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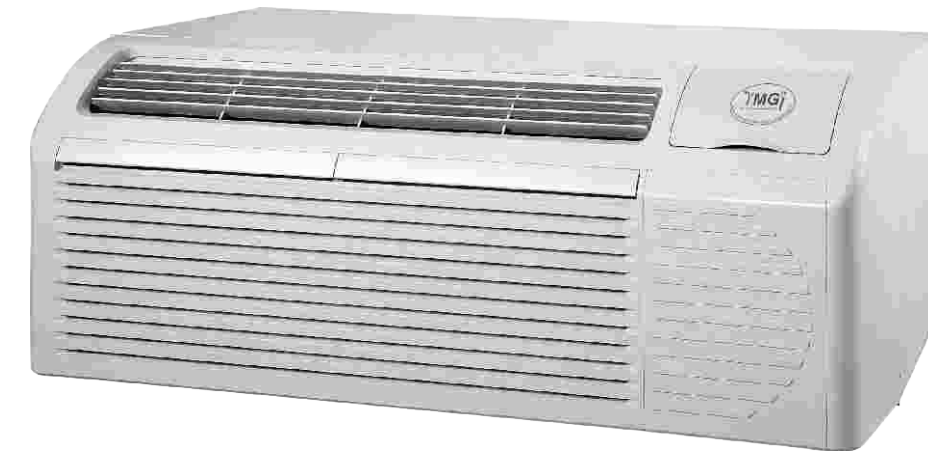
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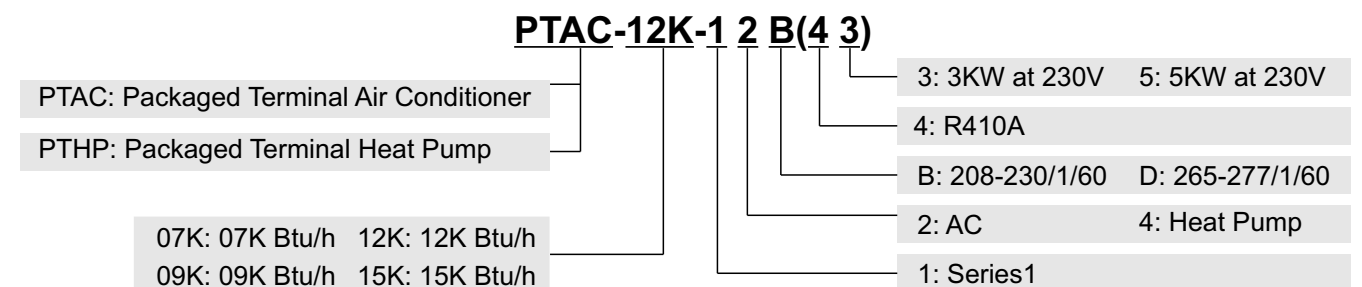


YMGI, Engineered Comfort Products for A Sustainable and Efficient Green World

PACKAGED TERMINAL AIR CONDITIONER (PTAC) PACKAGED TERMINAL HEAT PUMP (PTHP) INSTALLATION & OPERATION MANUALS



PRODUCT MODEL NOMENCLATURE



⚠ WARNING

This product is designed and manufactured free from defects in material and workmanship for the normal use and maintenance. Installation, operation, maintenance and service shall follow professional practices for regular cooling and heating equipment, NEC, State, City or Local Codes and related manuals from YMGI. Otherwise, damage to equipment or property even injury to people may occur.

Installer: Currently licensed HVAC technician only. Read manual before installation. Fully fill in warranty registration card.

User: Keep this manual for future maintenance and service use.

Service: Use this manual for service reference.



LITERATURE: Lit-PTAC-II-0102-20150323

FOREWORD AND CONTENTS

FOREWORD

This Instruction Manual is the standard version for all models for the packaged terminal air conditioners. The appearance of the model that you purchased may be slightly different from the ones described in the Manual, but it does not affect the proper operations and usage.

Must read this Manual carefully and keep the Manual available for reference at a later time.

- * Keep the unit away from children. Not supposed to be operated by children or infirm people.
- * The unit shall be installed by currently licensed HVAC technicians, in accordance with NEC wiring regulations.
- * If the power cord is damaged, it must be replaced by qualified person in order to avoid a hazard.
- * Due to continual product improvement, this manual is subject to change without prior notice.

⚠ WARNING

This symbol refers to a hazard or unsafe practice which can result in severe personal injury or death, or property damage.

⚠ CAUTION

This symbol refers to a hazard or unsafe practice which can result in personal injury or product or property damage.

LIMITED PRODUCT WARRANTY POLICIES	2
LIMITED PRODUCT WARRANTY REGISTRATION CARD	3
CUSTOMER AND TECHNICIAN MUST READ	4
SAFETY INSTRUCTIONS TO END-USERS	11
IMPORTANT NOTES	12
UNIT FEATURES	13
UNIT SPECIFICATIONS	14
UNIT FEATURES CONTINUED	15
ELECTRICAL DATA	15
INSTALLATION	16
SYSTEM CONFIGURATION	20
OPERATION	25
CARE AND CLEANING	25
PREVENTATIVE MAINTENANCE	26
SCHEMATIC DIAGRAM	27
TROUBLESHOOTING	29
TABLE OF SENSOR'S TEMPERATURE-RESISTANCE	33
WARRANTY AND TECH. SUPPORT	35
USER NOTES AND SERVICE LOG	36

LIMITED PRODUCT WARRANTY POLICIES

The YMGI products are designed and manufactured free from defects in workmanship, and materials for normal use. However, for any reason, including many handlings and occasions between the YMGI factories/warehouses and where you receive the products, the unit doesn't work, YMGI Group will help to remedy the occurrence in the following warranting ways:

Compressor: YMGI will warrant the compressor of YMGI-validated and approved warranty filing, for a period of 5 years from the date of successful installation at original location.

Parts: YMGI will warrant parts of YMGI-validated and approved warranty filing, for one year from the date of successful installation at original location.

All warranty compressors and parts replaced will become the sole property of YMGI Group and must be returned to YMGI Group upon request. Warranty parts may be new or refurbished. All parts are tested and approved before shipping.

At no time does the YMGI Group warrant labor cost of any type. Warranty will start from the date of successful installation at initial location, or 90 days as of original shipping date from YMGI Group, whichever comes first.

This is a standard warranty of limited liability and DOES NOT cover the following:

- * Any damage or repairs to properties, or persons as an incident or consequence of improper or faulty transportation, installation, operation, maintenance or service.
- * Damage caused by frozen or broken water hoses or refrigeration pipes in the event of equipment failure.
- * Any damage as a result of floods, fire, wind, lightning, accidents, corrosive atmosphere or any other conditions beyond the control of YMGI Group.
- * Any damage due to interruption or inadequate electrical service to equipment.
- * Any products that are installed outside the US or Canada.
- * Any unit that has been moved from the original installation address.
- * Any labor costs associated with the installation or service of the unit.
- * Poor unit performance due to improper unit selection (SEER, Unit size).

To validate the above warranties, ALL the following conditions must all be fulfilled:

1. The unit was fully (100%) and successfully installed by licensed or certified HVAC technicians.
2. The unit was installed following all NEC, state and local codes.
3. The unit was installed following all instructions and manuals made by YMGI Group.
4. ALL fields, especially the technician-checklist, of the **Limited Warranty Registration Card/Form** were filled completely by the installing technician and signed by both the installing company technician and the unit owner.
5. The **Limited Warranty Registration Card/Form** and a copy of the original installing company's invoice had been received by YMGI Group-Warranty Dept., POB 1559, O'Fallon, MO 63366, within 7 days of successful installation.

No warranty filing will be validated or approved, if any one of the above 5 conditions is not met.

Product registration doesn't guarantee the validity of this limited warranty statement.

Steps to follow for warranty part replacement:

1. Installing or service technician contacts YMGI tech support at 1-866-833-3138 ext 703 from the jobsite, to double-check and confirm with YMGI Technical support the exact part(s) needed to fix all the problems.
2. YMGI will check the customer's warranty filing. Parts for validated and approved warranty will not be charged. Parts of invalid warranty filing or unapproved warranty requesting, will be charged accordingly.
3. YMGI will ground ship out the parts ASAP. Expedited shipping is available at the customer's cost.
4. Replacement parts of approved warranty registration are to be warranted for the remainder of the 1 year parts and 5 year compressor warranty. Purchasing of replacement parts of invalid warranty filing or unapproved warranty requesting, will be as they are and bear no warranty.

YMGI keeps on improving products with various engineering changes without prior notice. Such improvements or changes include but not limited to product specification, appearance, functions, sizes, packaging and others. These improvements or changes will not void the limited warranty stated herein. YMGI keeps the final explanation of this warranty policy.

MUST READ



LIMITED PRODUCT WARRANTY REGISTRATION CARD

CUSTOMER AND TECHNICIAN MUST READ

MUST READ

MUST READ



YMGI GROUP
Innovative, Competitive, Efficient & Convenient

LIMITED PRODUCT WARRANTY REGISTRATION CARD / FORM

YMGI to Fill Top Portion, at Shipping, and Keep Copy A; Center Copy B for Installer to Fill and Mail back to YMGI; Bottom Copy C for Customer to Fill and Keep

For YMGI Use Only	The Company the Unit Was Sold Through: _____	Shipping Packing List Number: _____	Registration Card Serial No. _____	
	Did the Company Pay to YMGI: _____	HVAC Contractor/Technician--Name _____	Date the Filled Registration Card YMGI Received: _____	
	Installation Invoice Attached to the Registration Card _____	Hired YMGI-Recommended HVAC Contractor/Technician? _____	Unit(s) Work Successfully (Yes/No): _____	Warranty Approved _____ Warranty Denied _____

Outdoor Serial Number (One Outdoor Unit, One Registration Card/Form): _____	Indoor Serial Number:	For Multi Zone Units	Unit #1 _____	Unit #5 _____	Unit #6 _____	Unit #7 _____	Unit #8 _____
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Contact Where the Units are Installed:	
Name: _____	Phone: _____ Fax: _____
Address: _____	Email: _____
City: _____ State (Province): _____	Country: _____

Contact of the Installing HVAC Contractor/Technician:	YMGI-Recommended Contractor/Technician:
Technician Full Name (Print): _____	Phone/Fax: _____
HVAC Technician's Company Name: _____	Email: _____
Address: _____	City:State (Province): _____
Currently Licensed or Certified HVAC Technician License or Certification Number: _____	License Approved or Certified by: _____
Official Phone # to Check the License Validity: _____	

List for Installing HVAC Technician to Double Check Installation Quality, and Warranty Processing Purpose (if not filled by technician, or not filled fully, warranty will void)

- | | |
|---|--|
| <p>1) Are you the only one to install whole system? If not, % of installation done by you (HVAC technician).</p> <p>3) Did you read the User Manual and Installation Instruction, before you started the installation?</p> <p>5) Supply electrical power V/Ph/Hz measured at wiring terminal block of indoor unit: _____ outdoor unit: _____</p> <p>7) Wire gauge, length and terminal colors between circuit breaker/disconnect switch to outdoor unit: _____</p> <p>9) The size of HVAC circuit breaker/fuse or disconnect switch to the outdoor unit: _____</p> <p>11) What is the refrigerant pipe length between each indoor unit and the outdoor unit? Unit A _____ Unit B _____ Unit C _____ Unit D...</p> <p>13) What is the elevation difference between each indoor unit and the outdoor unit? Unit A _____ Unit B _____ Unit C _____ Unit D... (indoor unit above outdoor unit +, below -)</p> <p>15) Where is the outdoor unit located? Ground wall balcony roof other _____ Is the outdoor unit anchored to ground or secured onto wall location or pad _____ bracket?</p> <p>17) Were the refrigerant pipe ends capped or taped seal, prior to running them through structures to keep debris from entering the copper lines?</p> <p>19) Did you charge the inter-connection copper pipes and indoor unit with nitrogen to check for positive leakage (pressures 150-200PSI), before conducting vacuuming leakage check?</p> <p>21) Did you check if the compressor can be started and stopped in a correct (design) manner?</p> <p>23) Measured refrigerant pressures at outdoor service suction valve, when unit was st. Heat pump (PSI): _____ Cooling (PSI): _____ Outdoor Ambient Temp. (°F): _____</p> <p>25) Have you checked all unit functions, with customer's witness, and all functions are correct?</p> <p>27) Do you provide regular one-year free technical service for this installation?</p> | <p>2) What had been done, prior to your arrival?</p> <p>4) Who unpacked the unit and accessory boxes to check for damage?</p> <p>6) Incoming electrical power V/Ph/Hz measured at terminal blocks of indoor unit: _____ outdoor unit: _____</p> <p>8) Wire gauge, length and terminal colors between each indoor and outdoor unit: Unit A _____ Unit B _____ Unit C _____ Unit D...</p> <p>10) Are the inter-connecting wires and copper lines between indoor and outdoor units installed/covered/protected by line set covers, or anything else?</p> <p>12) Where is/are the indoor unit(s) located? Unit A _____ Unit B _____ Unit C _____ Unit D...</p> <p>14) Did you check the indoor unit for condensate leakage and refrigerant leakage, before and after connecting them?</p> <p>16) Have you checked to make sure there is no cross-piping and no cross-wiring between any two indoor units (zones)? How did you do it, who was with you?</p> <p>18) Have you checked and run cooling or heating, one unit by one unit, all working fine?</p> <p>20) Did you vacuum correctly to check the connecting pipes and indoor unit for leakage, what was the micron gauge reading, for how many minutes?</p> <p>22) If copper length were not made to the supplied or recommended refrigerant pipe length, how much refrigerant added or deducted?</p> <p>24) What were the measured temperatures (probe not touching any metal): At cooling: indoor return air °F, discharge air °F, and outdoor °F At heating: indoor return air °F, discharge air °F, and outdoor °F</p> <p>26) Did you show the user how to operate the unit? Did he/she understand you?</p> <p>28) Do you list the working details in the invoice and leave a copy to the customer?</p> |
|---|--|

Installation Finished and Unit Works Successfully. Print Name of Installation HVAC Technician: Signature: _____ Date and time: _____	Installation Finished and Unit Works Successfully. Print Name of Owner: Signature: _____ Date and time: _____
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By signing above, I acknowledge the liability and responsibility for any false statement or not telling all the facts, and I authorize YMGI to check the details of the filled above, and make its decision on warranty. I understand our filling or filling the warranty card/form DOESN'T mean automatic warranty approval, because warranty is approved only to those qualified and successful installations by qualified HVAC technician. I know the warranty, if approved, is a standard 5-year compressor and 1-year other parts only, without any labor coverage. I agree to and will follow all the contents contained in the Limited Product Warranty Policy that YMGI, not other entity, stated in public, including but not limited to manuals, web site, email, etc.

Important Note: A copy of the installing HVAC company's invoice to show all their work details, your payment proof, center copy B of this registration card filled after a successful installation, all three (3) MUST be mailed together to Warranty Dept., **YMGI Group, POB 1559, O'Fallon, MO 63366**, for warranty processing. Customer keeps bottom copy C. YMGI will check against copy A that was kept at YMGI.

PRIOR TO OPENING THE BOX OF, OR INSTALLING / SERVICING THE PRODUCT (HVAC & R)

Upon the purchasing, unpacking, installation and/or service of this product, you and all other parties hired to install or service your products, have read all YMGI Group (we) has written hereafter and all agree:

- 1) You understand all that is written hereafter in this and other documents that we publish.
- 2) You will follow what is written hereafter in this and other documents that we publish.
- 3) You will be bound by and completely follow all policies, guidelines, instructions, warnings, attentions and other materials, as published by YMGI Group, its subsidiaries or sister companies, in writing.
- 4) Only a successful installation, fully (100%) conducted by a qualified HVAC technician(s), as detailed in the checklist of the **Limited Product Warranty Policy** and **Limited Product Warranty Registration Card/Form**, along with a properly detailed installation invoice, is eligible for the **Limited Product Warranty**.
- 5) Failure to follow what is written hereafter may cause various equipment issues that you will take full responsibility and liability for, including, but not limited to, losing manufacturer's warranty, unit not working properly, unit malfunctions, under-performance, decreased safety, increased potential of various damages to your property, body, home and/or business, etc.
- 6) YMGI documents and policies supersede those made or provided by the sales distributors or installing contractors. YMGI Group maintains the final authority in explaining and resolving any and all discrepancies that might exist between distributors/contractors' documents and ours.

YMGI STRONGLY RECOMMENDS:

- * Customer hires a currently licensed/ certified HVAC technician(s) (N.A.T.E. or A.C.C.A certification is strongly recommended) to conduct 100% of the installation, inspection of all unit functions and repair service.
- * Customer signs an installation/service contract with the installation/service technician's company who has good service references and you trust. Installation and service is very important to the life of your investment and provide you a lifetime of comfort and peace of mind.
- * Customer requests the installer to put down a 1-year labor warranty coverage in the installation contract.
- * Have the technician check against all the items in the checklist of the **Limited Product Warranty Registration Card/Form**, sign and date it, to help ensure a proper and professional installation.
- * Customer pays in full, only after all the unit functions are inspected, the unit works properly, warranty checklist is fully filled out and signed and you are fully satisfied.
- * If any unit abnormality is found, have your technician check the unit first. Have them call for manufacturer technical assistance, if necessary, from your job site, not his office, so that we can more accurately assist him in diagnosing the cause of the malfunction.



CUSTOMER AND TECHNICIAN MUST READ

Dear Customer(s)/End User(s)/Unit Purchaser(s)/Installer(s)/Contractor(s)

Thanks for choosing YMGI products.

The YMGI equipment you purchased is either a split-type or a self-contained cooling/heating system which requires an installer's license, certification, knowledge, experience, carefulness and details for a successful and good installation. This equipment is different from those window or portable air conditioners you can normally purchase from local retail stores such as Home Depot, Lowe's, Sears, etc. which the manufacturer may not require licensed personnel to install.

Reading and following the YMGI Group recommendations, suggestions, and requirements, written in the following pages and other documents, is the first step in our hope and effort to help ensure a smooth installation & proper operation of your products for many years.

WHY DOES YMGI GROUP REQUIRE INSTALLATION AND SERVICE TO BE PERFORMED BY LICENSED OR CERTIFIED HVAC TECHNICIAN/ CONTRACTOR?

1) They have the training and experience to accurately and safely install and service your equipment.

The equipment runs with high-pressure refrigerant and oil and line-voltage. The copper lines must be installed properly to prevent leakage and foreign substances from contaminating the refrigerant system.

2) You will save money in the long run.

If any problems occur on the unit that is fully installed by the licensed or certified contractor, they have the training and experience to correct the problem more efficiently. A technician(s) may be unwilling to repair an issue on a unit that they did not install. If you do find a technician willing to perform the service, there is an increased possibility of higher service fees than normal, increased service visits, or delayed service from that technician.

3) It's the law!

The federal, state and/or local government and authorities have various governing laws or regulations, guidelines, ordinances, etc., requiring only licensed or certified professionals can install and service high pressure HVAC equipment.

SUGGESTIONS, TO AID YOU IN HIRING AN HVAC CONTRACTOR:

- 1) Hire a currently, practicing, licensed/ certified HVAC technician/ contractor. Technicians, who are no longer practicing (retired, etc.) in this field, may not have the updated knowledge or may lack experience on the equipment you have purchased.
- 2) Hire a technician/ contractor who services customers in your local area and you are familiar with. Local contractors have a faster response time and will be easier for you to determine if they are reputable.
- 3) Use only reputable licensed/ certified HVAC installation contractors/ technicians to prevent any unexpected charges as a result from unethical business practices.
- 4) Check their references, to verify they are a good service provider to the general customers. N.A.T.E or A.C.C.A certified technicians are strongly recommended.
- 5) Some contractors/ technicians may not feel comfortable about installing the equipment that you purchase for them to install, and they prefer to purchase and install the equipment. You can contact YMGI directly to check and see if there have been any contractors in your area who have installed our products or similar.
- 6) Ask for a detailed quote for the whole installation project. A flat rate quote is the safest contract for both you and the contractor
- 7) Your local HVAC technicians may charge you on a project basis or on an hourly basis. To our general knowledge and experience, **a full single head installation may normally cost anywhere from \$800 to \$1500**. These costs are estimates and your actual costs may differ due to job nature and location.
- 8) Number of hours can vary depending upon each individual situation, some factors are, but not limited to:
- 9) How difficult or complex the indoor unit is to be securely installed.
- 10) How difficult or how long the inter-connecting pipes and wires are to be installed.
- 11) If all the suggestions have been taken and all the necessary steps are followed.

CUSTOMER AND TECHNICIAN MUST READ

12) If the contractor(s)/technician(s) are experienced with the systems/brands you purchase.

You might spend less. But remember, many times you get what you pay for.

- 13) Sign a contract with them. The contract should list all the detailed work they will conduct and the standards they will follow. Some contractors are willing to include a 1-year installation/service warranty at no extra charge. Check with them to see if that is available. If available, include that in the contract.
- 14) Verify and confirm the installation is done completely and all the unit functions have been checked and are working properly, all the items in the checklist have been checked and marked well in the warranty registration card/form, prior to paying the contractor in full.

The cost of not having your unit installed properly can be more expensive than spending the little extra money that hiring the right contractor will cost. Protect your investment and warranty eligibility by doing it right the first time.

THE FOLLOWING LISTS THE JOBS AND RESPONSIBILITIES OF THE TECHNICIAN/ CONTRACTOR:

- * Performing a load calculation for the room(s) you would like to air condition. Cooling requirements will be different from the heating requirements. They will consider cooling hours, heating hours and your special needs or requirements. Supplemental heating such as baseboard heater or portable heater may help you save money by not over-sizing or under-sizing the heating equipment.
- * Selecting the right type, size or model of cooling and/or heating equipment.
- * Determining the best location to install the unit. (Positioning indoor unit, outdoor unit and running the inter-connecting pipes/wires.)
- * Selecting the correct electrical components (HVAC circuit breaker or fuse and disconnect switch for the electric power to the outdoor unit, types and sizes of the connecting wires between circuit breaker/disconnect switch and outdoor unit, and the wires between outdoor unit and indoor unit).
- * Keeping the indoor unit away from the ceiling and the outdoor unit away from the wall, bushes and other obstacles at a proper and safe distance to allow for the proper airflow through the unit's.
- * Placing the units on a secured level structure.
- * Taping and sealing both ends of the inter-connecting pipes, before running them through structures, to prevent dust or other debris from getting into the pipes otherwise they will contaminate and damage the refrigeration system. Failure to follow this practice will make your factory warranty void.
- * Connecting the inter-connecting pipes between the outdoor and indoor units. Checking for leaks through pressurization with nitrogen. After releasing nitrogen, evacuate the piping and indoor unit, for removal of system contaminants. Finally refrigerant introduction and adjustment, if necessary, from the outdoor unit.
- * Back-seating the stopping valves at outdoor condensing unit to release pre-charged refrigerant from outdoor unit to indoor unit.
- * Measuring and recording the electrical voltages at different terminals and the refrigerant pressures at stopping valves of outdoor condensing unit.
- * Verifying and ensuring the unit is connected to the proper electrical power supply.
- * Adjusting refrigerant levels (if necessary) following the installation instructions or chart on the unit.
- * Checking for any unusual noises and other abnormalities that might be present.
- * Operating the unit and check all functions, one by one, and explain to the owner how to operate and maintain the unit.
- * Completing all fields in detail on the installer checklist, signing and dating the **Warranty Registration Card/Form**.

LIMITED PRODUCT WARRANTY

If the installation is successfully and fully done by a qualified licensed/ certified HVAC technician/contractor, the registration card/form is filled completely and correctly, and filed along with a valid installation invoice from the contractor company within 7 days of the original installation, the following standard **Limited Product Warranty** is qualified:

5-year on compressor and 1-year other PARTS ONLY. There is **no labor coverage**.



CUSTOMER AND TECHNICIAN MUST READ



ATTENTION

- 1) The YMGI **Limited Product Warranty Policy**, details the eligibilities, coverage's and other explanations of the warranty terms between YMGI group and the unit owner.
- 2) The YMGI **Limited Product Warranty Policy** and the **Warranty Registration Card/Form** are either included inside the user's manual and/or installation instruction manual, or come separately in the unit packaging box/envelope. If for any reason they are not included with your shipment, contact our sales or customer service to request a copy (electronic or printed), prior to installation.
- 3) The checklist, in the **Warranty Registration Card/Form**, is for the currently licensed/ certified HVAC technician to fill out completely, while verifying all unit functions are operating correctly. This checklist is for the technician to test and check all details of your unit, to verify and ensure its proper operation.
- 4) The technician must complete all fields in the **Warranty Registration Card/Form**, especially the unit model and serial numbers and distributor information, and most importantly, the technician checklist.
- 5) **Warranty Registration Card/Form** shall be mailed, **along with the original copy of the currently licensed HVAC contractor's full installation invoice**, to YMGI Group, within 7-days after original installation, in order for YMGI to review and process your warranty registration.
- 6) Keep a copy of **Warranty Registration Card/Form** for your own use in the future, to aid in any possible future warranty claiming, any request of parts, customer service, and/or technical support.
- 7) YMGI reserves the right to approve or deny the warranty status based on the information reviewed.

Mailing address of the **Warranty Registration Card/Form**: Warranty Department, YMGI Group, POB 1559, O'Fallon, MO 63366, USA.

Following these requirements will aid in ensuring the units will be installed to the general HVAC practicing standards and are necessary factory requirements, to find problems early, prevent possible damage to the unit and help ensure the unit will work properly for its life time.

QUESTIONS ABOUT SELF-INSTALLATION VS HIRING LICENSED HVAC TECHNICIANS

Does YMGI allow to do-it-yourself installations (DIY) partially or fully? NO.

Unfortunately no brand or manufacturer can take the responsibility of the equipment if it is not professionally installed by a currently licensed HVAC technician/ contractor.

If unit is installed by non-licensed people, in part or fully, will the factory warranty be void? YES.

Some DIY installations have been successful, but these are exceptions. Most have resulted in equipment failure, due to lack of knowledge and experience. A few of the problems result from DIY's lack of knowledge in the following areas:

- * Sizing and selecting correct type, size and model of cooling and/or heating equipment.
- * Sizing and installing correct electric circuit breakers and wires.
- * Wiring the units correctly and properly.
- * Taping the ends, connecting to indoor and outdoor units correctly and properly.
- * Vacuuming the inter-connecting refrigerant lines.
- * Checking and/or fixing the refrigerant leaks.
- * Checking and/or fixing the condensate drain leaks.
- * Releasing the refrigerant from outdoor unit to indoor unit.
- * Running the unit to check all the unit functions.
- * Conducting the installation or trouble-shooting with correct tools, experience or professional knowledge to correct the problem.

RECEIVING AND FREIGHT DAMAGE

- * Freight (package/unit) shall be checked thoroughly for damage at receiving before accepting by signing on the carrier's delivery paperwork.
- * Upon shipment being signed for acceptance, it becomes a binding document as to the condition of the products on delivery. We cannot process any shipping damage claim, if you accept the delivery.
- * If damage is found at delivery, both you and the delivery driver must make notes on the delivery receipt or other freight paperwork detailing the damage found by marking position/parts on unit, description of damage, time/ date, your name, contact phone, etc. on the delivery documents. Make a copy of the marked delivery receipt.

CUSTOMER AND TECHNICIAN MUST READ

- * If the damage is minor or partial, that you choose to accept, you can contact the distributor or YMGI to discuss the possible replacement of the damaged part.
- * If refusal of the shipment is needed due to severe freight damage, **DO NOT** sign the carrier's delivery receipt document indicating that you accept the products. Mark receipt "REFUSED DUE TO FREIGHT DAMAGE." Sign and date along with the delivery driver's signature and date.
- * Take pictures showing the damage, before the delivery driver leaves.
- * If you accept the delivery or fail to note damage on the driver's delivery receipt, the ability to claim freight damage is lost and YMGI will not replace the unit on this basis.
- * Contact the distributor or YMGI, report the damage by forwarding the marked delivery receipt copy and pictures.
- * Only after YMGI verifies with the carrier the necessary detailed notes of received freight damage, will the damaged products be eligible for replacement.
- * If the returned products are found not damaged, YMGI will treat it as a return and will charge you 25% of product value plus added shipping cost.

RETURN-YMGI GROUP POLICIES & RETURN GOODS AUTHORIZATION (RGA)

All sales are final. If the customer wishes to return a product, the following **Return Policies** apply.

A. Only those products (units, parts or accessories) under the following conditions, are eligible for return:

1) Products are returned within 30 days of their original shipment date from YMGI

- 2) Products have not been installed.
- 3) No damage exists on the products being returned.
- 4) No missing products.
- 5) Products and packages are clean.
- 6) No duct tape or marking on the product or box.
- 7) Products are still their original package, in good shape and in re-sellable condition, as YMGI determines.

B. Preapproval steps for your return request:

- 1) Contact your distributor or YMGI to request a return.
- 2) Photograph your product and box to show details
- 3) YMGI will review your request, along with the pictures and any other details pertaining to your request.
- 4) If YMGI agrees to process your return request, a form called **Return Goods Authorization (RGA)**, along with **an assigned RGA #** will be forwarded to your distributor or you.
- 5) Any return without YMGI Group approved RGA #, will not be accepted.

C. YMGI must verify the following before you can pack your products:

- 1) No products (units, parts, accessories) are missing.
- 2) No damage is found.
- 3) The products are in the original packaging.
- 4) No duct tape on any product or box.
- 5) Pictures have been taken and sent to YMGI to verify the product and boxes are not damaged.
- 6) The RGA has been completed and a copy has been returned to YMGI, via email or fax.
- 7) YMGI has approved the request in writing.

D. Shipping Preparation:

- 1) Package all products in a manner in which no damage can occur to the product and secure to a pallet.
- 2) Take and forward pictures of packed pallets for YMGI to verify proper packaging and no existing damage.
- 3) Include the YMGI approved RGA# in the shipping documents.
- 4) YMGI reserves the right to approve or deny any shipments.
- 5) YMGI can arrange shipping for you, but not at YMGI's cost. If this option is chosen, a packing list and BOL will be issued to you through YMGI.
- 6) If the above option is not chosen, you will be responsible for all freight charges. YMGI will not accept any returned items COD.
- 7) Place the package in an area which is accessible to the shipping company for pickup and limits the possibility of damage to the product. Customer must be present at the time of freight pick up.

After shipping, fax the BOL to YMGI Group at 1-866-377-3355 or email to customerservice@ymgigroup.com, detailing the information of the freight company and their tracking number.

E. Freight Damage:

- 1) YMGI Group will inspect returned items
- 2) Claiming of freight damage from a customer hired carrier will be the customer's responsibility.
- 3) Claiming of freight damage from a YMGI hired carrier will be YMGI's responsibility.



CUSTOMER AND TECHNICIAN MUST READ

F. Charges for your return:

- 1) A restocking charge of 25% creditable invoice value.
- 2) All return shipping fees.
- 3) Additional fees will be charged, if products are found to be damaged, missing or used.
- 4) YMGI will notify the distributor of the charges only after the inspection and assessment of the returned products has been completed.

Attention:

- 1) Returned products must be shipped within 7 days of YMGI's releasing of **RGA #**.
- 2) All **RGA** shipping shall be prepaid by the customer. **YMGI will not accept any COD freight.**

YMGI GROUP DISCLAIMING-1:

YMGI Group will NOT accept any return, or may not honor 100% credit for any return of Product(s)/Part(s)/Accessories, in any of the following cases:

- * Return requests made 30 or more days after the date of original sales shipping from YMGI Group warehouse.
- * Return shipment is initiated 8 days or more after the RGA is approved.
- * Returned products received not displaying an YMGI-approved valid **RGA #**.
- * Returned products received C.O.D.
- * Returned products not received in the original packaging.
- * Returned products received with non-repairable packaging, including duct tape or marks on units or carton boxes.
- * Returned products received with missing units/parts/accessories.
- * Returned products received, are found to be non-functional or damaged.

YMGI GROUP DISCLAIMING-2:

- * YMGI Group will not be responsible for any losses of returned unit(s)/part(s)/accessories in transition to YMGI Group warehouse.
- * YMGI Group RGA is valid for seven (7) days from the original issuing date. Returns will not be accepted, if shipping is made 8 or more days after the YMGI Group RGA is issued.

DEFECTIVE UNITS / PARTS / ACCESSORIES-REPAIR OR REPLACEMENT

Out of thousands of units sold every year, there may be an occasional instance your product does not operate properly. Reasons of but are not limited to: **manufacturing, installation, operation, maintenance and knowledge of operator.**

Equipment failure does not automatically denote a product defect from the factory assembly line. The defects can be caused, during production, transportation, installation, operation, maintenance, or service. Defects may NOT be the responsibility of the manufacturer. Nobody willfully or intentionally produces a defective product. No determination shall be made until the technical issue(s) or the causes of the defect(s) are identified.

The defects might be found before/ during installation or in the operation of the unit. Defects can be in the form of blown fuse(s), defective control board(s), damaged remote control, loose or missing screws, etc. These defective parts can be replaced easily.

Some functions of our units are different from what are typical in traditional split type air conditioning and heat pump systems and similar systems made by other manufacturers. These are not defects. Take some time to learn the functions of your unit. We will be happy to assist you with any questions you may have concerning the functions of your new unit.

If a defect is found, whether at the original installation, or during normal operation, we will gladly help you in the following steps in sequence from 1 to 3:

1. **Part repair or replacement after trouble-shooting:** This is the most common and generally the easiest and most economical way for all parties, since the problem and all part needs can be accurately and completely identified.

- * Your technician calls our technical support line, from your job site, after checking your units and getting all the information ready.
- * Our technical support will go through several steps, over the phone or through email, with your technician, in order to help identify and resolve the problems. Normally wiring correction, piping correction, part repair/ replacement will resolve the problems.

CUSTOMER AND TECHNICIAN MUST READ

- * Your technician will then need to verify and confirm the problem(s) before YMGI can ship out the replacement part(s). Inaccurate or incomplete troubleshooting or part replacement will delay the repair. YMGI technical support will only speak with a licensed/certified technician in regards to the repair of your unit. In our experience this saves time and money for all parties involved.

Your technician is the only person to perform any physical checking, trouble-shooting and replacing of any defective part(s) for your units. Our factory technical support is just a help. **YMGI provided no labor warranty on the products.**

2. **Unit/part repair at our workshop(s):** Due to the limitations of our technical support not being at your job site, or your technician's experience with our product, the problem may not be resolved as quickly as would be desired. If the problem is still not resolved after attempts between your technician and our technical support, you can elect to have the unit repaired at our facility. If this step is chosen:

- 1) YMGI will send to you the **Customer Request to Ship Products to YMGI Service Center for Inspection and Repair, and Authorization to Charge** form.
- 2) You will review the form and fill all fields appropriately, sign and send back to the YMGI Group.
- 3) Once the form has been completed and sent back to YMGI, remove the units and ship back to YMGI.

Please make a note describing the problem and communication history, if possible. Our technicians will check the units and find the problem(s), repair the issue(s), and ship the unit back to you following the conditions set forth in the signed repair agreement. All unit removal and re-installation is done at your cost and must be done by a currently valid licensed HVAC technician.

3. **Unit replacement:** Only applies to those defects reported within 30 days of original purchase date and if all necessary warranty paperwork had been received and approved. This option applies only if the above steps cannot resolve the problem(s). Either indoor or outdoor unit replacement is available, based on the actual need, at YMGI's determination. **This option shall be the last resort**, due to refrigerant and wiring considerations. All unit removal, re-installation and shipping cost are the responsibility of the customer. YMGI maintains the final authority as to unit replacement. Replacement will be made with the same model only. Alternate units will be treated as a new order.

Returning Replaced Defective Units/Parts/Accessories After Unit Repair: (Only applies to steps 1&3 above)

- 1) Repack the replaced unit/ part /accessory in the box which contained the replacement part.
- 2) Parts can be boxed for UPS, FedEx or equivalent ground service. Units shall be secured onto the skid on which the replacement was shipped after placing into the package from the replacement product.
- 3) Ship **all** replaced products, to YMGI-designated location. You will be charged if YMGI does not receive the replaced parts.

Standard factory warranty does not cover the cost of materials and labor that are incurred at your site. There will be no cost for the replacement unit, if YMGI determines the defect is manufacturer related. Replacement will be made with the same model, only. Alternate units will be treated as a new order.

CUSTOMER SERVICE / TECHNICAL SUPPORT FROM YMGI GROUP

For questions or help with your unit, contact the original installer or service provider.

YMGI Group does not install nor physically service your unit. Your installer or service provider must check the unit prior to contacting YMGI Group from your jobsite, in order to be helped in an efficient and timely manner.

* Factory customer service at customerservice@ymgigroup.com Tel: 1-866-833-3138x704

* Factory technical support at techsp@ymgigroup.com Tel: 866-833-3138x703

* Fax: 1-866-377-3355

An "**YMGI Group Customer Service/Technical Support Daily Log Sheet**" will be filed in writing at our office, for effective communication between you and YMGI Group customer service, your technician and YMGI Group technical support. Before contacting the YMGI Group locate the IP# written at the top of your warranty registration form. Use this IP# whenever you contact the YMGI Group.

DISTRIBUTOR AND MANUFACTURER POLICIES

- * All questions concerning sales or money will be directed to the sales distributor from which you purchased the units.
- * Read and follow all policies set forth from the distributor from which you purchased your unit.
- * Upon purchase and installation of the unit(s), you agree to be bounded by all policies published by both distributors and YMGI.
- * MGI Group has the final authority and supersedes other related parties (distributors, etc.) concerning all policies regarding YMGI products.



SAFETY INSTRUCTIONS TO END-USERS

Read this manual carefully before using this unit to ensure proper operation and safety.

Installation Safety Instructions For Currently Licensed HVAC Technicians

⚠ WARNING

Be sure that the correct breaker is installed. If a breaker is not installed, it may result in electric shock or other hazards!

Do not install the unit where there might be leakage of inflammable gasses. In the case that the gasses are leaked out and accumulated around the unit, it may result in fire hazards or other accidents.

Be sure that the power source of the unit is properly grounded. The grounding wire of the packaged terminal air conditioner must be firmly connected to the grounding wire of the power source. Improper grounding will lead to possible electric shock or other hazards.

Do not use a fuse or breaker with the wrong capacity, or substitute wires in place of fuses. Improper use of wires or fuses or circuit breakers of the wrong capacity may result in faulty performance of the unit or fire hazards.

Do not sit on the unit or place heavy objects on it. If the unit falls it could cause bodily injuries or other accidents.

Check to see if the supporting parts of the units are properly installed and secure. If the supporting parts are damaged, repair them at once so as to prevent the unit from falling down which could cause bodily injuries.

Operating Safety Instructions for All

⚠ WARNING

Do not pinch, stretch, damage, heat, or modify the power cord. In case the power cord is damaged or otherwise, that a replacement for the power cord is required due to some other reason, contact your licensed installer/ technician, or an authorized maintenance technician, or service provider.

It may result in electric shock, overheating, fire hazard or other accidents.

Do not insert sticks, tools, or other objects into the air inlet or outlet. The high-speed rotation of the fan blades may cause accidents.

Do not place such articles as insecticides, paints, or other flammable spraying agents near the packaged terminal air conditioner or spray them against the air conditioner. It could result in a fire hazard.

Do not wash the air conditioner with water. It may cause electric shock or other accidents.

Do not disconnect the power cable to turn the unit off. This could result in electric shock, fire hazard or other accidents.

If the air conditioner is not to be used for an extended period of time, disconnect the air conditioner from the power socket to ensure safety. Turn off the air conditioner before pulling out the plug.

Instructions for Removal and Repairs



* If the unit needs to be removed to somewhere else or needs repair, contact your dealer or an authorized technician.



* In the case of occurrence of abnormal operation (burning smell for example), right away turn the unit off, disconnect power, and contact your service provider or an authorized technician.

IMPORTANT NOTES

SAFETY WARNINGS

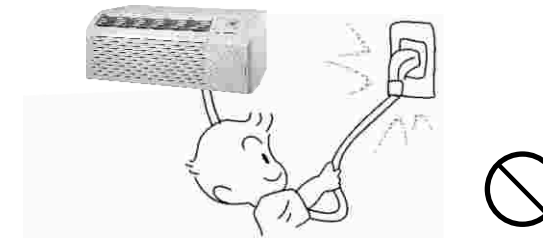
READ THESE SAFETY WARNINGS COMPLETELY PRIOR TO ANY USE.

	Ground connection
	Disconnect the plug

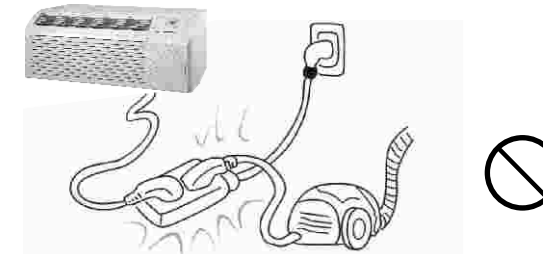
	Forbidden
	Imperative

These precautions are essential and must be strictly observed.

DO NOT pull on the power cord or refrigeration lines. Install them in secure positions. Plastic cover of line set is recommended.



DO NOT use smaller than recommended wires. Do not put several circuits on circuit breaker. Don't use under-sized circuit breakers. Otherwise power failure or fire may be caused.



DO NOT pull on the power cord or refrigeration lines. Install them in a secured position. A line set plastic cover is recommended.

DO NOT install the unit in places where there is exposure to flammable materials or gas leakage.

DO NOT use wire or circuit breakers that do not meet electrical safety standards. Several circuits cannot be connected to one breaker.

DO NOT wire or open the unit while it is running. Make sure to shut off all circuits prior to inspecting or servicing the unit.

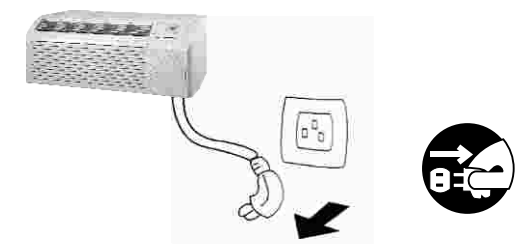
DO NOT install unit in a damp laundry room or near flammable gas. All units must be protected by certified electrical circuit breakers and in accordance with all safety codes.

DO NOT use the unit in cool or dry mode for prolonged periods where humidity is higher than 80%.

DO NOT blow the cold air directly towards people for prolonged period. Otherwise, people may get cold.



DO NOT wire or open unit while unit is running. Sparks or fire may occur. It may cause a shock that could cause injury and potentially be life threatening.



DO NOT install the indoor unit close to cooking surfaces or ventilation systems. Poor placement could inhibit peak performance.

DO NOT blow cold air directly towards people for extended periods.

DO NOT use chemical solvents, flammable insecticides, or abrasive materials. Clean the unit only with a soft dry cloth or rag.

DO NOT continue to operate the unit if there is any abnormal odor, burning, scorching, or smoke. Stop and disconnect power to the unit immediately.

DO NOT use the system for anything other than what it was designed for or any non-HVAC purposes. Do not store near food, paint, or other chemicals.

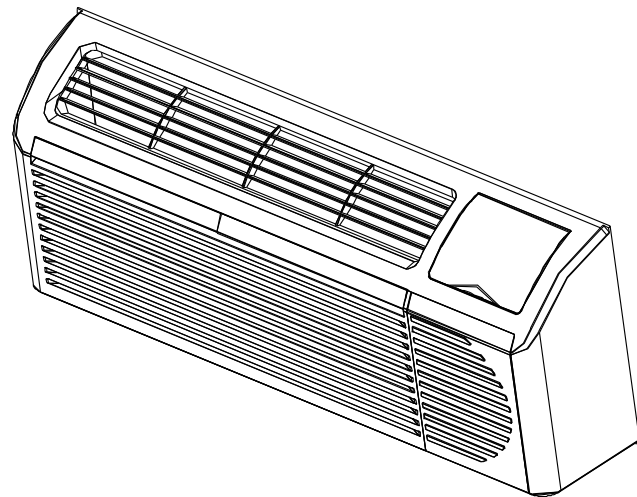
DO NOT operate the unit for prolonged periods without refreshing ambient air. Opening a door or window periodically will suffice.

MUST READ

MUST READ

UNIT FEATURES

This Premium unit has many exciting features which are different than those found on standard PTAC models. The owner must be familiar with these features in order to fully understand the operation and capability of the unit.



*** Intelligence** - Your Premium unit has an on board computer that utilizes real time diagnostics to prolong the life of your unit. There is an LED indicator on the control board, behind the front panel, that will flash an error code if the unit has detected some kind of fault condition. In many cases, the unit will automatically clear the fault condition and continue operating with no interruption. In some cases, the condition cannot be cleared and the unit will require service. In those cases, an "Fx" failure mode will be displayed on the digital display. For a detailed list of all error codes and "Fx" conditions, see Table 6 - Status LED Indicator Definitions for further details.

*** Memory** - Your Premium unit also has memory. If power is lost, all of the control settings (set point, mode, fan speed, on/off and configuration) are remembered. So when power is restored, the unit will start back up in the mode (and configuration) it was in, when power was lost.

*** Premium Sound** - Not only does The unit have 2 fan motors and a tangential blower wheel for optimum sound, the indoor fan will always run a minimum of 10 seconds before the compressor, to help reduce any compressor starting noise.

*** Random Compressor restart** - To help prevent power surges after a power outage (from many of your PTAC starting at the same time), the compressor is equipped with a 2:45 to 3:15 random restart delay feature. Whenever the unit is plugged in, or power has been restarted, a random compressor restart will occur.

*** Compressor Protection** - To prevent short cycling of the compressor and maximize it's life, there is a random start - up delay of 3 minutes on the compressor and a minimum compressor run time of 3 minutes.

*** Automatic room freeze protection** - automatically will keep the temperature in the room from getting too cold, where water pipes might freeze. If the unit is configured for the freeze protection feature to be active (which is the default condition), then whenever power is supplied to the unit, if the unit senses temperature below 40°F, the fan motor and electric heater are turned on and will warm the room to 50°F. If Freeze protection is not required, change the configuration switch to turn the feature off (see section on unit configuration).

*** Automatic defrost protection (for heat pump models only)** - When the outdoor temperature gets too cold (approx. 35°F) and the unit can no longer effectively heat with the compressor, the unit will automatically switch to electric heating. The unit will then heat with electric heat until the outside temperature rises enough (approx. 40°F), so the compressor can be used again.

*** Automatic Quick Warm-up (for heat pump models only)** - If the room temperature falls to 5°F below the set point temperature, the reverse cycle heat is shut off and the electric strip heat is turned on for one cycle, until heating is satisfied.

*** LED Indicator's and Buttons** - The touch pad has buttons for MODE, FANSPEED, ON/OFF, SETPOINT UP and SETPOINT DOWN. It also has LEDs that correspond to the mode, fan speed and setpoint operation, to indicate the unit's status. The LEDs below the mode button, FAN, COOL, and HEAT, indicate what operating mode is active. The LEDs below the Fan button, Low, Med and Hi, indicate the fan speed that is selected. The LED located in the lower right corner is the unit On/Off status LED. If the unit is in ON mode, the LED will be green. If the unit is OFF, the LED will be red.

*** Configure Fan to Optimize Selected Application** - Unit can be optimized to selected application by configuring the fan to run in continuous mode or cycle on and off with the compressor and electric heater (can be different for both heating and cooling modes). In cycle mode, fan will continue to run after compressor or electric heater stops in order blow off any residual heat or cool left on coil.

UNIT SPECIFICATIONS

Models 208-230/1/60		PTAC-07K-12B(43)	PTAC-09K-12B(43)	PTAC-12K-12B(43)	PTAC-12K-12B(45)	PTAC-15K-12B(45)	PTHP-07K-14B(43)	PTAC-09K-14B(43)	PTHP-12K-14B(43)	PTHP-12K-14B(45)	PTHP-15K-14B(45)
Models 265-277/1/60		PTAC-07K-12D(43)	PTAC-09K-12D(43)	PTAC-12K-12D(43)	PTAC-12K-12D(45)	PTAC-15K-12D(45)	PTHP-07K-14D(43)	PTAC-09K-14D(43)	PTHP-12K-14D(43)	PTHP-12K-14D(45)	PTHP-15K-14D(45)
Cooling Capacity (Rated)	Btu/h	7600/7700	8800/9000	11800/12000	11800/12000	14600/15000	7600/7700	8800/9000	11800/12000	11800/12000	14600/15000
Heating Capacity (Rated)	Btu/h	-	-	-	-	-	6100/6300	7900/8100	10500/10700	10500/10700	13800/13600
Cooling Power Input	W	620/640	770/800	1120/1120	1120/1120	1510/1530	620/640	770/800	1120/1120	1120/1120	1510/1530
Heating Power Input	W	-	-	-	-	-	530/540	700/720	990/1010	990/1010	1390/1370
Cooling Power Current	A	3.0/2.8	3.9/3.7	5.3/5.1	5.3/5.1	7.5/6.7	3.0/2.8	3.9/3.7	5.3/5.1	5.3/5.1	7.5/6.7
Heating Power Current	A	-	-	-	-	-	3.0/2.8	3.6/3.4	4.7/4.5	4.7/4.5	6.0/6.6
Rated Input	W	736	893	1394	1394	2025	736	972	1447	1447	2025
Rated Current	A	3	4.78	7.57	7.57	11.03	3	5.36	7.87	7.87	11.03
Air Flow Rate (H/M/L)	CFM	295/280/260	295/280/260	320/295/280	320/295/280	350/320/300	295/280/260	295/280/260	320/295/280	320/295/280	350/320/300
Dehumidifying Volume	L/h	0.8	1	1.3	1.3	1.5	0.8	1	1.3	1.3	1.5
EER	Btu/h.w	12.2/12	11.4/11.3	10.5/10.7	10.5/10.7	9.7/9.8	12.2/12	11.4/11.3	10.5/10.7	10.5/10.7	9.7/9.8
COP	W/W	-	-	-	-	-	3.4/3.4	3.3/3.3	3.1/3.1	3.1/3.1	2.9/2.9
Reference Only-Good for Floor Space, of Mild Load, in Residential Applications	Sq. Ft.	100-160	120-180	160-240	160-240	210-310	100-160	120-180	160-240	160-240	210-310
Climate Type		T1	T1	T1	T1	T1	T1	T1	T1	T1	T1
Isolation		I	I	I	I	I	I	I	I	I	I
Moisture Protection		IP24	IP24	IP24	IP24	IP24	IP24	IP24	IP24	IP24	IP24
Allowed Maximum Operation Pressure-High Side	PSI	550	550	550	550	550	550	550	550	550	550
Allowed Maximum Operation Pressure-Low Side	PSI	290	290	290	290	290	290	290	290	290	290
Dimensions of Main Unit WxHxD	In.	42x16.0x21.5	42x16.0x21.5	42x16.0x21.5	42x16.0x21.5	42x16.0x21.5	42x16.0x21.5	42x16.0x21.5	42x16.0x21.5	42x16.0x21.5	42x16.0x21.5
Dimensions of Wall Sleeve WxHxD	In.	42x16x13 3/4"	42x16x13 3/4"	42x16x13 3/4"	42x16x13 3/4"	42x16x13 3/4"	42x16x13 3/4"	42x16x13 3/4"	42x16x13 3/4"	42x16x13 3/4"	42x16x13 3/4"
Dimensions of Carton Box WxHxD	In.	45.5x26.6x18.1	45.5x26.6x18.1	45.5x26.6x18.1	45.5x26.6x18.1	45.5x26.6x18.1	45.5x26.6x18.1	45.5x26.6x18.1	45.5x26.6x18.1	45.5x26.6x18.1	45.5x26.6x18.1
Weight-Net	LBs	101.4	103.6	108.0	110.2	116.8	101.4	105.8	110.2	110.2	119.0
Weight-Gross	LBs	125.7	127.9	132.3	134.5	141.1	125.7	130.1	134.5	134.5	143.3
Refrigerant Name		R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
Charge	LBs	1.12	1.34	1.67	1.67	2.38	1.23	1.56	1.67	1.67	2.38
Fan Type		Cross-flow	Cross-flow	Cross-flow	Cross-flow	Cross-flow	Cross-flow	Cross-flow	Cross-flow	Cross-flow	Cross-flow
Fan Wheel Dia. x Length	In.	4.8 x 27.8	4.8 x 27.8	4.8 x 27.8	4.8 x 27.8	4.8 x 27.8	4.8 x 27.8	4.8 x 27.8	4.8 x 27.8	4.8 x 27.8	4.8 x 27.8
Fan Motor Speed(H/M/L)	RPM	840/790/740	1030/970/890	1100/1000/920	1100/1000/920	1100/1000/920	840/790/740	1030/970/890	1100/1000/920	1100/1000/920	1100/1000/920
Output of Fan Motor	W	18	21	23	23	23	21	23	23	23	23
Fan Motor RLA	A	0.15	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36
Fan Motor Capacitor	UF	1	1	1	1	1	1	1	1	1	1
Input of Heater	W	2452/3000	2452/3000	2452/3000	4087/5000	4087/5000	2452/3000	2452/3000	2452/3000	4087/5000	4087/5000
Evaporator Form		Aluminum Fin / Tube	Aluminum Fin-Copper Tube	Aluminum Fin-Copper Tube	Aluminum Fin-Copper Tube	Aluminum Fin-Copper Tube	Aluminum Fin / Tube	Aluminum Fin-Copper Tube	Aluminum Fin-Copper Tube	Aluminum Fin-Copper Tube	Aluminum Fin-Copper Tube
Swing Motor Model		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Output of Swing Motor	W	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fuse	A	3.15	3.15	3.15	3.15	3.15	3.15	3.15	3.15	3.15	3.15
Sound Pressure Level (H/M/L)	dB (A)	49/48/47	51/50/49	53/52/51	53/52/51	53/52/51	49/48/47	51/50/49	53/52/51	53/52/51	53/52/51
Sound Power Level (H/M/L)	dB (A)	59/58/57	61/60/59	63/62/61	63/62/61	63/62/61	59/58/57	61/60/59	63/62/61	63/62/61	63/62/61
Compressor Type		Rotary	Rotary	Rotary	Rotary	Rotary	Rotary	Rotary	Rotary	Rotary	Rotary
Compressor Brand		PANASONIC	DAIKIN	RECHI	RECHI	PANASONIC	PANASONIC	MITSUBISHI	RECHI	RECHI	PANASONIC
Compressor Model		5RS062FAA21	KN073NGFMC	44A282AK&FEKC	44A282AK&FEKC	5PS146FAA21	5RS062FAA21	KN073NGFMC	44A282AK&FEKC	44A282AK&FEKC	5PS146FAA21
Compressor Oil		FV50S	PVE	NMOC Ze-Gles RB68EP	FV50S	FV50S	FV50S	PVE	NMOC Ze-Gles RB68EP	FV50S	FV50S
L.R.A.	A	19	17	29.5	29.5	32.6	19	17	29.5	29.5	32.6
Compressor RLA	A	2.8	3.7	5	5	6.6	2.8	3.7	5	5	6.6
Compressor Power Input	W	630	740	1125	1125	1480	630	740	1125	1125	1480
Overload Protector		B130-140-241E	-	B245-140K-141H	B245-140K-141H	B205-150-141C	B130-140-241E	-	B245-140K-141H	B245-140K-141H	B205-150-141C
Metering Device		Capillary	Capillary	Capillary	Capillary	Capillary	Capillary	Capillary	Capillary	Capillary	Capillary
Panel Continued	F	61°F-86°F	61°F-86°F	61°F-86°F	61°F-86°F	61°F-86°F	61°F-86°F	61°F-86°F	61°F-86°F	61°F-86°F	61°F-86°F
Outdoor Ambient Temp (Cooling)	F	55°F-115°F	55°F-115°F	55°F-115°F	55°F-115°F	55°F-115°F	55°F-115°F	55°F-115°F	55°F-115°F	55°F-115°F	55°F-115°F
Outdoor Ambient Temp (Heating)	F	≤75°F	≤75°F	≤75°F	≤75°F	≤75°F	≤75°F	≤75°F	≤75°F	≤75°F	≤75°F
Condenser Form		Aluminum Fin-Copper Tube	Aluminum Fin-Copper Tube	Aluminum Fin-Copper Tube	Aluminum Fin-Copper Tube	Aluminum Fin-Copper Tube	Aluminum Fin-Copper Tube	Aluminum Fin-Copper Tube	Aluminum Fin-Copper Tube	Aluminum Fin-Copper Tube	Aluminum Fin-Copper Tube
Fan Motor Speed	RPM	1370	1370	1370	1370	1370	1370	1370	1370	1370	1370
Output of Fan Motor	W	40	40	65	65	65	40	40	65	65	65
Fan Motor RLA	A	0.42	0.42	0.67	0.67	0.77	0.42	0.42	0.67	0.67	0.77
Fan Motor Capacitor	UF	2	2	2.5	2.5	2.5	2	2	2.5	2.5	2.5
Fan Type		Axial-flow	Axial-flow	Axial-flow	Axial-flow	Axial-flow	Axial-flow	Axial-flow	Axial-flow	Axial-flow	Axial-flow
Fan Diameter	Inches	13.75	13.75	13.75	13.75	13.75	13.75	13.75	13.75	13.75	13.75
Sound Pressure Level (H/M/L)	dB (A)	61/59/57	61/59/57	63/61/59	63/61/59	63/61/59	61/59/57	61/59/57	63/61/59	63/61/59	63/61/59
Sound Power Level (H/M/L)	dB (A)	71/69/67	71/69/67	73/71/59	73/71/59	73/71/59	71/69/67	71/69/67	73/71/59	73/71/59	73/71/59
Defrosting Method		-	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Loading Quantity		20' GP	68	68	68	68	68	68	68	68	68
		40' GP	144	144	144	144	144	144	144	144	144
		40' HQ	180	180	180	180	180	180	180	180	180

Accessories Available: Wall Sleeve, Grille, LCDI Cord, Wall Mount Thermostat, Door Sensor, Occupancy Sensor...
Parts Available: Compressor, Motor, Heater, Filter...

1. Performance rated for matched system at standard conditions-cooling ID 80/67F, OD 95F, heating ID 70/60F, OD 47/43F. Unit performance varies when weather changes from the standard one.
2. Select equipment capacity sizes per space load calculation schedule and cooling & heating hours. Not to over size or under size equipment.
3. Watch unit operation during extreme weather conditions in summer and winter. After the unit is used for quite a while in these weather, unit may step into protection mode and stay idle.



UNIT FEATURES CONTINUED

- * **Unit Configuration** - There are many different configuration possibilities, through both dials and the digital keypad, that allow you to configure the unit for your exact application. See section on unit configuration for more details. Following are the configuration selections that have not previously been mentioned:
- * **°F or °C** - The unit can display in either °F or °C. Spell out (Fahrenheit) or (Celsius).
- * **Indoor Temperature Sensor Biasing** - Optimize the room temperature sensor reading to your exact application (one for cooling and another for heating).
- * **Emergency heat (for heat Pump Only)** - Disable the compressor during heating mode operation (heat only with Electric Heat).
- * **Display Set point OR Room Temperature** - The unit can be configured to display the room temperature OR set point only, during heating and cooling modes. See section on unit configuration for more details.
- * **Limit the Set point Range** - The unit can be configured to limit the controlling set point range. The display will always show the complete set point range, but the controlling set point will be limited to the configured minimum and maximum set point selected. See section on unit configuration for more details.
- * **Energy Management** - Sometimes known as Front Desk Control, an input is provided so that the unit can be manually disabled from a different location. If the unit detects 24vac on this input, it will automatically turn itself off. If no voltage is detected on the input, the unit will run normally.
- * **Wall Thermostat Control** - A wired wall thermostat can be connected to the unit. If it is, the unit must be configured to disable the keypad. See section on wired inputs and unit configuration for more details.

ELECTRICAL DATA

⚠ WARNING

ELECTRICAL SHOCK HAZARD

Failure to follow this warning could result in personal injury or death and/or property damage DO NOT alter cord or plug or use an extension cord.

Appropriate power cord accessory kit is determined by the voltage, and amperage of the branch circuit. The unit does not come with a power cord (or hard wire kit). An accessory power cord kit must be ordered to connect the unit to the outlet. If the unit is to be hard wired, an accessory hard wire kit must be ordered.

IMPORTANT: For 265V units, if power cord accessory option is selected, the cord is only 18" long and must plug into the accessory electrical 265V subbase.

Be sure that your outlet matches the appropriate blade configuration of the plug and that it is within reach of the service cord.

All wiring, including installation of the receptacle, must be in accordance with the NEC and local codes, ordinances and regulations. National codes require the use of an arc fault or leakage current detection device on all 208/230V power cords. Be sure to select the correct cord for your installation.

ALL UNITS

Wire Size

Use recommended wire size given in Table 1 and install a single branch circuit. All wiring must comply with local and national codes. All units are designed to operate off ONE single branch circuits only.

NOTE: Use copper conductors only.

SUGGESTED BRANCH CIRCUIT WIRE SIZES*

NAMEPLATE AMPS	AWG WIRE SIZE
7.0 to 12	14
12.1 to 16	12
16.1 to 24	10

LEGEND

- AWG - American Wire Gauge
- * Single circuit from main box.
- * Based on copper wire at 60°C temperature rating.

Grounding

For safety and protection, the unit is grounded through the service cord plug or through separate ground wire provided on hard wired units. Be sure that the branch circuit or general purpose outlet is grounded.

ELECTRICAL DATA

VOLTAGE SUPPLY

Check voltage supply at outlet. For satisfactory results, the voltage range must always be within the ranges found on the data information plate.

Cord-connected Units

The 250-v field supplied outlet must match the plug for the standard 208/230--v units and be within reach of the service cord. The standard cord-connected 265-v units require an accessory electrical subbase for operation. Refer to Table 2 for proper receptacle and fuse type.

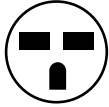
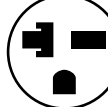



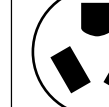
Power Cord Protection

The power cord for 230/208v units provide power cord fire protection. Unit power automatically disconnects when unsafe conditions are detected. Power to the unit can be restored by pressing the reset button on plug head.

Upon completion of unit installation for 230/208V models, an operational check should be performed using the TEST/RESET buttons on the plug head.

NOTE: The 265v models do not incorporate this feature as they require use of the electrical subbase accessory.

RECEPTACLES AND FUSE TYPES - 250, 265 VOLTS

RECEPTACLE						
AMPS	15	20	30	15	20	30
RATED VOLTS	250	250	250	265	265	265
TIME-DELAY TYPE FUSE (or HACR Circuit Breaker)	15	20*	30	15	20	30

LEGEND

HACR - Heating, Air Conditioning, Refrigeration * May be used for 15 - amp applications

INSTALLATION

Proper installation is the responsibility of the installer.

Product failure due to improper installation is not covered under the Warranty.

CHASSIS INSTALLATION

Units are shipped without a sleeve. In applications where unit is a replacement, it is recommended that a YMG I or Carrier sleeve be used.

These units can retrofit General Electric, Amana, Trane, and Friedrich sleeves/grilles (be sure outdoor grille is installed on the sleeve). See Table 3 for details.

For any sleeve retrofit applications, be sure that the foam seals (factory--installed on the tube sheets) provide a good seal between the grille and outdoor coil tube sheets. These foam seals provide a barrier to separate outdoor coil leaving air from mixing with the outdoor incoming air (known as air reticulation).

⚠ CAUTION

UNIT DAMAGE AND/OR OPERATION HAZARD

Failure to follow this caution may result in equipment damage or improper operation.

For retrofit applications, foam seals on outdoor coil tube sheets must make a seal between the coil and the grille or loss of performance and premature damage to the major components can result.

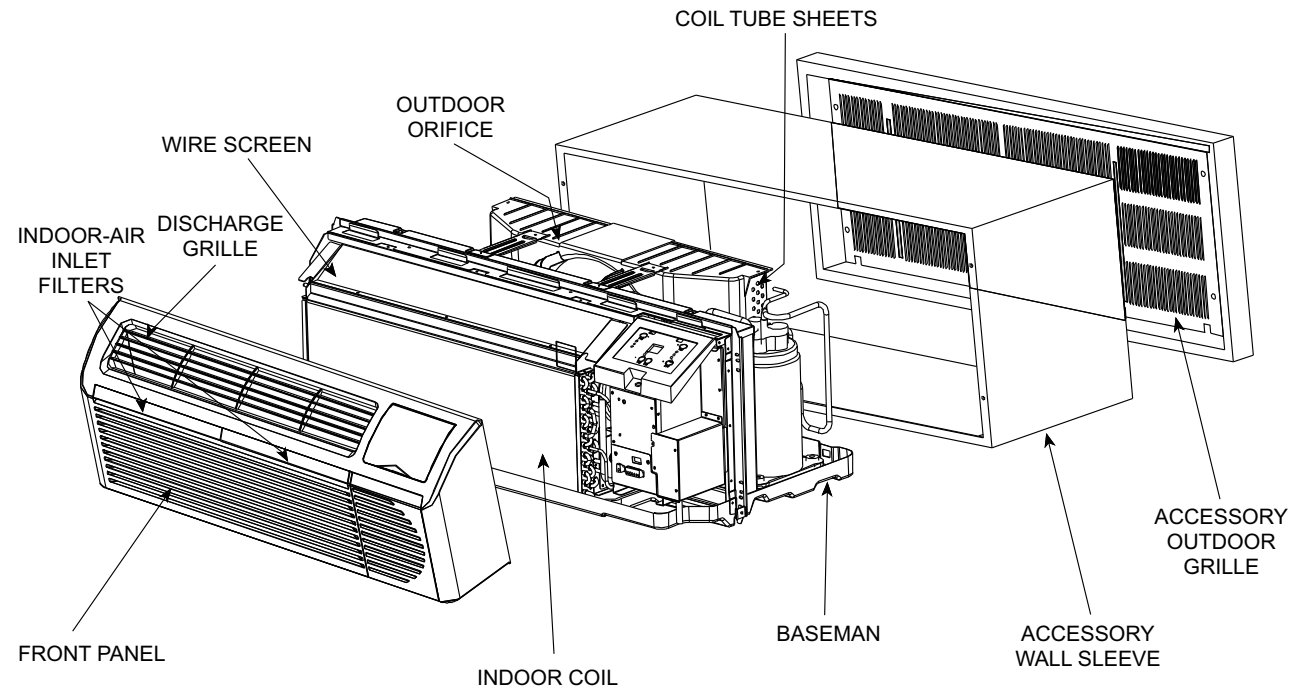
RetrofitWall Sleeves

Manufacturer	Wall Sleeve Part Number
General Electric	Metal Sleeve RAB71
	Plastic Sleeve RAB77
Amana	Metal Sleeve WS900B
Trane	Metal Sleeve SLV149
Friedrich	T - Series Metal 111/2 - in. Deep Wall Sleeve*
	Standard Depth Wall Sleeve 16 X 42 X 133/4 - in. PXWS

* FR - SLEEVE - EXT accessory is required for retrofit into Friedrich (T - Series) wall sleeves.



INSTALLATION



RETRO FIT SLEEVE PREPARATION

IMPORTANT: Inspect wall sleeve thoroughly prior to installation. Manufacturer does not assume responsibility for costs or damages due to defects in sleeve or for improper installation.

⚠ WARNING

ELECTRIC SHOCK HAZARD

- * Failure to follow this warning could result in personal injury or death.
 - * Disconnect all power to unit to avoid possible electrical shock during installation.
- Remove any existing foam baffles that are installed on competitive outdoor grille, if present.

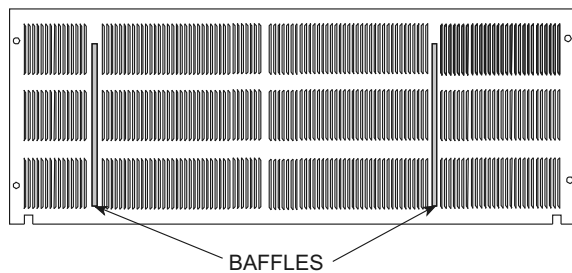
GE Sleeves Only

- GE Meta I Wall Sleeve - GE metal sleeve is interchangeable with YMGI wall sleeve.
- GE Plastic Sleeve - Remove bottom seal from plastic sleeve.

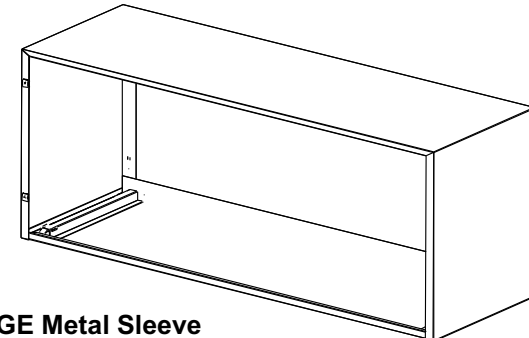
INSTALLATION OF A YMGI OR CARRIER WALL SLEEVE USING A NON-YMGI GRILLE

This application has become more common due to pre-manufactured windows with built-in grilles or renovations where a YMGI or Carrier sleeve is used with an existing non-YMGI grille. Use of a YMGI or Carrier wall sleeve with a non-YMGI grille requires installation of an Accessory Baffle Kit, which ensures a good seal between the unit and exterior grille to prevent air reticulation. Air reticulation is a large contributor to performance loss and premature damage to major components.

Notes: YMGI stamped grille is interchangeable with CARRIER'S.

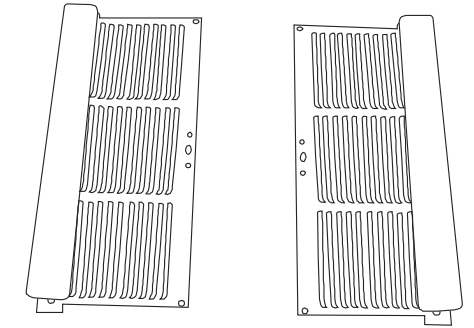
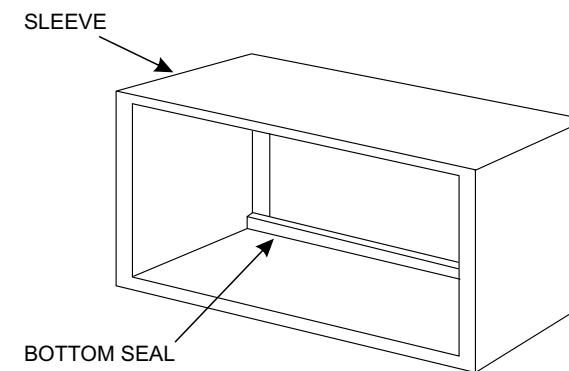


Remove Existing Outdoor Grille Baffles on Competitive Grille



GE Metal Sleeve

INSTALLATION



Accessory Baffle Kit

Note: contact your units supplier to get the kit and it may be different from the shape showed above.

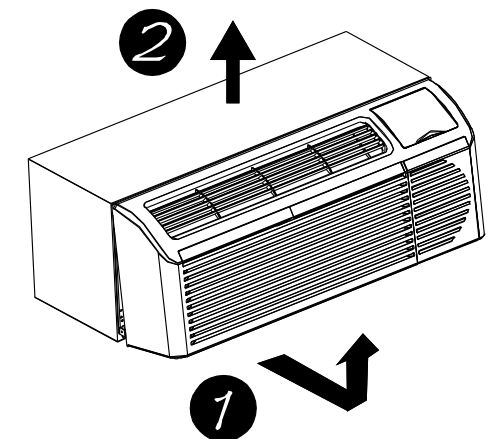
INSTALL UNIT INTO WALL SLEEVE

- 1) Carefully remove shipping tape from the front panel and vent door.
- 2) Remove shipping screw from the vent door, if present.
- 3) Remove front panel.
- 4) Lift unit level and slide unit into wall sleeve until foam seal rests firmly against front of wall sleeve.
- 5) Secure with four screws (supplied) through the unit flange holes.
- 6) Reinstall front panel.

⚠ CAUTION

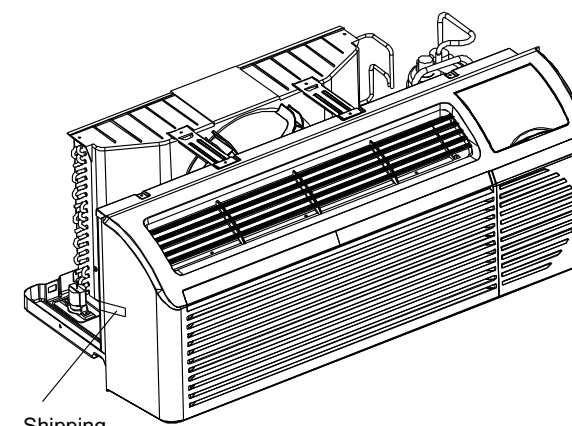
UNIT DAMAGE HAZARD

- * Failure to follow this caution may result in equipment damage or improper operation.
- * Failure to remove shipping tape and screw will prevent fresh air vent door from opening and may result in damage to vent door cable.

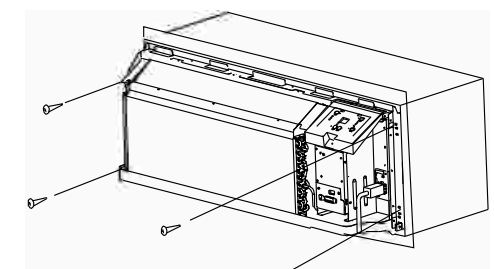


Removing Front Panel

Pull out at the bottom to release it from the tabs (1). Then lift up (2).

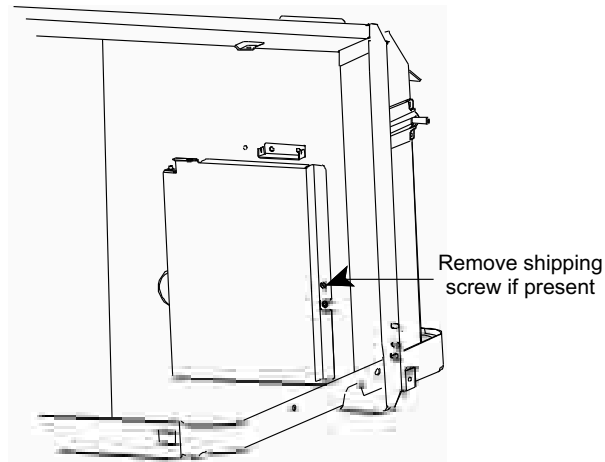


Shipping Tape Location

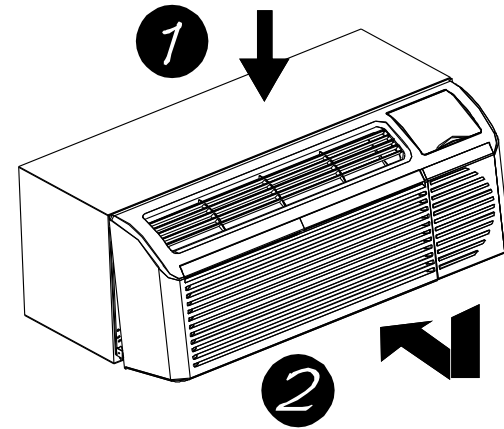


Securing Unit

INSTALLATION



Shipping Screw Location



Replacing Front Panel

Place tabs over top rail (1). Push Inward at bottom until panel snaps into place (2).

HOW TO CONNECT

IMPORTANT: Please read following electrical safety data carefully.

⚠ WARNING

ELECTRICAL SHOCK AND/OR UNIT OPERATION AND DAMAGE HAZARD

Failure to follow this warning could result in personal injury or death and/or unit operation and damage.

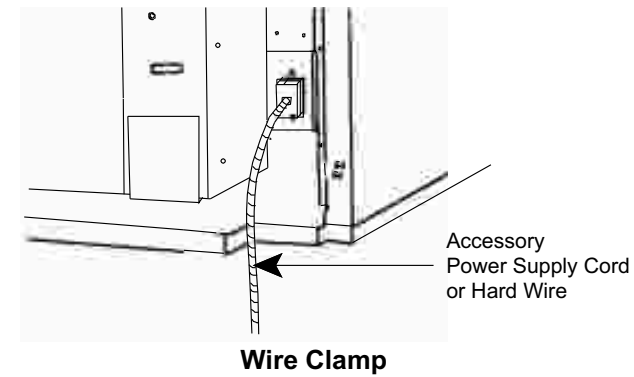
- * Follow the National Electrical Code (NEC) or local codes and ordinances.
- * For personal safety, this unit MUST BE properly grounded.
- * Protective devices (fuses or circuit breakers) acceptable for unit installations are specified on the nameplate of each unit.
- * Do not use an extension cord with this unit.
- * Aluminum building wiring may present special problems -- consult a qualified electrician.
- * When unit is in STOP position, there is still voltage to electrical controls.
- * Disconnect power to unit before servicing by:
 - 1) Removing power cord (if it has one) from wall receptacle.
 - 2) Removing branch circuit fuses or turning circuit breakers off at panel.
- 1) Remove front panel.
- 2) Remove junction box.

Remove junction box cover by removing three screws from front. Remove junction box by taking out top, rear and side screws.
- 3) Connect accessory power supply cord or hard wire connector to unit connector.

Units must be installed using the appropriate power supply kit. See Table 4 - POWER CONNECTION CHART.

These connections must be followed.
- 4) Reinstall junction box and cover.
 - * Use wire clamp to attach power cord to basepan.
 - Secure with screws (included).
 - * Relace junction box and cover with screws removed from Step 2. Tighten securely.
- 5) Replace front panel.
- 6) Connect power to unit.

INSTALLATION



UNIT MODEL	CODE OF POWER SUPPLY KIT		
	30A	20A	15A
208-230 VOLT			
PTAC-07K-12B(43)	N/A*	PWRCORD-230V-20A	N/A*
PTHP-07K-14B(43)			
PTAC-09K-12B(43)			
PTHP-09K-14B(43)			
PTAC-12K-12B(43)			
PTHP-12K-14B(43)	PWRCORD-230V-30A	N/A*	N/A*
PTAC-12K-12B(45)			
PTHP-12K-14B(45)			
PTAC-15K-12B(45)	PWRCORD-265V-30A	N/A*	N/A*
PTHP-15K-14B(45)			
PTAC-12K-12D(43)			
PTHP-07K-14D(43)			
PTAC-09K-12D(43)			
PTHP-09K-14D(43)			
PTAC-12K-12D(43)			
PTHP-12K-14D(43)	PWRCORD-265V-30A	N/A*	N/A*
PTAC-12K-12D(45)			
PTHP-12K-14D(45)			
PTAC-15K-12D(45)	PWRCORD-265V-30A	N/A*	N/A*
PTHP-15K-14D(45)			

* Using these cords could result in damage to your unit.

SYSTEM CONFIGURATION

VENTILATION CONTROL

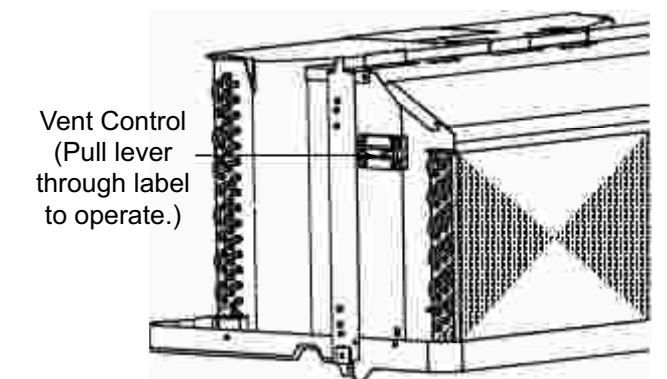
The ventilation control lever is located at left side of unit, behind front panel.

NOTE: The vent door shipping hardware must be removed before using vent control lever. See Installation Instructions.

When set at CLOSE, only the air inside the room is circulated and filtered.

When set at OPEN, some outdoor air will be drawn into room. This will reduce heating or cooling efficiency.

Energy Tip: Keep the vent control at CLOSE. Room air will be filtered and circulated.



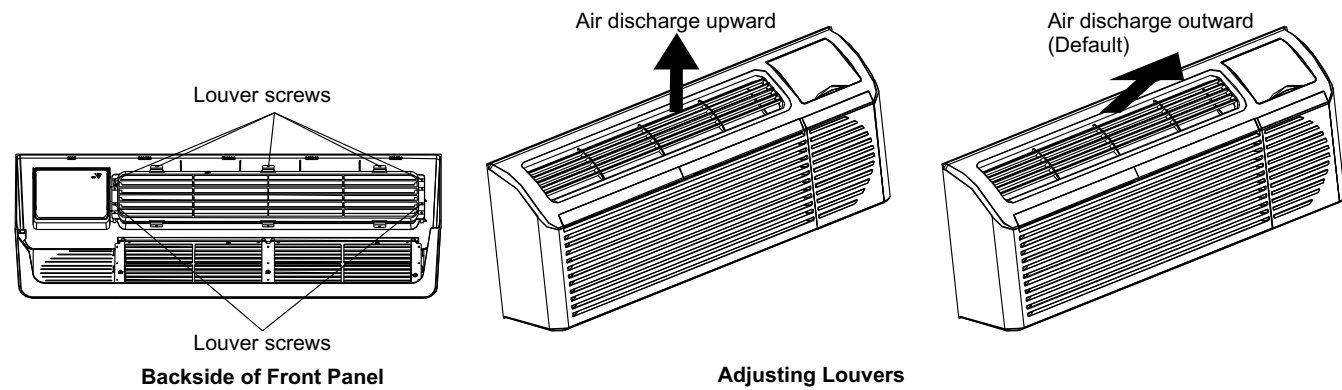
Ventilation Control Location

ADJUSTING AIR DIRECTION

To adjust air direction:

- 1) Remove front panel.
- 2) Remove louver screws that hold louver insert in place (from back side of front panel).
- 3) Turn louver insert and rotate 180°.
- 4) Replace louver insert.
- 5) Replace screws and front panel.

SYSTEM CONFIGURATION



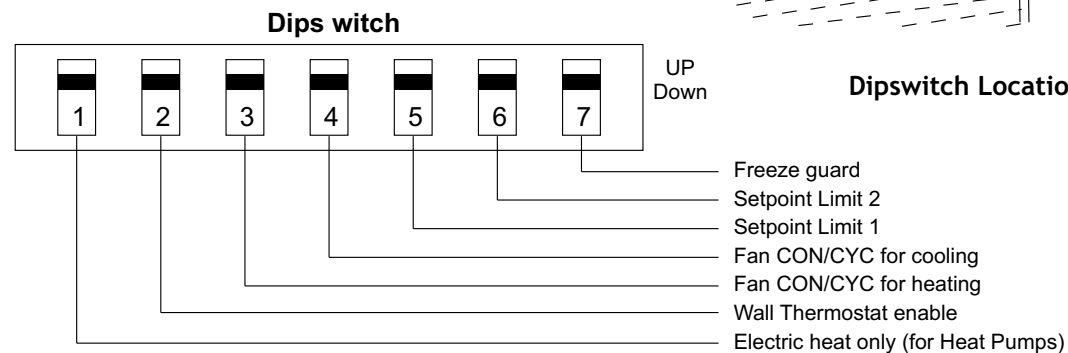
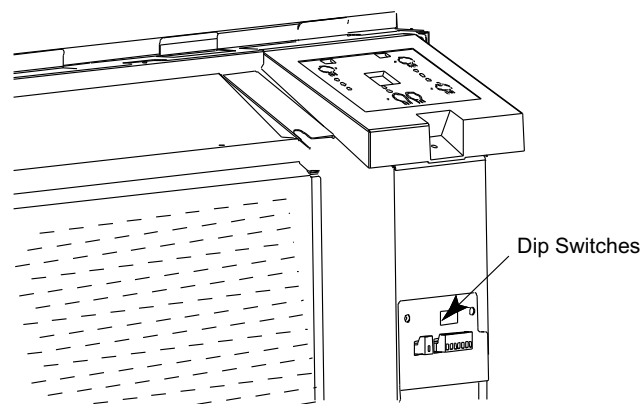
DIP SWITCHES

Auxiliary dip switch controls are located behind front panel, through an opening below the control panel. To access, remove front panel.

Dip switches are accessible without opening the control box. Unit must be powered OFF to effectively change their status.

Factory settings for dip switches will be in the DOWN position.

Functions for functions of each dip switch position.



DIP SWITCH FUNCTIONS

No	UP		DOWN		REMARKS	DEFAULT
1	Electric Heat Only		Heat Pump		For Heat Pump unit only.	DOWN
2	Wall Thermostat Enable		Control Panel Enable			DOWN
3	Fan Continuous Run for Heating		Fan Cycle for Heat			DOWN
4	Fan Cycle for Cool		Fan Continuous Run for Cooling			DOWN
5*6	UP*UP 68-75°F 20-24°C	UP*DOWN 63-80°F 18-28°C	DOWN*UP 65-78°F 19-26°C	DOWN*DOWN 61-86°F 16-30°C (full range)	Two configurations (5*6) combine to select set point range. When set point limit set, display always shows full range.	DOWN*DOWN 61-86°F 16-30°C
7	Freeze Guard Disable		Freeze Guard Enable			DOWN

Electric Heating Only / Emergency Heat (For heat Pump Units Only)

This setting is typically used for Emergency heating.

Wall Thermostat Enable

A wired wall thermostat can be connected to the unit. If it is, this dip switch must be moved to the Wall. Thermostat Enable Position, before the wall thermostat will begin control.

Heat and Cool Fan CON/CYC Dip-switches

Allows the fan to operate in continuous or cycle modes while the unit is in heating or cooling mode (continuous or cycle).

SYSTEM CONFIGURATION

CON (Continuous)

Allows fan to run continuously, circulating air even when the temperature setting has been satisfied. This switch helps to maintain the room temperature closer to the thermostat setting.

CYC (Cycle)

This setting allows the fan to cycle on and off with the compressor or electric heater. The fan stops a short time after the temperature setting is satisfied.

Set point Temperature Limits

Provides a restricted range of temperature control.

Room Freeze Protection

If unit senses a room temperature below 40°F, the fan motor and electric strip heat will turn on and warm the room to 50°F. The fan stops a short time after the temperature is satisfied.

KEYPAD CONFIGURATION

Keypad Configuration

Allows further configuration of system to desired application. Changes do not take affect until power is cycled on the unit.

To enter Keypad configuration

Cycle power to unit. Press and hold the Fan Speed Button and the COOLER button for 5 continuous seconds, within 30 seconds of the unit being powered up. If the unit has had power for more than 30 continuous seconds, keypad configuration cannot be entered. When keypad configuration mode is first entered, it will default to Fahrenheit/ Celsius Display Mode.

To scroll through the Keypad Configuration Options

Press and release the Fan Speed button. The stored value will be displayed.

To modify configuration settings

Press and release the Set point Up or Set point Down buttons.

To exit Keypad Configuration

Keypad Configuration will end on its own 30 seconds after the last button press or when the MODE button on the Keypad is pressed.

Fahrenheit/ Celsius Display Switch:

Change between degrees Fahrenheit and Celsius on the display. An "F" indicates Fahrenheit display and "C" indicates Celsius. Default is degrees "F".

Indoor Air Temperature Sensor Biasing for Cooling mode:

Sometimes known as an anticipator, the air temperature sensor bias is used to adjust the room air temperature reading when in cooling mode. (Not normally required.)

Indoor Air Temperature Sensor Biasing for heating mode:

Sometimes known as an anticipator, the air temperature sensor bias is used to adjust the room air temperature reading when in heating mode. (Not normally required.)

Indoor Temperature Display:

Change between showing set point only on the display during heating and cooling modes "SP" or displaying room temperature during heating and cooling modes "AA". "SP" mode is the default mode.

* If "SP" is selected, only the set point will be displayed during heating and cooling modes, regardless of what the real temperature is in the room.

* If "AA" mode is selected, the room temperature will be displayed during heating, cooling and fan only modes.

* If the mode button has been changed to either heating or cooling modes, set point will be displayed for 10 seconds. After the 10 seconds, the room temperature will again be displayed.

* If the on/off button is depressed (when the unit is off) and the last mode was either cooling or heating mode, the set point will be displayed for 10 seconds before displaying room temperature.

* During heating and cooling modes, if either the up or down set point key is depressed, the display will show the set point until 10 seconds after the last up or down key press. Then the room temperature will be displayed again.

SYSTEM CONFIGURATION

AUXILIARY CONTROLS

WALL THERMOSTAT TERMINAL

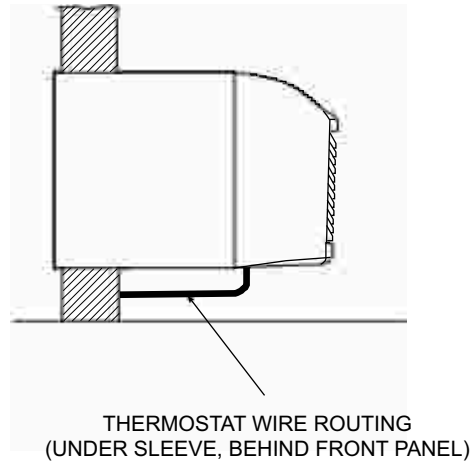
IMPORTANT: Only trained, qualified personnel should access electrical panel on unit and install electrical accessories. Please contact your local electrical contractor, dealer, or distributor for assistance.

Thermostat Wire Routing

Thermostat wire is field supplied. Recommended wire gauge is 18 to 20 gauge solid thermostat wire.

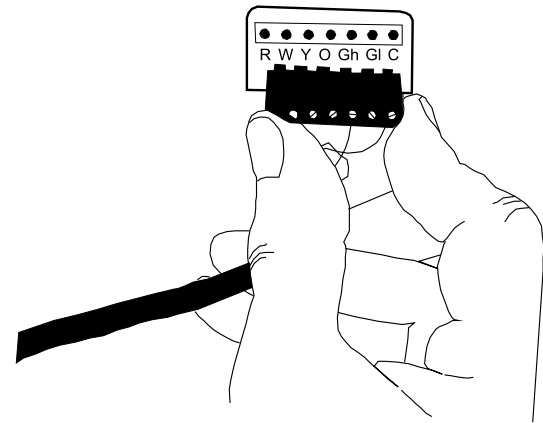
NOTE: It is recommended that extra wires are run to unit in case any are damaged during installation.

Thermostat wire should always be routed around or under, NEVER through, the wall sleeve. The wire should then be routed behind the front panel to the easily accessible terminal connector.



THERMOSTAT WIRE ROUTING
(UNDER SLEEVE, BEHIND FRONT PANEL)

Proper Wire Routing Beneath Unit



Terminal Connector Removal and Replacement

Wiring Thermostat To Unit

Wire wall thermostat input as defined in.

NOTE: Terminal connector can be removed and replaced to simplify the wiring.

NOTE: For heat pump models, anytime there is a second--stage call for heating from the wall thermostat, the unit will automatically switch over to electric heating.

Install Thermostat Wiring

1) Check to be sure power to unit is disconnected.

2) Pull terminal connector to remove

NOTE: Terminal connector can be removed and replaced to simplify thermostat wiring.

3) Connect wires from the thermostat to terminals on unit terminal connector.

4) Reinstall terminal connector.

5) Ensure that unit is configured for wall thermostat enable.

6) Replace control panel label with wall thermostat label (included).

7) Restore power to unit.

NOTE: Refer to thermostat installation instructions for details on installing wall thermostat.

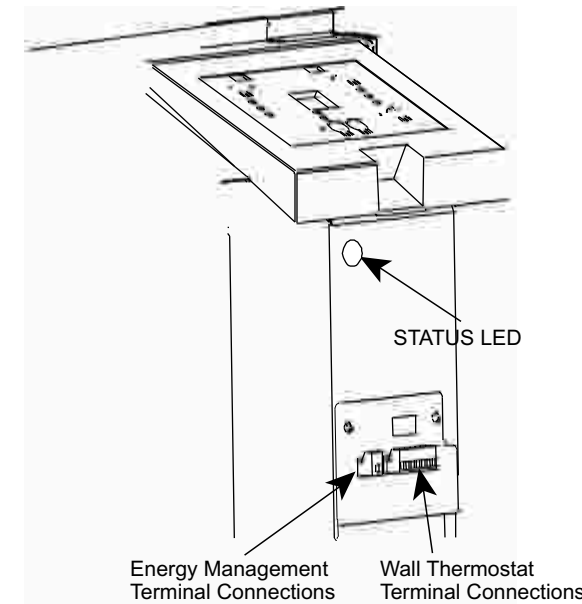
NOTE: For thermostats that have only one fan speed output (on or auto), the fan speed is determined by how the terminal connector is wired. If Low fan is desired, wire the G output from the thermostat to GL on the unit's terminal block. If Hi fan is desired, wire the G output from the thermostat to GH on the unit's terminal block.

NOTE: After proper installation, if your thermostat is not working properly, refer to the Trouble Shooting section.

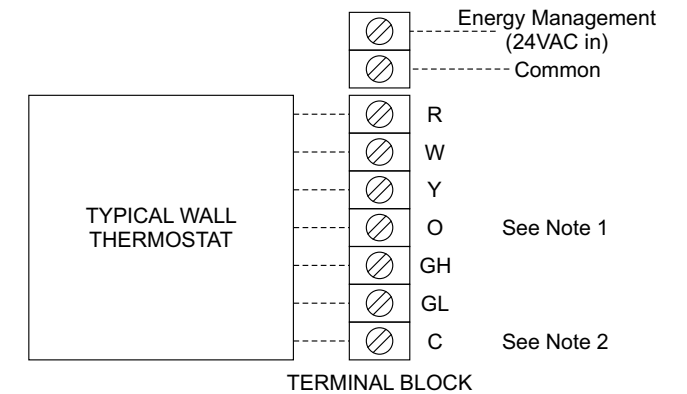
SYSTEM CONFIGURATION

TERMINAL CONNECTIONS

The wall thermostat terminal block is located behind the front panel and is easily accessible on front of control panel.



Terminal Connector and Status LED Location



NOTES:

1) Use terminal "O" for heat pump connection only.

2) Terminal "C" (common) is typically only required for digital thermostats.

TERMINAL	DESIGNATION
R	24 VAC
W	Electric Heat
Y	Compressor
O	Reversing Valve
GH	High Fan
GL	Low Fan
C	Common

NOTE: Any illegal input combinations will be captured as thermostat wiring failures and will light the STATUS LED indicator on main board (see Intelligent Self - Checking Control section)

Wiring Connections

CAUTION

UNIT DAMAGE HAZARD

Failure to follow this caution may result in equipment damage or improper operation.

Improper wiring may damage unit electronics.

Common busing is not permitted. Damage or erratic operation may result.

ENERGY MANAGEMENT INPUT (FRONT DESK CONTROL)

The controller can handle a switch signal from remote energy management input, called EM signal or front desk control. Input must be 24VAC. If system receives a 24VAC signal, it will turn unit off; otherwise, the unit runs in normal control. This function will be disabled under Freeze Guard protection. for terminal connections.

INTELLIGENT SELF-CHECKING CONTROL

Your YMGI PTAC has a computer board that continuously checks key components of the unit to ensure they are operating properly. Under normal operation, unit status indicator (STATUS, on main PCB), light is steadily ON. If there is a major problem, the unit will shut down and display a diagnostic failure code on the unit's display. If it is only a minor failure and unit is correcting the fault by itself, the diagnostic code will be flashed on the status LED that can easily be seen when the front panel is removed. Failure STATUS codes are defined in the table below.

STATUS LED Indicator Definitions

1	Indoor air temp sensor open/short	7- segment display 'F1', with STATUS light flash 1 time, off 2 seconds
2	Indoor coil sensor open/short	7- segment display 'F2', with STATUS light flash 2 time, off 2 seconds
3	Outdoor coil sensor open/short	7- segment display 'F4', with STATUS light flash 4 time, off 2 seconds
4	Freeze Guard protection	7- segment display 'FP'
5	Thermostat wiring error	STATUS light flash 9 times and off 3 sec, repeat
6	Indoor coil high temp protection	STATUS light flash 8 times and off 3 sec, repeat
7	Defrost (heat pump type)	STATUS light flash 7 times and off 3 sec, repeat
8	Outdoor coil high temp protection	STATUS light flash 6 times and off 3 sec, repeat
9	Indoor coil freeze protection	STATUS light flash 5 times and off 3 sec, repeat

NOTE: When status light is flashing, it will be ON for 0.5 seconds and OFF for another 0.5 seconds.

OPERATION

IMPORTANT: When unit is first started, high humidity conditions can cause condensation to form on discharge grille. Keep doors and windows closed. Room humidity will decrease and moisture will evaporate.

ABOUT THE CONTROLS ON YOUR UNIT

NOTE: In case of a power failure, the unit will remember the last programmed settings and will restart to those settings.

1) TEMP CONTROL

Temp Control is used to maintain room temperature. Compressor will cycle on and off to keep room at the requested level of comfort.

COOLER - Lowers temperature. (Minimum temperature setting is 61°F)

WARMER - Raises temperature. (Maximum temperature setting is 86°F)

2) FAN SPEED, MODE & ON/OFF

FAN SPEED - Set fan operation for HI, MED, or LO speed.

MODE- COOL - For cooling

MODE- HEAT - For heating

NOTE: If unit is a heat pump, raising the heat setting 5_F will cause unit to use its electric heating elements for one cycle in order to reach the new requested temperature quickly.

elements for one cycle in order to reach the new requested temperature quickly.

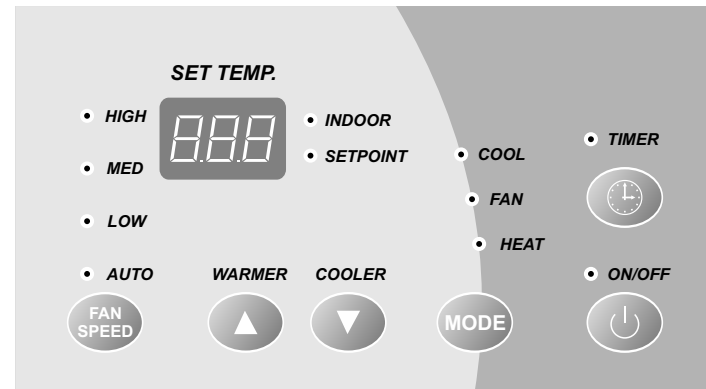
MODE - FAN - For fan--only operation

ON/OFF - Turns the unit on or off.

NOTE: The LED above the ON/OFF button will be green when unit is ON and red when the unit is OFF.

All other LEDs will be off when unit is set to OFF mode.

NOTE: Power remains connected to unit.



PTAC CONTROLS

CARE AND CLEANING

FRONT PANEL AND CASE

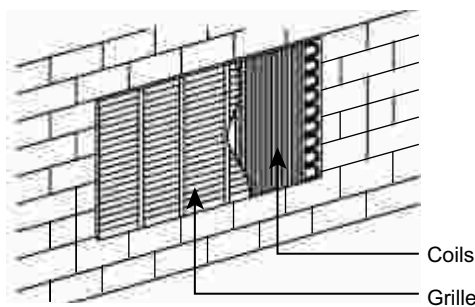
Turn unit off and disconnect power supply.

To clean, use water and a mild detergent. DO NOT use bleach or abrasives. Some commercial cleaners may damage the plastic parts.

OUTDOOR COIL

Coil on outdoor side of unit should be checked regularly. Unit will need to be removed to inspect dirt build-up that will occur on the inside of the coil. If clogged with dirt or soot, coil should be professionally cleaned.

NOTE: Never use a high-pressure spray on coil.



Clean inside and outside of outdoor coils regularly.

Outdoor Coil

AIR FILTERS

IMPORTANT: TURN UNIT OFF BEFORE CLEANING

CAUTION

UNIT DAMAGE HAZARD

Failure to follow this caution may result in equipment damage or improper operation.

Airflow restriction may cause damage to the unit.

BASE PAN

In some installations, dirt or other debris may be blown into unit from outside and settle in base pan (bottom of unit).

In some areas of the United States, a "jell-like" substance may be seen in the base pan. Check base pan periodically and clean, if necessary.

CARE AND CLEANING

CAUTION

UNIT DAMAGE HAZARD

Failure to follow this caution may result in equipment damage or improper operation.

Do not operate unit without filters in place. If a filter becomes torn or damaged, it should be replaced immediately.

Operating without filters in place or with damaged filters will allow dirt and dust to reach indoor coil and reduce cooling, heating, airflow and efficiency of unit. Airflow restriction may cause damage to unit.

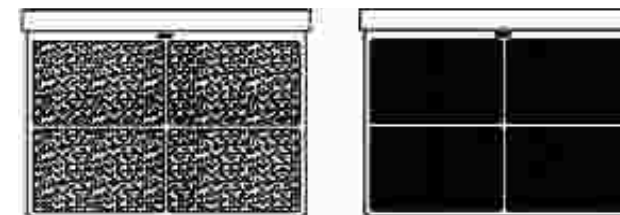
The most important thing you can do to maintain unit efficiency is to clean the filters at least every 30 days (or sooner depending on application). Clogged filters reduce cooling, heating and airflow.

Keeping filters clean will:

- * Decrease cost of operation.
- * Save energy.
- * Prevent clogged indoor coil.
- * Reduce risk of premature component failure.

To Clean Air Filters:

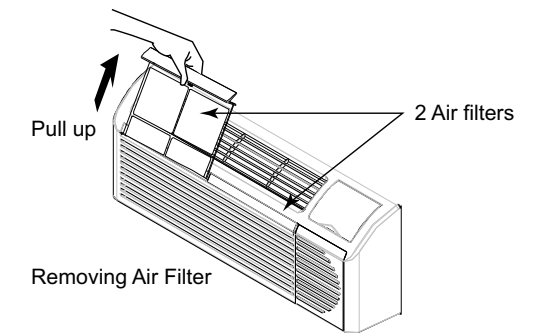
- * Vacuum off heavy soil.
- * Run water through filters.
- * Dry thoroughly before replacing.



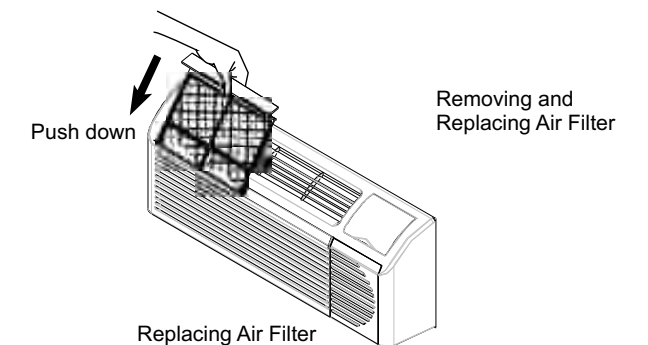
Dirty filter - Needs cleaning

Clogged filter - Greatly reduces cooling, heating and airflow.

Identifying Clogged Filter



Removing Air Filter



Replacing Air Filter

PREVENTATIVE MAINTENANCE

Preventative maintenance is essential to proper unit operation, efficiency and longevity.

To ensure equipment operates properly, it must be properly maintained. Equipment operation should be checked and verified several times during each year. During regular unit inspection and maintenance, follow the guidelines below:

- * Clean both sides of outdoor coil. (Never use high pressure spray on coils.)
- * Clean basement and outdoor vent filter.
- * Clean outdoor orifice and fan.
- * Clean indoor coil. (Never use high pressure spray on coils.)
- * Clean indoor fan, wire screen and front panel.
- * Clean or install new indoor-air inlet filter(s).
- * Clean wall sleeve and outdoor grille.
- * Inspect cord and receptacle.
- * Secure electrical connections.
- * Ensure front panel is properly mounted and not damaged.
- * Ensure wall sleeve is installed properly.
- * Ensure heat and cool cycles operate properly.

WIRING DIAGRAM

ELECTRICAL DATA

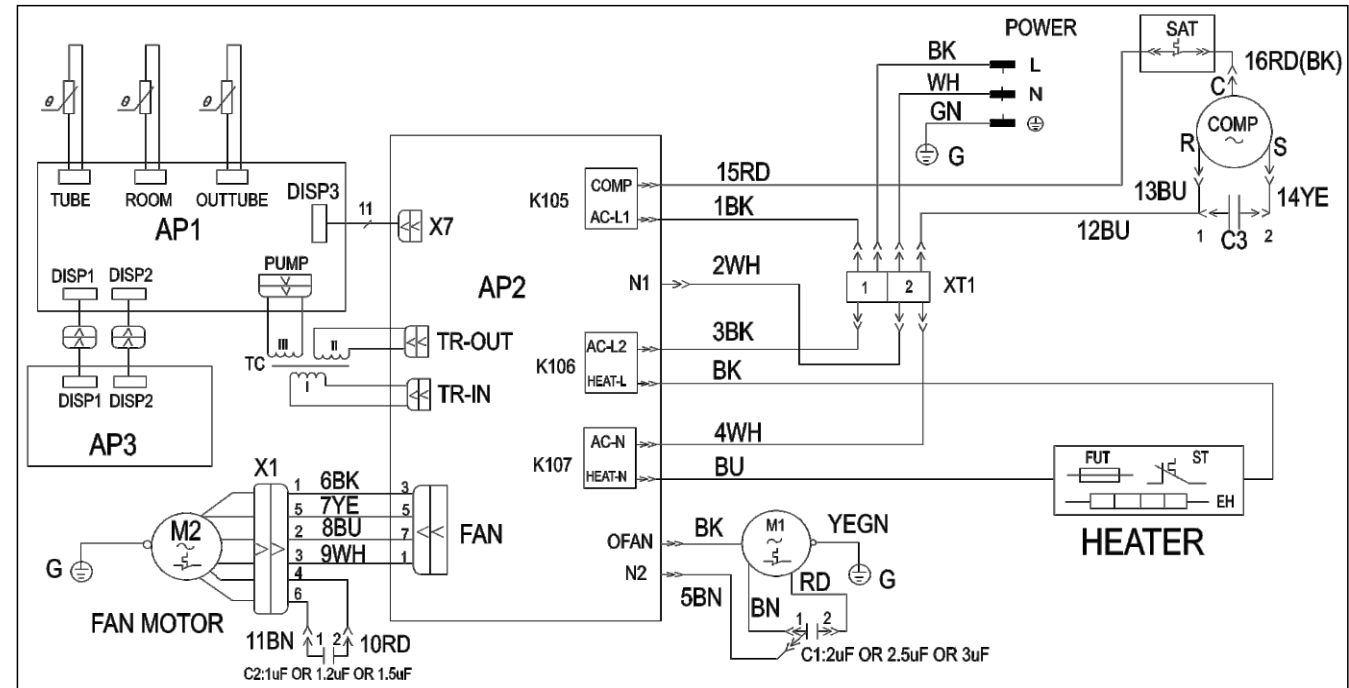
Meaning of marks

Symbol	Color symbol	Symbol	Color symbol
OG	ORANGE	BN	BROWN
VT	VIOLET	BU	BLUE
WH	WHITE	BK	BLACK

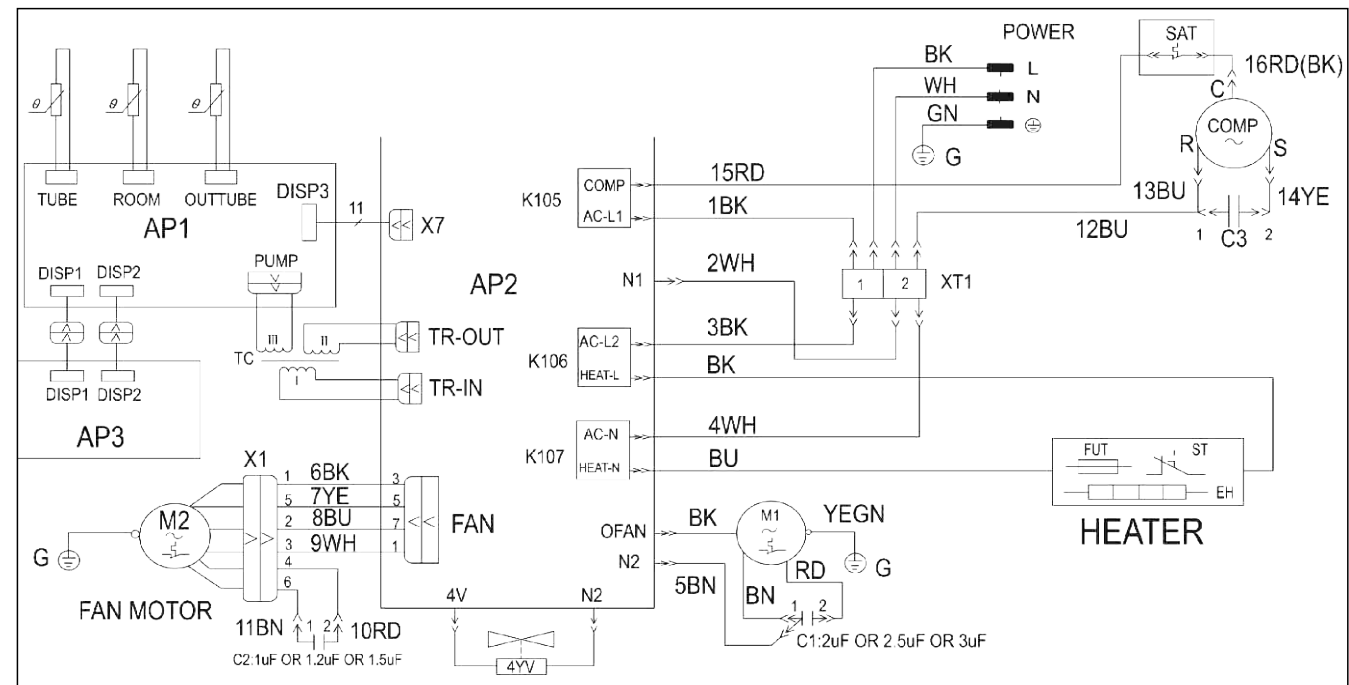
Symbol	Color symbol	Symbol	Parts name
YE	YELLOW	COMP	COMPRESSOR
RD	RED	⊕	PROTECTIVE EARTH
YEGN	YELLOW GREEN		

ELECTRIC WIRING

PTAC-07K-12B(43) PTAC-09K-12B(43) PTAC-12K-12B(43) / PTAC-07K-12D(43) PTAC-09K-12D(43) PTAC-12K-12D(43)

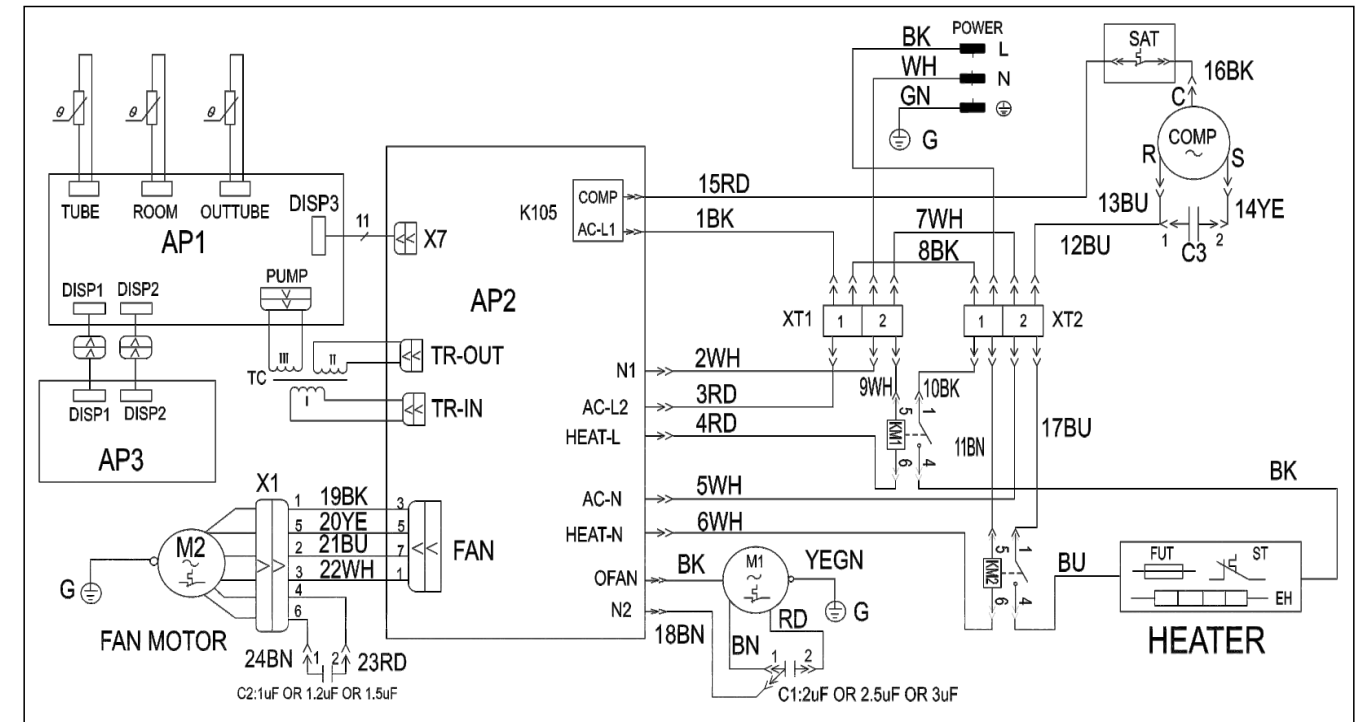


PTHP-07K-14B(43) PTHP-09K-14B(43) PTHP-12K-14B(43) / PTHP-07K-14D(43) PTHP-09K-14D(43) PTHP-12K-14D(43)

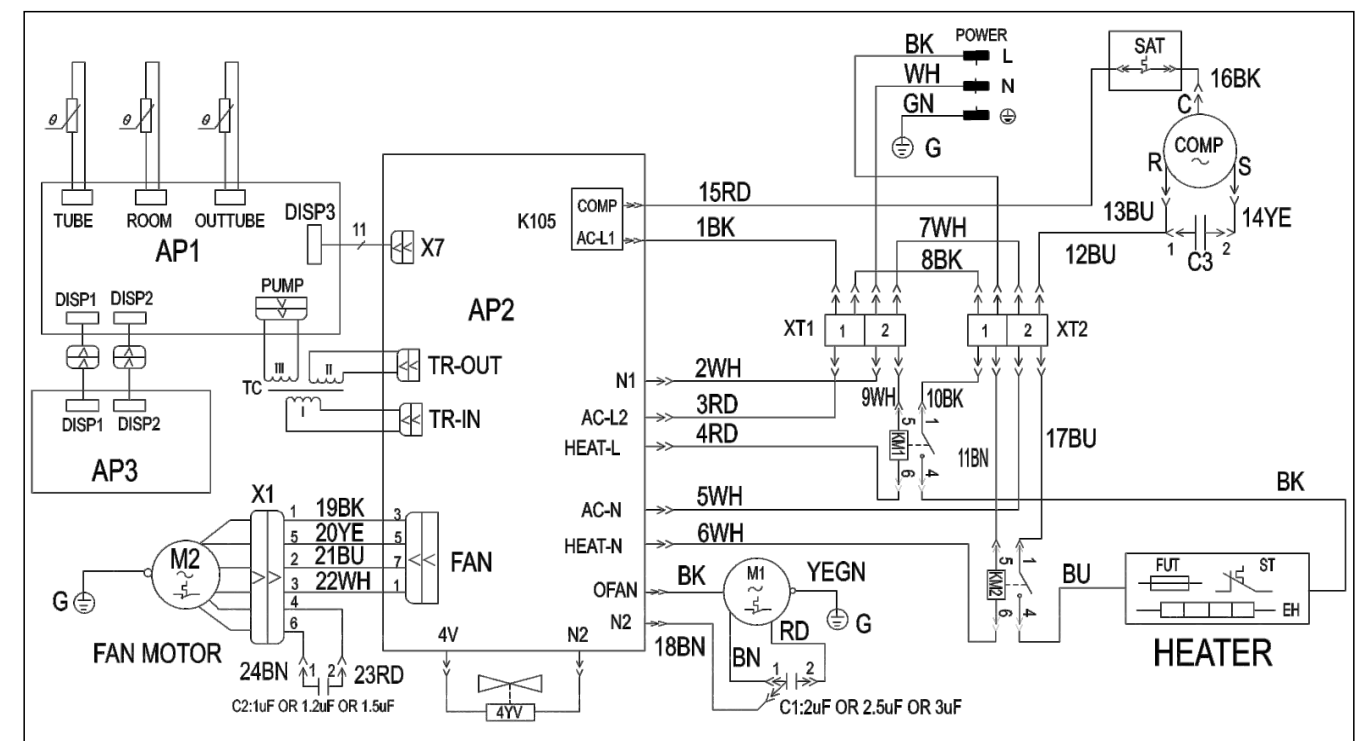


WIRING DIAGRAM

PTAC-12K-12B(45) PTAC-15K-12B(45) / PTAC-12K-12D(45) PTAC-15K-12D(45)



PTHP-12K-14B(45) PTHP-15K-14B(45) / PTHP-12K-14D(45) PTHP-15K-14D(45)



These circuit diagrams are subject to change without notice, please refer to the one supplied with the unit.

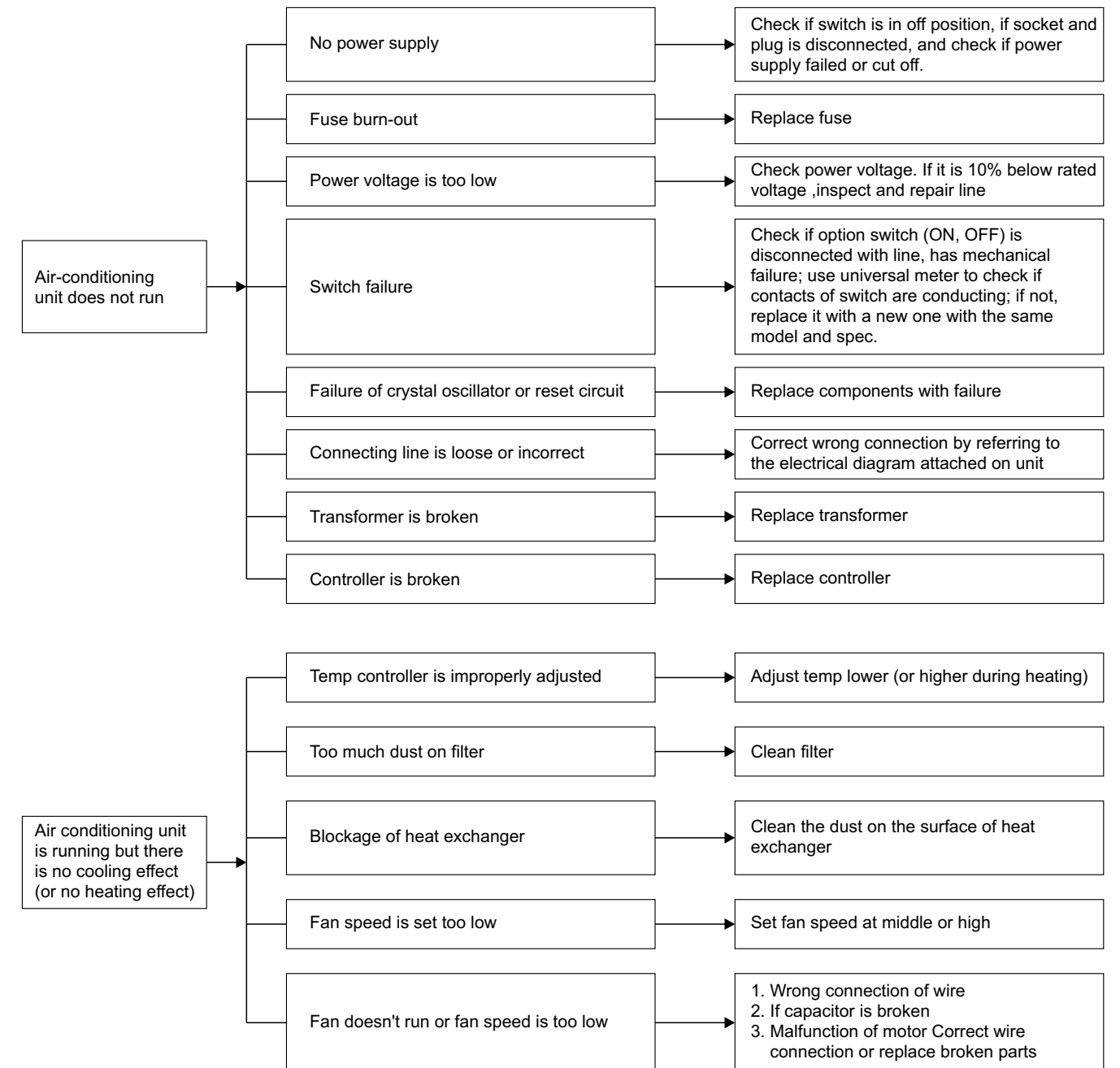
TROUBLESHOOTING

ERROR CODE LIST

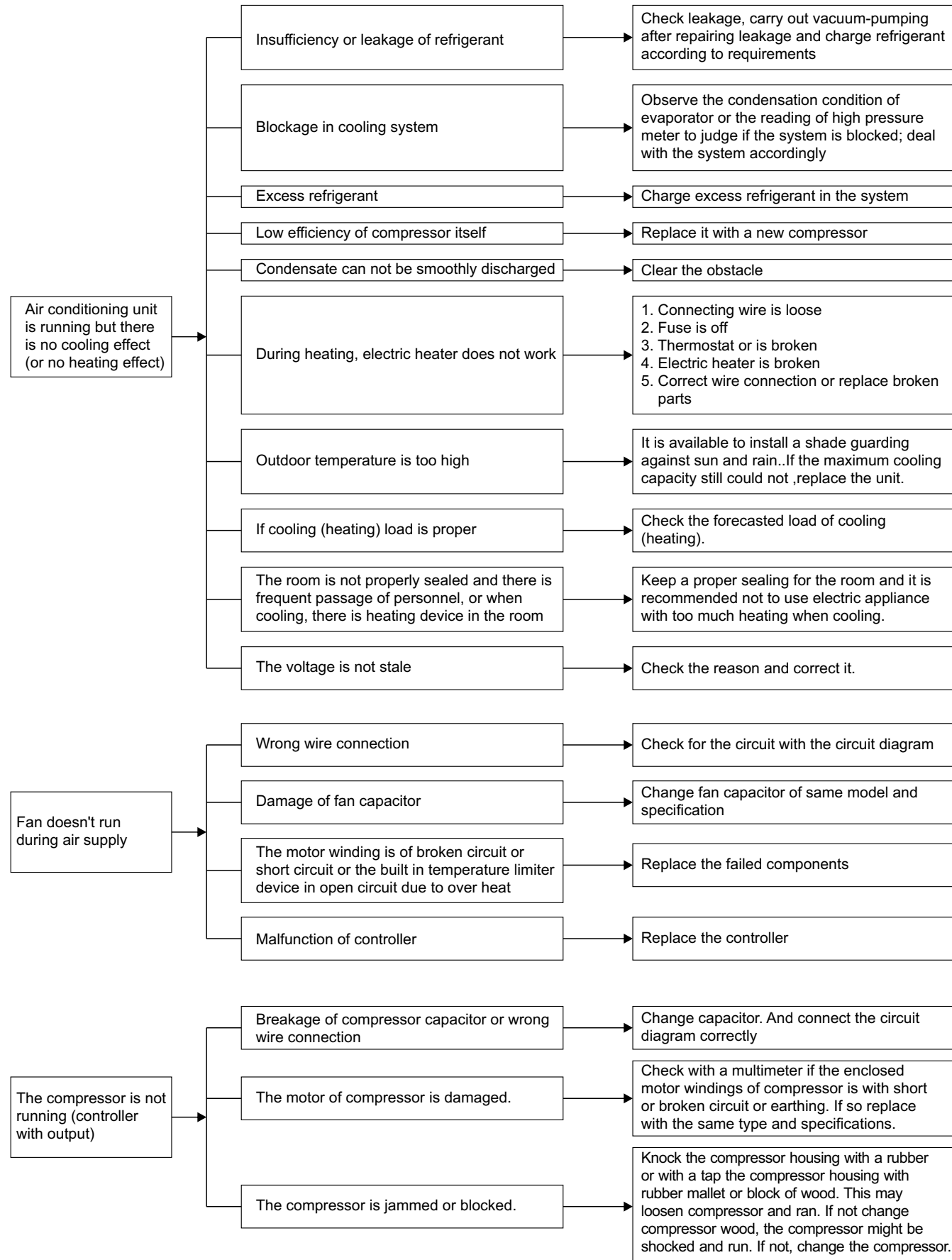
No.	Malfunction Name	Error Code	A/C Status	Possible Causes
1	Indoor ambient temperature sensor is open/short-circuited	F1	The unit will stop operation as it reaches the temperature point.	1.The wiring terminal between indoor ambient temperature sensor and controller is loosened or poorly contacted; 2.Theres short circuit due to trip-over of the parts on controller; 3.Indoor ambient temperature sensor is damaged (Please check it by referring to the resistance table for temperature sensor) 4.Main board is broken.
2	Indoor evaporator temperature sensor is open/short-circuited	F2	The unit will stop operation as it reaches the temperature point.	1.The wiring terminal between indoor evaporator temperature sensor and controller is loosened or poorly contacted; 2.Theres short circuit due to the trip-over of the parts on controller; 3.Indoor evaporator temperature sensor is damaged (Please check it by referring to the resistance table for temperature sensor) 4.Main board is broken.
3	Outdoor ambient temperature sensor is open/short-circuited	F4	The unit will stop operation as it reaches the temperature point.	1.The wiring terminal between outdoor ambient temperature sensor and controller is loosened or poorly contacted; 2.Theres short circuit due to the trip-over of the parts on controller; 3.Outdoor ambient temperature sensor is damaged (Please check it by referring to the resistance table for temperature sensor) 4.Main board is broken.
4	low temperature prevention protection	FP	A/C enters into pure electric heating mode, and low temperature protection is started up.	1.Indoor ambient temperature is lower than 40°F(5°C) continuously; 2.Indoor ambient temperature sensor is damaged; 3.Main board is broken.

TROUBLESHOOTING

MALFUNCTION ANALYSIS



TROUBLESHOOTING



TROUBLESHOOTING

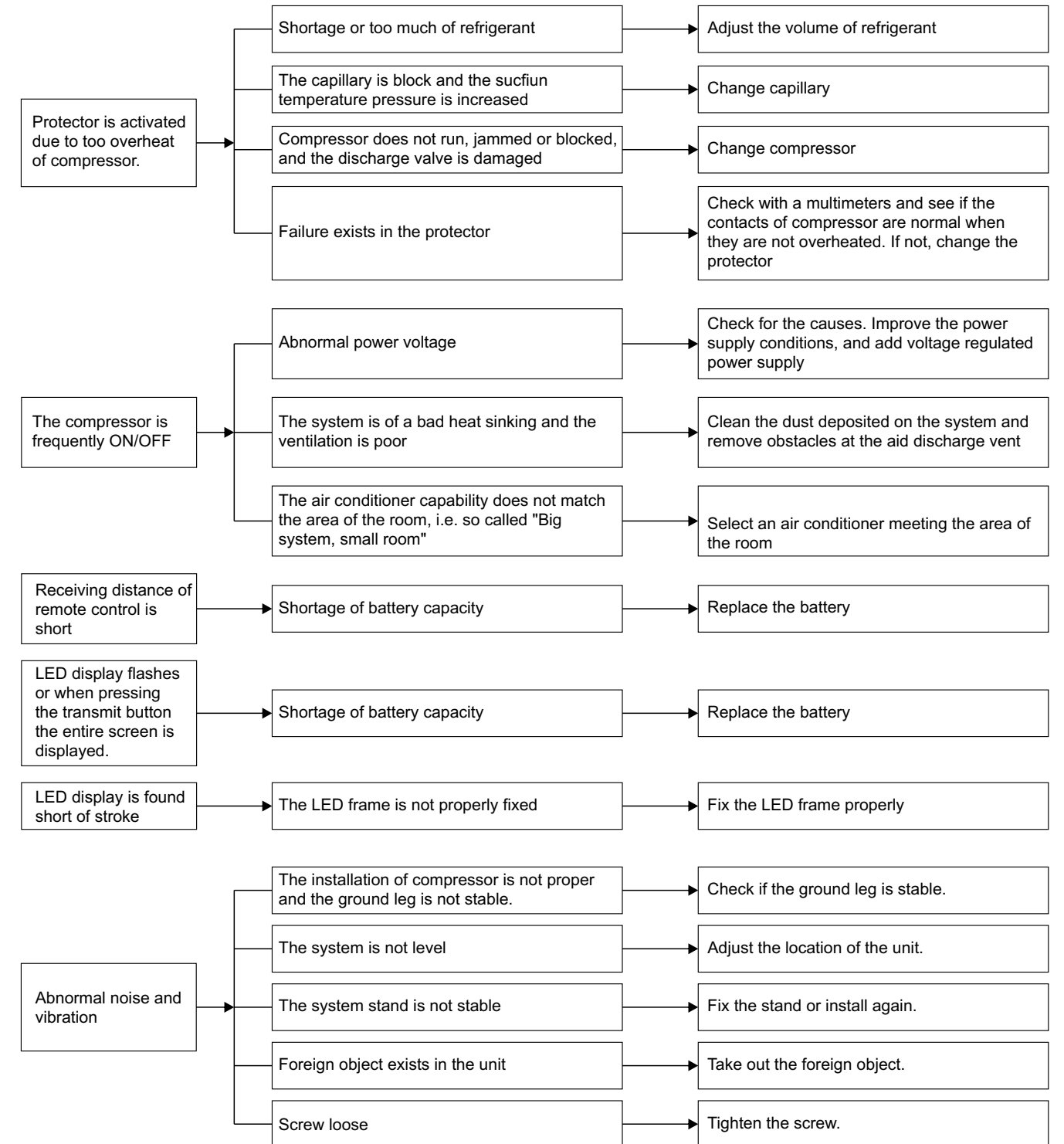


TABLE OF SENSOR'S TEMPERATURE-RESISTANCE

AMBIENT AIR TEMPERATURE SENSOR(S) INDOOR AND OUTDOOR TUBE TEMPERATURE SENSOR(S)

Temp.(°C / °F)	Resistance(k Ω)	Temp.(°C / °F)	Resistance(k Ω)	Temp.(°C / °F)	Resistance(k Ω)	Temp.(°C / °F)	Resistance(k Ω)	
-19	-2.2	138.1	20	68	18.75	59	138.2	3.848
-18	-0.4	128.6	21	69.8	17.93	60	140	3.711
-17	1.4	121.6	22	71.6	17.14	61	141.8	3.579
-16	3.2	115	23	73.4	16.39	62	143.6	3.454
-15	5	108.7	24	75.2	15.68	63	145.4	3.333
-14	6.8	102.9	25	77	15	64	147.2	3.217
-13	8.6	97.4	26	78.8	14.36	65	149	3.105
-12	10.4	92.22	27	80.6	13.74	66	150.8	2.998
-11	12.2	87.35	28	82.4	13.16	67	152.6	2.896
-10	14	82.75	29	84.2	12.6	68	154.4	2.797
-9	15.8	78.43	30	86	12.07	69	156.2	2.702
-8	17.6	74.35	31	87.8	11.57	70	158	2.611
-7	19.4	70.5	32	89.6	11.09	71	159.8	2.523
-6	21.2	66.88	33	91.4	10.63	72	161.6	2.439
-5	23	63.46	34	93.2	10.2	73	163.4	2.358
-4	24.8	60.23	35	95	9.799	74	165.2	2.28
-3	26.6	57.18	36	96.8	9.382	75	167	2.206
-2	28.4	54.31	37	98.6	9.003	76	168.8	2.133
-1	30.2	51.59	38	100.4	8.642	77	170.6	2.064
0	32	49.02	39	102.2	8.297	78	172.4	1.997
1	33.8	46.6	40	104	7.967	79	174.2	1.933
2	35.6	44.31	41	105.8	7.653	80	176	1.871
3	37.4	42.14	42	107.6	7.352	81	177.8	1.811
4	39.2	40.09	43	109.4	7.065	82	179.6	1.754
5	41	38.15	44	111.2	6.791	83	181.4	1.699
6	42.8	36.32	45	113	6.529	84	183.2	1.645
7	44.6	34.58	46	114.8	6.278	85	185	1.594
8	46.4	32.94	47	116.6	6.038	86	186.8	1.544
9	48.2	31.38	48	118.4	5.809	87	188.6	1.497
10	50	29.9	49	120.2	5.589	88	190.4	1.451
11	51.8	28.51	50	122	5.379	89	192.2	1.408
12	53.6	27.18	51	123.8	5.197	90	194	1.363
13	55.4	25.92	52	125.6	4.986	91	195.8	1.322
14	57.2	24.73	53	127.4	4.802	92	197.6	1.282
15	59	23.6	54	129.2	4.625	93	199.4	1.244
16	60.8	22.53	55	131	4.456	94	201.2	1.207
17	62.6	21.51	56	132.8	4.294	95	203	1.171
18	64.4	20.54	57	134.6	4.139	96	204.8	1.136
19	66.2	19.63	58	136.4	3.99	97	206.6	1.103

TABLE OF SENSOR'S TEMPERATURE-RESISTANCE

AMBIENT AIR TEMPERATURE SENSOR(S) INDOOR AND OUTDOOR TUBE TEMPERATURE SENSOR(S)

Temp.(°C / °F)	Resistance(k Ω)	Temp.(°C / °F)	Resistance(k Ω)	Temp.(°C / °F)	Resistance(k Ω)	Temp.(°C / °F)	Resistance(k Ω)	
-19	-2.2	181.4	20	68	25.01	59	138.2	5.13
-18	-0.4	171.4	21	69.8	23.9	60	140	4.948
-17	1.4	162.1	22	71.6	22.85	61	141.8	4.773
-16	3.2	153.3	23	73.4	21.85	62	143.6	4.605
-15	5	145	24	75.2	20.9	63	145.4	4.443
-14	6.8	137.2	25	77	20	64	147.2	4.289
-13	8.6	129.9	26	78.8	19.14	65	149	4.14
-12	10.4	123	27	80.6	18.13	66	150.8	3.998
-11	12.2	116.5	28	82.4	17.55	67	152.6	3.861
-10	14	110.3	29	84.2	16.8	68	154.4	3.729
-9	15.8	104.6	30	86	16.1	69	156.2	3.603
-8	17.6	99.13	31	87.8	15.43	70	158	3.481
-7	19.4	91	32	89.6	14.79	71	159.8	3.364
-6	21.2	89.17	33	91.4	14.18	72	161.6	3.252
-5	23	84.16	34	93.2	13.59	73	163.4	3.144
-4	24.8	80.31	35	95	13.04	74	165.2	3.04
-3	26.6	76.24	36	96.8	12.51	75	167	2.94
-2	28.4	72.41	37	98.6	12	76	168.8	2.844
-1	30.2	68.79	38	100.4	11.52	77	170.6	2.752
0	32	65.37	39	102.2	11.06	78	172.4	2.663
1	33.8	62.13	40	104	10.62	79	174.2	2.577
2	35.6	59.08	41	105.8	10.2	80	176	2.495
3	37.4	56.19	42	107.6	9.803	81	177.8	2.415
4	39.2	53.46	43	109.4	9.42	82	179.6	2.339
5	41	50.87	44	111.2	9.054	83	181.4	2.265
6	42.8	48.42	45	113	8.705	84	183.2	2.194
7	44.6	46.11	46	114.8	8.37	85	185	2.125
8	46.4	43.92	47	116.6	8.051	86	186.8	2.059
9	48.2	41.84	48	118.4	7.745	87	188.6	1.996
10	50	39.87	49	120.2	7.453	88	190.4	1.934
11	51.8	38.01	50	122	7.173	89	192.2	1.875
12	53.6	36.24	51	123.8	6.905	90	194	1.818
13	55.4	34.57	52	125.6	6.648	91	195.8	1.736
14	57.2	32.98	53	127.4	6.403	92	197.6	1.71
15	59	31.47	54	129.2	6.167	93	199.4	1.658
16	60.8	30.04	55	131	5.942	94	201.2	1.609
17	62.6	28.68	56	132.8	5.726	95	203	1.561
18	64.4	27.39	57	134.6	5.519	96	204.8	1.515
19	66.2	26.17	58	136.4	5.32	97	206.6	1.47

