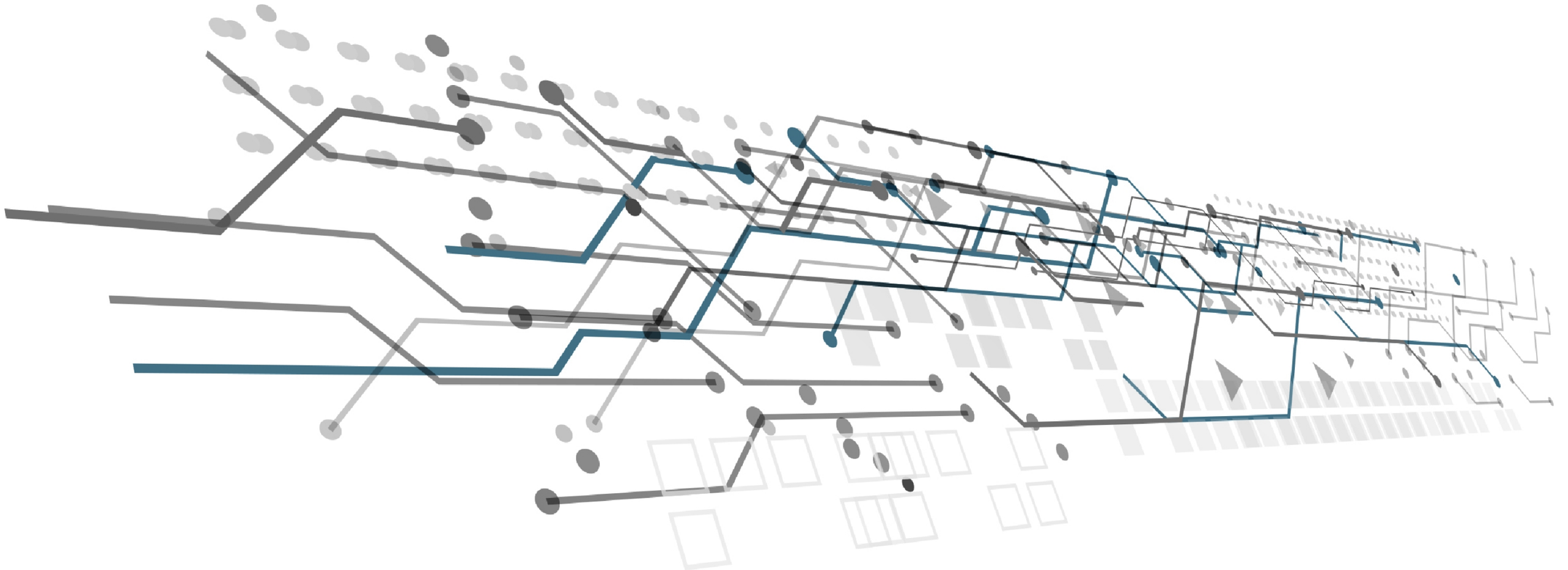
VEX1000 Wiring diagram

EXcon+ automatic
EXcon+ automatik
Système de règulation EXcon+



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VEX1000 - Customized (3x400V)

2027961

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Identification of wires by colour (according to EN 60204-1) Note #2

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) Note #3

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) Note #4

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 d'âmes désignés
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

GB All "Note #" in this document refer to non-English translations in the electrical installation instructions
DK Alle "Note #" i dette dokument henviser til den danske oversættelse i elektriske installationsvejledningen
DE Alle "Note #" in diesem Dokument beziehen sich auf die deutsche Übersetzung in der Elektroinstallationsanleitung
NO Alle "Note #" i dette dokumentet refererer til den norske oversettelsen i den elektriske installasjonsveiledningen
SE Alla "Note #" i detta dokument hänvisar till den svenska översättningen i den elektriska installationsanvisningen
NL Alle "Note #" in dit document verwijzen naar de Nederlandse vertaling in de elektrische installatie-instructies
FR Tous les "Note #" dans ce document se réfèrent à la traduction française du manuel d'installation électrique

Component	Location Note #5 (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
-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 Note #6 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 air temperature	Zulufttemperatur	Température de l'air soufflé
-B3	Heating return water temperature sensor	Temperatursensor Heizungsrücklaufwasser	Capteur thermique de l’eau de retour du chauffage
-B4	CO/CW return water temperature sensor	CO/CW-Rücklauf-Temperatursensor	Capteur thermique de retour CO/CW
-B5	Outdoor air temperature sensor (Pre-heater)	Außenluft-Temperatursensor (Vorwärmgerät)	Capteur thermique d’air extérieur (préchauffage)
-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
-BP1	DualPTH 1	DualPTH 1	DualPTH 1
-BP2	DualPTH 2	DualPTH 2	DualPTH 2
-BP3	DualPTH 3	DualPTH 3	DualPTH 3
-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 Power analyzer	Miniaturleistungsschalter für Leistungsanalysator	MCB pour analyseur de puissance
-F10	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
-K2	EXT module for Change over	EXT-Modul für Change-Over	Module EXT pour inversion

Component	Function Note #6 GB	Funktion DE	Fonction FR
-K10	Power analyzer main power	Leistungsanalysator Hauptstromversorgung	Analyseur de puissance alimentation principale
-K11	Power analyzer electric heater	Leistungsanalysator elektrische Heizung	Analyseur de puissance de chauffage électrique
-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
-Q1	Supply disconnecting device	Versorgungstrennvorrichtung	Dispositif de coupure de l'alimentation
-R1.1	Extract air damper	Abluftregister	Volet d'air extrait
-R1.2	Exhaust air damper	Fortluftregister	Volet d'air rejeté
-R2.1	Outdoor air damper	Außenluftregister	Volet d'air extérieur
-R2.2	Supply air damper	Zuluftregister	Volet d'air soufflé
-R3	Bypass damper	Bypassregister	Volet de dérivation
-R4	Mixing air damper	Mischluftregister	Volets 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
-T1	Power supply 230VAC/24VDC	Stromversorgung 230 V AC/24 V DC	Alimentation 230 V CA/24 V CC
-T10	Current transformer main power	Stromtransformator Hauptstromversorgung	Transformateur de courant alimentation principale
-T11	Current transformer electric heater	Stromtransformator für elektrische Heizung	Transformateur de courant chauffage électrique
-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
-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

Component	Function Note #6 (GB)	Funktion (DE)	Fonction (FR)
-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
-X9	Power analyzer terminals	Klemmen für Leistungsanalysator	Bornes des analyseur de puissance
-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-R1.2	Exhaust air damper plug	Stecker für Fortluftregister	Connecteur des volets d'air rejeté
-X-R2.1	Outdoor air damper plug	Stecker für Außenluftregister	Connecteur des volets d'air extérieur
-X-R4	Mixing air damper plug	Stecker für Mischluftregister	Connecteur des volts d'air mélangé

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Principles

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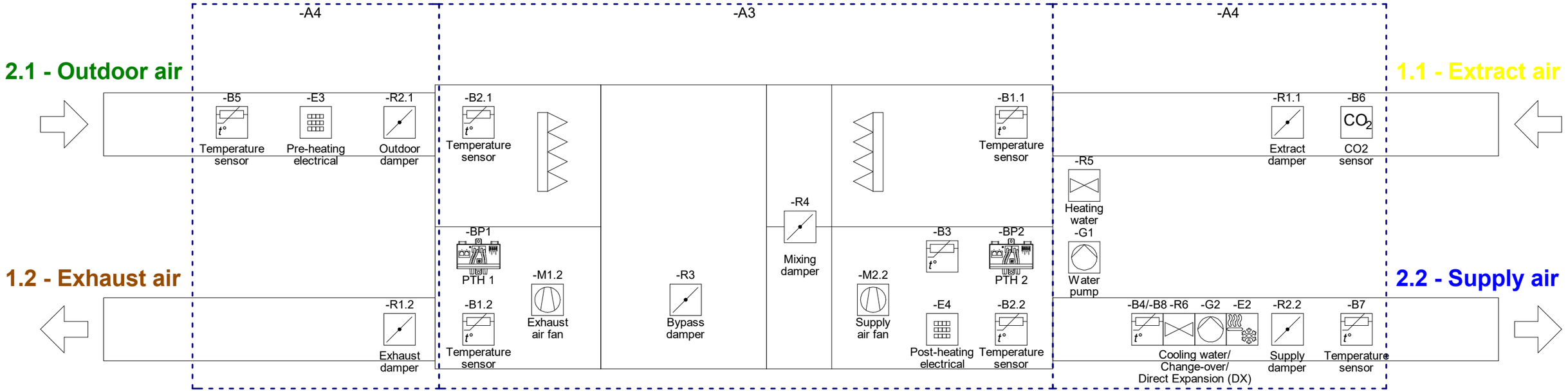
COUNTER-FLOW



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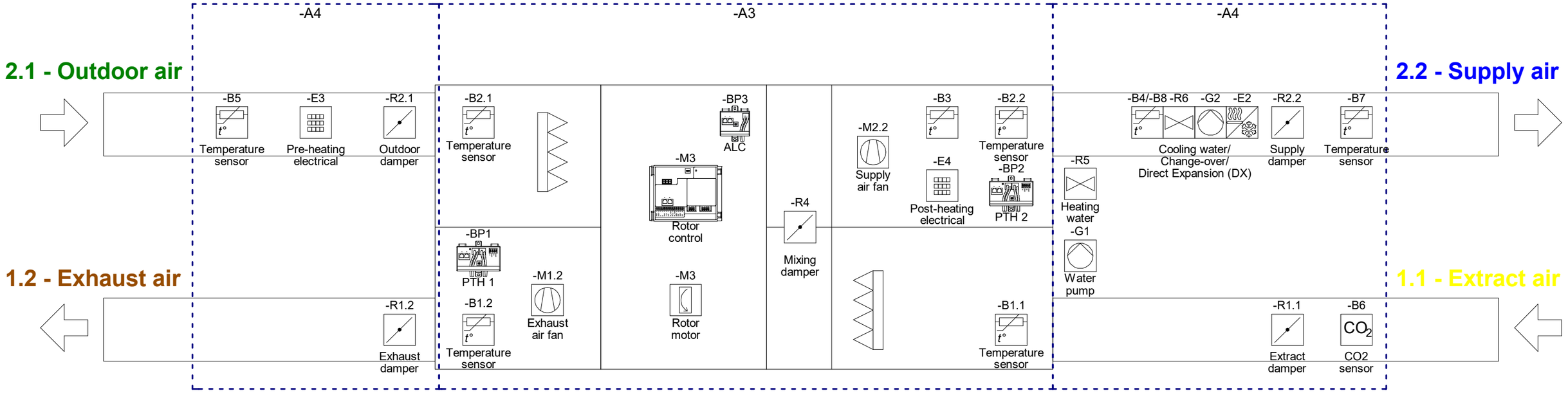

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Arrangement drawings

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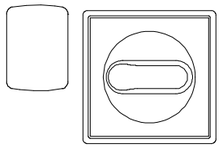

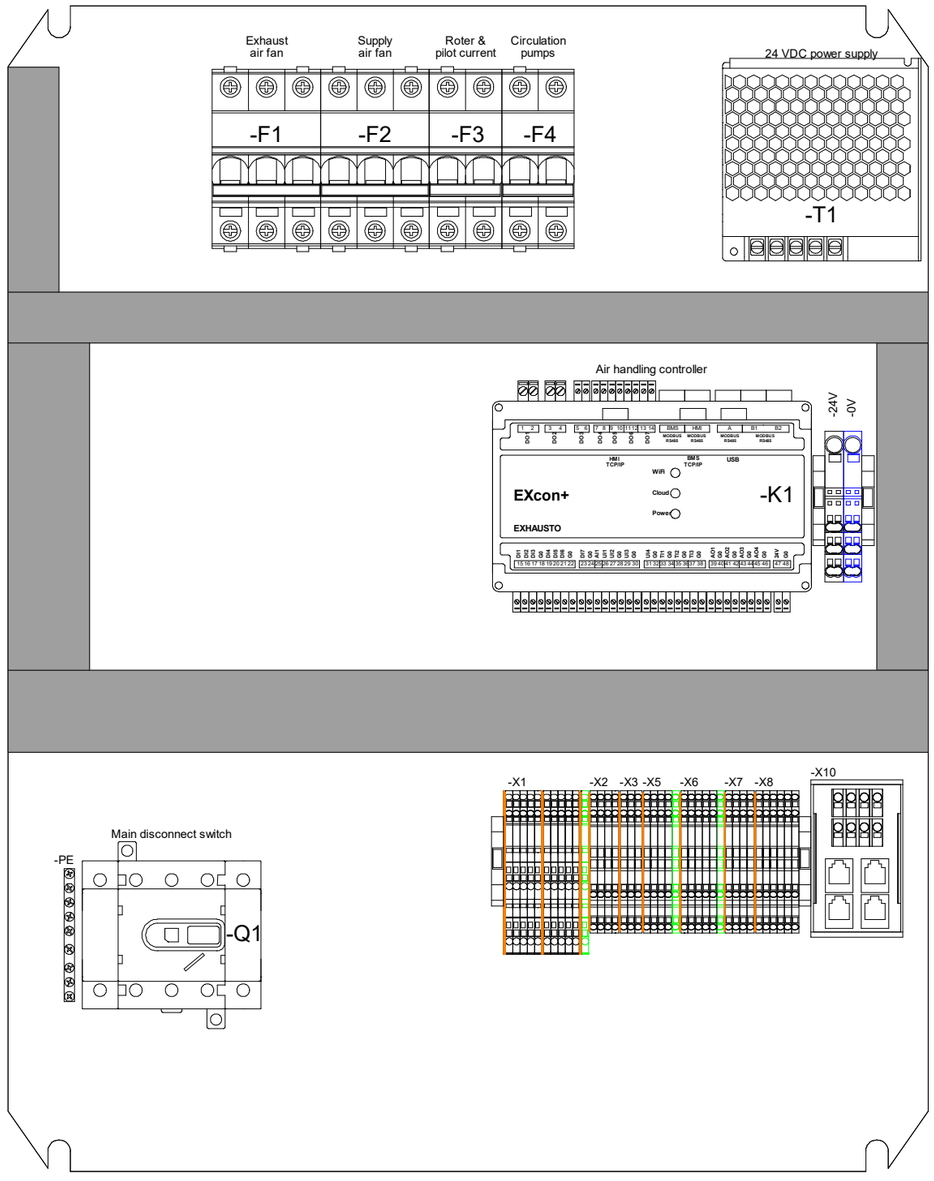

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Supplementary selections

Option 1: Power supply Electric heater

-F10 Circuit breaker 4P
-X4 Wire terminals

Option 2: Power analyser Main power

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

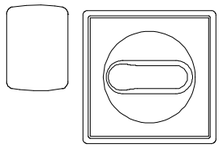
Option 3: Power analyser Electric heater

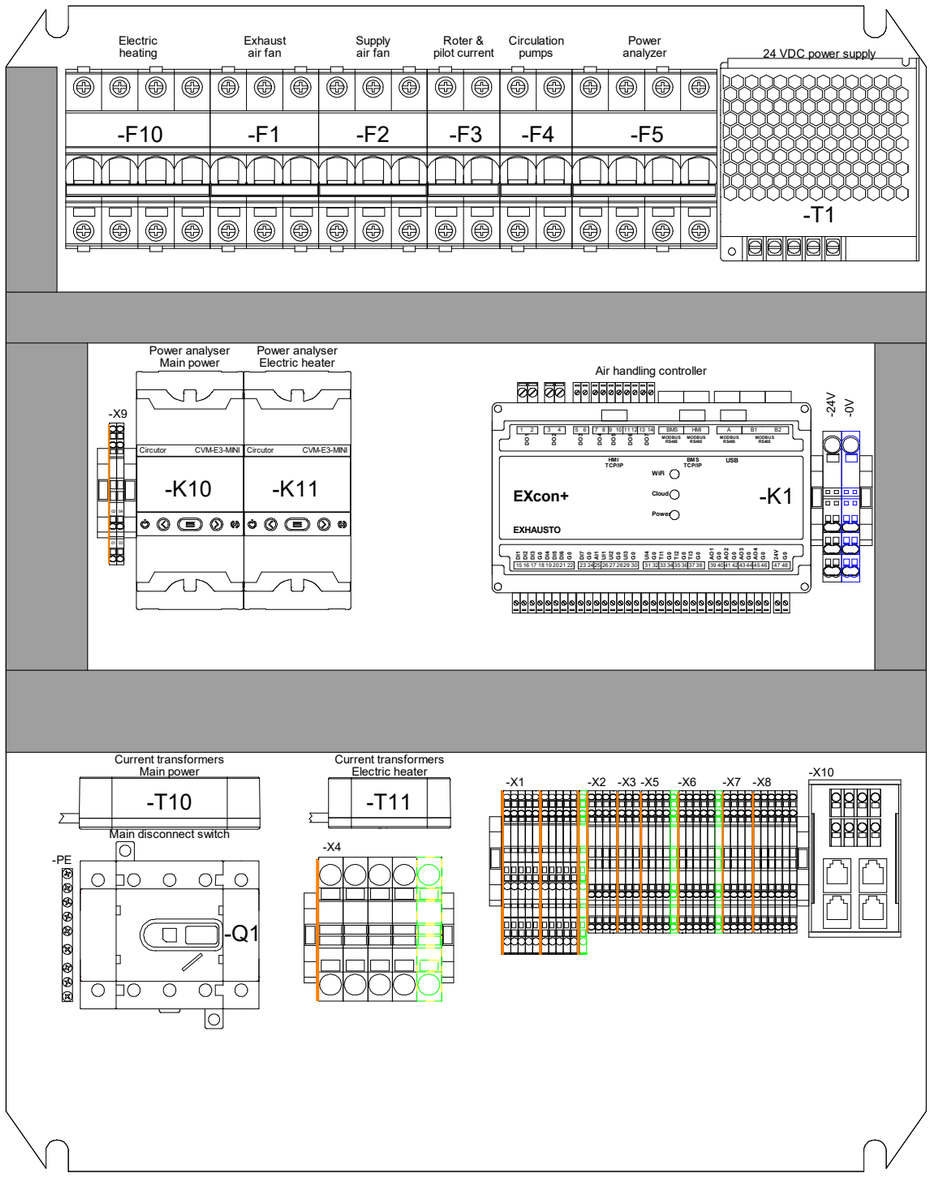
-K11 Three-phase power analyser
-T11 Three-phase current transformers 63A

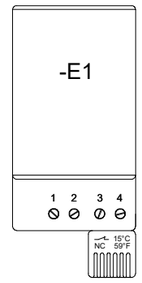
Option 3 is not selectable without option 1 and 2.

Option 4: Control panel heater

-E1 Control panel heater







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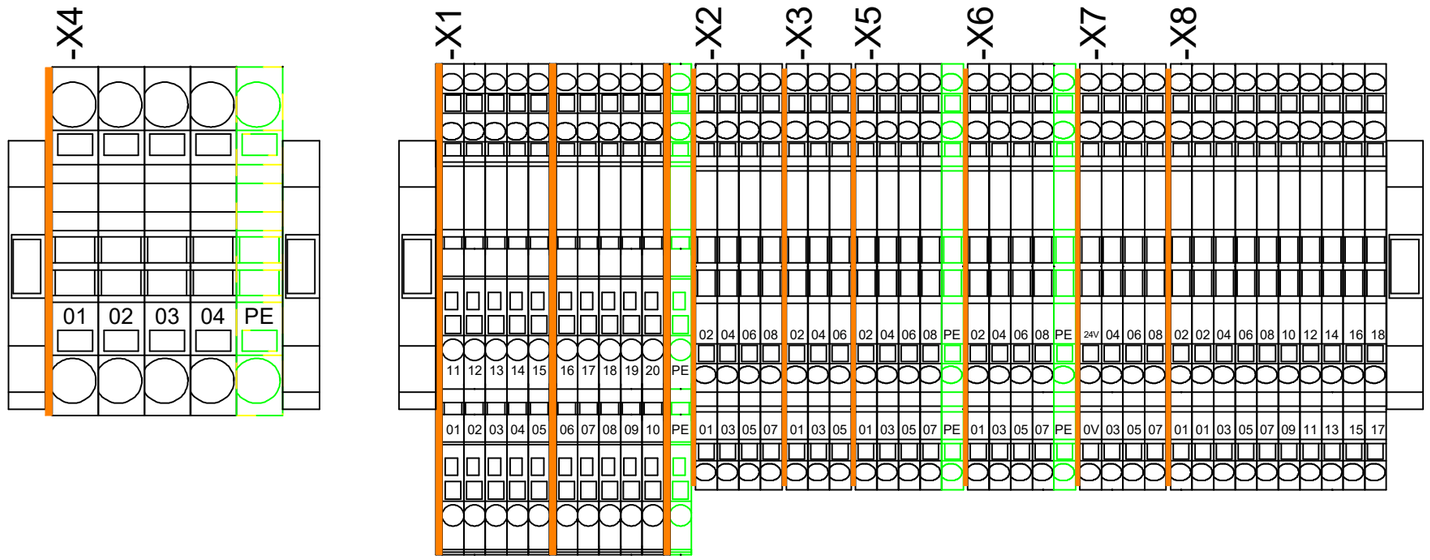
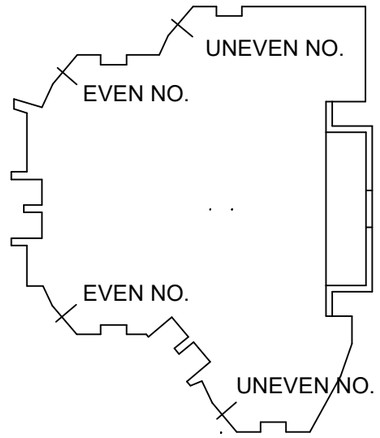




-X1:01	-M1.2	Exhaust air fan	L1
-X1:02	-M1.2	Exhaust air fan	L2
-X1:03	-M1.2	Exhaust air fan	L3
-X1:04	-M2.2	Supply air fan	L1
-X1:05	-M2.2	Supply air fan	L2
-X1:06	-M2.2	Supply air fan	L3
-X1:07	-M3	Rotor	L
-X1:08	-M3	Rotor	N
-X1:09	-MB	Modbus	0V
-X1:10	-MB	Modbus	24V
-X1:11	-MB	Modbus	B-
-X1:12	-MB	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

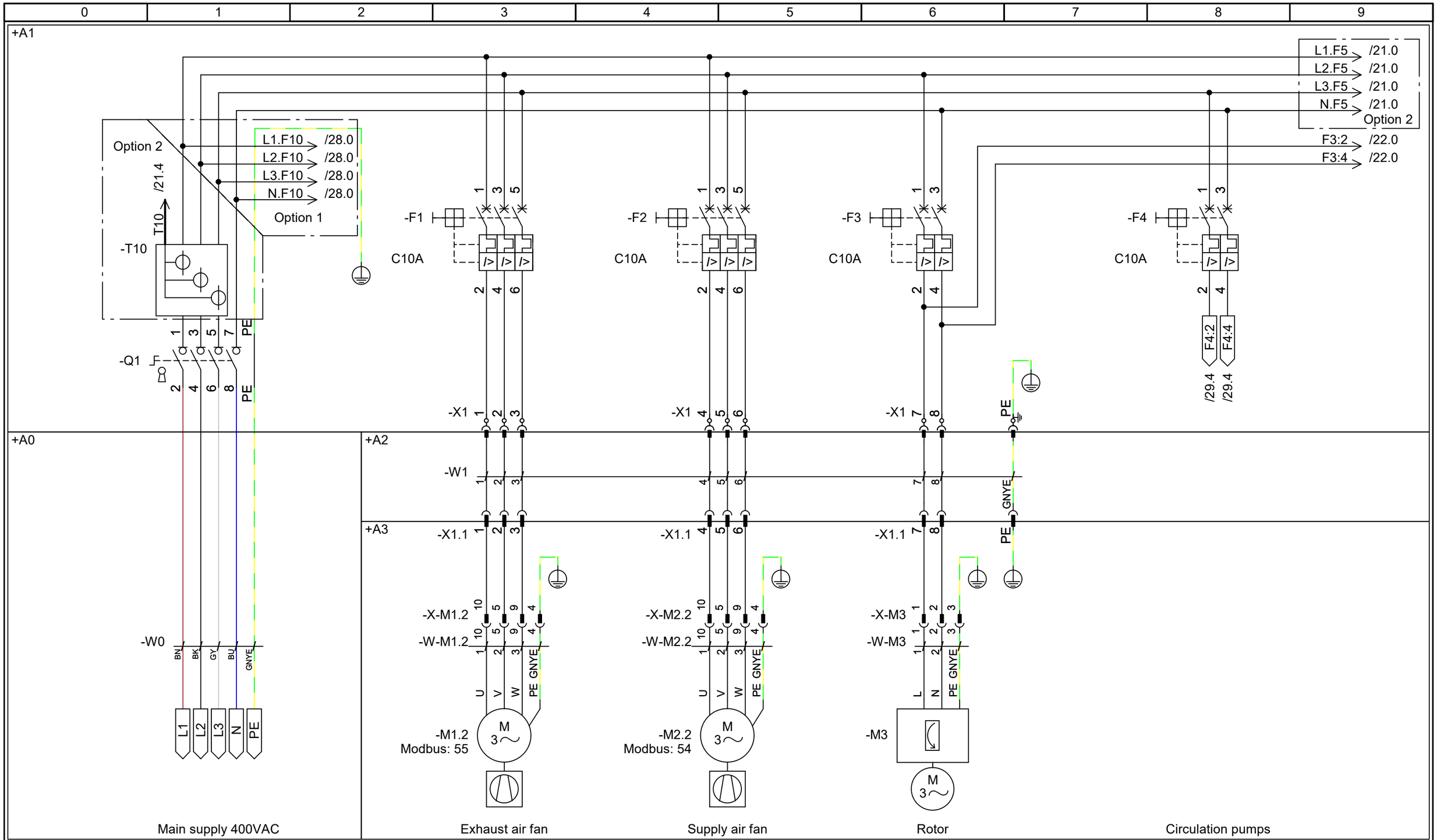
-X5:01	-R1	Valve HW	0V
-X5:02	-R1	Valve HW	24V
-X5:03	-R1	Valve HW	Signal
-X5:04	-R1	Valve HW	Not used
-X5:05	-G1	HW circulation pump	NC
-X5:06	-G1	HW circulation pump	COM
-X5:07	-G1	HW circulation pump	L
-X5:08	-G1	HW circulation pump	N
-X5:PE	-G1	HW circulation pump	PE
-X6:01	-R2	Valve CW/CO	0V
-X6:02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

Aldes | EXHAUSTO		Project: VEX1000 - Customized (3x400V)	Start date: 17-06-2024	Constructor: DKTSA	Page: 12
			Revision date: 15-11-2024	Approved by: DKBP	Previous page: 11
Drawing number: 2027961	Revision: A	Page Title: Control panel terminals	Replaces: -	Scale: 1:1	Next page: 20
			EC no.: -	Format: A3	Pages in total: 36

Circuit diagrams

aldes | EXHAUSTO		Project: VEX1000 - Customized (3x400V)	Start date: 17-06-2024	Constructor: DKTSA	Page: Circuit diagrams
			Revision date: 15-11-2024	Approved by: DKBP	Previous page: 12
Drawing number: 2027961	Revision: A	Page Title: Circuit diagrams	Replaces: -	Scale: 1:1	Next page: 20
			EC no.: -	Format: A3	Pages in total: 36



Project: VEX1000 - Customized (3x400V)		Start date:	17-06-2024	Constructor:	DKTSA	Page: 20
		Revision date:	15-11-2024	Approved by:	DKBP	Previous page: 12
Drawing number: 2027961	Revision: A	Page Title: Main current		Replaces: -	Scale: 1:1	Next page: 21
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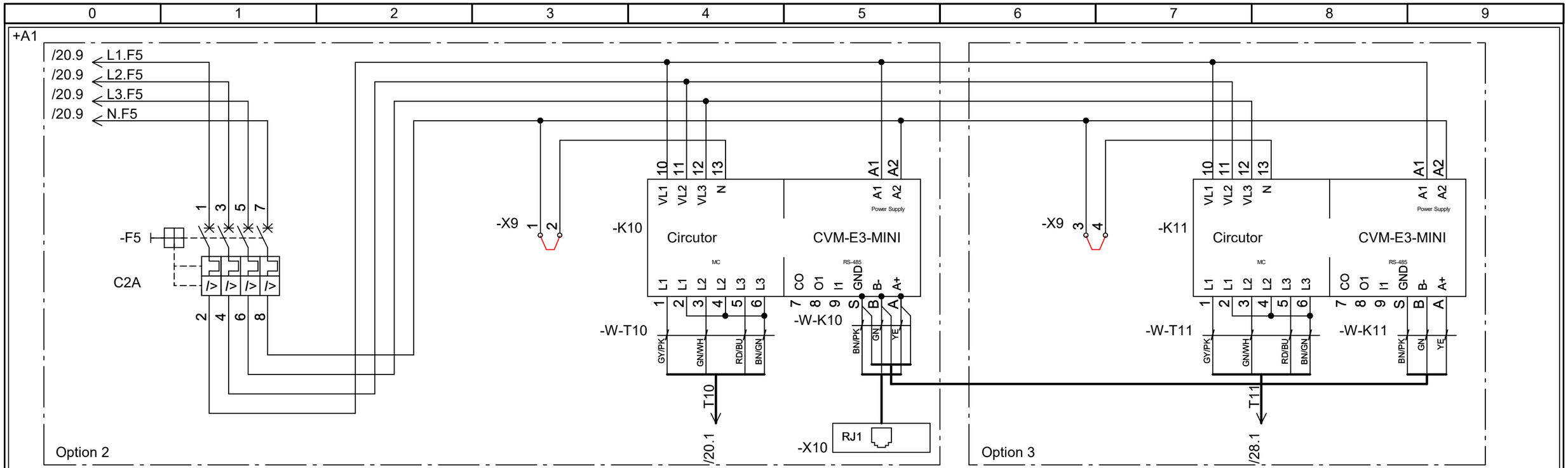


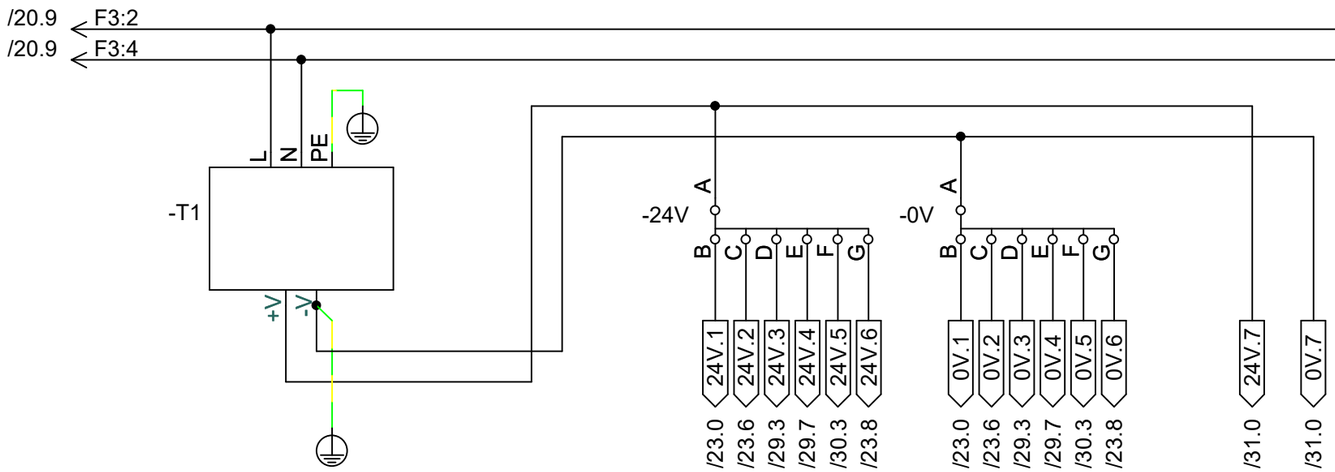
24VDC supply

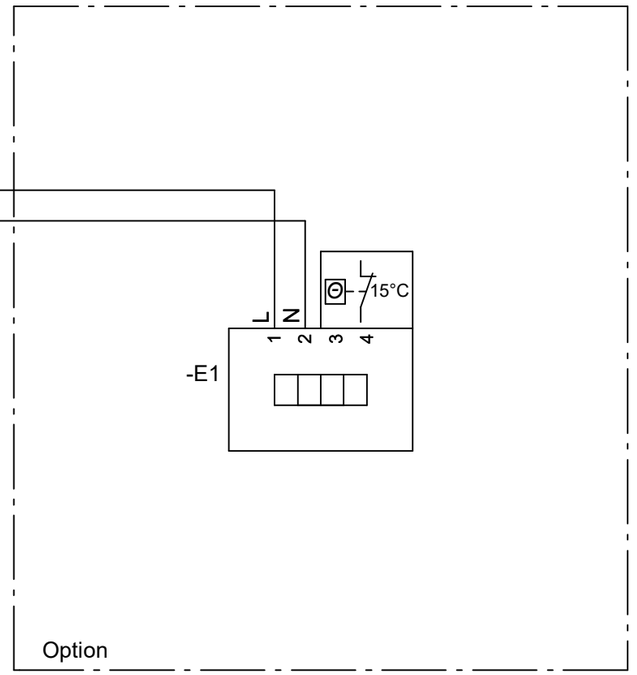
Power analyzer main power

Power analyzer electric heater

aldes | EXHAUSTO		Project: VEX1000 - Customized (3x400V)	Start date: 17-06-2024	Constructor: DKTSA	Page: 21
			Revision date: 15-11-2024	Approved by: DKBP	Previous page: 20
Drawing number: 2027961	Revision: A	Page Title: Power analyzers - 3 phase	Replaces: -	Scale: 1:1	Next page: 22
			EC no.: -	Format: A3	Pages in total: 36

+A1

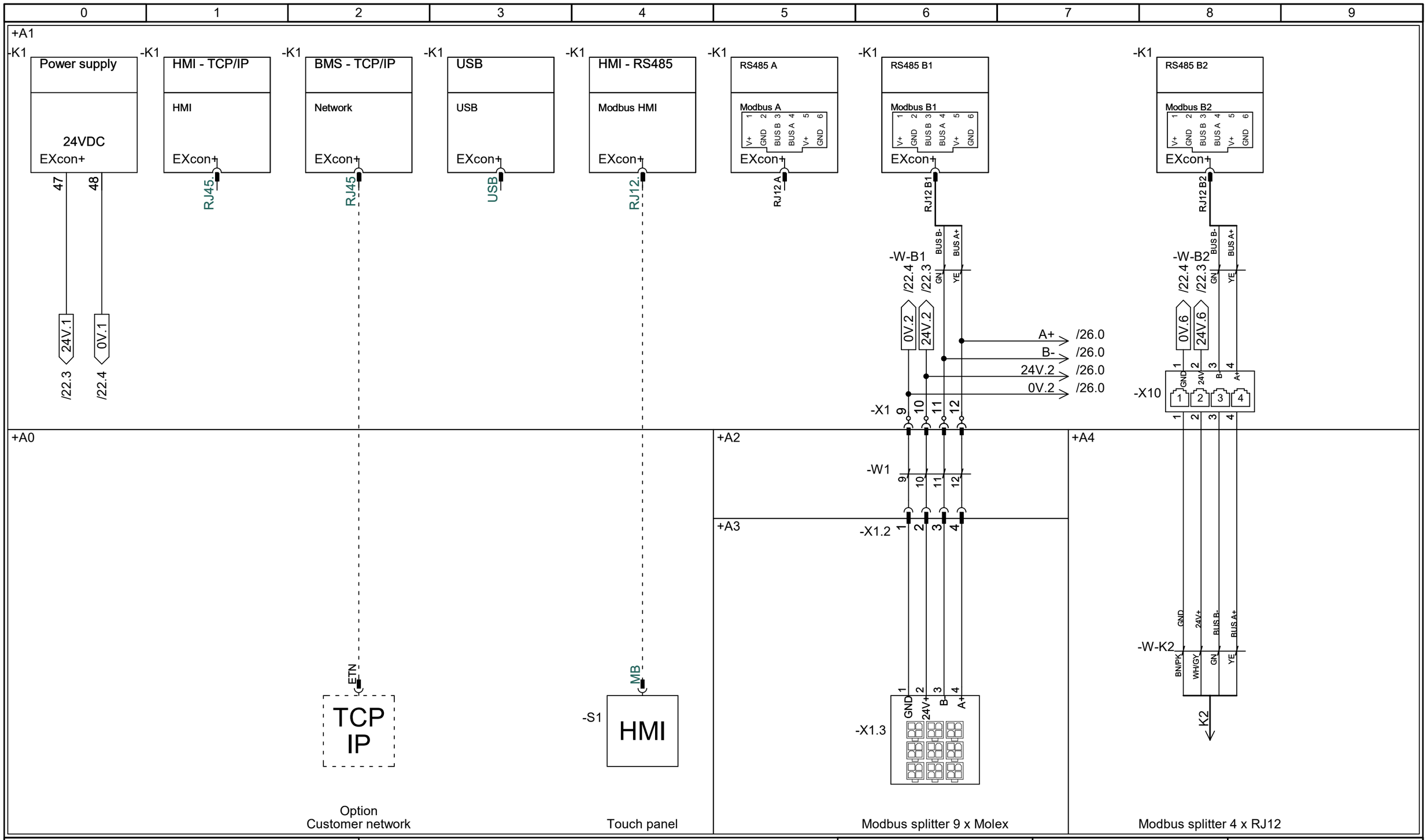




24VDC supply

Control panel heater

aldes | EXHAUSTO		Project: VEX1000 - Customized (3x400V)	Start date: 17-06-2024	Constructor: DKTSA	Page: 22
			Revision date: 15-11-2024	Approved by: DKBP	Previous page: 21
Drawing number: 2027961	Revision: A	Page Title: Pilot current	Replaces: -	Scale: 1:1	Next page: 23
			EC no.: -	Format: A3	Pages in total: 36



aldes | EXHAUSTO		Project: VEX1000 - Customized (3x400V)	Start date: 17-06-2024	Constructor: DKTSA	Page: 23
			Revision date: 15-11-2024	Approved by: DKBP	Previous page: 22
Drawing number: 2027961	Revision: A	Page Title: Standard - Modbus connections	Replaces: -	Scale: 1:1	Next page: 24
			EC no.: -	Format: A3	Pages in total: 36

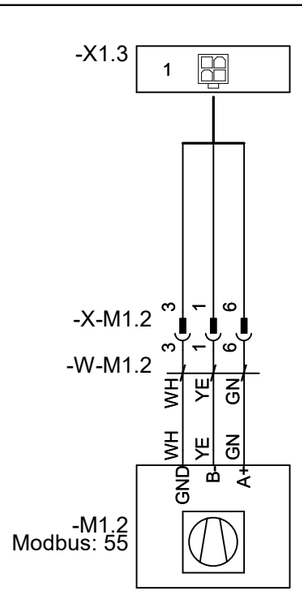
0	1	2	3	4	5	6	7	8	9

+A1

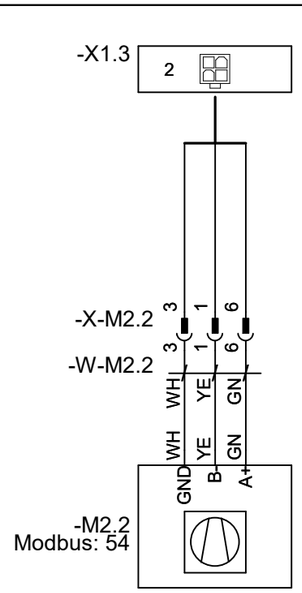
Rotor drive option

Counter-flow option

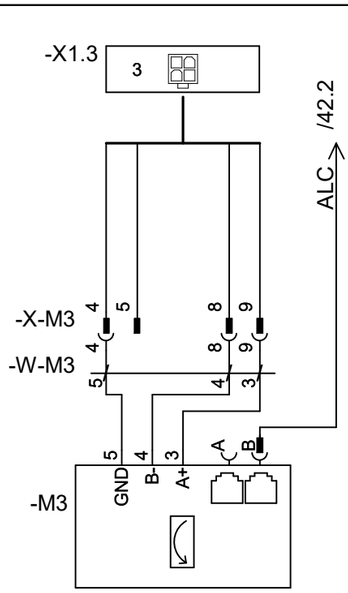
+A3



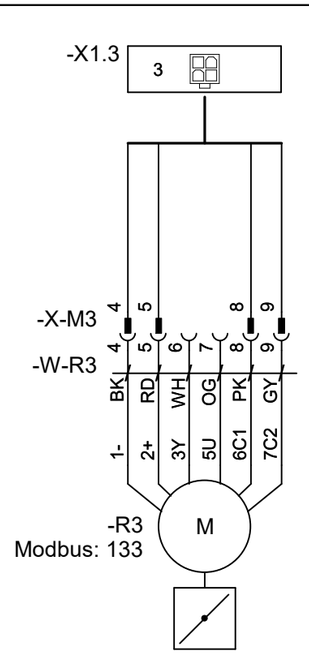
Exhaust air fan
Control



Supply air fan
Control



Rotor drive



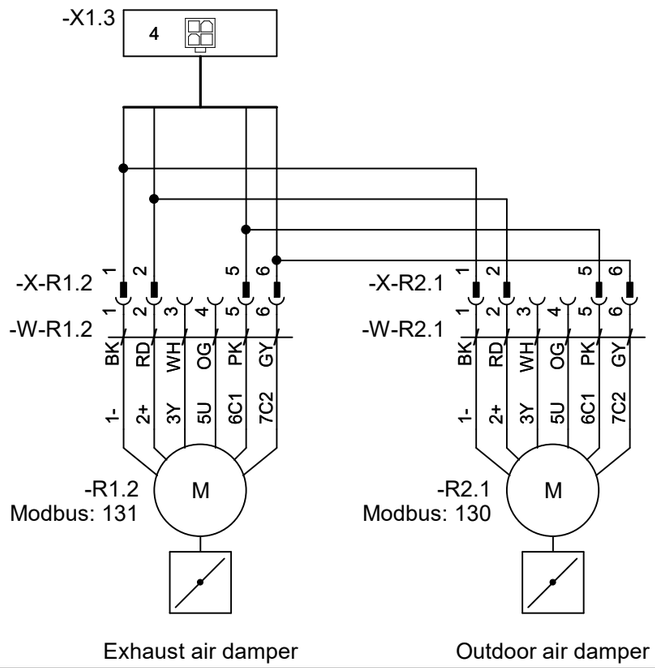
Bypass damper

Project: VEX1000 - Customized (3x400V)		Start date: 17-06-2024	Constructor: DKTSA	Page: 24	
		Revision date: 15-11-2024	Approved by: DKBP	Previous page: 23	
Drawing number: 2027961	Revision: A	Page Title: Standard - Fan & Rotor/Bypass controls	Replaces: -	Scale: 1:1	Next page: 25
			EC no.: -	Format: A3	Pages in total: 36

0	1	2	3	4	5	6	7	8	9

+A1

+A3



Project: VEX1000 - Customized (3x400V)		Start date:	17-06-2024	Constructor:	DKTSA	Page:	25
		Revision date:	15-11-2024	Approved by:	DKBP	Previous page:	24
Drawing number: 2027961	Revision: A	Page Title: Standard - Dampers		Replaces:	-	Scale:	1:1	Next page:	26
				EC no.:	-	Format:	A3	Pages in total:	36

0	1	2	3	4	5	6	7	8	9

+A1

/23.7 A+
/23.7 B-
/23.7 24V.2
/23.7 0V.2

-X2 1 3 5 7

-X2 2 4 6 8

+A3

-X1.3 8

-X-R4 1 2 5 6

-W-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

BK RD WH OG PK GY

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

-R1.1 M

Modbus: 136

(ALC™ air damper)
Extract air damper

-W-R2.2

BK RD WH OG PK GY

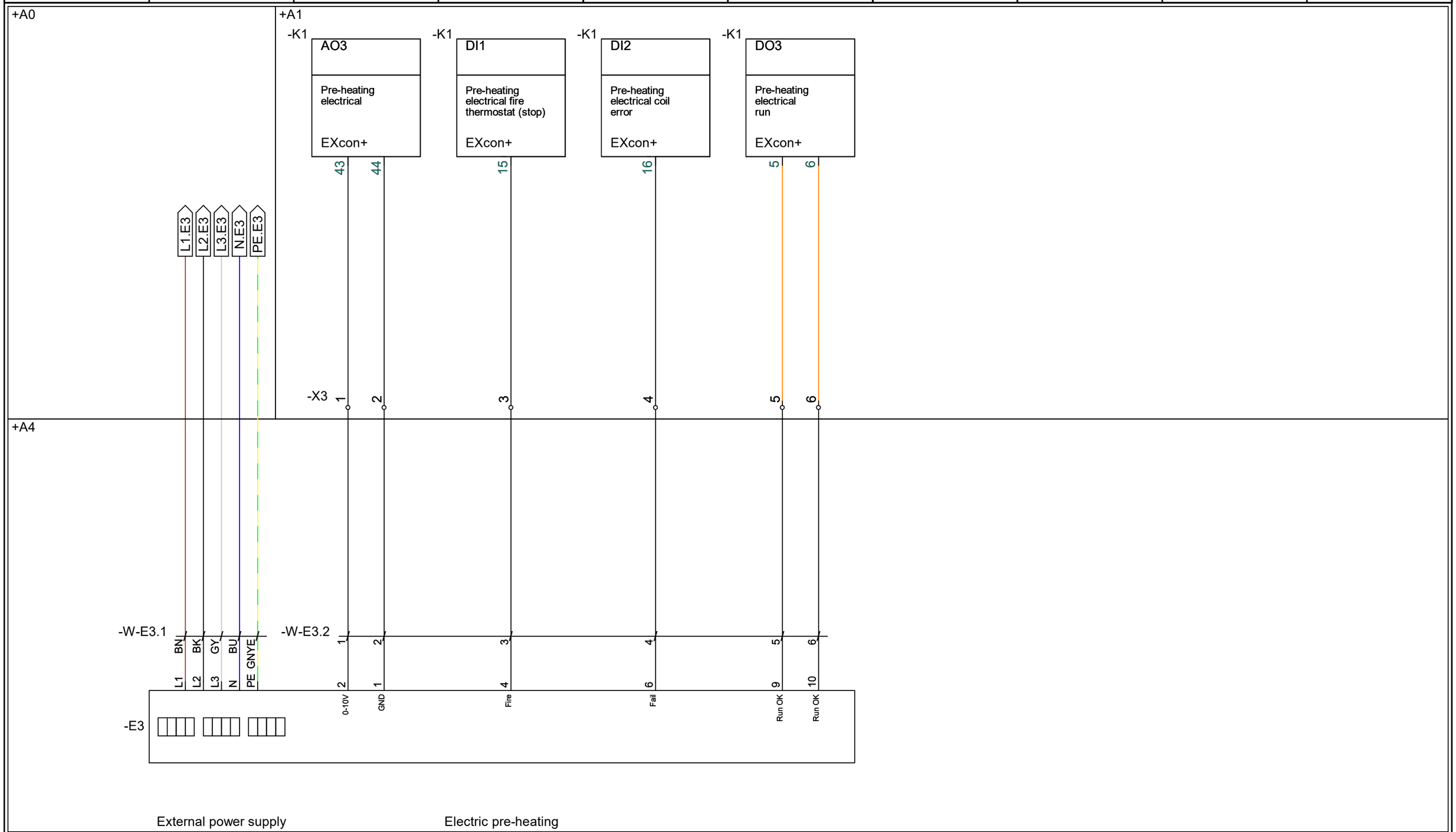
1- 2+ 3Y 5U 6C1 7C2

-R2.2 M

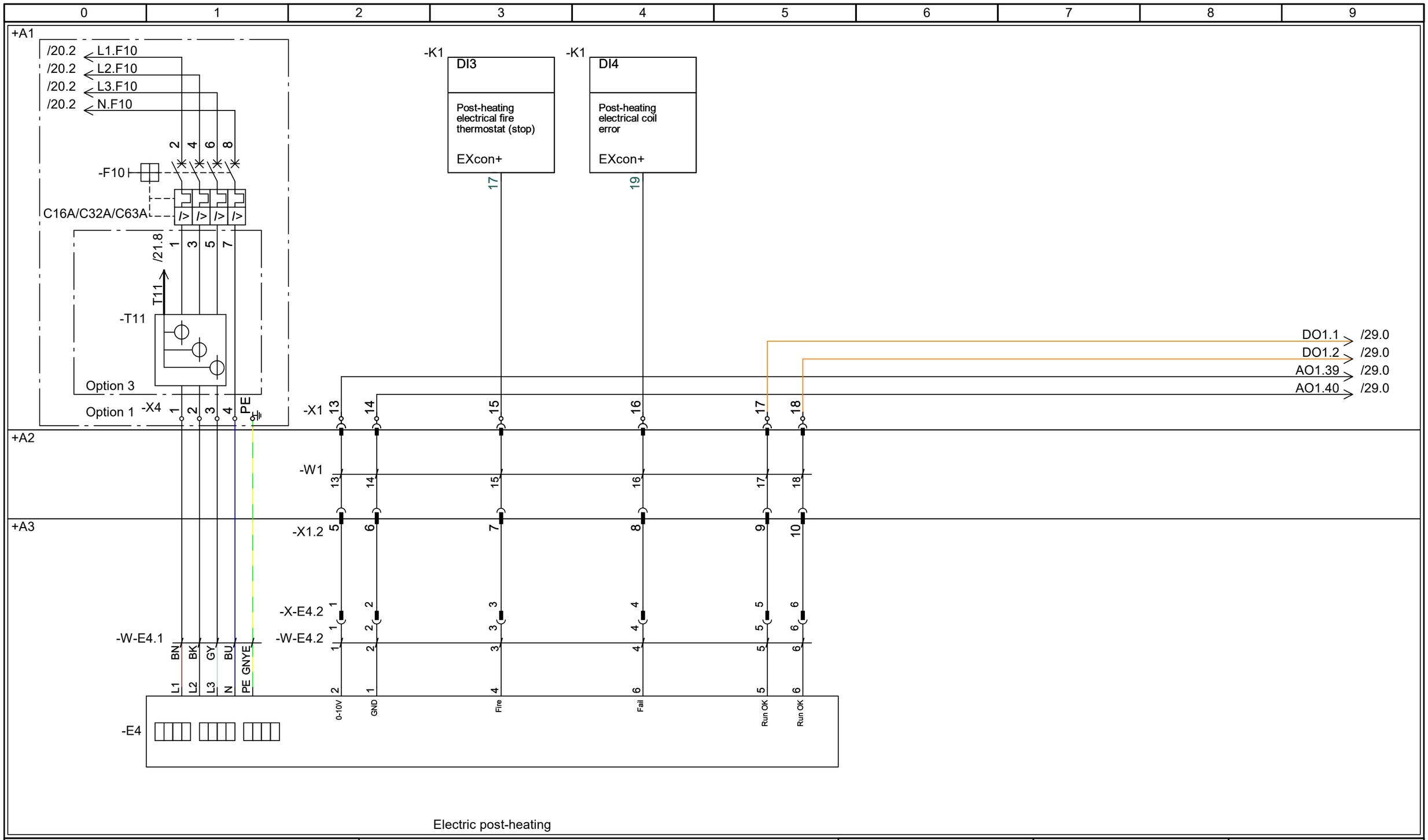
Modbus: 135

Supply air damper

Aldes | EXHAUSTO		Project: VEX1000 - Customized (3x400V)	Start date:	17-06-2024	Constructor:	DKTSA	Page: 26
			Revision date:	15-11-2024	Approved by:	DKBP	Previous page: 25
Drawing number: 2027961	Revision: A	Page Title: Options - Dampers	Replaces:	-	Scale:	1:1	Next page: 27
			EC no.:	-	Format:	A3	Pages in total: 36

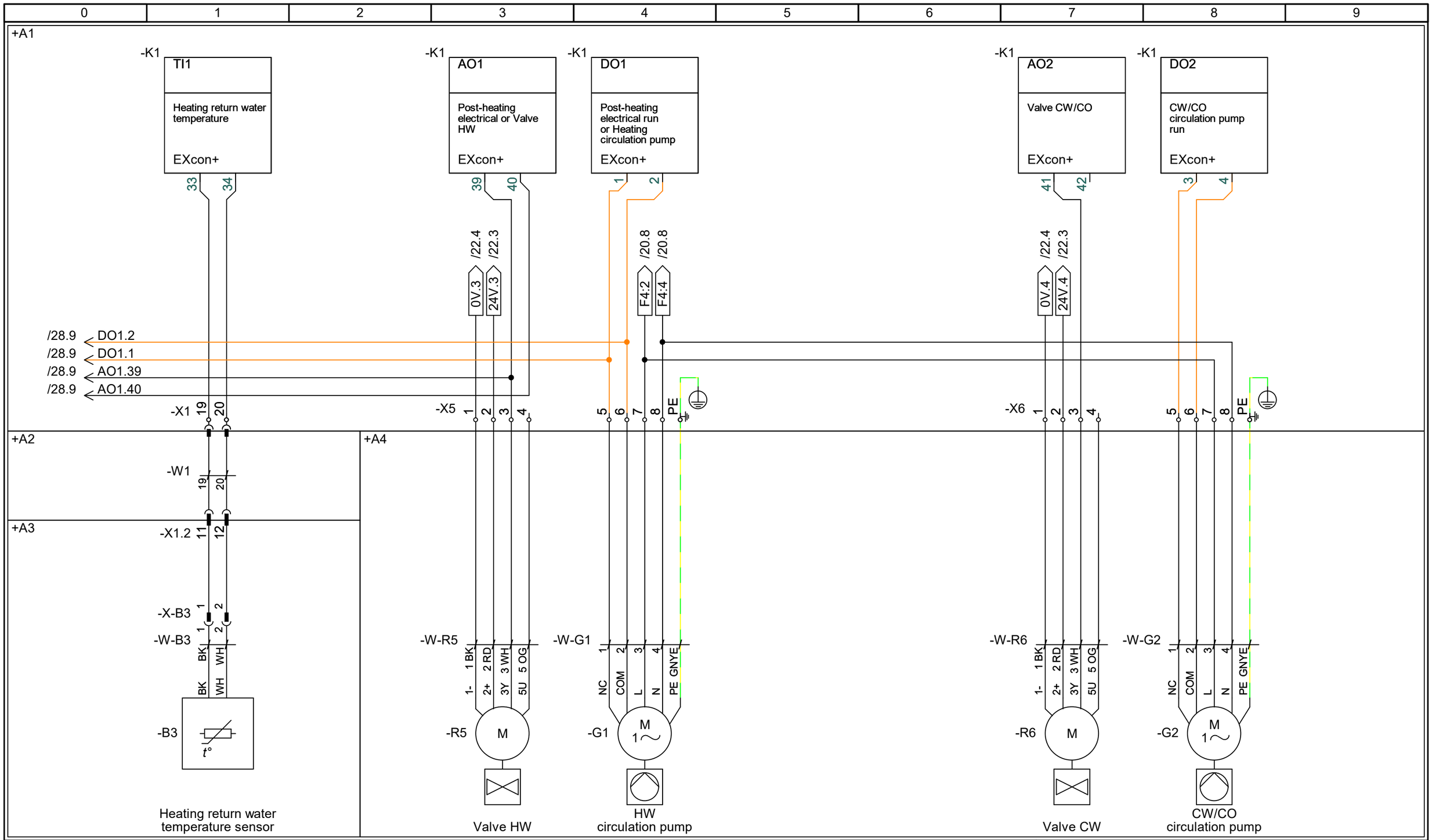


Project: VEX1000 - Customized (3x400V)			Start date:	17-06-2024	Constructor:	DKTSA	Page: 27
			Revision date:	15-11-2024	Approved by:	DKBP	Previous page: 26
Drawing number: 2027961	Revision: A	Page Title: Options - Pre-heating controls	Replaces:	-	Scale:	1:1	Next page: 28
			EC no.:	-	Format:	A3	Pages in total: 36

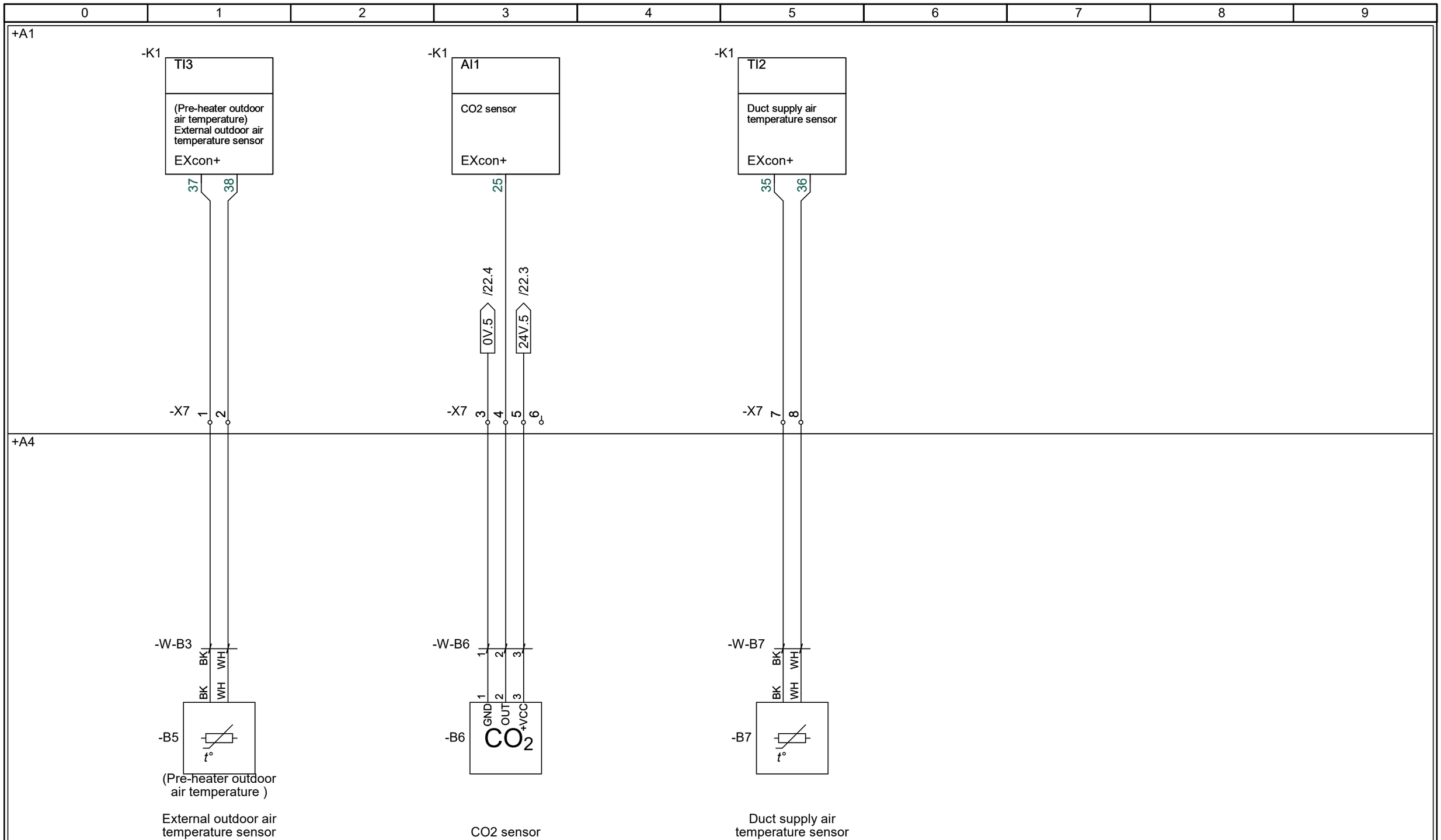


Electric post-heating

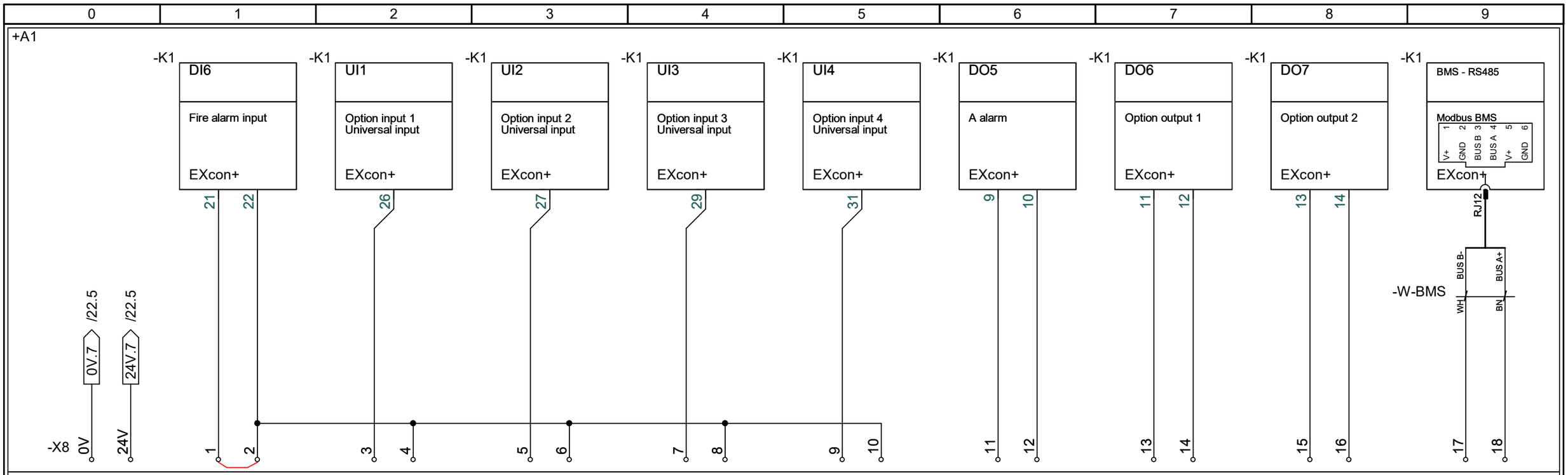
aldes | EXHAUSTO		Project: VEX1000 - Customized (3x400V)	Start date:	17-06-2024	Constructor:	DKTSA	Page: 28
			Revision date:	15-11-2024	Approved by:	DKBP	Previous page: 27
Drawing number: 2027961	Revision: A	Page Title: Options - Post-heating controls	Replaces:	-	Scale:	1:1	Next page: 29
			EC no.:	-	Format:	A3	Pages in total: 36



aldes | EXHAUSTO		Project: VEX1000 - Customized (3x400V)	Start date:	17-06-2024	Constructor:	DKTSA	Page: 29
			Revision date:	15-11-2024	Approved by:	DKBP	Previous page: 28
Drawing number: 2027961	Revision: A	Page Title: Options - HW/CW/CO controls	Replaces:	-	Scale:	1:1	Next page: 30
			EC no.:	-	Format:	A3	Pages in total: 36



aldes | EXHAUSTO		Project: VEX1000 - Customized (3x400V)	Start date:	17-06-2024	Constructor:	DKTSA	Page: 30
			Revision date:	15-11-2024	Approved by:	DKBP	Previous page: 29
Drawing number: 2027961	Revision: A	Page Title: Options - Temperature & CO2 sensors	Replaces:	-	Scale:	1:1	Next page: 31
			EC no.:	-	Format:	A3	Pages in total: 36



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	-

For further information on connecting accessories, see document 3006851

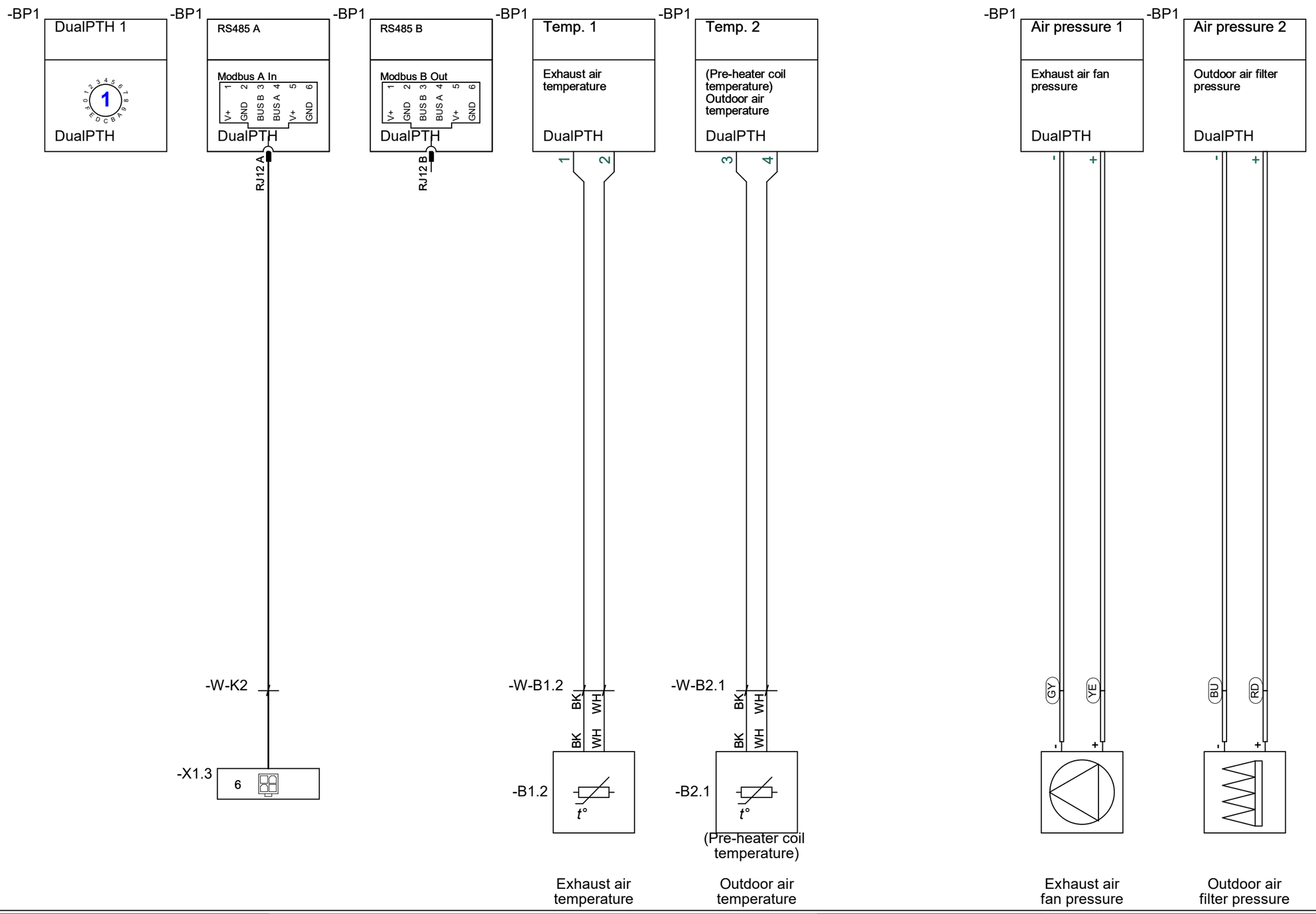
Project: VEX1000 - Customized (3x400V)		Start date:	17-06-2024	Constructor:	DKTSA	Page: 31
		Revision date:	15-11-2024	Approved by:	DKBP	Previous page: 30
Drawing number: 2027961	Revision: A	Page Title: Standard - Customer connections	Replaces: -	Scale:	1:1	Next page: 40
			EC no.: -	Format:	A3	Pages in total: 36

Pressure & temperature transmitters

aldes | EXHAUSTO		Project: VEX1000 - Customized (3x400V)	Start date: 17-06-2024	Constructor: DKTSA	Page: PTH
			Revision date: 15-11-2024	Approved by: DKBP	Previous page: 31
Drawing number: 2027961	Revision: A	Page Title: Pressure & temperature transmitters	Replaces: -	Scale: 1:1	Next page: 40
			EC no.: -	Format: A3	Pages in total: 36

0	1	2	3	4	5	6	7	8	9

+A3



aldes | EXHAUSTO		Project: VEX1000 - Customized (3x400V)	Start date:	17-06-2024	Constructor:	DKTSA	Page: 40
			Revision date:	15-11-2024	Approved by:	DKBP	Previous page: 31
Drawing number: 2027961	Revision: A	Page Title: Standard - Dual PTH 1	Replaces:	-	Scale:	1:1	Next page: 41
			EC no.:	-	Format:	A3	Pages in total: 36

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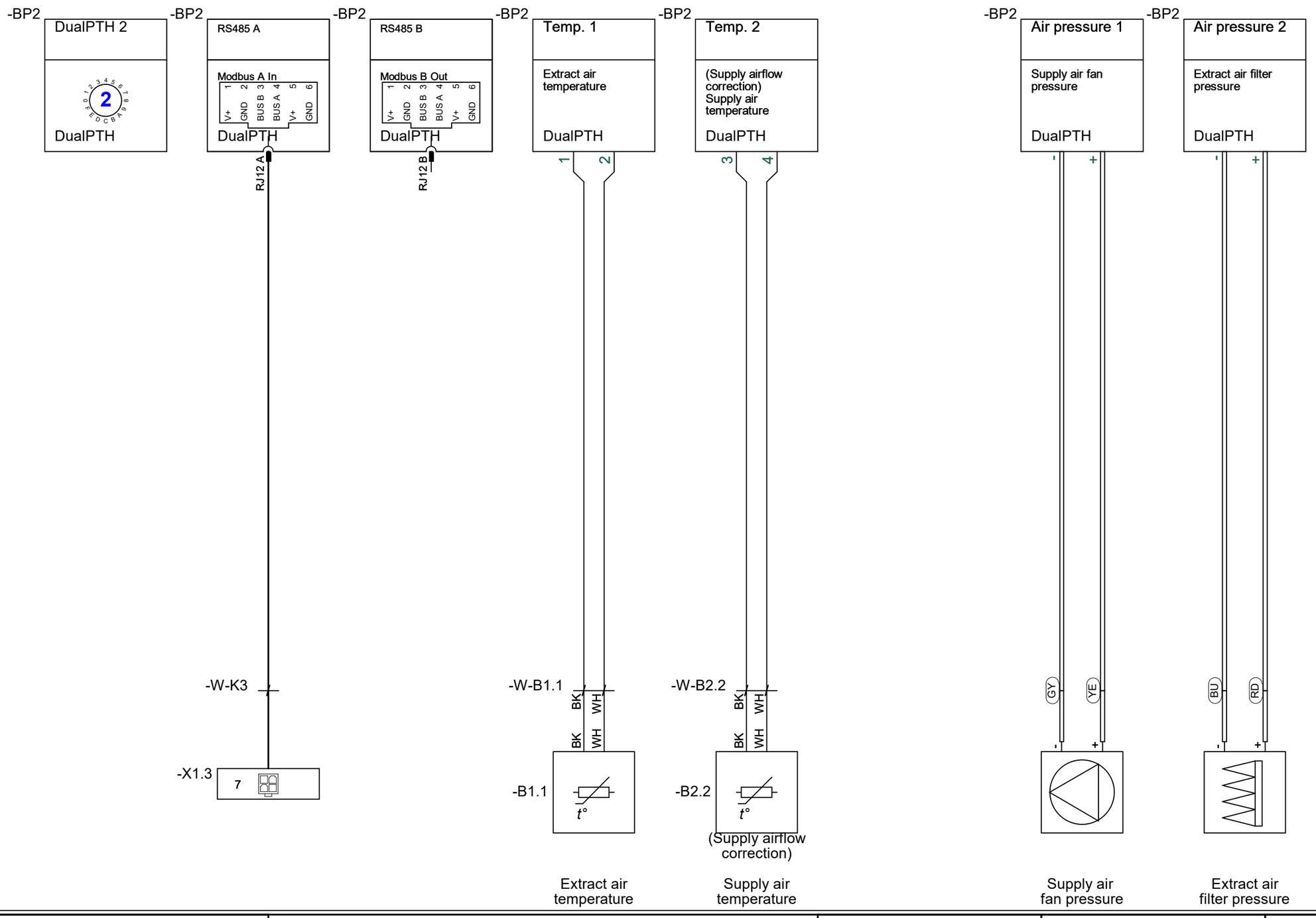
+A3



Aldes | EXHAUSTO		Project: VEX1000 - Customized (3x400V)	Start date:	17-06-2024	Constructor:	DKTSA	Page:	41
			Revision date:	15-11-2024	Approved by:	DKBP	Previous page:	40
Drawing number: 2027961	Revision: A	Page Title: Standard - Dual PTH 2	Replaces:	-	Scale:	1:1	Next page:	42
			EC no.:	-	Format:	A3	Pages in total:	36

0	1	2	3	4	5	6	7	8	9

+A3

-BP3 DualPTH 3

DualPTH

-BP3 RS485 A

Modbus A In

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

DualPTH

-BP3 RS485 B

Modbus B Out

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

DualPTH

-BP3 Temp. 1

Spare

DualPTH

1 2

-BP3 Temp. 2

Spare

DualPTH

3 4

RJ12 A

RJ12 B

-W-K4

/24.7 ALC

-BP3 Air pressure 1

Automatic Leakage Control™

DualPTH

- +

-BP3 Air pressure 2

Rotor deicing

DualPTH

- +

GY YE

Extract air - + Supply air

Automatic Leakage Control™

BU RD

Exhaust air - + Extract air

Rotor deicing

aldes | EXHAUSTO		Project: VEX1000 - Customized (3x400V)	Start date:	17-06-2024	Constructor:	DKTSA	Page:	42
			Revision date:	15-11-2024	Approved by:	DKBP	Previous page:	41
Drawing number: 2027961	Revision: A	Page Title: Option - ALC™ - Rotor deicing	Replaces:	-	Scale:	1:1	Next page:	50
			EC no.:	-	Format:	A3	Pages in total:	36

Extension modules

aldes | EXHAUSTO		Project: VEX1000 - Customized (3x400V)	Start date:	17-06-2024	Constructor:	DKTSA	Page: EXT
			Revision date:	15-11-2024	Approved by:	DKBP	Previous page: 42
Drawing number: 2027961	Revision: A	Page Title: Extension modules	Replaces:	-	Scale:	1:1	Next page: 50
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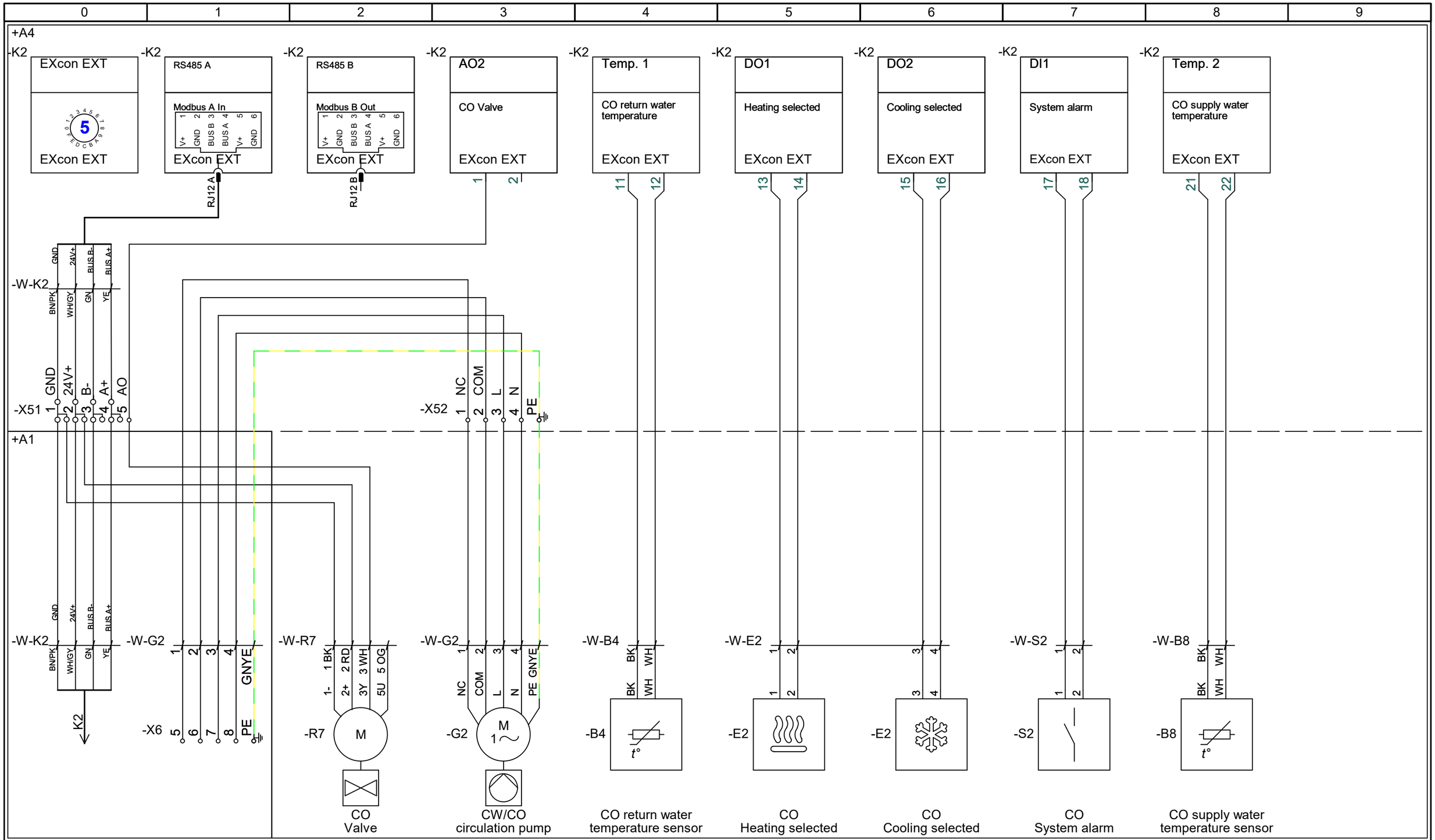
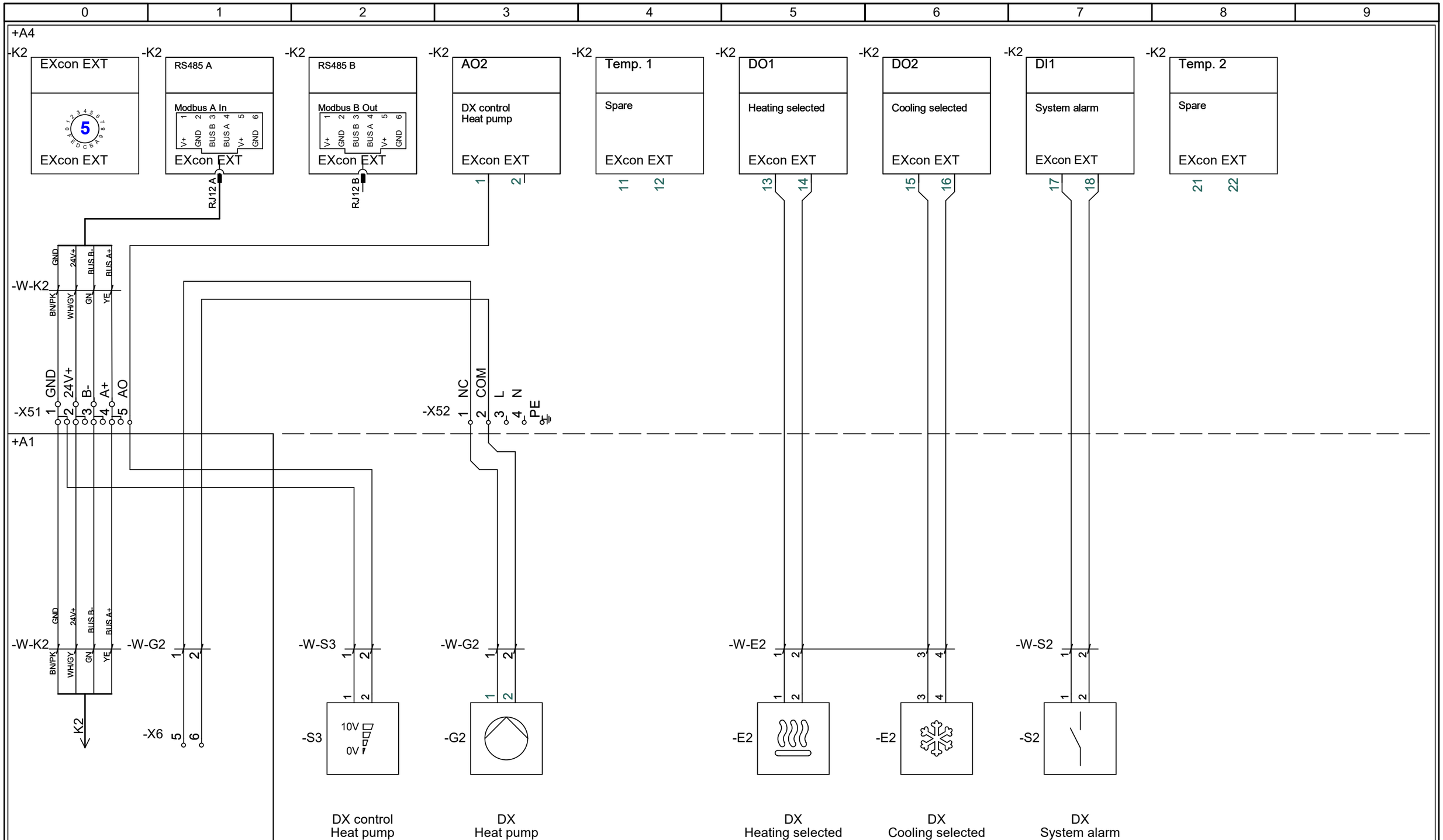


aldes | EXHAUSTO	Project: VEX1000 - Customized (3x400V)	Start date: 17-06-2024	Constructor: DKTSA	Page: 50	
		Revision date: 15-11-2024	Approved by: DKBP	Previous page: 42	
Drawing number: 2027961	Revision: A	Page Title: Option - Combi Coil	Replaces: -	Scale: 1:1	Next page: 51
			EC no.: -	Format: A3	Pages in total: 36



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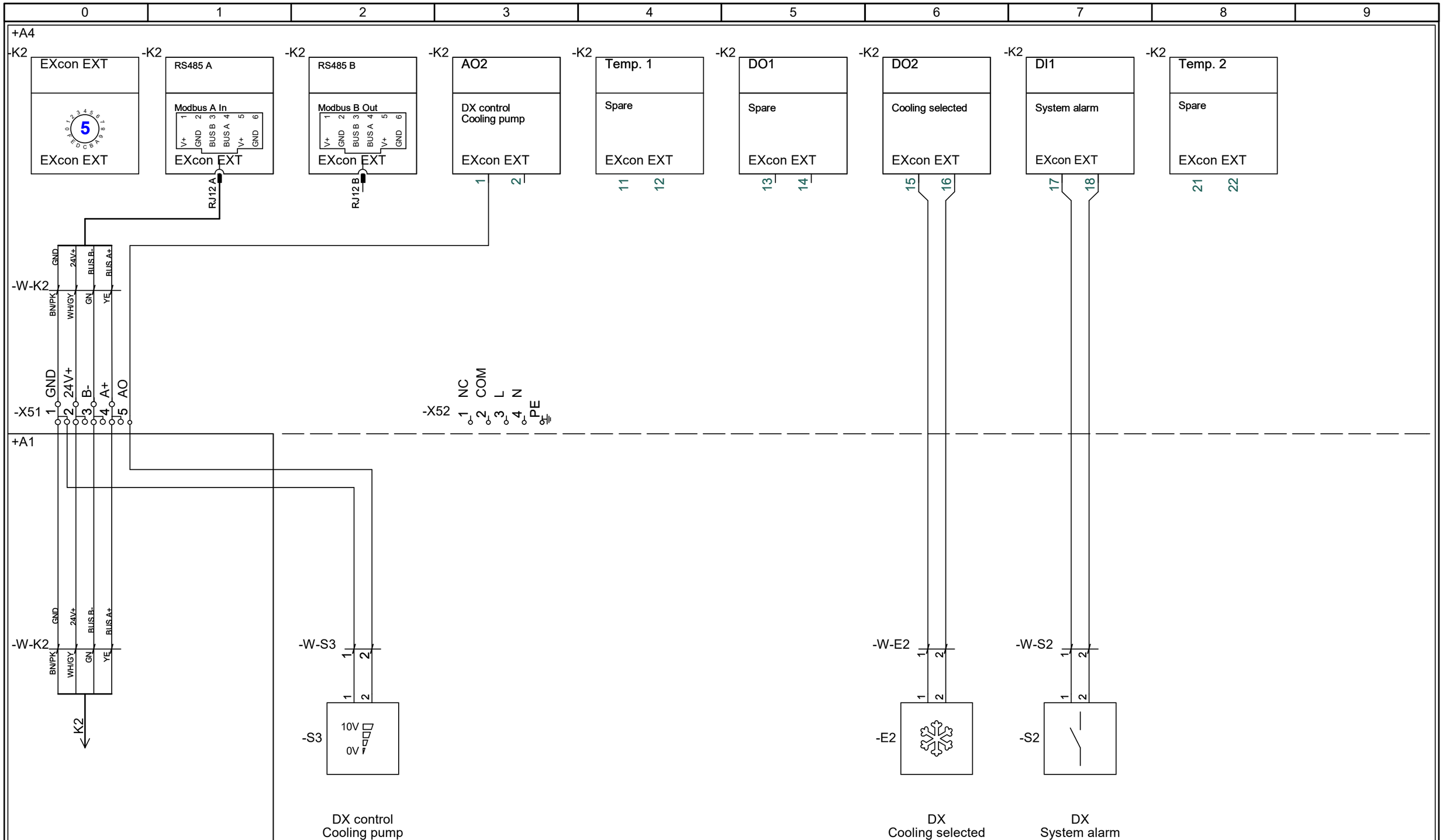
			Revision date: 15-11-2024	Approved by: DKBP	Previous page: 50	
Drawing number: 2027961	Revision: A	Page Title: Option - Direct Expansion Heat pump	Replaces: -	Scale: 1:1	Next page: 52	
			EC no.: -	Format: A3	Pages in total: 36	



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Drawing number: 2027961	Revision: A	Page Title: Option - Direct Expansion Cooling	Replaces: -	Scale: 1:1	Next page: .	
			EC no.: -	Format: A3	Pages in total: 36	