

ABB low voltage drives

ACS800-PC cabinet drive

150 to 600Hp @ 480Vac

Frequently Asked Questions



ACS800 Ultra Low Harmonic AC drive Frequently Asked Questions

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ACS800 Ultra Low Harmonic AC drive Frequently Asked Questions

Q What is the ACS800-PC?

A The ACS800-PC is a new cabinet drive offering for the ACS800 product family. It uses the ACS800-U4 drive module package in a 2000mm Rittal® enclosure.

Q What does “PC” stand for?

A The acronym “PC” is used for Package with Circuit Breaker. This is borrowed from the ACH550-PC as the construction is basically the same. In the ACS800-PC product offering the circuit breaker is promoted and used as a line disconnect.

Q Where is the ACS800-PC manufactured?

A The ACS800-PC is manufactured in the New Berlin, WI factory.

Q What ratings is the ACS800-PC available in?

A The ACS800-PC is available from 150 to 600Hp at 480Vac only.

Q What are the standard features of the ACS800-PC.

A Standard features include;

- Standard Rittal enclosure base
- ACS800-U4 drive module
- Roll in tray for easy drive module maintenance
- Lockable input disconnect (circuit breaker)
- Current limiting, fast acting, Class T input fuses
- Top entry and top exit
- Cabinet mounted drive control panel
- UL Type 1 enclosure for 150 to 400Hp
- UL Type 12 enclosure for 450 to 600Hp (optional on 150 to 400Hp)
- Common mode filter
- Coated boards
- 2nd environment EMC filter on frame R8 drives

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Q What is a “roll in tray”?

A The roll in tray is a custom part ABB uses in the Rittal enclosure to simplify installation of the ACS800-U4 module. The tray includes 6 wheels for the module drive to roll on when installed or removed for maintenance. This tray includes cleats for securing the module in place. With the roll in tray, a drive module in the ACS800-PC can be changed in as little as 1 hour and module maintenance is greatly simplified. See the ACS800-PC hardware manual for complete details.

Q What type enclosure ratings are available?

A UL type 1 protection class is standard for 150 to 400Hp. At 450Hp and above only UL Type 12 protection class is available and is an option for 150 to 400Hp.

Q Why is UL Type 1 not available for 450 to 600Hp drives?

A UL Type 12 includes an exhaust fan to provide adequate air flow for the drive module cooling. This additional airflow promotes improved cooling for the larger drives even in harsher industrial environments. This provides the best product life and offering for customers.

Q Is UL Type 1 with air filter available for the ACS800-PC

A No, only UL Type 1 and UL Type 12 are available.

Q What are the available options for the ACS800-PC

A The available options are;

- UL Type 12 on 150 to 400Hp
- Brake chopper
- Line contactor with emergency stop category 0
- 2nd environment EMC filter (frame R7 only, standard on R8)
- Output for motor fan (aux motor starter)
- Customer terminal block
- Analog and digital input and output extension modules
- 1 or 2 thermister relays
- 3 PT100 relays
- Pulse encoder interface modules
- Resolver interface module (limited SW support)
- Fieldbus option modules

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Q *Does the drive need to be stopped in order to change the inlet filter on UL Type 12 enclosures?*

A No, the inlet filters on the UL Type 12 enclosures of the ACS800-PC can be changed without opening the cabinet door. See the ACS800-PC hardware manual for step by step instructions for filter replacement.

Q *Is the ACS800-U2 still available?*

A Yes, the ACS800-PC is the primary product offering for 150 to 600Hp @ 480Vac, but the ACS800-U2 will still be available, though lead times may be extended.

Q *What is the typical lead time for the ACS800-PC*

A The typical lead time is 1 to 2 weeks x-works. (x-works is manufacturing time, shipping time is additional).

Q *Will the ACS800-PC be stocked?*

A Yes, we are planning to stock limited quantities of the most popular sizes with standard options. Stock inventory has not been completed at the time of this publication.

Q *Why is the ACS800-PC priced higher than the ACS800-U2?*

A The ACS800-PC is aggressively priced in the market to comparable competitive offerings. The industrial packaging and available options makes the ACS800-PC a very competitive product with significant feature advantages over the -U2. Remember, UL Type 12 is included on all 450Hp and larger drives and the additional cost adder on smaller units is below competitive offerings.

Q *What is the part number for the Rittal enclosure used in the ACS800-PC?*

A The part number for the Rittal enclosure that ABB uses for the ACS800-PC is not available as we have special requirements such as a custom door. The enclosure is a standard base Rittal TS8 (79h32w24d) and can be ordered directly from the Rittal catalog with those specifications or your needed width.

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Q *Can additional Rittal enclosures be used with the ACS800-PC?*

- A** Yes, choose the Rittal TS8 enclosure (79h24d) in the width desired. This cabinet will align best with the ACS800-PC. It is strongly recommended not to remove the sides from the ACS800-PC cabinet as this will negatively impact the air flow and cooling of the ACS800-PC. If you need to directly bolt additional enclosures to the ACS800-PC cabinet it must only be done on the left side of the ACS800-PC. The right side is a significant part of the air flow control baffling in the cabinet and must never be removed. When the left side is removed from the ACS800-PC for connection to additional Rittal enclosures, all additional enclosures must include appropriate exhaust fans for cabinet cooling.
- Note, our roof design is not from Rittal and is approximately 4in tall in Nema 1 & 2in tall (base) in Nema 12 (not including the 12in fan box). See dimensional drawings.

Q *Is the ACS800-PC available in 230Vac or 600Vac ratings?*

- A** Currently no, if market demands warrant, there is possibility in the future for support of these voltage ratings.

Q *Is the ACS800-U7 still available?*

- A** Yes, the ACS800-U7 is still available in all ratings as before. The ACS800-U7 is the best selection for product required for shipment out of the US. The ACS800-PC is only available as UL listed and does not include CE ratings. The US market is the primary target for the ACS800-PC. For all products requiring CE rating the best selection is the ACS800-U7 or ACS800-07.

Q *What 3rd party approvals or listings does the ACS800-PC have?*

- A** The ACS800-PC has only UL listing.

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The ABB Drives Product Family

ACS50, ACS140, and ACS550 AC drive families

Includes the ACS50, ACS140, and ACS550 AC drives, covering sizes from ¼ hp to 550 hp and voltages from 110 to 600 V.



ACS800 AC drive family

The ACS800 Single and Multi-Drive family includes drives from 0.75 hp to 3,000 hp and voltages from 230 to 690 V.



Medium-Voltage Drives

ABB's highly reliable ACS1000 is available from 400 hp to 6,700 hp and voltages of 2.3, 3.3, and 4.16 kV.



DCS400 and DCS500 DC drive families

DCS400 and DCS500 DC Drives are available from 5 hp to 10,000 hp and voltages from 230 to 1,190 V.



Low-Voltage AC, DC, and Medium Voltage AC Motors

Low-voltage AC motors from ABB range from ¼ hp to 800 hp and voltages from 208 to 480 V. A wide range of medium-voltage AC and low-voltage DC motors are also available.



ABB Control

ABB provides the widest range of low voltage products and systems. Our broad product lines include high-quality solutions for industrial controls, circuit protection devices, starters & soft-starters, automation, and wire management & connection systems.



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