

**Air-cooled unitary conditioners
Instructions for Installation, Operation, Maintenance**

**Autonomes Klimagerät mit Luftkühlung
Hinweise zu, Einbau, Bedienung, Wartung**



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Installation instructions

General description

The ASAO/I model conditioners are supplied in standard form as separate units. They are designed for installation with ducting, on terraces, roof-tops, in lofts and basements. When necessary, and at the moment of installation, these two units can easily be joined together, transforming them into a compact set of equipment.

Control of stopping and starting and temperature regulation are carried out through a special 24V thermostat which is supplied with every ASAO outdoor unit.

Protection of the environment



Packing

Packing is made of recyclable material. The disposal of same should be carried out in accordance with the regulations on selective residue disposal established by the local authorities.

Disposal of the unit

When dismantling after a long service life, its components should be ecologically salvaged. The cooling circuit is full of HCFC-22 refrigerant which should be salvaged and, finally, returned to the gas manufacturer for recycling.

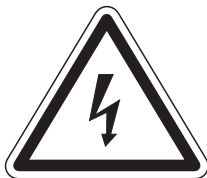
Oil will remain in the airtight compressor so, it will be returned along with the sealed circuit.

The air conditioning unit will be deposited wherever established by the local authorities for its selective disposal.

Warning signs

The following signs indicate the presence of potentially dangerous conditions for the users or service personnel.

Whenever found on the unit itself, keep in mind the warning indicated by each one.



This sign indicates an electrical risk or danger.



Attention: It is compulsory to read the instructions prior to any handling.



Attention: The unit has a remote control system and can start automatically. Two minutes prior to having access to the interior, the power supply should be disconnected so as to avoid any contact with the fan turbine in operation.



Attention: Not to touch the hot surfaces.



Attention: Wheel and belt transmission.



Attention: Possible escape of gas if incorrectly handled.

Transport

The outdoor units must always be transported in a vertical position so that the oil cannot escape from the compressor. If for some reason it is necessary from time to time to vary this position, the unit should be left in the new position for as short a time as possible.

Location

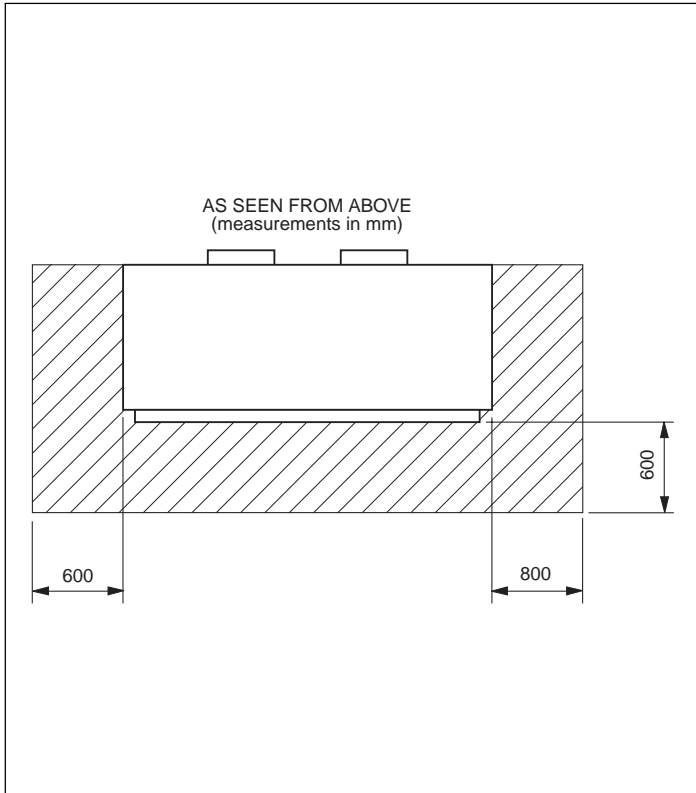
The location must be chosen providing permanent access for maintenance service, both through the lateral and rear panels.

The outdoor unit can be installed directly outdoors. If it is installed indoors, in basements, lofts, etc., ducting must be fitted to bring in exterior air and for its extraction.

Clearances

In the installation of each apparatus, clearance must be left for:

- Intake and discharge of air to and from the outdoor unit.
- Connection of drain and electrical tubing.
- Air ducts.
- Maintenance service.
- Electrical wiring.
- Cleaning the filters



Air ducts

- Connect the ducts, insulating them from the apparatus with a flexible coupling, preferably of non-inflammable material, to avoid transmission of vibration from the apparatus itself. If the ducts are made of flexible material they will not transmit vibration.
- It is recommended that a register be fitted on each section of the ducting to ensure correct balance of the system.
- Leave easy access for cleaning and changing the air filters.
- With the ASAO-45 units, two separate ducts, one from each fan, to the discharge, must be fitted to avoid recirculation of air.

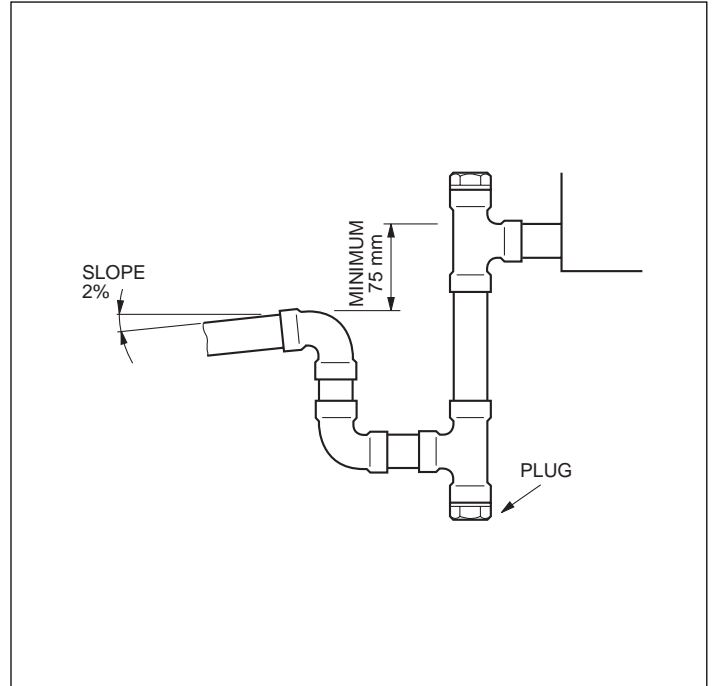
Drain connections

Run the drain tubes for each pan through a trap. Leave a minimum level difference of 75 mm. between the height of the connection to the apparatus and the line after the trap (see drawing). This is to prevent the depression produced by the fan from interfering with the emptying of the pan. Access

should be left for filling the trap with water at the beginning of each season.

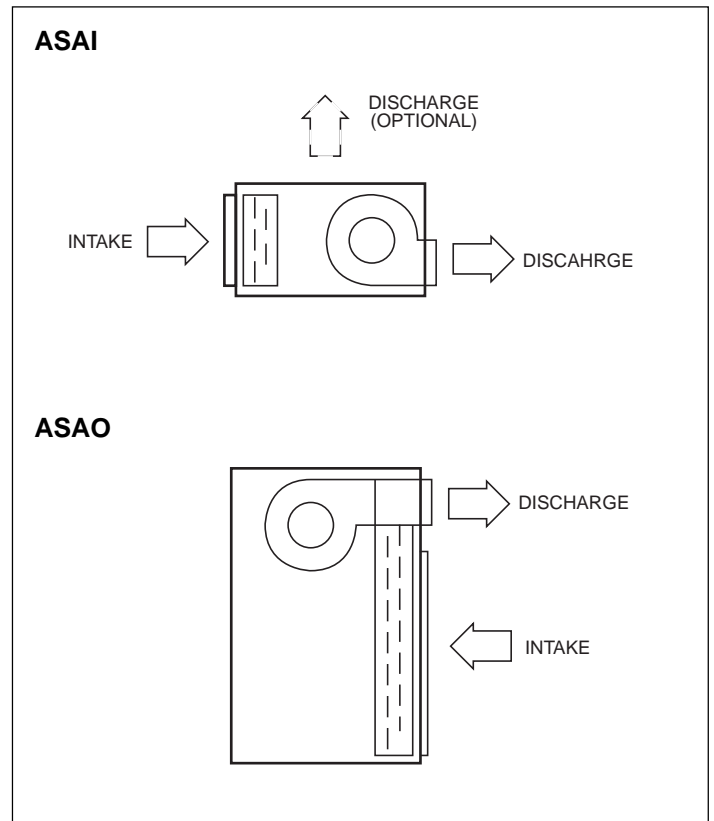
The drain line must have a minimum slope of 2 cm. for each metre of length.

The connections on the apparatus are of steel tube with 3/4" G. interior thread.



Orientation of the air intake and discharge

The standard orientations for air intake and discharge are as shown in the drawing.



On-site modifications

If the installation conditions require it, the discharge from the indoor fan ASAI can easily be modified on site to provide discharge vertically.

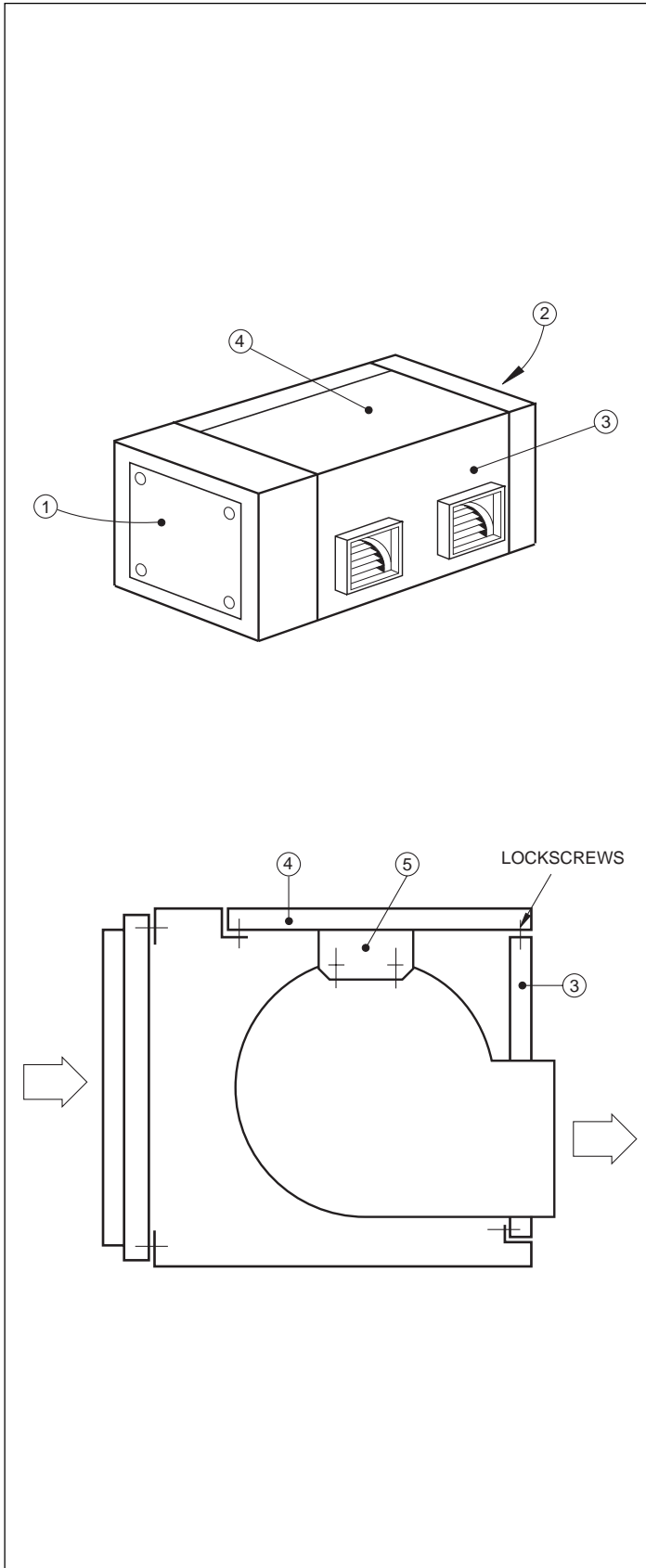
Transformation process from horizontal to vertical discharge

(ASAI-25, 30, 45)

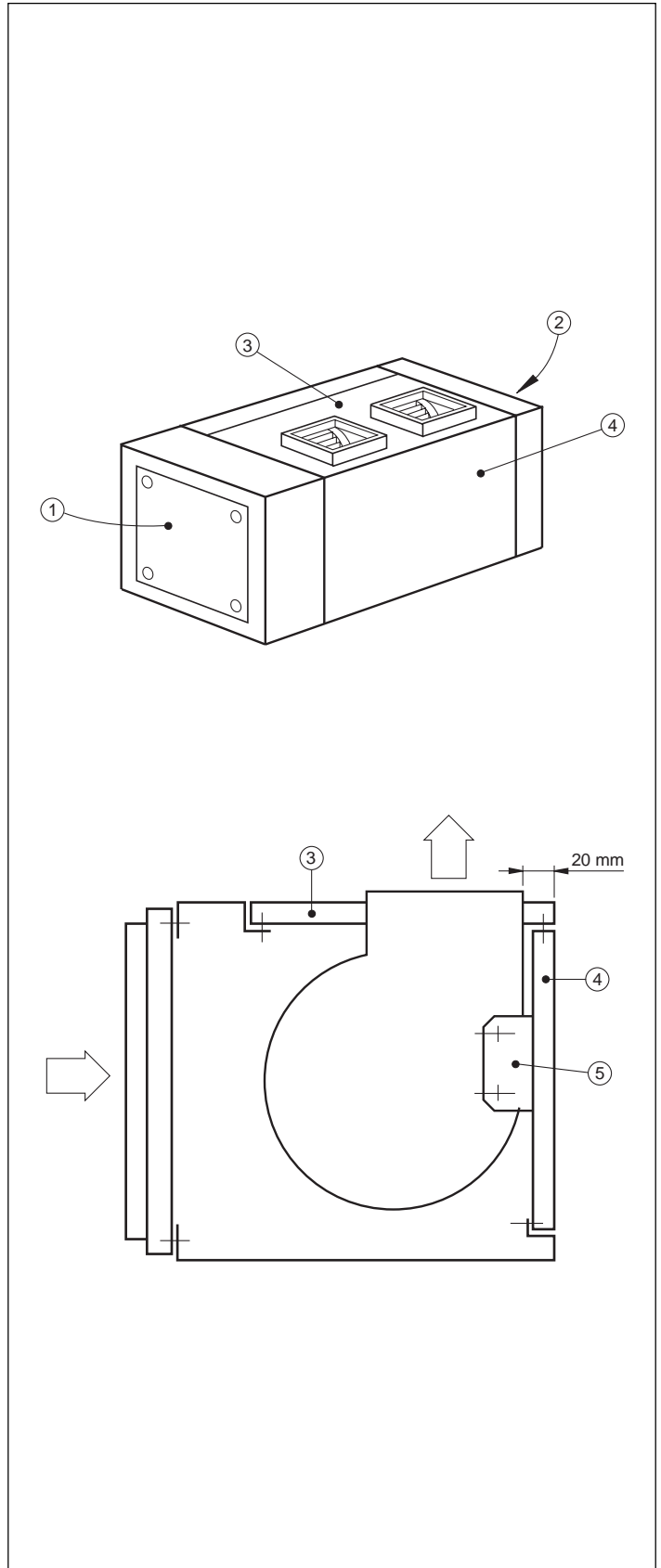
- 1- Remove the attachment screws from the side panels 1 and 2 on the upper unit.
- 2- Remove side panels 1 and 2.
- 3- Loosen the screws attaching the fan motor to its base and take off the drive belt.

- 4- Through the lateral accesses, unscrew panels 3 and 4, as shown in the standard orientation drawing.
- 5- Unscrew the attachment of the fan to support 5.
- 6- Place panel 3 in the former position of panel 4, and panel 4 in the former position of panel 3.
- 7- Screw home the panels and the fan to support 5.
- 8- Replace the drive belt and attach the motor to its base.
- 9- Screw on the side panels 1 and 2.

Standard orientation



Orientation as modified on site



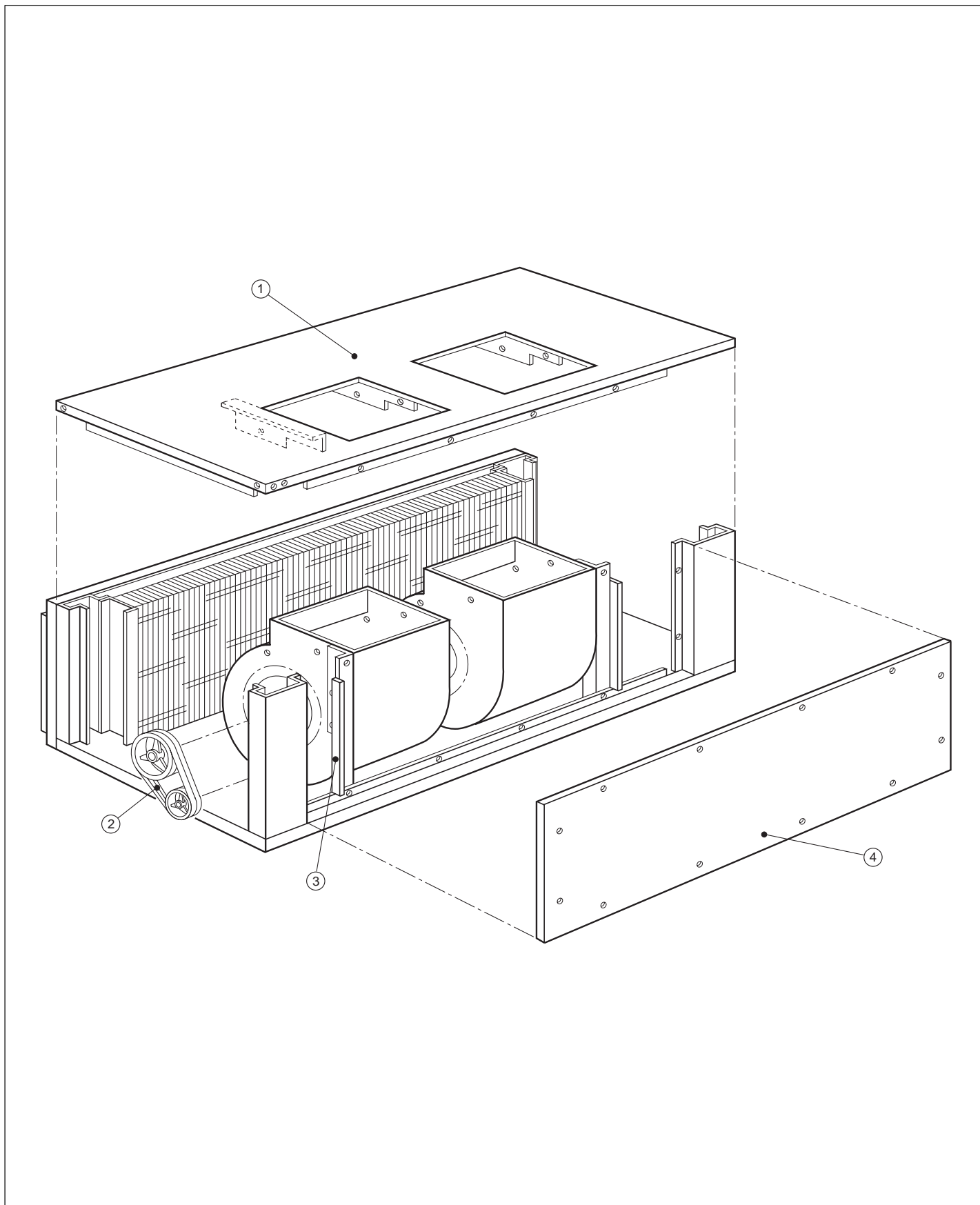
ASAI-60 unit

The ASAI-60 needs a transformation kit which includes: rear and upper panel, belts, motor pulleys and fan.

- 1- Dismantle the standard upper, rear and side panels and the fans, and orientate them as shown in the drawing, attaching them to the upper panel together with the transformation kit.
- 2- Once the fans have been installed, attach the upper panel

ref. 1 to the unit.

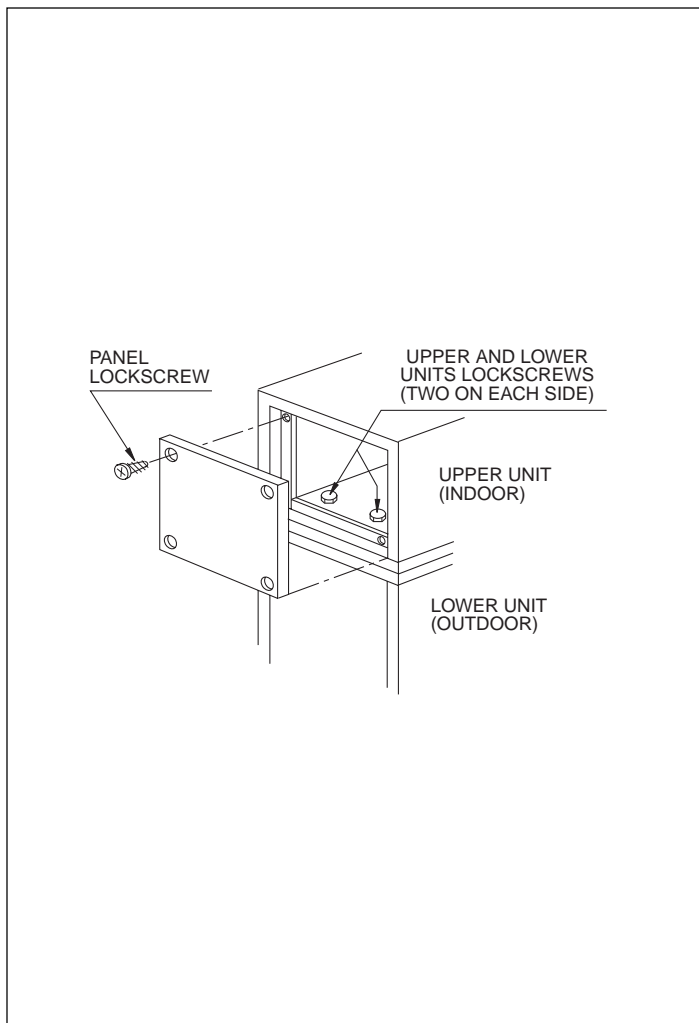
- 3- Attach the left-hand side angle support and right-hand fan support ref. 3 to the unit.
- 4- Change the motor pulleys, fan and belts ref. 2 for those included in the kit.
- 5- Fit the upper panel ref. 4.
- 6- Finally, fit the standard side panels.



Compact installation of the units

The units are supplied prepared for connection of their cooling circuits and electrically.

To install the units as a compact system, the outdoor ASAO unit and the indoor ASAI one have to be joined through the holes provided in them by the screws provided. These will be found in a bag inside the electrical box in the ASAO-60 and in the indoor unit in the ASAI-25, 30 & 45.



The indoor and outdoor units are supplied with the cooling circuit connections ready for soldering and to be interconnected on the outside of the casing.

The ASAO/I-25 and ASAO/I-30 units have one sole circuit. The ASAO/I-45 and ASAO/I-60 units has two circuits.

And the refrigerant load should be applied onsite.

Charge process

- 1 - Depressurise the units.
- 2 - Drain the refrigerant.
- 3 - Clean out with dry nitrogen.
- 4 - Solder the tubing under dry nitrogen inside the tubes.
- 5 - For soldering use low melting-point rods with a minimum silver content of 5%.
- 6 - Fill with 2 kg. R-22 refrigerant to detect leaks.
- 7 - Drain off the refrigerant.
- 8 - Clean out with dry nitrogen.
- 9 - Create a vacuum down to 200 microns.
- 10- Put in the refrigerant, using scales or a calibrated cylinder. Charge accuracy should be within 30 grams.

The outdoor unit is fitted with plug-in points at the connection outlets for verification of pressure and temperature, Super-

heat and Sub-cooling. Check that these values are in the order of 5°C.

Installation with separated units

Separation between the units

The length of connecting tubing should be kept down to the minimum possible.

Maximum admissible distances with the circuit and standard diameter tubes are:

| Total length of tubes m | Maximum level difference between units m |
|----------------------------|---|
| 20 | 10 |

For greater lengths the installation must be made after a previous project approved by our technical service.

This project may require modification of any of the following elements:

- Tube dimensions.
- Refrigerant charge.
- Suction traps.
- Suction accumulator.
- Liquid solenoid valve.

In such cases the maximum lengths which can be recommended are:

| Installation type | m | |
|---|---|----|
| Units at same level, maximum length | m | 50 |
| Outdoor unit higher than indoor. Maximum length and level difference. | m | 50 |
| Outdoor unit lower than indoor. Maximum length and level difference. | m | 15 |

Cooling interconnections

When forming the tubing to join the two units special care should be taken to keep the tubes clean and dry even before installation. The following recommendations should be observed:

- 1 - Use only copper tubing of refrigerant quality.
- 2 - Do not carry out outdoor work if it is raining.
- 3 - The ends of the tubes should be kept closed during the installation.
- 4 - The dryer filters and compressor should not be left exposed to the elements for more than one or two minutes.
- 5 - For soldering use low melting-point rods with a minimum silver content of 5%.
- 6 - During soldering and for as long as the tube stays hot, a current of dry nitrogen should be kept up to avoid the formation of oxides which could cause contamination and blockage.
- 7 - For copper-copper unions stripper should not be used.

Diameter of the interconnection tubing

| Model | Gas line diameter (wide tube) | Liquid line diameter (narrow tube) |
|-----------------|-------------------------------|------------------------------------|
| ASAO/I-25 en 45 | 1 1/8" (28.5 mm) | 1/2" (12.7 mm) |
| ASAO/I-30 en 60 | | 5/8" (15.87 mm) |

Refrigerant charge

The nominal charge show in the table below is calculated for functioning as a compact unit.

When a split system is installed, the refrigerant charge has to be increased as a function of the length of liquid tubing.

| Model | Nominale vulling R-22 kg | Aantal circuits | Diameter vloeistofleiding | Extra vulling in gr (per meter) |
|-----------|--------------------------|-----------------|---------------------------|---------------------------------|
| ASAO/I-25 | 11 | 1 | 1/2"(12.7mm) | 104 grs. |
| ASAO/I-30 | 15 | 1 | 5/8"(15.87mm) | 170 grs. |
| ASAO/I-45 | 11.6 x 2 | 2 | 1/2"(12.7mm) | 104 grs. |
| ASAO/I-60 | 7 x 2 | 2 | 5/8"(15.87mm) | 170 grs. |

Charge process

- 1 - Depressurise the units.
- 2 - Drain the refrigerant.
- 3 - Clean out with dry nitrogen.
- 4 - Solder the tubing under dry nitrogen inside the tubes.
- 5 - For soldering use low melting-point rods with a minimum silver content of 5%.
- 6 - Fill with 2 kg. R-22 refrigerant to detect leaks.
- 7 - Drain off the refrigerant.
- 8 - Clean out with dry nitrogen.
- 9 - Create a vacuum down to 200 microns.
- 10- Put in the refrigerant, using scales or a calibrated cylinder. Charge accuracy should be within 30 grams.


The outdoor unit is fitted with plug-in points at the connection outlets for verification of pressure and temperature, Super-heat and Sub-cooling. Check that these values are in the order of 5°C.

Insulation of tubing

The interconnecting cooling tubing must be insulated.

The insulation requires certain characteristics: it must be easy to install; be hard-wearing; be water and fire resistant; and have a minimum thickness of 12 mm.

To avoid deterioration through exposure to sunlight it is recommended that it be painted with water-enamel.



CAUTION

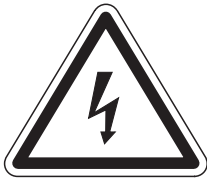
After the tube has been insulated, do not try to bend it in excess because it could become cracked or broken.

Electrical installation

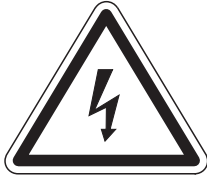
Each conditioner is delivered with a control box for connection to the mains through a main switch with fuses or an automatic cut-out.

The electric heater, if there is one, must be installed with power line and switches independent of those of the conditioner.

In all cases **established national regulations must be observed.**



Loose cables can cause overheating of the connectors or an inadequate operation of the unit. Fire risk could also exist. For this reason, make sure that all cables are properly connected.



Do not supply power to the unit and do not start up operations until the tubing and electrical connections with the outdoor unit have been completed.
Make sure that electrical supply is correctly connectec to the units, as shown in the electrical diagrams.

Electrical characteristics

| Model | Power supply V.ph.Hz. | | Vermogen A | | | | | | | Power sup. cable cross section mm ² | Automatic circuit breaker A |
|------------------|-----------------------|-------------|------------|----------|----------|------------|---------|-------------|---------|---|--------------------------------|
| | Compressor | Fan | Compressor | | | Indoor fan | | Outdoor fan | | | |
| | | Ext. - Int. | Start | Nominal | Maximum | Start | Nominal | Start | Nominal | | |
| ASAO/I-25 | 230.3.50 | 230.3.50 | 183 | 22.8 | 34.5 | 14 | 5.2 | 23 | 5.2 | 10 | 50 |
| | 400.3.50 | 400.3.50 | 90 | 13.2 | 20 | 7 | 2 | 10 | 3 | 6 | 32 |
| ASAO/I-30 | 230.3.50 | 230.3.50 | 170 | 28.5 | 33 | 23 | 4.7 | 31 | 6.6 | 16 | 80 |
| | 400.3.50 | 400.3.50 | 100 | 16.5 | 19 | 10 | 2.7 | 25 | 3.8 | 10 | 50 |
| ASAO/I-45 | 400.3.50 | 400.3.50 | 2 x 91 | 2 x 12.5 | 2 x 14.5 | 10 | 3.5 | 2 x 13 | 2 x 3 | 16 | 63 |
| ASAO/I-60 | 400.3.50 | 400.3.50 | 2 x 100 | 2 x 16.5 | 2 x 19 | 25 | 7.1 | 80 | 13 | 25 | 100 |

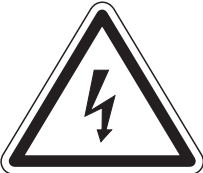
Important: The automatic switch sizing and the power line section are orientative, and should be corrected in accordance with site conditions and legislation.

Limits of use

| Voltage limits | | | | Air intake temperature evaporating unit °C | | | | Air intake temperature condensing unit °C | |
|----------------|---------|------------|---------|--|---------|----------------|---------|---|---------|
| Nom. 230 V | | Nom. 400 V | | Temperature WB | | Temperature DB | | Temperature DB | |
| Minimum | Maximum | Minimum | Maximum | Minimum | Maximum | Minimum | Maximum | Minimum | Maximum |
| 198 | 254 | 342 | 436 | 14 | 23 | 19 | 32 | 19 | 46 |

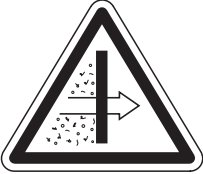
Notes: WB- Wet bulb. DB- Dry bulb.

Before final approval of the installation




Verify:


- Voltage is always between 198 - 254 V or 342 - 436 V.
- The section of the supply cable is at least that recommended in the corresponding wiring diagrams.




- The need to clean the air filter has been notified.



- Condensation drainage is carried out perfectly and there are no leaks in the water circuit.



- The guarantee card has been filled out.
- Maintenance instructions have been given, or a regular servicing contract has been signed.



- Operating instructions have been given to the user.

Operating instructions

General information

Start-up and automatic temperature regulation are carried out through the ambient thermostat.

Place the thermostat about 1.5 metres above floor level, where no obstacle can prevent it from measuring the real temperature of the room.

Important warning

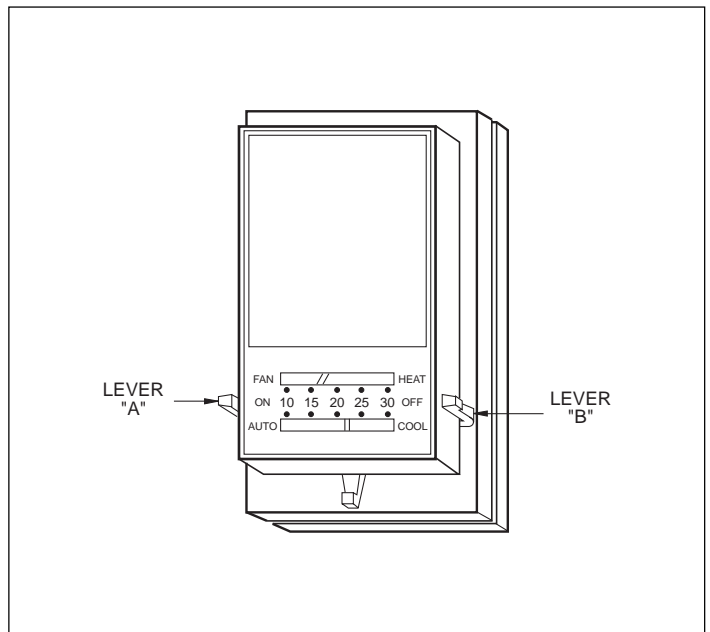
The thermostat should be located on a wall that is not exposed to direct sunlight. Should this not be the case, the temperatures would not be real, and operation would be inadequate.

Before starting up, turn on the main switch to activate the electric heater in the compressor crankcase.

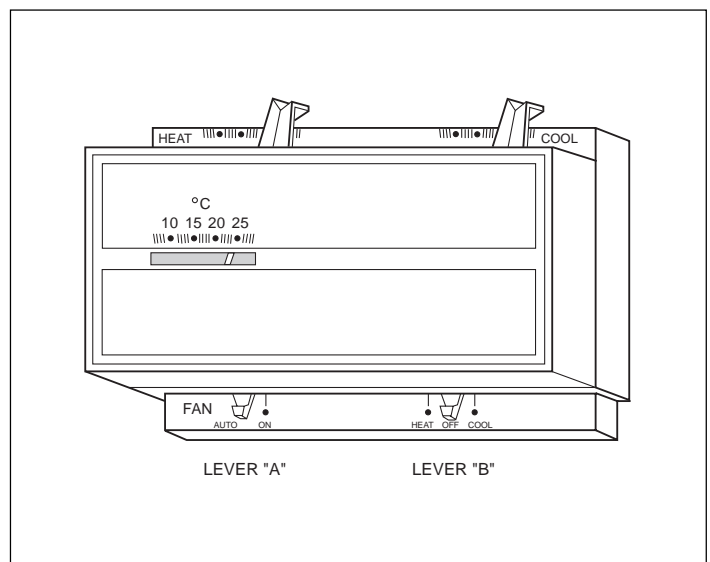
The compressor must not be started up until at least eight hours have elapsed.


This is to allow for evaporation of any refrigerant in liquid form which may have mixed with the compressor oil.

Thermostat for ASAO/I-25 & 30



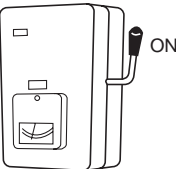
Thermostat for ASAO/I-45 & 60





CAUTION

ELECTRICAL SUPPLY



Connection:

To heat the system, the electrical supply must be switched on at least 8 hours before the conditioner is put into operation.

Leave the supply connected unless you are going to leave the conditioner idle for a long period of time.

Recommendations for better functioning

- Turn the console on before the room gets hot. The heat accumulated on furniture, walls, etc. makes the console take longer to achieve the desired temperature.
- It is advisable to inspect and service your unit in the spring; this avoids damage and insures a long service of your console.

Ambient thermostat

Characteristics:

- Operating voltage 24V.
- Admissible strength 2 A.
- With a switch for the functioning of COOL-OFF-HEAT, and another for the fan, with positions AUTO-ON (Automatic-Continuous).
- With heat and cold anticipators adjustable between 0.1 and 1.2 A.
- With a bi-metal thermometer.

Start-up process

Connect the main and earth wires to the board provided in the control box.

Connect the ambient thermostat cable to 24 V on the board provided in the control box.

Once the equipment has been installed in accordance with the instructions given previously, and the appropriate checks have been made, the start-up process can be initiated. This is done through the thermostat.

a) For ventilation only:

- Lever A in ON position.
- Lever B in OFF position.
- Dial in any position.

b) Summer conditioning:

- Lever A in ON or AUTO position.
- Lever B in COOL position.
- Dial indicating the temperature desired.

c) Winter conditioning:

- (With heating coils)
- Lever A in ON or AUTO position.
- Lever B in HEAT position.
- Dial indicating the temperature desired.

In the OFF position the cooling group does not operate. When the lever A is in the ON position only the fan functions. In the position COOL or HEAT and AUTO the fan starts up in conjunction with the compressor or electric heater, if fitted (as indicated by the thermostat and the room temperature). The group is switched off completely when the A lever is in the AUTO position and the B lever in OFF.

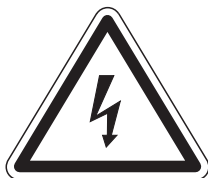
Pressostats

The conditioner is fitted with a cut-out in the high circuit, functioning when pressure becomes excessive, and another in the low circuit, when it is insufficient. When one of the cut-outs is activated, it opens the control circuit, stopping the compressor. Before re-setting the corresponding cut-out, the thermostat should be switched off through the thermostat and the anomaly which produced the abnormal pressure dealt with.

To reconnect, press the tab on the cut-out spring and put the thermostat in the operating positions.

Maintenance

Clean the casing with a vacuum cleaner or a cloth moistened in a mild liquid detergent.



Do not pour water on the unit to clean it. Water could damage the internal components and cause electrical discharges.

Indoor unit discharge ducts

The indoor unit discharge, intended for ducts, is supplied without a protective grill. When maintenance work is being done this must be taken into account.



CAUTION

In cases of unrestricted discharge installations for an indoor unit intended for ducting, the outlet opening must be protected with a grill. Failure to fit this protection could result in damages being caused by the fan turbine.

Cleaning the filters

Keep the battery filters in good condition, servicing them at least once a month. If the filters become dirty they will reduce the air-flow and the performance of the unit.

Cleaning the outdoor unit

Dirt must not be allowed to accumulate on the outdoor unit. This must be cleaned as often as necessary with a brush,

vacuum cleaner or detergent.



CAUTION

For safety reasons make sure you switch off the air-conditioner, and disconnect it from the mains before cleaning.



CAUTION

Check the outdoor unit periodically to see whether either the outlet or the inlet are blocked up with dirt or leaves, etc.

The internal coil and other components of the outdoor unit must also be periodically cleaned. Contact your concessionary or maintenance service.

Filling the drain trap

To avoid problems with water condensation, we recommend that at start-up and before the beginning of each season, the drain trap be filled with water, to prevent air being drawn through this tube from the beginning.

Checking belt tension

The tension and wear of the motor belts should be checked once a year, and must be changed if necessary. Before doing this, turn the general main switch off.



CAUTION

For safety reasons, make sure to turn your air conditioner off and unplug the mains before any cleaning is performed or fan motor belts are checked.

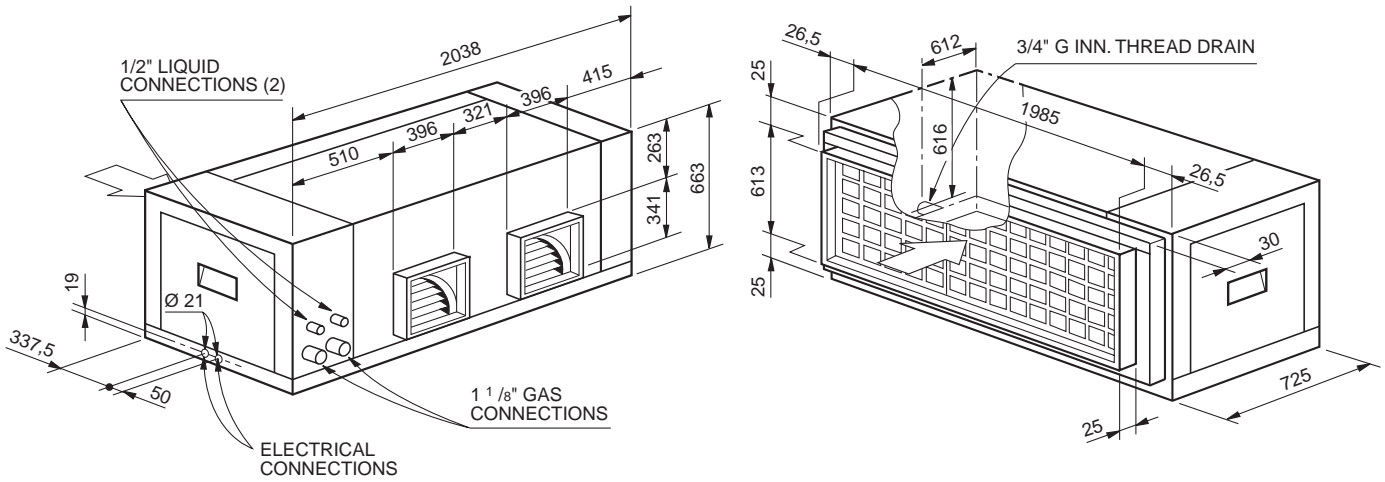
Access to the units for maintenance servicing



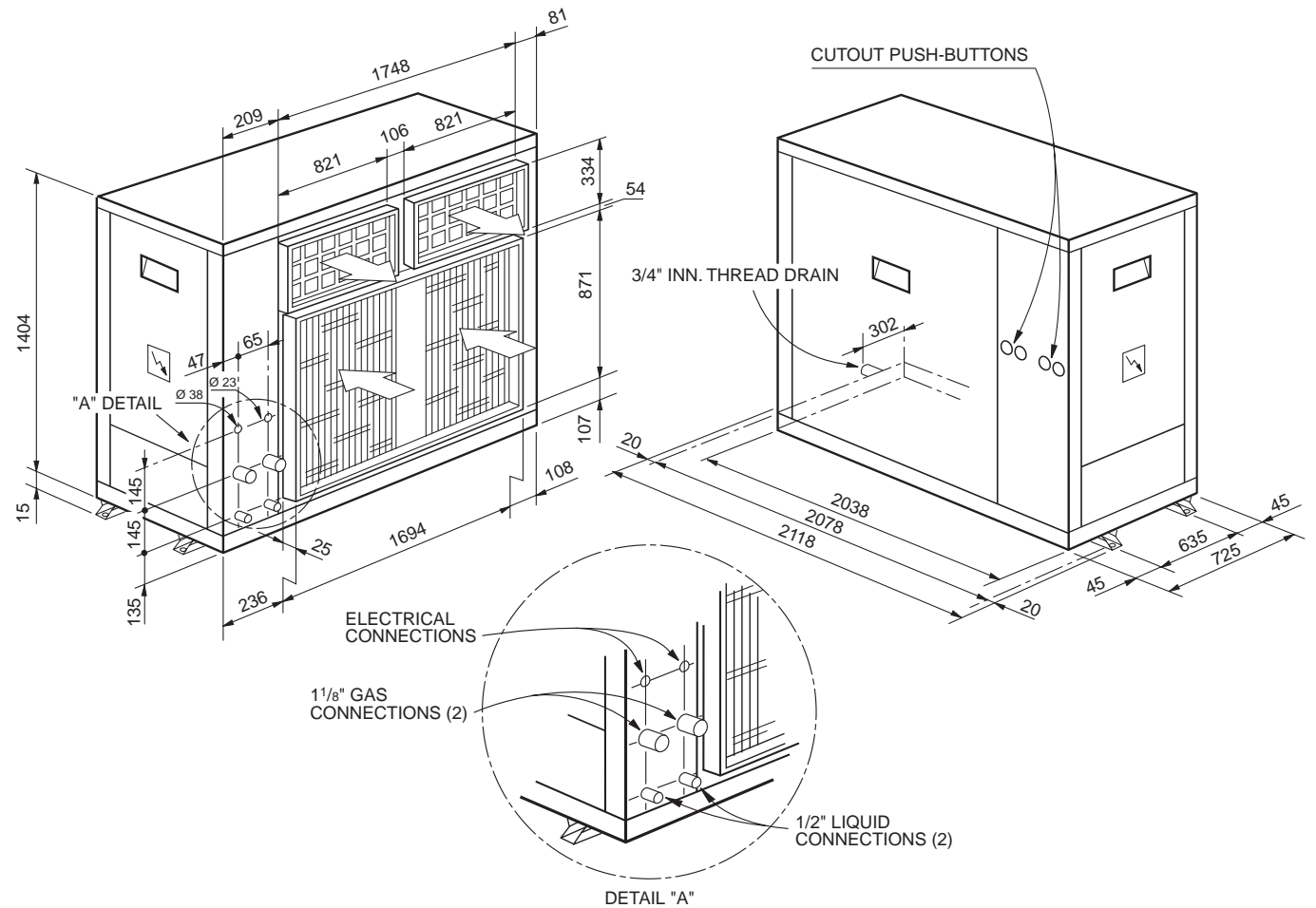
Attention: The unit has a remote control system and can start automatically. Two minutes prior to having access to the interior, the power supply should be disconnected so as to avoid any contact with the fan turbine in operation.

General dimensions mm

ASAI-45

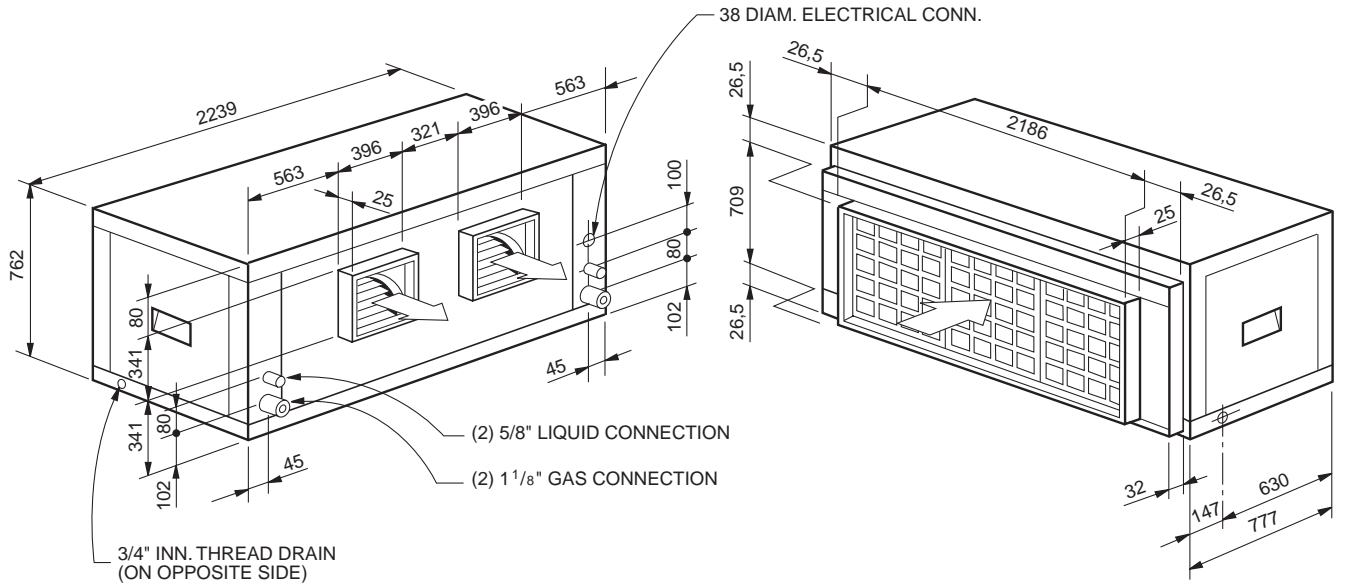


ASAO-45

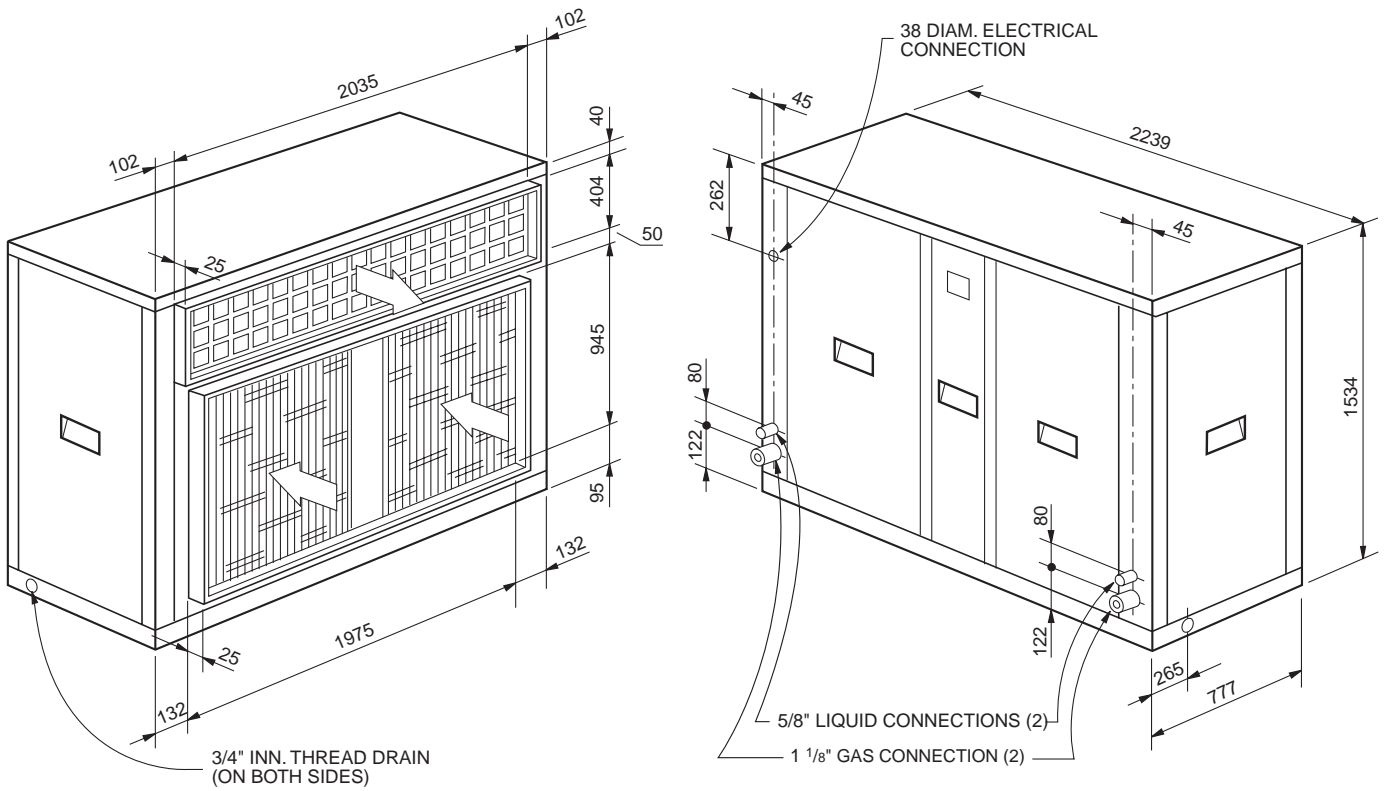


General dimensions mm

ASAI-60

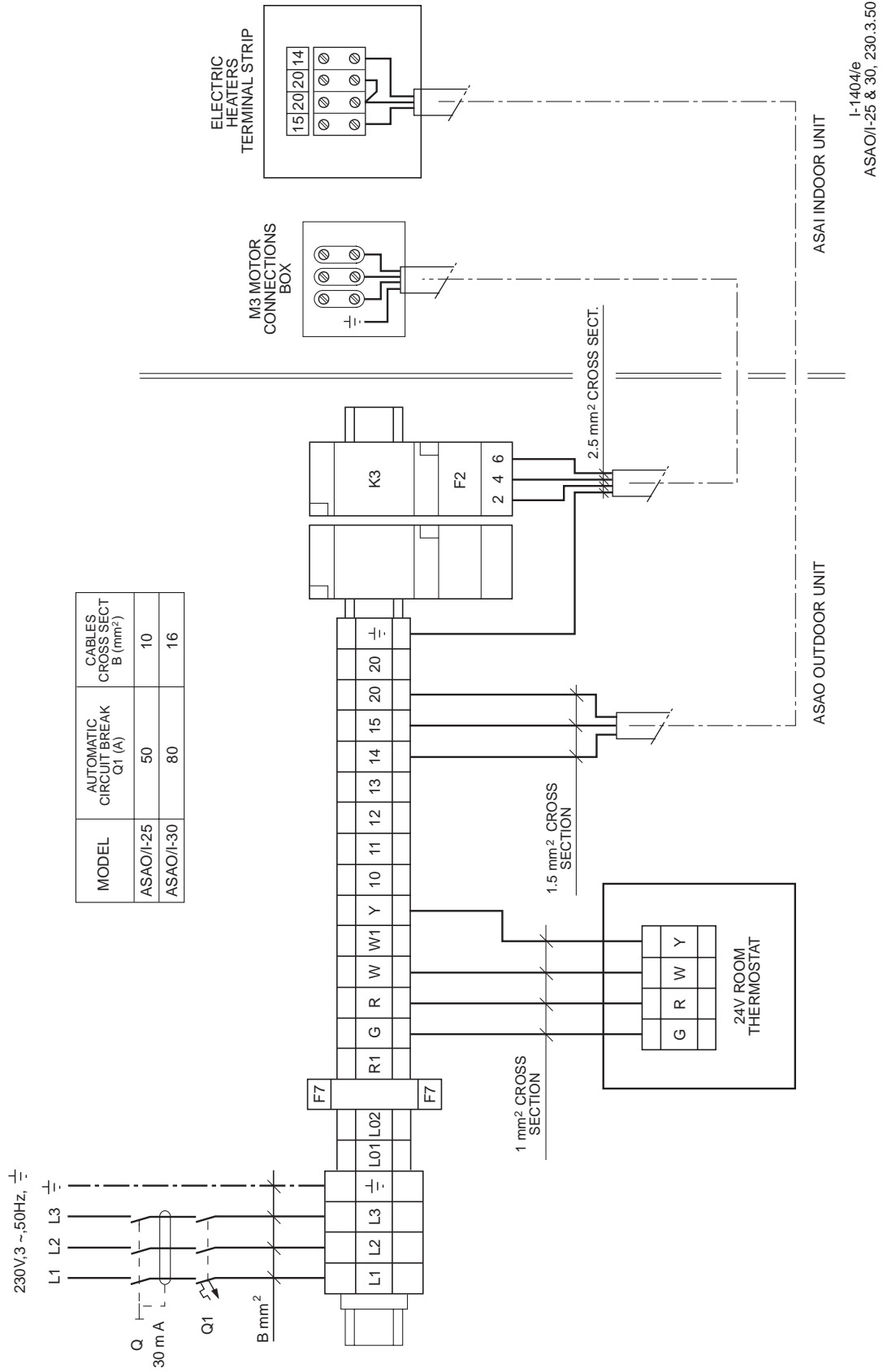


ASAO-60



Interconnection diagram

ASAO/I-25 & 30, 230.3.50



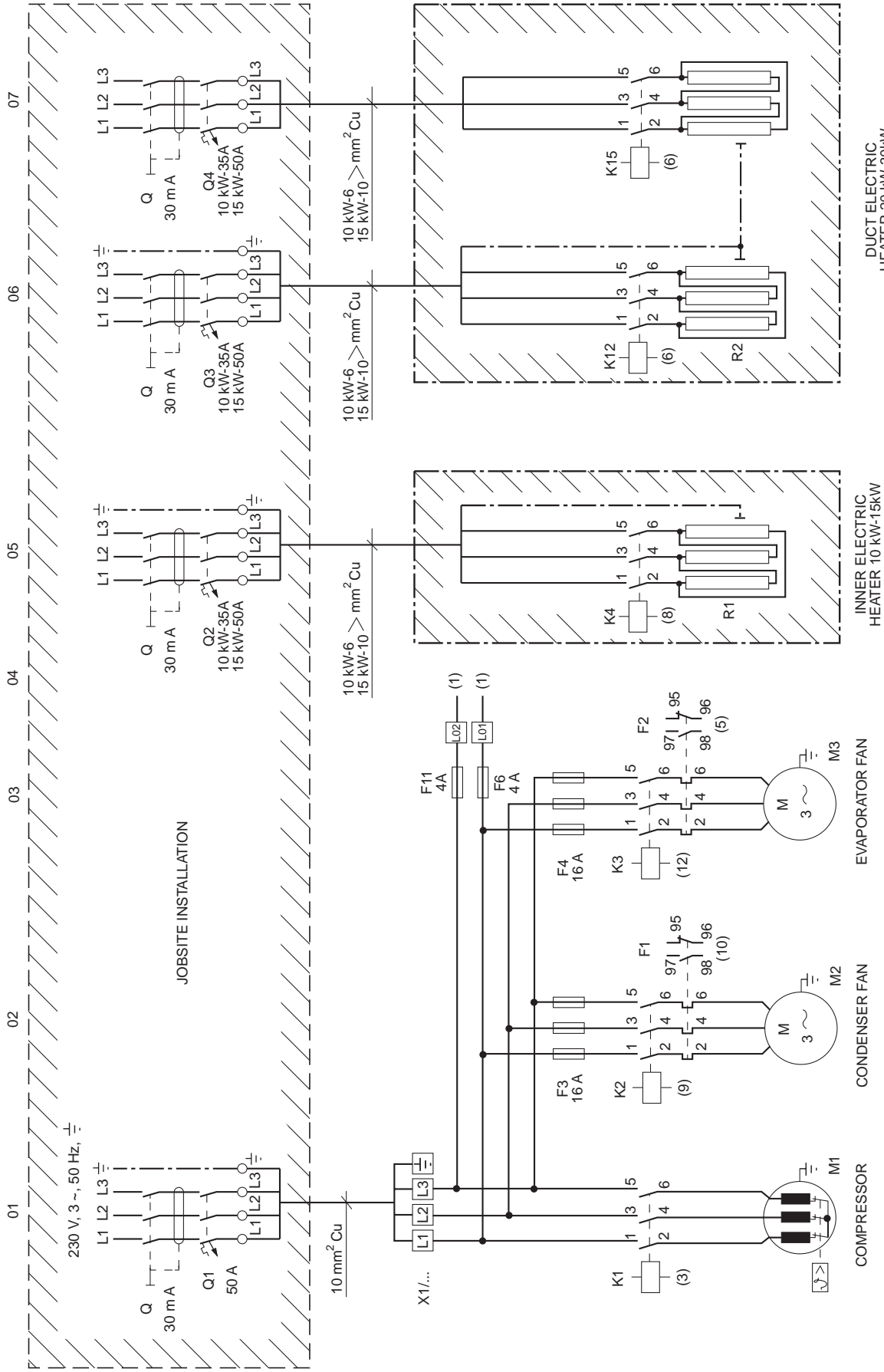
| MODEL | AUTOMATIC CIRCUIT BREAK Q1 (A) | CABLES CROSS SECT B (mm ²) |
|-----------|--------------------------------|--|
| ASAO/I-25 | 50 | 10 |
| ASAO/I-30 | 80 | 16 |

ASAO INDOOR UNIT
I-1404/e
ASAO/I-25 & 30, 230.3.50

ASAO OUTDOOR UNIT

Power diagram

ASAO/I-25, 230.3.50



DUCT ELECTRIC HEATER 20 kW-30kW
SEE DIAGRAM RC-20-24/30-24

INNER ELECTRIC HEATER 10 kW-15kW

COMPRESSOR
CONDENSER FAN
EVAPORATOR FAN

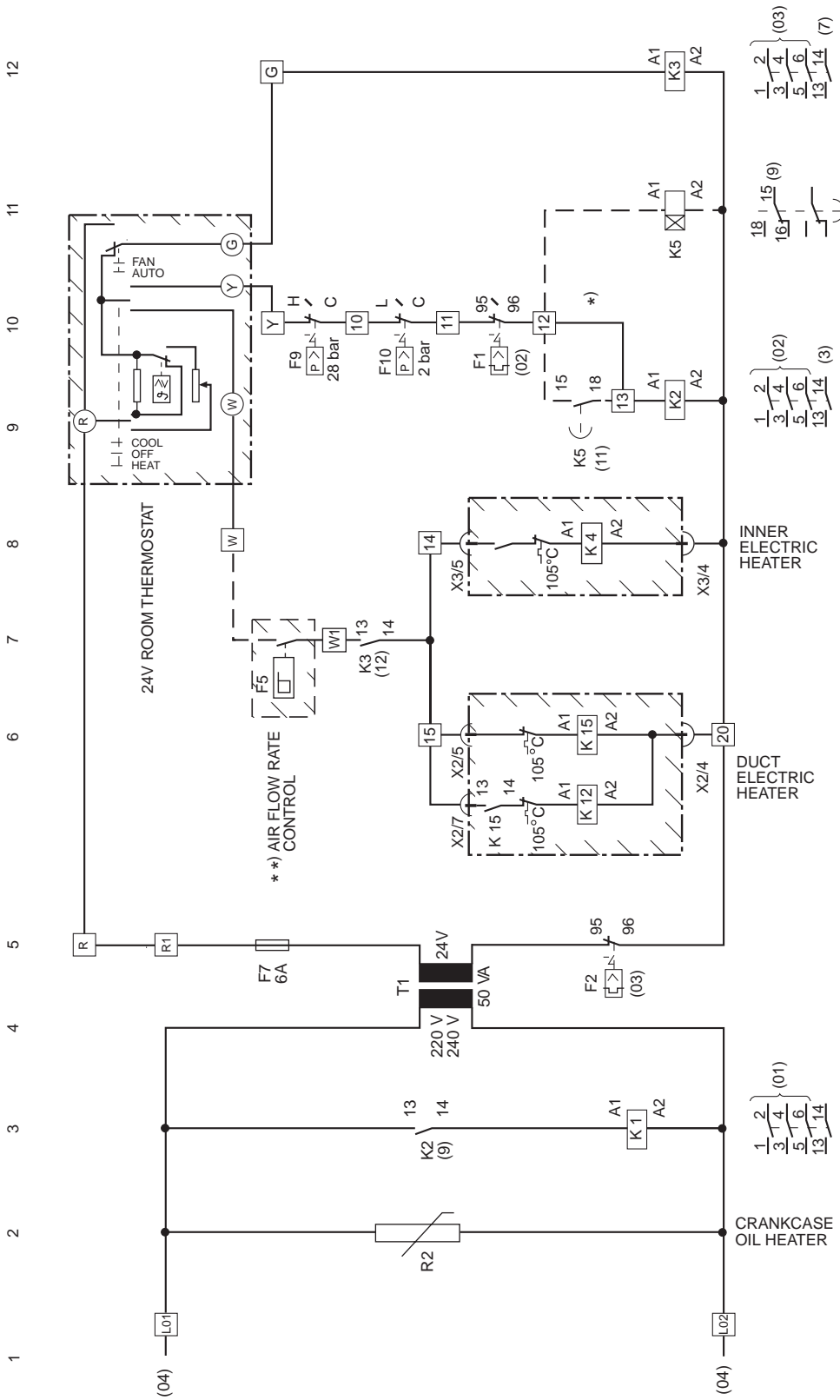
THE COMPONENTS INCLUDED IN THESE BOXES ARE NOT SUPPLIED BY THE MANUFACTURER

THE COMPONENTS INCLUDED IN THESE BOXES ARE STANDARD ACCESSORIES SUPPLIED BY THE MANUFACTURER

I-1125-1/g
ASAO/I-25, 230.3.50

Control diagram

ASAO/I-25, 230.3.50



*) REMOVE JUMPER 12-13 WHEN A START TIMER IS INSTALLED

***) INSTALL AIR FLOW RATE CONTROL F5 WHEN AN ELECTRIC HEATER IS INSTALLED

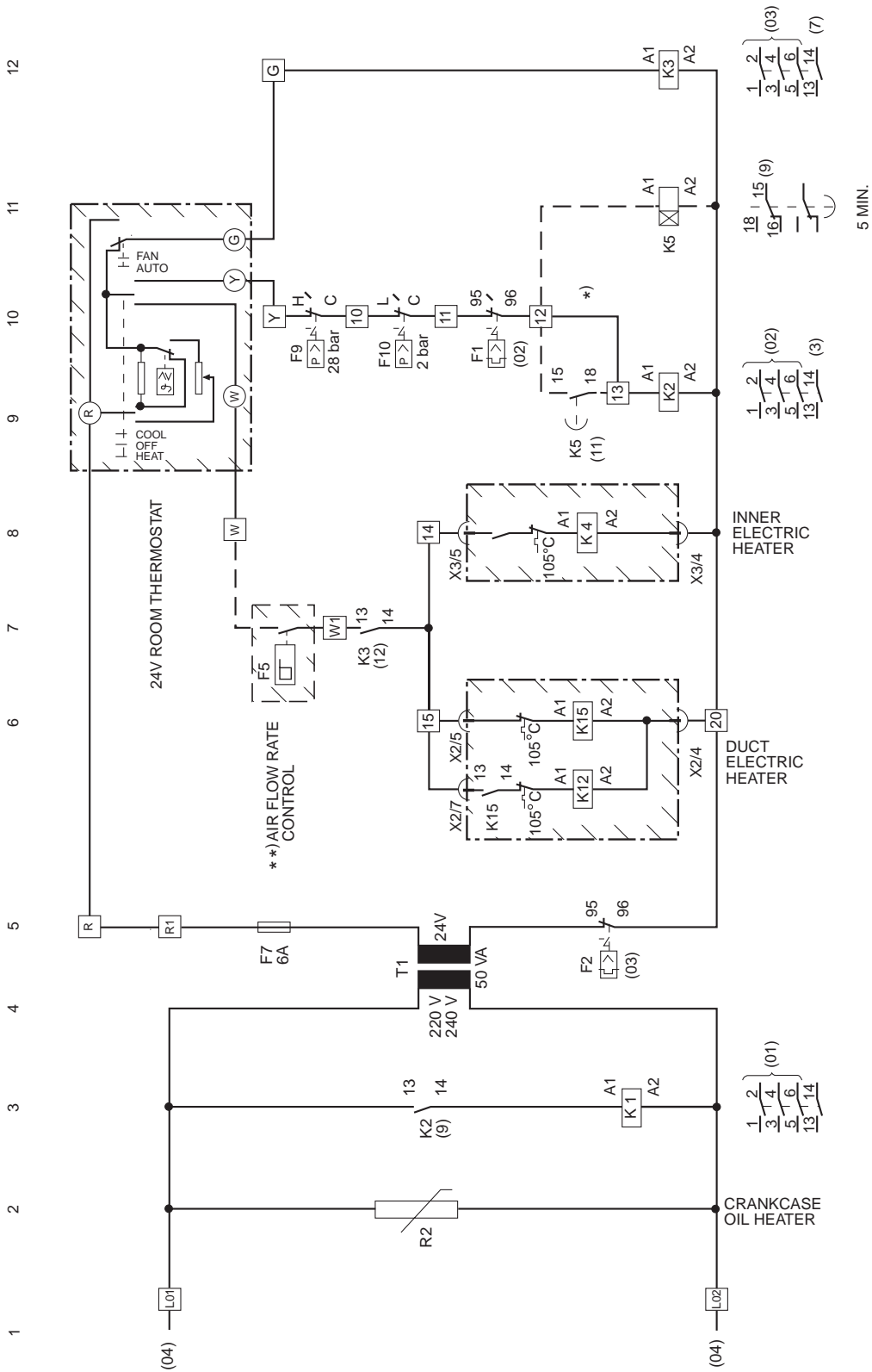
 THE COMPONENTS INCLUDED IN THESE BOXES ARE NOT SUPPLIED BY THE MANUFACTURER

 THE COMPONENTS INCLUDED IN THESE BOXES ARE STANDARD ACCESSORIES SUPPLIED BY THE MANUFACTURER

I-1125-2/d
ASAO/I-25, 230.3.50

Main diagram

ASAO/I-30, 230.3.50



*) REMOVE JUMPER 12-13 WHEN A START TIMER IS INSTALLED

**) INSTALL AIR FLOW RATE CONTROL F5 WHEN AN ELECTRIC HEATER IS INSTALLED

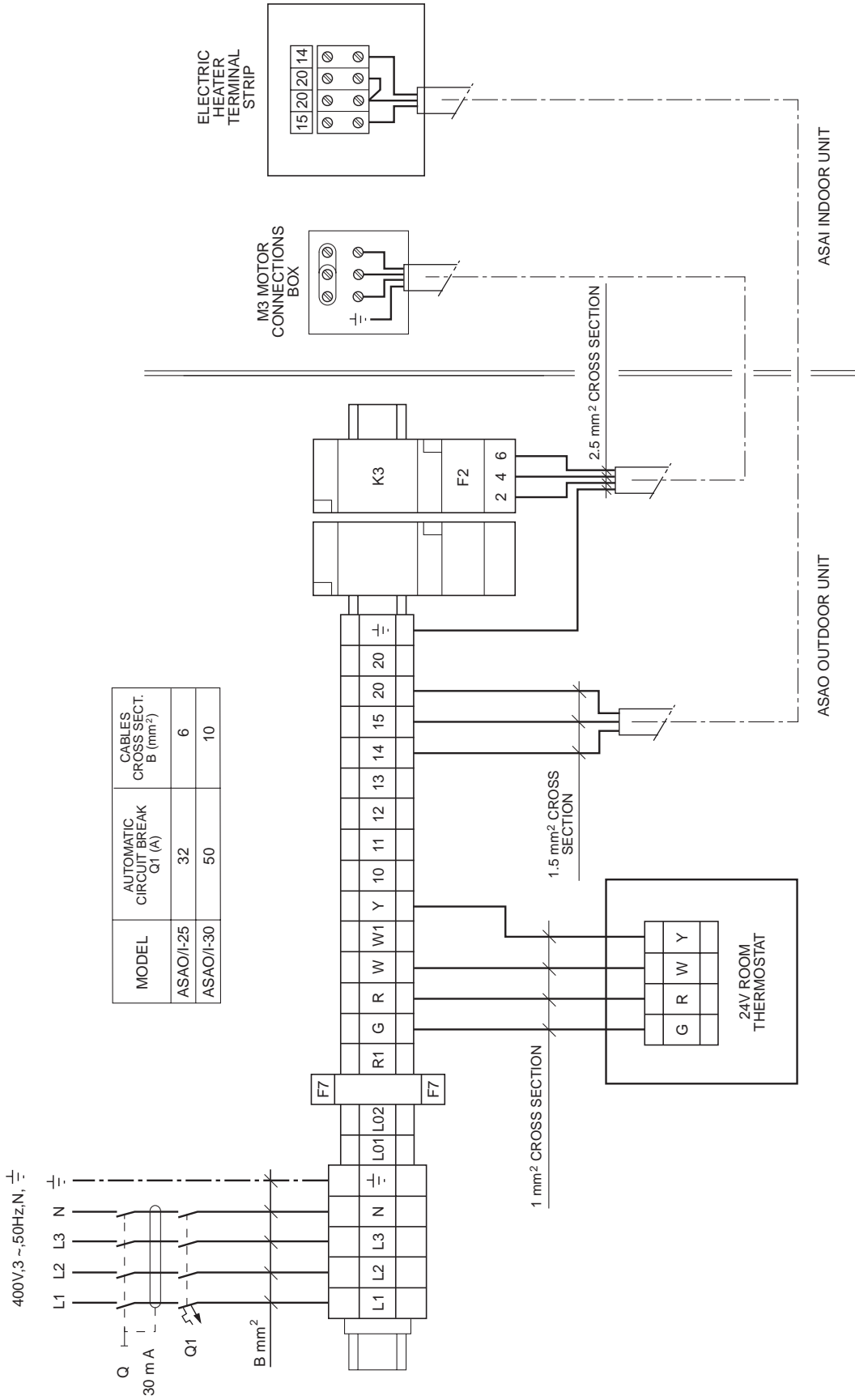
 THE COMPONENTS INCLUDED IN THESE BOXES ARE NOT SUPPLIED BY THE MANUFACTURER

 THE COMPONENTS INCLUDED IN THESE BOXES ARE STANDARD ACCESSORIES SUPPLIED BY THE MANUFACTURER

I-1124-2/d
ASAO/I-30, 230.3.50

Interconnection diagram

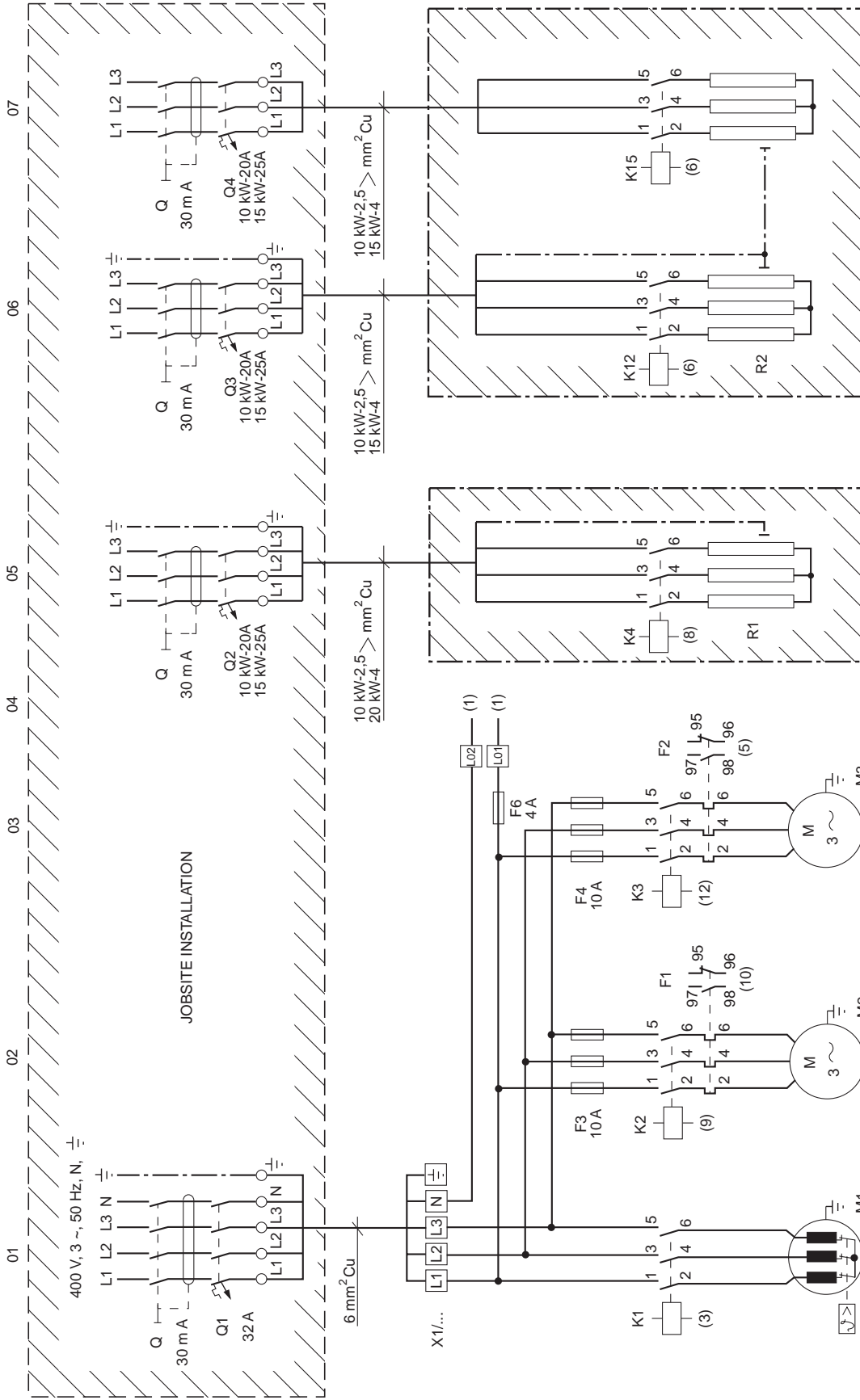
ASAO/I-25 & 30, 400.3.50



I-1405/e
ASAO/I-25 & 30, 400.3.50

Power diagram

ASAO/I-25, 400.3.50



DUCT ELECTRIC HEATER 20 kW-30kW
SEE DIAGRAM RC-20-24/30-24

INNER ELECTRIC HEATER 10 kW-15kW

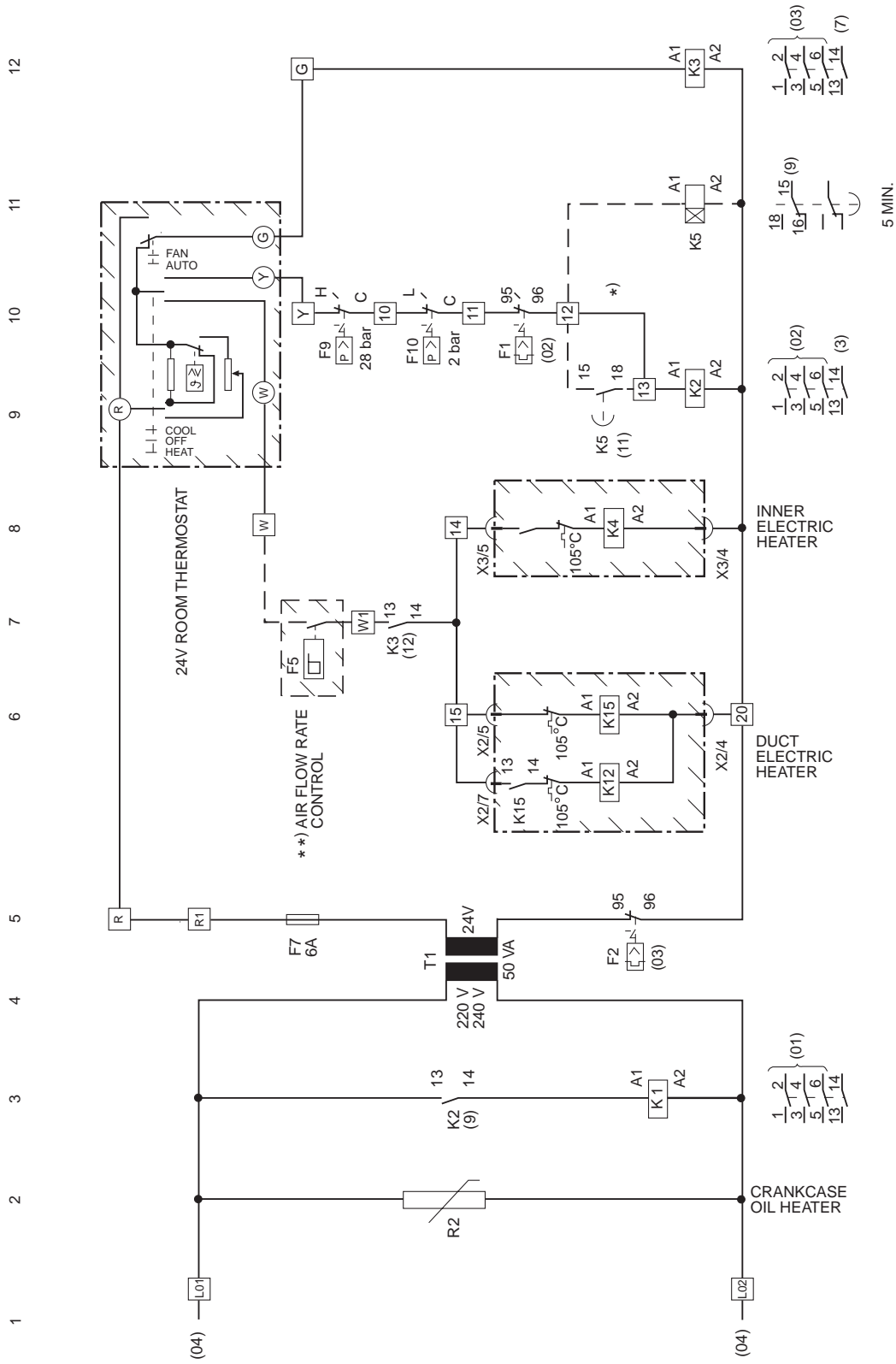
THE COMPONENTS INCLUDED IN THESE BOXES ARE NOT SUPPLIED BY THE MANUFACTURER

THE COMPONENTS INCLUDED IN THESE BOXES ARE STANDARD ACCESSORIES SUPPLIED BY THE MANUFACTURER

I-11116-1/i
ASAO/I-25, 400.3.50

Main diagram

ASAO-25, 400.3.50



*) REMOVE JUMPER 12-13 WHEN A START TIMER IS INSTALLED

**) INSTALL AIR FLOW RATE CONTROL F5 WHEN AN ELECTRIC HEATER IS INSTALLED

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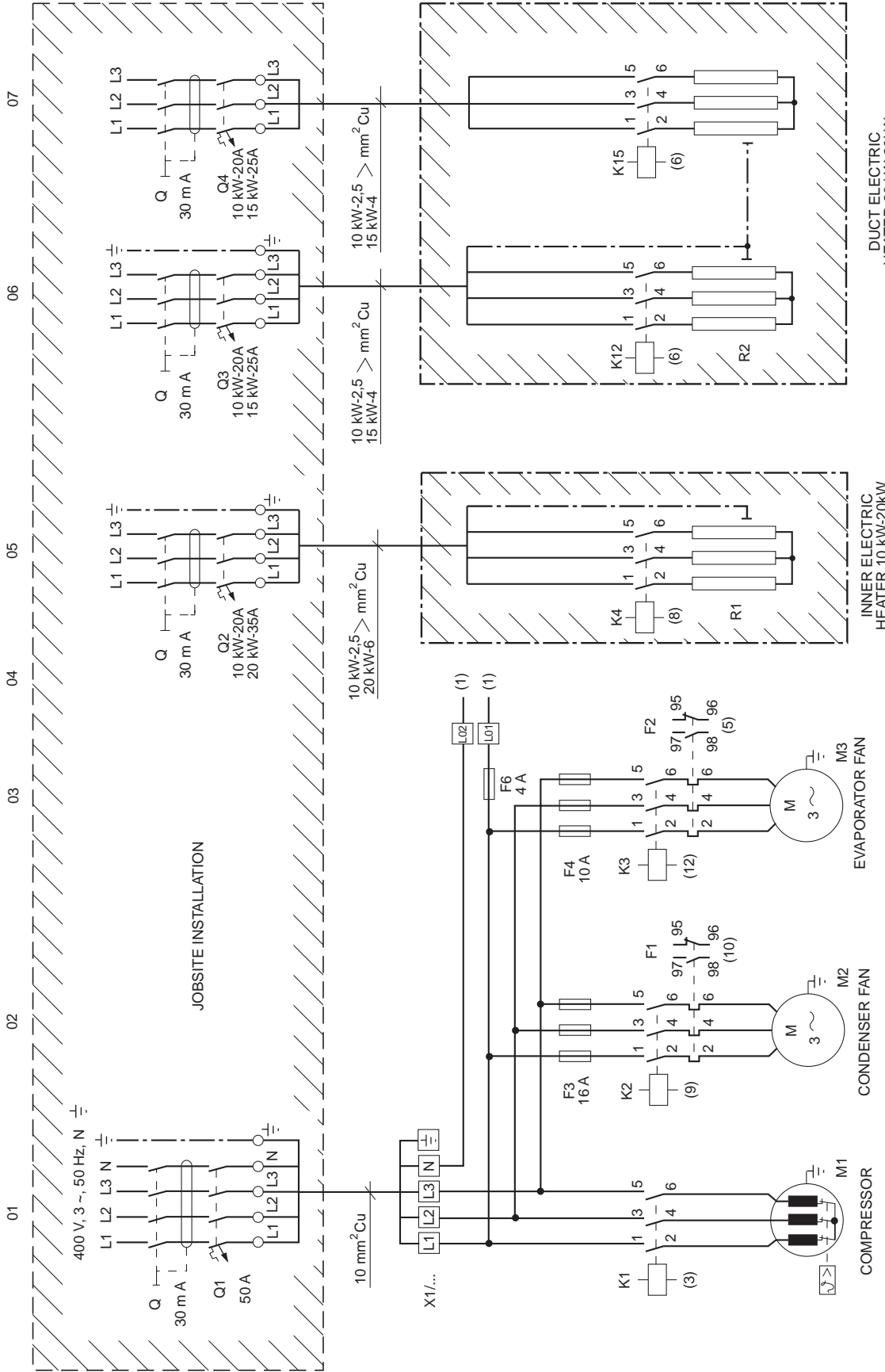
THE COMPONENTS INCLUDED IN THESE BOXES ARE NOT SUPPLIED BY THE MANUFACTURER

THE COMPONENTS INCLUDED IN THESE BOXES ARE STANDARD ACCESSORIES SUPPLIED BY THE MANUFACTURER

I-1116-2/d
 ASAO/I-25, 400.3.50


Power diagram

ASAO/I-30, 400.3.50



DUCT ELECTRIC HEATER 20 kW-30kW
SEE DIAGRAM RC-20-24/30-24

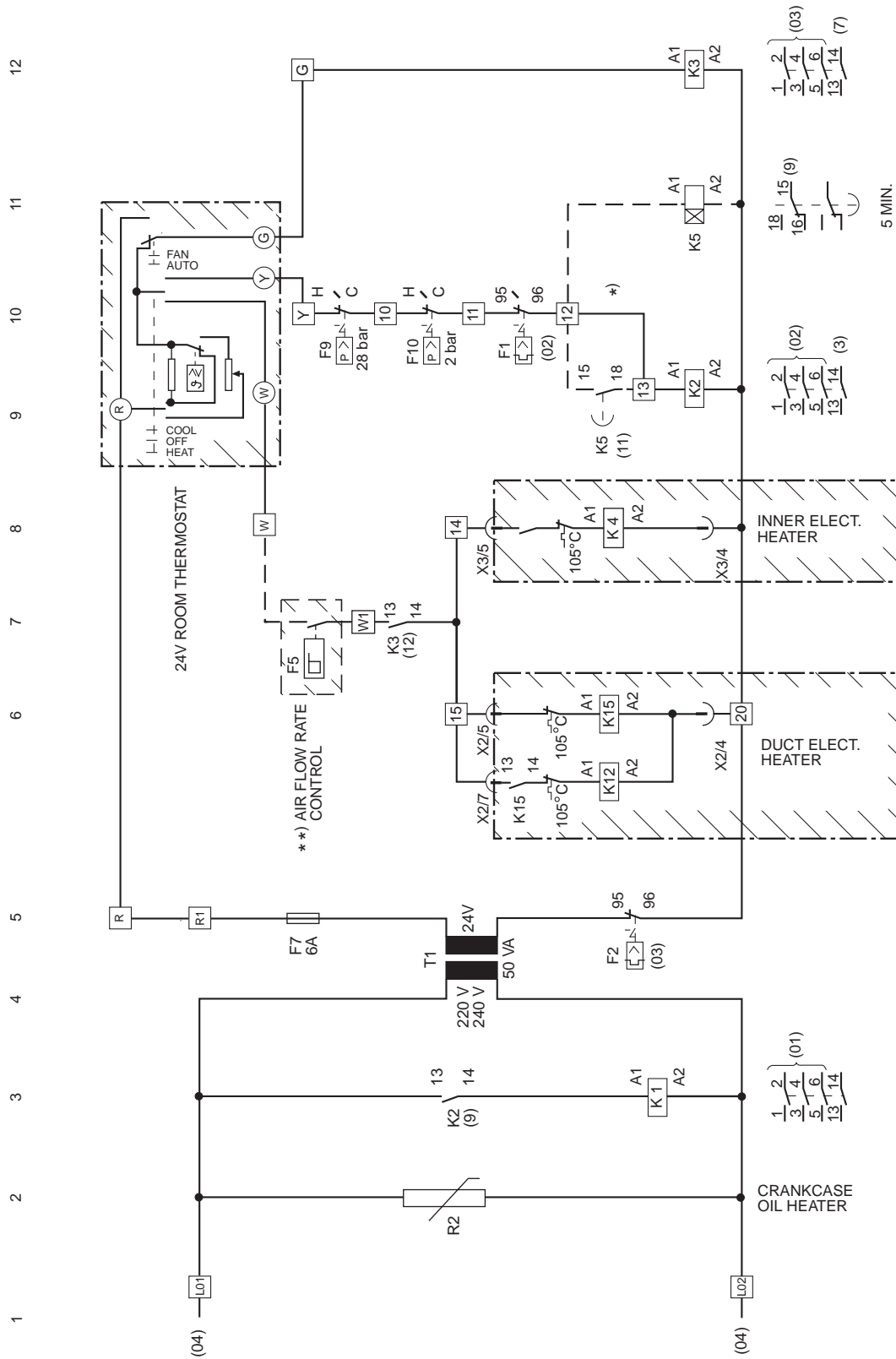
INNER ELECTRIC HEATER 10 kW-20kW

 THE COMPONENTS INCLUDED IN THESE BOXES
 ARE NOT SUPPLIED BY THE MANUFACTURER
 THE COMPONENTS INCLUDED IN THESE BOXES ARE STANDARD
 ACCESSORIES SUPPLIED BY THE MANUFACTURER

l-1087-1/g
ASAO/I-30, 400.3.50

Main diagram

ASAO/I-30, 400.3.50



*) REMOVE JUMPER 12-13 WHEN A START TIMER IS INSTALLED

***) INSTALL AIR FLOW RATE CONTROL F5 WHEN AN ELECTRIC HEATER IS INSTALLED

[---] THE COMPONENTS INCLUDED IN THESE BOXES

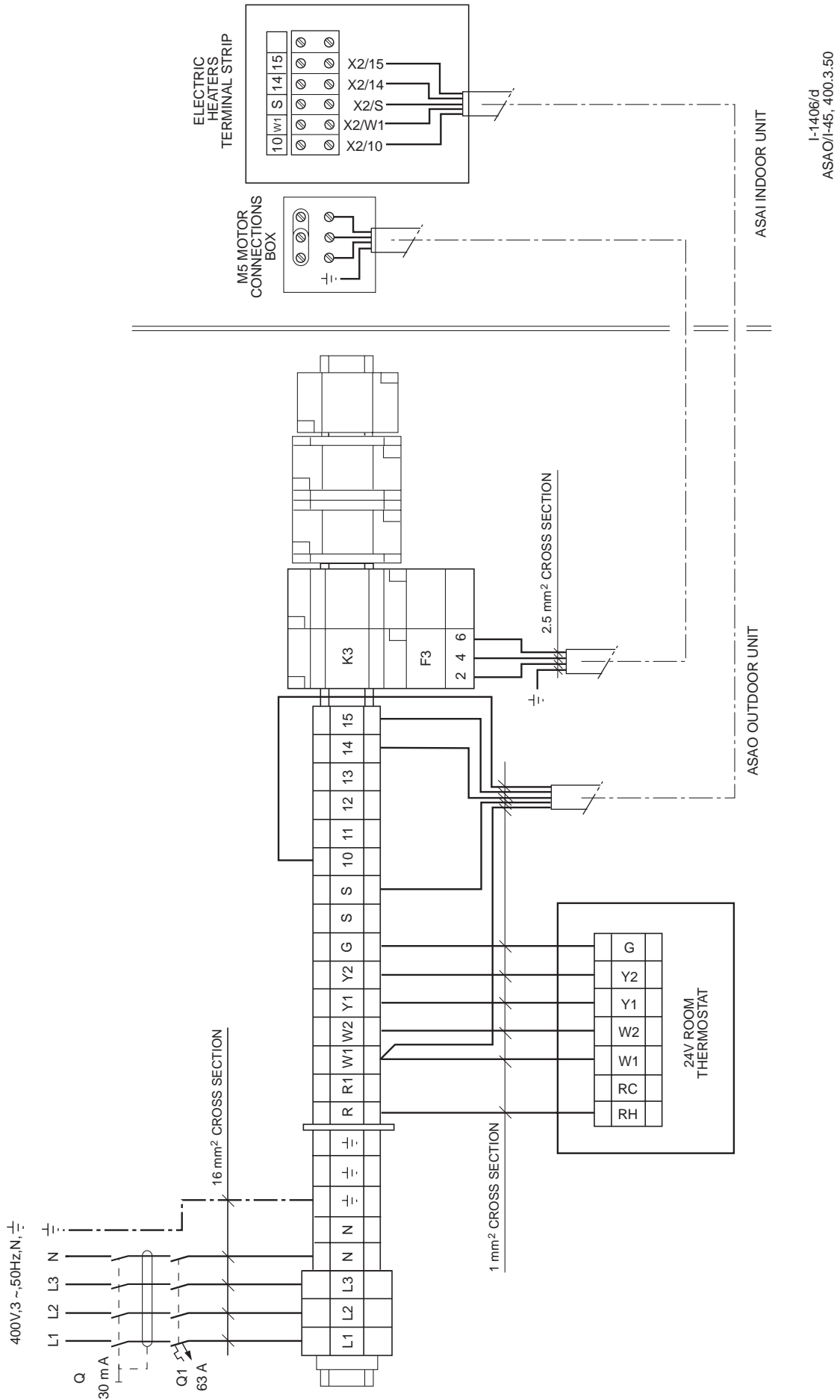
[---] ARE NOT SUPPLIED BY THE MANUFACTURER

[---] THE COMPONENTS INCLUDED IN THESE BOXES ARE STANDARD ACCESSORIES SUPPLIED BY THE MANUFACTURER

I-1087-2/d
ASAO/I-30, 400.3.50

Interconnection diagram

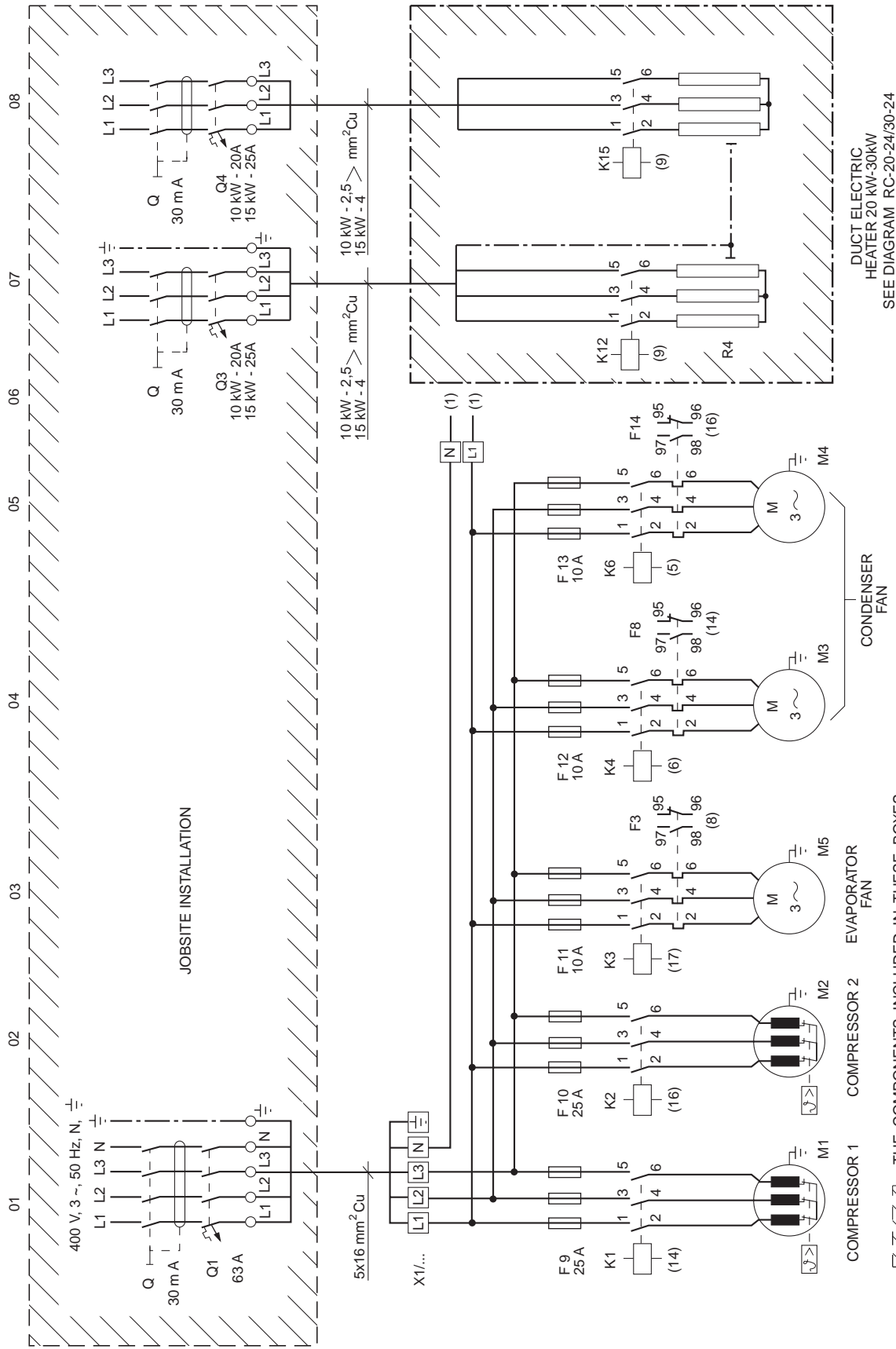
ASAO/I-45, 400.3.50



I-1406/d
ASAO/I-45, 400.3.50

Power diagram

ASAO/I-45, 400.3.50



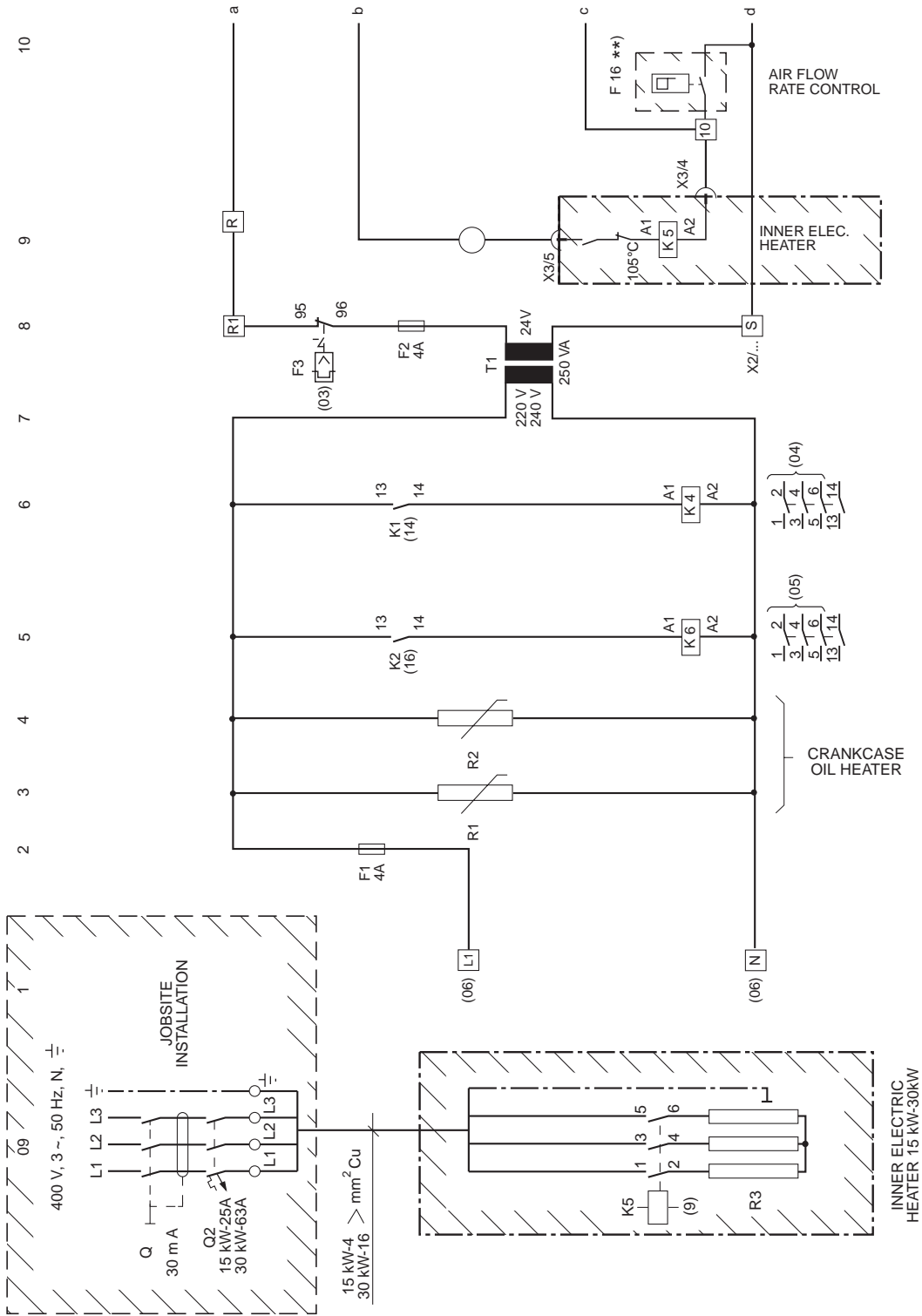
COMPRESSOR 1 COMPRESSOR 2 EVAPORATOR FAN
CONDENSER FAN

THE COMPONENTS INCLUDED IN THESE BOXES ARE NOT SUPPLIED BY THE MANUFACTURER

THE COMPONENTS INCLUDED IN THESE BOXES ARE STANDARD ACCESSORIES SUPPLIED BY THE MANUFACTURER

Main diagram

ASAO/I-45, 400.3.50 (1 of 2)



**) INSTALL AIR FLOW RATE CONTROL F16 WHEN AN ELECTRIC HEATER IS INSTALLED

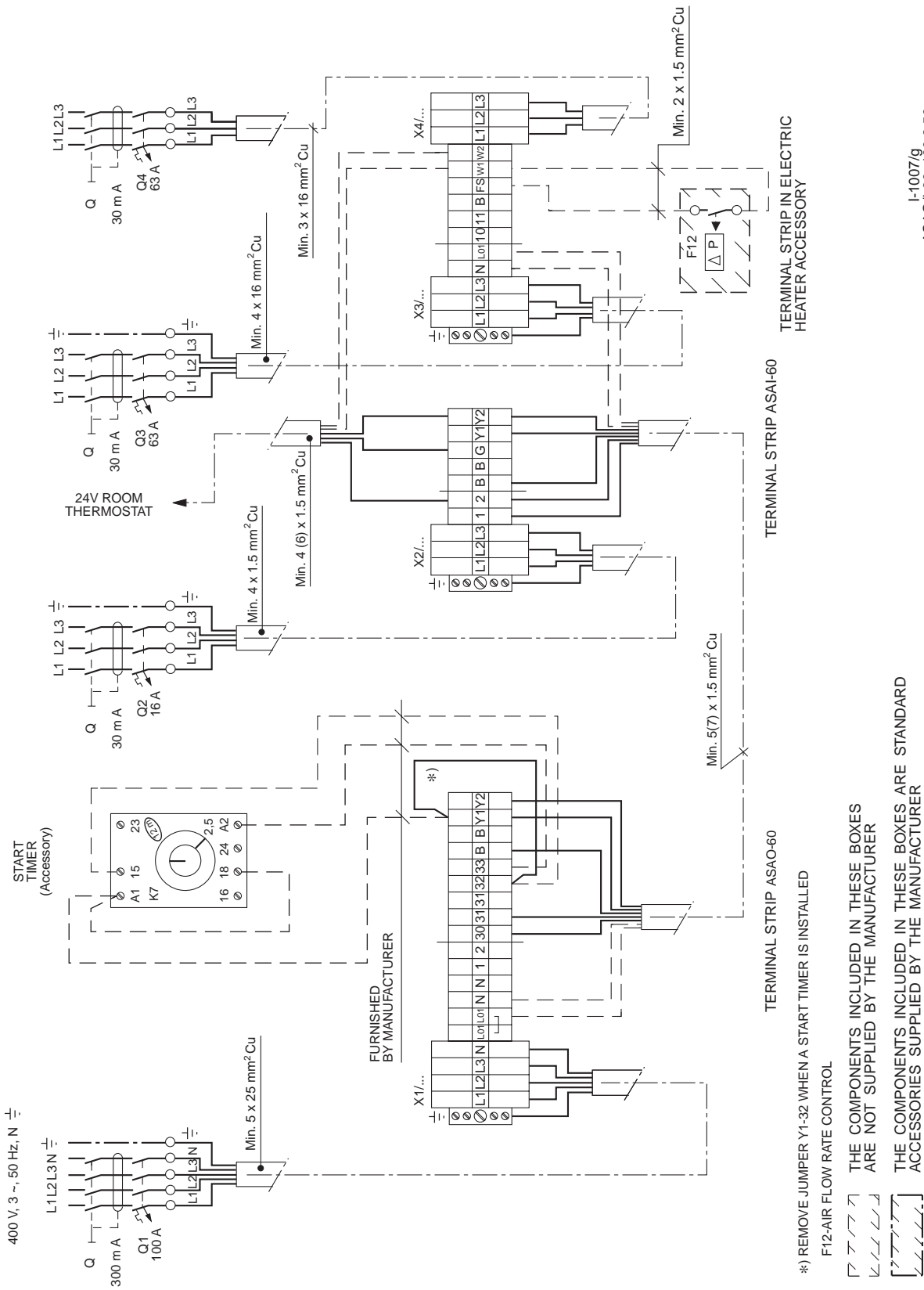
THE COMPONENTS INCLUDED IN THESE BOXES ARE NOT SUPPLIED BY THE MANUFACTURER

THE COMPONENTS INCLUDED IN THESE BOXES ARE STANDARD ACCESSORIES SUPPLIED BY THE MANUFACTURER

I-1114-2/f
ASAO/I-45, 400.3.50 (1 of 2)

Interconnection diagram

ASAO/I-60, 400.3.50

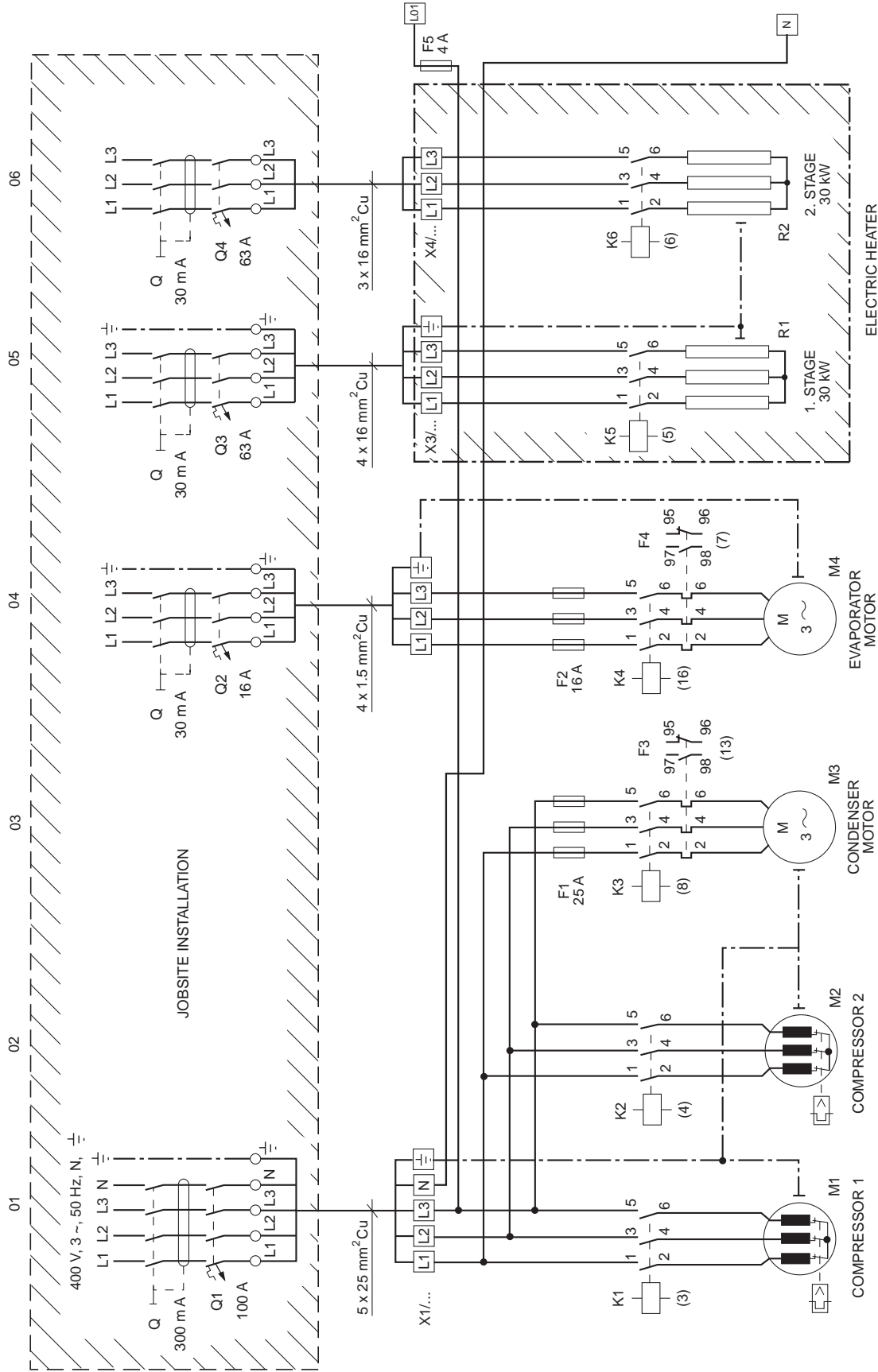



I-1007/g
ASAO/I-60, 400.3.50



Power diagram

ASAO/I-60, 400.3.50

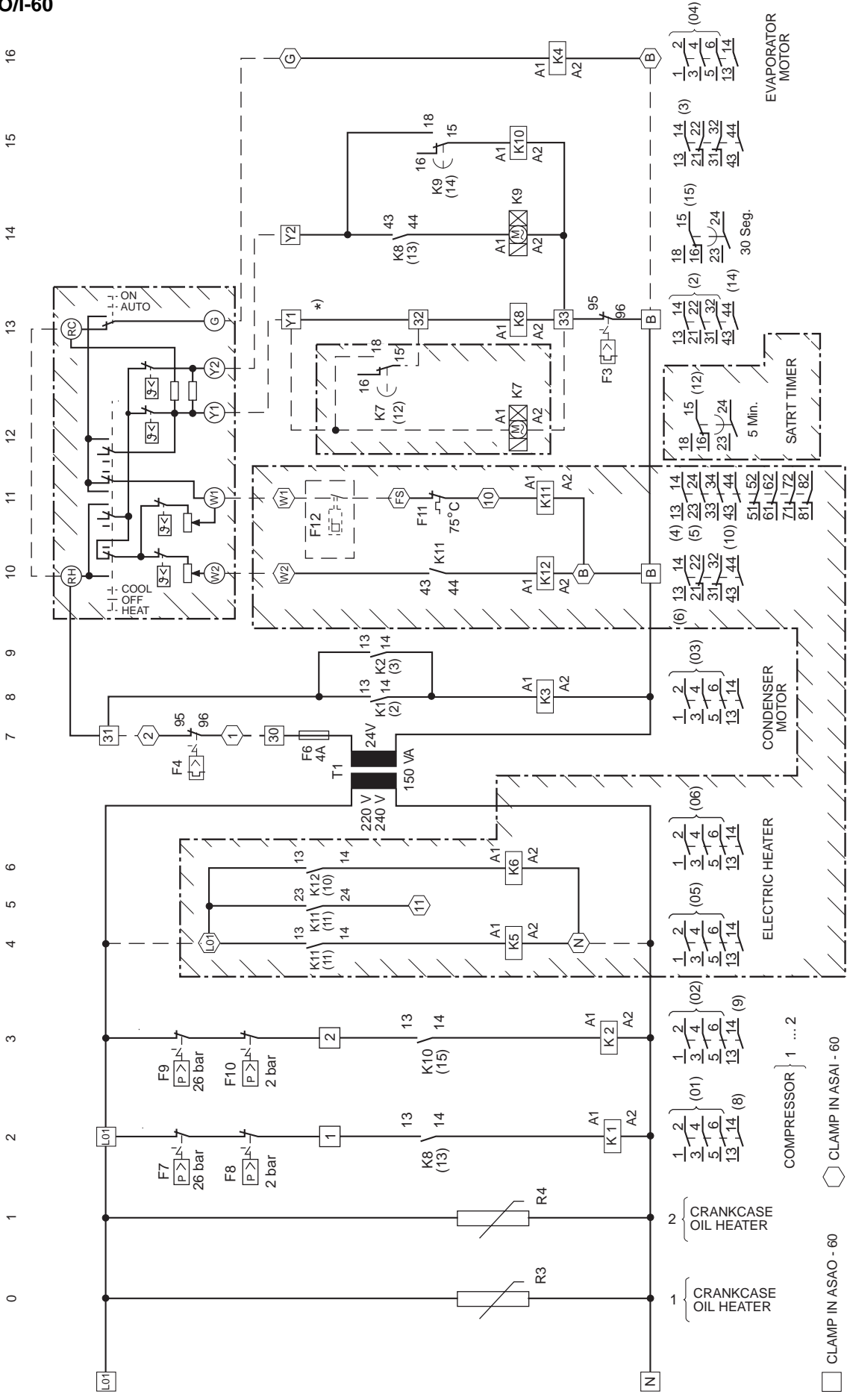


 THE COMPONENTS INCLUDED IN THESE BOXES ARE NOT SUPPLIED BY THE MANUFACTURER
 THE COMPONENTS INCLUDED IN THESE BOXES ARE STANDARD ACCESSORIES SUPPLIED BY THE MANUFACTURER

I-1005/h
ASAO/I-60, 400.3.50

Main diagram

ASAO/I-60



I-1006f
ASAO/I-60

*) REMOVE JUMPER Y1-32 WHEN A START TIMER IS INSTALLED

THE COMPONENTS INCLUDED IN THESE BOXES ARE NOT SUPPLIED BY THE MANUFACTURER
THE COMPONENTS INCLUDED IN THESE BOXES ARE STANDARD ACCESSORIES SUPPLIED BY THE MANUFACTURER

- CLAMP IN ASAO - 60
- CLAMP IN ASAI - 60
- X1/... [Symbol]
- X2/... (X3/... X4/...)

All data subject to change without notice.



DECLARATION OF COMPLIANCE ON MACHINERY
KONFORMITÄTSERKLÄRUNG FÜR MASCHINEN



MANUFACTURER:
HERSTELLER: **CLIMA ROCA YORK, S.L.**

ADDRESSE:
ANSCHRIFT: Paseo Espronceda, 278, 08.204 SABADELL

This machine complies with the basic demands of the EP Standards on machinery (Standard "EC" 89/392/CEE), including any modification of same.
Diese Maschine entspricht den grundlegenden Anforderungen der EG-Maschinenrichtlinie ("CE"-Richtlinie 89/392/EWG) sowie den diesbezüglichen Änderungen und den sie umsetzenden nationalen Bestimmungen.

APPLICATION OF THE MACHINE: AIR CONDITIONER/COOLING
ANWENDBEREICH DER MASCHINE: KLIMATECHNIK

TYPE: **ASAO/ASAI**
TYP:

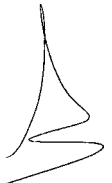
EC STANDARDS APPLIED: 89/392/EEC,89/336/EEC
ZUR ANWENDUNG GEBRACHTE EG- NORMEN:

MATCHING STANDARDS APPLIED: EN60204-1, EN292-1, EN292-2, EN563, EN294, EN953, EN55014,
ZUR ANWENDUNG GEBRACHTE HARMONISIERTE NORMEN: EN60555-2, EN50082-1

INTERNATIONAL STANDARDS AND TECHNICAL SPECIFICATIONS
APPLIED : EN ISO 9001, (Pr EN378)
ZUR ANWENDUNG GEBRACHTE INTERNATIONALE NORMEN
TECHNISCHE SPEZIFIKATIONEN:

PLACE: Sabadell, (España)
ORT:

SIGNATURES:
UNTERSCHRIFT:


IGNACIO SERRA
JEFE CONTROL DE CALIDAD