



CDFI

EN MOUNTING AND INSTALLATION INSTRUCTION

 **SALDA**

www.salda.it

1. CONTENT

2.SYMBOLS AND MARKING	3
3.SAFETY INSTRUCTIONS AND PRECAUTIONS	4
4.INFORMATION ABOUT THE PRODUCT	5
4.1. DESCRIPTION	5
4.2. DIMENSIONS AND WEIGHT	5
4.3. TECHNICAL DATA	5
4.4. OPERATING CONDITIONS	5
4.5. STANDARD PACKAGE OF COMPONENTS	6
4.6. DESCRIPTION OF COMPONENTS	6
5. INSTALATION	7
5.1. RECEPTION OF GOODS	7
5.2. TRANSPORTATION AND STORAGE	7
5.3. UNPACKING	8
5.4.PIPING AND INSTRUMENTATION DIAGRAM	8
5.5. MOUNTING	8
5.5.1. UNIT PLACING AND MOUNTING POSITIONING REQUIREMENTS	9
5.5.2. DRAINAGE SYSTEM INSTALLATION	9
5.6. CONNECTION OF THE AIR DUCT	9
5.7.CONNECTION OF THE UNIT TO ELECTRIC NETWORK	9
5.8. START-UP RECOMMENDATIONS	10
5.8.1. SYSTEM PROTECTION	10
5.8.2.PRE-STARTUP RECOMENDATIONS OF THE UNIT (IN THE PRESENCE OF THE ENDUSER)	10
6. MAINTENANCE	11
6.1. SAFETY INSTRUCTION	11
6.2.GENERAL RECOMMENDATIONS FOR VENTILATION SYSTEM MAINTENANCE	11
6.3. COVER OPENING	11
6.4. CONNECTION OF MODULES	11
6.5. FANS MAINTENANCE	12
6.6.ELECTRICAL HEATER MODULE MAINTENANCE	12
6.7. CONTROL PANEL MAINTENANCE	12
7.SETTING FAN ROTATION SPEED	13
8.ELECTRICAL HEATER MODULE	14
8.1. CONNECTION RECOMMENDATIONS	14
8.2. WIRING DIAGRAMS	14
9.ELECTRICAL WIRING DIAGRAMS	20
10.POSSIBLE FAULTS AND TROUBLESHOOTING	22
11.ECODESIGN DATA TABLE	23
12.DECLARATION OF CONFIMITY	24
13. WARRANTY	25
13.1. LIMITED WARRANTY COUPON	25

2. SYMBOLS AND MARKING



Warning – pay attention



Additional information

Apply the auxiliary label on the unit (on an easily accessible location) or on the dashed location of the technical manual in order to keep the important information about the unit.

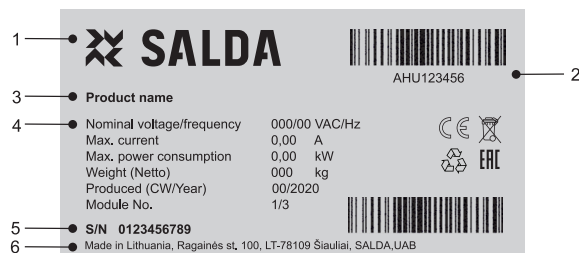


Figure 2.1. Technical label

1 - Logo; 2 - Product code (SKU); 3 - Product name; 4 - Technical data; 5 - Serial number; 6 - Production place.



Figure 2.2. Indication for duct connection.

ODA - outdoor air; SUP - supply air.

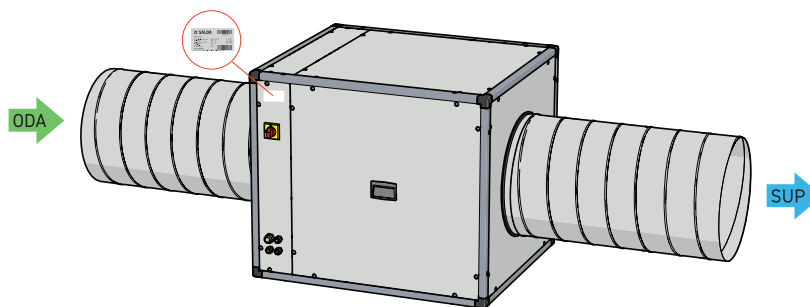


Figure 2.3. Technical label place and air duct indication (right side)



NOTE. Ducts are not the part of the unit.

3. SAFETY INSTRUCTIONS AND PRECAUTIONS

Read these instructions very carefully before installing and using this equipment. Installation, connection and maintenance should be carried out by a qualified technician and in accordance with the local regulations and legislation.

The company shall take no responsibility for the injuries or damaged property if the safety requirements are not followed or the device is modified without the permission of the manufacturer.

Main safety rules

Danger



- Before carrying out any electrical or maintenance works, make sure that the device is disconnected from the mains and all moving parts of the device have stopped.
 - Make sure that the fans are not accessible through air ducts or branch openings.
 - If any liquids on electric parts or connections that bear voltage are noticed, stop the operation of the device.
 - Do not plug the device into the mains that differ from the one indicated on the label or on the housing.
 - Voltage of the mains should comply with the electro technical parameters indicated on the label.
 - The device should be earthed in accordance with the regulations on the installation of electric devices. Turning on and using unearthed device is not allowed. Follow the requirements specified on the device's labels that indicate danger.
-

Warnings



- Connection of electricity and maintenance of the device should be performed by the qualified personnel only and in accordance with the manufacturer's instructions and safety requirements.
 - In order to reduce the risk during installation and maintenance, suitable protective clothing must be worn.
 - Beware of sharp angles while carrying out installation and maintenance works.
 - Do not touch heating elements until they haven't cooled down.
 - Some devices are heavy, you should be very careful while transporting and installing them. Use suitable lifting equipment.
 - When connecting electricity to the mains, a circuit breaker of suitable size must be used.
-

Warning!



- If the device is installed in a cold environment, make sure that all connections and tubes are properly isolated. Intake and discharge air ducts should be isolated in all cases.
 - Openings of the ducts should be covered during transportation and installation.
 - Make sure not to damage the heater when connecting the piping of the water heater. For tightening up, use a wrench/spanner.
-

Before starting up the device




- make sure, that there are no strange objects inside;
 - manually check fans to make sure they are not stuck or blocked;
 - check the earthing;
 - make sure that all components and accessories are connected in accordance with the wiring diagram or provided instructions.
-

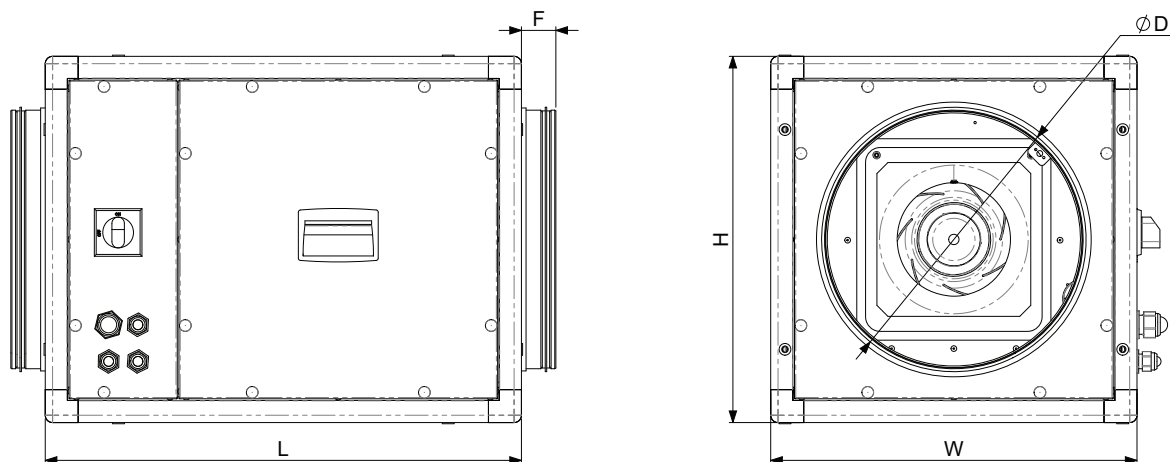
4. INFORMATION ABOUT THE PRODUCT

4.1. DESCRIPTION

CDFI modular units are designed to be built into single-flow ventilation installations in collective housing and tertiary buildings. They come with an ECM low-consumption motor.

 **Not suitable for operation in pools, saunas and other similar premises.**

4.2. DIMENSIONS AND WEIGHT




CDFI CO EKO		800 R/L	1500 R/L	4000 R/L	6000 R/L	8000 R/L	10000 R/L	12000 R/L	16000 R/L
L	[mm]	650	860		1035		1255		1370
W	[mm]	500	710		885		1105		1220
H	[mm]	500	710		885		1105		1220
ØD	[mm]	355	400		500		630		710
F	[mm]	48	50						
WEIGHT	[kg]	28,56	53,73	56,11	89,93	90,11	199	164,79	190

4.3. TECHNICAL DATA

CDFI CO EKO		800	1500	4000	6000	8000	10000	12000	16000
Fan									
phase/voltage	[50 Hz/VAC]	1N~/230	1N~/230	1N~/230	1N~/230	3~/400	3~/400	3~/400	3~/400
power/current	[kW/A]	0,11/0,8	0,23/1,86	0,84/3,56	1,31/5,69	2,14/3,16	5,79/8,64	3,9/5,77	5,92/8,63
speed	[min ⁻¹]	2830	2350	2450	2390	2300	2630	1920	1840
control input	[VDC]	0-10	0-10	0-10	0-10	0-10	0-10	0-10	0-10
protection class		IP44	IP44	IP44	IP55	IP55	IP55	IP55	IP55
Total power/current consumption	[kW/A]	0,11/0,8	0,23/1,86	0,84/3,56	1,31/ 5,69	2,14/ 3,16	5,79/ 8,64	3,9/5,77	5,92/ 8,63
Insulation of walls	[mm]	25	25	25	25	25	25	25	25
Device protection class		IP54	IP54	IP54	IP54	IP54	IP54	IP54	IP54

Acoustic data: check the product page on <https://select.salda.it>

 **Not suitable for installation in living rooms: additional noise insulation required.**

4.4. OPERATING CONDITIONS

CDFI CO EKO	800	1500	4000	6000	8000	10000	12000	16000
Operating air temperature range (Operating air temperature)	-23 °C ... +40 °C							
Operation environment	Outdoors under roof							

4.5. STANDARD PACKAGE OF COMPONENTS

CDFI CO EKO	800	1500	4000	6000	8000	10000	12000	16000
Legs	4	4	4	4	4	4	4	4

4.6. DESCRIPTION OF COMPONENTS

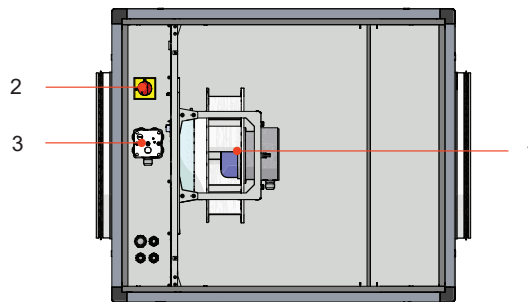


Figure 4.6.1. CDFI construction (left side)

1 - Supply fan; 2 - Handle for safety switch; 3 - Fan speed control potentiometer box.

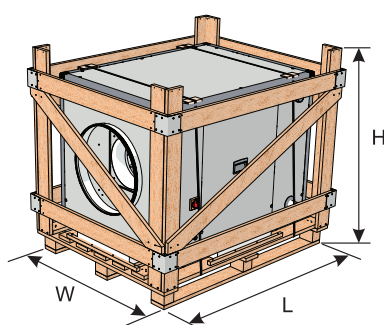
5. INSTALATION

5.1. RECEPTION OF GOODS

Each device is carefully checked before transportation. When receiving the goods, checking the devices for any damage made during transportation is recommended. If any damage to the unit is observed, immediately contact the representatives of a transport company. Please inform the representative of the manufacturer, if any deviation of the device is noticed.

5.2. TRANSPORTATION AND STORAGE

- All units are factory-packaged to withstand normal conditions of transportation.
- When unpacking, check the unit for any damage made during transportation. Installing of damaged units is not allowed!
- The packaging is used for protection purpose only!
- When unloading and storing the units, use suitable lifting equipment to avoid damage and injuries. Do not lift units by holding on power supply cables, connection boxes, air extract or exhaust flanges. Avoid hits and shock overloads. Before installation, the units must be stored in a dry room with the relative air humidity not exceeding 70% (at +20°C) and with an average ambient temperature ranging between +5 °C and +30 °C. The storage place must be protected against dirt and water.
- The units must be transported to the storage place or installation site using forklifts.
- The recommended storage i period should not be longer than one year. In case of storing the units for a period longer than one year, checking if the fan bearings and motor rotate without difficulty (turning the impeller by hand) and if the electric circuit insulation is not damaged or the moisture has not accumulated must be performed before the installation of the unit.



	H	W	L	Max. number of transported packages
CDFI CO EKO	[mm]	[mm]	[mm]	[pcs.]
800	842	747	942	1
1500	1042	962	1167	1
4000	1042	962	1167	1
6000	1217	1137	1407	1
8000	1217	1137	1407	1
10000	1472	1352	1627	1
12000	1472	1352	1627	1
16000	1418	1600	1500	1

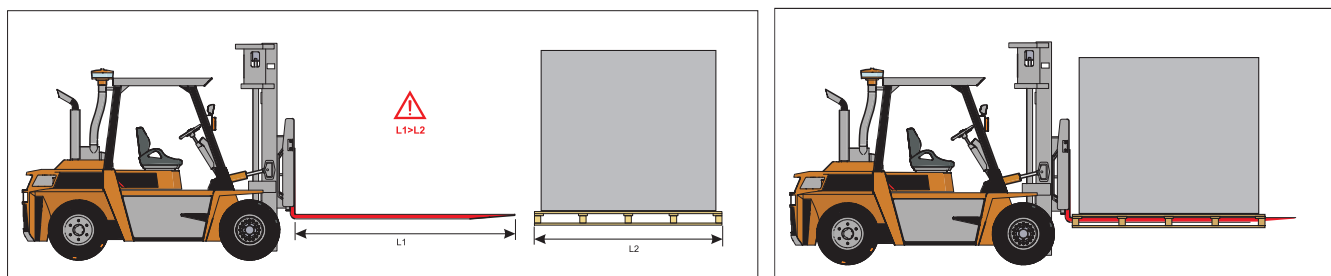


Figure 5.2.1. Lifting by forklift.



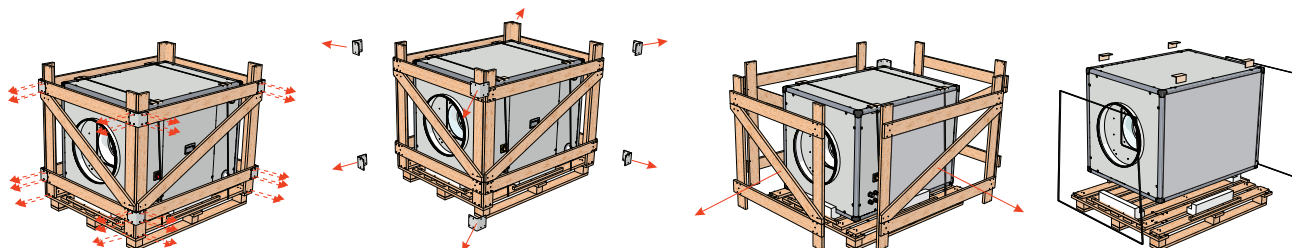
In order to prevent damage to the casing, only a product placed on a pallet should be lifted.

5.3. UNPACKING



Accessories may be packed together with the product. Prior to transporting the unit, the accessories should be unpacked first.

- Remove the film from the unit.
- Remove the wooden side frames.
- After unpacking the unit, examine it to make sure that no damage was made during transportation. Installing of damaged units is not allowed!
- Before commencing the installation of the unit, please check if all ordered equipment have been delivered. Any variation from the ordered equipment list must be reported to the product supplier.



5.4. PIPING AND INSTRUMENTATION DIAGRAM

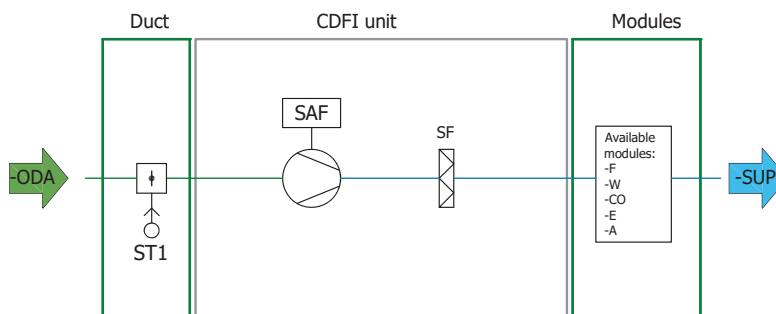


Figure 5.4.1. CDFI Right

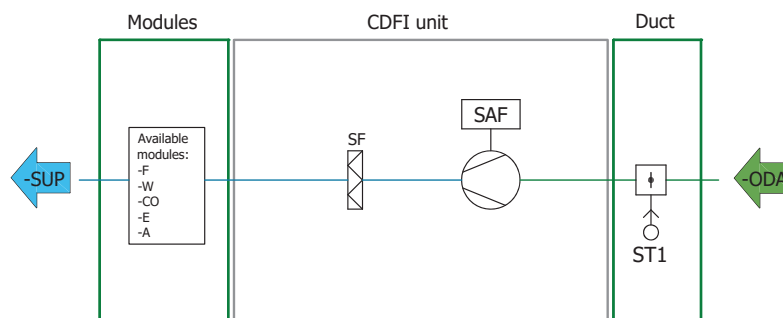


Figure 5.4.2. CDFI Left

LIST OF INTEGRATED COMPONENTS

SAF Air fan supply

LIST OF OPTIONAL ACCESSORIES

ST1 Air damper outdoor

F Filter module

W Water heater module

CO Water cooler module

E Electrical heater module

A Acoustic module

SF Air filter supply

5.5. MOUNTING

- Installation should be carried out by qualified and trained staff only.
- When connecting air ducts, consider the labels on the casing of the unit.
- Before connecting to the air duct system, the connection openings of ventilation unit should be closed.
- When connecting the ducts, the air-flow direction indicated on the device housing should be observed.
- Do not connect the bends close to connection flanges of the unit. The minimum distance of the straight air duct between the unit and the first

- branch of the air duct in the supply air duct must be $1xD$, in air exhaust duct $3xD$, where D is the diameter of the air duct.
- It is recommended to use the brackets (accessories). This will reduce the vibration transmitted by the unit to the air duct system and environment.
- Sufficient space must be provided for opening of the manhole and filter covers.
- Ducts are connected to the unit in such way that they could be easily disassembled and the heater could be removed from the unit when carrying out maintenance, servicing and/or repairs



The protective film is used to protect the unit during transportation. It is recommended to remove the film; otherwise, oxidation signs may occur.

5.5.1. UNIT PLACING AND MOUNTING POSITIONING REQUIREMENTS

The CDFI module can be installed in every position, unless used with one or more ancillary modules. In this case, the CDFI module must be positioned horizontally.



Under no circumstances must the maintenance panel be obstructed:

- To enable the maintenance operations
- To enable free access for setting fan speed
- To enable the fan motor assembly to cool down in case of fire

5.5.2. DRAINAGE SYSTEM INSTALLATION

- It is important to install a condensate evacuation siphon to prevent odours, and offset the pressure difference between the outside (atmospheric pressure) and inside of the unit.
- The height X (in mm) must correspond to at least the negative pressure in the unit (allowing a margin of 50 mm), in mm water column. See formula opposite.
- The height Y (in mm) must correspond to half the negative pressure in the unit. We generally adopt $Y=X/2$ (see formula opposite).
- If the unit is installed in unheated premises or outside, the siphon must have thermal insulation and be heated by means of a cable (not supplied by Salda)
- If a siphon is not installed, the machine warranty is no longer valid.



To prevent freezing risks, the fluid circulating on these coils must be able to withstand the negative temperatures generally encountered in the region where the machine is to be based.

5.6. CONNECTION OF THE AIR DUCT

- The connected air ducts must not be bent and have separate fixing.
- Make sure that the fans can not be accessed through air duct heads. Otherwise, protective grid should be installed. You may choose the grid from the range of products provided in our website.
- Do not reduce the diameter of the piping near air inlet or exhaust ducts. If you want to reduce the airflow speed in the system, drop of pressure and noise level, you can increase the diameter.
- In order to reduce the level of the noise in the air supply system, install dampers (see the chapter on air supply system installation).
- In order to reduce air loss in the system, the air ducts and profile components should be of class C and higher. The catalog on the above-mentioned items can be found in our website.
- External air and exhaust system piping should be isolated in order to prevent heat loss and condensation.
- Maintaining the distance of up to 8 meters between air intake and air exhaust ducts is recommended. Air supplying system should be installed away from potential air pollution sources.
- When installing air ducts next to the ventilation equipment, brackets must be used. They suppress vibration and assure secure installation of the various system parts. The necessary brackets can be found in our catalog or website.
- Air ducts are often mistakenly connected in inappropriate location. The ventilation units bear the labels indicating the correct air duct connection layout. Before starting up the system, carefully check if all related works have been performed properly.



For flange diameters see chapter " DIMENSIONS AND WEIGHT".

Connect the CDFI take-off directly onto the circular duct.

The connected ducts must have the same dimensions as the inlet and supply air take-off. A unit power drop can be observed if ducts of smaller diameter are used, as well as in certain cases a reduction in fan service life.

Connect the inlet and air supply take-offs (circular take-off) via flexible connectors (sleeves), to prevent transmission of vibrations.

All ventilation duct connectors on the unit must be sealed with mastic or sealing tape.

The minimum distance between bends in the air ducts or adapters and the unit take-off is 3 times the take-off diameter.

5.7. CONNECTION OF THE UNIT TO ELECTRIC NETWORK

- Supply voltage to the unit must be connected by a qualified specialist following the manufacturer's instructions and applicable safety guidelines.
- The unit's power network voltage must correspond to electro technical specifications of the unit indicated in the technical decal.
- The unit's voltage, power and other technical specifications are provided in the unit's technical decal (on the unit casing). The unit must be connected to the voltage plug socket of the grounded power network in accordance with the applicable requirements.
- The unit must be earthed according to electrical equipment installation regulation.
- Electrical power cable for the unit must be routed through the unit's control panel cable gland and connected to the unit's safety switch.
- Using extension wires (cables) and power network plug socket distribution devices is not allowed.
- Prior to carrying out any ventilation unit installation and connection works (before the unit is commissioned), the unit must be disconnected from the power network.

- After installation of the unit, the power network plug socket must be accessible at any time and disconnection from the power network must be performed by disconnecting power network plug or circuit breaker.
- Before it is connected to the power network, the unit must be carefully checked for any damage (execution, control, and measurement nodes) made during transportation.
- The power cable can be replaced only by a qualified technician, having evaluated the rated power and current.



The manufacturer does not assume any liability for personal injuries and property damage due to nonconformance with the provided instructions.

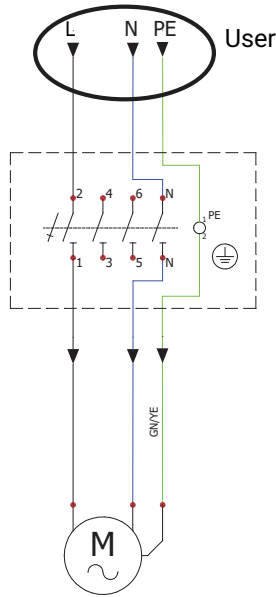


Figure 5.1. Power supply connection of size 800 - 6000 units

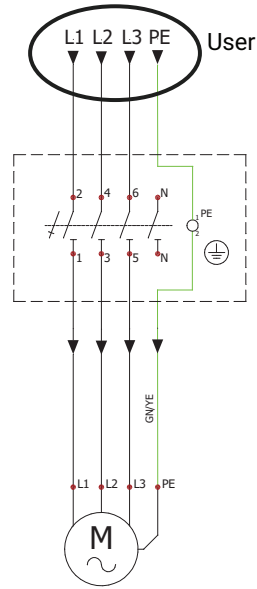


Figure 5.2. Power supply connection of size 8000 - 16000 units

5.8. START-UP RECOMMENDATIONS

5.8.1. SYSTEM PROTECTION

All units must be used with external protection device.

CDFI	800	1500	4000	6000	8000	10000	12000	16000
Mains Fuse	3 A	6 A	6 A	10 A	6 A	12 A	10 A	12 A



To ensure safe maintenance of the unit, it is necessary to turn off main switch and/or external protection device.

5.8.2. PRE-STARTUP RECOMENDATIONS OF THE UNIT (IN THE PRESENCE OF THE ENDUSER)

Prior to start-up, the system must be carefully cleaned. Check for the following:

- operation systems and unit elements as well as electrical components were not damaged during installation,
- all electrical components are installed and connected to the power supply and fit for service,
- cable connection comply with the existing wiring diagrams,
- all electrical equipment protection components are properly connected (if they are additionally used),
- cables and wires correspond to all applicable safety and functional requirements, diameters, etc.,
- earthing and protection systems are properly installed,
- condition of all seals and sealing surfaces is proper.

6. MAINTENANCE

6.1. SAFETY INSTRUCTION



Unplug the unit from the mains before opening the cover (disconnect the power plug from the outlet or in case an automatic circuit breaker installed, disconnect it as well. Make sure that it cannot be turned on by third parties) and wait until the fans completely stop (for about 2 min.).

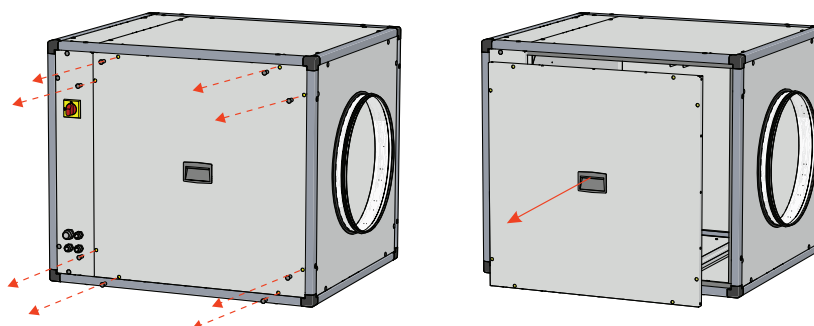
6.2. GENERAL RECOMMENDATIONS FOR VENTILATION SYSTEM MAINTENANCE

In order to ensure proper functioning of the system, maintenance requirements and its periods should be observed. Otherwise, the warranty shall be void. Some recommendations are provided in the table below, but they are just advisory, as the need for system maintenance depends on the location of the unit installation, the pollution of atmosphere, population, working hours, etc.

COMPONENT	DURING START-UP	AT LEAST EVERY 6 MONTHS
Filters	Check the cleanliness of the filters	Replace filters every 3 to 4 months or according to the control device indications. Check cleanliness. Clean, if necessary Make sure that the impellers are not unbalanced.
Fans	Check the connections and the direction of rotation	Make sure that the impellers do not cause noise when rotated by hand. Make sure that the fastening screws are not loose and free of mechanical damage. Check electrical connections and make sure that these are secured properly and are free of signs of corrosion.
Electrical components	Check the connections	Check the connections
Electric heater	Check the connections	Clean off dust, and check the electrical components and connections of the heater
Air intake and discharge system	Check the connections	Clean
Air duct system	Check the tightness	Clean
Dampers, diffusers, grid	Check the tightness of connections	Clean
Switching unit (contactor)		Every 3 to 4 months, visually assess the functioning of the switching unit (contactor), i.e. make sure that its casing has no signs of melting or is not thermally damaged in any way and does not produce any unusual sounds. All the contactors in the product or in its accessories must be checked.

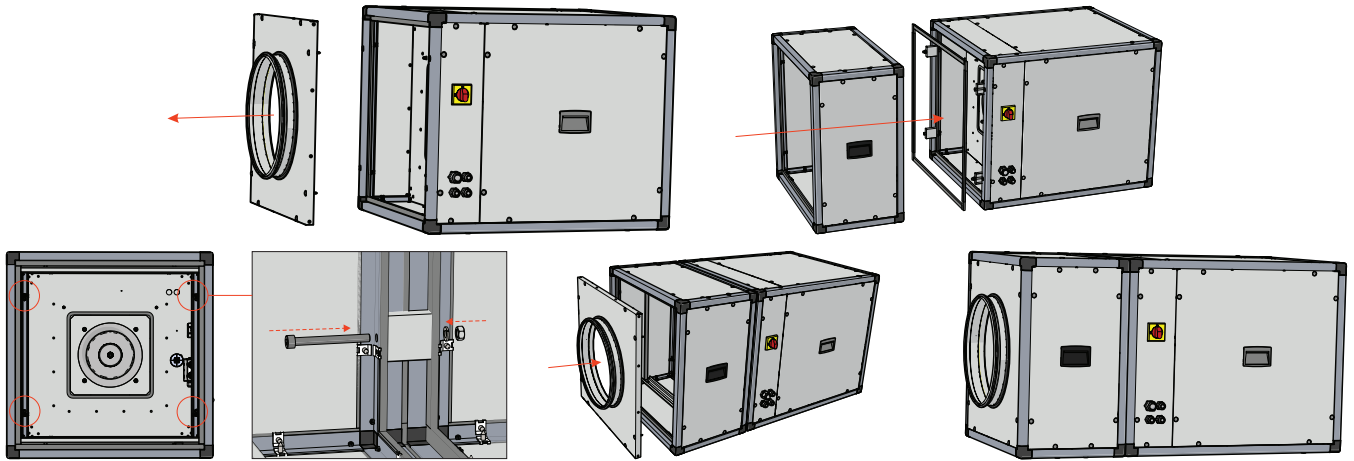
6.3. COVER OPENING

Before opening the covers, first, unplug the unit from the mains, then wait for 2 minutes (until the fans completely stop).



6.4. CONNECTION OF MODULES

- Detach ODA panel by removing the screws.
- Put 4 connectors included in connection kit between profiles of CDFI and aux module. Connectors preferably should be put on opposite walls in 2x2 manner. Connection position can be determined by finding 8,5 mm holes on all suitable profiles.
- Use the screws included in the connection kit to adjust distance between CDFI and aux module.
- Attach previously removed panel to aux module using same screws.

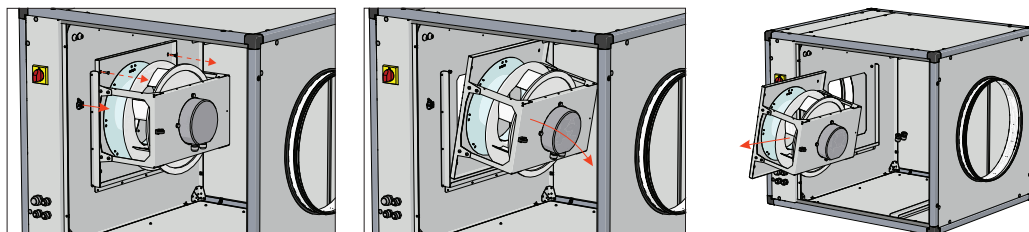


6.5. FANS MAINTENANCE

- Fan maintenance should be performed by experienced and trained staff only.
- The fan should be inspected and cleaned at least once per year.
- Prior to commencing any maintenance or repairs , make sure the fan is disconnected from the power source.
- Proceed to maintenance and repair after any fan rotation is stopped.
- Observe staff safety regulations during maintenance and repairs.
- The fans features a heavy-duty ball bearing design. The motor is completely sealed and free of maintenance.
- Detach the fan from the unit.
- The impeller should be particularly checked for built-up material or debris that may cause an imbalance. Excessive imbalance may lead to accelerated wear on motor bearings and vibration.
- Clean the impeller and inside housing with a mild detergent, water and damp, soft cloth.
- Do not use high-pressure cleaner, abrasives, sharp tools or caustic solvents that may scratch or damage the housing and impeller.
- Do not plunge the motor into any fluid while cleaning the impeller. Make sure the impeller's balance weights are not moved.
- Make sure the impeller is free of any obstacles.
- Install the fan back into the unit. Connect fan power and control signals.
- In case the fan after maintenance does not automatically start up or stop, contact the manufacturer. Malfunction of the fan can be identified by the pressure in the system.



Prior to commencing any maintenance or repairs , make sure the ventilation units is disconnected from the power source.



6.6. ELECTRICAL HEATER MODULE MAINTENANCE

- In case manual protection is activated, check for a fault before pressing the RESET button. If the fault is identified after it has been rectified, press the RESET button using a screwdriver or a similar object.
- Electrical heater does not require additional servicing. The filters must be replaced as described above.
- Heaters are equipped with 2 thermal protection devices: an automatic self-resetting protection device that is activated at +75 °C, and a manually restored protection device that is activated at +120 °C.
- After an activation of the manually restored protection device, make sure the unit is disconnected from the power supply. Wait until all heating elements cool down and the fans completely stop. Having identified and rectified the failure, to start the unit, press the RESET button. The failure can be identified by a qualified technician only.
- If necessary, electric heater can be removed from module.

6.7. CONTROL PANEL MAINTENANCE

- Disconnect product unit from electric power source.
- Open unit's cover.
- Disconnect fan's connector and unscrew control panel connector's fixing screw from section separation wall.
- Unscrew and open control panel and remove it's connector from section separation wall.
- Remove control panel..
- To reassemble, follow all maintenance steps in reverse order.

7. SETTING FAN ROTATION SPEED

The rotation speed must comply with the recommendations made during the installation design phase. When external control is used, the controller set-up consists in setting the setpoint determined during the study, according to the possible control modes.

The fan rotation speed is set as standard by 0-10V analogue signal. This setting is made using a potentiometer supplied, with the CDFI unit, making it possible to set the fan's operating range from 0 to 100%.

The speed control potentiometer is delivered as standard fitted in its box. The wiring diagram is located on the inside of the front cover of the unit. When connecting an external potentiometer or control, the factory-fitted potentiometer must be disconnected.

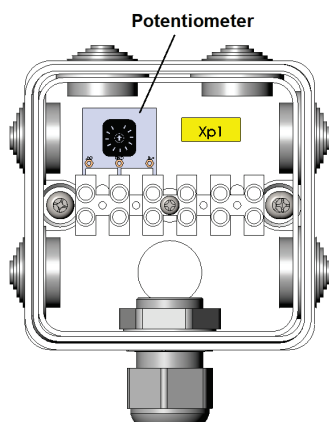


Figure 7.1. Box with fan speed control potentiometer

8. ELECTRICAL HEATER MODULE

8.1. CONNECTION RECOMMENDATIONS

Since the control system is not supplied with the modules, it is necessary to:

- fit in the control circuit for thermal protection, connected in series with heater's manual and automatic reset protection devices.
- monitor for flow shortages (e.g. with a pressure switch). The heating elements must never be powered in the absence of ventilation.
- make sure not to stop ventilation immediately after heater is turned off (e.g. with a time lag relay), to dissipate the residual heat from the heating elements before the ventilation is switched off.
- connect the heating elements to a contactor, and never directly to the mains power supply.

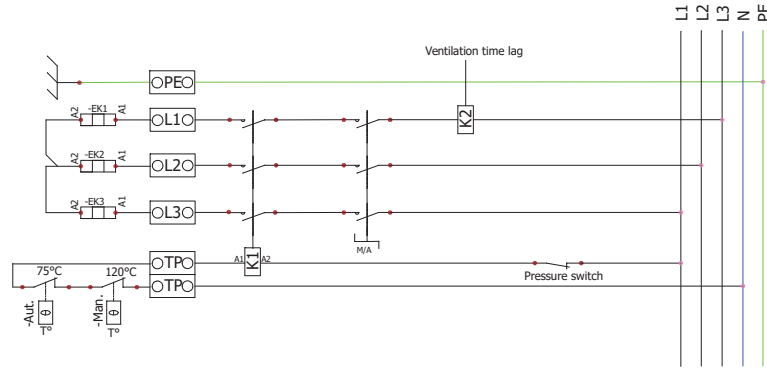


Figure 8.1.1. Electrical heater module connection example

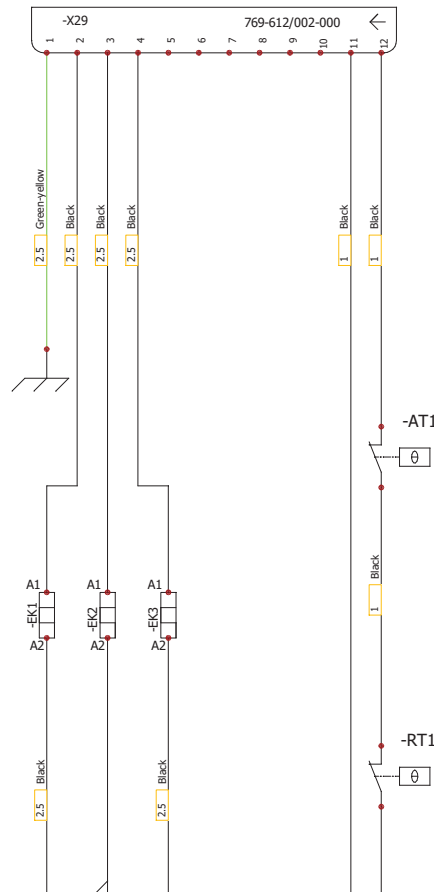
8.2. WIRING DIAGRAMS

Three-phase power supply, 3~ 400V - 50Hz.

Opening thermal protectors with manual reset (RT1) and automatic reset (AT1), connected in series, installed in a control circuit.

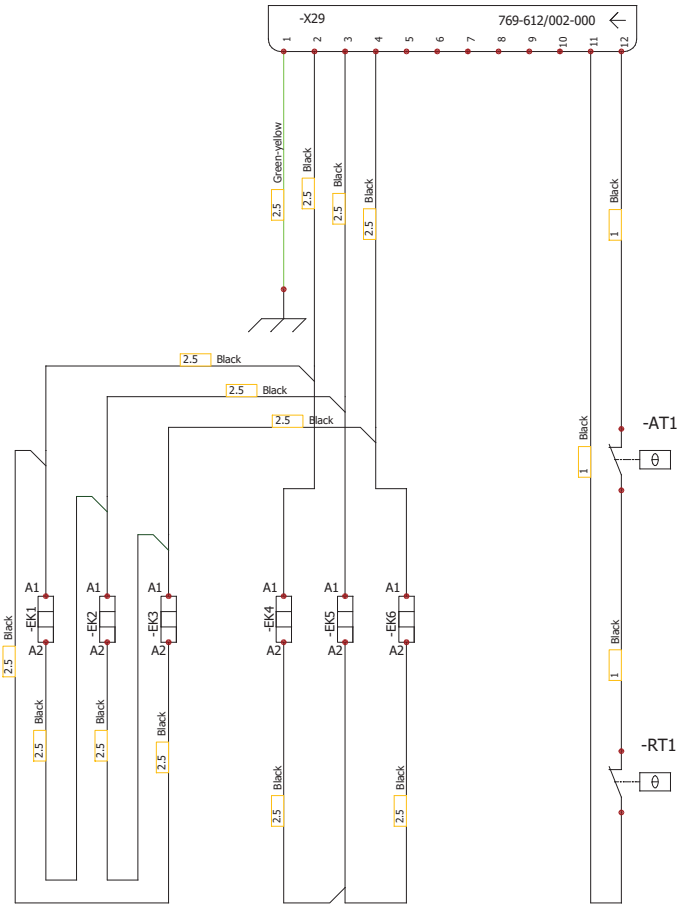


Control system not supplied. Do not connect the heating elements directly to the power supply.



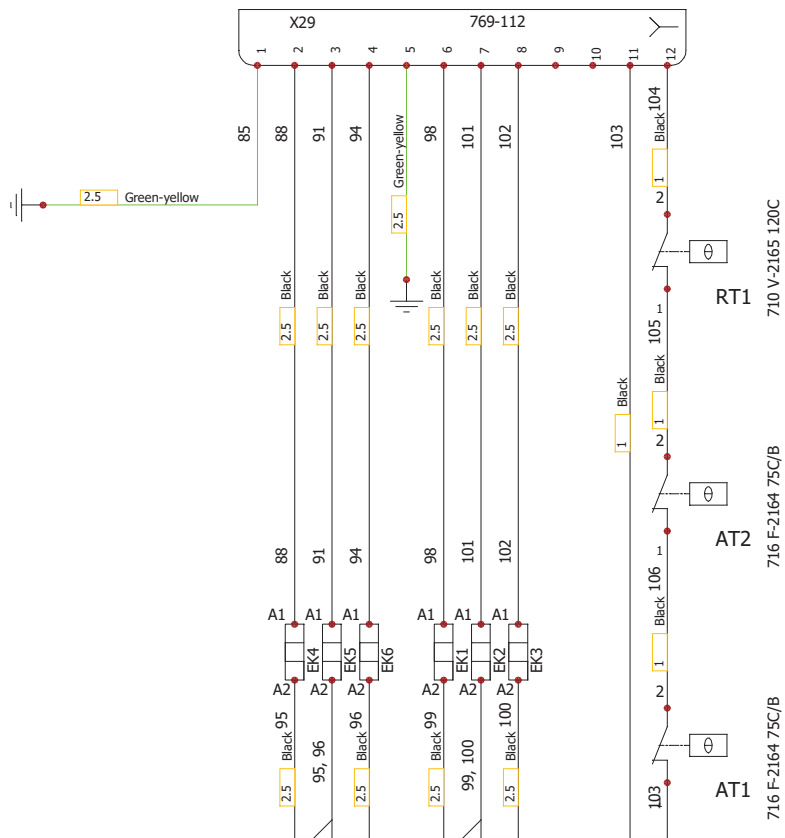
EK1-EK3 - 3x2000W/230V

Figure 8.2.1. CDFI Size 800 heater E1. 6kW



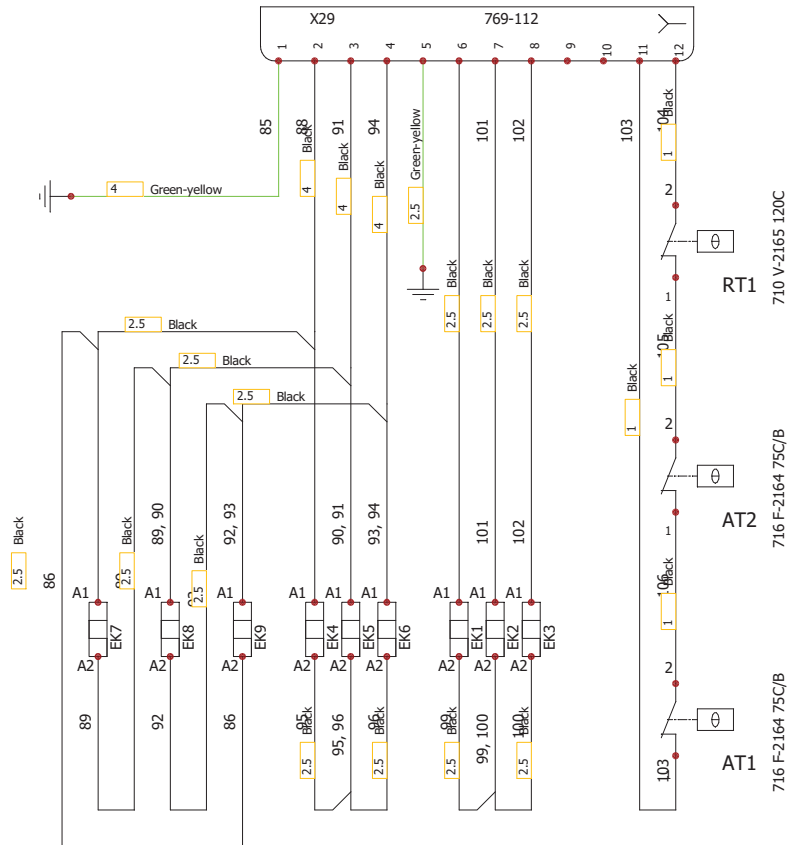
EK1-EK3 - 3x1500W/400V
 EK4-EK6 - 3x2000W/230V

Figure 8.2.2. CDFI Size 800 heater E2. 10,5kW



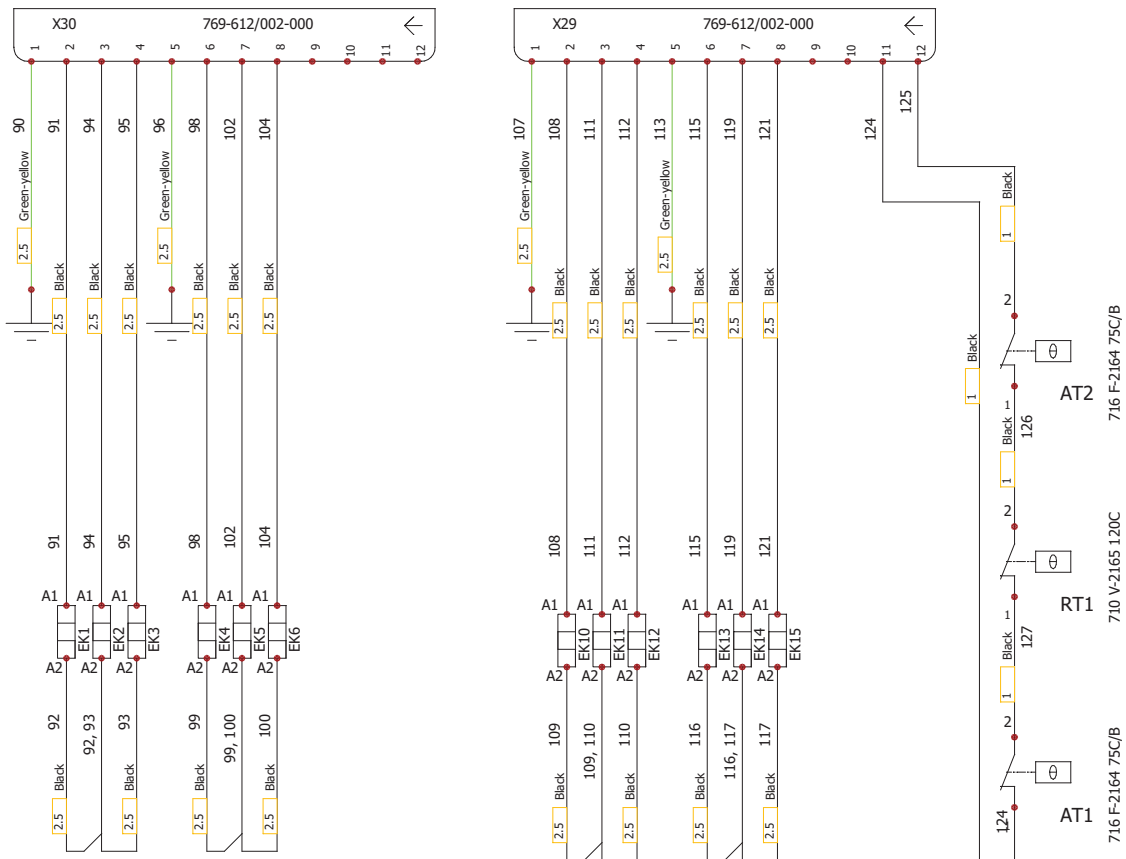
EK1-EK6 - 2000W 230V

Figure 8.2.3. CDFI Size 1500, 4000 heater E1. 12kW



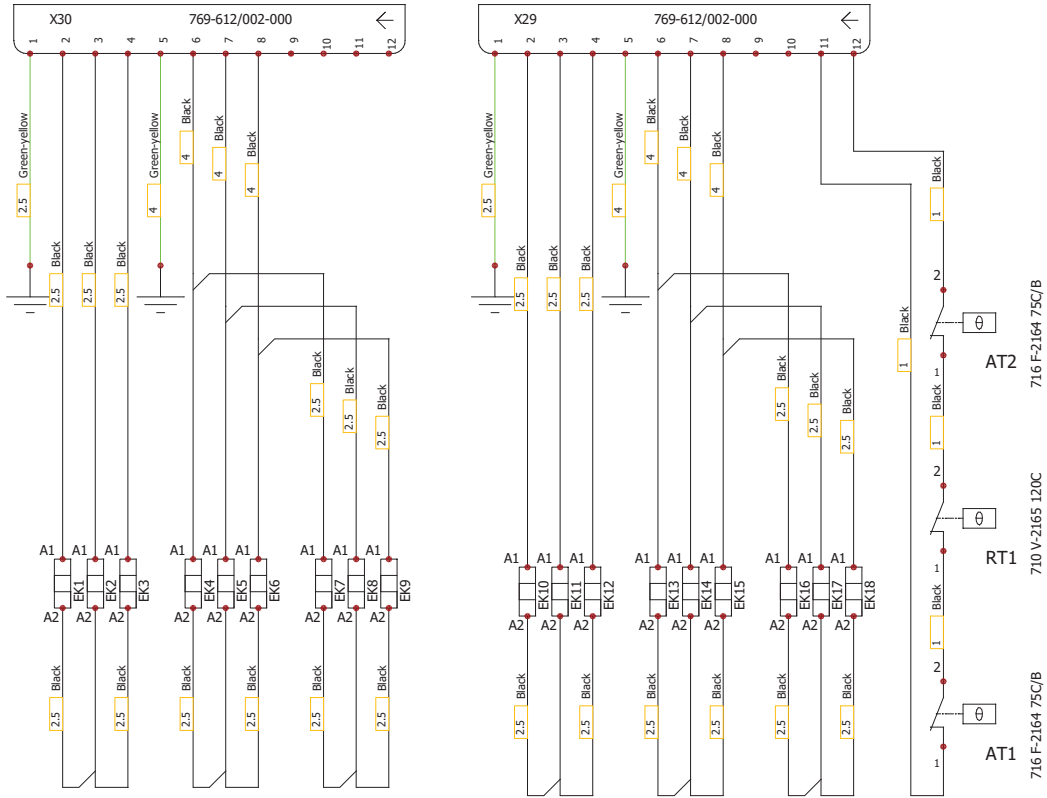
EK1-EK6 - 3000W 230V
 EK7-EK9 - 1500W 400V

Figure 8.2.4. CDFI Size 1500, 4000 heater E2. 22,5kW.



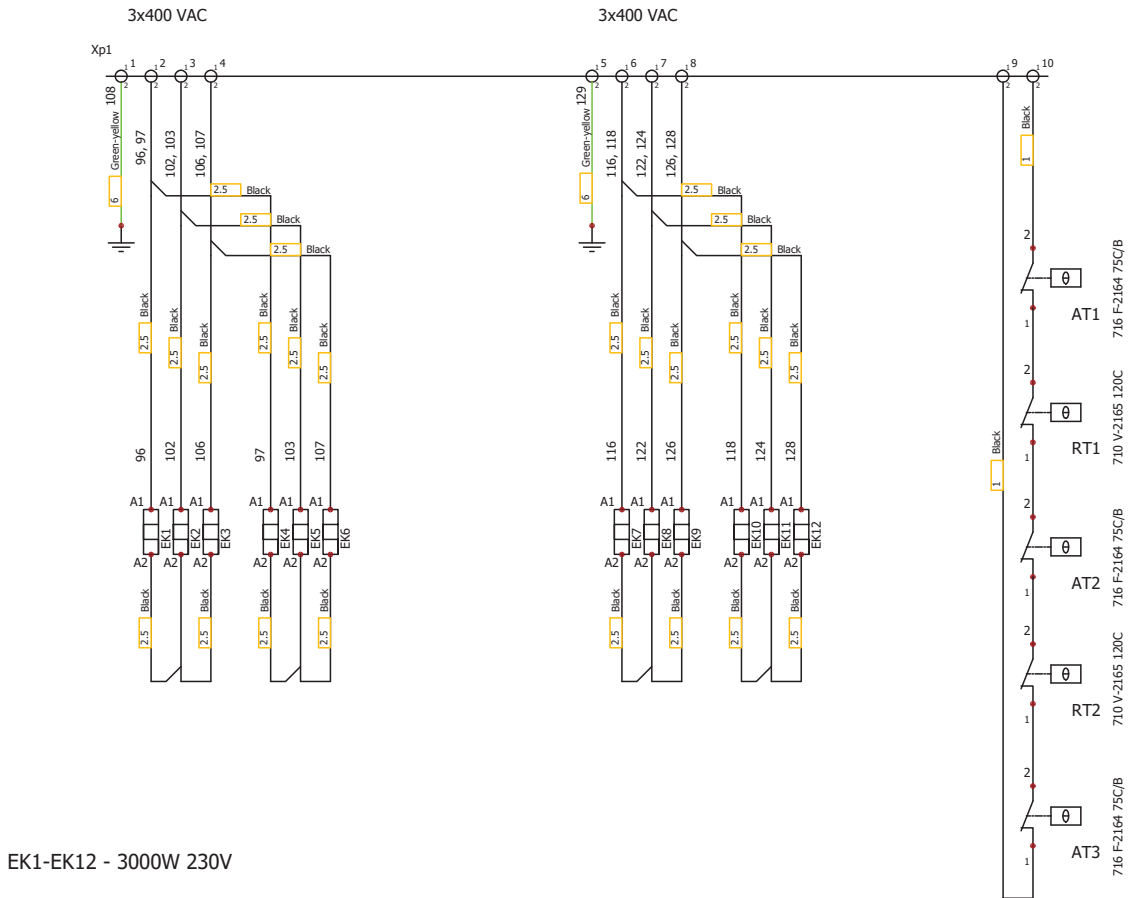
EK1-EK6, EK10-EK15 - 2000W 230V

Figure 8.2.5. CDFI Size 6000, 8000 heater E1. 24kW



EK1-EK6, EK10-EK15 - 3000W 230V
 EK7-EK9, EK16-EK18 - 2000W 230V

Figure 8.2.6. CDFI Size 6000, 8000 heater E2. 48kW



EK1-EK12 - 3000W 230V

Figure 8.2.7. CDFI Size 10000, 12000 heater E1. 36kW

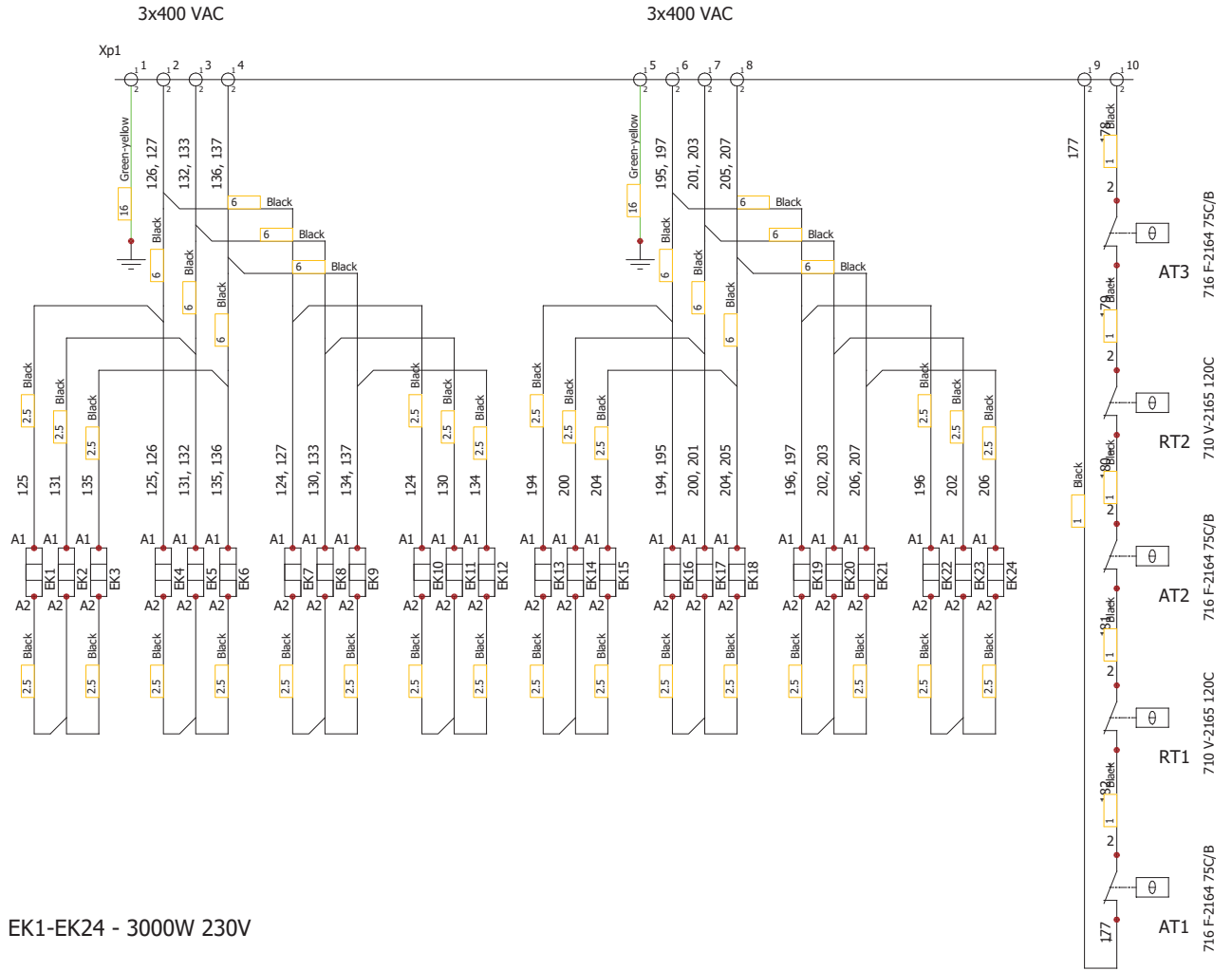


Figure 8.2.8. CDFI Size 10000, 12000 heater E2. 72kW

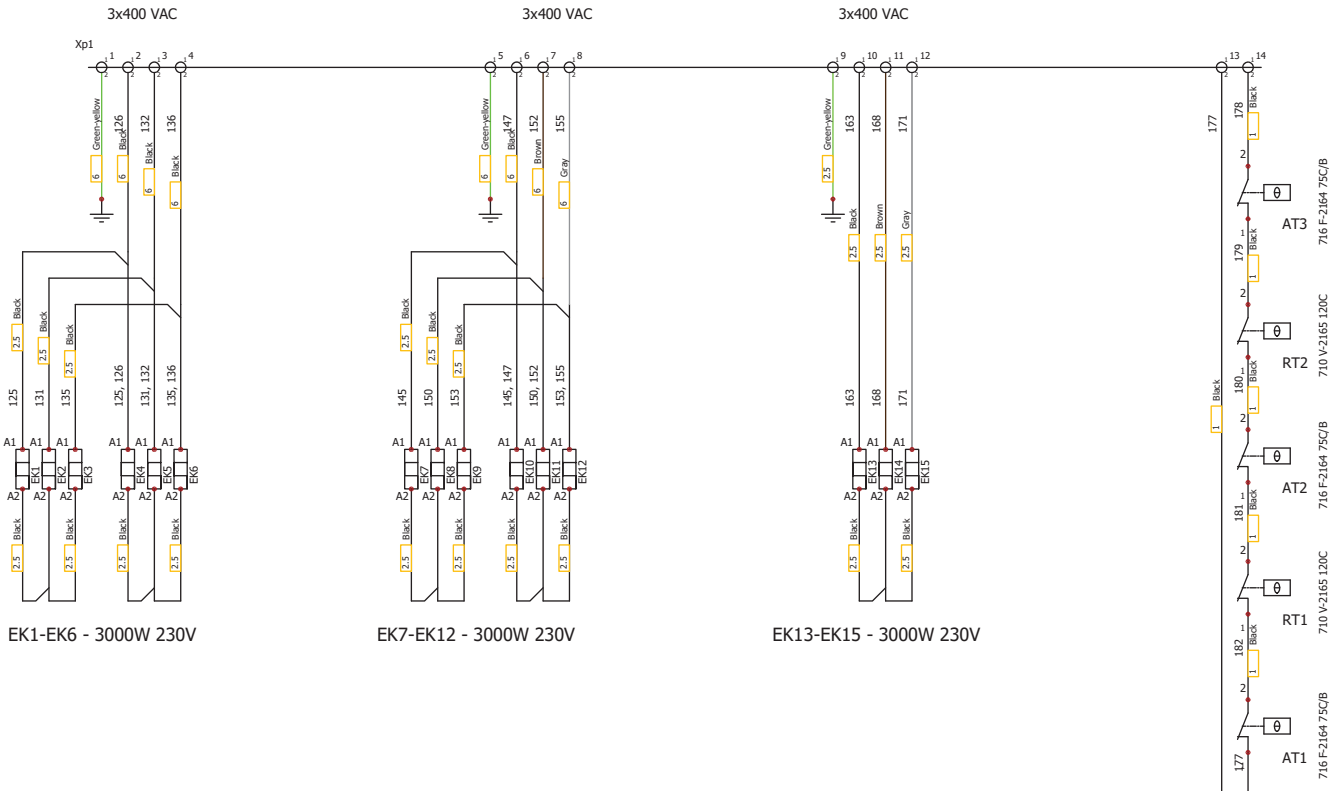


Figure 8.2.9. CDFI Size 16000 heater E1. 45kW

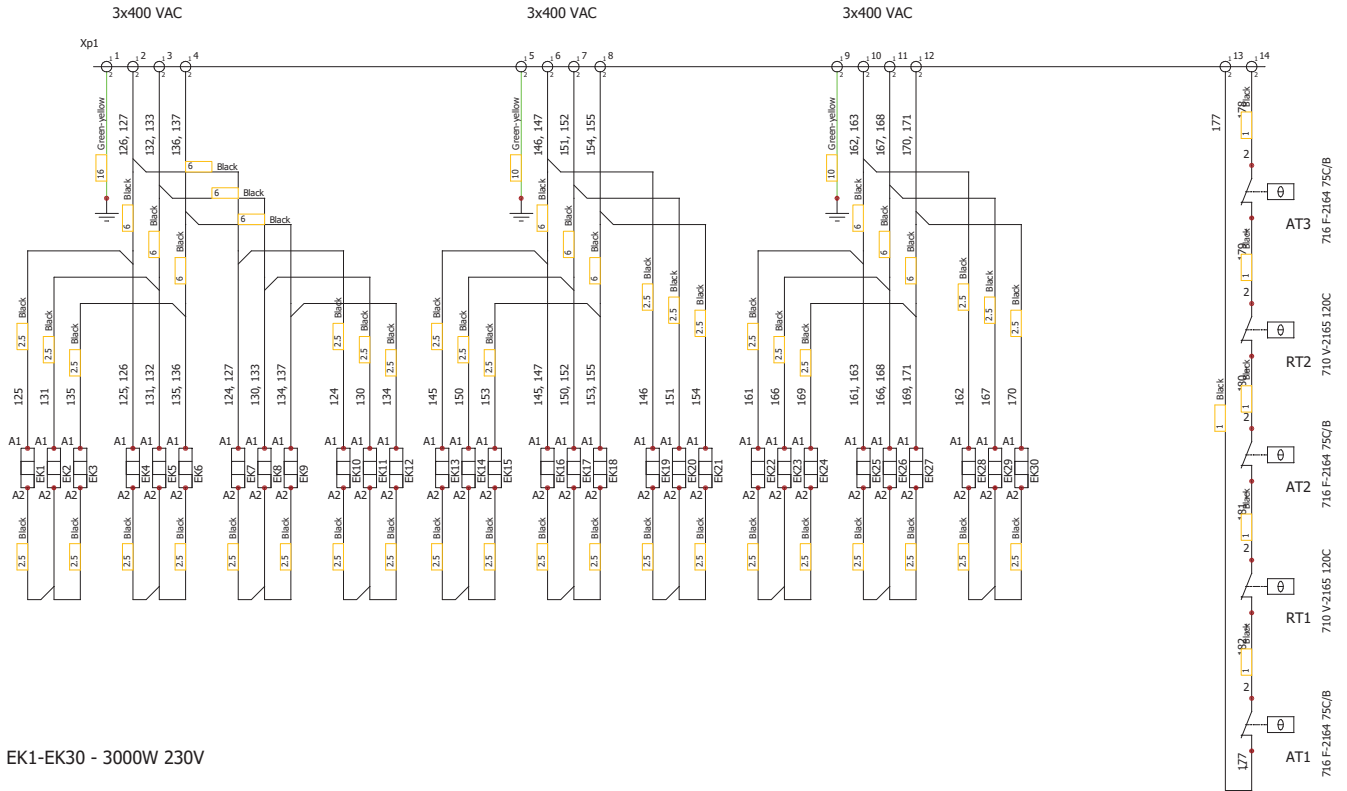


Figure 8.2.10. CDFI Size 16000 heater E2. 90kW

9. ELECTRICAL WIRING DIAGRAMS

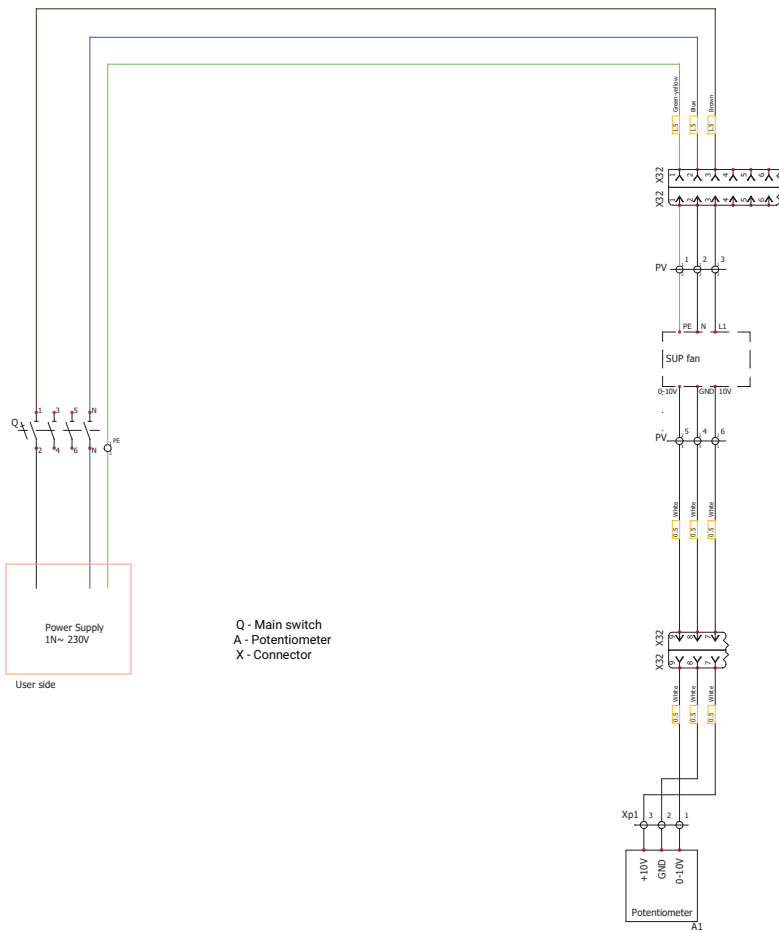


Figure 9.1. CDFI 800-1500

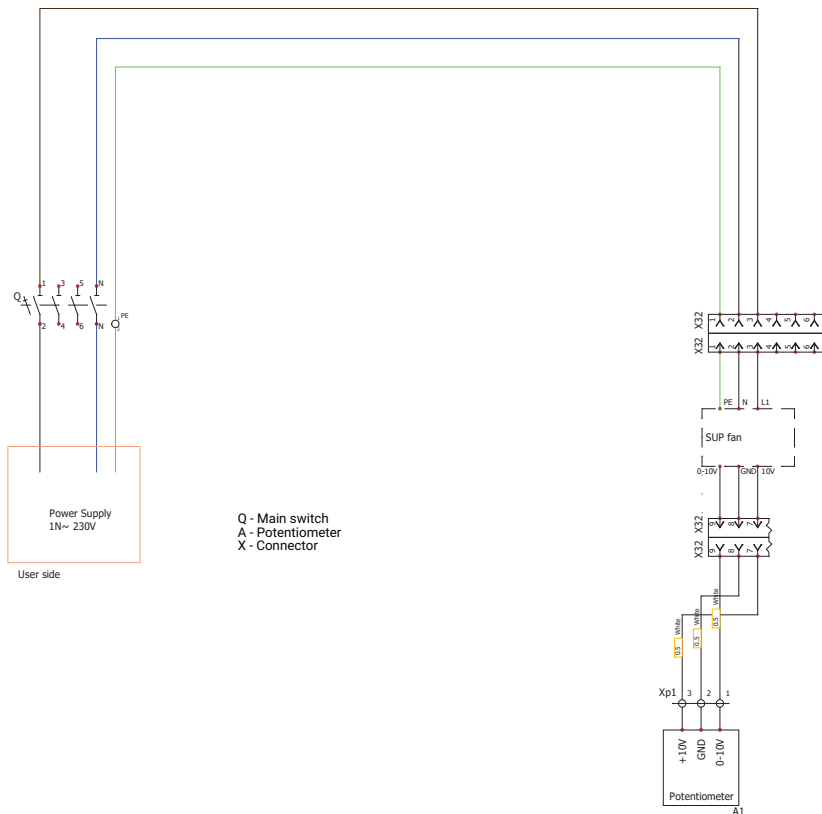


Figure 9.2. CDFI 4000-6000

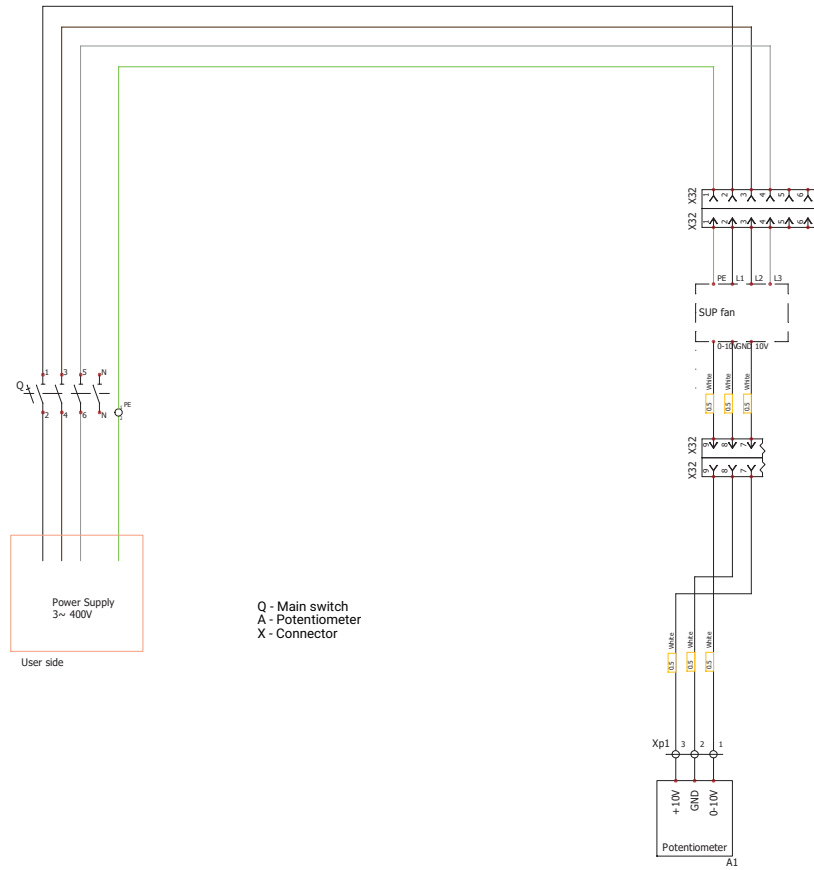


Figure 9.3. CDFI 8000 - 16000

10. POSSIBLE FAULTS AND TROUBLESHOOTING

FAILURE	CAUSE	EXPLANATION / CORRECTIVE ACTIONS
Unit is not operating	No supply voltage	Check whether the device is connected to the power network
	Protection device is off or a current leakage relay is active (if installed by the installer)	Switch on only if the unit condition has been evaluated by a qualified electrician. If the system failed, the failure MUST BE rectified prior to switching it on.
Air supply heater or pre-heater is not operating or malfunctioning (if installed)	Too low air flow in air ducts activates automatic protection	Check if air filters are not clogged Check if fans are rotating
	Manual protection is activated	Possible heater or unit failure. MUST contact the servicing staff for failure detection and its elimination.
Too low air flow at rated fan speed	Clogged supply and/or extract air filter(s)	Filter replacement needed

11.ECODESIGN DATA TABLE

MODEL		CDFI 800 CO EKO	CDFI 1500 CO EKO	CDFI 4000 CO EKO	CDFI 6000 CO EKO
Topology		NRVU / UVU	NRVU / UVU	NRVU / UVU	NRVU / UVU
Type of drive		Variable speed	Variable speed	Variable speed	Variable speed
Nominal NRVU flow rate	[m³/s]	0,15	0,28	0,67	1
Effective electric power input	[W]	115	163	709	1138
Face velocity	[m/s]	0,68	0,59	1,42	1,35
Normal external pressure	[Pa]	300	275	550	600
Static efficiency of fans used in accordance with Regulation (EU) No 327/2011	[%]	39,8	46,9	51,7	52,7
Declared maximum external leakage rates (CAL(R) @ +400 Pa)	[%]	1	3	3	3
Declared maximum external leakage rates (CAL(R) @ -400 Pa)	[%]	1	3	3	3
Casing sound power level	[dB(A)]	57	55,8	58	65,4
ErP Compliance		2018	2018	2018	2018
Internet address for disassembly instructions		www.salda.it			

MODEL		CDFI 8000 CO EKO	CDFI 10000 CO EKO	CDFI 12000 CO EKO	CDFI 16000 CO EKO
Topology		NRVU / UVU	NRVU / UVU	NRVU / UVU	NRVU / UVU
Type of drive		Variable speed	Variable speed	Variable speed	Variable speed
Nominal NRVU flow rate	[m³/s]	1,33	2,11	2,36	3,19
Effective electric power input	[W]	1859	3761	3250	4982
Face velocity	[m/s]	1,8	1,81	2,02	2,24
Normal external pressure	[Pa]	740	970	760	880
Static efficiency of fans used in accordance with Regulation (EU) No 327/2011	[%]	53,1	54,5	55,2	56,4
Declared maximum external leakage rates (CAL(R) @ +400 Pa)	[%]	3	3	3	3
Declared maximum external leakage rates (CAL(R) @ -400 Pa)	[%]	3	3	3	3
Casing sound power level	[dB(A)]	70,6	83,6	78,9	76,7
ErP Compliance		2018	2018	2018	2018
Internet address for disassembly instructions		www.salda.it			

12. DECLARATION OF CONFIRMITY

Manufacturer

SALDA, UAB
Ragainės g. 100
LT-78109 Šiauliai, Lithuania
Tel.: +370 41 540415
<https://select.salda.lt>

Hereby confirms that the following products - Air handling units:

CDFI*

(where by „*“ indicates possible unit installation type and modification)

Provided it was delivered and installed in the facility in accordance with the included installation instructions, comply with all applicable requirements in the following directives:

Machinery Directive 2006/42/EC
EMC Directive 2014/30/EU
Low Voltage Directive 2014/35/EU
Ecodesign Directive 2009/125/EC
RoHS 2 Directive 2011/65/EU

The following regulations are applied in applicable parts:

Ecodesign requirements for ventilation units Nr. 1253/2014
Energy labeling of residential units Nr. 1254/2014

The following harmonized standards are applied in applicable parts:

EN 13141-7:2010 - Ventilation for buildings - Performance testing of components/products for residential ventilation - Part 7: Performance testing of a mechanical supply and exhaust ventilation units (including heat recovery) for mechanical ventilation systems intended for single family dwellings.
EN ISO 12100:2012 - Safety of machinery - General principles for design - Risk assessment and risk reduction.
EN 60204-1:2018 - Safety of machinery - Electrical equipment of machines - Part 1: General requirements.
EN 60335-1:2012 - Household and similar electrical appliances. Safety. Part 1: General requirements.
EN 60529:1999/A2:2014/AC:2019 - Degrees of protection provided by enclosures (IP code).
EN IEC 61000-6-1:2019-03 - Electromagnetic compatibility (EMC) -- Part 6-1: Generic standards - Immunity for residential, commercial and light-industrial environments.
LST EN 61000-6-3:2008 - Electromagnetic compatibility (EMC) -- Part 6-3: Generic standards - Emission standard for residential, commercial and light-industrial environments.

Should any alterations be made in the products, this declaration will no longer apply.

Quality: SALDA UAB activities are in line with the international quality management system standard **ISO 9001:2015**.

Date 2020-10-23



Giedrius Taujenis
Director product development

13. WARRANTY

1. All equipment manufactured in our factory is checked in operating conditions and tested before delivery. Test protocol is supplied together with the unit. The equipment is shipped in good working condition to the end-client. The unit is warranted for the period of two years from the invoice date.
2. If equipment is found to have been damaged during transportation, a claim should be made against carrier, as we assume no responsibility for such damage.
3. This warranty does not apply:
 - 3.1. when transportation, storage, installation and maintenance instructions of the unit are violated;
 - 3.2. when the equipment is improperly maintained, mounted - inadequate maintenance;
 - 3.3. when the equipment without our knowledge and permission has been upgraded or unskilled repairs were made;
 - 3.4. when the unit was used not for its original purpose.
 - 3.5. Company SALDA UAB is not responsible for potential loss of property or personal injury in cases where AHU is manufactured without a control system and the control system will be installed by the client or third parties. The manufacturer's warranty does not cover devices that will be damaged by installing the control system.
4. This warranty does not apply at these malfunction cases:
 - 4.1. mechanical damage;
 - 4.2. damage caused by entering outside objects, materials, liquids;
 - 4.3. damage caused by natural disaster, accident (voltage change in the electricity network, lightning, etc..).
5. The company assumes no liability for its products either directly or indirectly damage, if the damage is caused by failure to comply with installation and mounting regulations, deliberate or careless users or third-party behavior.

These conditions are readily discernable when the equipment is returned to our factory for inspection. If the direct client determines that equipment is found to be faulty, or a breakdown occurred, he should inform the manufacturer within five working days and deliver the equipment to manufacturer. Delivery costs should be covered by customer.



Manufacturer reserves the right to change this technical passport any time without prior notice, if some typographic errors or inaccurate information is found, as well as after improving the apps and/or the devices. Such changes will be included in the new issues of the technical passport. All illustrations are just for information and thus may differ from the original device.

13.1. LIMITED WARRANTY COUPON

Warranty term
24 months*

I received complete package and technical manual of the product ready for usage. I have read warranty terms and conditions and agree with them:

.....
 Customer's signature

*refer to WARRANTY CONDITIONS

Dear User, we appreciate your choice and do hereby guarantee that all ventilation equipment manufactured by our Company is inspected and thoroughly tested. An operational and high-quality product is sold to the direct buyer and shipped from the territory of the factory. It is provided with a 24-month warranty since invoice issue date.

Your opinion is important to us, thus we always look forward to hearing your comments, feedback, or suggestions regarding technical and operational characteristics of the Products.

In order to avoid any misunderstandings, please read the instructions for installation and operation of the product as well as other technical documents of the product carefully. The number of the Limited Warranty Coupon and serial number of the product specified on the silver identification sticker attached to the housing must match.

The Limited Warranty Coupon shall be valid provided that the seller's stamps and records are clear. It is not allowed to change, delete, or rewrite the data specified on it in any manner – such a coupon shall be invalid.

With this Limited Warranty Coupon the manufacturer confirms one's obligations to implement the imperative requirements established by effective laws on protection of consumer rights in the event of identification of any defects of the products.

The manufacturer reserves the right to refuse provision of free warranty servicing in cases when the warranty conditions listed below are disregarded.

PRODUCT MAINTENANCE TABLE

Product name*		
SERIAL number*		
installation	interval	Date
Fan cleaning	Once per year**	_____
Heat-exchanger cleaning	Once per year**	_____

Filter replacement	Every 3-4 months**	_____

* - Look at the product label.
** - At least.

NOTE. The customer shall be required to complete the Product Maintenance Table.



MAN000381

