

# Modernization for ACS600 single drives

## Extending the lifetime of your equipment



ABB offers a variety of modernization services to maintain performance, increase reliability, and improve the operation of your ACS607 drive. By using solutions that fit your needs we can help maximize the long-term value of your asset.

### Securing the reliability and continuity of your operations

ACS607 cabinet-built single drives have been widely used in many industries because of their reliability and robustness. From pumps and fans, to even the most demanding applications, such as mixers and conveyors, these drives have proven their value over many years as flexible workhorses.

ACS607 drives are coming to the end of their life cycle and it will become difficult if not impossible to maintain them with normal maintenance programs. ABB offers various options for you to manage this life cycle transition, enabling you to continue to extract value from your asset with upgrade or retrofit solutions, or replacing the ACS607 cabinet drives with the latest technology. Our modernization services allow you to select the best possible solution for your needs. ABB is there to help inform, guide, and schedule the right solution for you.



Extend the life cycle of your drive



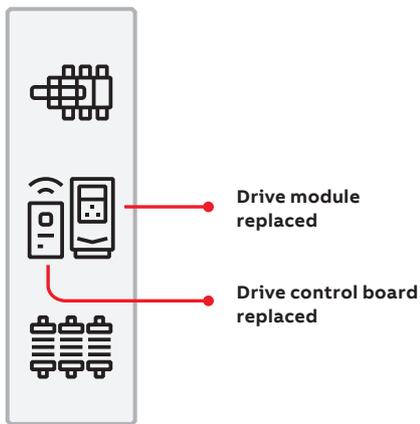
Improve the performance, usability and safety of your equipment



Enable your access to new digital services to identify emerging problems before they occur

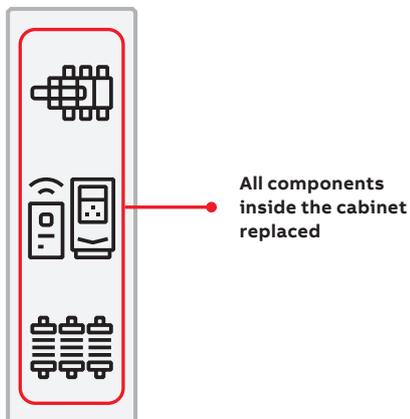
## Your modernization solutions

ABB offers you a variety of solutions to modernize your existing ACS607 cabinet-mounted single drives with ACS880 technology. On top of the usual replacement solutions, ABB can offer upgrade or retrofit solutions, depending on the power of the drive. Please see below for a description of the different options.



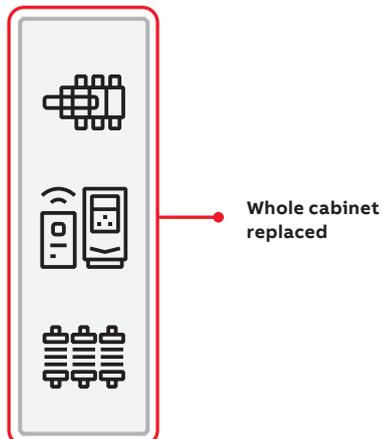
### Module Upgrade

Only the drive module and necessary control connection options are changed. The remaining parts, such as fuse switch and filters can be replaced later as separate maintenance actions. At this power level they are easily changed after modernization. The Module Upgrade is an extremely easy, fast and cost-efficient solution to modernize your ACS607 drive with ACS880 platform.



### Retrofit

For larger power units all the components inside the cabinet are changed to ACS880 technology. The drive module, control board, the incoming fuse base or switch fuse (as well as du/dt filters) are changed. The advantage of this modernization solution is that it can be performed in areas with limited access, where drive cabinet is difficult to replace, allowing the supply and the motor cables remain in exactly the same position as in the original assembly. This eliminates the need for timely and costly cable work.



### Replacement

ABB can also offer replacement drives across the whole power range if desired. The old cabinet will be totally removed and changed to an ACS580-07 or ACS880-07 cabinet drive. With this option, the full range of ACS580-07 / ACS880-07 features are available. For detailed information please refer to the ACS580 / ACS880 documentation.

## The benefits of the ACS880 design used in ACS607 modernizations



### Uncompromized productivity

The ACS607 to ACS880 drive modernizations are compatible with all the same processes as the old ACS607 drives. Based on ACS880 technology this will control virtually any type of AC motor, provide extensive input/output connectivity and support all major fieldbus protocols. Control performance is scalable from basic to demanding applications, delivered by direct torque control (DTC). The flexibility and scalability of the ACS880 drives enable one drive platform to control virtually any application or process, making it an easy solution for modernizing your ACS607 drives.



### Raising your operating efficiency through digital connectivity

Modernizing ACS607 with ACS880 technology enables digital connectivity and provides access to ABB's digital services, such as ABB Ability™ Condition Monitoring for drives. With this service, collecting and obtaining information from drives, and then analyzing it using digital algorithms, gives you valuable insight into your industrial equipment. This can raise your operating efficiency to higher levels than ever before.



### Ease of use

All our ACS880 drives used in ACS607 modernization share easy-to-use interfaces, saving time during drive commissioning and maintenance. The control panel supports multiple languages. With the PC tool, you get extensive drive monitoring capabilities and quick access to the drive settings. Integrated and certified safety features provide safety for machine operators.

To further improve the user experience, we have developed mobile apps that can be utilized when interacting with the drive. These apps give you an easy graphical interface for management, maintenance and service of your drives.

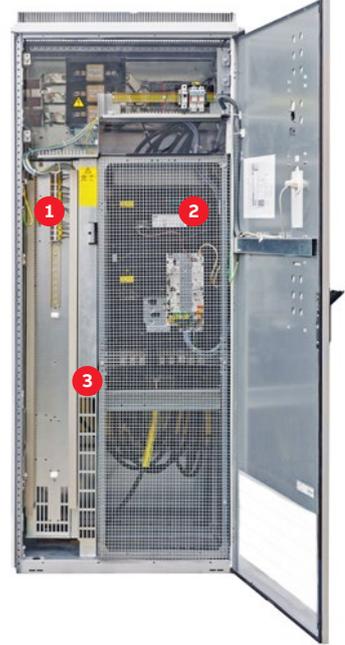


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## ACS607 to ACS880U upgrade

What does an ACS607 cabinet look like after upgrading to ACS880U?

1. The old IO-connections remain, while the upgrade kit includes ready-to-use wire sets to connect control signals to the ACS880 control board.
2. The ACS880-01 module, together with the mechanical fitting kit, ensures you get the full benefit of the ACS880 technology.
3. The upgrade kit provides busbars so that incoming and motor cable connections remain in exactly the same position as the old ACS607.



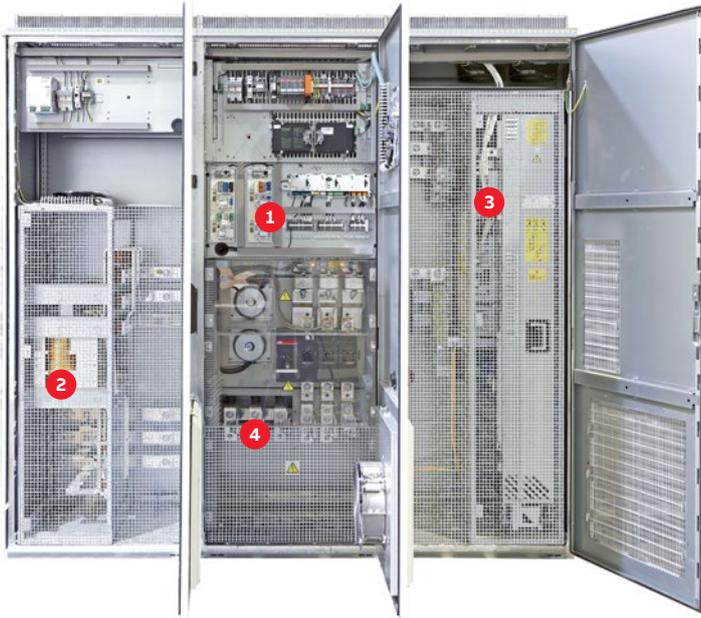

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## ACS607 to ACS880R retrofit

What does the ACS607 cabinet look like after an ACS880R retrofit installation?

1. All components excluding the drive module are ready installed in a frame to be pushed into the cabinet on site.
2. Pre-wired control wiring minimizes the time needed for installation.
3. The frame is designed so that there is no need to change incoming or motor cable positions inside the cabinet.

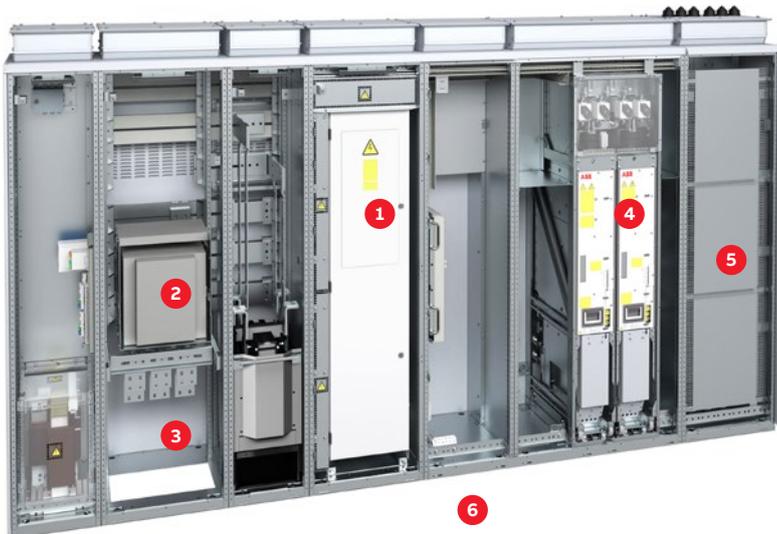




### ACS607 (parallel connected) to ACS880R retrofit

What does the ACS607 (parallel connected) cabinet look like after an ACS880R retrofit installation?

1. Control connections with new ACS880 options are placed in the middle cabinet providing convenient access for service and maintenance.
2. The optional du/dt filter is pre-assembled in a frame which is then installed in the left cabinet.
3. The ACS880-04 module slides easily into the frame delivered with the retrofit solution.
4. Incoming and motor cables remain in exactly the same place as the original ACS607, eliminating the need for cable work during the modernization.



### ACS607 (high power) to ACS880R retrofit

What does the ACS607XXT cabinet look like after an ACS880R retrofit installation?

1. The new supply unit module fits well in the old cabinet structure.
2. Optional Air Circuit Breaker kit or OT-kit available.
3. No need to move supply cables.
4. Inverter unit retrofit delivered as frame solution to make installation fast.
5. No need to touch motor cables if the old installation has a common motor cable terminal.
6. For a step-by-step approach supply unit and inverter, unit can be delivered and installed separately.

## Technical data

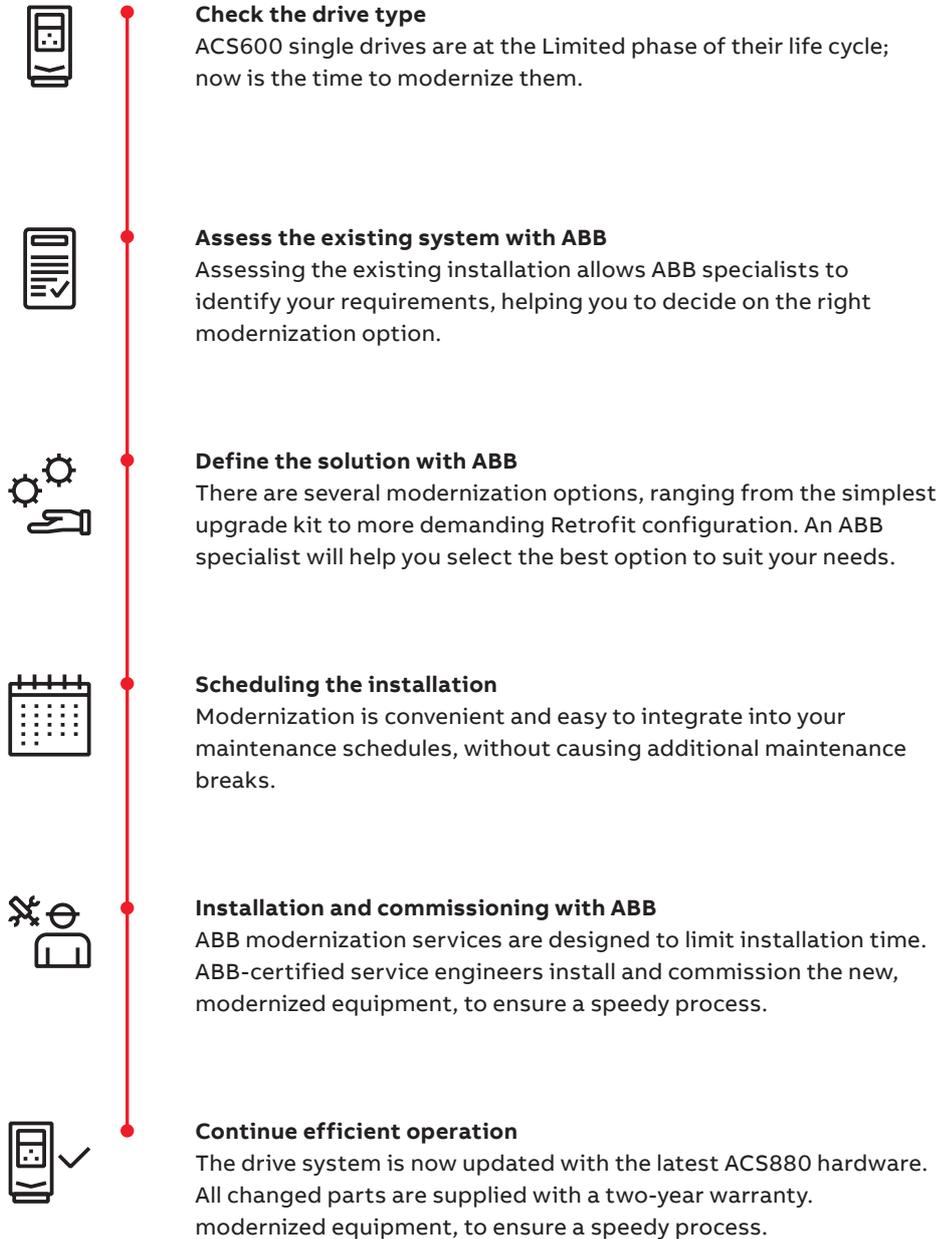
Selection table for upgrade and retrofit types

### Modernization types for ABB ACS607 drives

Product to modernize	Old frame	ACS600 $I_n$	New frame	Upgrade/Retrofit type
<b>400 V</b>				
ACS607-0100-3	R7	147	R7	ACS880U-07S6-0169A-3
ACS607-0120-3	R7	178	R7	ACS880U-07S6-0206A-3
ACS607-0140-3	R8	216	R8	ACS880U-07S6-0246A-3
ACS607-0170-3	R8	260	R8	ACS880U-07S6-0293A-3
ACS607-0210-3	R8	316	R9	ACS880U-07S6-0363A-3
ACS607-0260-3	R9	395	R9	ACS880U-07S6-0430A-3
ACS607-0320-3	R9	480	R10	ACS880R-07F6-0585A-3
ACS607-0400-3	2xR8	600	R10	ACS880R-07F6-0650A-3
ACS607-0490-3	2xR9	751	R11	ACS880R-07F6-0820A-3
ACS607-0610-3	2xR9	912	R11	ACS880R-07F6-0880A-3
ACS607-0760-3	B4+R11i	1094	H6+2xR8i	ACS880R-07F6-1094A-3
ACS607-0930-3	B4+R12i	1336	H6+2xR8i	ACS880R-07F6-1336A-3
ACS607-1120-3	B4+R12i	1624	H7+2xR8i	ACS880R-07F6-1624A-3
ACS607-1440-3	B5+2xR11i	2079	H7+3xR8i	ACS880R-07F6-2079A-3
ACS607-1770-3	B5+2xR12i	2558	H7+3xR8i	ACS880R-07F6-2558A-3
<b>500 V</b>				
ACS607-0120-5	R7	135	R7	ACS880U-07S6-0156A-5
ACS607-0140-5	R7	164	R7	ACS880U-07S6-0180A-5
ACS607-0170-5	R8	200	R8	ACS880U-07S6-0240A-5
ACS607-0210-5	R8	240	R8	ACS880U-07S6-0260A-5
ACS607-0260-5	R8	300	R9	ACS880U-07S6-0361A-5
ACS607-0320-5	R9	365	R9	ACS880U-07S6-0414A-5
ACS607-0400-5	R9	480	R10	ACS880R-07F6-0503A-5
ACS607-0490-5	2*R8	570	R10	ACS880R-07F6-0583A-5
ACS607-0610-5	2*R9	694	R11	ACS880R-07F6-0715A-5
ACS607-0760-5	2*R9	874	R11	ACS880R-07F6-0880A-5
ACS607-0930-5	B4+R11i	1073	H6+2xR8i	ACS880R-07F6-1073A-5
ACS607-1090-5	B4+R12i	1263	H6+2xR8i	ACS880R-07F6-1263A-5
ACS607-1380-5	B4+R12i	1593	H6+2xR8i	ACS880R-07F6-1580A-5
ACS607-1760-5	B5+2xR11i	2039	H7+3xR8i	ACS880R-07F6-2039A-5
ACS607-2160-5	B5+2xR12i	2501	H7+4xR8i	ACS880R-07F6-2501A-5
<b>690 V</b>				
ACS607-0100-6	R7	88	R7	ACS880U-07S6-0098A-7
ACS607-0120-6	R7	105	R7	ACS880U-07S6-0119A-7
ACS607-0140-6	R8	127	R8	ACS880U-07S6-0142A-7
ACS607-0170-6	R8	150	R8	ACS880U-07S6-0174A-7
ACS607-0210-6	R8	179	R9	ACS880U-07S6-0210A-7
ACS607-0260-6	R8	225	R9	ACS880U-07S6-0271A-7
ACS607-0320-6	R9	265	R9	ACS880U-07S6-0271A-7
ACS607-0400-6	R9	351	R10	ACS880R-07F6-0430A-7 +SP1102
ACS607-0490-6	2*R8	428	R10	ACS880R-07F6-0430A-7
ACS607-0610-6	2*R9	504	R11	ACS880R-07F6-0522A-7
ACS607-0760-6	2*R9	667	R11	ACS880R-07F6-0721A-7
ACS607-0900-6	B4+R11i	755	H6+2xR8i	ACS880R-07F6-0755A-7
ACS607-1040-6	B4+R12i	874	H6+2xR8i	ACS880R-07F6-0874A-7
ACS607-1380-6	B4+R12i	1156	H6+2xR8i	ACS880R-07F6-1156A-7
ACS607-1710-6	B5+2xR11i	1435	H7+3xR8i	ACS880R-07F6-1435A-7
ACS607-2120-6	B5+2xR12i	1777	H7+3xR8i	ACS880R-07F6-1740A-7
ACS607-2540-6	B5+2xR12i	2129	H7+4xR8i	ACS880R-07F6-2129A-7
ACS607-2800-6	B5+4xR11i	2344	H7+4xR8i	ACS880R-07F6-2300A-7



# Service delivery process



For more information, please contact your local ABB representative or visit

- [new.abb.com/drives](http://new.abb.com/drives)
- [new.abb.com/drives/drivespartners](http://new.abb.com/drives/drivespartners)
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