



SELF CONTAINED TYPE MARINE AIR CONDITIONER

INSTALLATION, OPERATION AND MAINTENANCE MANUAL

Brand Name: COOLMAR

MODEL NO

MAP 008

MAP 010

MAP 012

MAP 015

MAP 018

MAP 020

MAP 022

MAP 024



TABLE OF CONTENTS

Page No

1.	PREFACE	3
2.	PRODUCT DESCRIPTION	3
3.	TECHNICAL SPECIFICATIONS TABLE	4
4.	UNIT WORKING CONDITIONS	5
5.	TRANSPORTATION AND STORAGE	5
5.1.	Transportation	5
5.2.	Storage	5
6.	LOCATION AND INSTALLATION	6
6.1.	Unit's Location	8
6.2.	Ducting	8
6.3.	Refrigerant Piping	9
6.4.	Drain System	9
6.5.	Condenser System	10
6.6.	Electrical Connections	10
7.	UNIT SAFETY	11
7.1.	Warnings and Precautions	11
7.2.	Warning Signs	11
8.	PRELIMINARY CONTROLS BEFORE START UP	11
9.	OPERATION	12
9.1.	Warnings	12
9.2.	Running the Unit	12
9.2.1.	Remote Control Functions	12
9.2.1.1.	The Features That Can be Controlled by the User	12
9.2.1.2.	The Features That Can not be Controlled by the User	13
10.	MAINTENANCE AND CLEANINIG	13
10.1.	Cleaning	13
10.2.	Maintenance	14
10.2.1.	Annual Maintenance	14
11.	SERVICE	14
11.1.	After Sales Service	14
11.2.	Spare Parts List	16
11.2.1.	MAP 008, MAP 010	16
11.2.2.	MAP 012, MAP 015, MAP 018	17
11.2.3.	MAP 020, MAP 022, MAP 024	18
11.2.4.		19
11.2.5.		20
11.3.	Trouble Shooting and Correction Tables	21
11.4.	Name Plate	22
11.5.	Communication	22
12.	ANNEX	22

1. PREFACE

This manual has prepared to give general information about the description, operation, installation and service of COOLMAR SELF CONTAINED MARINE AIR CONDITIONERS. Our group manufactures COOLMAR Self Contained Marine Air Conditioners at Karabağlar İzmir facility by İzmir Klima Sanayi İnşaat Taahhüt Turizm ve Ticaret Ltd. Şti. and having sales office in Yenişehir, Turkey by Pratikel Dış Ticaret Ltd. Şti.

İzmir Klima Sanayi Ltd. Şti. was established at 2002 by the combination of three ideas developed since the beginning of 90's and which has undertaken the responsibility of serving innovative demands with know how, experience and creativity. In 2005, Coolmar branded marine air conditioning systems are approved by TÜV Germany and our group started export activities by own commercial company Pratikel Dış Ticaret Ltd. Şti.

The approaching tourism market and which is one of the needs of this market; marine self contained and split type air conditioners, water chillers, fan coils and refrigerators which are all manufactured of chrome-nickel stainless steel sheet metal resistant to sea water, equipped with digital remote control with display of room temperature and failure codes, high and low pressure switches with micro control, silent fan motors and rotary type compressors. The air conditioners are remarkable with compact dimensions and this feature solves the problem of installation place.

Our group of companies:

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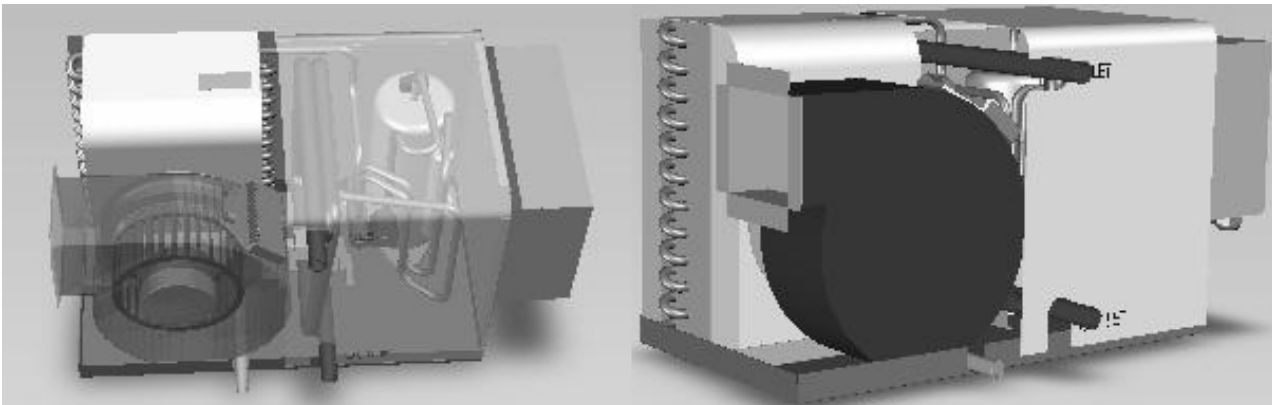
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You must read throughout this manual carefully before operating your unit and please keep it in a place where the service personal can easily reach.

2. PRODUCT DESCRIPTION



COOLMAR Marine Self Contained Type Air Conditioners are water cooled units designed for air conditioning. Thanks to the heat pump function the unit can heat in winter and cool in summer time. Condenser is made of 90/10 Copper/Nickel composition material and can be cooled with sea water. The casing is made of chrome, which prevents noise emission of compressor and protects the mechanical and electrical equipment against the outer effects. Including the couplings, both components on the unit are made of chrome. The fan body can turn between 0 – 90 for the convenience during the air duct installation.

3. TECHNICAL SPECIFICATIONS TABLE

SPECIFICATIONS	Model / Unit	MAP 008	MAP 010	MAP 012	MAP 015	MAP 018	MAP 020	MAP 022	MAP 024
Cooling Capacity	Btu/h	7.500	9.500	12.200	15.000	18.200	20.000	22.100	24.600
Heating Capacity	Btu/h	7.600	9.700	12.600	15.800	18.700	20.300	22.600	25.000
Power Consumption	W	680	900	1.270	1.600	2.000	2.200	2.400	2.630
Current	A	3,3	4,1	5,8	7,2	9,3	10,8	11,2	12,1
Length	Mm	490	490	585	625	625	625	625	625
Width	Mm	270	270	270	320	320	320	320	320
Height	Mm	320	320	340	370	370	370	400	400
Net Weight	Kg	27	28	33	42	45	46	48	54
Air Flow	m ³ /h	275	320	520	650	780	950	1.100	1.250
Fan Motor Power	W	60	70	100	110	110	115	120	120
Condenser Pipe	Inch	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Drain Pipe	Inch	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"
Duct Diameter	mm	100	100	125	125	2x125	150	150	150
Proposed Fuse for the System	A	C 16	C 16	C 16	C 20	C 20	C 25	C 25	C 25
Max Pump Current That can be Connected to the Unit Electrical Box	A	4	4	4	4	4	4	4	4
Condenser water flow	l/m	10	11	13	15	18	20	20	22
Voltage	V	230							
Frequency	Hz	50							
IP Class		IP 22							
Feeding Cable Cross Section /Type		3 x 2,5 / Tin Coated							

*Not: The manufacturer preserves the right to change the electrical, cooling and control equipment with the equivalent.

Nominal Capacity Conditions;

Cooling Entering Air : 19°C / 27°C (YT/KT)

Entering Water : 28°C

Heating Entering Air: 16°C / 22°C (YT/KT)

Entering Water : 10°C

4. UNIT WORKING CONDITIONS

The unit has designed to work indoor; it's not suitable for outdoor use.

Min sea water temperature in heating mode	: 5°C
Max sea water temperature in cooling mode	: 35°C
Max working pressure of sea water cooling system	: 2 bar
Max working environment temperature	: 42°C

5. TRANSPORTATION AND STORAGE

5.1. Transportation

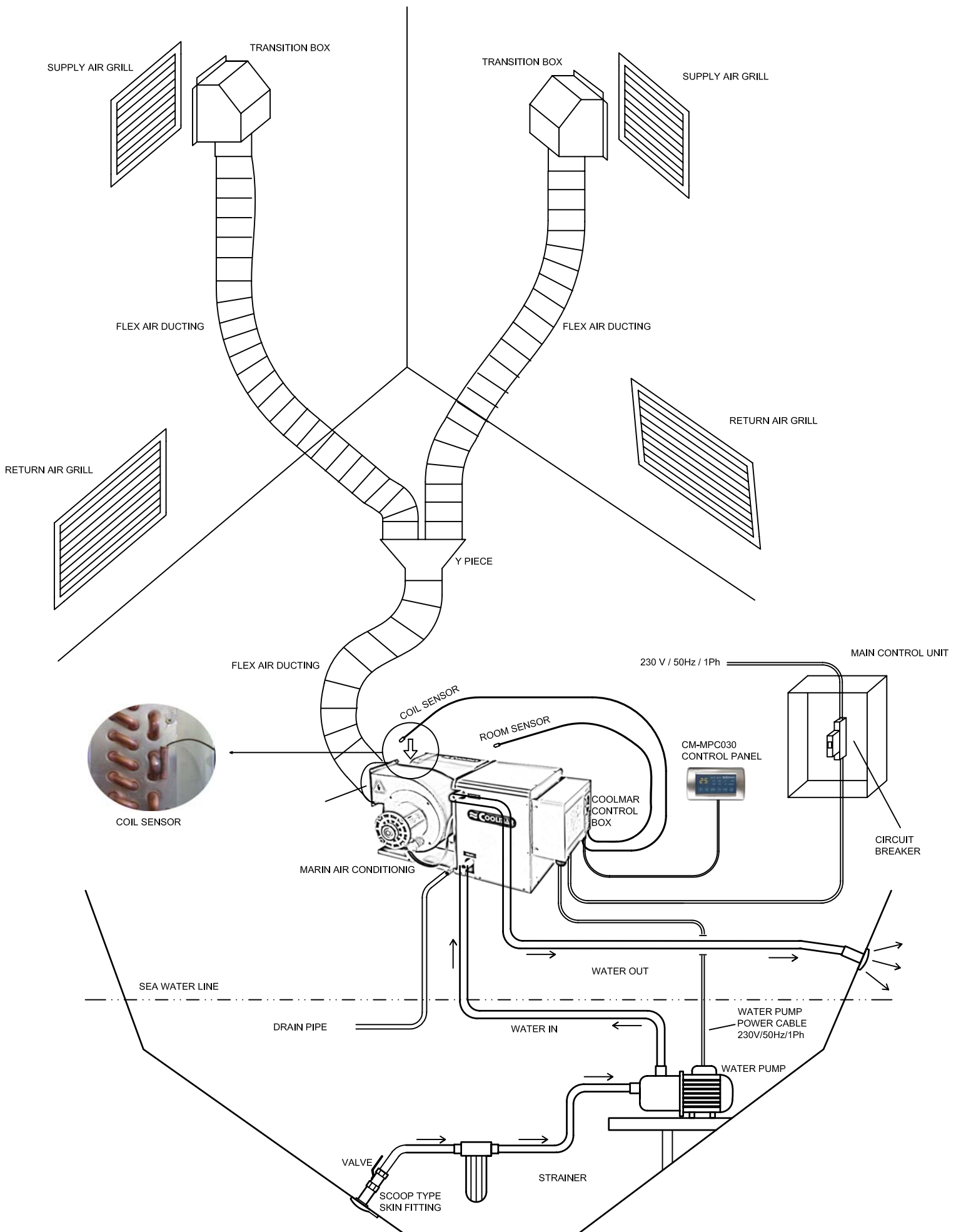
1. The unit can be carried with or without the palette.
2. Lift and carry the unit balanced.
3. **Do not forget that the compressor side is heavier.**
4. Do not lean on the unit a side during transportation and do not lean on any side more than 15°.
5. During putting on the unit on floor do not leave from a high level. Do not make pressure and impact on the unit.
6. If the weight of the unit is not suitable for carrying with man power you must use a vehicle.
7. If it's necessary to change the place of the unit obey the rules listed above.
8. Do not lift the unit by handling from the fan body.

5.2. Storage

If you need to store the units after buying or changing the place until the operating time obey the rules listed below.

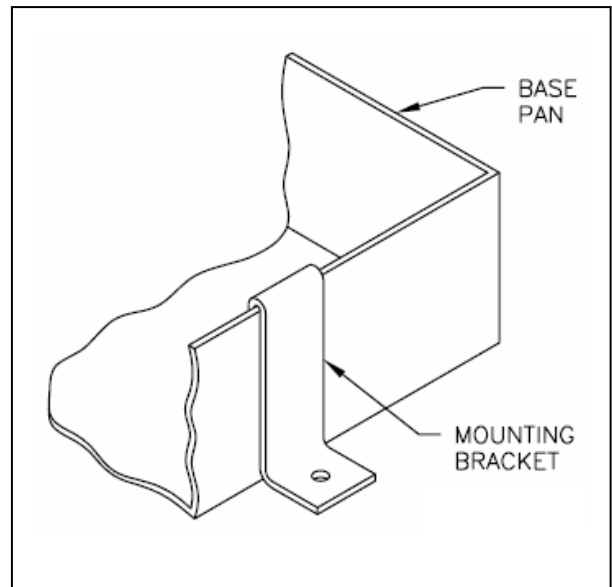
1. Store the unit in a closed area away from moisture and dust.
2. Store the unit in plastic packaging that will prevent your unit's electrical, cooling and metal equipment from wearing out and damaging.
3. Obey the rules listed at 5.1. during transportation.
4. The temperature at the storage area should be between $-5^{\circ}/+38^{\circ}\text{C}$.

COOLMAR SELF-CONDENSING TYPICAL INSTALLATION



6.1. Unit's Location

1. Before locating the unit and beginning the installation read this manual carefully.
2. Remove the package and destroy the packaging waste obeying the rules at your area's waste instructions without damaging the environment.
3. Take preventive actions not to be reached by children to the plastic, paper, styrofoam and wood package materials.
4. Place the unit on a flat surface after removing the package.
5. **Do not ever lean the unit on parallel to the floor or upside down.**
6. Make sure that the surface that the unit will be placed is balanced and free from height differences.
7. Place the unit at a closed area away from excessive air circulation, heat source like radiator or direct sun light.
8. Do not place the unit in the bilge or engine room and insure that the selected location is sealed from direct access to bilge and/or engine room vapors.
9. Do not install in spaces containing gasoline engine, tanks, LPG cylinders, regulators, valves or fuel line fittings.
10. For easy servicing and maintenance 30cm distance should be left at the electric box and condenser piping side.
11. To fix the unit, unit mounting brackets should be placed on the base pan as it was shown on the drawing and fix at the installation place by using screws.
12. Install the room sensor to the most suitable place away from a heat source like radiator, oven etc, direct sun light and that will be possible to sense the unit return air temperature directly and it's own cable length will permit (do not make any adding to the sensor cable).
13. Make sure that the coil sensor has fixed on the evaporator's kurve. If not fix it.



6.2. Ducting

The fan body can turn between 0° – 90° for the convenience during the air duct installation. During ducting do not forget that the air flow is critical for the system performance. The ducting should run as straight, smooth, taut and without turns as possible. If the turn or bend is necessary at the ducting, we recommend that the turns not to be sharp and bend to be installed with 90° apparatus.

1. Turn the fan body and position through the outlet grill as to maintain the straight air circulation.
2. Loosen the collar screw to turn the fan body and after positioning the fan tighten the collar screw.

3. Fix a flexible duct with collar which has enough length between the fan outlet and the air grill. Make sure that the duct is isolated.
4. Install the supply air grille as high as possible in a location that will provide uniform air distribution throughout the cabin, grille louvers should be directed to the position that does not cause inconvenience.
5. The unit will make free aspiration, that's why install the return air grill should be placed as close as possible to the unit.
6. The return air grille should be installed as low and close to the a/c unit as possible to insure direct uninterrupted airflow to the evaporator. The return air grille should have a minimum 10mm of clearance in front of it.
7. In no instance should a supply air discharge be directed towards a return air grille, as this will cause the system to air short cycle.

6.3. Refrigerant Piping

The refrigerant gas piping has made and gas charged to the unit during the manufacturing. For process you need to follow during the service check 11.1.

6.4. Drain System

The drain piping should be done for removing the condensate water.

1. Fix a 5/8" hose to the drain outlet with a collar.
2. Install the condensate drain hose downhill from the unit an appropriate slope and neither a cross section shrinking nor a height should be.
3. For installation on sailboats that heel over 15° position the unit so that the drain pan drain port and starboard teed together.
4. After finishing the piping check the water flow by pouring water to the drain pan.



Do not terminate condensate drain line within 1m of any outlet of engine or generator exhaust systems, nor in a compartment housing an engine or generator, nor in a bilge. Smoke and vapors can cause danger by running through the drain system in to the cabin.

6.5. Condenser System

The condenser is sea water cooled. That's why a pump and piping should be added to the system to carry the sea water to the unit.

1. Install a pump with the related piping that will not exceed the limits listed on the Technical Specifications Table.
2. Fix $\frac{3}{4}$ " hoses with collars for the piping between the pump and unit's condenser.
3. Make sure that a water filter has installed in front of the sea water pump.

6.6. Electrical Connections

1. The unit's feeding voltage is 230V / 1pH / 50Hz.
2. Make sure that the electrical system that the unit will be connected has made by competent and experienced personnel only complying with EN 60204-1.
3. If it's necessary ask for our company's service.
4. During the service use the electrical wiring diagram and the document about remote control attached to this manual.
5. Connect the electric line, fuse with min 3mm contact opening, min 30mA RCD and phase cut off switch for each unit.
6. The electrical connections should be made to the terminals in the unit's electrical box. The terminals have labeled for the correct connection of electrical feeding, grounding and pump connections.
7. Make the pump electrical connections. The max current value of the pump that can be connected to the unit's electrical box has listed on the Technical Specifications Table. Do not exceed this value.
8. Make the remote control electrical connections.
9. All the connections should be made complying the wiring diagrams attached with this manual and electrical box.
10. The feeding cable should be 3x2,5 tin coated.
11. The grounding of the unit should be connected to the ship's grounding system.
12. The electrical box has fixed with 4 screws on the unit. If it's necessary the electrical box can be removed and fixed to an other surface.
13. The cable between the unit and electrical box is 1.1m long. Do not bend or extend the cable during the installation.

7. SAFETY

7.1. Warnings and Precautions



All the safety precautions on this unit have already been taken. If the rules described in this manual and listed below will be obeyed the unit will not cause any risk for user, service personnel and the environment.

1. Protect the unit against every kind of outer effect.
2. Before the cleaning and maintenance processes turn off the unit's phase cut off switch and main electrical switch off the system.
3. Make sure that the energy has cut off before touching the live parts.
4. Do not touch the unit with dry hands or cotton while it's running.
5. Do not touch any part of the unit with the purpose of service and maintenance while it's running.

7.2. Warning Signs

The unit has labeled with this safety signs. Please comply with the instructions.



Fan is working



Electrical shock risk



Warning

8. PRELIMINARY CONTROLS BEFORE START UP

Make the checks listed below before running the unit:

1. Read this manual throughout carefully.
2. Make sure that the electrical feeding is 230V / 1Ph / 50Hz.
3. Make sure that the grounding connections have made and the electrical connections complies with the standard EN 60204-1.
4. Make sure that electrical line equipped with fuse with the contact opening min 3mm and phase cut off switch.
5. Make sure that the duct, drainage, electrical and the condenser system connections have made complying with the instructions listed at 6.

6. Make sure that the unit's cut off switch and the main switch turned off and check by hand and visually taking care of the moving and rotating parts.
7. Clean the foreign materials (dust, wood shavings etc) that can clog the evaporator, air filter and drain from the unit surrounding.
8. Check the CONDENSER water flow from the condenser water outlet, complies with the "condenser water flow" listed on the Technical Specifications Table.

9. OPERATION



9.1. Warnings;

1. The unit should be installed by the competent service personnel only.
2. The unit's working voltage is 230V. Make sure that the generator's voltage within the 230V ± 10V range.
3. Make sure that the duct, drainage, electrical and the condenser system connections have made in a right way.
4. Make sure that the temperature set value is right.
5. Make sure that the air flow has not been terminated in front of the supply and return grills.

9.2. Running the Unit

1. Turn on the cut off switch.
2. Push the on/off button on the remote control and turn on the unit.
3. Push the MODE button on the remote control and chose heat, cool or fan mode. The lamp near the selected mode will light.
4. Push the FAN button on the remote control and chose the fan speed. The lamp near the selected speed will light.

9.2.1. Remote Control Functions

9.2.1.1. The Features That Can be Controlled by the User

1. On/Off
2. Fan Speed: 3 fan speeds can be selected (high, medium and low). The AUTO fan mode can also be selected as the fan speed. This mode will drive the fan speed from high to medium and low according to the difference between the room temperature set value and the real value.
3. Temperature Set: The room temperature can be set to any value between 15°C – 30°C.

4. Auto Start / Auto Stop: This mode will turn on the unit till 15 hour if it's not running and turn off if it's running.
5. Room Temperature Display: The digital display shows the real room temperature.
6. Mode Selection: Unit can run at 3 different modes; cooling, heating and fan.
7. Sleep Mode: This mode will rise the set temperature value 1°C while the unit is running at cooling mode and reduce 1°C while the unit is running at heating mode with the aim of comfort and energy saving. This function will be put into use automatically when the SLEEP button pushed.

9.2.1.2. The Features That Can Not be Controlled by the User

1. Observer: There is a circuit for observing the microprocessor's running in the system.
2. Compressor Delay Protection: The putting into use of the compressor will be delayed because of the safety reasons after it has turned on again.
3. Compressor Least Protection: The compressor will keep on running 24sec more after it has put into use even if it has been turned off by the user.
4. Compressor State: The compressor's state can be watched from the lighted LED display on the remote control.
5. Recorded Memory (auto): After the energy cut off, the remote control will restart the unit with the previous set values.
6. Preheating: In the cold weather and at the start, the running of the fan will be protected till the outlet air temperature value reach to a certain level.
7. Freezing Function: The compressor will automatically cut off when the evaporator coil temperature reaches below the 0°C.
8. Heat / Cool Changing Protection: To protect the system, when the heat / cool mode changed the unit's putting into use has delayed.

10. MAINTENANCE and CLEANING

10.1. Cleaning



Do not use sharp, corrosive and chemical materials during the cleaning process.

1. Before beginning cleaning process turn the unit's cut off switch and the main switch off.
2. Take out the filter by pulling up after loosening the nails on the coil.
3. Place the filter on a clean, dry and flat surface and remove the accumulated dust with a vacuum cleaner.
4. Wash the filter with water and detergent. (no solvents)

5. Leave the filter to dry in a ventilated place in the sun.
6. Replace the filter and tighten the nails when it's perfectly dry. It's recommended to repeat this process in every 15 days.
7. Check the drain connections. If there will be any blockage because of accumulated dirt, the condensate water can run over to the out of the drain pan.

10.2. Maintenance

There isn't any maintenance work that can be done by the user on the unit. Ask for our service for the maintenance.

10.2.1. Annual Maintenance

This maintenance work should be done by the service personnel.

1. Check the electrical motors and the fans. Measure the absorbed current.
2. Check the electrical connections. Tighten if there is looseness. Replace if there is crack or broken piece on the terminal block. Replace if there is oxidized cable end sleeve.
3. Check the refrigerant system. Recharge gas if there is leakage. Research the reason of leakage and make the necessary.
4. Check the safety and control equipment functions and settings.
5. Check the temperature displays with a calibrated thermometer. If there is deflection more than 1°C replace the display.
6. Check the sea water filter, clean or replace if clogged.

11. SERVICE

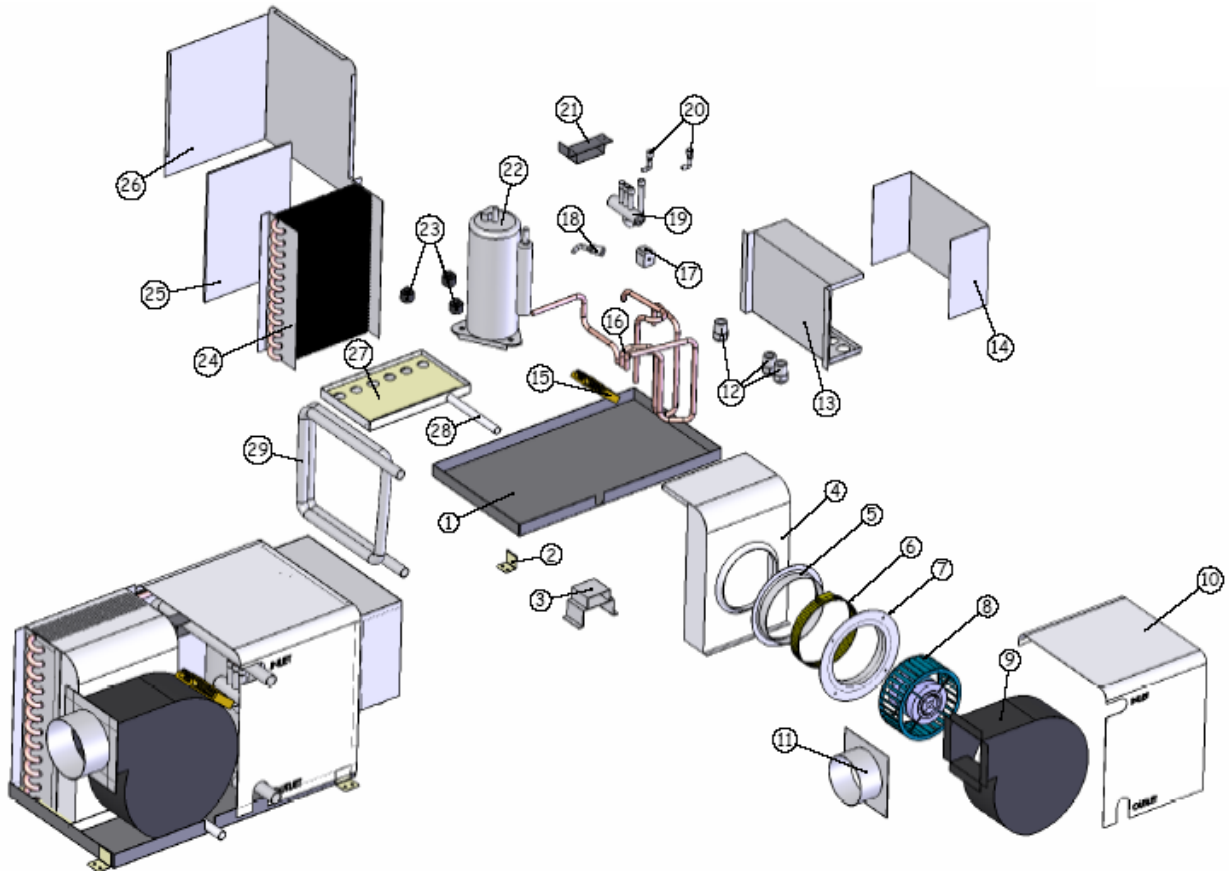
11.1. After Sales Service

There isn't any equipment replacement or maintenance work on this unit except the cleaning and visual check by the user. The user should ask for the authorized service determined by the manufacturer for the malfunction. The service personnel will follow the instructions listed below.

1. The gas type used in this unit has listed on the unit's name plate. Use the same gas if recharge is necessary.
2. Do not leave the gas to the atmosphere during recharge. Follow the environment instructions of the area.
3. Repair the leakage by welding.
4. Make leakage test at 25bar with dry nitrogen during the welding process. Leave the system under pressure at least 1 hour. Measure the pressure with a calibrated manometer and check for any leakage.
5. After this process vacuum until -30 Bar. Charge the amount of gas listed on the Technical Specifications Table and check the cooling/heating.
6. Contact with the manufacturer for the continual and unsolved malfunctions. Give detailed information about the company name, your name, unit model and malfunction. Use the recommended brand and model or the equivalent by the manufacturer if replacement of a component is necessary. The manufacturer is not responsible of the interventions that will be done by the service personnel except the ones, determined by the manufacturer and the manufacturer him self.

11.2. Spare Parts List

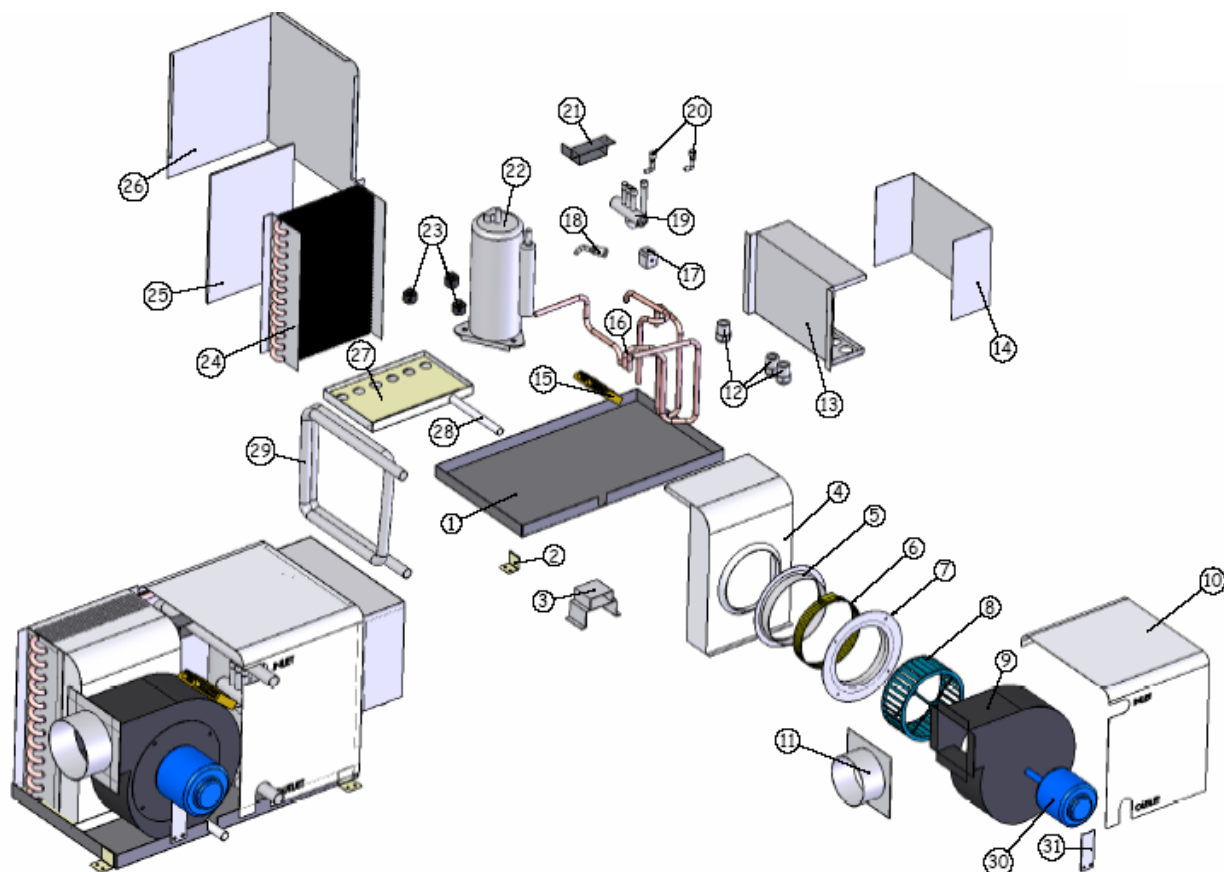
11.2.1. MAP 008, MAP 010



PART NO	PART CODE	PART NAME
1	CM008010-01	BASE PAN
2	CM008010-02	UNIT MOUNTING BRACKETS
3	CM008010-03	CONDENSER MOUNTING BASE PART
4	CM008010-04	DRUM
5	CM008010-05	MALE NECK
6	CM008010-06	NECK COLLAR
7	CM008010-07	FEMALE NECK
8	CM008010-08	FAN MOTOR BLOWER
9	CM008010-09	BLOWER BODY
10	CM008010-10	CABINET CASING COVER
11	CM008010-11	DUCT CONNECTION ADAPTER
12	CM008010-12	CABLE SLEEVE
13	CM008010-13	ELECTRICAL BOX
14	CM008010-14	ELECTRICAL BOX COVER
15	CM008010-15	TERMINAL BLOCK SOCKET
16	CM008010-16	CU PIPING KIT

PART NO	PART CODE	PART NAME
17	CM008010-17	REVERSING VALVE BOBBIN
18	CM008010-18	HIGH PRESSURE SWITCH
19	CM008010-19	REVERSING VALVE
20	CM008010-20	GAS SERVICE TAPS
21	CM008010-21	CONDENSER MOUNTING UPPER PART
22	CM008010-22	COMPRESSOR 8.000 BTU/H
22	CM008010-23	COMPRESSOR 10.000 BTU/H
23	CM008010-24	COMPRESSOR PLUG
24	CM008010-25	EVAPORATOR 8000 BTU/H
24	CM008010-26	EVAPORATOR 10000 BTU/H
25	CM008010-27	FILTER
26	CM008010-28	CABINET CASING
27	CM008010-29	DRAIN PAN
28	CM008010-30	DRAIN PIPE
29	CM008010-31	CONDENSER

11.2.2. MAP 012, MAP 015, MAP 018

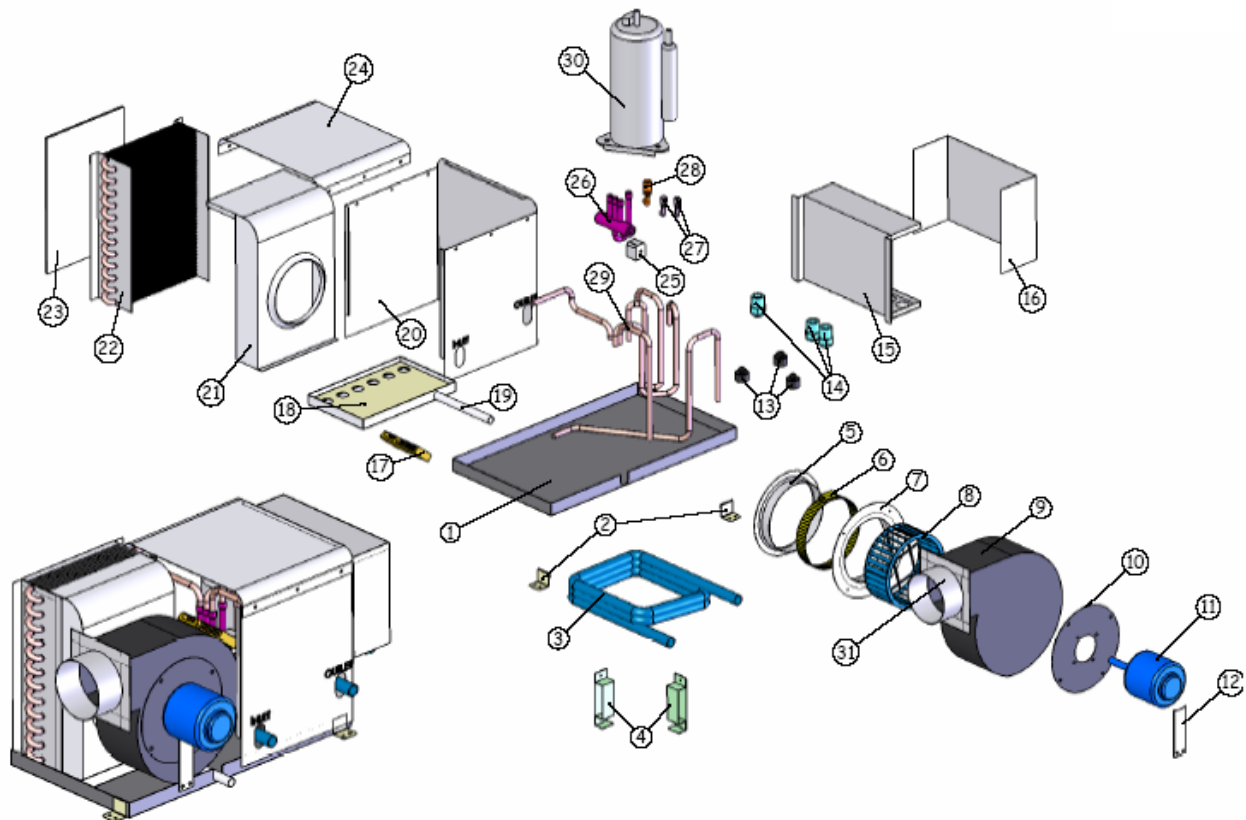


PART NO	PART CODE	PART NAME
1	CM012018-01	BASE PAN 012
1	CM012018-02	BASE PAN 015-018
2	CM012018-03	UNIT MOUNTING BRACKETS
3	CM012018-04	CONDENSER MOUNTING BASE PART 012
3	CM012018-05	CONDENSER MOUNTING BASE PART 015-018
4	CM012018-06	DRUM 012
4	CM012018-07	DRUM 015-018
5	CM012018-08	MALE NECK 012
5	CM012018-09	MALE NECK 015-018
6	CM012018-10	NECK COLLAR 012
6	CM012018-11	NECK COLLAR 015-018
7	CM012018-12	FEMALE NECK 012
7	CM012018-13	FEMALE NECK 012-018
8	CM012018-14	BLOWER 012
8	CM012018-15	BLOWER 015
8	CM012018-16	BLOWER 018
9	CM012018-17	BLOWER BODY 012
9	CM012018-18	BLOWER BODY 015-018
10	CM012018-19	CABINET CASING COVER 012
10	CM012018-20	CABINET CASING COVER 015-018
11	CM012018-21	DUCT CONNECTION ADAPTER
12	CM012018-22	CABLE SLEEVE

PART NO	PART CODE	PART NAME
18	CM012018-29	HIGH PRESSURE SWITCH
19	CM012018-30	REVERSING VALVE 012
19	CM012018-31	REVERSING VALVE 015-018
20	CM012018-32	GAS SERVICE TAPS
21	CM012018-33	CONDENSER MOUNTING UPPER PART 012
21	CM012018-34	CONDENSER MOUNTING UPPER PART 015-018
22	CM012018-35	COMPRESSOR 012
22	CM012018-36	COMPRESSOR 015
22	CM012018-37	COMPRESSOR 018
23	CM012018-38	COMPRESSOR PLUGS
24	CM012018-39	EVAPORATOR 012
24	CM012018-40	EVAPORATOR 015
24	CM012018-41	EVAPORATOR 018
25	CM012018-42	FILTER 012
25	CM012018-43	FILTER 015-018
26	CM012018-44	CABINET CASING 012
26	CM012018-45	CABINET CASING 015-018
27	CM012018-46	DRAIN PAN 012
27	CM012018-47	DRAIN PAN 015-018
28	CM012018-48	DRAIN PIPE 012
28	CM012018-49	DRAIN PIPE 015-018
29	CM012018-50	CONDENSER 012

13	CM012018-23	ELECTRICAL BOX	29	CM012018-51	CONDENSER 015-018
14	CM012018-24	ELECTRICAL BOX COVER	30	CM012018-52	FAN MOTOR 012
15	CM012018-25	TERMINAL BLOCK SOCKET	30	CM012018-53	FAN MOTOR 015-018
16	CM012018-26	CU PIPING KIT 012	31	CM012018-54	MOTOR SUPPLY 012
16	CM012018-27	CU PIPING KIT 0015-018	31	CM012018-55	MOTOR SUPPLY 015-018
17	CM012018-28	REVERSING VALF BOBBIN			

11.2.3. MAP 020, MAP 022, MAP 024



PART NO	PART CODE	PART NAME
1	CM020025-01	BASE PAN
2	CM020025-02	UNIT MOUNTING BRACKET
3	CM020025-03	CONDENSER
4	CM020025-04	CONDENSER BASE
5	CM020025-05	MALE NECK
6	CM020025-06	NECK COLLAR
7	CM020025-07	FEMALE NECK
8	CM020025-08	BLOWER
9	CM020025-09	BLOWER BODY
10	CM020025-10	MOTOR MOUNTING PLATE
11	CM020025-11	FAN MOTOR
12	CM020025-12	MOTOR SUPPLY
13	CM020025-13	COMPRESSOR PLUGS
14	CM020025-14	CABLE SLEEVE
15	CM020025-15	ELECTRICAL BOX
16	CM020025-16	ELECTRICAL BOX COVER
17	CM020025-17	TERMINAL BLOCK SOCKET

PART NO	PART CODE	PART NAME
18	CM020025-18	DRAIN PAN
19	CM020025-19	DRAIN PIPE
20	CM020025-20	CABINET CASING
21	CM020025-21	DRUM
22	CM020025-22	EVAPORATOR
23	CM020025-23	FILTER
24	CM020025-24	CABINET CASING COVER
25	CM020025-25	REVERSING VALVE BOBBIN
26	CM020025-26	REVERSING VALVE
27	CM020025-27	GAS SERVICE TAPS
28	CM020025-28	HIGH PRESSURE SWITCH
29	CM020025-29	CU PIPING KIT
30	CM020025-30	COMPRESSOR 020
30	CM020025-31	COMPRESSOR 022
30	CM020025-32	COMPRESSOR 025
31	CM020025-33	DUCT CONNECTION ADAPTER

11.3. Trouble Shooting and Correction Tables

Fault	Possible Reason	Correction
Unit is not running.	No energy.	The fuse on the generator or on the electrical box might have cut the energy. If the fuse is at the normal position contact with the authorized service.
Cooling/Heating is not sufficient.	If the air filter has clogged the capacity or the functions of the unit will decrease.	Clean the filter.
	The thermostat set value may be too high at cooling or too low at heating.	Set the appropriate value by the remote control.
	The unit may not be blowing the air in to the room.	Check the duct connections and/or move the materials in front of the supply grill, obstructing the air flow.
No cooling/heating.	Unit might have been set at the wrong mode.	Reverse the set mode (Cool/Heat) on the remote control.
	The thermostat set value may be too high at cooling or too low at heating.	Set the appropriate value by the remote control.
	If the air filter has clogged the capacity or the functions of the unit will decrease.	Clean the filter.
	The water pump is out of work.	Repair the pump by complying the pump manufacturer's instructions.
Bad smell diffusion.	As the unit circulates the room air, the materials like smoke or dust will dirty the unit by the time.	Contact with the authorized service.
Loud voice.	There may be a mechanical damage on the unit.	If you hear an abnormal sound from the unit shut it off and contact with the authorized service.
The unit makes the fuse blow out.	The fuse may be out of order.	Make the fuse changed by the competent personnel. If the problem continues contact with the authorized service.
	The size of the fuse may differ from the one recommended on the Technical Specifications Table.	Make the fuse changed by the competent personnel. If the problem continues contact with the authorized service.



If the problem still continues after all these steps contact with the authorized service.

11.4. Name Plate

Model Number MAP 008-H3TEA1D	Serial Number CP07072608001
Power Supply	230V1Ph/50Hz
Cooling Capacity	7.500 Btu/h
Heating Capacity	7.600 Btu/h
Compressor Type	Rotary
Refrigerant R-22 Charge (g)	320
Power Consumption (W)	680
F.L.A. (A)	3.3
Net Weight (kg)	27
Year Of Manufacturing	2007
 Izmir Klima Sanayi Tic. Ltd. Sti 5821/1 Sokak No:25 35400 Karabaglar-IZMIR TURKIYE Tel: +902322537780 Fax: +902322537795 e-mail: info@coolmar-ac.com   108-640261	

11.5. Communication

Please contact to the address below for service or the questions.

Our group of companies:

Exporter

Pratikel Dış Ticaret Ltd. Sti.

1203 Sok. No:8 Eminhan is merkezi D:102 Yenisehir 35110 Izmir/TURKEY

Tel: +90 232 459 85 54 Fax: +90 232 459 85 94

e-mail: info@pratikel.com web: www.coolmar-ac.com

Manufacturer

Izmir Klima Sanayi Tic. Ltd. Sti.

5821/1 Sok. No: 25 Karabaglar/Izmir/TURKEY

Tel: +90 232 253 77 80 Fax: +90 232 253 77 95

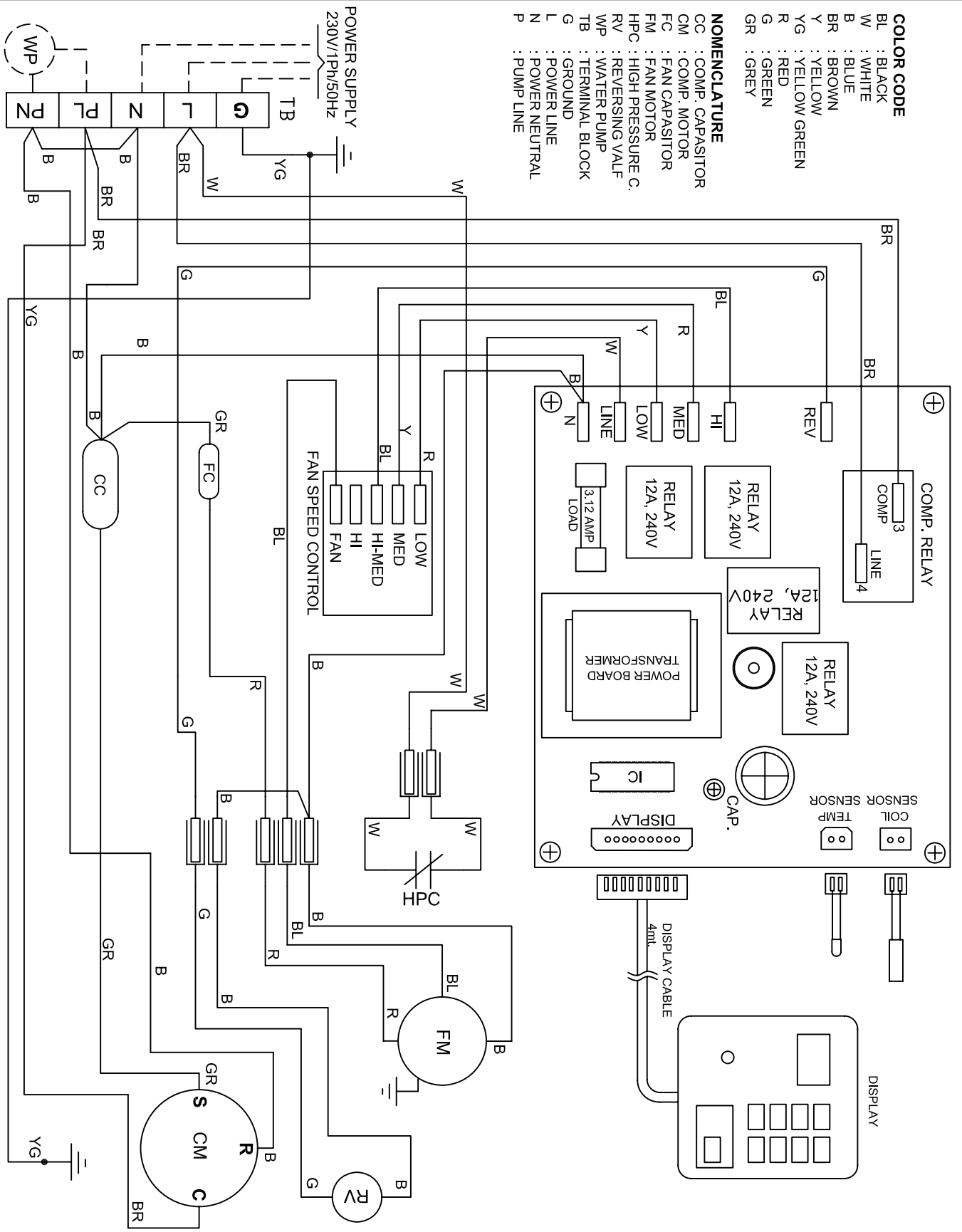
e-mail: info@coolmar-ac.com web: www.coolmar-ac.com

ANNEX

ANNEX 1 : WIRING DIAGRAM

DIAGRAM CM-MPC11

MAIN PC BOARD



- COLOR CODE**
 BL : BLACK
 W : WHITE
 B : BLUE
 BR : BROWN
 Y : YELLOW
 YG : YELLOW GREEN
 R : RED
 G : GREEN
 GR : GREY

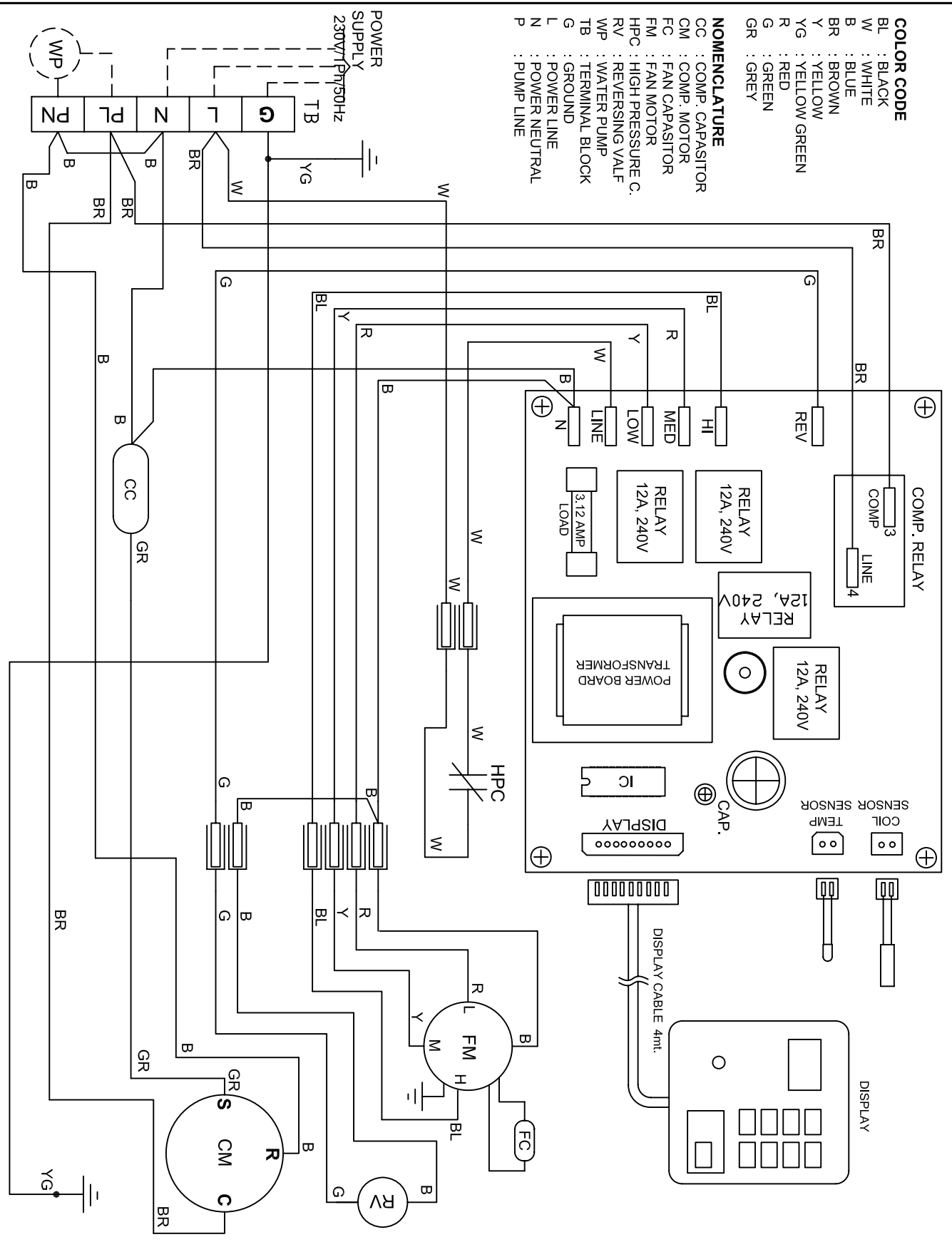
- NOMENCLATURE**
 CC : COMP. CAPASITOR
 CM : COMP. MOTOR
 FC : FAN CAPASITOR
 FM : FAN MOTOR
 HPC : HIGH PRESSURE C.
 RV : REVERSING VALVE
 WP : WATER PUMP
 TB : TERMINAL BLOCK
 G : GROUND
 L : POWER LINE
 N : POWER NEUTRAL
 P : PUMP LINE

- NOTES:
 1- UNIT MUST BE PROPERLY GROUNDED.
 2- INSURE THE POWER SUPPLY IS SAME AS SHOWN ON THE UNITS NAME PLATE.
 3- DISCONNECT SWITCH AND ALL WIRING MUST COMPLY WITH LOCAL ELECTRICAL CODES.
 4- FOR HPC & LPC ACCESSORIES PROVISION IS MADE TO INSTALL THE FIELD.

PROJ. : DRW003	DATE: 18-08-04	MODEL NUMBER	REV 2
DR. BY.- M.U.	18-08-04	MAP 008010	
CK. BY.- MH.	18-08-04		

DIAGRAM CM-MPC11

MAIN PC BOARD



COLOR CODE
 BL : BLACK
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NOMENCLATURE
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 FC : FAN CAPASITOR
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 4- FOR HPC & LPC ACCESSORIES PROVISION IS MADE TO INSTALL THE FIELD.

PROJ. : DRW001	DATE:	MODEL NUMBER	REV 3
DR. BY.- M.U.	18-08-04	MAP 012024	
CK. BY.- MH.	18-08-04		

DIAGRAM CM-MPC30

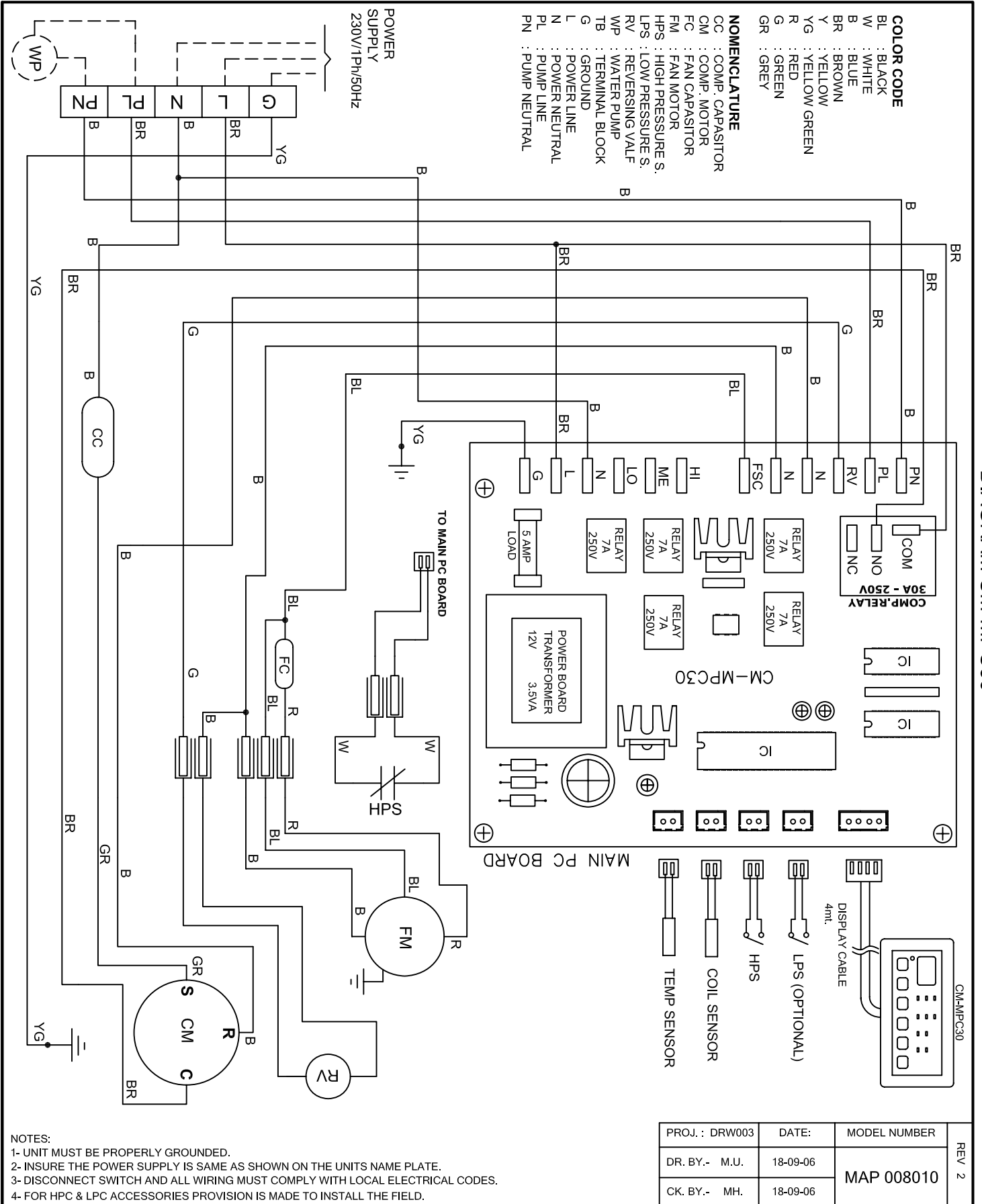
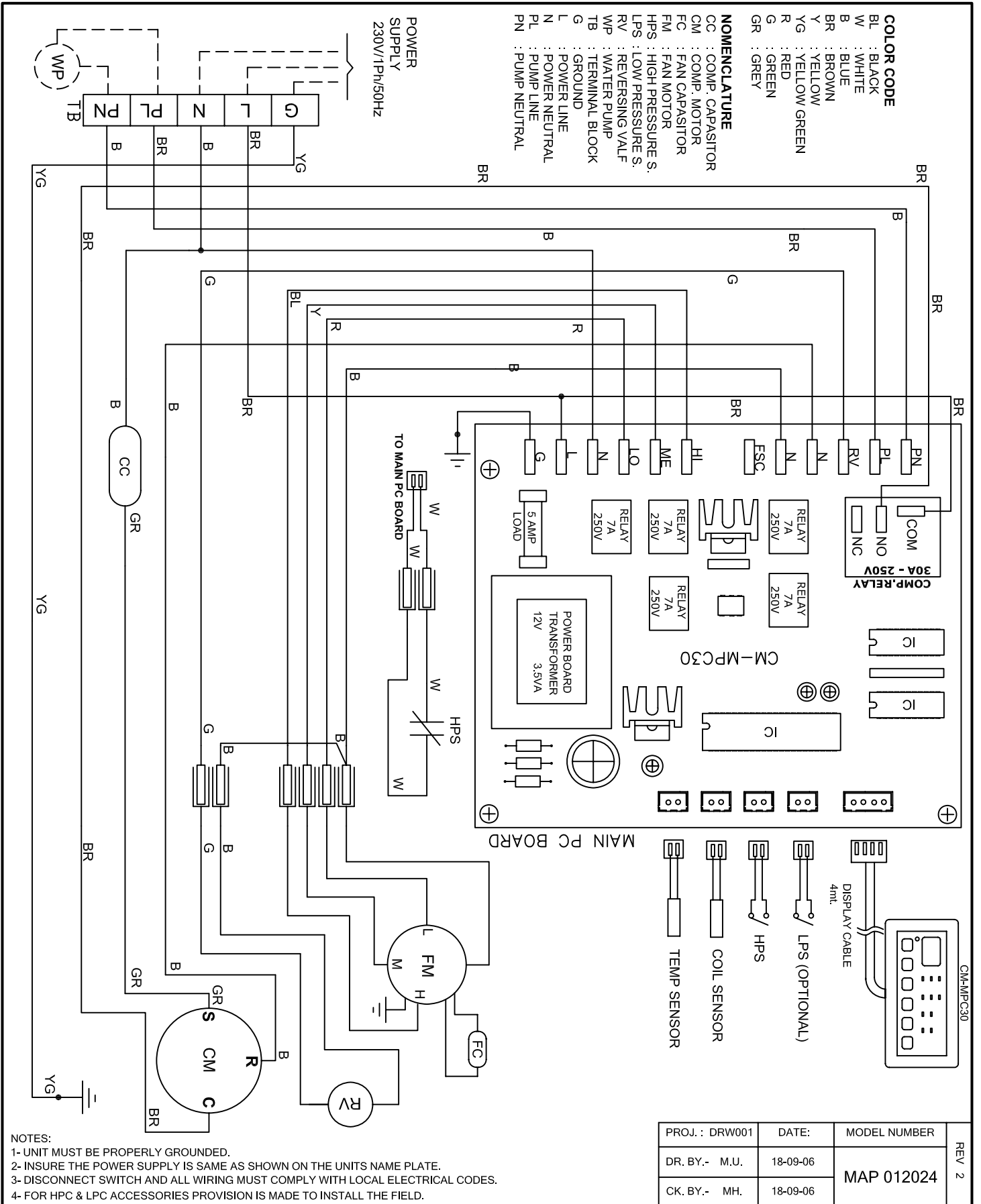


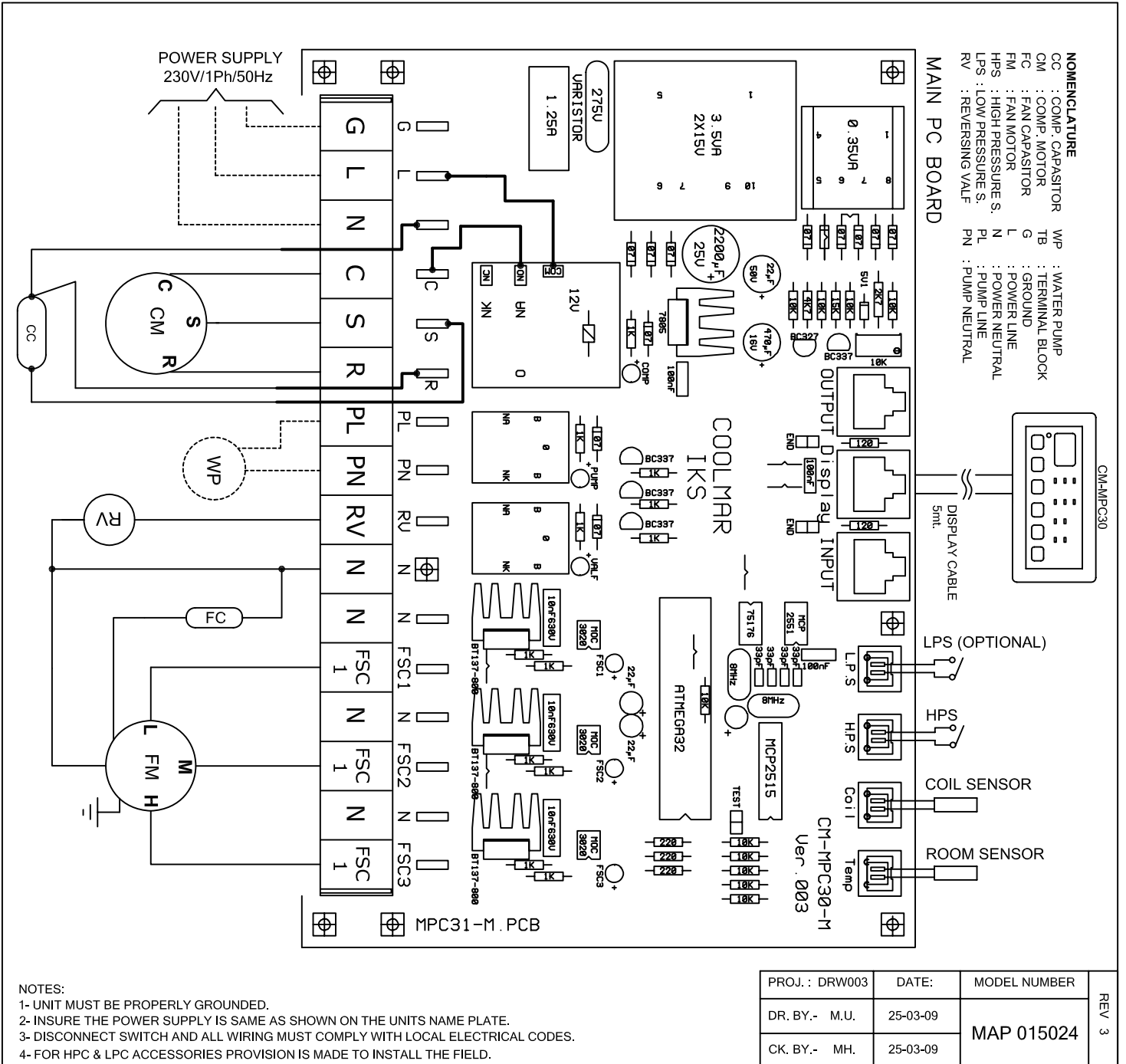
DIAGRAM CM-MPC30



- NOTES:
- 1- UNIT MUST BE PROPERLY GROUNDED.
 - 2- INSURE THE POWER SUPPLY IS SAME AS SHOWN ON THE UNITS NAME PLATE.
 - 3- DISCONNECT SWITCH AND ALL WIRING MUST COMPLY WITH LOCAL ELECTRICAL CODES.
 - 4- FOR HPC & LPC ACCESSORIES PROVISION IS MADE TO INSTALL THE FIELD.

PROJ. : DRW001	DATE: 18-09-06	MODEL NUMBER	REV 2
DR. BY.- M.U.	18-09-06	MAP 012024	
CK. BY.- MH.	18-09-06		

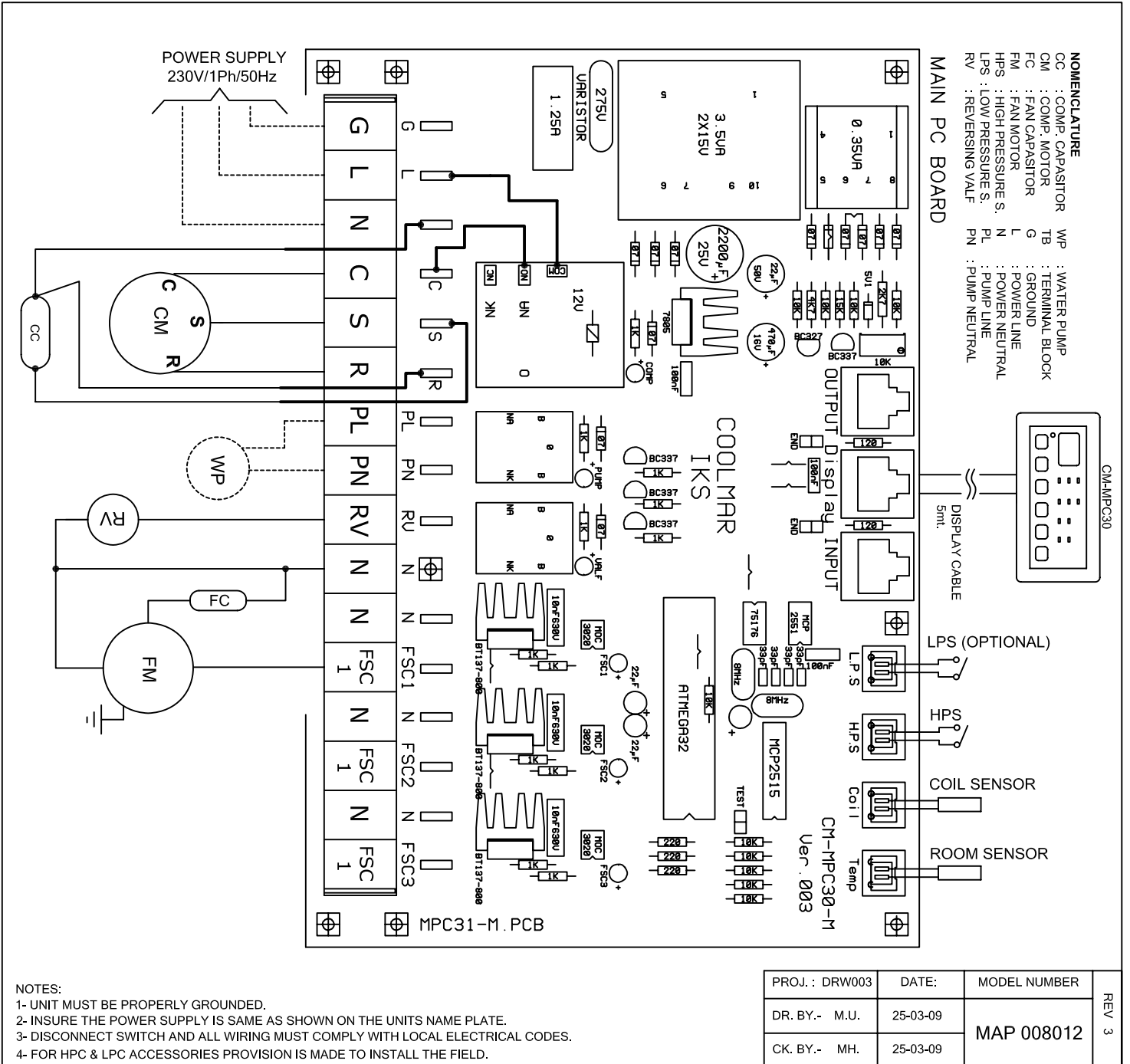
DIAGRAM CM-MPC30



- NOTES:
- 1- UNIT MUST BE PROPERLY GROUNDED.
 - 2- INSURE THE POWER SUPPLY IS SAME AS SHOWN ON THE UNITS NAME PLATE.
 - 3- DISCONNECT SWITCH AND ALL WIRING MUST COMPLY WITH LOCAL ELECTRICAL CODES.
 - 4- FOR HPC & LPC ACCESSORIES PROVISION IS MADE TO INSTALL THE FIELD.

PROJ. : DRW003	DATE:	MODEL NUMBER	REV 3
DR. BY.- M.U.	25-03-09	MAP 015024	
CK. BY.- MH.	25-03-09		

DIAGRAM CM-MPC30



- NOTES:
- 1- UNIT MUST BE PROPERLY GROUNDED.
 - 2- INSURE THE POWER SUPPLY IS SAME AS SHOWN ON THE UNITS NAME PLATE.
 - 3- DISCONNECT SWITCH AND ALL WIRING MUST COMPLY WITH LOCAL ELECTRICAL CODES.
 - 4- FOR HPC & LPC ACCESSORIES PROVISION IS MADE TO INSTALL THE FIELD.

PROJ. : DRW003	DATE:	MODEL NUMBER	REV 3
DR. BY.- M.U.	25-03-09	MAP 008012	
CK. BY.- MH.	25-03-09		