

Install AC-M5W in a container

AC-M5 can be installed in all kinds of containers. For installation Dantherm Air Handling offers a trap door system and a mounting frame.

The trap door accommodates the air conditioner and provides a sliding ability so the air conditioner can slide into the container and be fixed for transportation, not violating the ISO standard envelope.



The mounting frame accommodates the trap door system. It is designed to be welded into the container wall and the trap door system can be bolted into the mounting frame. The mounting frame takes into account the corrugated walls on some containers. In combination these components provides a solution easy to repair in the field with common tools.

Below matrix gives an overview of the components. For container installation all parts are recommended:

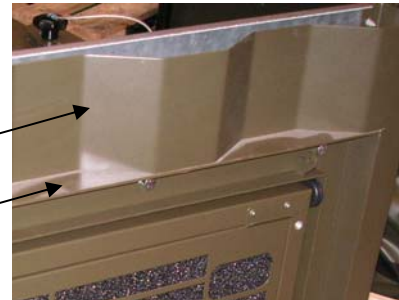
Part no.	Description	NSN	
322006	AC-M5W AC-M5W-H020	4120-22-602-6562 4120-22-614-8068	
322007	Trap door	5340-22-605-8967	
019502	Mounting frame kit	5340-22-614-9092	

Mounting in a corrugated steel container

It is recommended to use the trap door and the mounting frame in order to close the gaps appearing from the corrugated wall.

Corrugated container wall

Mounting frame



Mounting in a flat wall steel container

It is recommended to use the trap door and the mounting frame in order to get the air conditioner assembly flush with the outside container wall. If the trap door system is mounted directly – without the mounting frame – the door will protrude app. 40 mm from the wall.

Mounting in a non-steel insulated sandwich container wall

In this case welding is not possible. It is recommended to add flanges to the mounting frame and combine it with a spreader plate on the inside. When bolting these two parts it is recommended to use metal stand offs for keeping the distance between the outer and inner wall when the bolts are tightened . The air conditioner weighs 80 kg and the trap door weighs 20 kg. Please make sure that the construction is supported to accommodate the air conditioner application.

How to install AC-M5W in a steel container

This section will describe how to install each of the components in a steel container. Before the installation is done you will have to carry out three installations:

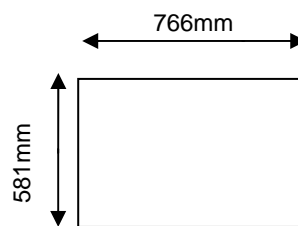
1. Installation of the mounting frame
2. Installation of the trap door system
3. Installation of the air conditioner

Installing the mounting frame in the container wall

Cut a hole in the container wall where you want the air conditioner to be located. It is recommended that it is placed high on the wall. Please make sure that there is space between the trap door and the ceiling to operate the transport securing screws (see section below).

Width x Height = 766 x 581 mm

Insert the frame in the cut.

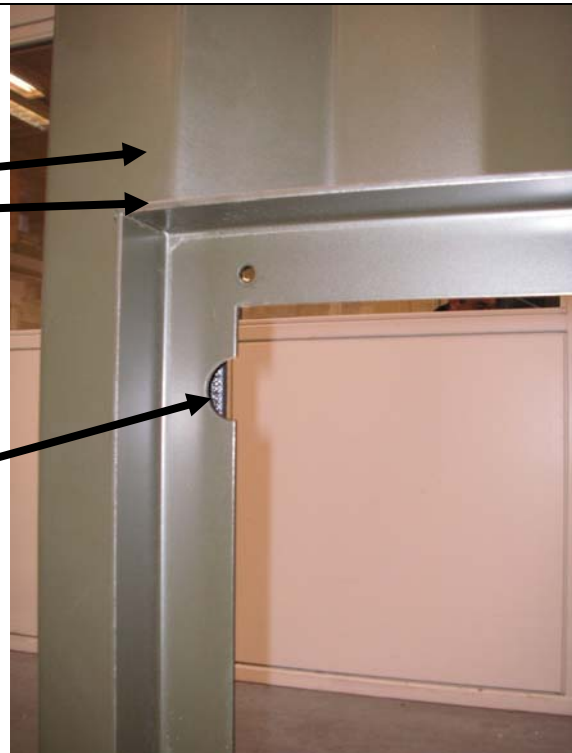


Mount the frame flush with the exterior surface of the container by sport welding from the inside. Grind off paint before welding.

Flush

The round half hole upwards

Paint the frame and the weld seams. Any leaks should be sealed with a suitable sealant prior to painting. The frame is now ready to accommodate the trap door.



Be careful when the draw latches are passing through.



Now – take the 12 sets of screws, washers and nuts



Mount the trap door by the 12 screws. Mount the screws from the out side to avoid dirt in the threads.



Washers and nuts on the inside.



The trap door is now mounted.



Mounting the air conditioner in the trap door

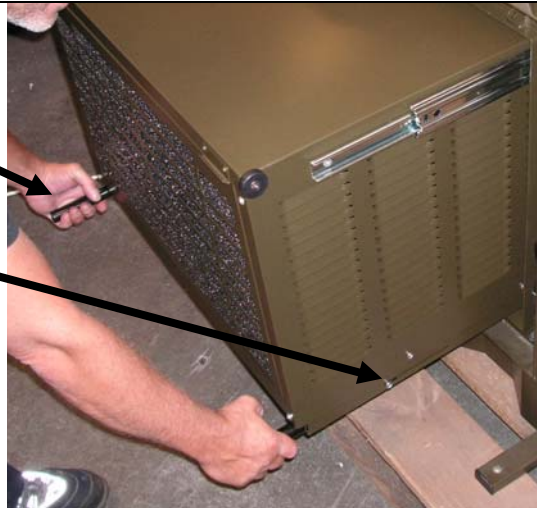
It is recommended to mount the air conditioner from the outside. Place the air conditioner on a supporting structure in the right height ready to slide it in. The control panel must be facing the outside container wall.

Remove the two handles on the side of the unit. Use a cross head screwdriver.



Pull out the four handles by loosening the locking screws.

Tighten the locking screws when the handles are in position.

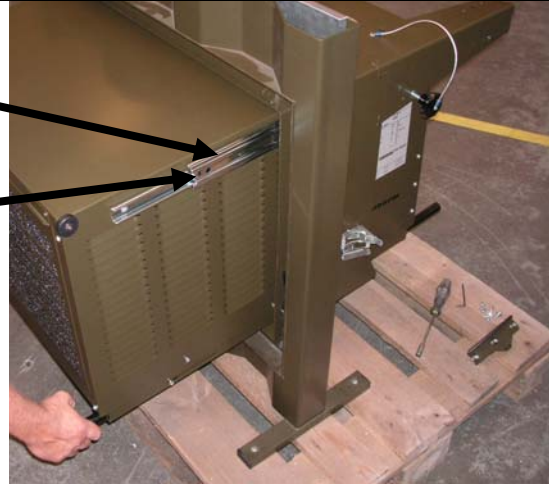


Slide the air conditioner into the trap door system.



Caution: The sliding rails must slide on top of the shelf provided.

Make sure, that the outer moving rails are pushed backwards along with the rest of the air conditioner.



Caution: The power cable and the thermostat cable outlet on the lower left hand side interferes slightly with the trap door. When passing – please press the air conditioner right (seen from the outside). Use a wooden wedge.

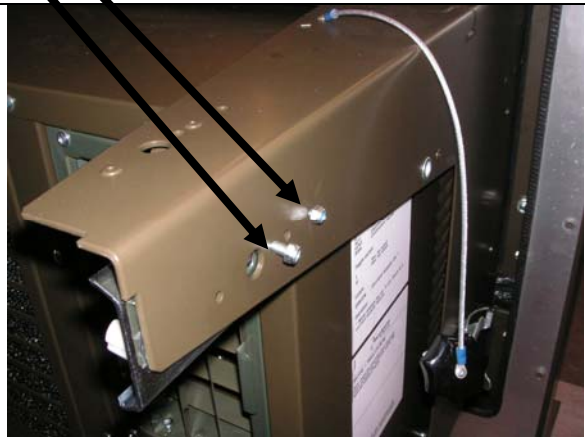


Go to the inside. Align the holes in the moving part of the rails with the mounting holes in the trap door support bracket.



Take out the screws and nuts from the thermostat wrapping. Mount the two countersunk screws from the inside with the screw head inside the rails as shown on the picture to the right. The nuts goes on the outside of the trap door support bracket.

With the two screws in each side of the rail – and the rail resting on the support shelf – the rail is now mounted correctly.



Reassemble the two handles from the inside.

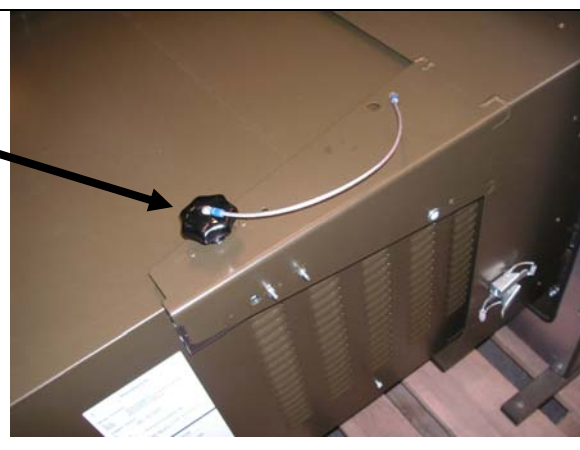


Pull the air conditioner all the way into the container and release the transport securing handles from their resting position.



Install the transport securing handles in their transport securing position.

They are screwed into the air conditioner top.



Put the trap door cover back in position



Re-mount the hinge screws in both sides and close the door.



Secure the door by the draw latched in both sides.

The air conditioner is now installed and ready for transportation.



To use the air conditioner:

Release the transport securing handles from the transport position and install them in their resting position.



Release the front cover by releasing the two draw latches from the inside.



Push the air conditioner on the two handles so it slides out and the trap door cover opens automatically. Make sure that it is all the way out. Secure the operating position by locking the air conditioner in position using the two draw latches on the side.



The air conditioner is now ready for operation.

