



NORDcanopy

UV-W Ultraviolet Cleaning System for Kitchen Canopies – Installation Guide

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1. General

This manual contains the necessary information regarding the ETS NORD UV-W 4/8 Control Unit. The UV-W Control Unit can be used with both UV-900 and UV-1200 lamps. Before installing the equipment, this manual must be read carefully. All work described in this installation manual must be properly completed before the arrival of the ETS NORD technician for system commissioning. The installation must also comply with the requirements specified in the UV System Pre-Start Commissioning Checklist.

If the required work has not been properly completed by the time the ETS NORD technician arrives, ETS NORD AS reserves the right to charge additional fees.

2. Product Inspection

It must be checked that the packaged products do not show any visible signs of damage. Any damage or missing components must be reported immediately to both the supplier and the manufacturer.

It must be verified that the product corresponds to the order and that all items listed on the delivery note are included. Any incorrect deliveries or transport damage must be reported to the carrier without delay, and ETS NORD Service must be contacted immediately.

The period for submitting claims is 5 days from the date of product delivery. ETS NORD is not responsible for defects that arise after the goods have been handed over to the purchaser.

If goods purchased from ETS NORD have defects for which ETS NORD is responsible, ETS NORD will repair or replace the defective goods. If the goods cannot be repaired or replaced, ETS NORD will refund the purchaser all payments made under the sales contract.

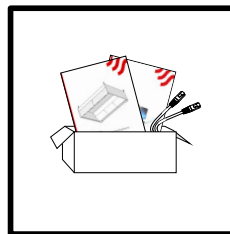
In the event of any problems, ETS NORD Service must be contacted!

The UV-W Control Unit package includes:

- Control Unit (A);
- User Manual (in Estonian and English) (B).



A



B

3. Safety Instructions

Failure to follow the operating and safety instructions for the UV unit (ultraviolet device), or improper use of the device, may result in personal injury.

The UV cleaning system is intended for air treatment using UV-C radiation and ozone only in the manner described in this manual. UV technology helps reduce odors and break down grease particles, mold, and bacteria.

ETS NORD AS shall not be liable for any damage resulting from the use of the product in a manner that does not comply with the manufacturer's instructions provided in this manual.

Installation of the wall-mounted UV-W Control Unit may only be carried out by persons or technicians trained and authorized by ETS NORD who have read this manual and understand the installation and safety requirements of the equipment.

Electrical work may only be performed by appropriately qualified personnel in accordance with applicable laws, standards, and installation requirements.

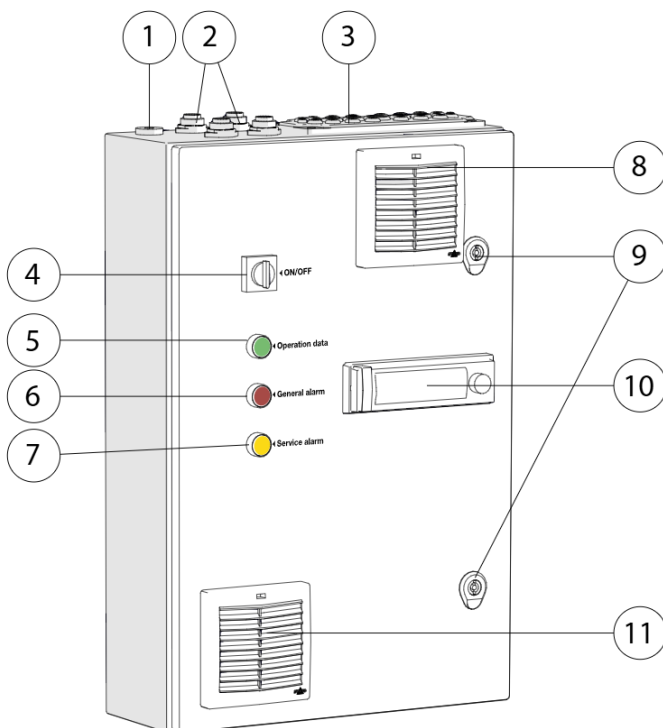
Only UV lamps and spare parts supplied by ETS NORD AS may be used in the system.

Ultraviolet radiation and ozone are hazardous to human health. Prolonged exposure may cause:

- Skin irritation, rashes, and burns;
- Eye irritation, burns, visual impairment, or loss of vision;
- Respiratory irritation and breathing difficulties.

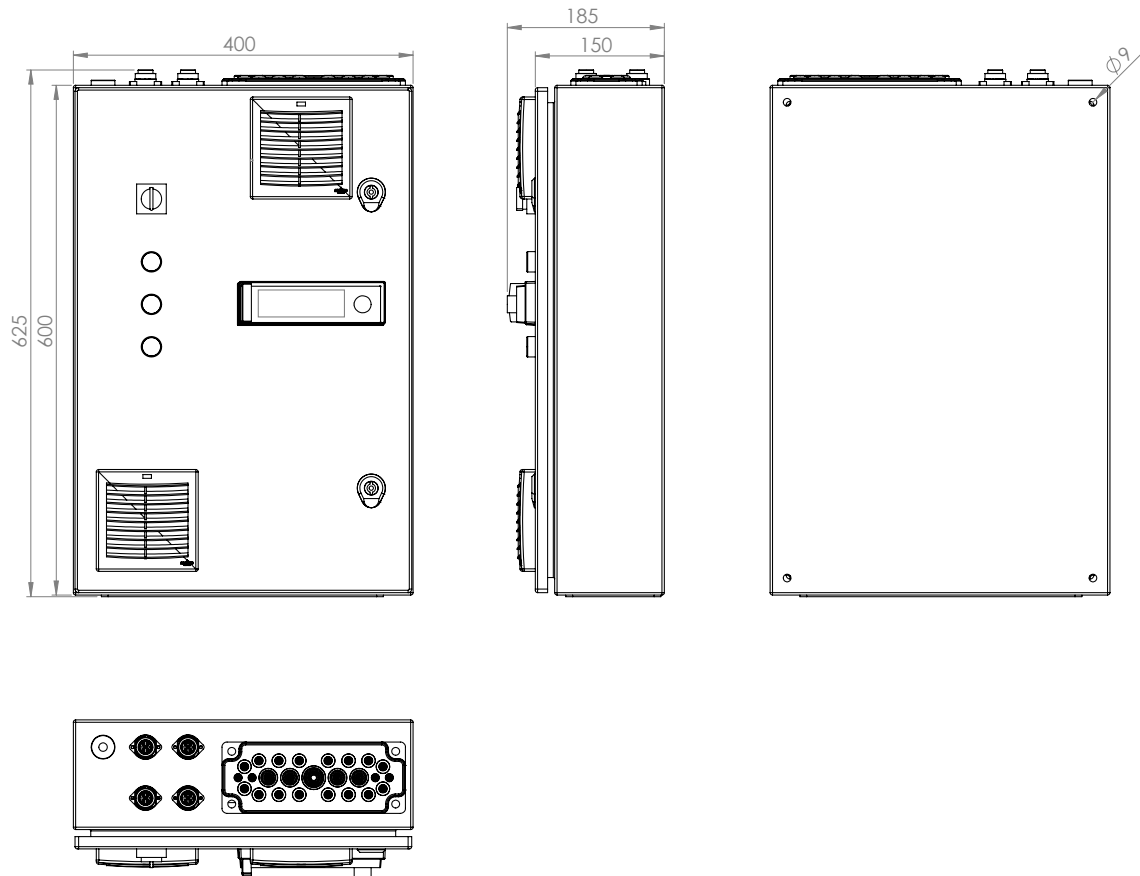
The grease filters of the canopy may only be removed after the UV lamps have been switched off from the control panel and it has been verified that the system is in a safe condition.

When installing a UV lamp, protective safety glasses and protective gloves must always be worn to protect against possible quartz glass fragments in the event of lamp breakage.

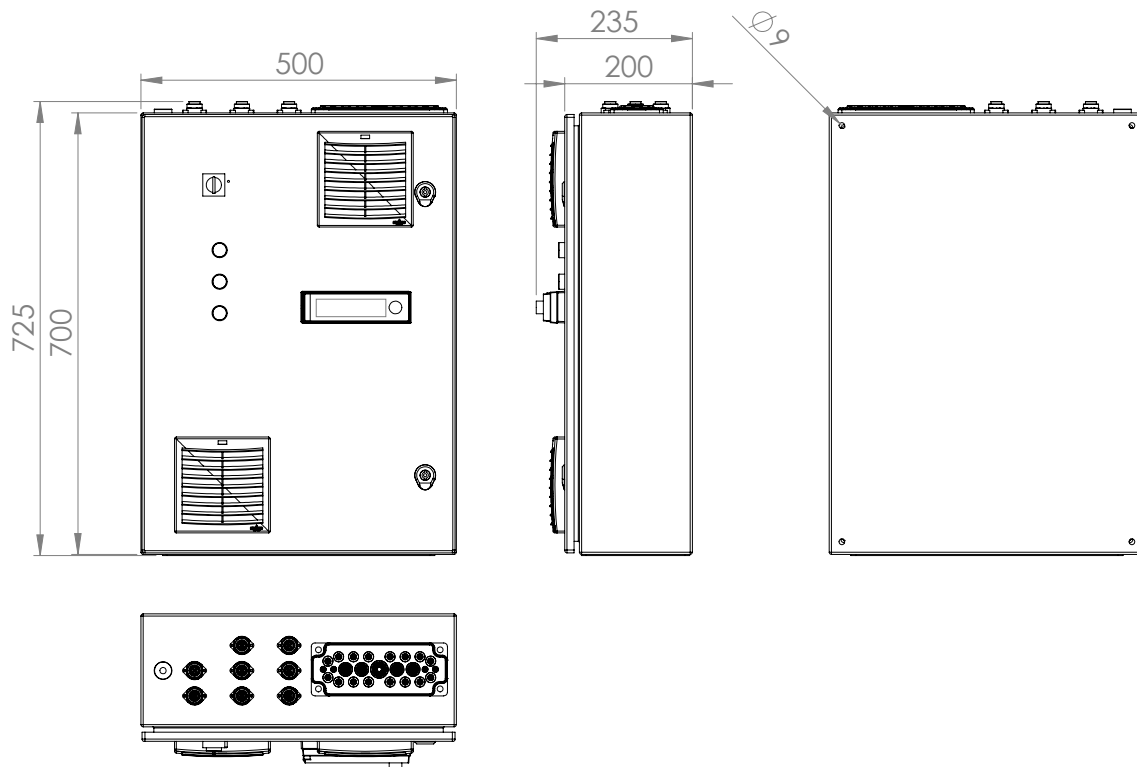


- 1 – Cable gland for power cable (230 VAC)
- 2 – Power connectors for UV lamps
- 3 – Multi-cable gland for canopy sensors (gland for low-voltage cables)
- 4 – Power ON/OFF switch
- 5 – System operation indicator
- 6 – General alarm indicator
- 7 – Service alarm indicator
- 8 – Air outlet grille with filter
- 9 – Control panel door locks
- 10 – LCD control panel
- 11 – Control panel supply air fan

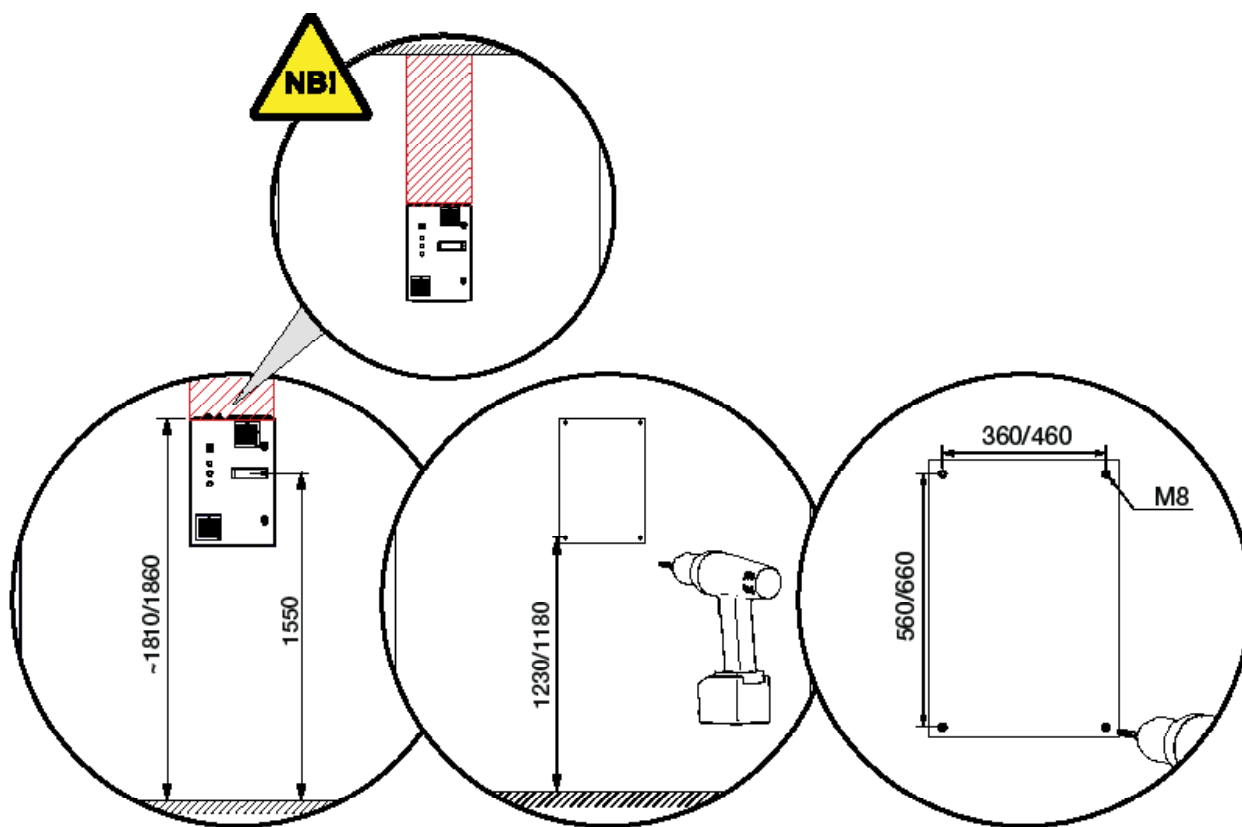
4. UV-W 4 Dimensions



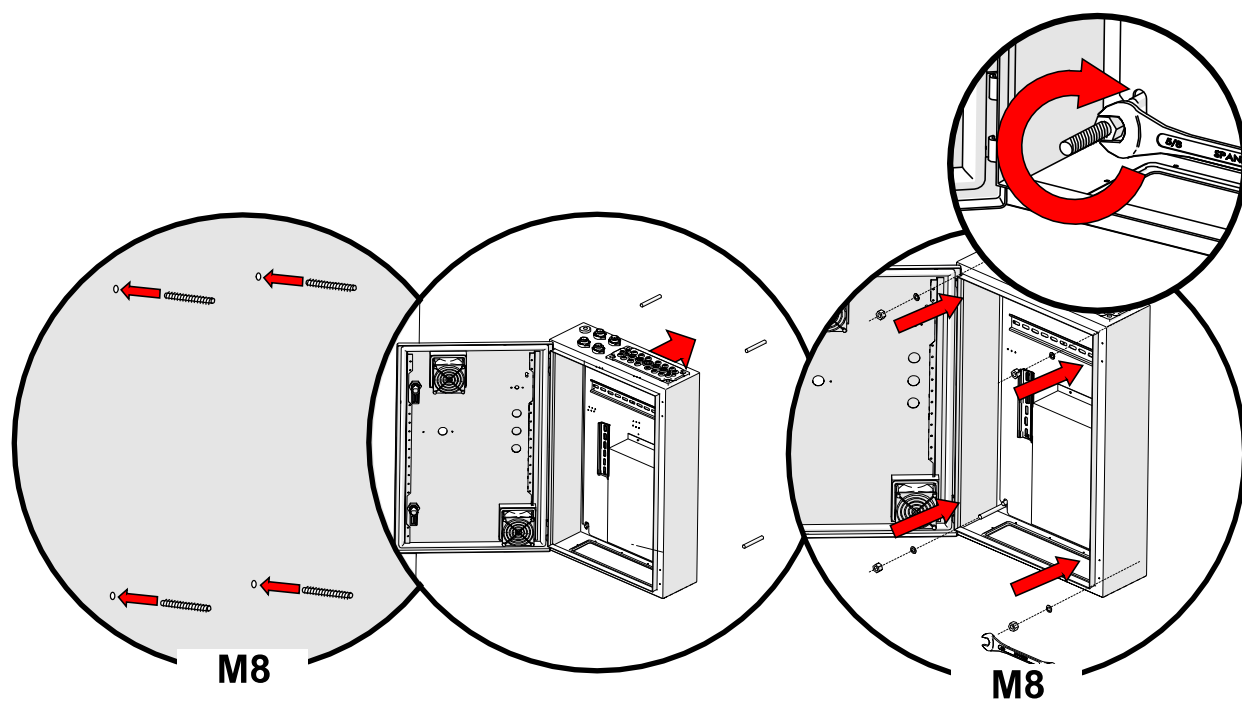
5. UV-W 8 Dimensions



6. UV-W 4 ja UV-W 8 Installation Requirements



7. UV-W 4 ja UV-W 8 Mounting Brackets



8. UV-W 4 Modbusi register list

All registers are type HOLDING.

UV-W 4 control unit can be scanned through Modbus RTU and TCP/IP (requires IoT device) network.

If the register points listed below are not reflected correctly in the registers, then please contact ETS NORD service technician. At the time of your application, please add the building automation reading result so that we can better understand the situation. In a Modbus RTU connection, the register numbers may differ by ± 1 .

Abbreviation legend: A - Analog, D - Digital, R - Read, W - Write, WR - Read & Write

Name	Unit	Reg.	Object type	Read/Write	Address format	Enum	Note
Safety switch 1.1	-	201	D	R	U16	0 = Okay 1 = Not okay	Displays the state of the safety switch in section 1.1 exhaust air chamber.
Safety switch 1.2		202					Displays the state of the safety switch in section 1.2 exhaust air chamber.
Safety switch 1.3		203					Displays the state of the safety switch in section 1.3 exhaust air chamber.
Safety switch 1.4		204					Displays the state of the safety switch in section 1.4 exhaust air chamber.
Pressure 1.1	Pa	205	A	R	S16	0...100	Differential pressure measurement value in section 1.1 exhaust air chamber.
Pressure 1.2		206					Differential pressure measurement value in section 1.2 exhaust air chamber.
Pressure 1.3		207					Differential pressure measurement value in section 1.3 exhaust air chamber.
Pressure 1.4		208					Differential pressure measurement value in section 1.4 exhaust air chamber.
Operation status	-	221	D	R	U16	0 = Off 1 = On	Displays the state of the UV unit.
General alarm	-	222	D	R	U16	0 = No 1 = Alarm	Displays the general alarm state.
Service status	-	223	D	R	U16	0 = No 1 = Service	Displays the maintenance alarm state.
Lamp 1	-	307	D	R	U16	0 = Off 1 = On	Displays the state of the UV-lamp 1.
Lamp 2	-	308					Displays the state of the UV-lamp 2.
Lamp 3	-	309					Displays the state of the UV-lamp 3.
Lamp 4	-	310					Displays the state of the UV-lamp 4.
System work permission	-	281	D	R	U16	0 = Disabled 1 = Enabled	Displays the state of the control units work permission.

Abbreviation legend: A - Analog, D - Digital, R - Read, W - Write, WR - Read & Write

Name	Unit	Reg.	Object type	Read/Write	Address format	Enum	Note
Exhaust airflow 1.1	-	295	A	R	S16	-	Displays the airflow volume in section 1.1 exhaust air chamber. Unit according to the setting on “Unit selection flow” based on selection in register 351.
Exhaust airflow 1.2	-	297		R		-	Displays the airflow volume in section 1.2 exhaust air chamber. Unit according to the setting on “Unit selection flow” based on selection in register 351.
Exhaust airflow 1.3	-	299		R		-	Displays the airflow volume in section 1.3 exhaust air chamber. Unit according to the setting on “Unit selection flow” based on selection in register 351.
Exhaust airflow 1.4	-	301		R		-	Displays the airflow volume in section 1.4 exhaust air chamber. Unit according to the setting on “Unit selection flow” based on selection in register 351.
Time until maintenance	days	302	A	R	S16	-	Days left until maintenance.
Remote Modbus work permission	-	332	D	RW	U16	0 = Disable 1 = Enable	Allows to set the Modbus work permission value when the “Work permission input” setting is set as “Bus”.
Work permission input	-	331	A	RW	S16	0 = Not used 1 = Di NO 2 = Di NC 3 = Bus 4 = Ecoazur Default: 0	Allows to select which work permission input is used.
Start UV system	-	334	A	RW	S16	0 = Stopped 1 = Started 2 = Smart schedule	Controls the UV system state. If state is “Started” then lamps are turned on/off based on safety switch, pressure and work permission state values. If state is “Smart schedule” then the system state is operated based on a weekly schedule.
Display pressure alarm in general alarm	-	354	D	RW	U16	0 = Ei 1 = Jah Default: 0	Allows to add pressure alarm states to the “General alarm” output.
Unit selection flow	-	363	D	RW	U16	0 = l/s 1 = m³h Default: 0	The selected unit is valid for the “Exhaust airflow 1.1”, “Exhaust airflow 1.2”, “Exhaust airflow 1.3”, “Exhaust airflow 1.4” registers 321, 323, 325, 327.

UV-W 4 Modbus RTU communication						
Name	Register	Object type	Accesss	Address format	Range, enumeration	Default value
Address	373	A	RW	S16	1...250	1
Baudrate	374	A	RW	S16	0 = 9600 1 = 4800 2 = 14400 3 = 19200 4 = 38400 5 = 56000 6 = 57600 7 = 115200	9600
Data-bits	375	D	RW	U16	0 = 8 1 = 7	8
Pariteit	376	A	RW	S16	0 = None 1 = Even 2 = Odd	None
Stop-bits	377	D	RW	U16	0 = 1 1 = 2	1

9. UV-W 8 Modbus register list

All registers are type **HOLDING**.

UV-W 8 control unit can be scanned through Modbus RTU and TCP/IP network.

If the register points listed below are not reflected correctly in the registers, then please contact ETS NORD service technician. At the time of your application, please add the building automation reading result so that we can better understand the situation. In a Modbus RTU connection, the register numbers may differ by ± 1 .

Name	Unit	Reg.	Object type	Read/Write	Address format	Enum	Note
Safety switch1.1	-	201	D	R	U16	0 = Okay 1 = Not okay	Displays the state of the safety switch in section 1.1 exhaust air chamber.
Safety switch 1.2		202					Displays the state of the safety switch in section 1.2 exhaust air chamber.
Safety switch 1.3		203					Displays the state of the safety switch in section 1.3 exhaust air chamber.
Safety switch1.4		204					Displays the state of the safety switch in section 1.4 exhaust air chamber.
Safety switch 2.1		205					Displays the state of the safety switch in section 2.1 exhaust air chamber.
Safety switch 2.2		206					Displays the state of the safety switch in section 2.2 exhaust air chamber.
Safety switch 2.3		207					Displays the state of the safety switch in section 2.3 exhaust air chamber.
Safety switch 2.4		208					Displays the state of the safety switch in section 2.4 exhaust air chamber.
Pressure 1.1	Pa	209	A	R	S16	0...100	Differential pressure measurement value in section 1.1 exhaust air chamber.
Pressure 1.2		210					Differential pressure measurement value in section 1.2 exhaust air chamber.
Pressure 1.3		211					Differential pressure measurement value in section 1.3 exhaust air chamber.
Pressure 1.4		212					Differential pressure measurement value in section 1.4 exhaust air chamber.
Pressure 2.1		213					Differential pressure measurement value in section 2.1 exhaust air chamber.
Pressure 2.2		214					Differential pressure measurement value in section 2.2 exhaust air chamber.
Pressure 2.3		215					Differential pressure measurement value in section 2.3 exhaust air chamber.
Pressure 2.4		216					Differential pressure measurement value in section 2.4 exhaust air chamber.
Operation status	-	232	D	R	U16	0 = Off 1 = On	Displays the state of the UV unit.
General alarm	-	233	D	R	U16	0 = No 1 = Alarm	Displays the general alarm state.
Service status	-	234	D	R	U16	0 = No 1 = Service	Displays the maintenance alarm state.

Abbreviation legend: **A** - Analog, **D** - Digital, **R** - Read, **W** - Write, **WR** - Read & Write

Name	Unit	Reg.	Object type	Read/Write	Address format	Enum	Note
Lamp 1	-	558	D	R	U16	0 = Off 1 = On	Displays the state of the UV-lamp 1.
Lamp 2	-	559					Displays the state of the UV-lamp 2.
Lamp 3	-	560					Displays the state of the UV-lamp 3.
Lamp 4	-	561					Displays the state of the UV-lamp 4.
Lamp 5	-	562					Displays the state of the UV-lamp 5.
Lamp 6	-	563					Displays the state of the UV-lamp 6.
Lamp 7	-	564					Displays the state of the UV-lamp 7.
Lamp 8	-	565					Displays the state of the UV-lamp 8.
System work permission	-	358	D	R	U16	0 = Disabled 1 = Enabled	Displays the state of the control units work permission.
Exhaust airflow 1.1	-	503	A	R	S16	-	Displays the airflow volume in section 1.1 exhaust air chamber. Unit according to the setting on “Unit selection flow” based on selection in register 520.
Exhaust airflow 1.2	-	505					Displays the airflow volume in section 1.2 exhaust air chamber. Unit according to the setting on “Unit selection flow” based on selection in register 520.
Exhaust airflow 1.3	-	507					Displays the airflow volume in section 1.3 exhaust air chamber. Unit according to the setting on “Unit selection flow” based on selection in register 520.
Exhaust airflow 1.4	-	509					Displays the airflow volume in section 1.4 exhaust air chamber. Unit according to the setting on “Unit selection flow” based on selection in register 520.
Exhaust airflow 2.1	-	511					Displays the airflow volume in section 2.1 exhaust air chamber. Unit according to the setting on “Unit selection flow” based on selection in register 520.
Exhaust airflow 2.2	-	513					Displays the airflow volume in section 2.2 exhaust air chamber. Unit according to the setting on “Unit selection flow” based on selection in register 520.
Exhaust airflow 2.3	-	515					Displays the airflow volume in section 2.3 exhaust air chamber. Unit according to the setting on “Unit selection flow” based on selection in register 520.
Exhaust airflow 2.4	-	517					Displays the airflow volume in section 2.4 exhaust air chamber. Unit according to the setting on “Unit selection flow” based on selection in register 520.
Time until maintenance	days	518	A	R	S16	-	Days left until maintenance.
Remote Modbus work permission	-	366	D	RW	U16	0 = Disable 1 = Enable	Allows to set the Modbus work permission value when the “Work permission input” setting is set as “Bus”.

Abbreviation legend: **A** - Analog, **D** - Digital, **R** - Read, **W** - Write, **RW** - Read & Write

Name	Unit	Reg.	Object type	Read/Write	Address format	Enum	Note
Work permission input	-	365	A	RW	S16	0 = Not used 1 = DI NO 2 = DI NC 3 = Bus 4 = Ecoazur Default: 0	Allows to select which work permission input is used.
Start UV system	-	437	A	RW	S16	0 = Stopped 1 = Started 2 = Smart schedule	Controls the UV system state. If state is “ Started ” then lamps are turned on/off based on safety switch, pressure and work permission state values. If state is “ Smart schedule ” then the system state is operated based on a weekly schedule.
Display pressure alarm in general alarm	-	532	D	RW	U16	0 = No 1 = Yes Default: 0	Allows to add pressure alarm states to the “ General alarm ” output.
Unit selection flow	-	520	D	RW	U16	0 = l/s 1 = m³h Default: 0	The selected unit is valid for the “Exhaust airflow 1.1”, “Exhaust airflow 1.2”, “Exhaust airflow 1.3”, “Exhaust airflow 1.4”, “Exhaust airflow 2.1”, “Exhaust airflow 2.2”, “Exhaust airflow 2.3”, “Exhaust airflow 2.4” registers 503, 505, 507, 509, 511, 513, 515, 517.

Abbreviation legend: **A** - Analog, **D** - Digital, **R** - Read, **W** - Write, **RW** - Read & Write

UV-W 8 Modbus RTU communication						
Name	Register	Object type	Access	Address format	Range, enumeration	Default value
Address	392	A	RW	S16	1...250	1
Baudrate	393	A	RW	S16	0 = 9600 1 = 4800 2 = 14400 3 = 19200 4 = 38400 5 = 56000 6 = 57600 7 = 115200	9600
Data-bits	394	D	RW	U16	0 = 8 1 = 7	8
Parity	395	A	RW	S16	0 = None 1 = Even 2 = Odd	None
Stop-bits	396	D	RW	U16	0 = 1 1 = 2	1

10. UV-W 4 Electrical Wiring Diagrams

The UV cleaning system is intended for commercial kitchen usage to help clean ventilation system components. UV-W - 4 control cabinets are used in this system for control of up to four UV lamps if there is not possible to use built-in UV-L and UV-S solutions.

Standard delivery includes:

- selected quantity of control cabinets according to the order;
- differential pressure sensors according to the order;
- lamp cables, protection switch cables and differential pressure sensor cables with canopy sections.

Optional accessories which can be ordered from ETS NORD include:

- 4G modem, if there is no possibility to use building local network for Internet connection;
- external antenna for 4G modem.

NB! Maximum length of cable between control unit and UV lamp is 25 m!

Accessory extension cables with connectors for UV lamps:

- 3 m;
- 5 m;
- 15 m.

Necessary extension cables are selected according to the order based on customer information.

Cables for protection switches and differential pressure sensors could be extended by customer himself (e.g. with connection box and splicing connectors). Requirements for minimum cross-section should be observed.

Work permission input shall only be used with potential-free output!

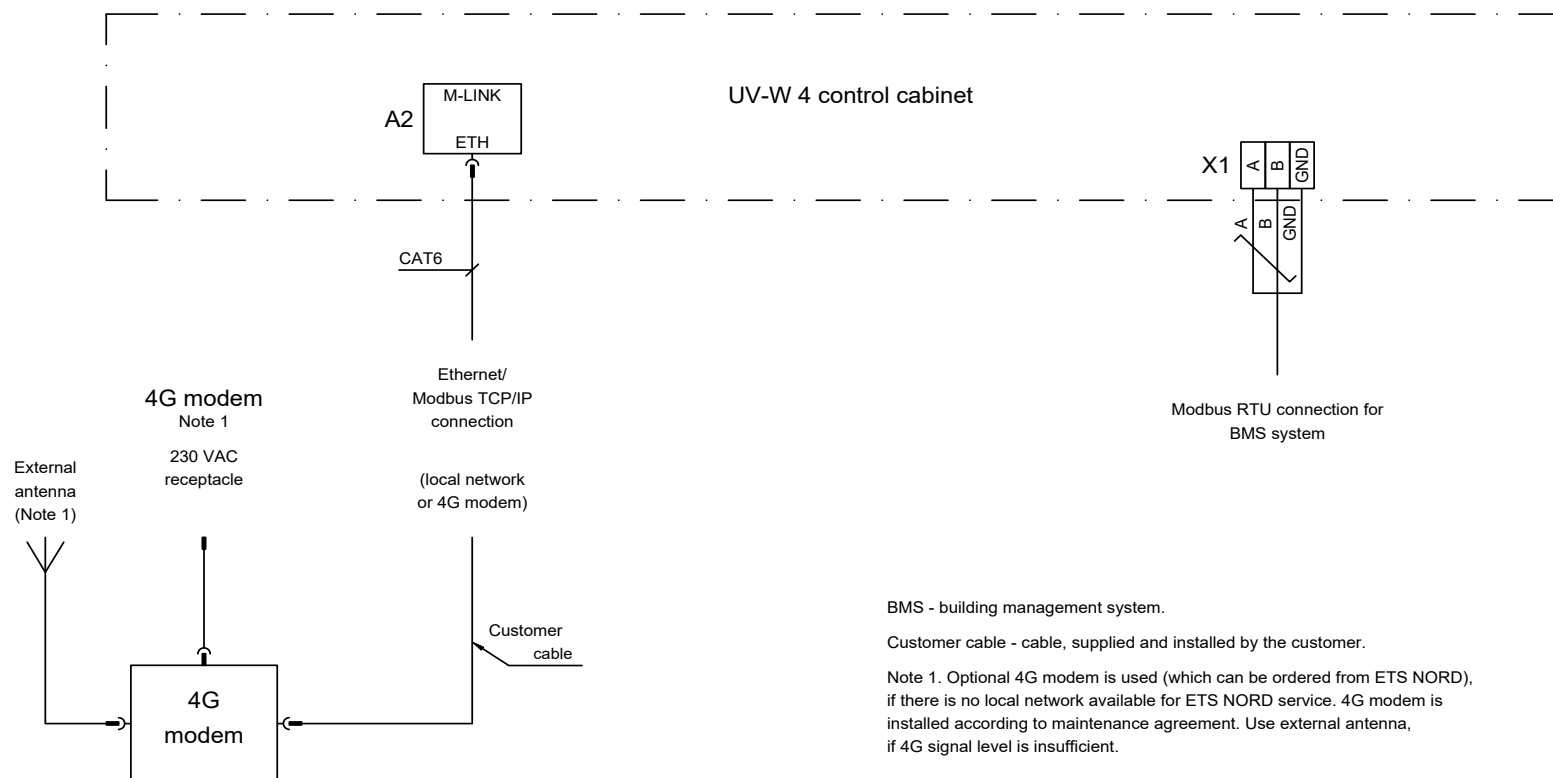
All electrical installation works must be done by qualified electricians according to the national regulations.

Power and current consumption

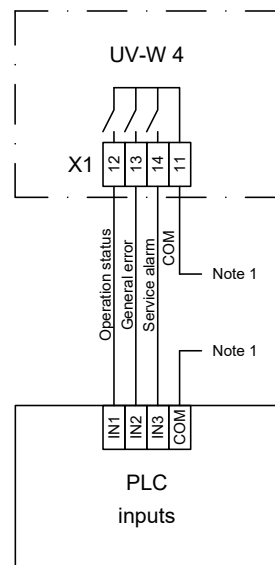
Number of connected UV-lamps	Type of UV-lamps			
	L = 900 mm		L = 1200 mm	
	Power, W	Current, A	Power, W	Current, A
1	180	0,84	255	1,2
2	360	1,5	480	2,2
3	480	2,2	708	3,2
4	600	2,8	930	4,2

**Colour coding
according to
EN IEC 60757:2021**

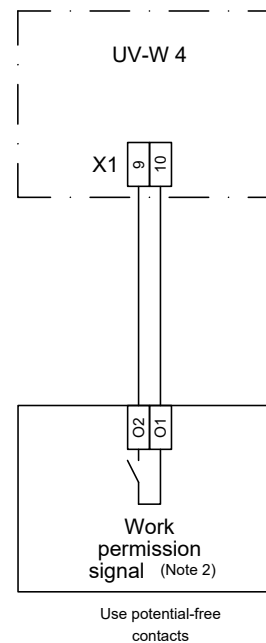
Colour name	Letter code
black	bk
brown	bn
red	rd
orange	og
green	gn
yellow	gc
blue	blu
violet	vt
grey	gr
white	wh
pink	pk
gold	gd
fluorescent	fq
silver	sr



Connection of digital outputs
with PLC



Connection to work
permission input



PLC - programmable logic controller.

All the cables are supplied, installed and connected to the connectors X1 at the installation site by the customer.

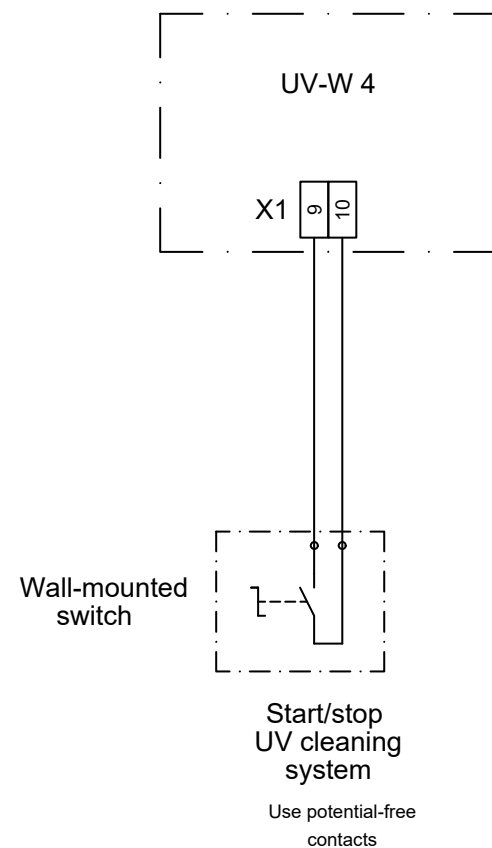
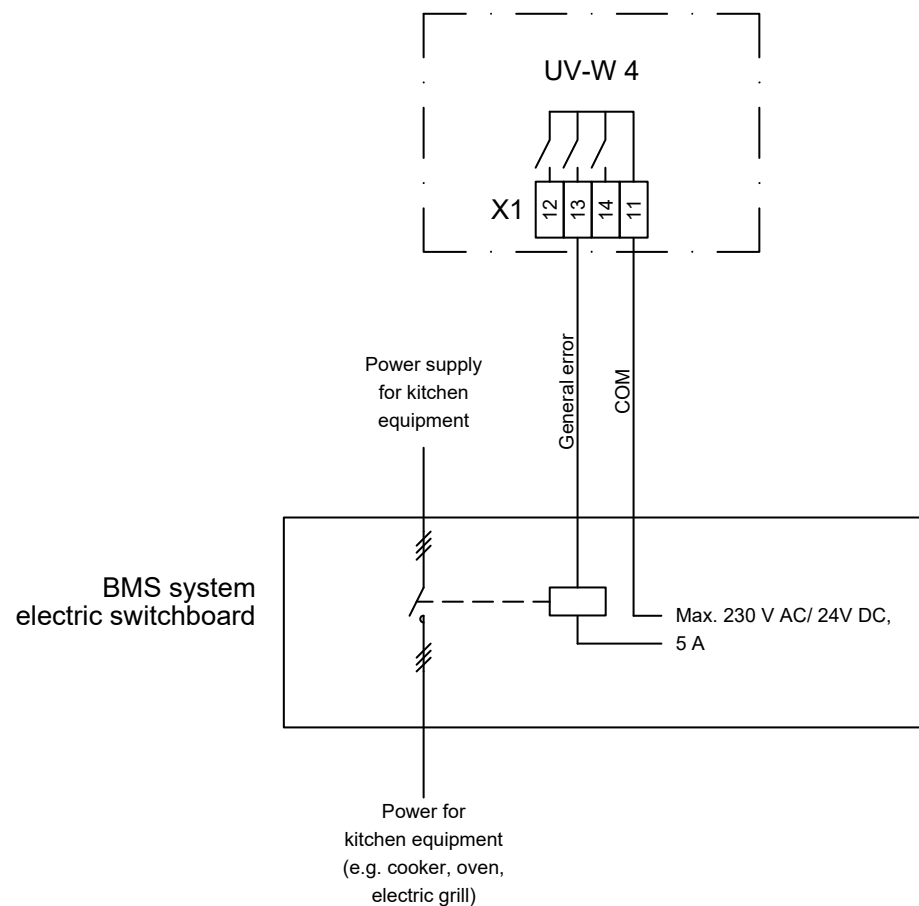
Terminals 11 ... 14 of X1 connector are potential-free relay contacts: max. 230 V AC/ 24V DC, 5 A.

Max. cable core cross-section is 2,5 mm² (solid conductors) for X1 connector.

Note 1 24V or 0V can be used as COM input depending on the control device inputs (PNP or NPN).

In case of questions, consult with ETS NORD SERVICE department.

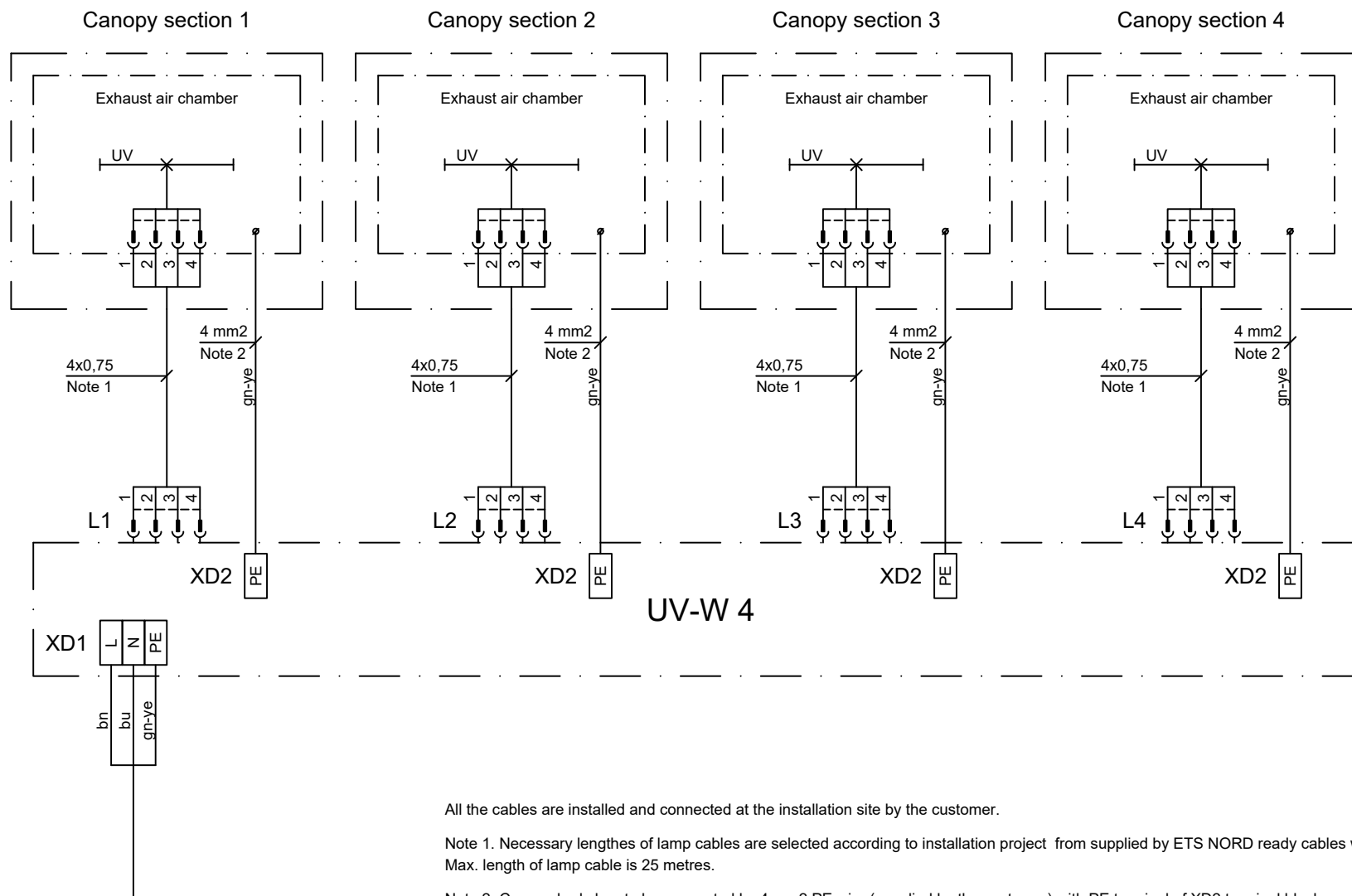
Note 2 The work permission signal can be applied, for example, from a fire alarm system, building automation system or a building ventilation control system.



BMS - building management system.

All the cables are supplied, installed and connected to the connectors X1 at the installation site by the customer.

Max. cable core cross-section is 2,5 mm² (solid conductors) for X1 connector.



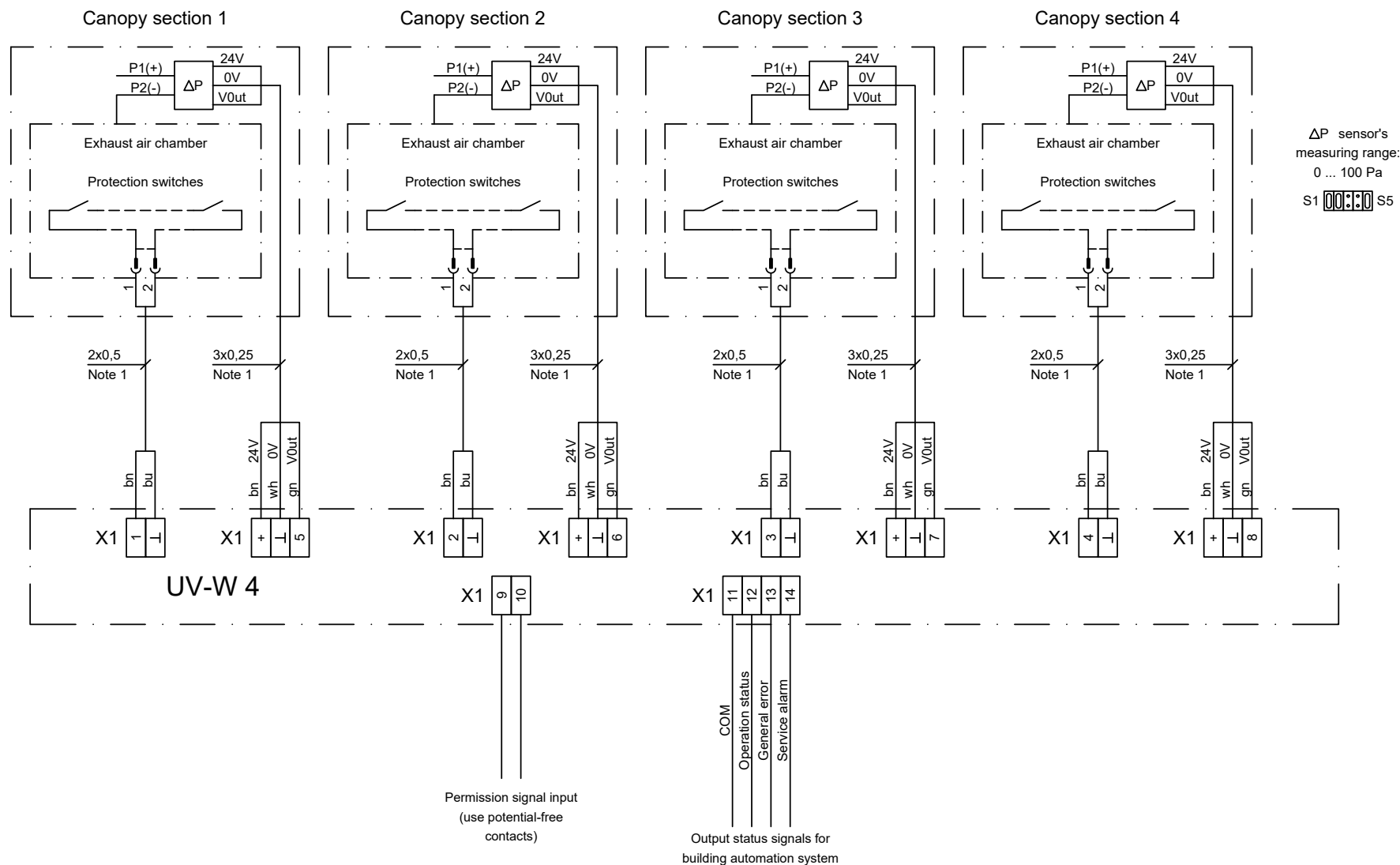
Power supply: 1 ph., 230 V, 50 Hz.
Circuit breaker: C6, B10 or C10.

All the cables are installed and connected at the installation site by the customer.

Note 1. Necessary lengths of lamp cables are selected according to installation project from supplied by ETS NORD ready cables with connectors (see p. 1).
Max. length of lamp cable is 25 metres.

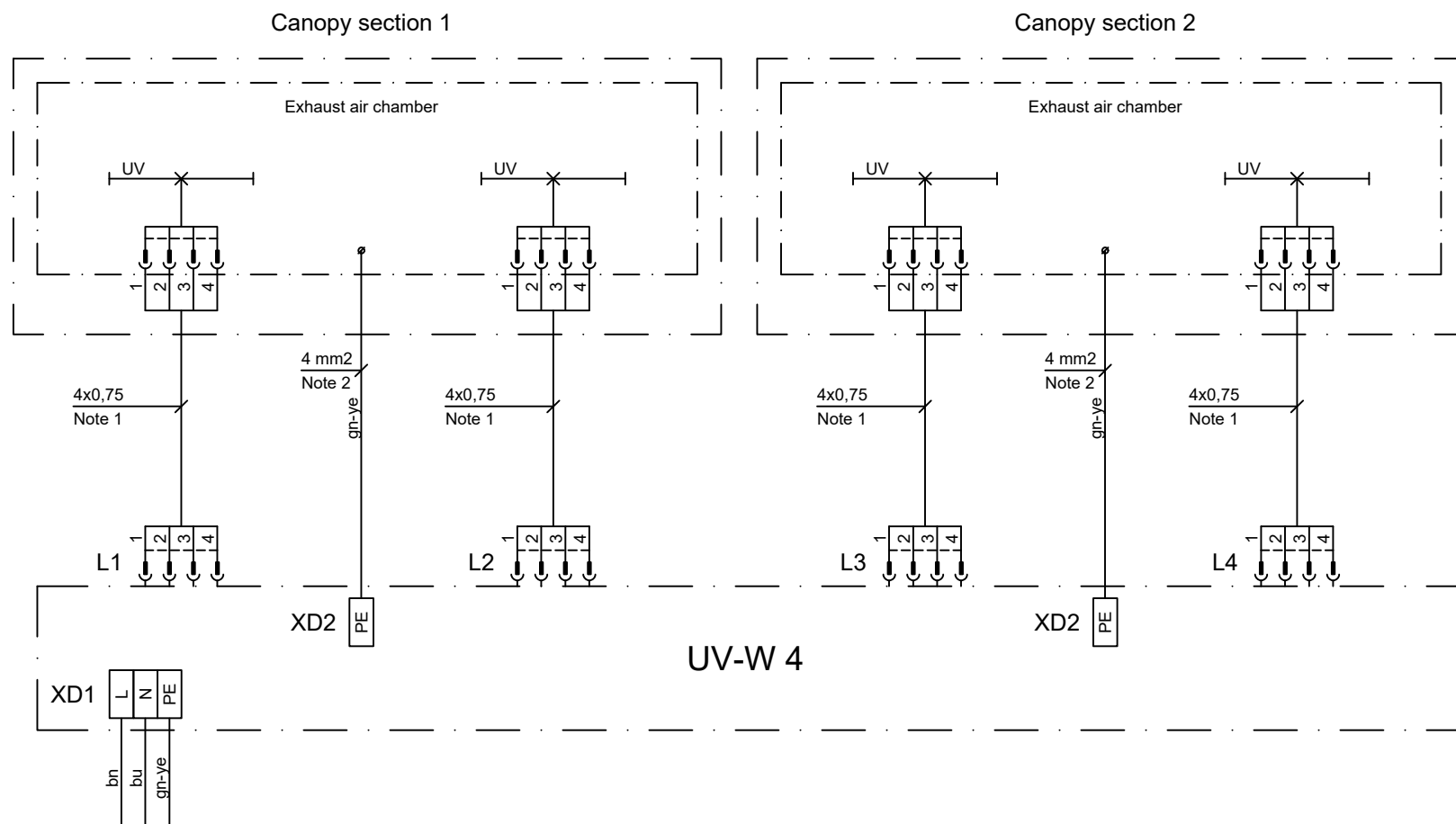
Note 2. Canopy body has to be connected by 4 mm2 PE wire (supplied by the customer) with PE terminal of XD2 terminal block.
If canopy sections are installed as solitary canopies, install and connect these PE wires from each section to UV-W 4 control cabinet.

NB! PE wires should be installed together with lamp cables.



All the cables are connected to the connectors X1 at the installation site by the customer.

Note 1 Lengths of cables are delivered according to the installation project. If longer cables are needed, then they can be lengthened by cables with cross-sections not less than ETS NORD ones (min 2x0,5 mm² and 3x0,25 mm²).



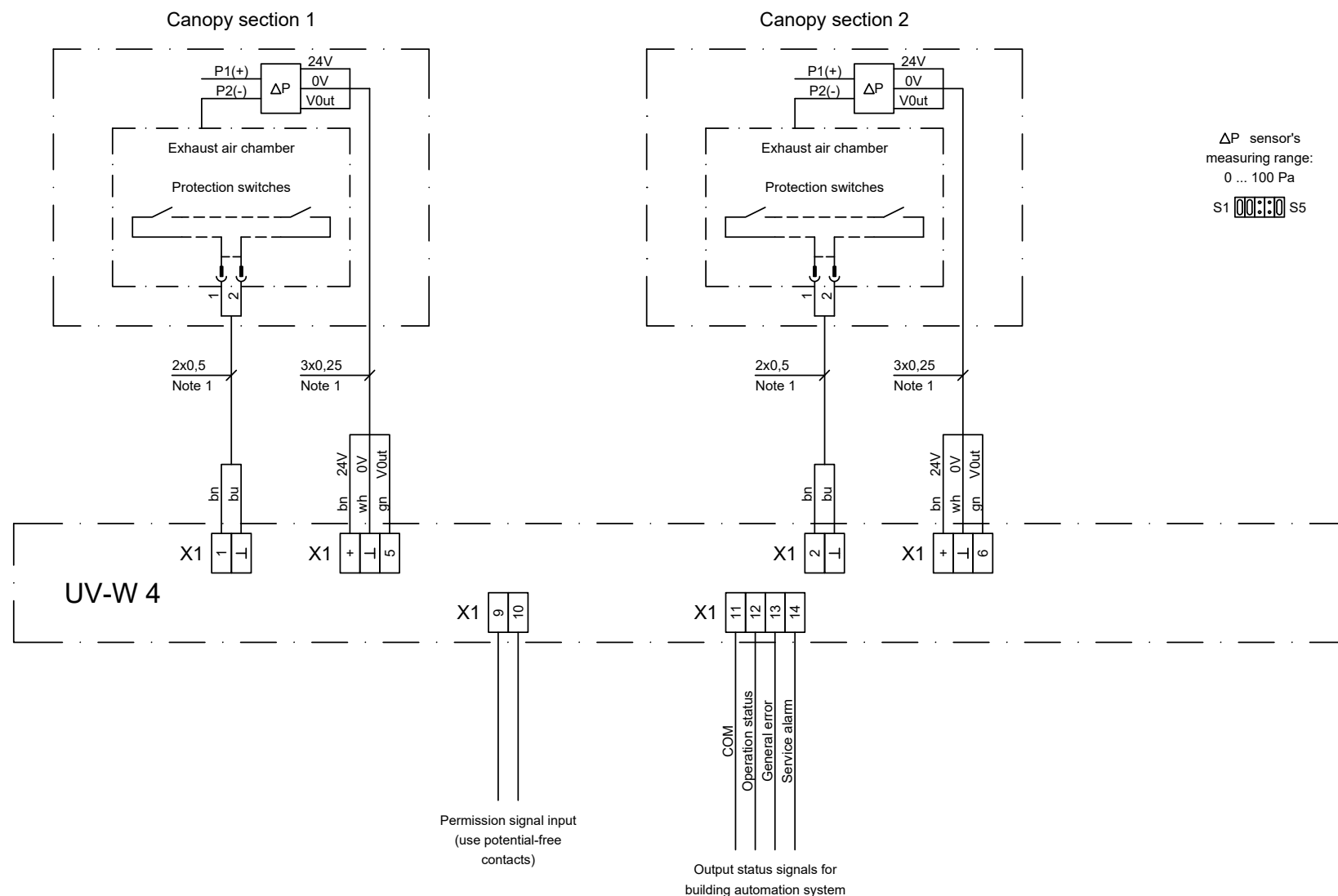
Power supply: 1 ph., 230 V, 50 Hz.
Circuit breaker: C6, B10 or C10.

All the cables are installed and connected at the installation site by the customer.

Note 1. Necessary lengths of lamp cables are selected according to installation project from supplied by ETS NORD ready cables with connectors (see p. 1). Max. length of lamp cable is 25 metres.

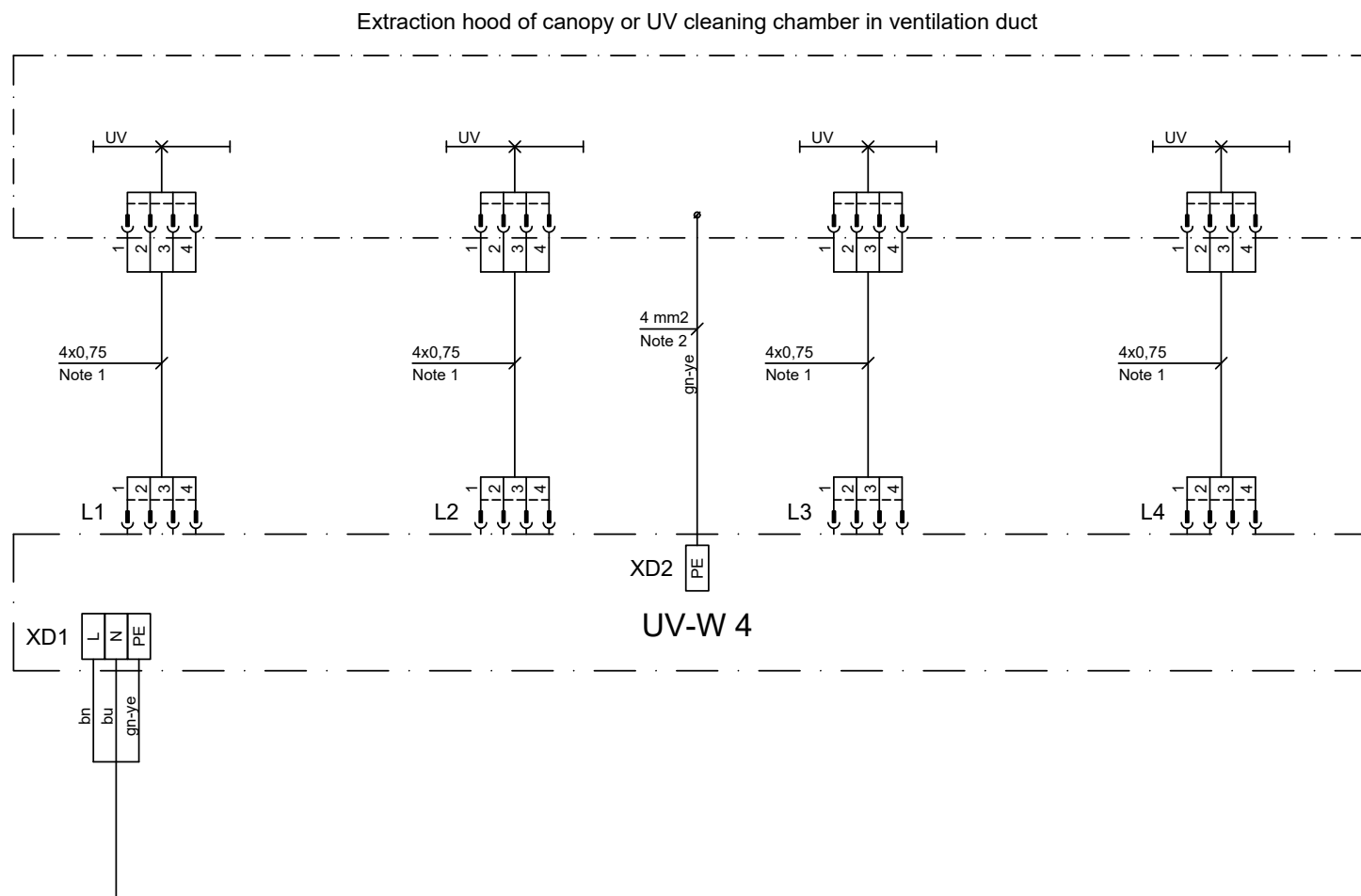
Note 2. Canopy body has to be connected by 4 mm² PE wire (supplied by the customer) with PE terminal of XD2 terminal block. If canopy sections are installed as solitary canopies, install and connect these PE wires from each section to UV-W 4 control cabinet.

NB! PE wires should be installed together with lamp cables.



All the cables are connected to the connectors X1 at the installation site by the customer.

Note 1 Lengths of cables are delivered according to the installation project. If longer cables are needed, then they can be lengthened by cables with cross-sections not less than ETS NORD ones (min 2x0,5 mm² and 3x0,25 mm²).



Power supply: 1 ph., 230 V, 50 Hz.
Circuit breaker: C6, B10 or C10.

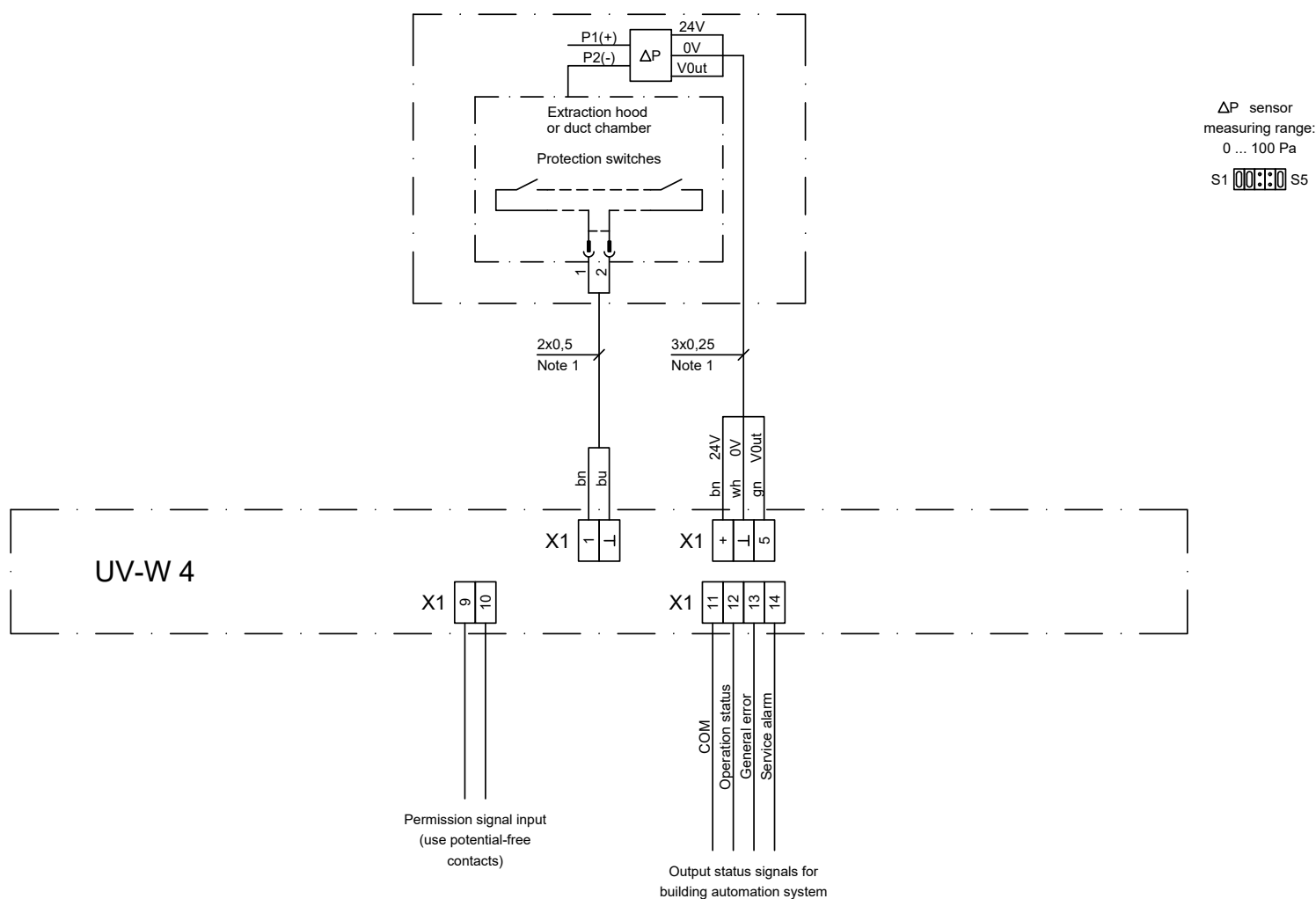
All the cables are installed and connected at the installation site by the customer.

Note 1 Necessary lengths of lamp cables are selected according to installation project from supplied by ETS NORD ready cables with connectors (see p. 13).
Max. length of lamp cable is 25 metres.

Note 2 Canopy body or cleaning chamber has to be connected by 4 mm² PE wire (supplied by the customer) with PE terminal of XD2 terminal block.

NB! PE wire should be installed together with lamp cables.

Extraction hood of canopy or UV cleaning chamber in ventilation duct



All the cables are connected to the connectors X1 at the installation site by the customer.

Note 1 Lengths of cables are delivered according to the installation project. If longer cables are needed, then they can be lengthened by cables with cross-sections not less than ETS NORD ones (min 2x0,5 mm² and 3x0,25 mm²).

11. UV-W 8 Electrical Wiring Diagrams

The UV cleaning system is intended for commercial kitchen usage to help clean ventilation system components. UV-W 8 control cabinets are used in this system for control of up to eight UV lamps if there is not possible to use built-in UV-L and UV-S solutions.

Standard delivery includes:

- selected quantity of control cabinets according to the order;
- differential pressure sensors according to the order;
- lamp cables, protection switch cables and differential pressure sensor cables with canopy sections.

Optional accessories which can be ordered from ETS NORD include:

- 4G modem, if there is no possibility to use building local network for Internet connection;
- external antenna for 4G modem.

NB! Maximum length of cable between control unit and UV lamp is 25 m!

Accessory extension cables with connectors for UV lamps:

- 3 m;
- 5 m;
- 15 m.

Necessary extension cables are selected according to the order based on customer information.

Cables for protection switches and differential pressure sensors could be extended by customer himself (e.g. with connection box and splicing connectors).

Requirements for minimum cross-section should be observed.

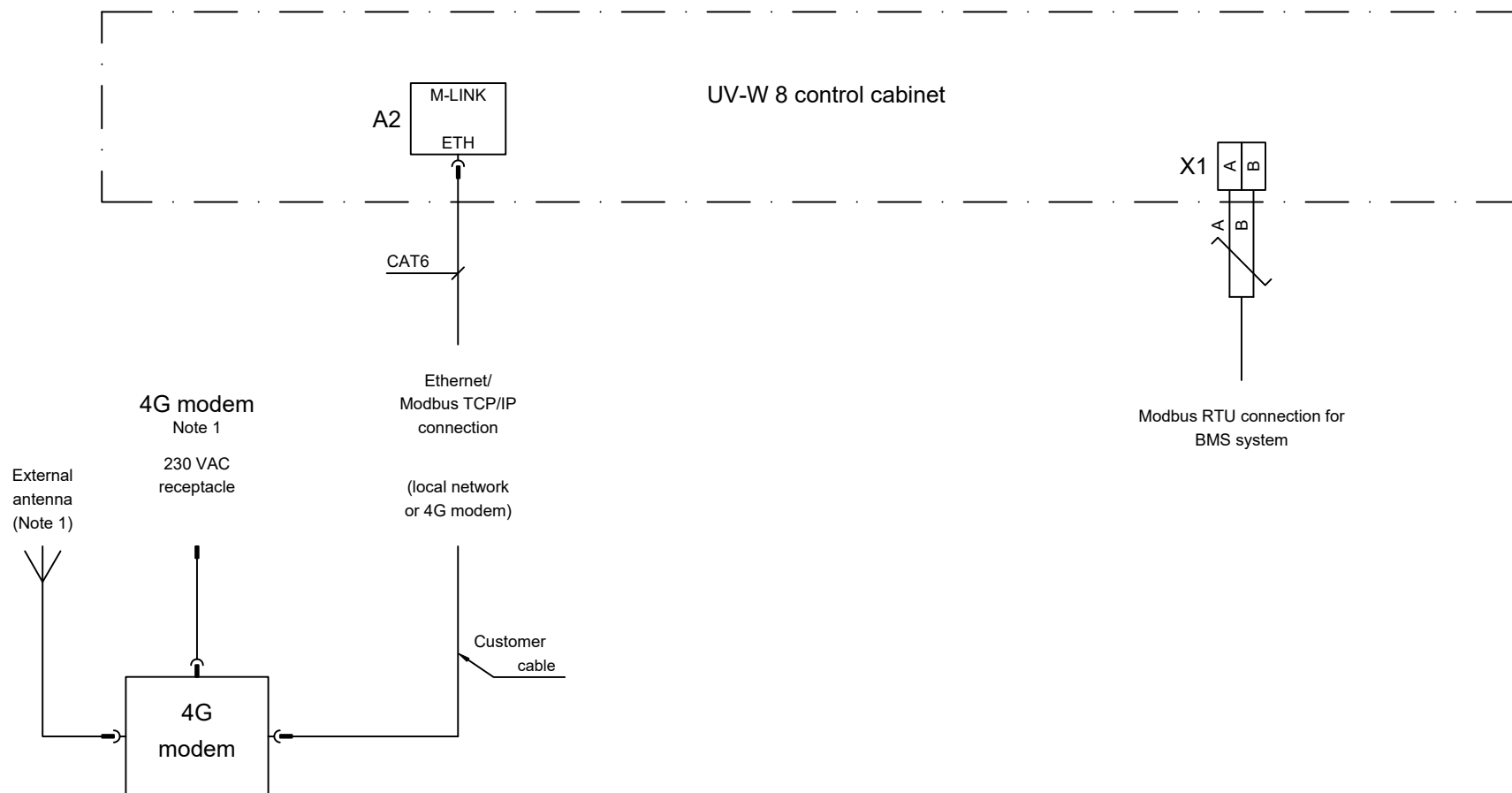
Use work permission input only with potential-free output!

All electrical installation works must be done by qualified electricians according to the national regulations.

Max. power and current consumption (8 x 1200 mm lamps) - 1860 W and 8,2 A .

Colour coding
according to
EN IEC 60757:2021

Colour name	Letter code
black	bk
brown	bn
red	rd
orange	og
green	gn
yellow	ye
blue	bu
violet	vt
grey	gy
white	wh
pink	pk
gold	gd
turquoise	tq
silver	sr

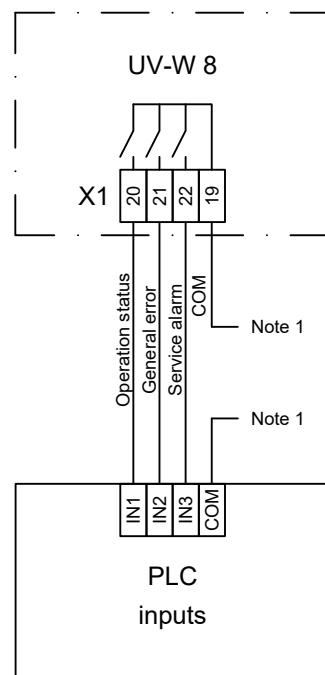


BMS - building management system.

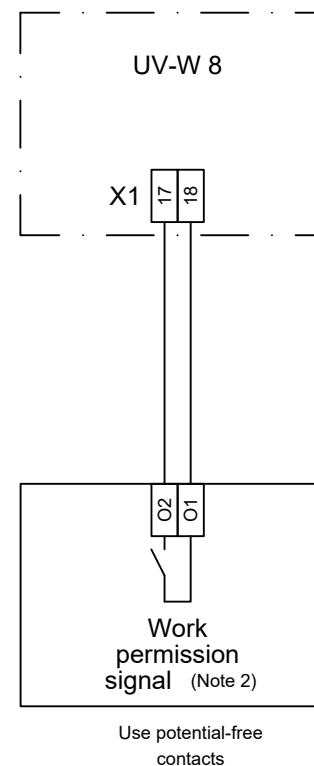
Customer cable - cable, supplied and installed by the customer.

Note 1 Optional 4G modem is used (which can be ordered from ETS NORD), if there is no local network available for ETS NORD service. 4G modem is installed according to maintenance agreement. Use external antenna if 4G signal level is insufficient.

Connection of digital outputs
with PLC



Connection to work
permission input



PLC - programmable logic controller.

All the cables are supplied, installed and connected to the connectors X1 at the installation site by the customer.

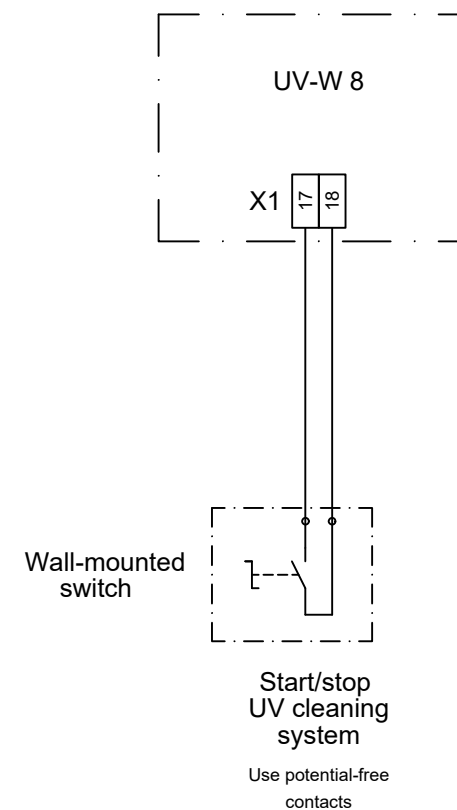
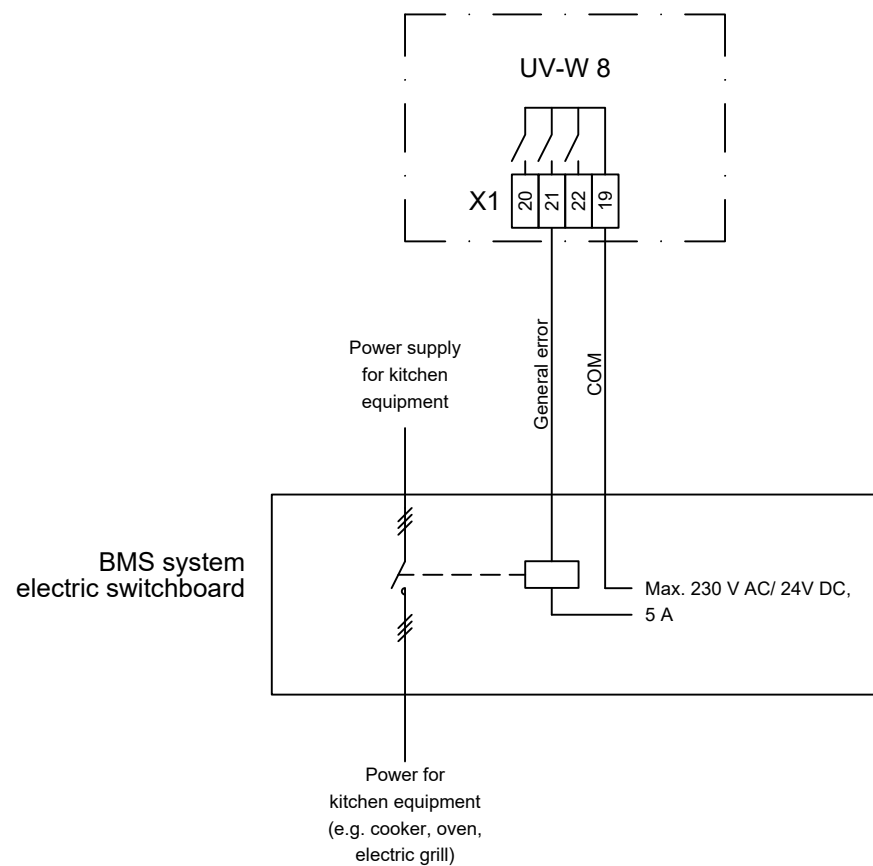
Terminals 19 ... 22 of X1 connector are potential-free relay contacts: max. 230 V AC/ 24V DC, 5 A.

Max. cable core cross-section is 2,5 mm² (solid conductors) for X1 connector.

Note 1 24V or 0V can be used as COM input depending on the control device inputs (PNP or NPN).

In case of questions, consult with ETS NORD SERVICE department.

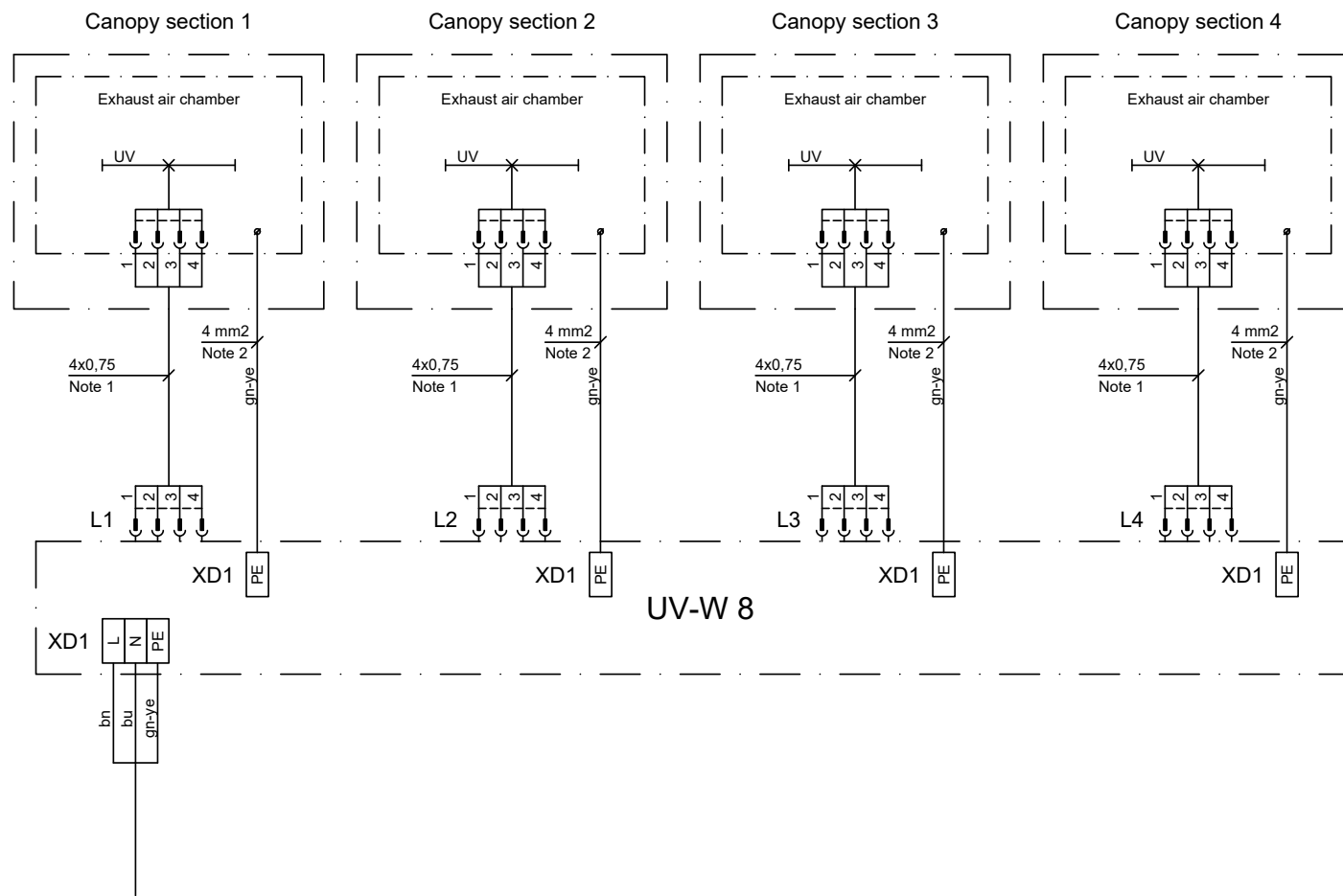
Note 2 The work permission signal can be applied, for example, from a fire alarm system, building automation system or a building ventilation control system.



BMS - building management system.

All the cables are supplied, installed and connected to the connectors X1 at the installation site by the customer.

Max. cable core cross-section is 2,5 mm² (solid conductors) for X1 connector.



Power supply: 1 ph., 230 V, 50 Hz.
Circuit breaker: C10, C13 or C16.

All the cables are installed and connected at the installation site by the customer.

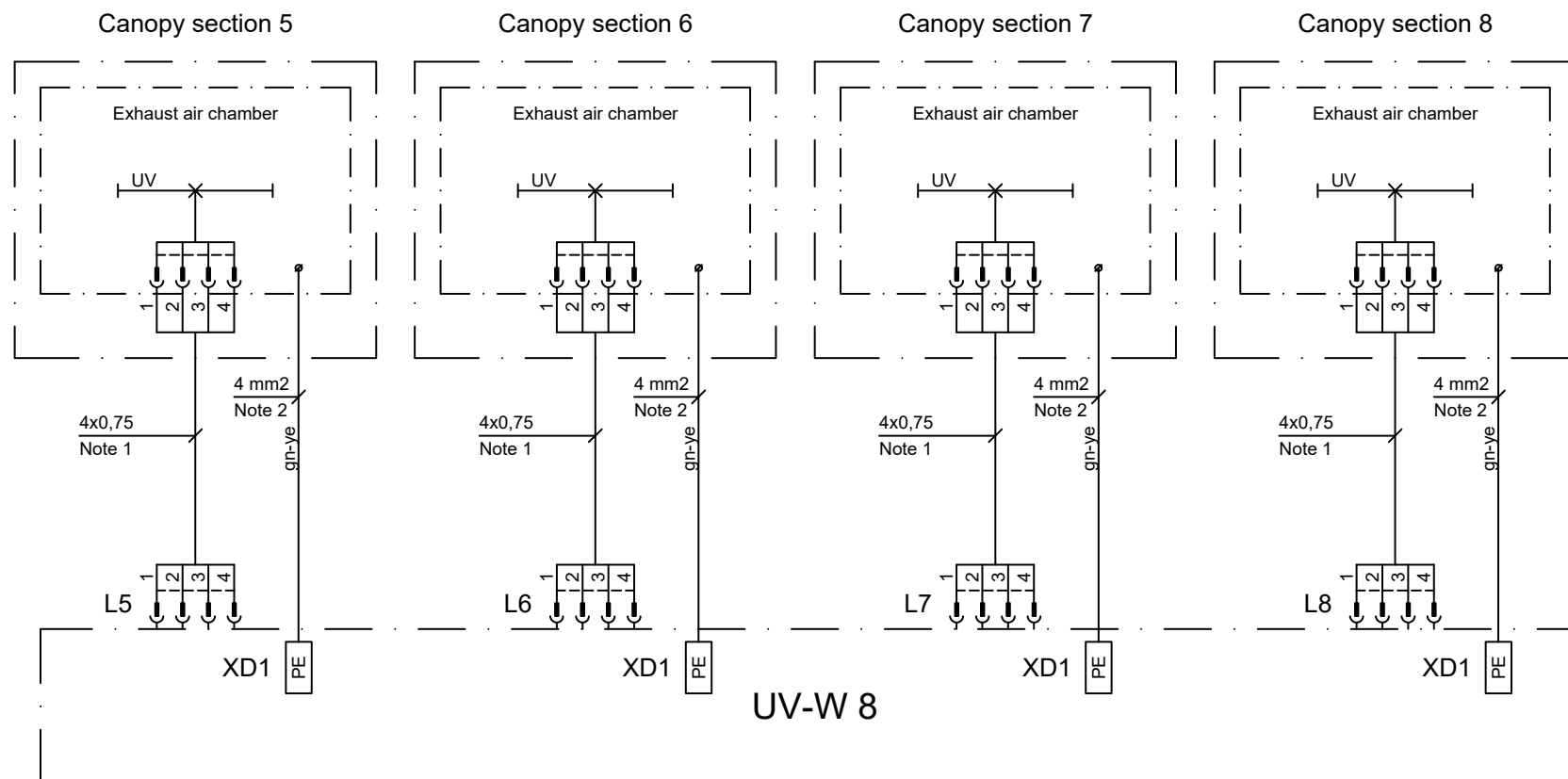
Note 1 Necessary lengths of lamp cables are selected according to installation project from supplied by ETS NORD ready cables with connectors (see p. 23).

Max. length of lamp cable is 25 metres.

Note 2 Canopy body has to be connected by 4 mm² PE wire (supplied by the customer) with PE terminal of XD1 terminal block.

If canopy sections are installed as solitary canopies, install and connect these PE wires from each section to UV-W 8 control cabinet.

NB! PE wires should be installed together with lamp cables.



All the cables are installed and connected at the installation site by the customer.

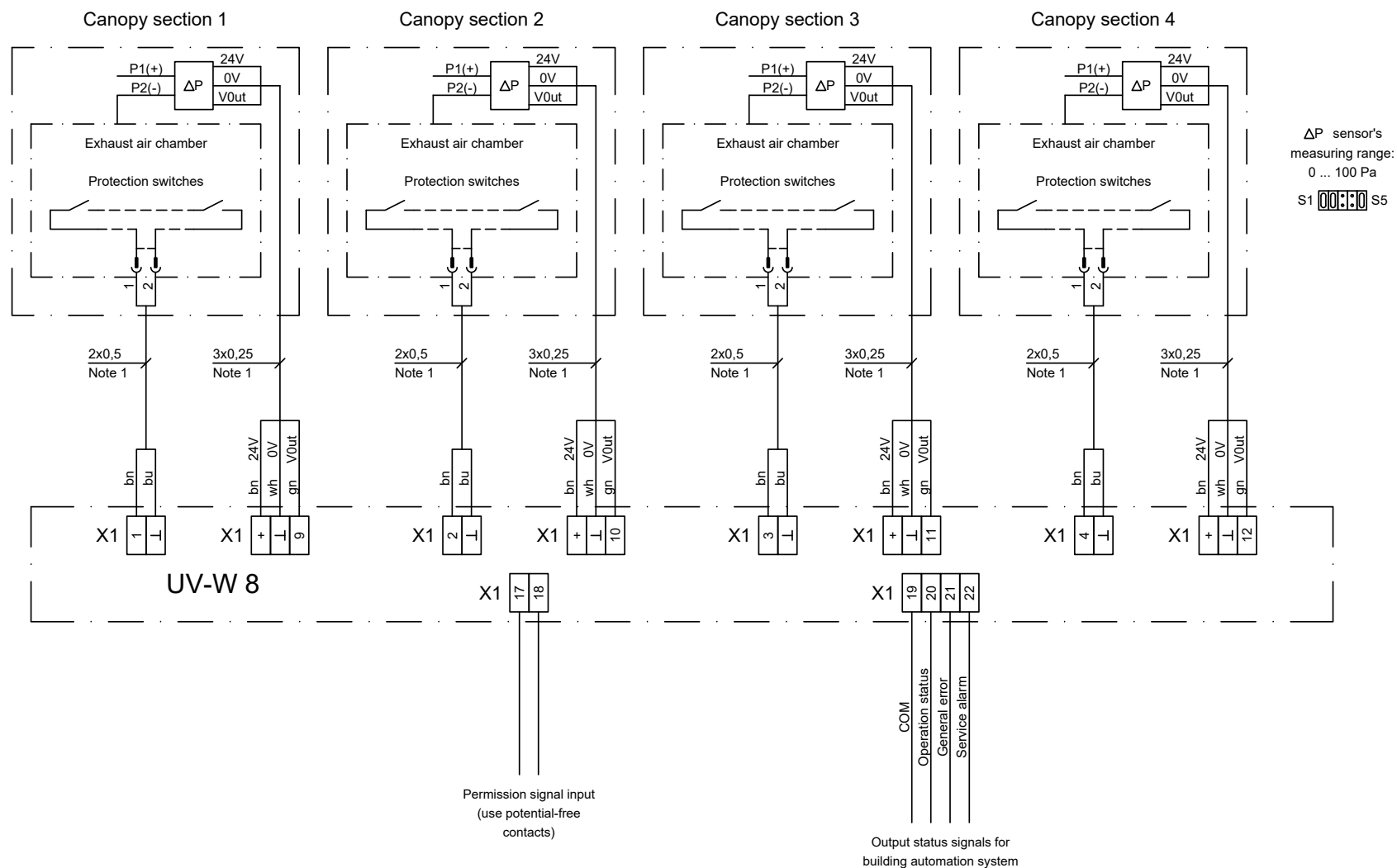
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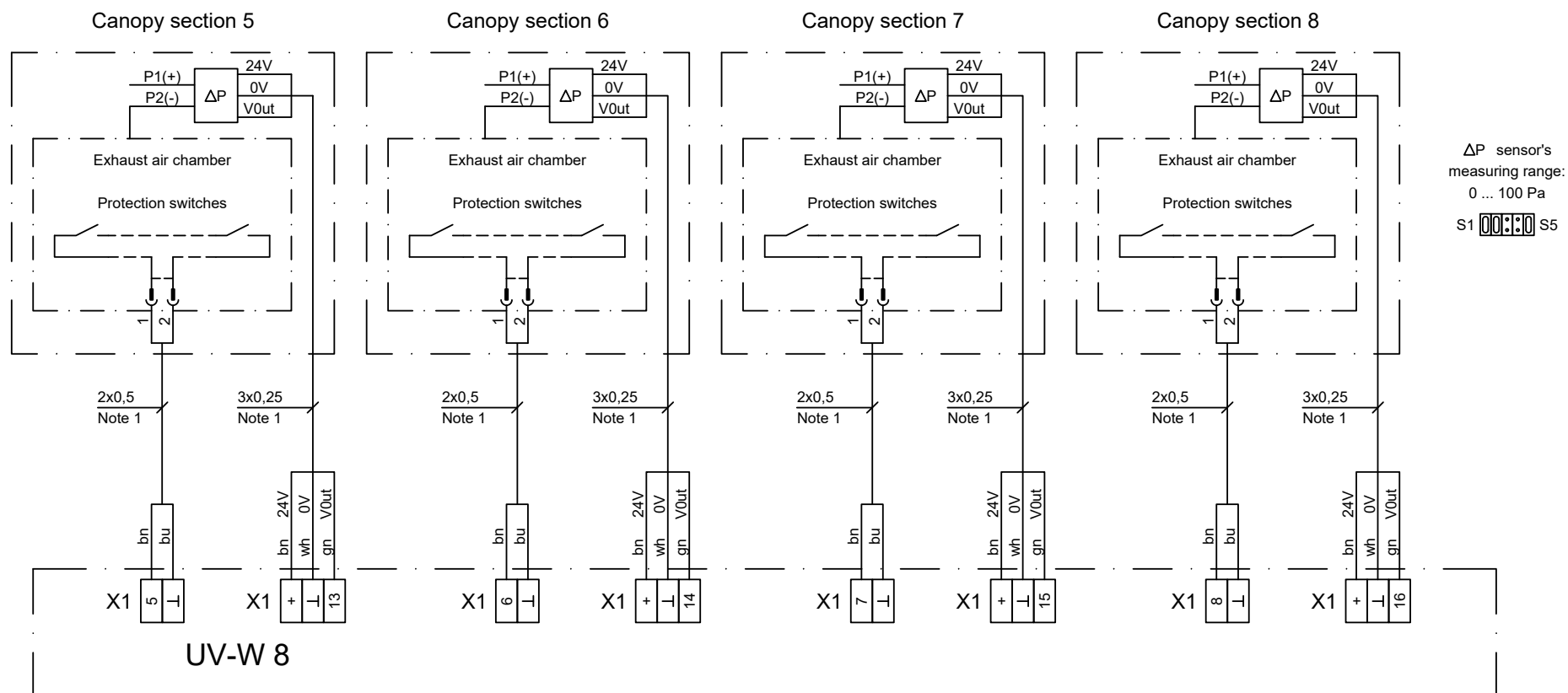
If canopy sections are installed as solitary canopies, install and connect these PE wires from each section to UV-W 8 control cabinet.

NB! PE wires should be installed together with lamp cables.



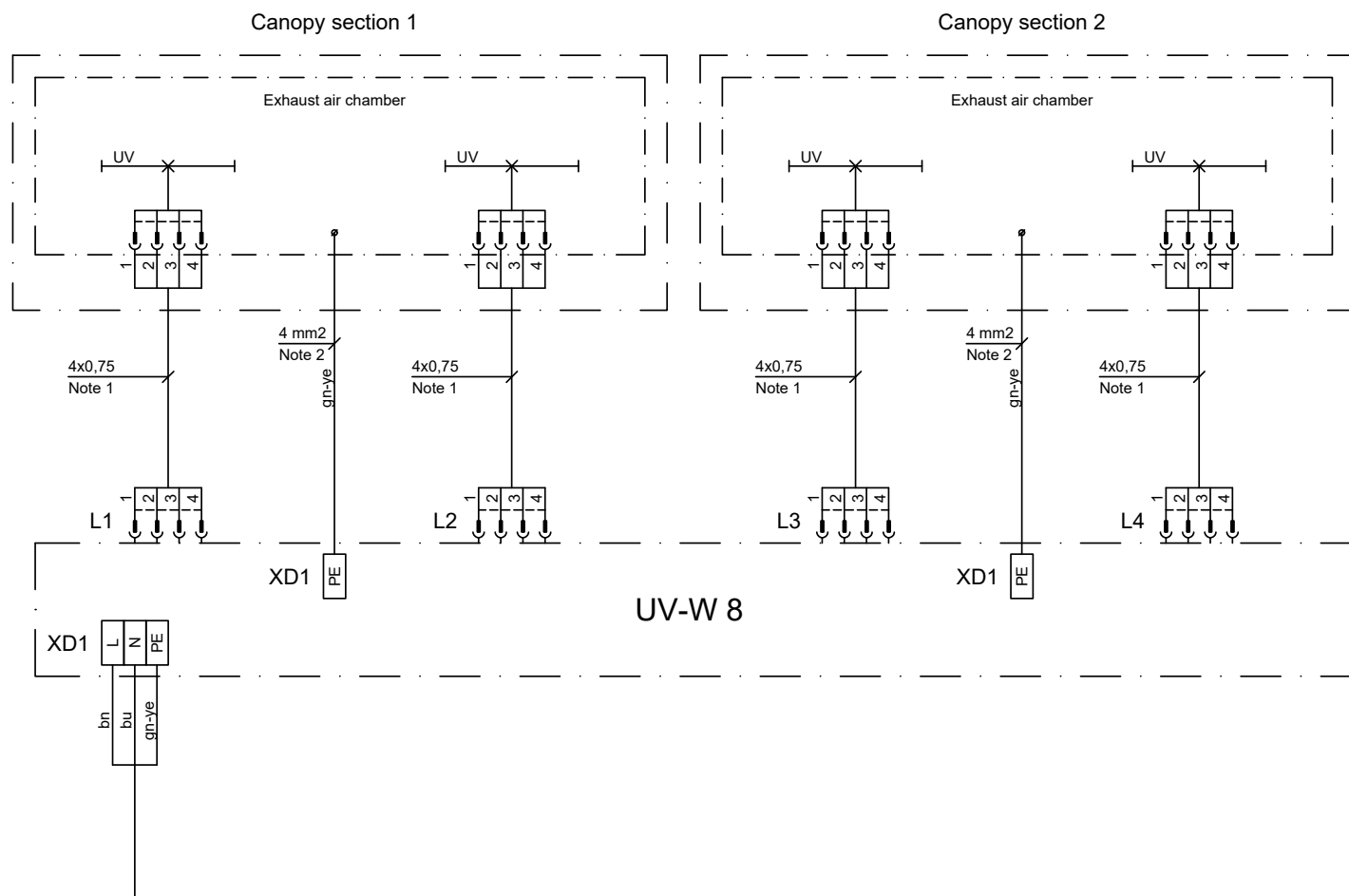
All the cables are connected to the connectors X1 at the installation site by the customer.

Note 1 Lengths of cables are delivered according to the installation project. If longer cables are needed, then they can be lengthened by cables with cross-sections not less than ETS NORD ones (min 2x0,5 mm² and 3x0,25 mm²).



All the cables are connected to the connectors X1 at the installation site by the customer.

Note 1 Lengths of cables are delivered according to the installation project. If longer cables are needed, then they can be lengthened by cables with cross-sections not less than ETS NORD ones (min 2x0,5 mm² and 3x0,25 mm²).



Power supply: 1 ph., 230 V, 50 Hz.

Circuit breaker: C10, C13 or C16.

All the cables are installed and connected at the installation site by the customer.

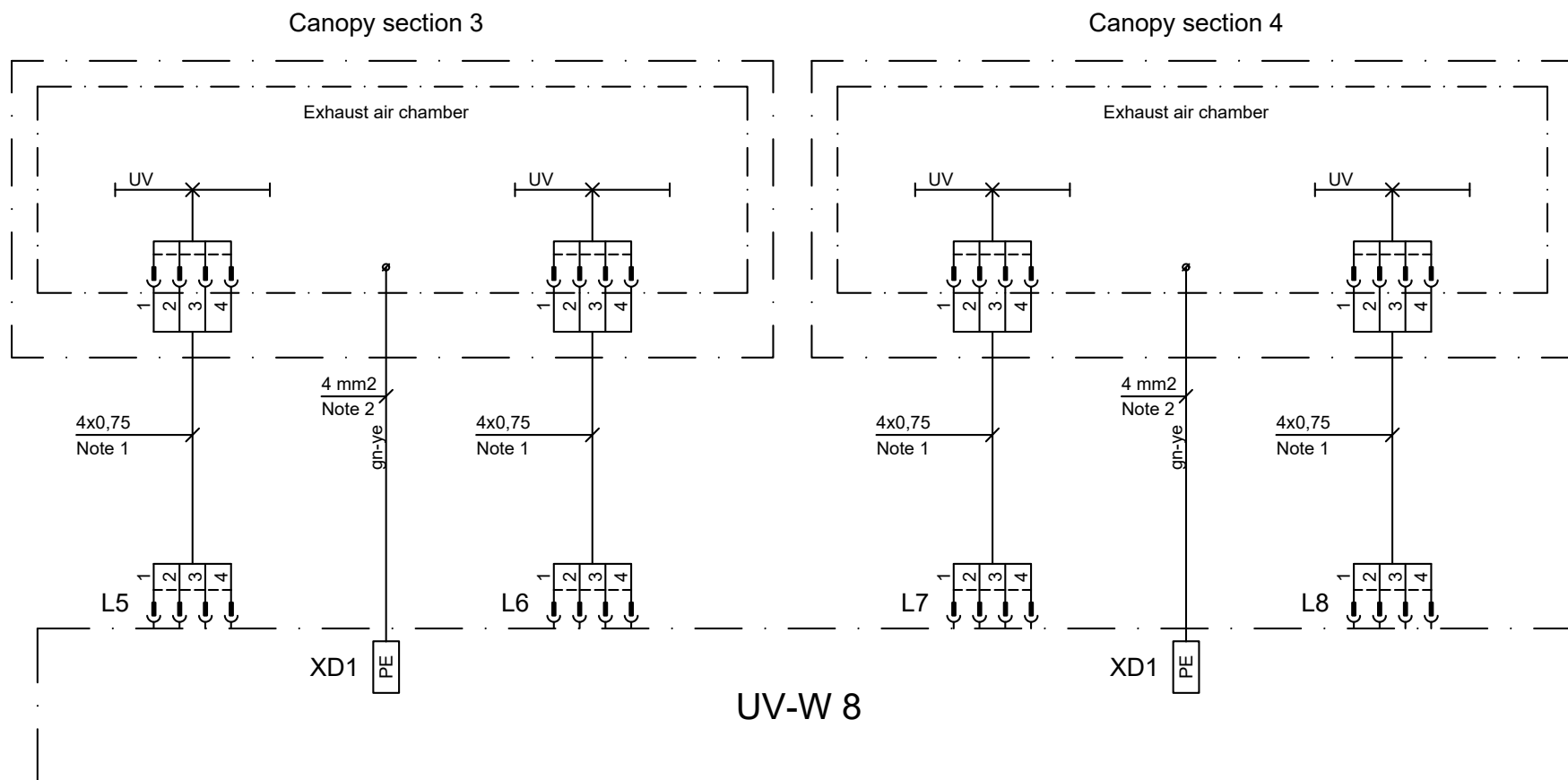
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Note 2 Canopy body has to be connected by 4 mm² PE wire (supplied by the customer) with PE terminal of XD1 terminal block.

If canopy sections are installed as solitary canopies, install and connect these PE wires from each section to UV-W 8 control cabinet.

NB! PE wires should be installed together with lamp cables.



All the cables are installed and connected at the installation site by the customer.

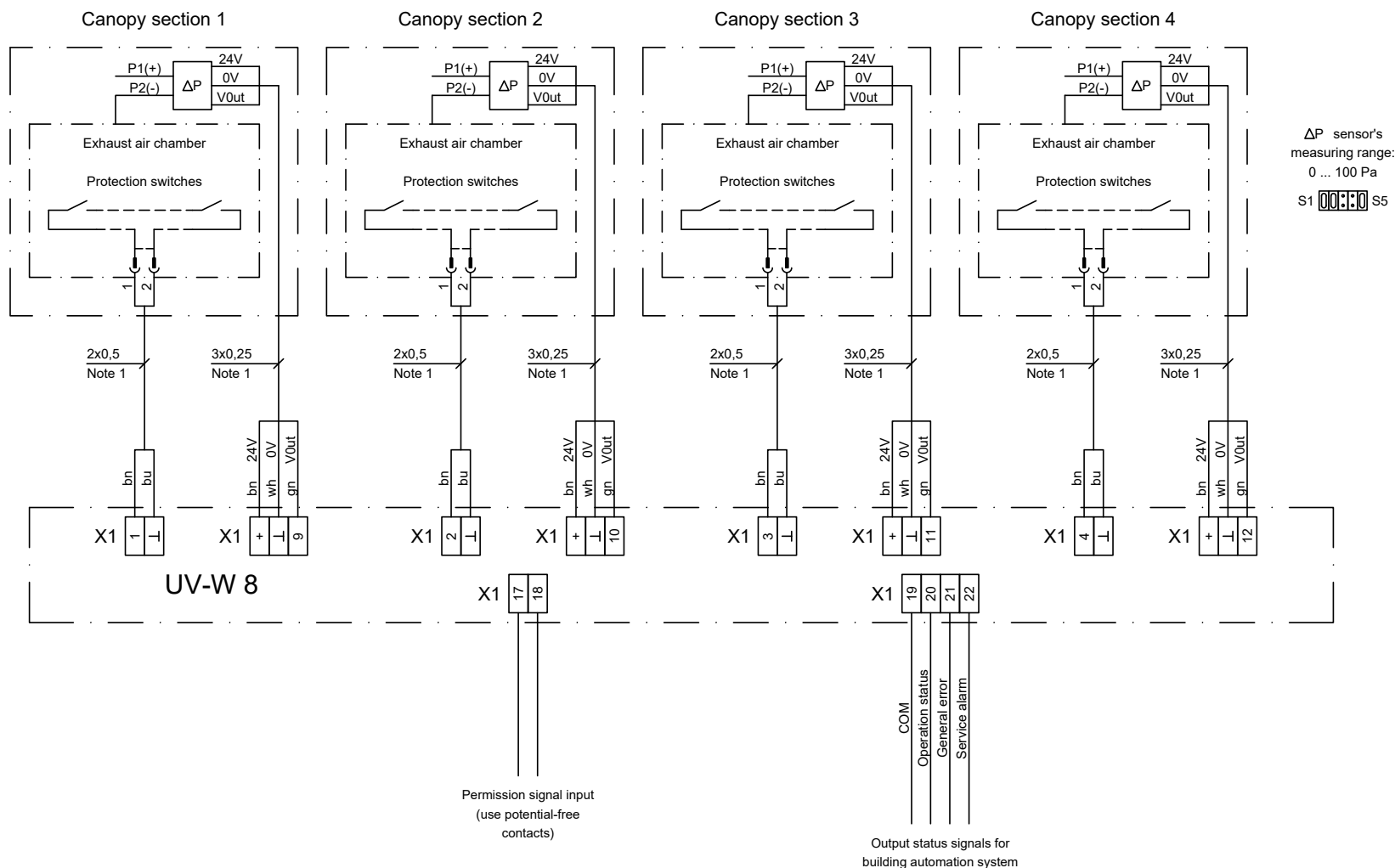
Note 1 Necessary lengths of lamp cables are selected according to installation project from supplied by ETS NORD ready cables with connectors (see p. 23).

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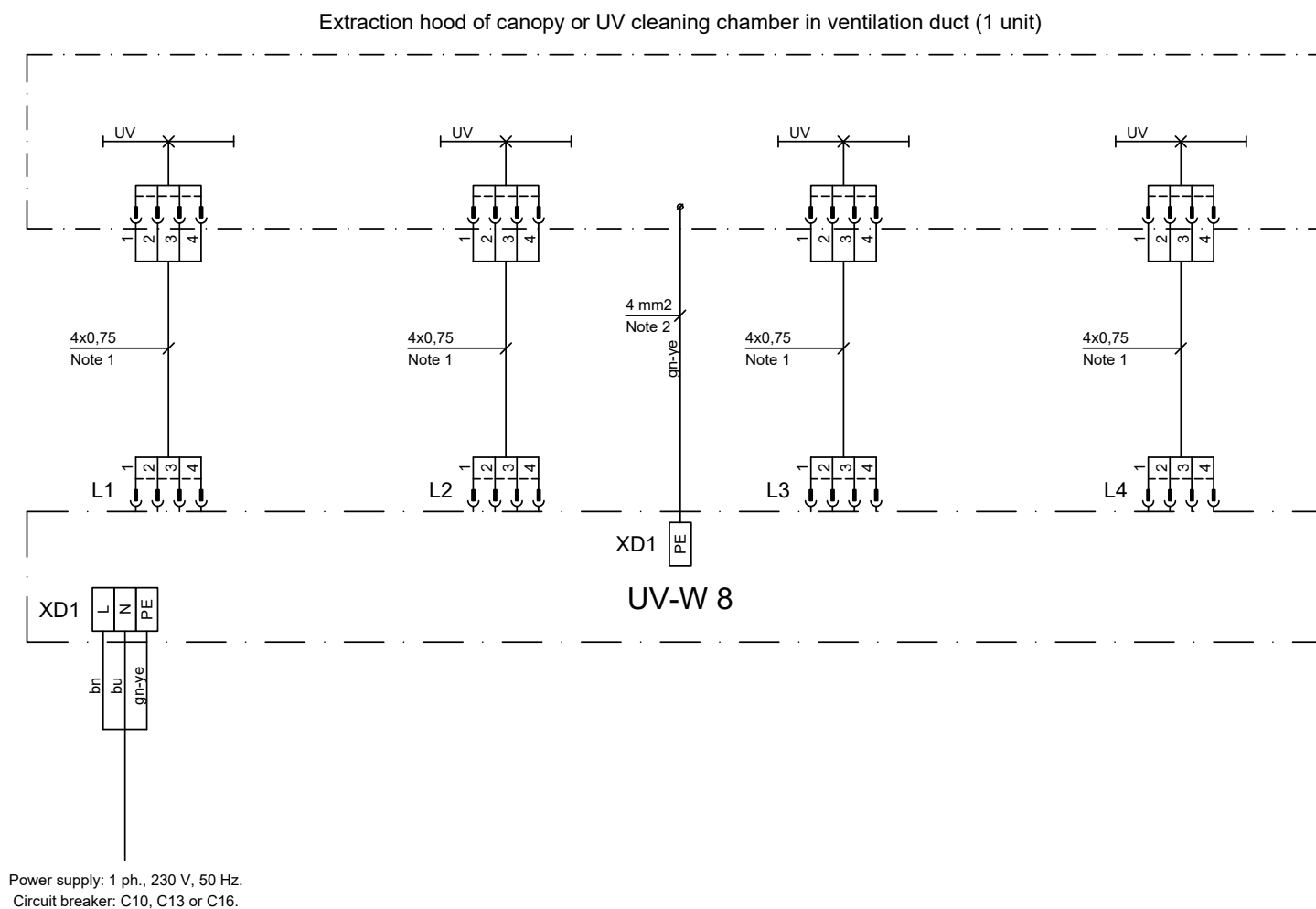
If canopy sections are installed as solitary canopies, install and connect these PE wires from each section to UV-W 8 control cabinet.

NB! PE wires should be installed together with lamp cables.



All the cables are connected to the connectors X1 at the installation site by the customer.

Note 1 Lengths of cables are delivered according to the installation project. If longer cables are needed, then they can be lengthened by cables with cross-sections not less than ETS NORD ones (min 2x0,5 mm² and 3x0,25 mm²).



All the cables are installed and connected at the installation site by the customer.

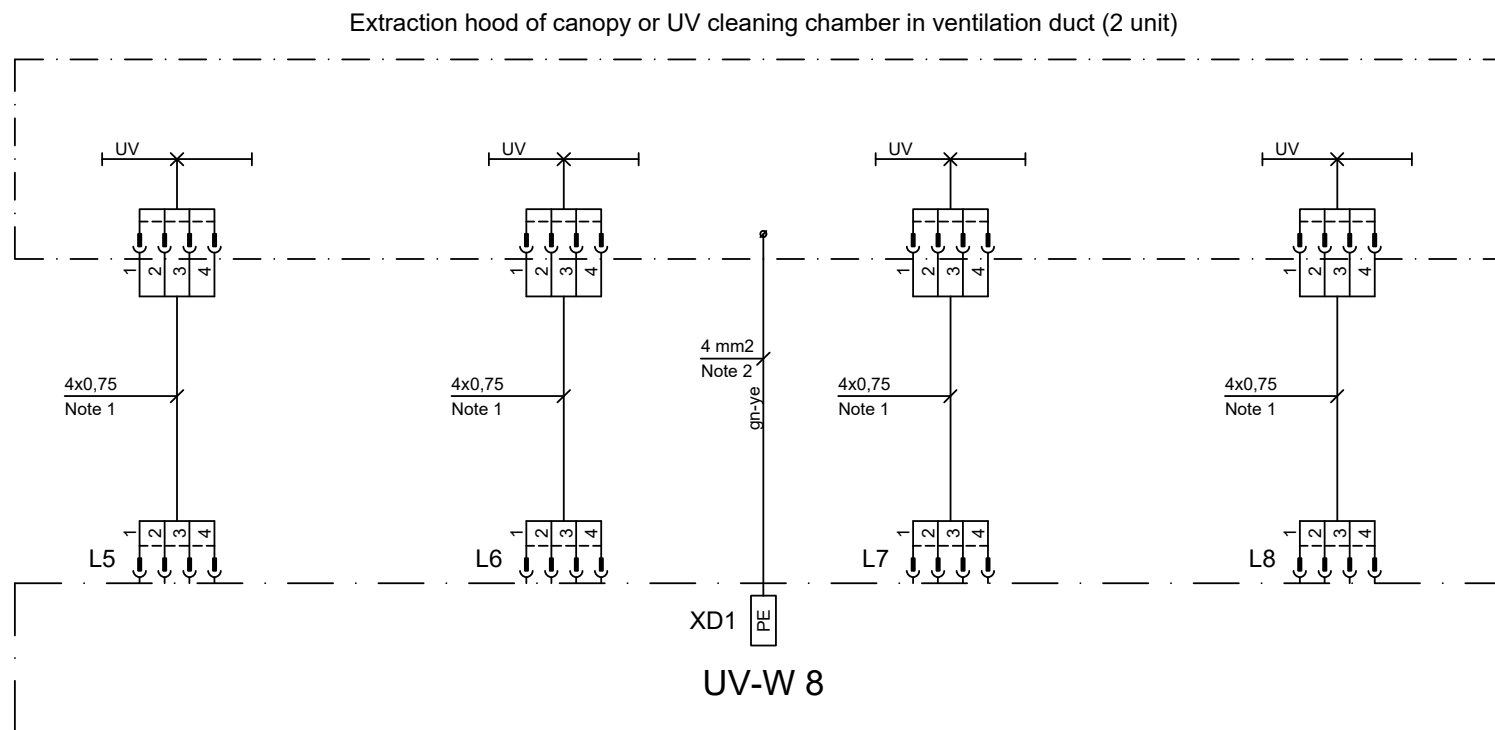
Note 1 Necessary lengths of lamp cables are selected according to installation project from supplied by ETS NORD ready cables with connectors (see p. 23).

Max. length of lamp cable is 25 metres.

Note 2 Canopy body has to be connected by 4 mm² PE wire (supplied by the customer) with PE terminal of XD1 terminal block.

If canopy sections are installed as solitary canopies, install and connect these PE wires from each section to UV-W 8 control cabinet.

NB! PE wires should be installed together with lamp cables.



All the cables are installed and connected at the installation site by the customer.

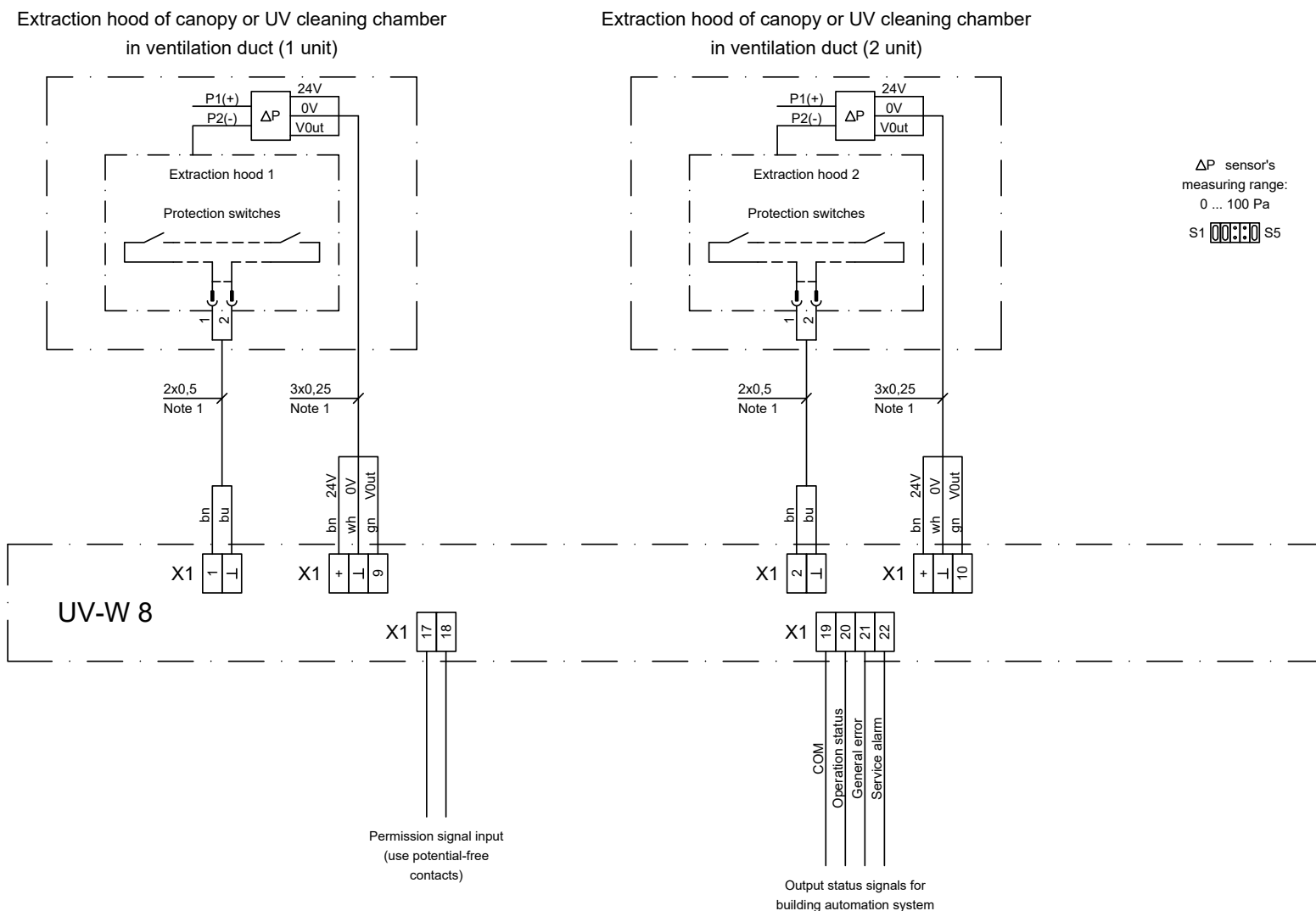
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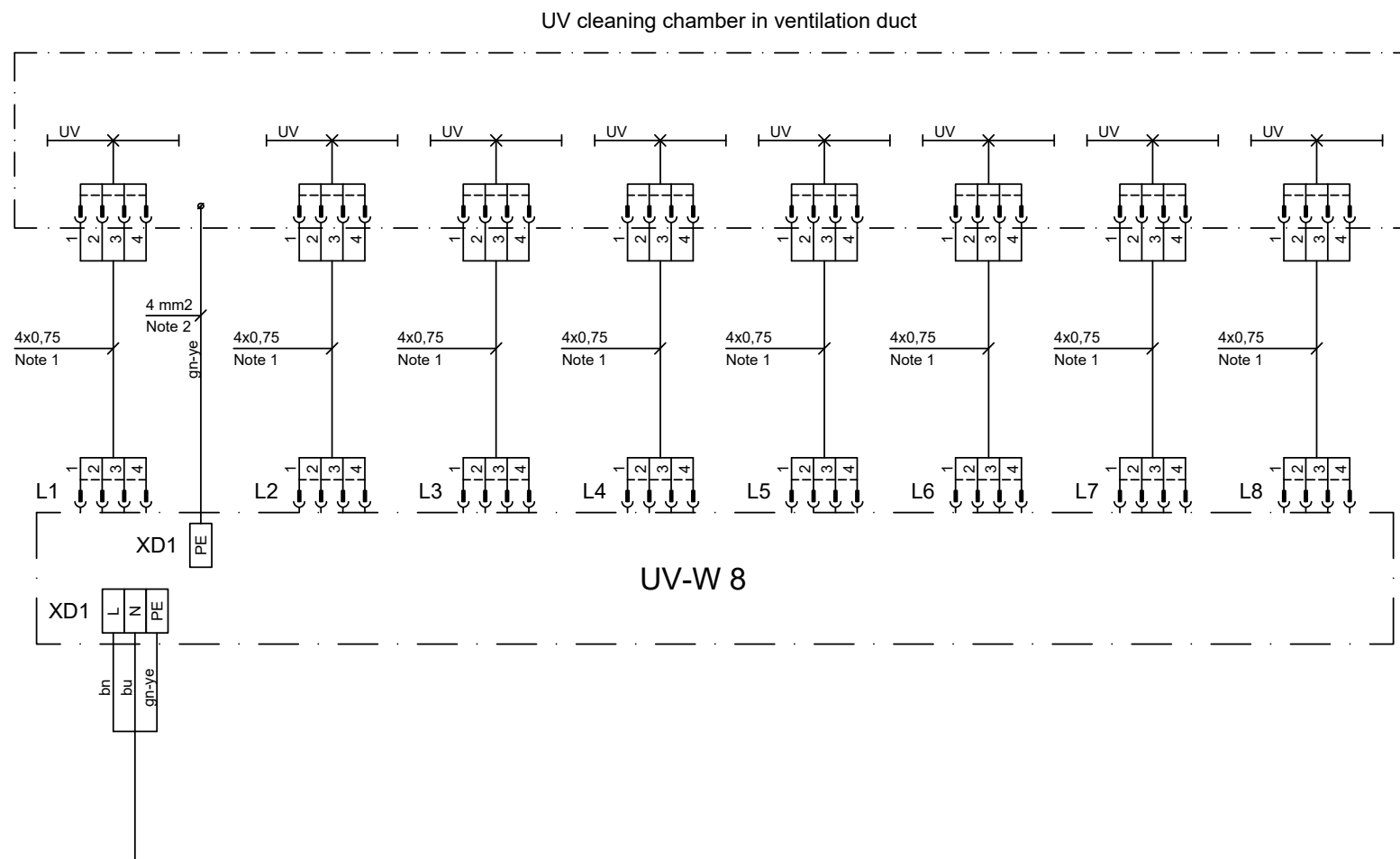
If canopy sections are installed as solitary canopies, install and connect these PE wires from each section to UV-W 8 control cabinet.

NB! PE wires should be installed together with lamp cables.



All the cables are connected to the connectors X1 at the installation site by the customer.

Note 1 Lengths of cables are delivered according to the installation project. If longer cables are needed, then they can be lengthened by cables with cross-sections not less than ETS NORD ones (min 2x0,5 mm² and 3x0,25 mm²).



Power supply: 1 ph., 230 V, 50 Hz.

Circuit breaker: C10, C13 or C16.

All the cables are installed and connected at the installation site by the customer.

Note 1 Necessary lengths of lamp cables are selected according to installation project from supplied by ETS NORD ready cables with connectors (see p. 23).

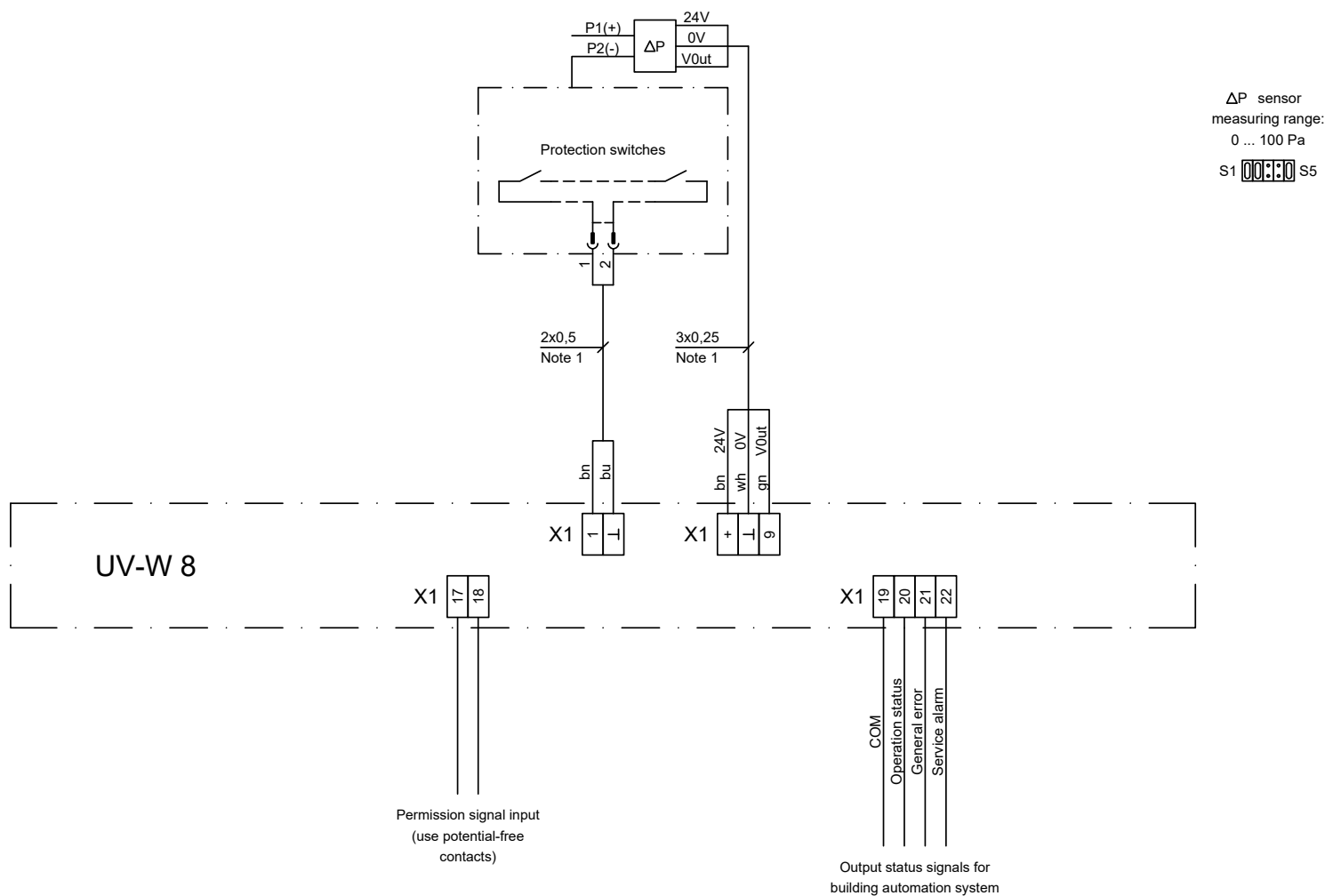
Max. length of lamp cable is 25 metres.

Note 2 Canopy body has to be connected by 4 mm² PE wire (supplied by the customer) with PE terminal of XD1 terminal block.

If canopy sections are installed as solitary canopies, install and connect these PE wires from each section to UV-W 8 control cabinet.

NB! PE wires should be installed together with lamp cables.

UV cleaning chamber in ventilation duct



All the cables are connected to the connectors X1 at the installation site by the customer.

Note 1 Lengths of cables are delivered according to the installation project. If longer cables are needed, then they can be lengthened by cables with cross-sections not less than ETS NORD ones (min 2x0,5 mm² and 3x0,25 mm²).

12. Warranty information

The warranty for the UV cleaning system is subject to the following conditions:

- A two-year warranty is granted for the new product against possible defects or manufacturing defects, provided that:
 - The introduction of the UV cleaning system has been carried out by ETS NORD.
 - The annual maintenance of the device has been completed on time.
 - Components that have exceeded the operating hours or switching cycle (e.g. UV-lamps) have been replaced on time.
- The warranty for the new UV cleaning system covers the replacement and repair of the defective part.
- Replacement parts have a 90-day defect and manufacturing defect warranty from the date of original installation.
- The warranty takes effect from the date of commissioning.

UV-lamps two-year warranty is subject to following conditions:

- 10 000 operating hours
- 20 000 switching cycles

If the conditions are met before the end of the warranty period, replacing the old lamp with a new one will void the UV-lamps two-year warranty.



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