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1. User manual

This instruction manual contains information and instructions to enable the user to work safely, correctly and economically on the unit. Understanding and adhering to the manual can help one:

- Avoid any dangers.
- Reduce repair costs and stoppages.
- Extend and improve the reliability and working life of the unit.

PLEASE ENSURE TO USE THE RIGHT VERSION OF THE INSTRUCTION MANUAL SUITABLE FOR YOUR UNIT.

Intended use

The unit is to be used exclusively for the dissipation of heat from control cabinets and enclosures (stationary, not moving) in order to protect temperature sensitive components in an industrial environment. To meet the conditions of use, all the information and instructions in the instruction manual must be adhered to.

**General danger**

Indicates compulsory safety regulations which are not covered by a specific pictogram such as one of the following.

**High electric voltage**

Indicates electric shock danger.

**Important safety instruction**

Indicates instructions for safe maintenance and operation of the unit.

**Attention**

Indicates possible burns from hot components.

**Attention**

Indicates possible damage to the unit.

**Instruction**

Indicates possible danger to the environment.

2. Legal regulations

Liability

The information, data and instructions contained in this instruction manual are current at the time of going to press. We reserve the right to make technical changes to the unit in the course of its development. Therefore, no claims can be accepted for previously delivered units based on the information, diagrams or descriptions contained in this manual. No liability can be accepted for damage and production caused by:

- Disregarding the instruction manual
- Operating error
- Inappropriate work on or with the unit
- The use of non-specified spare parts and accessories
- Unauthorised modifications or changes to the unit by the user or his personnel

The supplier is only liable for errors and omissions as outlined in the guarantee conditions contained in the main contractual agreement. Claims for damages on any grounds are excluded.

3. Safety instructions

This product is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge. Children should be supervised to ensure that they do not play with the product.

Upon delivery the unit is already meeting current technical standards and can therefore be safely taken into operation. Only authorised personnel is allowed to work on the unit. Unauthorised personnel must be prohibited from working on the unit. Operating personnel must inform their superiors immediately of any malfunction of the unit.

Please note that before starting to work on or with the unit, a procedure must be carried out inside the cabinet on which the unit is to be mounted.

Before commencing work inside the cabinet, the control cabinet manufacturer's instruction must be read with regards to:

- Safety instructions.
- Instructions on taking the cabinet out of operation.
- Instructions on the prevention of unauthorised cabinet reconnection.

The electric equipment meets the valid safety regulations. One can find dangerous voltages (above 50 V AC or above 100 V DC)

- Behind the control cabinet doors.
- On the power supply in the unit housing.

The unit has to be operated according to the type plate and the wiring diagram. The unit shall be installed in accordance with national wiring regulations and must be protected externally from overloading and electrical faults via suitable protective devices. The installation of a residual current device (RCD) having a rated residual operating current not exceeding 30 mA is advisable. Means for disconnection must be incorporated in the fixed wiring in accordance with the wiring rules.



Danger through incorrect work on the unit

The unit can only be installed and maintained by technical competent and qualified personnel, using only supplied material according to the supplied instructions.



Danger from electrical voltage

Only specialised personnel are allowed to maintain and clean the unit. The personnel must ensure that for the duration of the maintenance and cleaning, the unit is disconnected from the electrical supply.



Attention

Damage to the unit through the use of inappropriate cleaning materials. Please do not use aggressive cleaning material.



Instruction

Damage to the environment through unauthorised disposal. All spare parts and associated material must be disposed according to the environmental laws.

4. Functional principle

The cooling unit for enclosures works on the basis of a refrigeration circuit consisting of four main components: compressor, evaporator, condenser and expansion device.

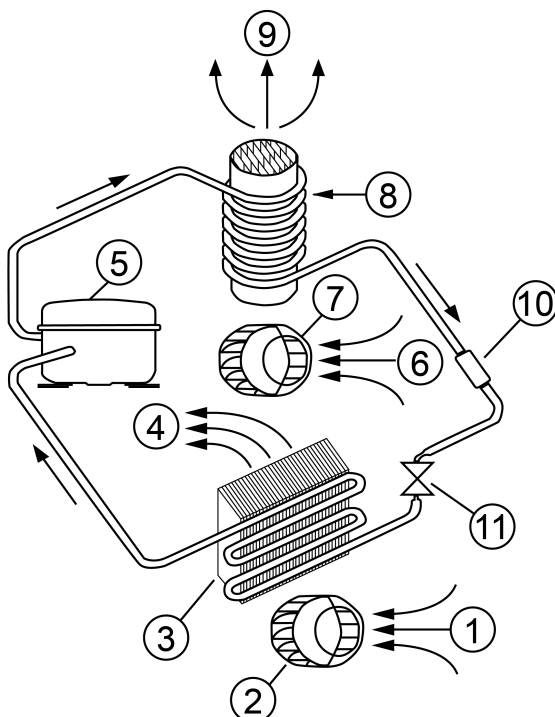
The circuit is hermetically sealed and R290 refrigerant circulates inside it. The compressor compresses the refrigerant (thus taking it to high pressure and high temperature), and pushes it through the condenser, where it is cooled by ambient air thus passing from the gas to the liquid state. At the liquid state it then passes through the capillary pipe being a much lower pressure the refrigerant arrives to the evaporator where it absorbs the necessary heat to change from liquid to gas state. The gas is then drawn back into the compressor completing the cycle.



Risk of fire or explosion. Flammable refrigerant used.

Operate, service and clean only as recommended by the manufacturer.
The cooling unit shall be stored in an area without continuously operating ignition sources. Do not pierce or burn. Be aware that refrigerants may not contain or odour. Follow handling instructions carefully in compliance with national regulations.

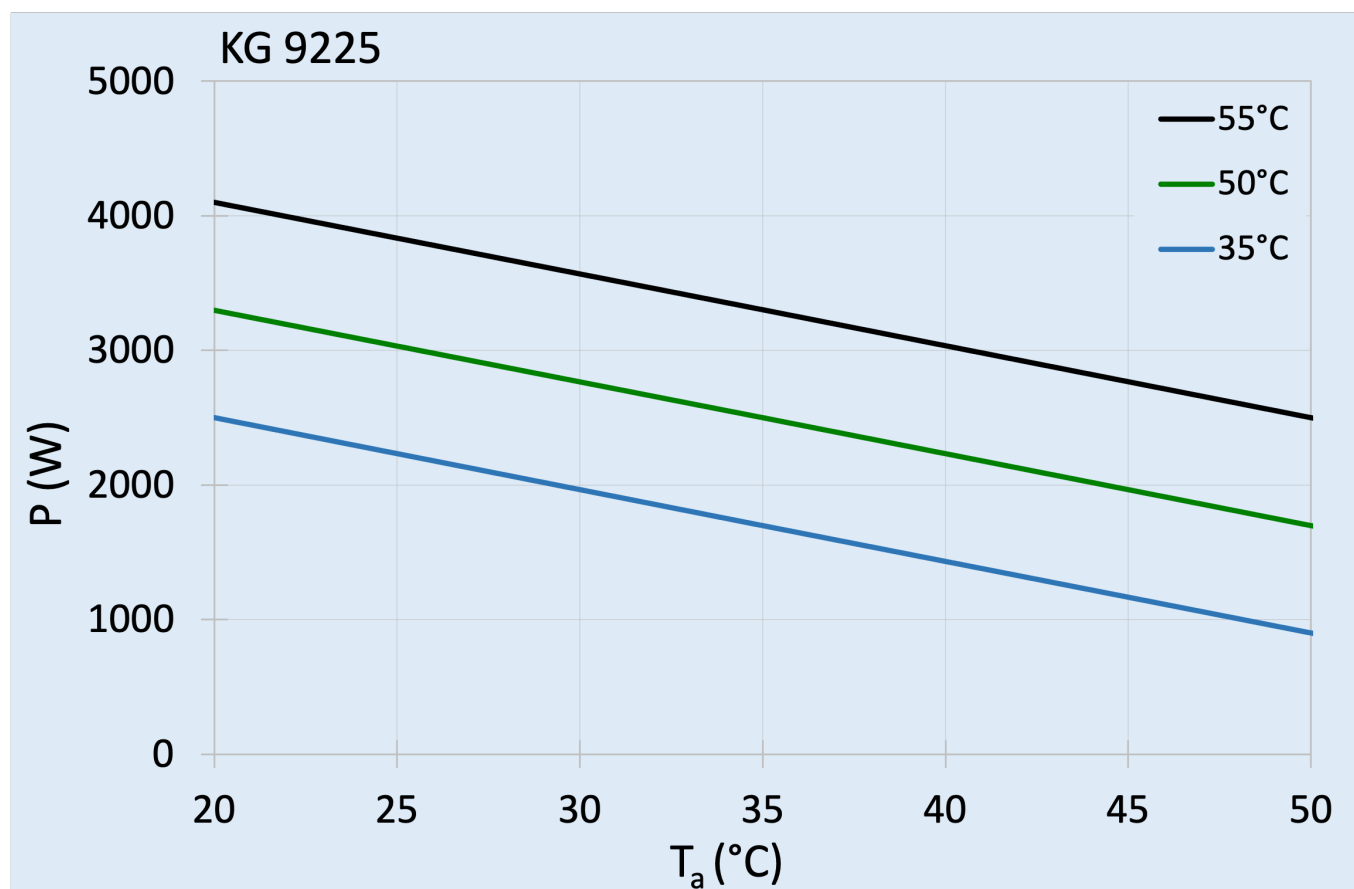
- | | |
|---------------------------|---------------------------|
| 1 Air intake cabinet side | 6 Air intake ambient side |
| 2 Radial fan cabinet side | 7 Radial fan ambient side |
| 3 Evaporator | 8 Condenser |
| 4 Air outlet cabinet side | 9 Air outlet ambient side |
| 5 Compressor | 10 Filter dryer |
| | 11 Expansion device |



5. Technical data

Order Number	922520001
Cooling capacity L35L35 (EN14511-3)	2500 W
Cooling capacity L35L50 (EN14511-3)	1700 W
EER L35L35	2.8
Compressor type	BLDC Rotary Piston
Refrigerant / GWP	R 290 / 0.02
Refrigerant charge	99 / 3.49 oz.
High / low Pressure	3.0 / 0.8 MPa 435 / 116 psig
Air flow volume (system / unimpeded)	Ambient air circuit: 680 / 1000 m ³ /h Enclosure air circuit: 650 / 1000 m ³ /h
Operating Temperature Range	10°C - 60°C
UL temperature range	10°C - 60°C
Mounting	External / Internal / Recess
Dimensions A x B x C (D+E)	1350 x 395 x 290 mm
Weight	42 kg
Cut out dimensions	1316 x 351 mm
Voltage / Frequency	360-480 V ~2 50/60 Hz
Current L35L35	2.5 / 1.9 A
Max. current	3.0 - 4.0 A
Max. power	1260 W
Fuse	15 A (T)
Short-circuit current rating	5 kA
Connection	4 pole connector for power, 5 pole connector for signals, 3 pole connector for RS485
IP protection class to EN 60 529	IP 54 / IP 55

6. Performance graph



7. Mounting

Mounting preparations

Several points must be checked before the unit can be mounted. These checks must be made to ensure safety and the trouble-free operation of the unit. These checks must be carried out with absolute thoroughness to ensure that the unit works perfectly.

Check unit for transport damages

On delivery the carton box containing the unit must be examined for signs of transport damage. Any transport damage to the carton box could indicate that the unit itself has been damaged in transit which in the worst case could mean that the unit will not function.

Location and space requirements

The location of the cabinet must allow for sufficient air circulation to and from the unit. Minimum permissible distances to adjacent structures is 0.5m from the sides of the unit and 1.5m from the front and top of the unit.

Attention

Damage to the unit through incorrect mounting. The unit must be mounted according to the mounting template. It is therefore also important to check, with the help of a spirit-level, that the cabinet is in a horizontal position. The max. deviation from the vertical or horizontal is 3 degrees.

Air apertures

To provide adequate air circulation and avoid temperature layers from forming, ensure that air inlet and air outlet are not partially or completely blocked by obstructions in the cabinet. It must also be ensured in accordance with UL, that the air outlet is not blowing air directly at an equipment operator. Should this be the case a barrier or duct shall be provided to redirect the airflow.

Sealing

To guarantee that the unit works perfectly ensure that the control cabinet is completely sealed to min. IP54 according to EN 60529 a good seal exists between the control cabinet and the unit.

Danger through high voltage

Ensure that for the duration of the mounting operation the cabinet is disconnected from the electrical supply. Therefore take the cabinet out of operation, following the relevant instructions, before mounting work begins and take all precautions to prevent premature reconnection of the cabinet. When all mounting preparations are complete the actual mounting operation can commence.

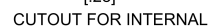
The supplied mounting template helps to mount the cabinet air conditioner quickly. Please proceed as follows:

- Take the cabinet out of operation in the prescribed manner and secure it against unauthorized reactivation
- Fix the mounting template in the required position on the outer surface of the cabinet
- Drill the holes and cut the apertures in the required positions in the surface of the cabinet.
- Stick the self-adhesive unit seals on the outer surface of the cabinet for externally mounting and on the inner surface of the cabinet for half in/half out mounting of the unit. The self-adhesive seals ensure a durable seal between the unit and the cabinet.

Mounting the unit

Only use the supplied material to mount the unit on the cabinet. Proceed as follows to secure the unit on the cabinet:

Set the unit up on the cabinet Screw the M6 hex. head screws together with the washers and locking washers into the M6 threaded rivets in the unit The resistance of the earth connection between cabinet and cooling unit must be $< 0.1 \Omega$.



9. Electrical Connection



High electric voltage present. Installation, maintenance, cleaning and any other work must be carried out by qualified personnel only. The personnel must ensure that for the duration of this work the unit and the cabinet are disconnected from the electrical supply and protected against unauthorised/accidental reconnection.

Unconnected and / or faulty protective conductor system can lead to dangerous voltages and electric shocks which can cause serious accidents.

Work on electrical connections may only be carried out by trained electrical engineers.

Door Switch

The unit can be switched ON and OFF via a door contact switch. When delivered the door contact terminals are bridged on the female connector. To connect the door contact switch remove the bridge and connect door contact switch. The contact must be closed when the enclosure door is closed.

Alarm contacts

The alarm contacts have the following ratings: 30 VDC, 2 A resistive, 6k cycles, 125 VAC, 0.5 A resistive, 6k cycles.

These contacts are not suitable for fluorescent loads (neon lights etc.) that use starters (ballasts) with phase shifting capacitors. Fluorescent lamps with electronic controllers or without phase shifting capacitors can be used, depending on the operating limits specified for each type of relay.

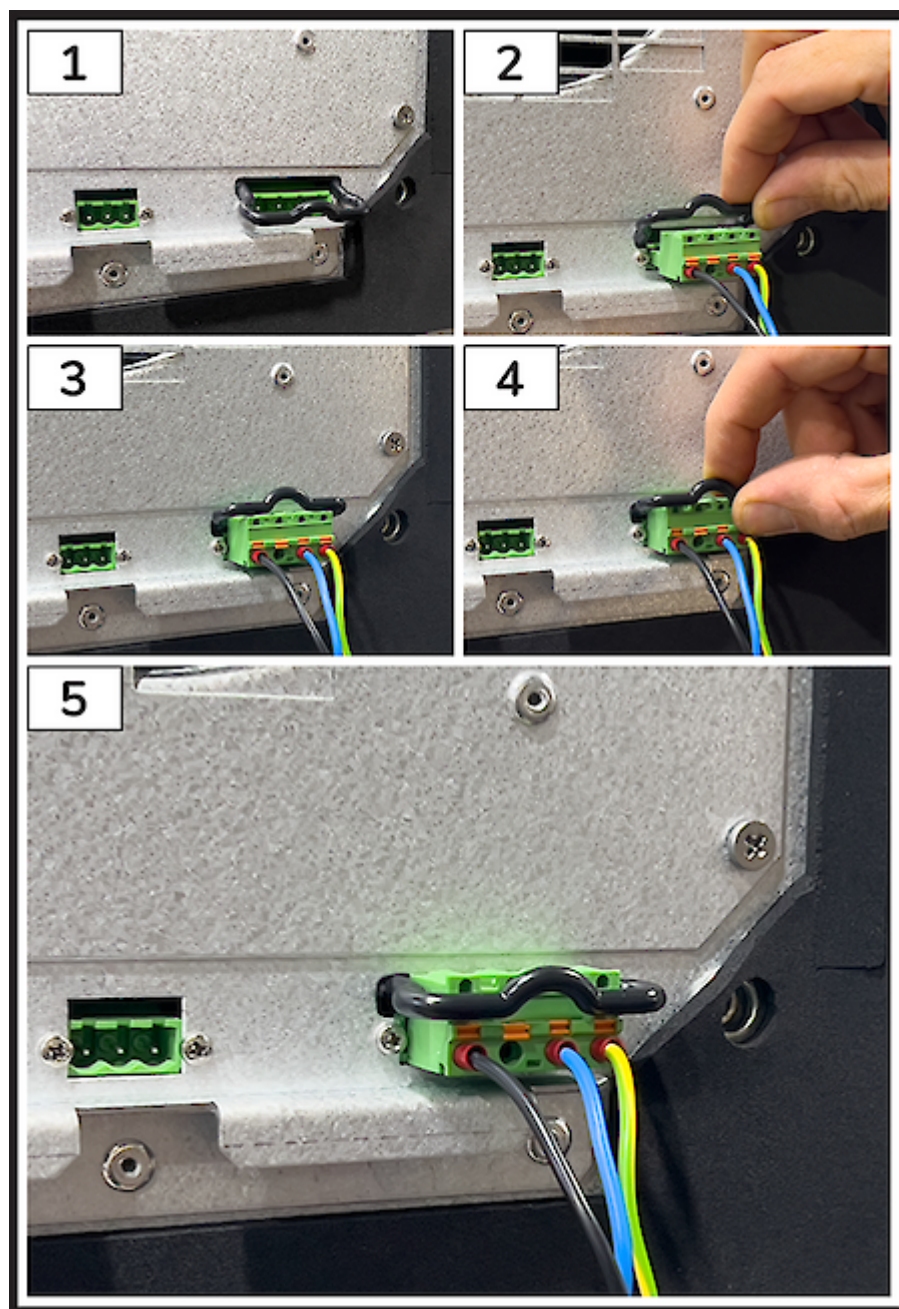
On power-up, connectors P2 and P3 will remain shorted for the first 5 seconds, this is not an alarm condition but part of the boot sequence.

SCCR

Refer to UL508A Supplement SB and Seifert Systems' document [Short Circuit Current Rating \(SCCR\)](#) on methods how to modify the available short circuit current within a circuit in the panel.

Supply Connector Locking Bracket

NOTE: actual connector positions might vary from image



Connect unit:

Connect the cooling device according to the wiring diagram and typeplate supply ratings. The cable cross-section must correspond to the required power for the current consumption, but max. 2.5 mm² / AWG 14.

10. Controller

When started, the display shows the internal temperature of the cooling unit and serves as the home menu for control.



Buttons	LED Functions
□ Menu	Blue LED: Steady On - Cooling mode
○ Set	Blue LED: Blinking - min. compressor off time not elapsed
△ Up	Red LED: Steady On - Heating mode (opt.) Red LED: Blinking - Alarm
▽ Down	Rightmost digit - Master / Slave indicator

i) Operations from Home Screen:

- Pressing △ or ▽ for 1 second will go to Menu 1. This will show the status of DI1, DI2, S1, S2, Onboard Sensor and total Alarms. Pressing △ or ▽ will toggle between sensors/digital inputs and alarms.
- Pressing □ will go to Menu 2.
- Any Alarms will appear on the Home Screen.
- If the Door Contact is Open, the Home Screen will show an OFF status.
- Pressing △ and ▽ simultaneously for 3 seconds will start Test Mode

ii) Operations from inside the Menus:

- Pressing □ from any menu will return to the Home Screen.
- Pressing ○ while in Menus 2/3 shows the parameter value.
- Pressing ○ for 3 seconds while showing a parameter, will save the parameter.
- Pressing □ while showing a parameter, will return to the respective menu.

iii) Menu Access using passwords:

- As standard, the user can only access Menus 1 and 2.
- When using the client password, the user is allowed access to Menu 3.
- This password can be set at any value between 0 and 9998.

All parameters are sorted in 3 separate menus.

Menu 1

Parameter	Description	Range
Sbrd	Onboard sensor Reading	-
S1	S1 Sensor Reading	-
S2	S2 Sensor Reading	-
d1	Digital Input 1 reading	0: Open 1: Closed
d2	Digital Input 2 reading	0: Open 1: Closed

Menu 2

Parameter	Description	Input	Setting range
Ct_S	Control Setpoint	△ or ▽ to Increase/Decrease Temperature	Min: ccS1 Max: ccS2
HA_S	High Alarm Setpoint	△ or ▽ to Increase/Decrease Temperature	Min: HAS1 Max: HAS2
LA_S	Low Alarm Setpoint	△ or ▽ to Increase/Decrease Temperature	Min: LAS1 Max: LAS2
Ht_S	Heater Setpoint	△ or ▽ to Increase/Decrease Temperature	Min: HS1 Max: HS2
C_F	Celsius / Fahrenheit	△ or ▽ to change between °C and °F	C: Celsius F: Fahrenheit
IP_1	Input 1 Invert	△ or ▽ to changes between NC/NO door contact	0: NC 1: NO
StAt	System State	Read Only	OFF: Off dL: Idle CL: Cooling Ht: Heating tSt: Test
OUtP	Relay Outputs	Read Only	H: Heater Relay A: Ambient Blower relay C: Compressor Relay
PASS	Password	△ to increase number and ▽ to change digit An incorrect Password will reset the input to 0 The correct password opens MENU 3	Any number between 0 and 9999

Menu 3

Parameter Description		Input	Setting range
Add	Modbus Address	△ or ▽ to increase or decrease Modbus address	Any number between 1 and 254
SLoc	Setpoints Lock	△ or ▽ to change between Locked/Unlocked	0: Unlocked 1: Locked
CPSS	Change Password	△ to increase number and ▽ to change digit	Any number between 0 and 9998
br	Baud rate	△ or ▽ to change value	0: 9,600 1: 19,200 2: 38,400
Pr	Parity	△ or ▽ to change value	0: None 1: Even 2: Odd
Sb	Stop bits	△ or ▽ to change value	0: 1 stop bit 1: 2 stop bits
CP_S	Compressor speed RPS	Read only	-
Ib_S	Internal blower speed RPM	Read only	-
Ab_S	Ambient blower speed RPM	Read only	-

The preset communication values are: **19200, even, 1 stop bit**

Alarm codes

Alarm code	Description
AL1 - HI	High temperature Alarm
AL2 - LO	Low temperature Alarm
AL3 - AbS	Ambient sensor faulty
AL4 - InS	Internal sensor faulty
NA	Not available
NA	Not available
AL8 - CP_E	Compressor error
AL9 - Ab_E	Ambient blower error
AL10 - Ib_E	Internal blower error

Test mode

- Test mode is started by simultaneously pressing $\triangle$ and ∇ for 3 seconds.
- When Test run is active, tEST will be shown blinking on the display.

Test procedure:

0 - 30 seconds	Internal blower
30 seconds - 5:30 minutes	Internal blower + compressor
5:30 - 6:30 minutes	Ambient blower + heater

Modbus Communication

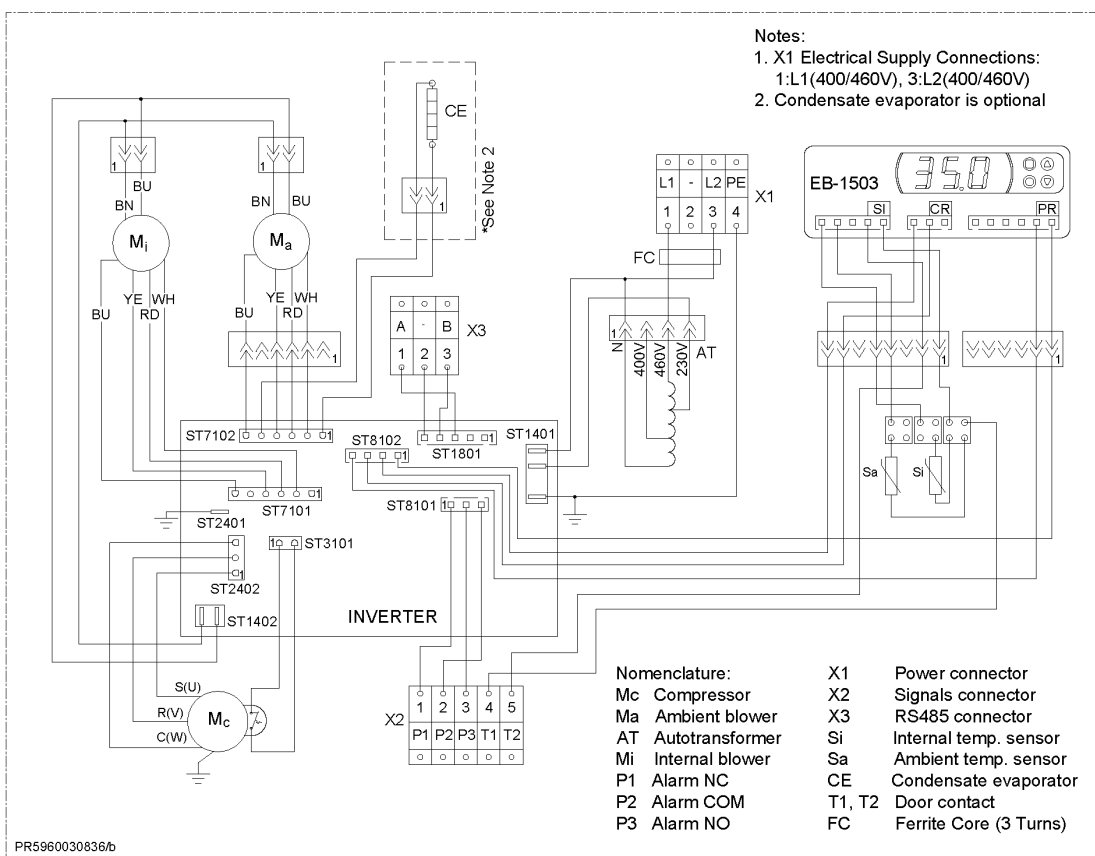
Detailed instructions on Modbus communication can be found in the link below.

https://seifertsystems.com/site/assets/files/6903/rdtg2001-0_2_-_generic_modbus_table.pdf

Further notes:

- From Modbus side, any setting can be with 0.1°C precision. From the display, the precision is 0.5°C.
- When having a setting, example 30.4°C, this will be rounded to 30.5°C when accessed via display.
- When system detects incorrect sensor mapping, it sends unit into idle and triggers an alarm on display.
- No alarm is shown on Modbus.
- When Ambient, Icing and Pressure are not enabled, the value displayed (Modbus/Seifert Software) is -50°C.
- When saving settings via communication, S is shown on display for 1 second.
- When system goes in Cooling Mode, C is shown on display for 1 second.
- When system goes in Heating Mode, H is shown on display for 1 second.
- When accessing the Display Settings of Menu 2/3/4, any settings from Modbus are ignored.
- When running a test with the door contact open, the display only shows TEST, since the unit will not be OFF.
- When running a test with Alarms, the Alarms and TEST are shown together.
- The Blue LED is ON when the unit is cooling
- A red LED is ON when the unit is heating
- The red LED flashes when an alarm is present

11. Wiring Diagram



12. Taking into Operation

All necessary precautions related to the handling and operation of units employing flammable refrigerants shall be observed. Potential ignition sources or hot surfaces with temperatures exceeding 370 °C shall not be located in areas where leaked refrigerant could accumulate. Appropriate measures shall also be implemented to prevent the accumulation of leaked refrigerant in enclosed or confined spaces. In accordance with IEC 60335-2-40 Annex GG and EN 378-1 Annex C, no room size limitations apply for refrigerant charges below 150 g.

The air conditioner does not contain any potential leak points (as defined in IEC 60335-2-40 Annex FF) on the enclosure side. Consequently, in the unlikely event of a refrigerant leak within the tubing system, such a leak would occur on the ambient side of the air conditioner. Therefore, any leaked refrigerant would be released to the ambient environment and would not accumulate within the host enclosure.



Risk of fire or explosion. Flammable refrigerant used.

Operate, service and clean only as recommended by the manufacturer. The cooling unit shall be stored in an area without continuously operating ignition sources. Do not pierce or burn. Be aware that refrigerants may not contain an odour. Follow handling instructions carefully in compliance with national regulations.



Risk of fire or explosion. Flammable refrigerant used.

Refer to instruction manual. All safety precautions must be followed.



**Refrigerant
Safety
Group A3**

Attention!

The unit can be damaged by lack of lubricant. To ensure that the compressor is adequately lubricated the oil, which has been displaced during transport, must be allowed to flow back into it. The unit must therefore be allowed to stand for at least 30 min. before being connected to the mains and taken into operation.

The unit / system must be protected with a MCB Type D or K. Upon connection the internal fan will start working. If the temperature inside the enclosure is higher than the set value of the controller both the compressor and external air fan start working. The cooling cycle will either stop once the air inside the enclosure reaches the set temperature minus hysteresis or once the minimum On-time is reached. The setpoint for the internal enclosure temperature is pre-set at 40°C.

The hysteresis is 2K, the minimum ON-time is 2 minutes, the minimum OFF-time is 4 minutes.

13. Trouble Shooting



Risk of fire or explosion. Flammable refrigerant used.

To be repaired only by trained service personnel. Consult this manual before attempting to service this product. All safety precautions must be followed. Do not puncture refrigerant tubing.

Under no circumstances shall potential sources of ignition be used in the searching for or detection of refrigerant leaks. A halide torch (or any other detector using a naked flame) shall not be used. Ensure that the leak detection equipment being used is suitable for use with R290 i.e. non-sparking, adequately sealed or intrinsically safe.

Failure	Reason	Troubleshooting
<i>Unit doesn't start</i>	No power supply	Check the electrical connection
	Cabinet temperature is lower than set point	Wait until the set point is reached. The unit will then start automatically. If the set point of the cabinet temperature is too high, reduce it accordingly.
	Door contact is open	Close the cabinet door or bridge the door contact.
<i>Unit doesn't cool</i>	Compressor is faulty	Please get in contact with one of our service partners.
	The circuit breaker of the compressor got activated	Check the cooling capacity. In case the cooling capacity is too small, install the unit at a different place or add another cooling unit.
	The evaporator and / or condenser are extremely dirty.	Evaporator and /or condenser need cleaning
<i>Evaporator is iced up</i>	Not enough refrigerant due to leaking cooling circuit	*)
	Ambient temperature is much lower than the stated operating temperature range	Install the unit at a different place. The ambient temperature must be within the stated operating temperature range.
	The control cabinet is not sealed properly.	The control cabinet needs re-sealing.
	Fan or fan capacitor on the cold side are faulty	Replace fan and/or fan capacitor.
<i>Too much condensate</i>	Cabinet door not closed	Ensure that cabinet door is closed properly
	The cabinet is not sealed properly	The control cabinet needs re-sealing.
	Incomplete gasket between cooling unit and cabinet	Please check gasket
<i>Uneven air circulation inside the cabinet</i>	Cabinet air intake and air outlet are blocked	Ensure that both are unblocked and that air can circulate
	Cabinet volume too big for this cooling unit	Check the cooling capacity. In case the cooling capacity is too small, install the unit at a different place or add another cooling unit.
<i>Condenser fan doesn't work</i>	Fan is faulty	Replace fan
<i>Evaporator fan doesn't work</i>	Fan is faulty	Replace fan

*) Power off unit and make sure that there is no ignition sources or hot surfaces (> 370°C) where leaked refrigerant can accumulate. Do not attempt to repair the circuit. Please contact the manufacturer.

14. Maintenance & Cleaning



Risk of fire or explosion. Flammable refrigerant used.

To be repaired only by trained service personnel that have a certificate of competence showing their competence in safe handling of flammable refrigerants. Consult this manual before attempting to service this product. All safety precautions must be followed. Do not puncture refrigerant tubing.

The cooling unit is generally maintenance free and can be operated without filters in most environments. If the ambient air is extremely dusty, we recommend installing filter mats (see accessories). These should be cleaned or replaced at regular intervals. Oily or greasy filter mats should be replaced immediately. Do not use a steam jet or high pressure to clean the filter mats. Do not wring out the filter mats. If the ambient air is extremely oily, we recommend the use of metal filters (see accessories). They can be cleaned with standard cleaning agents and reused. In addition, the unit should have regular functional tests (approx. every 2,000 hours depending on the grade of ambient pollution).

Note: The use of filter mats / metal filters reduces the cooling capacity of the unit.

Repair

Do not attempt any repair work on the refrigerating circuit. Contact manufacturer.

Work in confined spaces shall be avoided. The area shall be checked with an appropriate leak detector prior to and during work, to ensure that the technician is aware of a potentially flammable atmosphere. No person carrying out work on the unit shall use any sources of ignition in such a manner that may lead to the risk of fire or explosion. All possible ignition sources, including smoking, should be kept sufficiently far away from the site of installation, repairing, removing and disposal during which refrigerant can possibly be released to the surrounding space. To avoid damaging the pipes or heat exchanger, do not use sharp objects when working on the unit. The unit must not be drilled or burnt.

Only use original replacement parts when repairing the unit.

This ensures that the unit functions perfectly and remains safe. Replace components only with parts specified by the manufacturer. Other parts may result in the ignition of the refrigerant in the atmosphere from a leak. Repair and maintenance to electrical components shall include initial safety checks and component inspection. If a fault exist that could compromise safety, then no electrical supply shall be connected to the circuit until it is satisfactory dealt with. For further information and spare part ordering please contact us by email under on the address stated on the last page.

Disposal



Risk of fire or explosion. Flammable refrigerant used.

Dispose of properly in accordance with local regul

The cooling unit contains R290 refrigerant and small quantities of lubricating oil. Replacement, repairs and final disposal must be done according to the regulations of each country for these substances. De-commissioned units should have a label indicating if the cooling has been emptied or if it still contains flammable refrigerant. Label shall be dated and signed.

15. Maintenance



Risk of fire or explosion. Flammable refrigerant used.

To be repaired only by trained service personnel. Consult this manual before attempting to service this product. All safety precautions must be followed. Do not puncture refrigerant tubing.

Under no circumstances shall potential sources of ignition be used in the searching for or detection of refrigerant leaks. A halide torch (or any other detector using a naked flame) shall not be used. Ensure that the leak detection equipment being used is suitable for use with R290 i.e. non-sparking, adequately sealed or intrinsically safe.

Failure	Reason	Troubleshooting
<i>Unit doesn't start</i>	No power supply	Check the electrical connection
	Cabinet temperature is lower than set point	Wait until the set point is reached. The unit will then start automatically. If the set point of the cabinet temperature is too high, reduce it accordingly.
	Door contact is open	Close the cabinet door or bridge the door contact.
	Compressor is faulty	Please get in contact with one of our service partners.
<i>Unit doesn't cool</i>	The circuit breaker of the compressor got activated	Check the cooling capacity. In case the cooling capacity is too small, install the unit at a different place or add another cooling unit.
	The evaporator and / or condenser are extremely dirty.	Evaporator and /or condenser need cleaning
<i>Evaporator is iced up</i>	Not enough refrigerant due to leaking cooling circuit	*)
	Ambient temperature is much lower than the stated operating temperature range	Install the unit at a different place. The ambient temperature must be within the stated operating temperature range.
	The control cabinet is not sealed properly.	The control cabinet needs re-sealing.
	Fan or fan capacitor on the cold side are faulty	Replace fan and/or fan capacitor.
<i>Too much condensate</i>	Cabinet door not closed	Ensure that cabinet door is closed properly
	The cabinet is not sealed properly	The control cabinet needs re-sealing.
	Incomplete gasket between cooling unit and cabinet	Please check gasket
<i>Uneven air circulation inside the cabinet</i>	Cabinet air intake and air outlet are blocked	Ensure that both are unblocked and that air can circulate
	Cabinet volume too big for this cooling unit	Check the cooling capacity. In case the cooling capacity is too small, install the unit at a different place or add another cooling unit.
<i>Condenser fan doesn't work</i>	Fan is faulty	Replace fan
<i>Evaporator fan doesn't work</i>	Fan is faulty	Replace fan

*) Power off unit and make sure that there is no ignition sources or hot surfaces (> 370°C) where leaked refrigerant can accumulate. Do not attempt to repair the circuit. Please contact the manufacturer.

16. Transport & Storage

Malfunction due to transport damage

On delivery the carton box containing the unit must be examined for signs of transport damage. Any transport damage to the carton box could indicate that the unit itself has been damaged in transit which in the worst case could mean that the unit will not function.

The unit can only be stored in locations which meet the following conditions:

- temperature range: - 40°C to 70°C
- relative humidity (at 25°C): max. 95 %
- the cooling unit should always be stored according to the installation position

Returning the unit

To avoid transport damage the unit should be returned in the original packing or in a packing case and must be strapped to a pallet. If the unit cannot be returned in the original packing please ensure that:

- A space of at least 30 mm. must be maintained at all points between the unit and the external packing.
- The unit must be firmly fixed in the packing.

The unit must be protected by shock resistant padding (hard foam corner pieces, strips or cardboard corner pieces).



Warning

The cooling unit shall be stored in an area without continuously operating ignition sources. Follow handling instructions carefully in compliance with national regulations.

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