

Service note

ACS 1000 auxiliary power upgrade

ABB offers an auxiliary power upgrade for its ACS 1000 medium voltage drive to further increase the drive's reliability and availability.



ACS 1000 variable speed drives; water cooled and air cooled

Auxiliary power upgrade

Reliability and availability are key for our customers to minimize plant downtime and maximize production.

The probability of malfunction of electrical equipment does not only depend on the reliability of the equipment itself, but also on external factors, such as network conditions. In case of an auxiliary power loss, the ACS 1000 can cope with a power loss as the drive is equipped with back-up batteries. These batteries limit the "power loss ride through" to one second. However, batteries have a limited life expectancy.

To overcome these constraints, a new auxiliary power concept has been designed and is now available as a retrofit option.

In addition to the standard three phases auxiliary supply which is used also for cooling, the new power supply concept uses a safe line auxiliary source from the customer's UPS to supply the drive power supplies. Should the customer safe line not be available the new power supply concept can be used with a special internal professional UPS type. This upgrade further improves the reliability and availability of the ACS 1000.

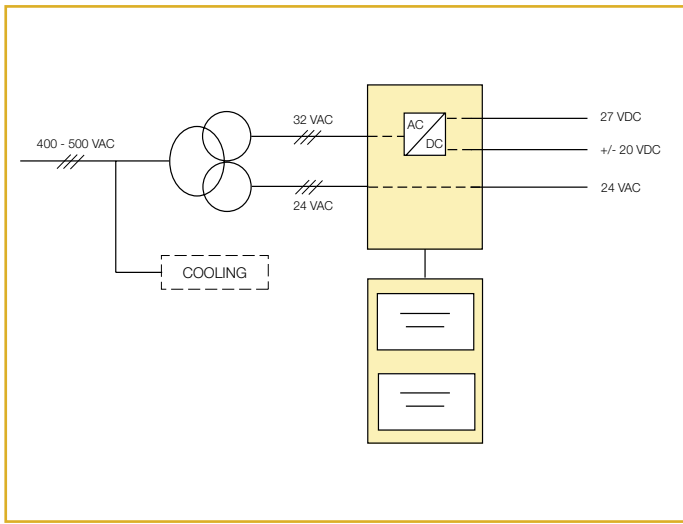
Benefits

Longer auxiliary power loss ride through capabilities

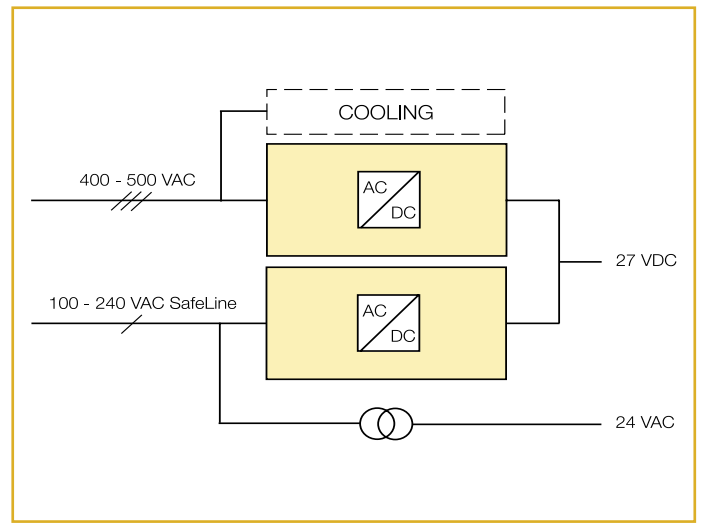
Improved reliability and availability

Easy troubleshooting as the interface with the control system is via digital inputs only

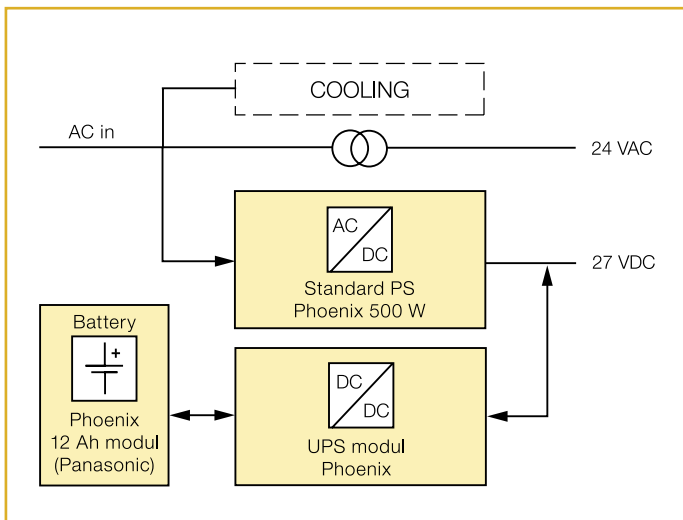
Predefined software and hardware packages reduce the downtime for the upgrade on-site



Old power supply concept



New power supply concept (safe line solution)



New power supply concept (internal UPS solution)

Requirements

- External safe line single phase supply for control (only with customer safe line solution)
- External three phases supply for cooling
- Approximately one working day needed for the upgrade on-site
- AMC33/AMC34 with software version MSOH4100 or newer
- EPLD version MSEE5110 or newer

Kit contents

- Two ready-wired assemblies with all necessary parts mounted on (including power supplies, auxiliary transformer, terminal blocks, ready plug connectors)
- Interface board jumper

Ordering information

The power supply upgrade can be ordered from local ABB service organizations using the following codes:

- 3BHB017534R0001
(safe line solution for ACS 1000 air cooled)
- 3BHB017534R0002
(safe line solution for ACS 1000 water cooled)
- 3BHB017534R0003
(internal UPS solution for ACS 1000 air cooled)
- 3BHB017534R0004
(internal UPS solution for ACS 1000 water cooled)

For more information please contact:

www.abb.com/drives