Legal Information

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Electrical equipment should be installed, operated, serviced, and maintained only by qualified personnel. No responsibility is assumed by Schneider Electric for any consequences arising out of the use of this material.

As standards, specifications, and designs change from time to time, please ask for confirmation of the information given in this publication.
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Safety

Important Safety Instructions — SAVE THESE INSTRUCTIONS

Read these instructions carefully and look at the equipment to become familiar with it before trying to install, operate, service or maintain it. The following safety messages may appear throughout this manual or on the equipment to warn of potential hazards or to call attention to information that clarifies or simplifies a procedure.

The addition of this symbol to a “Danger” or “Warning” safety message indicates that an electrical hazard exists which will result in personal injury if the instructions are not followed.

This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages with this symbol to avoid possible injury or death.

⚠️ DANGER

DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.

Failure to follow these instructions will result in death or serious injury.

⚠️ WARNING

WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

Failure to follow these instructions can result in death, serious injury, or equipment damage.

⚠️ CAUTION

CAUTION indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

Failure to follow these instructions can result in injury or equipment damage.

⚠️ NOTICE

NOTICE is used to address practices not related to physical injury. The safety alert symbol shall not be used with this type of safety message.

Failure to follow these instructions can result in equipment damage.

Please Note

Electrical equipment should only be installed, operated, serviced, and maintained by qualified personnel. No responsibility is assumed by Schneider Electric for any consequences arising out of the use of this material.

A qualified person is one who has skills and knowledge related to the construction, installation, and operation of electrical equipment and has received safety training to recognize and avoid the hazards involved.
Safety During Installation

⚠️ DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

- Apply appropriate personal protective equipment (PPE) and follow safe electrical work practices.
- This equipment must be installed and serviced by qualified personnel only.
- Turn off all power supplying this equipment before working on or inside the equipment.
- Replace all devices, doors, and covers before turning on power to this equipment.

Failure to follow these instructions will result in death or serious injury.

⚠️ WARNING

HAZARD FROM MOVING PARTS

Keep hands, clothing, and jewelry away from moving parts. Check the equipment for foreign objects before closing the doors and starting the equipment.

Failure to follow these instructions can result in death, serious injury, or equipment damage.

⚠️ WARNING

DAMAGE TO EQUIPMENT OR PERSONNEL

- The equipment is heavy. For safety purposes, adequate personnel must be present when moving this item.
- The load must always be solidly anchored to the bearing element of the lifting equipment and means of transport.
- No one should be near the suspended load, nor in the working area of the crane, forklift, truck, or any other lifting equipment or means of transport.

Failure to follow these instructions can result in death, serious injury, or equipment damage.

⚠️ CAUTION

HAZARD FROM UNPROTECTED OUTPUT

Apply circuit protection to all outputs.

Failure to follow these instructions can result in injury or equipment damage.

NOTICE

STATIC ELECTRICITY HAZARD

Circuit boards contained within this unit are sensitive to static electricity. Use one or more electrostatic-discharge devices while handling the board.

Failure to follow these instructions can result in equipment damage.
<table>
<thead>
<tr>
<th>NOTICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>DAMAGE FROM EXPOSURE</td>
</tr>
<tr>
<td>Leaving the equipment uncovered and exposed to possible damage from the environment will void the factory warranty.</td>
</tr>
<tr>
<td>Failure to follow these instructions can result in equipment damage.</td>
</tr>
</tbody>
</table>
# Symbols on Unit or Packaging

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>!</td>
<td>Danger</td>
</tr>
<tr>
<td>🟢</td>
<td>Important notice</td>
</tr>
<tr>
<td>⚡</td>
<td>High voltage: Risk of electric shock</td>
</tr>
<tr>
<td>🍷</td>
<td>Fragile: Handle unit with care</td>
</tr>
<tr>
<td>🌧</td>
<td>Keep dry: The packed unit must be stored in a dry place</td>
</tr>
<tr>
<td>🪜</td>
<td>Center of gravity: Shows the center of gravity of the packed unit</td>
</tr>
<tr>
<td>⛅</td>
<td>Keep away from the heat: The unit must be stored away from heat sources</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>🔥</td>
<td>Moving parts</td>
</tr>
<tr>
<td>👄</td>
<td>Sharp surface</td>
</tr>
<tr>
<td>🔧</td>
<td>This side up: Shows the correct orientation of the packed unit</td>
</tr>
<tr>
<td>📈</td>
<td>Temperature limits: The packed unit must be stored in a place within the indicated limits</td>
</tr>
<tr>
<td>🚫</td>
<td>Do not use hooks: Do not lift packed unit with hooks</td>
</tr>
<tr>
<td>🚫</td>
<td>Do not stack: The packed units must not be stacked</td>
</tr>
</tbody>
</table>
General Information

Overview

The Uniflair™ WMF cooling units are precision cooling units used to control environments for telecom rooms, Internet hubs, and data processing centers.

This manual describes air-conditioning units with 460-V/3-Ph/60Hz TN-c power supplies. It supplies general information, safety instructions, unit transportation, installation information, and necessary information on how to install the units.

Manual Updates

Schneider Electric™ policy is one of continuous technological innovation and the company reserves the right to amend any data herein without prior notice. The images shown in this manual are for descriptive purposes only and they may differ from specific models that are selected.

NOTE: Unit images and component identification information are examples only. The final configuration of the unit may change according to the different options.

Check for updates to this manual on the Schneider Electric Web site, www.schneider-electric.com/support. Select the Download Documents and Software link under the Support tab and enter the manual part number or SKU for your equipment in the search field. See the back cover of this manual for the part number.

Cross-Reference Symbol Used in This Manual

See another section of this document or another document for more information on this subject.

Documentation Included with the Unit

Every Uniflair WMF cooling unit is delivered with the following documentation enclosed:

- Uniflair WMF Operation and Maintenance Manual
- Uniflair WMF Installation Manual
- Drawing of hydraulic circuits of the unit
- Electrical diagrams
- List of spare parts
- Conditions of Warranty

Save These Instructions

This manual contains important instructions that must be followed during the installation of this equipment.
Compliance

These units are intended for installation in a non-public location with restricted access, and with installation, use, and maintenance performed by qualified personnel.

Mains Disconnecting Device

- Appliance provided with no accessible mains disconnecting device (internal) to be used to remove the mains supply during maintenance operations carried out exclusively by trained and qualified technical personnel
- Installation of the appliance on raised plenum and disconnecting device not accessible (height of operating means greater than 1.9 m (74.8 in.) from servicing level)

In these cases, it is absolutely necessary to install a mains disconnecting device on the stationary fixed wiring located near the appliance to handle the safety shutdown and disconnection of the power supply. The disconnecting device shall be one of the following types:

- Switch-disconnector, with or without fuses that are in accordance with IEC 60947-3, utilization category AC-23B or DC-23B
- Control and protective switching device suitable for isolation that are in accordance with IEC 60947-6-2
- A circuit-breaker suitable for isolation that is in accordance with IEC 60947-2

The installed mains power disconnect must do the following:

- Isolate the electrical equipment from the supply and have one OFF and one ON position marked with “O” and “I”
- Be provided with a means for locking the device in the OFF (isolated) position (e.g., with padlocks).
- Have a breaking capacity sufficient to interrupt the rated current (see rated parameter on the unit name plate or Technical Specifications)
- Be easily accessible and located between 0.6 m (2 ft) and 1.9 m (6 ft) above where the service personnel stands to service the unit

After unit installation, it is necessary to evaluate the fault-loop impedance and automatic protection coordination.

Radio Frequency Interference

USA—FCC

This equipment complies with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and or can radiate radio frequency energy. If not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.
Receiving and Inspecting the Cooling Unit

Your Schneider Electric cooling unit has been tested and inspected for quality assurance before shipment from Schneider Electric. Carefully inspect both the exterior and interior of the equipment immediately upon receipt to ensure that the equipment has not been damaged during transit.

Verify that all parts ordered were received as specified and that the equipment is the correct type, size, and voltage.

Filing a Claim

If damage is identified on receipt of the equipment, note the damage on the bill of lading and file a damage claim with the shipping company. Contact Schneider Electric Worldwide Customer Support at one of the numbers listed on the Web page on the back page of this manual for information on how to file a claim with the shipping company. The shipping claim must be filed at the receiving end of the delivery.

NOTE: In case of shipping damage, do not operate the equipment. Keep all packaging for inspection by the shipping company and contact Schneider Electric.

Storing the Cooling Unit Before Installation

<table>
<thead>
<tr>
<th>NOTICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>DAMAGE FROM EXPOSURE</td>
</tr>
<tr>
<td>Leaving the equipment uncovered and exposed to possible damage from the environment will void the factory warranty.</td>
</tr>
<tr>
<td>Failure to follow these instructions can result in equipment damage.</td>
</tr>
</tbody>
</table>

If storing the unit for a period of time, the following procedures must be followed:

- The storage area must be dry (<90% R.H.) and protected against minimum storage temperatures −20°C (−4°F) and extreme storage temperatures 50°C (122°F).
- The unit should remain in its original packaging if stored for long periods of time.
Moving the Unit

⚠️ WARNING

DAMAGE TO EQUIPMENT OR PERSONNEL

- The equipment is heavy. For safety purposes, adequate personnel must be present when moving this item.
- The load must always be solidly anchored to the bearing element of the lifting equipment and means of transport.
- No one should be near the suspended load, nor in the working area of the crane, forklift, truck, or any other lifting equipment or means of transport.

Failure to follow these instructions can result in death, serious injury, or equipment damage.

Lifting and transporting the units must be carried out by qualified personnel as described in this manual.

Use all relevant safety standards to prevent any possible damage to people or objects.

The cooling unit packaged in a wooden crate or anchored to a pallet and covered with transparent film. The recommended tools for moving and installing the equipment include the following:

- Forklift
- Pallet Jack

The following graphic provides an example of equipment used to move the unit safely.

Intended Use

The cooling unit provides air conditioning within the limits and methods described in this manual. No modifications may be made to the units or their parts without explicit written consent from Schneider Electric. Any mechanical or electrical modification voids factory warranty.

Waste Electrical and Electronic Equipment (WEEE) Disposal

Schneider Electric products comply with international directives on the Restriction of Hazardous Substances (RoHS) in electronic and electrical equipment and the disposal of Waste Electrical and Electronic Equipment (WEEE). Dispose of any waste electronic or electrical equipment with the appropriate recycling center. Contact Schneider Electric for assistance.
Equipment Guidelines

Working Conditions and Environmental Limits

<table>
<thead>
<tr>
<th>Limit Working Conditions</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Power supply</td>
<td>460 V/3 Ph/60 Hz TN/c</td>
</tr>
<tr>
<td>Refrigerant type</td>
<td>R-407C</td>
</tr>
<tr>
<td>Voltage input tolerance</td>
<td>±10%</td>
</tr>
<tr>
<td>Frequency input tolerance—continuously</td>
<td>±0.5 Hz</td>
</tr>
<tr>
<td>Frequency input tolerance—short time</td>
<td>±1 Hz</td>
</tr>
<tr>
<td>Room conditions (temperature/humidity)</td>
<td>Temperature: 18.0°C to 37.0°C (64.4°F to 98.6°F) Relative humidity: 30% to 70% and humidity ratio: 5 to 12 gr/kg</td>
</tr>
<tr>
<td>Outside temperature conditions</td>
<td>–30.0°C to 48.7°C (–22.0°F to 119.7°F)</td>
</tr>
<tr>
<td>Maximum inlet dew point</td>
<td>16.0°C (60.8°F)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Storage Conditions</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperature</td>
<td>–20.0°C to 50.0°C (–4.0°F to 122.0°F)</td>
</tr>
<tr>
<td>Humidity</td>
<td>Relative humidity: &lt;90%RH</td>
</tr>
</tbody>
</table>

NOTE: In accordance with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules
Unit Overview

Model Nomenclature

IDENTIFYING PREFIX

UNIT TYPE
M = MONOBLOCK

FUNCTION MODE
A = MECHANICAL COOLING
F = MECHANICAL COOLING AND FREE-COOLING

MODEL NUMBER

NUMBER OF COMPRESSORS

VERSION
C = BASIC VERSION
T = VERSION WITH ELECTRIC RE-HEAT
The units can be identified by the nameplate, which is located in the electrical panel of the cooling unit. The model and any eventual accessories that are installed are indicated by an ‘X’ in the corresponding box. The nameplate contains the following information:

- Model and series number of the unit
- Power supply type
- Power absorbed by the unit and individual components
- Current absorbed by the unit and individual components
- The setpoints of the heater overheating switches and air pressure switches
Component Identification

External Components

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Perimeter attachment flange</td>
</tr>
<tr>
<td>2</td>
<td>Discharge grille (optional)</td>
</tr>
<tr>
<td>3</td>
<td>Intake grille (optional)</td>
</tr>
<tr>
<td>4</td>
<td>Condenser air intake grille</td>
</tr>
<tr>
<td>5</td>
<td>Frontal inspection/maintenance panels</td>
</tr>
<tr>
<td>6</td>
<td>Condenser fan</td>
</tr>
<tr>
<td>7</td>
<td>Protective cover for external air intake grille (F version)</td>
</tr>
<tr>
<td>8</td>
<td>External air intake grille (F version)</td>
</tr>
</tbody>
</table>
## Display Interface

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>LCD display</td>
<td>Flat, electronic visual display</td>
</tr>
<tr>
<td>2</td>
<td>STATUS key</td>
<td>Displays the status screen.</td>
</tr>
<tr>
<td>3</td>
<td>MAINTENANCE key</td>
<td>View the unit and device hour counters and the routine maintenance screens.</td>
</tr>
<tr>
<td>4</td>
<td>ALARM LOG key</td>
<td>View the last 100 alarm events.</td>
</tr>
<tr>
<td>5</td>
<td>I/O key</td>
<td>View the status of the board inputs and outputs.</td>
</tr>
<tr>
<td>6</td>
<td>CLOCK key</td>
<td>View the clock, date, and time bands (only if equipped with optional clock card).</td>
</tr>
<tr>
<td>7</td>
<td>SETPOINT key</td>
<td>View the setpoint.</td>
</tr>
<tr>
<td>8</td>
<td>PROGRAMMING key</td>
<td>Enters the configuration menu for the corresponding menu.</td>
</tr>
<tr>
<td>9</td>
<td>INFORMATION key</td>
<td>Displays the firmware version of the program stored in the Flash EEPROM.</td>
</tr>
<tr>
<td>10</td>
<td>REMOTE key</td>
<td>View the remote control settings.</td>
</tr>
<tr>
<td>11</td>
<td>SPECIAL FUNCTIONS key</td>
<td>Displays the number of special functions. This is programmed based upon customer request.</td>
</tr>
<tr>
<td>12</td>
<td>ON/OFF key</td>
<td>Turn the unit off or on. When illuminated, indicates that the unit has been turned on.</td>
</tr>
<tr>
<td>13</td>
<td>ACTIVE ALARMS key</td>
<td>When illuminated, indicates that there is an active alarm. When the button is not illuminated, there are no active alarms.</td>
</tr>
<tr>
<td>14</td>
<td>UP key</td>
<td>Moves up the menu.</td>
</tr>
<tr>
<td>15</td>
<td>DOWN key</td>
<td>Moves down the menu.</td>
</tr>
<tr>
<td>16</td>
<td>ENTER key</td>
<td>Confirm selection. When illuminated, indicates that the controller has been turned on.</td>
</tr>
</tbody>
</table>
## Electrical Panels

### WMF0661

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Controller (UPC1s)</td>
</tr>
<tr>
<td>2</td>
<td>pCOE Control Card (pCOE)</td>
</tr>
<tr>
<td>3</td>
<td>Terminal block, external connections</td>
</tr>
<tr>
<td>4</td>
<td>Clogged filter pressure switch (PFS)</td>
</tr>
<tr>
<td>5</td>
<td>Airflow pressure switch (FS)</td>
</tr>
<tr>
<td>6</td>
<td>Ground (PE)</td>
</tr>
<tr>
<td>7</td>
<td>Compressor automatic switch (SM1)</td>
</tr>
<tr>
<td>8</td>
<td>Heating automatic switch (SM6)</td>
</tr>
<tr>
<td>9</td>
<td>Ground modular terminal block (UT 16–PE)</td>
</tr>
<tr>
<td>10</td>
<td>Main disconnect switch (IG)</td>
</tr>
<tr>
<td>11</td>
<td>Feed-through terminal block (UT 10)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>Fan motor contactor (CV1)</td>
</tr>
<tr>
<td>13</td>
<td>Compressor contactor (CC)</td>
</tr>
<tr>
<td>14</td>
<td>Heating contactor (CR)</td>
</tr>
<tr>
<td>15</td>
<td>Fan motor overload cutout switch (SM2)</td>
</tr>
<tr>
<td>16</td>
<td>Transformer fuse (FU11)</td>
</tr>
<tr>
<td>17</td>
<td>Voltage presence relay (RPT)</td>
</tr>
<tr>
<td>18</td>
<td>Phases sequence control relay (RSF)</td>
</tr>
<tr>
<td>19</td>
<td>Fan motor contactor (CV2)</td>
</tr>
<tr>
<td>20</td>
<td>Fan motor overload cutout (SM3)</td>
</tr>
<tr>
<td>21</td>
<td>Terminal block</td>
</tr>
<tr>
<td>22</td>
<td>Transformer (TR)</td>
</tr>
</tbody>
</table>
Dimensions and Weights

Overall Unit

<table>
<thead>
<tr>
<th>Model</th>
<th>Dimensions – mm (in.)</th>
<th>Net Weight – kg (lb)</th>
</tr>
</thead>
<tbody>
<tr>
<td>WMF0661</td>
<td>A: 2250 (88.6)</td>
<td>B: 1050 (41.3)</td>
</tr>
</tbody>
</table>
Service Clearance

To service the cooling unit, 1500 mm (59 in.) of clearance on the front side is required.

NOTE: Dimensions are in mm (in.).
Operating Clearance

NOTE: Image shown is an example. Actual configuration may vary.

<table>
<thead>
<tr>
<th>Model</th>
<th>Clearance – mm (in.)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sx</td>
</tr>
<tr>
<td>WMF0661</td>
<td>300 (11.8)</td>
</tr>
</tbody>
</table>
Installation

Site Preparation

⚠️ WARNING

HAZARD FROM MOVING PARTS

Keep hands, clothing, and jewelry away from moving parts. Check the equipment for foreign objects before closing the doors and starting the equipment.

Failure to follow these instructions can result in death, serious injury, or equipment damage.

NOTICE

DAMAGE FROM EXPOSURE

Leaving the equipment uncovered and exposed to possible damage from the environment will void the factory warranty.

Failure to follow these instructions can result in equipment damage.

NOTICE

WATER DAMAGE

Installing the unit on an uneven surface may result in overflow spilling from the condensate tray.

Failure to follow these instructions can result in equipment damage.

Positioning

This is an outdoor unit, but it should be protected from rain, snow, and water flowing from drains or gutters. Do not install the unit near the sea (it should be at least 10 km (6.2 miles) from the shore, contact Schneider Electric if this is not feasible) or in areas with sulfurous springs. Make sure that the unit is not exposed to air containing inflammable or greasy substances.

The unit must be perfectly vertical with a maximum slope of 6–7 mm (0.5°) to avoid spillage from the condensate tray.

Intake airflow from the fans and through the condensing coil must not be obstructed in order to ensure efficiency of the unit and to prevent compressor safety devices from ending unit operation.

If the installation location is windy, the unit should be installed in a sheltered position; the wind could obstruct the airflow through the cooling coil or cause it to be excessive.
Air Distribution

Airflow grilles must correspond accurately with the holes made in the wall of the air conditioned environment, making sure of the following:

- The air discharge grille (upper grille) has a double row of directable slats to control the direction of the airflow on both the vertical and horizontal plane.
- The air intake grille has a wide passage in order to minimize the loss of load; the intake grille slats do not need to be directable.

Airflow Holes

To allow air flow into the acclimatized room, it is necessary to make two holes in the wall in the position of the unit of dimensions; airflow holes must be completely free of any obstructions.

The following image shows the dimensions of the rear panel of the unit. Aspiration and airflow holes are protected with fixed metal grilles.
Wall-Mounted Units

NOTE: Dimensions are in mm (in.).
NOTE: Dimensions are in mm (in.).

1. Install rubber seals around the air intake and discharge openings to ensure an airtight fit; 18–20-mm (0.7–0.8-in.) thick, self-adhesive, closed-cell, neoprene rubber tape (field supplied) is recommended.

2. Apply a layer of builders silicone to the joint between the top cover of the unit and the wall to prevent rain from entering the gap.
External Units

Outdoor units have an external air intake for free-cooling and a motorized control damper.

The quantity of external air is variable from a user-entered minimum value to 100% of the air discharged into the air conditioned environment. It is taken in through an opening mounted on the front panel that contains a washable, metal pre-filter to protect against the entry of leaves and insects. The expulsion of air from the air-conditioned environment is through an aperture connected to the lower lateral grilles.
Mounting the Unit

1. Check that the wall is of suitable material and strength to support the weight of the unit and to cope with the (relatively minimal) vibrations of the refrigerant compressor.

2. Create the intake and discharge holes in the wall.

3. Drill 12 holes in the wall necessary for mounting the unit. The recommended diameter is 12 mm (0.5 in.).

4. Attach rubber seals around the openings of the air intake and discharge to ensure an airtight fit: 18- to 20-mm-thick (0.7- to 0.8-in. thick), self-adhesive, closed-cell neoprene rubber tape (field supplied) is recommended.

5. If the units are connected electrically with the inside of the air-conditioned environment, make holes for the passage of cables (one for the power cable, one for the display interface connection and the control cables).
6. Attach the unit support bracket with three M8 screws (field supplied) to the wall.

**NOTE:** The dimensions shown are in mm (in.).

7. Lift the unit from below with a pallet jack (or with a hoist using canvas belts passed underneath the unit) and attach the lower flange over the lip of support bracket. In this phase, it is important to support the unit on all sides to prevent it swinging or falling.

8. Use three M8 screws (field supplied) to attach the unit to the wall; through bolts are recommended, especially on light walls. The use of screws with wall anchors is recommended only on masonry or brickwork walls.

9. Check that the unit is level. An inclination of more than 6–7 mm (0.5°) could cause the condensate tray to overflow.

10. Apply a layer of builders silicone to the joint between the top cover of the unit and the wall to prevent rain from entering the gap.
Unit Connections

Mechanical Connections

Condensate Drain

The condensate tray is located at the base of the evaporative coil. The condensate drains from the unit via a flexible tube (factory supplied) behind the condensing coil. The flexible tube has a bend that functions as a siphon and must not be removed. The flexible tube drains the condensate across the lower unit grille. It is possible to connect it to the main water drain of the building via a plastic tube with 25 mm (1 in.) internal diameter and a minimum slope of 1 degree.
Electrical Connections

⚠️ DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

- Apply appropriate personal protective equipment (PPE) and follow safe electrical work practices.
- This equipment must be installed and serviced by qualified personnel only.
- Turn off all power supplying this equipment before working on or inside the equipment.
- Replace all devices, doors, and covers before turning on power to this equipment.

Failure to follow these instructions will result in death or serious injury.

Check that the mains voltage corresponds to the nominal data of the unit (voltage, phases, frequency) shown on the electrical panel.

Power supply voltage must be within –10% and +6% the nominal value. In 3-phase units, the difference between the phases must be less than 2%: unit operation with power supplies outside these limits will void the warranty. Units with a three-phase power supply of 400 V need a neutral cable.

Installing the Power Supply Cable

WMF0661

Insert the power cables through the provided holes on the rear of the unit. The cables can be inserted directly to the power supply using the sheath.

The three holes on the right are for the installation of the power cables. The three holes on the left allow for the installation of the signal cables to be connected to the terminal block.

NOTE: The dimensions shown are in mm (in.).

Separate the signal cables from the power cables by using different routes (where possible) or by grouping the two sets of cables separately. Make sure that the power supply and auxiliary control cables are as far as possible from electric components. After opening the pre-drilled holes on the rear of the unit, protect the cable passages to avoid contact with sharp surfaces.
Connecting the Power Supply Cables

WMF0661

Locate the mains switch (IG) found inside the electrical panel.

Attach the cable terminals to the mains switch and secure the screws; connection of the yellow/green ground wire using the PE terminal is required.

Recommended Power Supply Cable Sections and Line Fuses

The power cable is field supplied and must be appropriately sized by the installer. For short distances (<30 m (98 ft), the recommended sections are shown in the tables below.

<table>
<thead>
<tr>
<th>Model</th>
<th>Line</th>
<th>Fuse – A</th>
</tr>
</thead>
<tbody>
<tr>
<td>WMF0661</td>
<td>4 x 4 mm + 4 mm PE</td>
<td>40 A</td>
</tr>
<tr>
<td></td>
<td>(4 AWG)</td>
<td></td>
</tr>
</tbody>
</table>
### Accessories

#### Temperature and Humidity Sensor

See unit wiring diagrams for more information.

1. Insert a screwdriver in the slot and release the front cover of the sensor.
2. Remove the lid and fasten the screws inside the sensor to the mounting location on the unit.
3. Connect the shielded cable to the appropriate terminals on the sensor, using the electrical diagram in the unit as reference.

**NOTE:** Some cooling applications may require the sensor be mounted in the room apart from the unit. The recommended maximum distance between the sensor and the unit is 3 m (10 ft). Use only #18 AWG.