# Service note IGBT upgrade and retrofit solutions for ACS600 drives

ABB offers multiple IGBT upgrade options for its ACS600 drives. Upgrade now to further increase your drive's reliability and life cycle.



## ACS600 IGBT upgrade options

The original IGBT components utilized in the manufacturing of many ACS600 drives are no longer being manufactured nor will they be available for spare parts. As reliability and availability are key for our customers to minimize plant downtime and maximize production, ABB is encouraging customers to proactively upgrade to the new IGBT solution for the ACS600. ABB Drive Services will work with you to determine the best solution for your drive. Upgrades should be done during a scheduled plant shutdown, when planned in advance, to ensure minimal downtime and avoid any production loss. Additionally, ABB has upgraded all ACS600 drive modules in stock with the new IGBT design, making drive exchange quick and efficient.

Depending on the frame size of your drive, there are different upgrade solutions available: Proactive workshop IGBT upgrade, or an ACS880 Retrofit.

## Proactive workshop IGBT upgrade

ABB offers two IGBT upgrade solutions. If a customer would prefer to have ABB replace only the IGBT components, an IGBT upgrade kit is offered which includes the new IGBT components and necessary hardware. When it is more efficient to swap out the entire drive module, the customer has the option to exchange their current ACS600 for an upgraded ACS600 module.

ABB has upgraded all in stock ACS600 drives with the new IGBT design, allowing customers to maintain the ACS600 capability and functionality. Preventive maintenance is provided with both upgrade solutions and includes replacement of the control and main circuit boards, cable/wire sets, DC bus capacitors and the discharging resistor.

## **Benefits**

Extended life cycle

Upgrade should be carried out during a scheduled process shutdown to avoid any production loss due to upgrade work For drives under heavy cyclic load, this is the best upgrade

solution

Ultrasonic cleaning

Spare part availability is ensured

No re-commissioning required

1 year warranty



ACS600 Drives affected by IGBT upgrade

Single Drives	ACS Multidrive Sections	Available Upgrade Solution
ACx601-0120-50140-5 ACx601-0100-60120-6 ACx604/607-0120-50140-5 ACx604/607-0100-60120-6	ACA610-0020-30120-3 ACA610-0025-50140-5 ACA610-0025-60120-6	ACS880 Retrofit
ACx604/607-0140-30320-3 ACx604/607-0170-50400-5 ACx604/607-0140-60400-6	ACA610-0185-30405-3 ACA610-0215-50495-5 ACA610-0185-60485-6	Proactive Workshop IGBT Upgrade or ACS880 Retrofit
ACx604/607-0400-30610-3 ACx604/607-0490-50760-5 ACx604/607-0490-60760-6	Not Applicable	Proactive Workshop IGBT Upgrade
ACS607-0760-3 ACS607-0930-5 ACS607-0900-6	ACA610-0500-30765-3 ACA610-0610-50935-5 ACA610-0600-60900-6	Proactive Workshop IGBT Upgrade or ACS880 Retrofit
ACS607-0930-3, 1120-3 ACS607-1090-5, 1380-5 ACS607-1040-6, 1380-6	ACA610-0935-3, 1125-3 ACA610-1095-5, 1385-5 ACA610-1045-6, 1385-6	Proactive Workshop IGBT Upgrade or ACS880 Retrofit
ACS607-1440-3, 2140-3 ACS607-1760-5, 2620-5 ACS607-1710-6, 3350-6	ACA610-1440-32820-3 ACA610-3450-52620-5 ACA610-1710-65140-6	Proactive Workshop IGBT Upgrade or ACS880 Retrofit

Note: ACS601 = Wall mounted ACS604 = Module ACS607 = 604 Built in cabinet

#### ACS880 retrofit solution

The ACS80 Retrofit is now also available for the vast majority of the ACS600 drives. For the smaller drives, it is not feasible for an IGBT upgrade and a retrofit is the only solution available. Retrofits are only performed on-site and are a very beneficial service solution to modernize your drive and allow for increased drive performance.

Benefits
Performed proactively to minimize downtime
One kit code makes ordering easy
Spare part availability is ensured

#### Extended life cycle

Due to this new generation IGBT upgrade, as of July 1, 2012, ABB has extended the life cycle for the ACS604/607/627 R8 to 2XR9 single drives by 3 years. These drives will remain in the classic phase until 2018, transitioning to the limited phase in 2019 and will be obsolete in 2022.

ABB has extended the life cycle for the ACS600 Multi-drives (both air and water cooled). ACS607/627 R11i to R12i and ACS617/677 R8i to R12i by 6 years. These drives will remain in the classic phase until 2021, transitioning to the limited phase in 2022 and will be obsolete in 2025.

For more information please contact:

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