

# ACS880 Extension Box



### What is the extension box?

The ACS880 Extension Box is an ACS880-01 wall mount drive attached to a back panel that includes a small enclosure below the drive for optional components.

### Where is it manufactured?

The extension box is designed and manufactured in the US.

### What certifications does it have?

It carries cULus on the drive and the box. The box does not have CE.

### Are there units in stock?

No. Each unit is built to order.

### What is the typical lead time?

Four (4) weeks. Contact ABB if faster delivery is required.

### What Voltage ratings are available?

- Standard Voltages: 208 – 240V, 380 – 500V
- With optional control power transformer (CPT): 230V, 460V

### Can the control transformer be used on a 208 Volt system?

Yes, by making a field modification to a 230V unit.

### What power ratings are available?

#### UL Type 1

- 230V: 1 – 60 HP
- 460V: 1 – 150 HP

### What is new and different about this product?

It will save cost and simplify installation because it has input fusing and an optional local disconnect switch integrated into the drive. These devices are typically required as part of the installation. The fuses are an ABB requirement. The disconnect switch fulfills an NEC requirement if the drive is in line of sight of the motor and the disconnect switch is easily accessible.

With options, it can provide the user with 120 Vac digital control instead of the 24 Vdc control.

**NOTE:** Requires field wiring between the CPT and the drive I/O adapter.

The extension box is smaller, lighter, and a more economical package compared to fully enclosed wall mounted drives.

### How does this differ from other low voltage drive competitors?

Some of our competitors offer a similar package up to 75 HP. Above that, few or none offer anything other than a fully enclosed wall mounted drive.

### How does it compare to the ACS580-0P?

- The ACS580-0P has a similar design through 200 HP.
- The ACS580-0P is priced lower than the ACS880 extension box, due of the price difference between the ACS580 and ACS880 base drive.

### How does it fit with other ACS880 packaged products?

The only other ACS880 non-regenerative packaged drive is the ACS880-07 “Cabinet Built Single Drive” which starts at 75 HP. The Extension Box is the only standard ACS880 packaged drive offering below 75 HP.

**What is included as standard?**

- UL Type 1 packaging
- Power distribution block (when disconnect is not added)
- ACS880-01 variable frequency drive (qty 1)
- Class T fuses (to protect the drive)

**Does the box obstruct air flow under the drives?**

No. On the F2 frame, the box has an air duct (which also draws some air through the box). On the larger frames, the box is mounted on stand-offs allowing the air to flow behind it.

**Are the base drive fans easy to replace?**

On R1-R5 base drives (up to 60 HP), the fan is at the top, so the box is not in the way. On larger units, fan replacement can be done either by reaching behind the box from below or by first removing the base drive. Base drive removal only requires loosening the top two bolts. The bottom of the base drive is mounted on slots.

**What code do I use to order the extension box?**

+C212

**How do I maintain a 100 kA short circuit current rating?**

When the ACS880 extension box is ordered without the optional disconnect, the unit is provided with a power distribution block that needs to be protected with 200 Amp class J fuses electrically ahead of the unit in order to maintain a 100 kA SCCR. These fuses are not included with the extension box. If the disconnect switch is added, this requirement goes away and the ACS880-01 is supplied with a 100 kA SCCR.

**What is included as options?**

- Lockable through-the-door disconnect switch with external handle
- Drive output (dv/dt) filter up to 10 HP at 460 Vac (UL Type 1)
- Control power transformer providing 115Vac, 100 VA at a terminal block
- Fieldbus, input/output and software options that are normally available with the ACS880-01

**Will customized options be available?**

No, but let ABB know what other options are desired. ABB will consider expanding the offering if possible and if enough interest exists.

**What is the warranty?**

The warranty is the same as the ACS880-01.

**Can I get an ACS580 or ACS800 extension box?**

The ACS580 has an extension box offering called the ACS580-0P. The ACS800 is not available as an extension box.

**How does the user connect to the unit? Is top and bottom entry and exit available?**

The unit has conduit knockouts on the top and on the bottom of the box. The top or bottom can be used for entry or exit.

**NOTE:** On units 50 HP and above, top entry, bottom exit works best.

**What documentation is available?**

- Sales flyer
- Installation quick guide
- Layout drawings (all options)
- Schematic drawing (all options)
- ACS880-01 Hardware Manual
- ACS880-01 Firmware Manual
- Other ACS880 documentation