

Fault	Possible Cause	Remedy
Unit fails to cool. Internal fan is running.	Temperature setting to high.	Check temperature setting.
Unit fails to cool sufficiently.	Required cooling capacity exceeds capacity of unit.	Check ambient temperature and internal load.
	Dirty filter or condenser.	Clean condenser. Clean or replace filter.
	Lack of refrigerant.	Call authorized technician. Check unit for leaks.
	Internal and external fans not working.	Call authorized technician. Check fan capacitors. Replace fans.
Air not circulating properly inside the switch cabinet.	Check enclosure and air circulation inside enclosure. Air intake and exhaust must be unimpeded by components.	
Condensate accumulates in switch cabinet.	Exiting temperature is too low. Enclosure is not sufficiently sealed.	Set cooling unit to a higher temperature setting. Close enclosure door and improve the seal in the enclosure.
Condensate fails to drain.	Condensate drain is clogged.	Clean condensate drainage. Condensate drainage hose must be inclined downward without showing a bend.
Indication Faults LED:		
Door Contact	*C = Off, CF = Off, EF = Off	**Sequence: 1, (Contacts Closed)
High Pressure	*C = Off, CF = Off, EF = On	***Sequence: 2, (Contacts Open)
Start Up	*C = On, CF = On, EF = On	****Sequence: 3, (Contacts Open)
*C = Compressor; CF = Condenser Fan; EF = Evaporator Fan		
**Sequence 1: (User Error)		
***Sequence 2: (Unit Fault)		
****Sequence 3: (Test/start-up mode)		

Cleaning and Maintenance:

The cleaning intervals depend upon the relevant operating conditions. In particular, observe the following instructions:
Clean the heat exchanger regularly.

Clean the heat exchanger using a soft brush or pressurized air.

It is recommended that the condensate run off opening be checked regularly.

If the cooling units are provided with a filter, clean the filter mat regularly. The cleaning intervals or the intervals for replacement of the filter mat mainly depends upon ambient conditions (air quality.)

You can rinse the filter mat using water heated to 40 C and commercially available mild detergent.

It is possible to remove any dirt by knocking the mat slightly, vacuum cleaning it or blowing it out.

If the filter mat is oily or greasy, please replace.

Caution!

Protect the electric components against leakage.
Do not use any pointed or sharp-edged objects. The ribs should not be compressed or damaged during the cleaning process.
If the covering hood is removed, the electric plug-in connections on the inside must be removed by hand. During fitting do not forget to plug-in!

Safety:

Cooling units produced by Pfannenbergl are designed for dissipating heat from switch cabinets. During each cooling process condensate can be produced.

The cooling unit may only be used under the ambient conditions specified on the enclosed sheet.

The cooling unit is to a large measure maintenance-free, (See Maintenance Section)

Every other use is considered as non-authorized use making any warranty null and void.

The electrical equipment must be regularly checked. Any faults such as loose connections or scorched cable must be removed immediately.

Work on the cooling system and on electrical components may only be carried out by authorized specialist personnel.

Compliance with applicable safety and environmental regulation is mandatory.

Warranty Conditions:

(WARRANTY IS VALID FOR 1 YEAR)

Warranty becomes null and void:

In case of improper usage of the unit, noncompliance with operating conditions or nonobservance of instructions.

If operated in rooms in which corrosives or acids are present in the atmosphere.

In case of damage caused by contaminated or jammed air filters.

If a non-authorized person interrupts the cooling circulation, modifies the unit or changes the serial number.

In case of damage caused by transport or by accidents.

For the exchange of parts by non-authorized companies.

In order to maintain your warranty rights please observe the following when returning the unit.

Enclose an exact description of the fault in the shipping package.

Enclose proof of delivery (delivery note or copy of invoice).

Return the unit together with all accessories; use the original packaging or packaging of equivalent quality, send the unit freight prepaid and covered by an adequate transport insurance.



ELECTRO-TECHNOLOGY FOR INDUSTRY

Pfannenbergl Inc.

Subsidiary of the Pfannenbergl Group

68 Ward Road—Lancaster, NY 14086

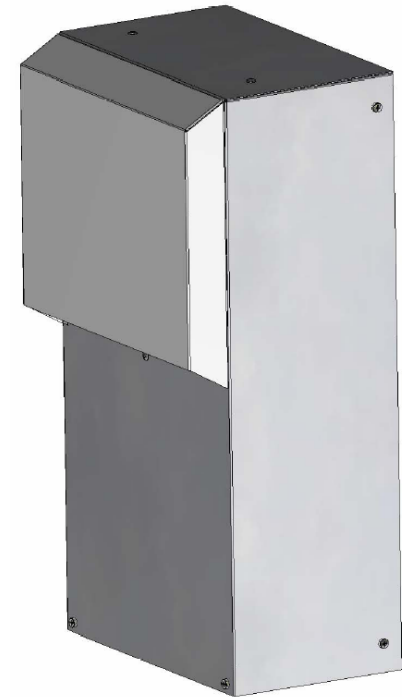
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www.pfannenberglusa.com

885408001



DTS 3141, 3161, and 3181 Indoor and Outdoor Cooling Units



Unpacking:

Prior to and during unpacking make a visual inspection of the cooling unit to see whether any damage has occurred during transportation.

Pay special attention to loose parts, dents, scratches, visible loss of oil etc.

Any damage must be reported immediately to the delivering carrier.

Save the carton and packaging material and request an inspection.

Then file a claim with the delivering carrier.

Before disposing of packaging material ensure that it does not contain any loose components.

Danger!

Burrs caused by production may be present on the metal edges of the unit. Always wear protective gloves when carrying out maintenance work and installation. In case of a warranty claim, exact details on the fault (photograph, if possible); the unit part number and serial number of the cooling unit are required.

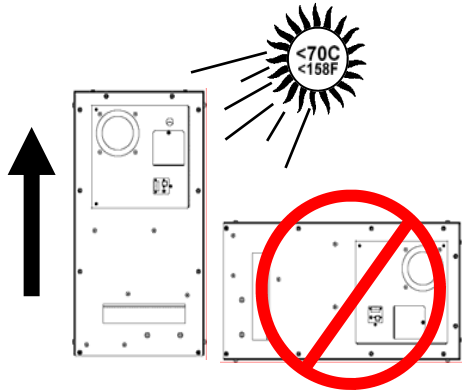
Handling:

Storage:

Failure to observe these instructions will render the warranty provisions null and void.

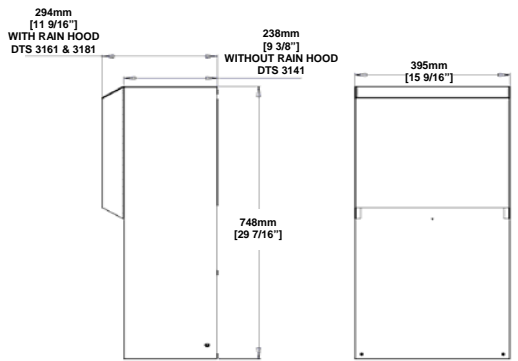
If it is necessary to store the air conditioner in a horizontal position prior to mounting, make sure that it is placed in a vertical position for a minimum of 1 hour prior to starting the unit.

Running the compressor without oil in the compressor will cause permanent damage to the air conditioner, and void the warranty of the unit.

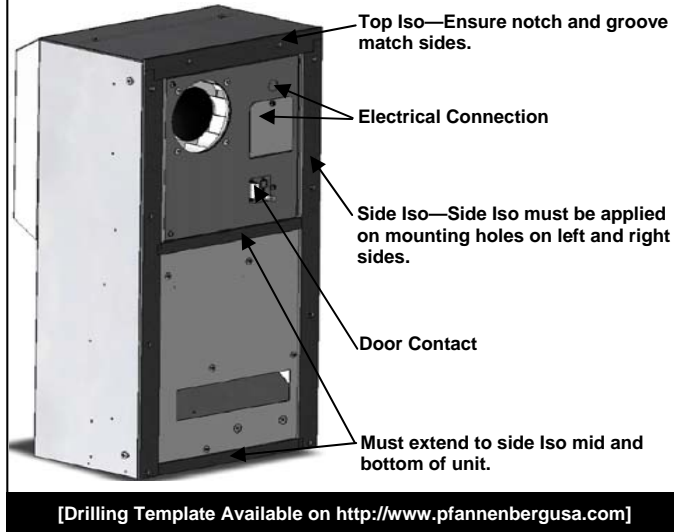


TEST THE UNIT FOR FUNCTIONALITY PRIOR TO MOUNTING THE AIR CONDITIONER ON THE ENCLOSURE.

Technical Information: 115 Volt 60 Hz	
Amp Draw:	8.4 Amps
Capacity (95F/95F)[35C/35C]:	3141/61/81: 3755 BTUH [1100 W]
Capacity (122F/122F)[50C/50C]:	3141/61/81: 3241 BTUH [950 W]
Weight:	3141:38kg [84lbs]; 3161:40kg [89lbs]; 3181:42kg [92lbs]
Technical Information: 230 Volt 50/60 Hz	
Amp Draw:	4.5 Amps
Capacity (95F/95F)[35C/35C]:	3141/61/81: 3755 BTUH [1100 W]
Capacity (122F/122F)[50C/50C]:	3141/61/81: 3241 BTUH [950 W]
Weight:	3141:38kg [84lbs]; 3161:40kg [89lbs]; 3181:42kg [92lbs]
Technical Information: 400/460 Volt 50/60 Hz	
Amp Draw:	2.75 / 2.5 Amps
Capacity (95F/95F)[35C/35C]:	3141/61/81: 3755 BTUH [1100W]
Capacity (122F/122F)[50C/50C]:	3141/61/81: 3241 BTUH [950W]
Weight:	3141:42kg [92.6lbs]; 3161:44kg [97lbs]; 3181:46kg [101.4lbs]



Mounting Insulation Installation:



General Information:

Installation:

When tightening the bolts the gasket should be evenly compressed half the thickness of the gasket.

Over compression of the gasket will not provide a better seal to the enclosure.

MAKE SURE NOTHING IS MOUNTED 6 INCHES IN FRONT OF INLET FAN.

CAUTION!

If the cooling unit is mounted on a switch cabinet door, it must be confirmed that the hinge can support the additional weight or that the switch cabinet will not topple over when the door is opened.

CAUTION!

Make cutouts required to the enclosure prior to mounting the air conditioner. Make sure that metal particles are not allowed to enter the enclosure.

Electrical Connection:

All power connections and repairs should be carried out by an authorized trained electrician.

No other equipment should be connected to this circuit to prevent overloading.

Both main voltage and frequency must correspond to the nominal values indicated on the nameplate of the cooling units.

ATTENTION!

THE COOLING UNIT MAY BE DAMAGED IF THE VOLTAGE IS TOO HIGH.

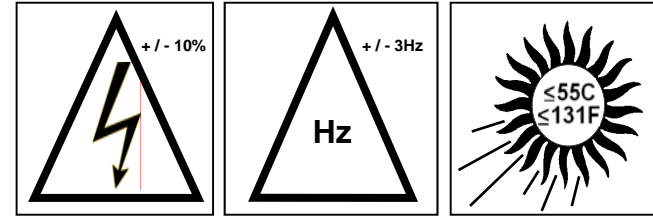
Minimum Circuit Protection Class CC

NAME PLATE

125% of Run Load Amps
Short Circuit Protection for:
115/230V: 200 Amps; 400/460V: 1000 Amps

Testing and Startup Procedure:

Operating Conditions:



When unit is plugged in, the drawn-in switch cabinet internal air temperature is measured by a temperature sensor.

If the compressor and condenser fan do not turn on, adjust the thermostat down to a lower setting that will call for the compressor and condenser fan.

You should feel a temperature difference between the inlet and outlet air.

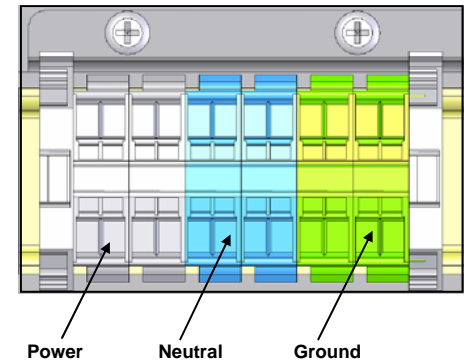
Door Contact: (All Units)

To avoid an increased production of condensate and for safety reasons a door limit switch should be connected to the terminals provided

(see circuit diagram, housing cover or supplement.)

Terminal Connections:

Permanent Connection Detail



Centralized Fault Indication:

The signal of a fault in the cooling unit is caused by the high pressure switch being opened.

This fault is displayed by the breaking of a potential-free contact. Therefore, if the fault wire breaks, a fault signal will be simulated.

WARNING!

THE CONTACTS MAY BE LOADED WITH MAX. 230V, 10A.