oceania
SOLUTIONS GROUP

High Wall Series

Technical IOM Manual

euroclima®

Your projects, challenges and requirements are our focus. We have a dedicated team that can engineer tailored solutions for your commercial HVAC application.

Oceania Solutions Group is an Australian owned business that focuses on providing engineered HVAC solutions. We value the importance of relationships with our clients and partners. Our team enjoy collaborating and solving complex 'design and construct' projects for your business with our product solutions.

Oceania Solutions Group are proud of our extensive portfolio and experience within HVAC industry. From industrial applications through to commercial air conditioning installations for tropical and high humidity environments.

Operating throughout Australia, New Zealand and the South Pacific Islands, we provide engineered technical data and commercial support for a wide range of HVAC solutions.

Our experienced team of HVAC professionals work hand-in-hand with market leading suppliers of HVAC solutions and equipment.

With international accreditation from Eurovent, CTI, AHRI, TÜV and AMCA, our products are rigorously tested and certified, meeting Australian and New Zealand standards and regulations.

Partnering with trusted international suppliers, we are available to provide an engineered solution for your next project.

Contents

Better air since 1963

Euroclima is a company with extensive international operations, four manufacturing facilities in Italy, Austria and India and more than 34,000 m² of production and offices. Euroclima specialise in the manufacturing and worldwide distribution of air handling units and fan coil units.

Euroclima has a well distributed network of sales and service across Europe, Asia, Middle East and Northern Africa. Our partners in various countries assume a surface covering responsibility for marketing, local servicing and optimal assistance.

The #1 partner for fan coil units

Euroclima offers a wide range of standardised and customised terminal units for residential and commercial buildings: hotels, offices, schools, stores and hospitals to name a few.

From simple, cost effective products for comfort applications, to specialised equipment such as double skin fan coils for marine or medical applications. Euroclima can provide you the right terminal units to meet your exact needs. Specialised products can be designed for individual projects with components such as EC motors or UVC lamps. All Euroclima terminals can be equipped with factory mounted controls.

High wall (HW)

The Euroclima HW unit is the optimal solution for wall mounting in hotels, apartments and offices for summer cooling and winter heating.

The units are equipped with elegant ABS casing, adjustable blades for optimal air distribution, high efficiency heat exchanger, drain pan, 3 speed fan, IR remote control, manual switch, signaling LEDs, removable, regenerable and washable air filter.

Product warranty

The Euroclima HW series, chilled water units are supplied with a parts warranty for either 12 months from start-up or 16 months from invoice date, whichever is to occur first.

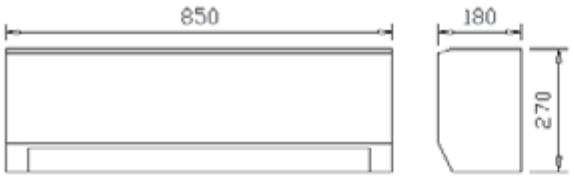
A parts and labour warranty can be obtained at the time of purchasing the units. Please contact your local Oceania Solutions Group representative for further details.

Technical data

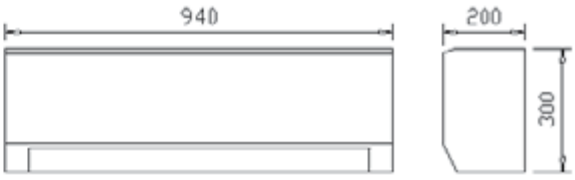
Technical Data					Cooling		Conditions					Heating	Sound
Unit	Model	Mode	Fan Speeds	Flow (l/s)	Total (kW)	Sen-sible (kW)	Air On (DB °C)	Air On (WB°C)	Air Off (DB °C)	T in (°C)	T out (°C)	Total (kW)	Lp (dBa)
HW	070-2R-1	Cooling Only	3	100	2.2	1.47	27	19.5	14.4	6.0	12.0	-	39
HW	090-2R-1	Cooling Only	3	156	3.35	2.17	27	19.5	15.0	6.0	12.0	-	42
HW	180-2R-1	Cooling Only	3	237	5.03	3.31	27	19.5	14.9	6.0	12.0	-	49
HW	070-2R-1	Reverse Cycle	3	100	2.2	1.47	27	19.5	14.4	6.0	12.0	2.69	39
HW	090-2R-1	Reverse Cycle	3	156	3.35	2.17	27	19.5	15.0	6.0	12.0	4.01	42
HW	180-2R-1	Reverse Cycle	3	237	5.03	3.31	27	19.5	14.9	6.0	12.0	6.12	49

Dimensional data

HW 070-090



HW 180



General Information

The specialised features of the HW fan coil allow for a varienty of installation applications, from light commercial to hotels and apartments. The HW is a perfect and stylish solution for cooling and heating in any space. The ABS casing, high efficiency heat exchanger and finned coil has been specially designed and manufactured to make the unit as compact as possible. The fan, condensation drain pan, leeds, IR control, manual switch, air filter all make the HW series an easy unit to install. The fan-coil is design and comes complete with adjustable fins to change the airflow direction (only with IR) and obtain the best air distribution in the room. Air filters are easy to remove, wash and clean.

It is compulsory to mount the electro valve: when the unit has reached the desiderate temperature, water does not continue to circulate into the coil of the air conditioner.

Cabinet:

Refined, elegant and modern design. Compact and suitable for all environments.

Terminal board:

With output with command with electrovalve 2 or 3 ways, 230V AC on/off

Air supply fins:

Fins automatically open and close with the fan turning on/off. The air flow can be manually adjusted to the left or to the right. Up/down adjustment is automatic thanks to the remote control.

Water coil:

Heat exchanger coil in copper pipe and aluminium fins. Joints provided with air vent bleed and hydraulic joints on the lower part to the left. Suitable for boiler hot water, low temperature water (solar panels, condensing boiler and heat pump), chiller cold water and glycol water.

Condensate drain pump:

Available only in 2-tubes coil (cooling or heating) version.

Fan:

Including one tangential fan coupled to the electric motor. Mounted on elastic and anti-vibration supports. Fan section statically and dynamically balanced, extra silent fan, designed to realize high air flow with low revolutions number. Designed according international rules 230V AC-Ph-50Hz.

Electronic chart:

Microprochip with several functions set by remote control

Bracket:

Strong thickness galvanized steel with holes for wall fastening. Screws not included.

Drain pan:

In ABS, with drain pipe.

Air filter:

Easy to remove, high efficiency, can be regenerated by water wash, blowing, suction. Made of polypropylene NAN cellular against powders and pollens.

Optional Accessories

Elec digital thermostats

Actuators 0-10v and on/off

2-3 way Chilled water valves and bypass

IR Remote

Important notes

Warning: the manufacturer and supplier are not responsible for the incorrect installation of hydraulic and electrical connections.

Please carefully read this manual before installing and operating the HW series fan coil unit. It is recommended this manual is kept readily available and referred to for additional information about the unit, operation and maintenance.

- The unit must be installed following the local standard, safety codes and guidelines. Please contact the seller, installer or a qualified specialists.
- Follow the instructions below or incorrect and improper use during installation can cause the loss of the warranty or parts guarantee.
- Maintenance must only be performed by qualified specialists.
- Unplug or disconnect the power supply before maintenance or accessing the internal parts of the unit.
- Do not install or use a damaged device.
- In case of malfunction, switch off the unit, unplug the power supply and return to the seller or qualified specialists.
- Dispose of the packaging material following the local environmental regulations.

Unit acceptance, handling and storage.

- At the time of the delivery, please verify the correspondence between the order and the delivery docket.
- Verify the packaging integrity and, if inconsistencies with the order, damage or discrepancies are found, they must be reported on the delivery docket and promptly signaled to the supplier and manufacturing company.
- The unit must be stored in spaces protected from bad weather with a temperature between -10°C and 55°C.
- The handling and installation of the unit must be performed with the highest attention to prevent any damage of fragile parts; these operations can be facilitated with the help of the following manual.

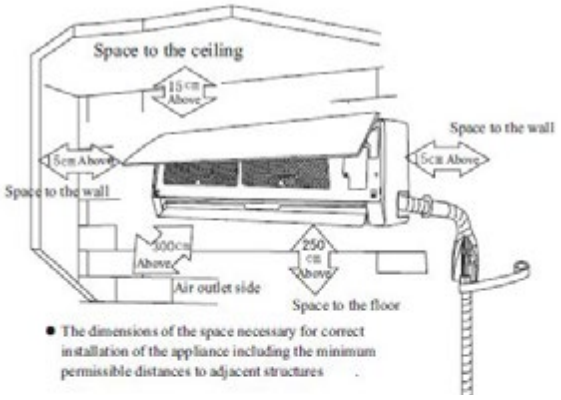
Basic requirements for installation position

Installation in the following places can cause malfunctions. If it is unavoidable, please contact a service center.

- Installations where strong heat sources, vapors, flammable gas or volatile object are emitted.
- Installations where a lot of salinities such as coastal environment exists.
- Installations where the oil (machine oil) is contained in the air.
- Installations where a sulfured gas such as the hot spring zone is generated.
- Other installations with special circumstance other than a normal environment, if in doubt please contact the local supplier.

Unit installation position selection

- The air inlet and outlet vent should not be obstructed by any object, make sure that the air can be distributed effectively throughout the entire space.
- Select a position where the condensing water can be easily drained out.
- Select a location where children can not easily access the unit.
- Select the wall location where it is strong enough to withstand the full weight and or any vibrations of the unit and will not create any noise.
- Be sure to leave enough space to allow access for routine maintenance; the height of the installed location shoul be 2.5m (where possible) or more from the floor.



Rear panel installation

- Always mount the real bracket panel horizontally using an accurate level instrument.
- Fix the real bracket panel using appropriate screws according to the type of wall.

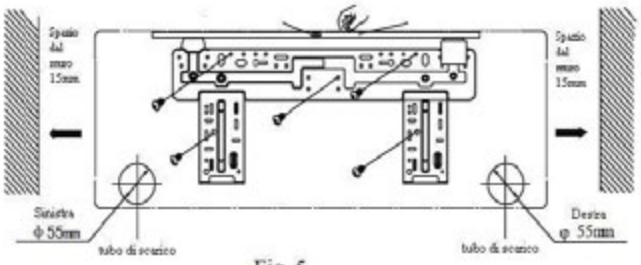


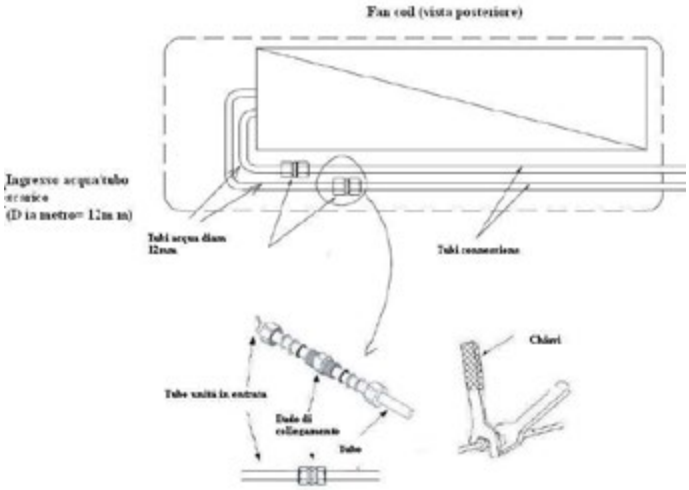
Fig. 5

Condensate drain connection

- For good drainage, the drain pipework must be positioned with a fall of at least 1-2%.
- Do not damage or kink the drain pipework, slight bend for installation by a qualified installer is acceptable.
- Insulation of the condensate drainage pipe will be reliant upon site conditions.

Hydraulic connection

- Comply with the inlet / outlet as shown on the labels placed on the tubes of the unit.



Installation and maintenance manual

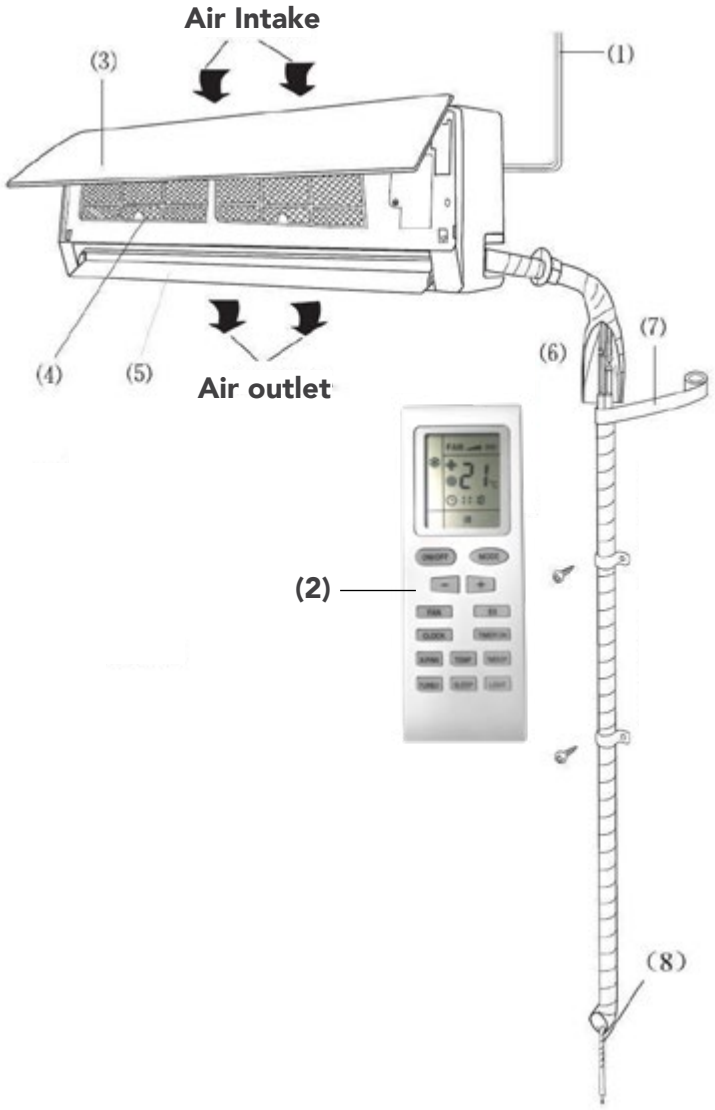
HW 070-090-180 WALL HYDRONIC TERMINAL UNIT

Installation

The unit installation work must be completed by qualified personnel according to the local rules and this installation and operation manual.

Before installing, please ensure you have contacted a local authorised installer or maintenance contractor. If the unit is not installed by an authorised contractor, any malfunction or warranty claim may not be accepted or resolved due to incorrect installation.

Unit description and dimensional information



Wireless remote control	
❄	Cold
💧	Dry
🌀	Fan
☀	Heat
⏻	On
88	Temperature set

Terminal Description	
1	Electrical supply cable
2	Remote controller
3	Frontal panel
4	Filter
5	Louvers
6	Wall plumbing
7	Insulation
8	Drain pipe

Operating limits

Maximum temperature of flow: 70°C
Minimum temperature of flow: 4°C
Maximum working pressure: 10bar
Minimum room temperature: 4°

HW 070 -090

HW 180

Electrical connections

The electrical connections must be performed by a qualified specialist, according to the national electrical standards in force (AS3000). Before making any connection the power must be turned off.

- Use the appropriate electrical wire gauge to the maximum drawn current as shown on the label of the technical data on the unit.
- Electrical connect respecting the installation instructions provided are attached, according to the HW series unit and accessories.
- After the electrical connection, all cables and wires must be securely fixed to the structure to prevent any snag during the maintenance operations to adjacent devices.
- The incorrect connection and/or the failure to respect the national electrical and safety regulations will void the warranty guarantee and any other responsibility of the manufacturer and distributor of the product.

Cleaning and maintenance

Before conducting any maintenance, make sure the power to the unit is turned off or disconnected.

It is recommended only a qualified specialist can intervene.

The only component of the fan coil that needs cleaning and maintenance is the filter. It is placed on the air intake (unless there is the breakage of other components).

The filter must be cleaned regularly, using a vacuum cleaner or washing/replacing the filter.

To perform this operation, follow the steps below:

- Carefully pull the panel from the specific angle by holding the two ends of the panel according to the arrow directions.
- Once open, you can pull the air filters downwards to remove it.
- Clean regularly or at a minimum every change in season, using a vacuum cleaner or washing it.
- Re-insert clean and dry air filters and close the front panel of the unit.
- To maintain the maximum efficiency of the unit, it is advisable to replace the air filters every 2 years.

Step 1

Open the cover by pulling up from the sides

Step 2

Remove the filter by gently pulling down

Step 3

Replace the filter and close the cover

Points to control	Possible causes
Has the unit been secured to the wall correctly?	The unit may drop, shake or emit noise or vibration
Have you conducted a water leakage test?	It may cause insufficient cooling/heating capacity
Is application of cooling/heat insulation sufficient?	It may cause condensation and cause water to drip
Is water drainage sufficient?	It may cause condensation and water pooling
Is the voltage in accordance with the rated voltage indicated on the HW name plate?	It may cause electric malfunction or damage the fan motor
Is the electric wiring and piping connection installed correctly and securely?	It may cause electric malfunction or damage.
Has the unit been connected to a secure earth connection?	It may cause electrical leakage
Is the power supply enclosed in appropriate conduit?	It may cause electric malfunction or damage the part
Have the inlet and outlet pipes been bleed?	It may cause insufficient cooling (heating) capacity due to air in the system

Malfunctions and corrective actions

Fan does not run
Corrective Actions:

- Make sure that the machine is powered.
- Check if switches or fuses are tripped.
- Check the correct wiring of the unit (qualified personnel only).
- Check if the thermostat is set in the right way.

Low air flow
corrective actions:

- Select an higher fan speed.
- Replace or clean the filter.

The appliance leaks water
corrective actions:

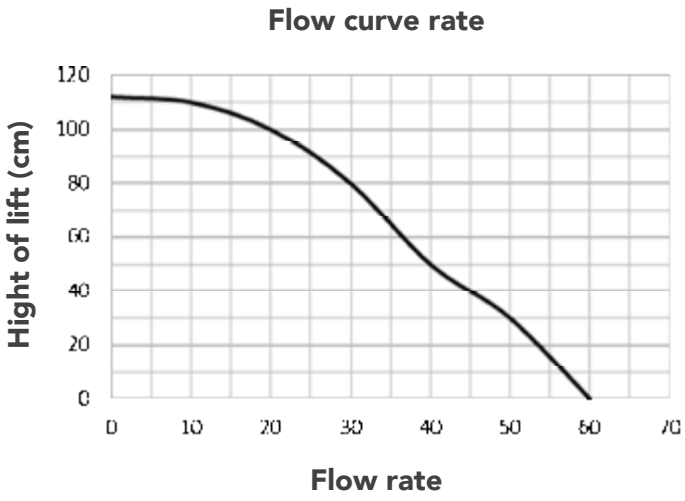
- Monitor and improve the insulation of the water pipes.
- Tighten the water attacks.
- Fix the unit perfectly horizontally.
- Clean the dip tray.
- Check and clean the pipe of the condensate drain.
- Monitor the proper functioning of the condensate drain pump.
- Check the slope of the condensate collection tray.

The unit does not cool/heat
corrective actions:

- Lower/raise the set temperature on the thermostat.
- Check that the chiller/boiler and circulation pump are turned on.
- Bleed the water pipes.
- Check if the thermostat is not installed in a warmer/cooler area.
- Clean the air filter.

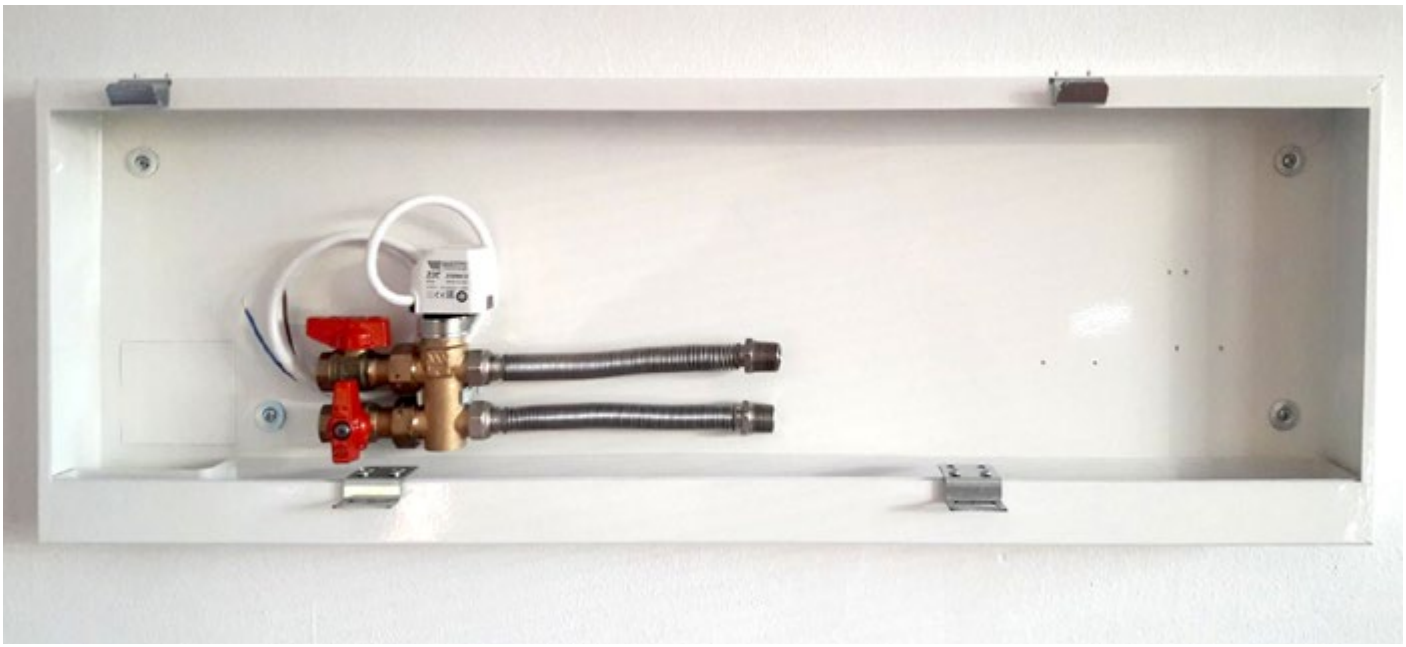
All technical data and dimensions shown are subject to change without prior notice from the manufacturer

Condensate drain pump



Volt	Frequency	SWL (at 30 cm)	Absorption	Insulation	Power
230 V±10%	50-60 Hz	< 26 dB(A)	62 mA	Class B – IP54	8 W

Wall cabinet concealed pump and valves



Manual for IR wireless remote control

This wireless remote control is a universal type and it is employed for various types of terminal units use only the functions of the buttons that are described in this manual.

Functions of wireless remote control

Modes of unit operation:

- Auto (not used).
- Cool (Cooling): in this mode, the unit cools and dries the room; press - / + for set a lower temperature than the ambient to start that cycle.
- Dry (Dehumidification): in this mode, the unit alternates cycles of cooling and ventilation; the operation is automatic: it set alone the fan speed.
- Fan (Ventilation): in this mode, the unit work only in ventilation.
- Heat (Heating): in this mode, the unit heats the room; press - / + for set a higher temperature than the ambient to start that cycle.

Fan

Fan speed adjustment:

Press this button to set the fan speed.

AUTO (automatic by the need cool/heat).

- (min speed)
- - (med speed)
- - - (max speed)

Louvre

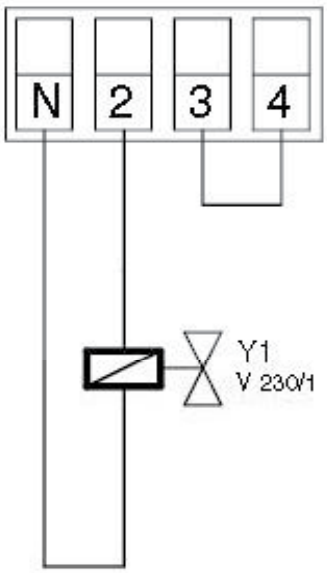
Is used for adjusting the air direction; the selection of this button performs the movement of the Louvre (flap) in each possible position until returned to automatic cycle.

COD: HW.T.V.01.14
HW+IR control+V connection

Terminal	Description
N	Valve power supply N 230V
2	Valve consent L 230V
3-4	ON-OFF remote (ON-close / OFF-open)

Note:

On the line of power supply always install differential switch and/or as required by national regulations and respect neutral/phase.

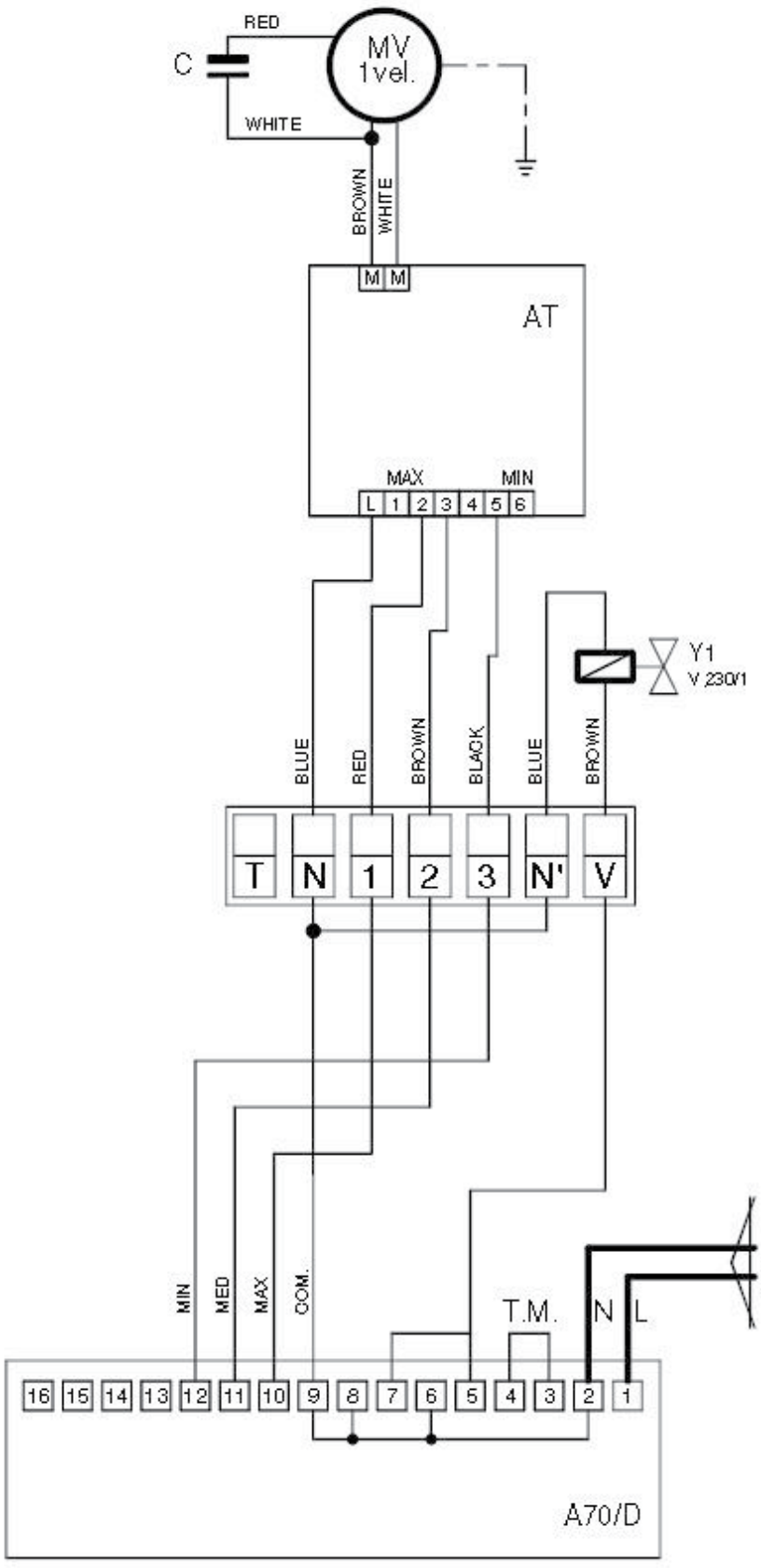


By customer care

Power supply cable

POWER SUPPLIED BY CUSTOMER
V230/1/50Hz

COD: HW.A70/D.01.14
HW+A70/D+V connection



Terminal Description	
T	Earth
N	Fan Common N
1	MAX Speed L
2	MED speed L
3	MIN speed L
N'	Valve common N
V	Valve consent L

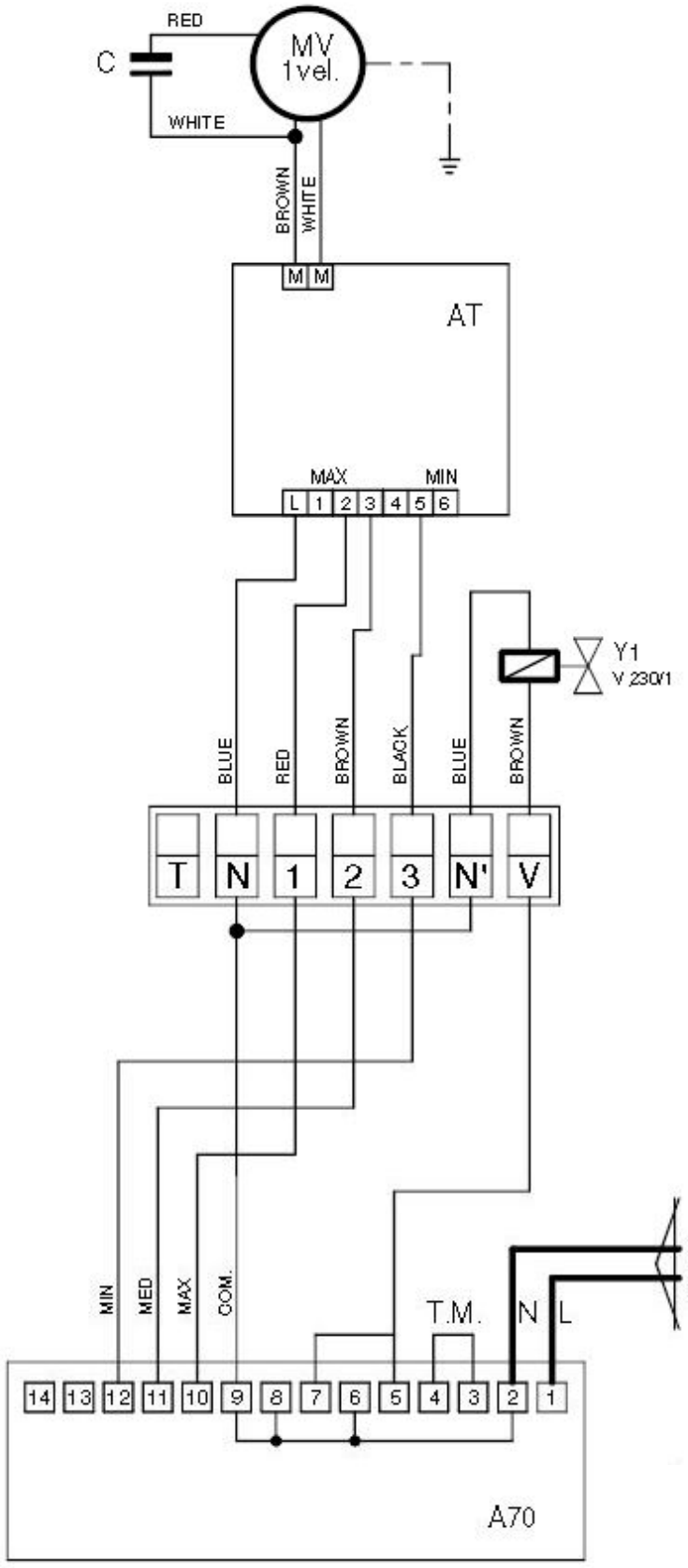
Condenser	
1µF	HW 070 / 090
1.5µF	HW 180

Note:

On the line of power supply always install differential switch and/or as required by national regulations and respect neutral / phase.

POWER SUPPLIED BY CUSTOMER
V230/1/50Hz

COD: HW.A70/D.01.14
HW+A70+V connection



Terminal Description	
T	Earth
N	Fan Common N
1	MAX Speed L
2	MED speed L
3	MIN speed L
N'	Valve common N
V	Valve consent L

Condenser	
1µF	HW 070 / 090
1.5µF	HW 180

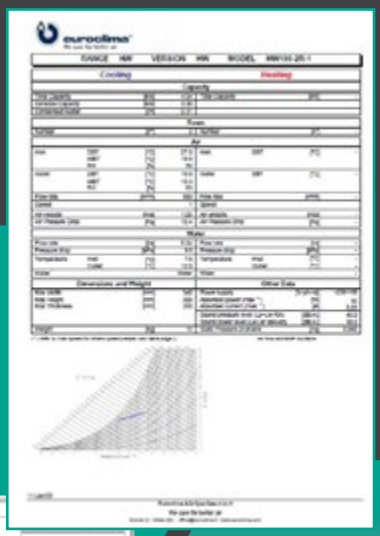
POWER SUPPLIED BY CUSTOMER
V230/1/50Hz

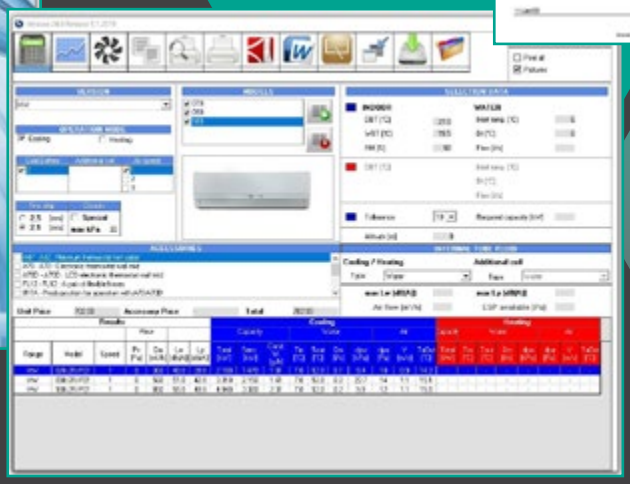
Note:

On the line of power supply always install differential switch and/or as required by national regulations and respect neutral / phase.

Did you know?

Euroclima have an extensive range of interactive Eurovent certified software available to support you with all of your air handling units and fan coil unit needs.





Notes

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