

Innehåll endast avsett för ABB  
Authorized Value Providers (AVP)



# FREKVENSSOMRIKTARE NYHETER FRÅN ABB

Partnerkonferens – 2026  
Edvin Sten - Produktchef

ENGINEERED  
TO OUTFIT

# KONTAKT

**Edvin Sten**

Product marketing manager – Drive products

✉ [Edvin.sten@se.abb.com](mailto:Edvin.sten@se.abb.com)

☎ 070-331 28 86



# AGENDA

# 01

- Framtidens drivsystem
- Roadmap
- Nyheter – nya lanseringar
- ABB Go Select

# ACS880 industriella frekvensomriktare – framtidens omriktare!

Från 0.55 to 6000 kW @ 230-690 V

## Singeldrifter från 0.55 to 6000 kW



Väggmonterade och skåpsbyggda frekvensomriktare för enskilda motorapplikationer. Allt levereras i ett kompakt och färdigt-att-använda paket.

## Moduler från 0.55 to 3200 kW



Modulerna är konstruerade för installation i kapslingar och apparatskåp. Säkerställer optimal integration med omfattande stöd i form av dokumentation, monteringsatser och expertis.

## Multidrives från 1.5 to 6000 kW



Kundanpassade lösningar för applikationer med flera motorer, som minskar matningseffekt, skåpstorlek och investeringskostnader.



**Kapslingsklass upp till IP55**



**Luft och vattenkyllning**

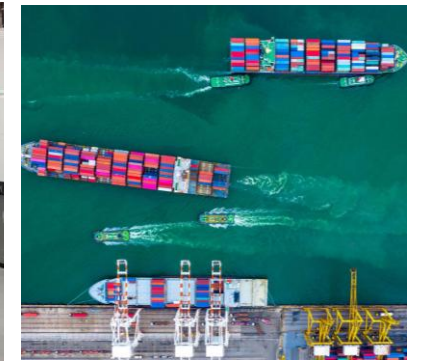


**Ultra-Low Harmonic och regenerativa drifter**

# ACS880 Cyber security extension (+V998)

Vad är nytt?

- IEC62443-4-2 certifierad frekvensomriktare med säkerhetsnivå SL1<sup>1</sup>.
- Mognadsnivå level ML3<sup>2</sup> certifierade sökra utvecklingspricesser enligt IEC 62443-4-1.
- Integrerad PROFINET<sup>3</sup> och Ethernetverktygs kommunikation.
- Crealizer™ avancerad programmeringsmiljö för analys- och styrningsapplikationer.
- OPC-UA tillgängligt för pilottester
- Tillståndsövervakning direkt i frekvensomriktaren
- Kommande lanseringar: MR-, CRA- efterlevnad & SL2, Integrated Modbus TCP, Ethernet IP, EtherCAT och OPC-UA.



1)IEC 62443-4-2 defines the security „robustness“ of the component with security level(SL) requirements. Level1 (SL1) -Capability to protect against casual or coincidental violation .

2)IEC 62443-4-1 defines Maturity levels (ML) for organizations based on adaptation of cyber security development practices. Level3(M3)- Documented process that is repeatable and consistently followed.

Certification by TuV

3)PROFINET fully functional. But parameter and group naming harmonization planned in coming FW releases.

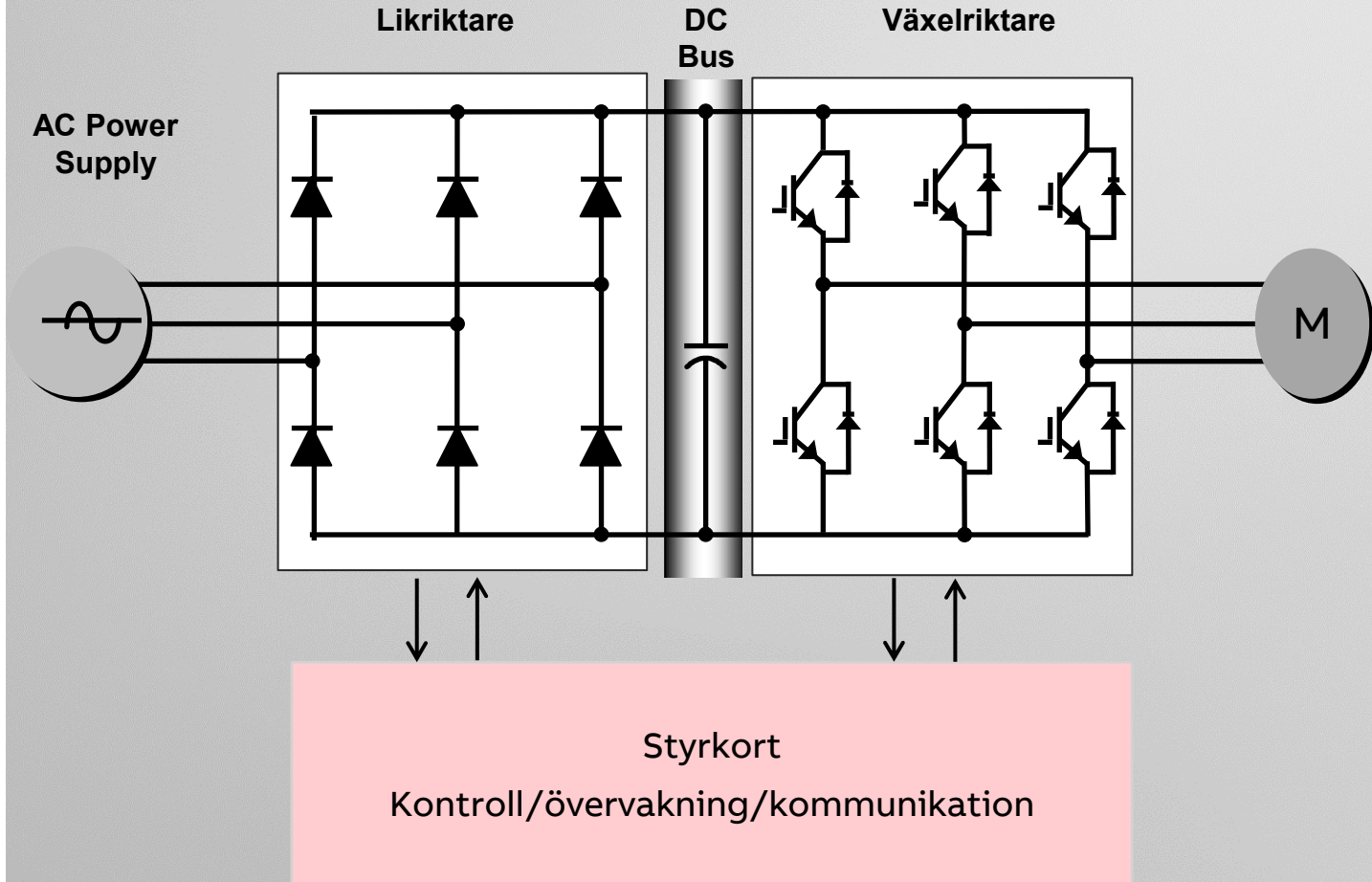
# ACS880-01/04 idag

## Huvudsakliga komponenter

ACS880-01/-04  
frekvensomriktare  
ZCU-xx styrkort



Nuvarande  
styrkort  
ZCU-12/14



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# Men varför uppdaterar vi styrkortet?

## Cyber Resilience Act (CRA)

- Cyber Resilience Act (CRA) är en EU-förordning som syftar till att förbättra cybersäkerheten för digitala produkter.
- CRA gäller för enheter eller programvara som innehåller ett digitalt element och som direkt eller indirekt kan anslutas till en annan enhet eller ett nätverk.

Cyber Resilience Act (CRA) trädde officiellt i kraft den 10 december 2024.

- September 2026: Tillverkare måste börja rapportera exploaterbara sårbarheter.
- December 2027: De flesta bestämmelser, inklusive CE-märkning och uppfyllnad av cybersäkerhetskrav, blir tillämpliga.



---

# Men varför uppdaterar vi styrkortet?

Comunidad Europea



China Export



# ACS880 Cyber security extension (+V998)

## Cyber security certifikat och guide



**Certificate**

No.: 968/CSP 1036.00/25

<b>Product tested</b>	Variable frequency converters and converter systems	<b>Certificate holder</b>	ABB Oy Drives Hiomotie 13 00380 Helsinki, Uusimaa Finland
<b>Type designation</b>	ACS880		
<b>Codes and standards</b>	IEC 62443-4-1:2018 (Edition 1.0)	IEC 62443-4-2:2019 (Edition 1.0)	
<b>Intended application</b>	The frequency converter (drive) ACS 880 complies with the requirements according to IEC 62443-4-1 and Security Level Capability 1 (SL-C 1) according to IEC 62443-4-2.		
<b>Specific requirements</b>	The frequency converter (drive) ACS 880 is only valid in the dedicated security context as documented in the user manuals. The instructions of the associated user manuals released by manufacturer must be considered. The current versions of the product are specified in the currently valid Revision List. The Revision List is released by the manufacturer in cooperation with the certification body.		
<b>Valid until</b>	2030-07-04		

The issue of this certificate is based upon an evaluation in accordance with the Certification Program CERT CSI V2.0.2021 in its actual version, whose results are documented in Report No. 968/CSP 1036.00/25 dated 2025-07-04. This certificate is valid only for products, which are identical with the product tested. Issued by the certification body accredited by DAkkS according to DIN EN ISO/IEC 17065. The accreditation is only valid for the scope listed in the annex to the accreditation certificate D-ZE-11052-02-03.

TÜV Rheinland Industrie Service GmbH  
Bereich Automation  
Funktionale Sicherheit  
Am Grauen Stein, 51105 Köln

Köln, 2025-07-04  
Certification Body Safety & Security for Automation & Grid  
Dipl.-Ing. (FH) Sergei Biberdorf

www.fs-products.com  
www.tuv.com

**Certificate**

**Cyber Security Management**

CS Management (TÜV Rheinland)  
IEC 62443-4-1:2018 (Edition 1.0)  
Centralized Group Certification

<b>Certificate No.</b>	968/CSM 112.01/24
<b>Certified Company &amp; Location</b>	ABB Oy Drives Hiomotie 13 00380 Helsinki, Uusimaa Finland
<b>Scope of Certification</b>	for further regional locations see appendix IEC 62443-4-1:2018 (Edition 1.0) Security for Industrial Automation and Control Systems Part 4-1: Secure Product Development Lifecycle Requirements Centralized Group Certification
<b>Validity</b>	This certification does not imply approval or certification for specific security related developments of products. This certificate is valid until 2027-02-18

The certified company organization and its committed company sites have successfully demonstrated that a Secure Product Development Lifecycle has been established and applied according to IEC 62443-4-1.

The Scope of Certification with regards to committed company sites and achieved Maturity Levels are determined in the current revision of Certificate Appendix.

The instructions of the associated user manuals released by manufacturer must be considered.  
The current versions of the product are specified in the currently valid Revision List. The Revision List is released by the manufacturer in cooperation with the certification body.

TÜV Rheinland Industrie Service GmbH  
Bereich Automation  
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Am Grauen Stein, 51105 Köln

Cologne, 2024-02-18  
Dipl.-Ing. (FH) Sergei Biberdorf

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ABB INDUSTRIAL DRIVES

## ACS880 drives

### Cyber security guide

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[ACS880 Cyber security certificate SL-1](#)

[ACS880 Cyber security guide](#)

[ACS880 Secure product development management ML-3](#)



# ACS880 Cyber security extension (+V998)

## Vad är nytt?

- Bakåtkompatibel med befintliga ACS880-drivsystem, både mekaniskt och funktionellt<sup>1</sup>.
- Dubbelport PROFINET samt en port för Tools-Ethernet som standard.
- OPC-UA stöd som standard
- Nya säkerhetsfunktioner, inklusive identifiering och autentisering av programvara och användare, skrivskyddat panel-läge, systemmeddelanden m.m.
- Crealizer™ – avancerad programmeringsmiljö för pilottester och anpassad funktionalitet.
- Flervärgig (multi-core) processor, upp till **10× snabbare**, med **250× större minne** samt stöd för upp till 8 GB microSD-kort.
- Dubbelt IEC-programminne och 2× snabbare IEC-cykeltid (500 µs).
- Nya prediktiva diagnos- och tillståndsövervakningsfunktioner direkt i enheten.
- Stödjer befintliga I/O-, encoder- och fältbussalternativ samt nästa generations A-series-optioner<sup>2</sup>.
- Stöds i befintligt ingenjörswerktyg Drive Composer.



# ACS880 Cyber security extension (+V998)

## Jämförelse mellan UCU och ZCU



### ACS880-01/04/04F.. +V998 with UCU-20 control

Multi-core CPU, ca 10× snabbare. Ny MU (UMU-01): 250× större minne (4 GB) + µSD-kort (upp till 8 GB).

Ny förbättrad A-series optointerface. 3 × A-till-F adaptrar förinstallerade. Ingen X12-interface för FSO – nya säkerhetsmoduler

FSCS-21, FPTC(+L536, +L537) Stöd lanseras senare.

Stöder inte FSO, FSE och liknande +koder<sup>1)</sup>.

Samma I/O specifikation som ZCU excl., RO3, DIIL->DIIL/DIO3

RTC-batteri BR2032, 3 V, finns som option (+T890<sup>2)</sup>.)

Stöder Drive Composer, Drive tune, F-optioner och manöverpaneler

ACS880-04: ökad bredd via intern control unit-option +P905

Drive latest FW YINFC 1.40

AI/V/I-val via parameter. AI, AO, STO funktionsisolering, fuktsensor.

ZCU->UCU uppgraderingskit kommer bli tillgängligt via Service

### Existing ACS880 with ZCU-xx control

Single core processor, 16MB minne på ZMU

3-F series optioner och X12 användargränssnitt för FSO

FSCS, FPTC optioner stöds

FSO, FSE och liknande optioner stöds.

Full IO

RTC batteri (CR2032) standard

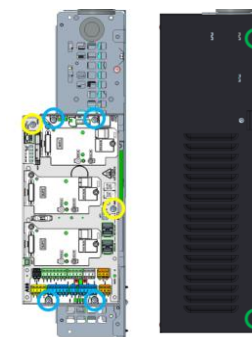
Stöder Drive Composer, Drive tune, F-optioner och manöverpaneler

-

Drive latest FW AINFC 3.47

AI V/I val via Dip switch.

-



1)+Q973 FSO-12, +Q972 FSO-21, +Q971 "Safe disconnect function", +Q982 FSO+FPNO, +L521 FSE-31. Men nya A-serie AFSO modul (släpps senare) kommer stödjas. Stöder FSPS(PROFISafe)

2) Standardinställningen för RTC-synkronisering kommer från manöverpanelens batteri.

# ACS880 Cyber security extension(+V998)

Endless possibilities to customize an ACS880



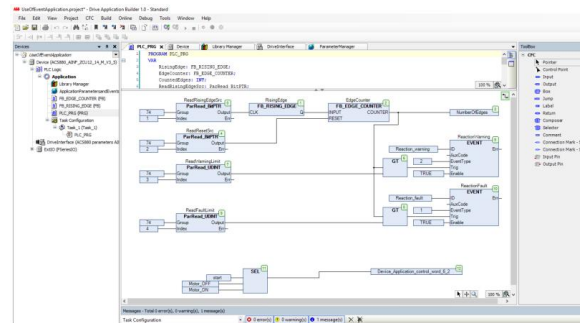
## Adaptive programming



Easy to use dynamic programming which allows flexible adjustments to the ACS880 software



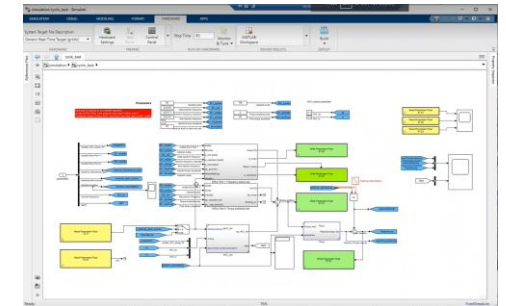
## IEC programming



Drive application programming allows you to **add a competitive advantage** to your machines. Thanks to the built-in PLC functionality of ACS880 drives, you can combine your application knowledge with the world-class AC drive.



## Crealizer™



Build and co-create **customized control** and **analytics applications** using advanced programming tools (e.g., Simulink, Python or C++) and **high-resolution data access** (Drive as a sensor).

Programs are **signed and encrypted** for security and IP protection.

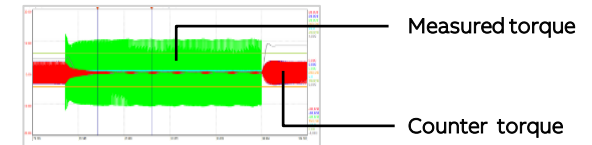
# Crealizer™ Use cases & Customer benefits

Category	Solution	Benefits
Drive condition	<ul style="list-style-type: none"><li>• Maintenance planning for IGBTs</li><li>• DC capacitor lifetime estimation</li><li>• Cooling anomaly detection</li><li>• Phase loss Analysis</li></ul>	Reduce downtime
Power train performance/ Analytics	<ul style="list-style-type: none"><li>• Adaptive vibration control</li><li>• Load based torque optimization</li></ul>	Prevent failure/strain
Application/ system	<ul style="list-style-type: none"><li>• Detect process anomalies</li><li>• No load detection for conveyors</li><li>• Energy usage analysis</li><li>• Energy efficiency improvements</li><li>• Adapting to seasonal load variation</li></ul>	Improve performance, reduce energy usage

## Use case: Adaptive vibration control

In the past this problem was solved by rapidly passing certain speeds or modifying the mechanical design, which limited the usability of the powertrain.

A Crealizer algorithm that calculates a counter torque in real-time and hence actively dampens the system vibrations.

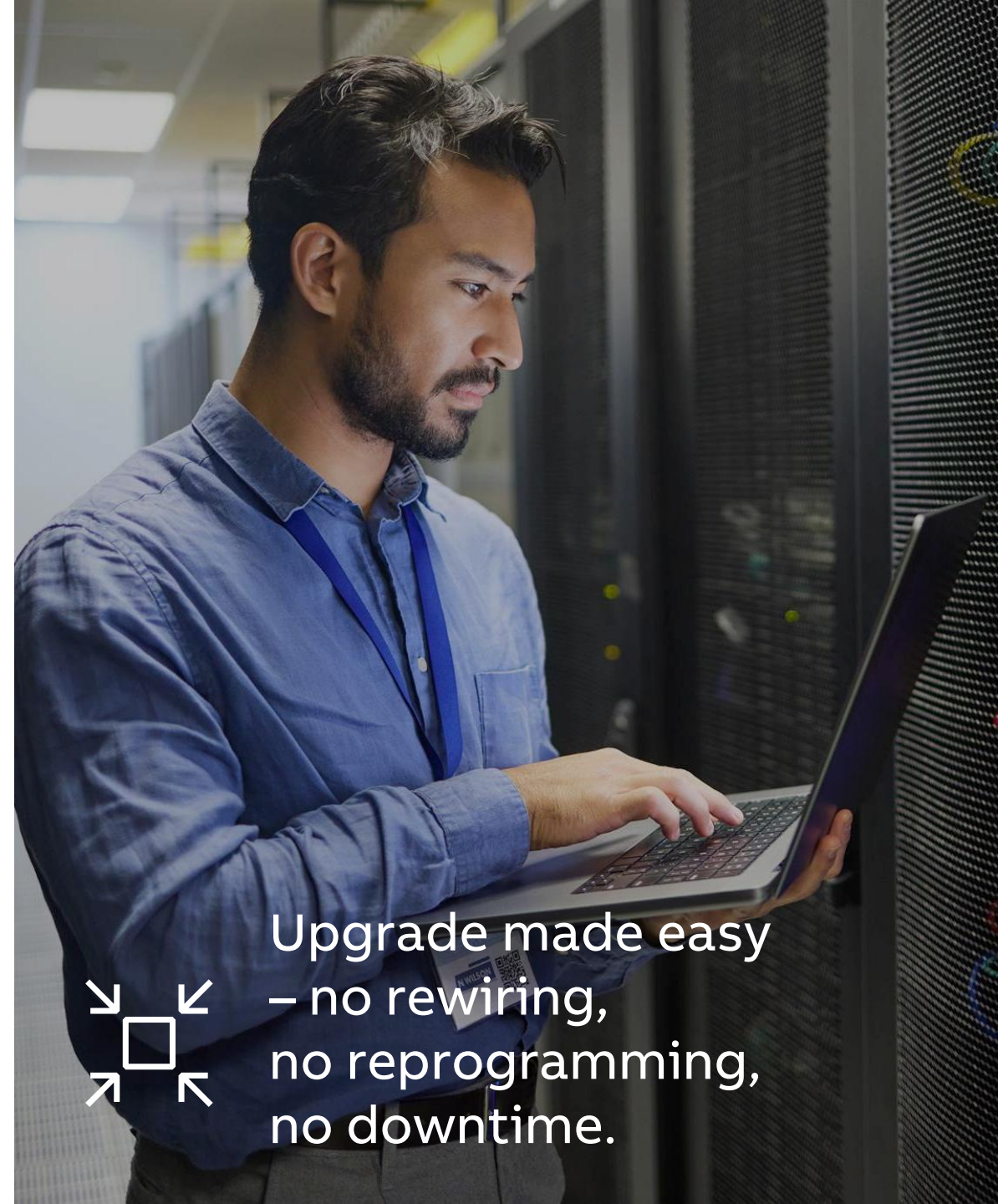


# ACS880 Cyber security extension (+V998)

Hur kan jag byta ut en existerande drift?

- Enkelt att uppgradera till Cyber security extension, Zero Disruption<sup>1)</sup>.
- Passar mekaniskt och fungerar sömlöst utan anpassningar.
- Samma visuella design.
- Plug & Play – Ingen omparametrering krävs – befintliga backuper kan återställas<sup>2)</sup>.
- Adaptiva- & IEC-programs – Återanvänd allt utan att behöva skriva om.
- PLC Integration – Ingen förändring behövs; kommunikationen förblir intakt.
- Styr- och I/O-terminalerna ansluts direkt, vilket möjliggör en snabb och sömlös uppgradering.

1. Undantag: FSO, FSE,RO3, RTC batteri. Nya A-serie optioner inklusive kommande AFSO-säkerhetsmodul lanseras senare.
2. 3. En varning visas vid försök att återställa för att indikera att det kan finnas nya parametrar i UCU. I övrigt fungerar backup/restore sömlöst.



Upgrade made easy  
– no rewiring,  
no reprogramming,  
no downtime.

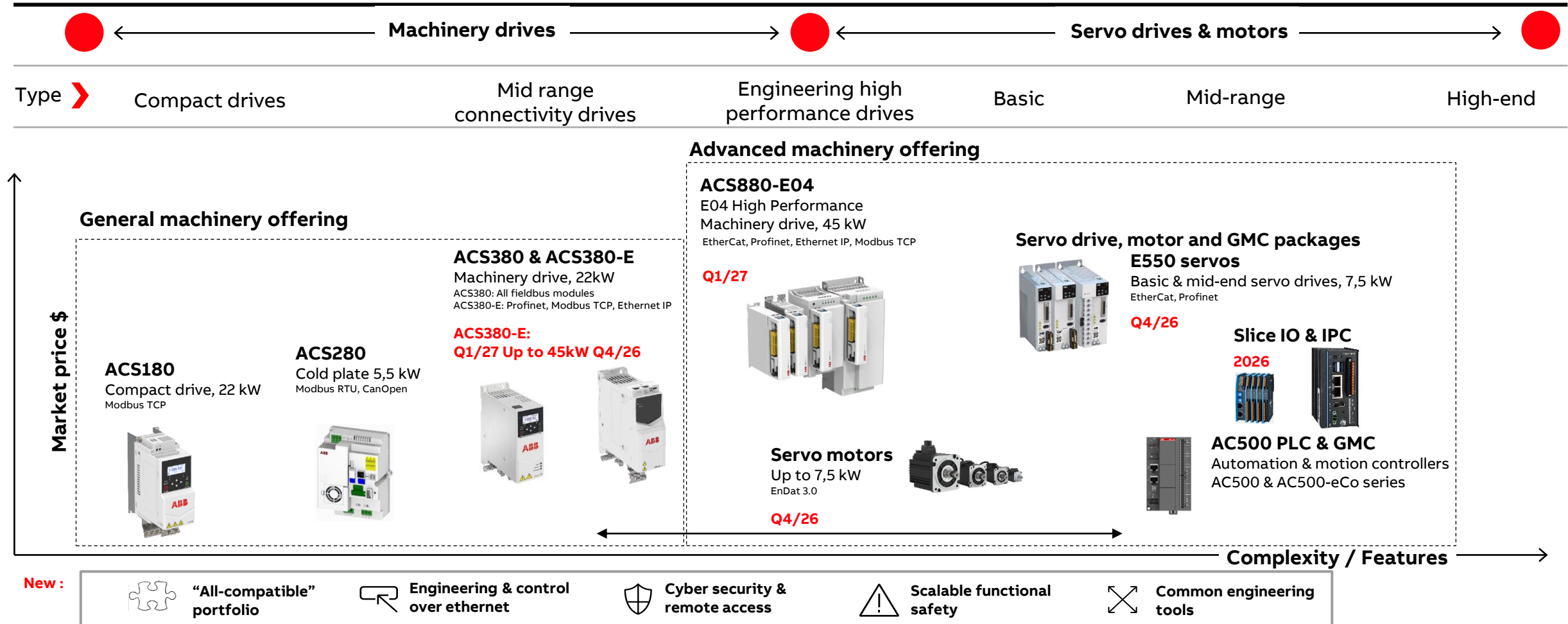
# AGENDA

# 02

- Framtidens drivsystem
- Roadmap
- Nyheter – nya lanseringar
- ABB Go Select

# MO Drive Products Machinery Portfolio

## Machinery & servo drives portfolio and NEW offering



# COMING RELEASE: ACS880-E04

## High Performance Machinery Drive

### Next generation high performance drive

- For OEMs looking for the best performance, flexibility or precision
- Powering any axis in speed, torque, position or synchronization tasks with advanced customization features inbuilt
- Part of ACS880 next generation offering | Optimized for machine building

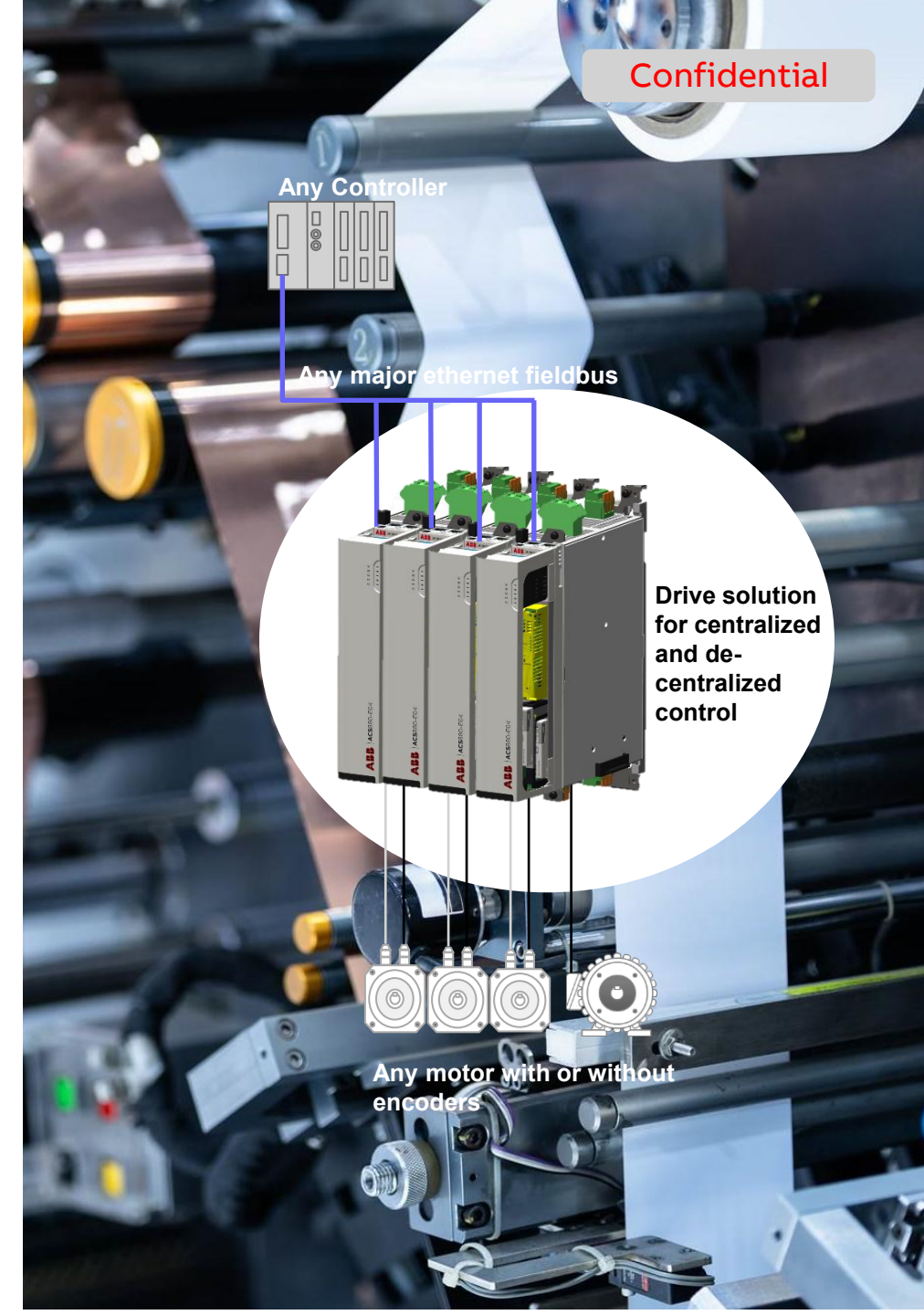
### Some of target applications

- Metals; pipe cutting and bending, wire drawing, drilling, coiling
- R&P cast and blow film foil lines, injection molding, cable and wire lines
- Pulp & paper; corrugation machines, roll handling, storing systems
- Materials handling; transportation and packing, recycling lines
- Coating machines

### Main features

- Integrated 2x100 Mbit/s ethernet connectivity with multiple protocols, optional 2<sup>nd</sup> 2x100 Mbit/s ethernet e.g. for tools / remote access
- DTC motor control optimized for 200 % peak current cycles
- Book shape slim format with easy common DC bus setup
- Position control program option with application customization features
- Internal drive to drive link for position synchronization tasks handled by drive itself

Features and options are released step-by-step during 2027



# COMING RELEASE: E550

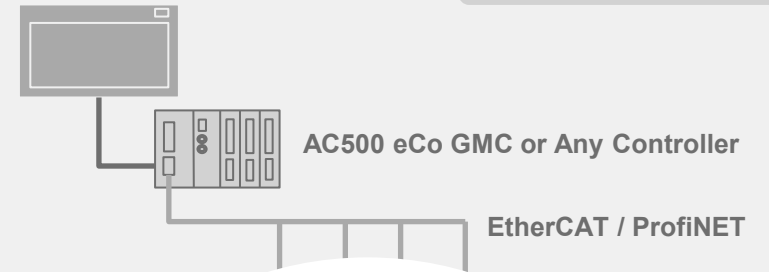
## Standard servo package for global markets

### E550 Basic EtherCAT/ProfiNET servo packages for EU & global markets

- Position control & axis synchronization in basic servo applications (centralized motion)
- Easy to configure and commission with optimized tools and autotuning
- Servo drive matched with ABB servo motor
- Power range 0.05...2 kW (200V), 0.85...7.5 kW (400V), 300% overload
- IP20 book format standard servo drives, with compact size
- Front supply, motor connection and brake resistor
- Integrated control panel and all interfaces, Ethernet tool communication
- Onboard EtherCAT 250us and ProfiNET RT fieldbus communication
- Speed loop bandwidth 2kHz, mechanical vibrations damping algorithms
- Minimum functional safety STO (SIL3/PlE)
- Motor series with EnDat 3.0 encoder – Single cable solution
- CE, UL cUL certifications to meet global market needs

ProfiNET IRT is not part of E550

Planned product series release Q4/2026



200V 0.05-2kW  
400V 0.4-7.5kW

# AGENDA

# 03

- Framtidens drivsystem
- Roadmap
- Nyheter – nya lanseringar
- ABB Go Select

## ACS880-01 new R9e frame

Extending wall mounted offering up to 355 kW

- Wall mounted drive with high output power from 250kW to 355kW on 400V & 500 V mains supply
- 400 V: 595 A & 670 A  $I_N$
- 500 V: 585 A & 635 A  $I_N$
- IP21 & IP55 – no need for cabinet!
- Flange mounting
- New, revolutionary cabling making it much easier than with competitor drives
  - Note! This can be a remarkable issue with thick cables!
- To be released in Q1 2026



Compact and robust combined with easy cabling!



	Height	Width	Depth	Weight
IP21	1130 mm	416 mm	520 mm	185 kg

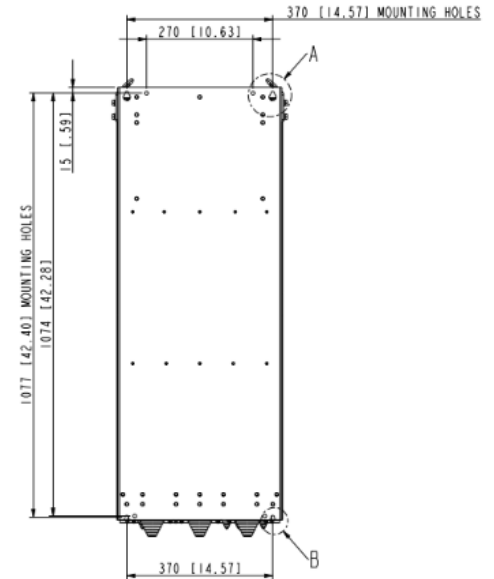
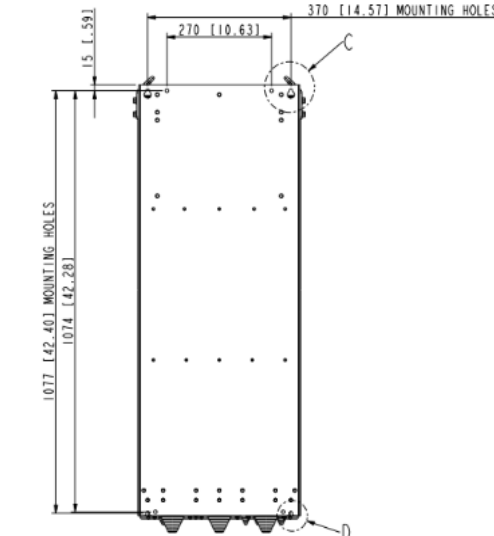
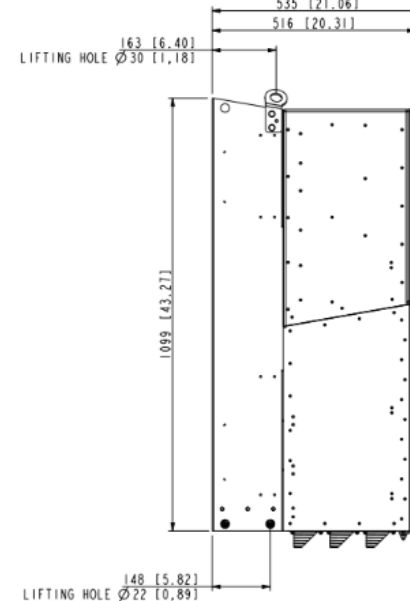
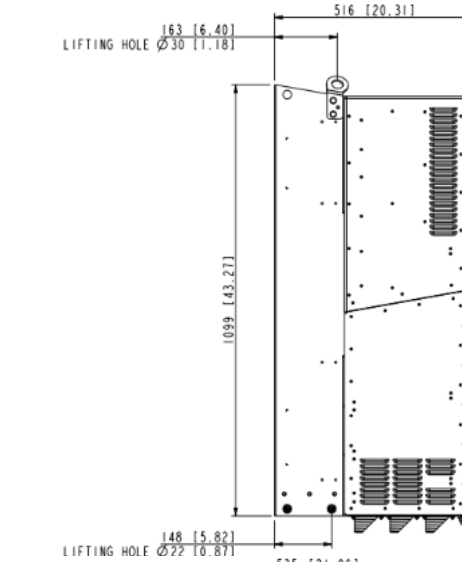
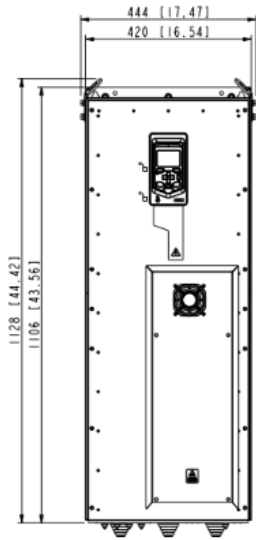
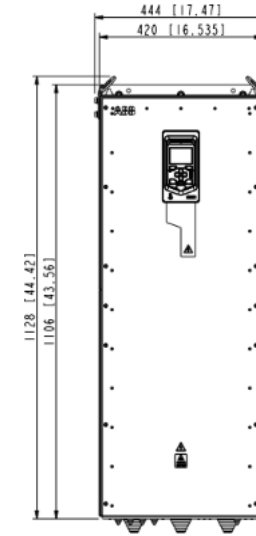
# R9e dimensioner och vikt

## IP21

Width	420 mm
Height	1099 mm
Depth	516 mm
Weight	180 kg

## IP55

Width	420 mm
Height	1099 mm
Depth	535 mm
Weight	180 kg



# Maskinomriktare

## Portfölj



**ACS180**

ACS180 ger dig precis det du behöver – och inget onödigt. Ett enkelt och pålitligt paket med ABB-kvalitet för alla maskinapplikationer.



**ACS380**

Konsekvent prestanda under hela livscykeln och ett bredare utbud av standard- och tillvalsfunktioner för optimal maskinbyggnad.

### Senaste tillskottet



**ACS380-E**

ACS380-E erbjuder snabbhet, flexibel uppkoppling och säkerhet för framtiden – för enkel integration och maximal prestanda i dina maskinlösningar.

Flexibel

Säker

Uppkopplad

**Performance, connectivity, cyber security**

# AGENDA

# O4

- Framtidens drivsystem
- Roadmap
- Nyheter – nya lanseringar
- ABB Go Select

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## GoSelect

Trygghet när det är som bäst

- Felsäkert
- Rekommenderat urval
- Lätt att se hela portföljen
- Bra utbildning
- Tillgänglighet
- [ABB GoSelect](#)



**ABB**