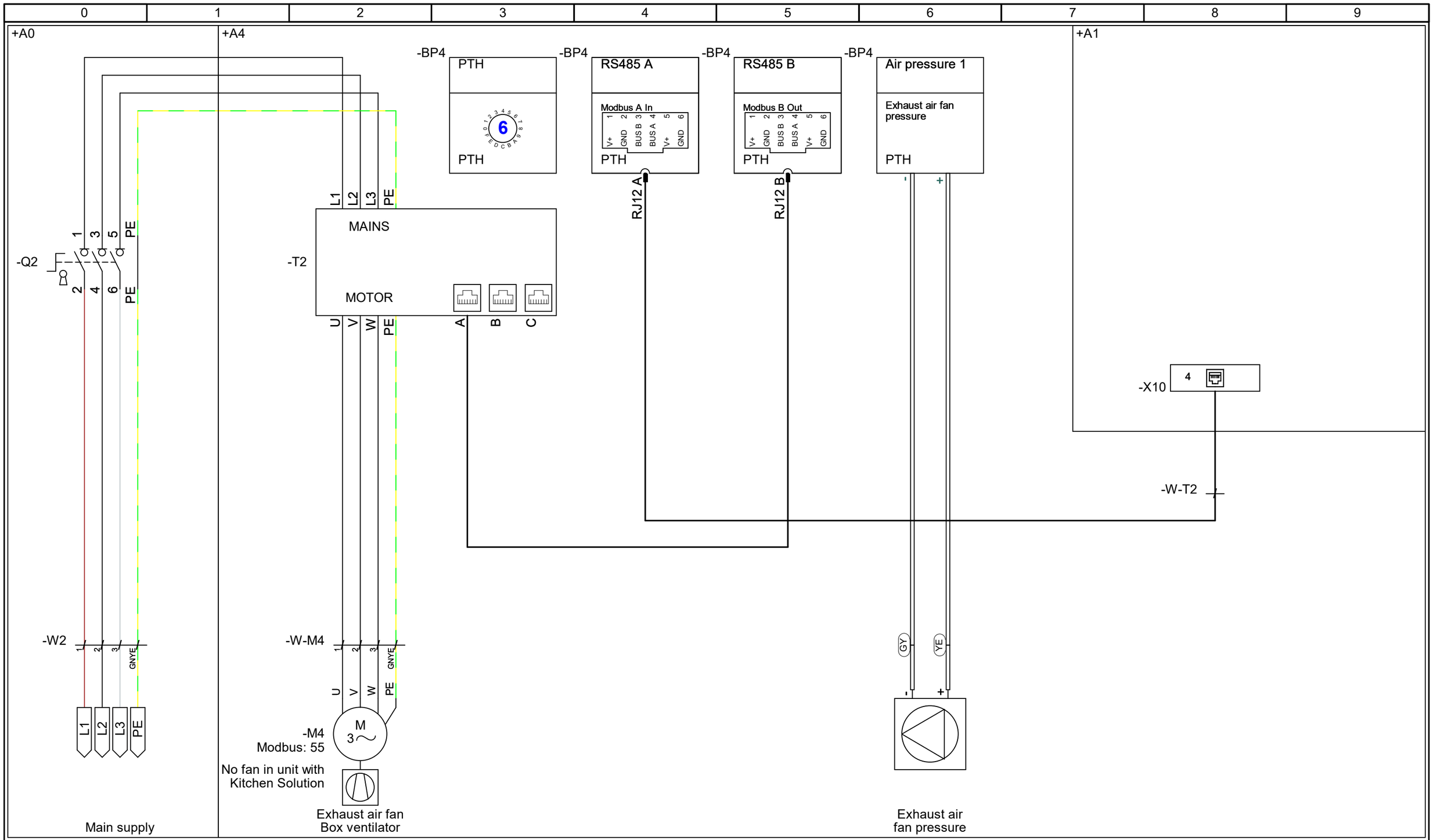
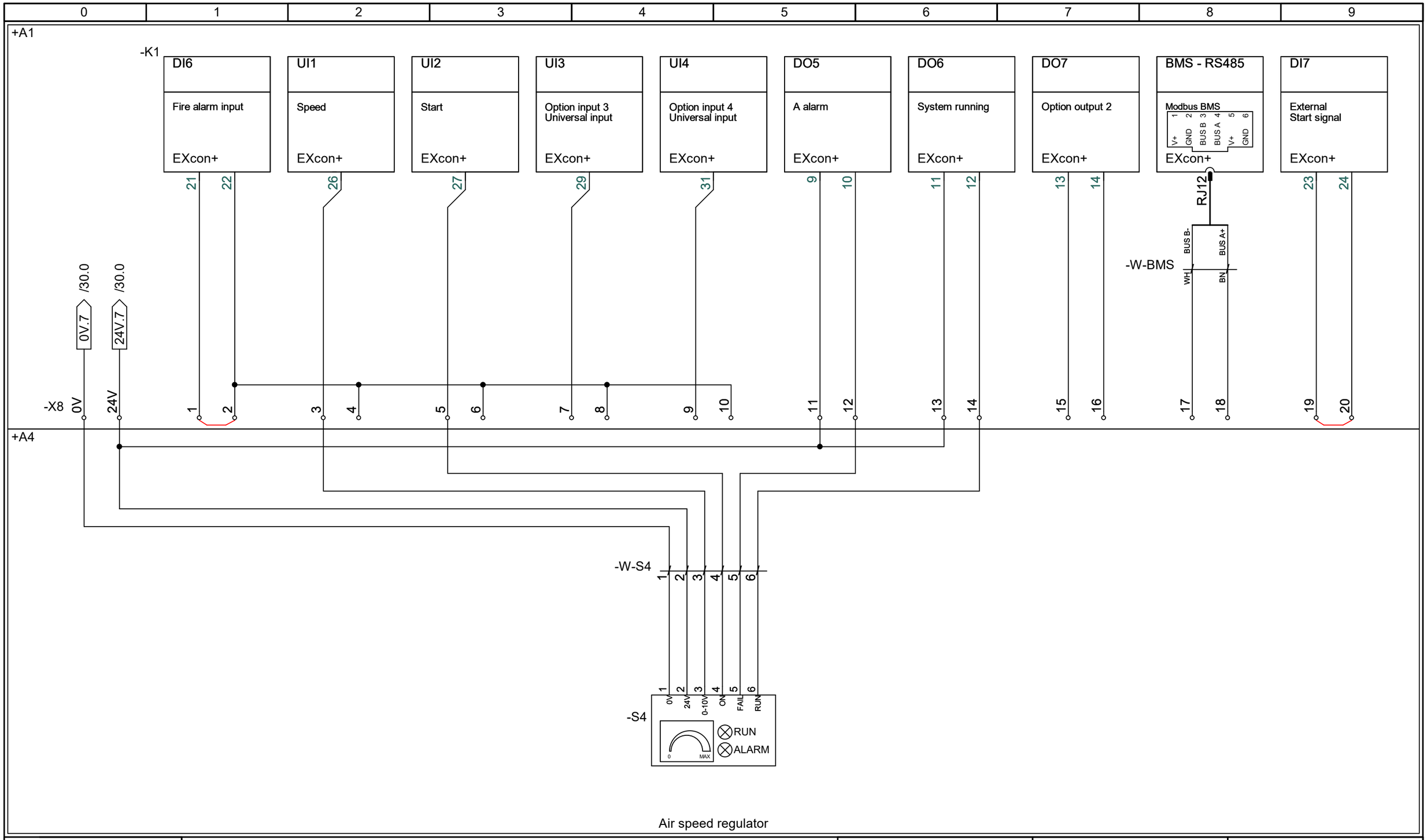
2028125	Option - Direct Expansion Cooling	Replaces revision:	C	Format:	A3	Pages in total:	40

Option - Kitchen Solution

Manufactured by: EXHAUSTO	Project: VEX1000 - Control panel (1x230V+HE)	Start date:	01-06-2023	Constructor:	DKTSA	Page:	KS
		Revision date:	12-05-2026	Approved by:	DKBP	Previous page:	53
Drawing number: 2028125	Page Title: Option - Kitchen Solution	Revision:	D	Scale:	1:1	Next page:	60
		Replaces revision:	C	Format:	A3	Pages in total:	40



Manufactured by: EXHAUSTO	Project: VEX1000 - Control panel (1x230V+HE)	Start date:	01-06-2023	Constructor:	DKTSA	Page:	60
		Revision date:	12-05-2026	Approved by:	DKBP	Previous page:	53
Drawing number: 2028125	Page Title: Option - Kitchen Solution - Box fan	Revision:	D	Scale:	1:1	Next page:	61
		Replaces revision:	C	Format:	A3	Pages in total:	40



Air speed regulator

Manufactured by: EXHAUSTO	Project: VEX1000 - Control panel (1x230V+HE)	Start date:	01-06-2023	Constructor:	DKTSA	Page:	61
		Revision date:	12-05-2026	Approved by:	DKBP	Previous page:	60
Drawing number: 2028125	Page Title: Option - Kitchen Solution - Air speed	Revision:	D	Scale:	1:1	Next page:	.
		Replaces revision:	C	Format:	A3	Pages in total:	40

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