

Installation guide

for ACS100/140 NEMA1/IP21 Enclosure Kit

Introduction

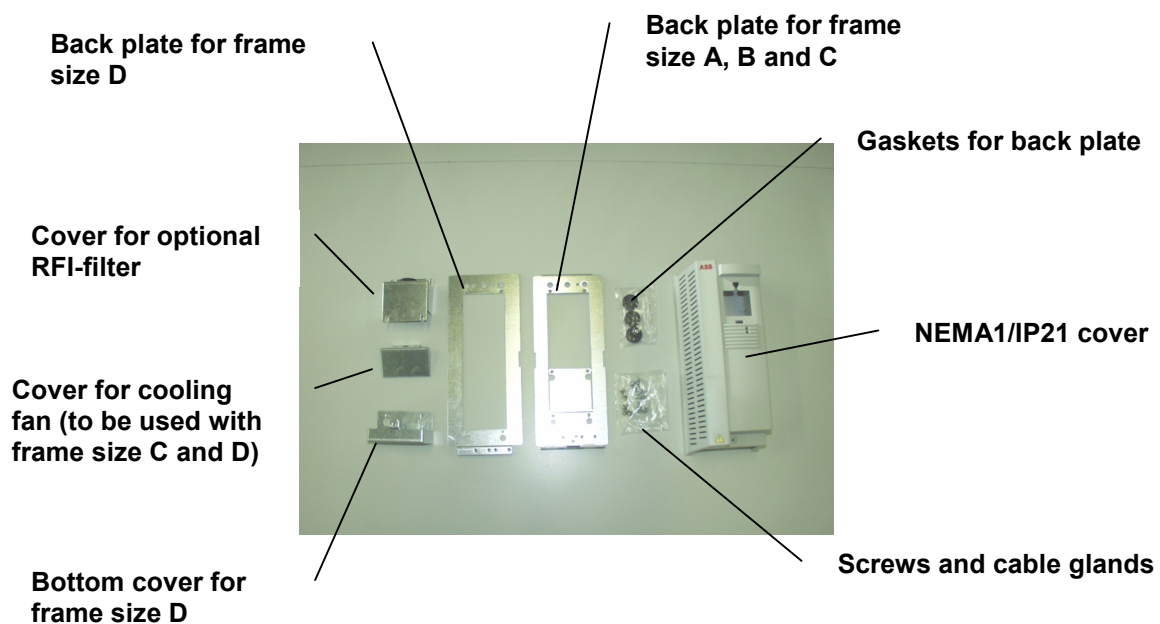
The ACS 100 and ACS 140 NEMA1/IP21 Enclosure Kit provides a NEMA1/IP21 housing for the ACS 100 and ACS 140 IP20 protected chassis units. The NEMA1/IP21 enclosure kit consists of a metal back plate with a conduit plate and a plastic cover. Additionally the kit includes parts that are needed if an optional RFI-filter is used. The drive heatsink is flange mounted to the back plate so that the heatsink fins are outside the enclosure. The assembled NEMA1/IP21 drive unit can be mounted to a vertical surface using a DIN rail or the mounting holes and slots in the heatsink.

Planning for Mounting the Assembled Unit

The final mounting of the drive should be planned before installing the drive in the enclosure kit. Study this guide carefully before installation. Note that the drives of frame size A have limited clearance for access to the mounting bolts. Hex head mounting bolts or nuts must be tightened by reaching behind the back plate with a wrench. Bolts or screws with a screwdriver or allen head can be tightened by inserting a screwdriver or allen wrench through clearance holes in the back plate.

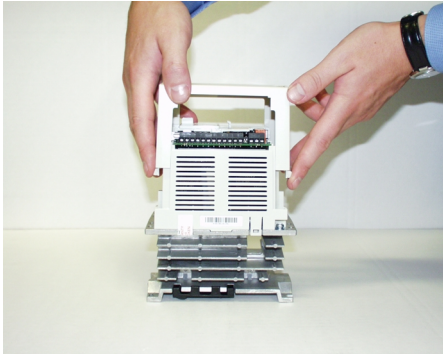
Assembling the Kit

The kit contains two back plates as shown in photo 1. The back plate with the smaller rectangular hole is used for drives of frame size A, B and C. The other one is used for drives of frame size D. For Drives of frame size C, the smaller rectangular hole must be enlarged by removing the knock-out section.



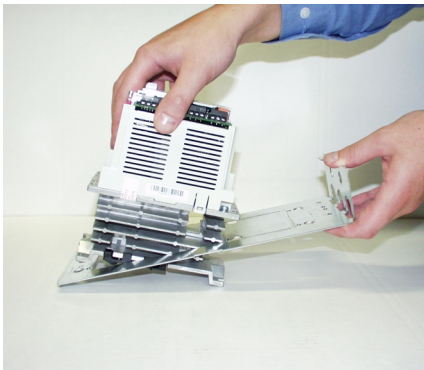
To assemble the kit, perform the following steps:

1. Remove the original cover from the drive. Simultaneously press the four (4) snap-on buttons in the top and bottom corners of the unit and pull the cover forward. Discard the cover.

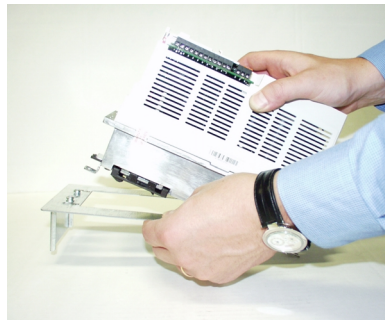


Removing the cover

2. Insert the drive heatsink through the rectangular hole in the back plate of the kit. Tilt the drive chassis forward and insert the bottom of the heatsink. Move the chassis downward and insert the top of the heatsink. In case of frame size C and D (these models are equipped with cooling fan) mount first the cooling fan cover to the back plate and then insert the drive through the hole in the back plate.



Inserting the frame size A or B into the back plate



Mounting the cooling fan cover and inserting the frame size C or D into the back plate

3. Move the heatsink through the backplate until the heatsink flange rests against the surface of the backplate. Fasten the heatsink flange to the backplate using four (4) M4 screws (in case of frame size D, fasten only using two (2) upper M4 screws at this stage).

Mounting the Assembled Unit

Mount the drive to a vertical surface using 4 mm screws or bolts inserted through the holes and slots in the drive heatsink. Hex head mounting bolts or nuts must be tightened by reaching behind the back plate with a wrench. Bolts or screws with a screwdriver or allen head can be tightened by inserting a screwdriver or allen wrench through clearance holes in the back plate.



Mounting the assembled unit

If installation includes also an optional RFI-filter, mount first the filter and then the drive on the top of the filter.



Mounting the assembled unit with RFI-filter

Complete the installation by mounting the gaskets to back plate and installing the wiring. In case of frame size D, fasten also the heatsink flange and bottom cover to the backplate using two (2) M4 screws.



Installing the bottom cover to the back plate (frame size D only)

Installing the Cover and Control Panel

Install the cover of the NEMA1/IP21 kit. Hook the top of the cover over the top of the back plate. Push the cover against the drive chassis. Make sure that the cover around the control panel plug fits into the square hole in the cover. Fasten the cover with an M4 screw inserted through the hole at the bottom of the cover.



Installing the cover

Install the control panel by hooking it over the hook at the bottom and tilting it back so that it plugs into the drive.



Installing the control panel

