



ABB DRIVES, MOTORS AND SERVICES FOR THE CHEMICAL, OIL AND GAS INDUSTRY

ENGINEERED
TO OUTFIT

TABLE OF CONTENTS

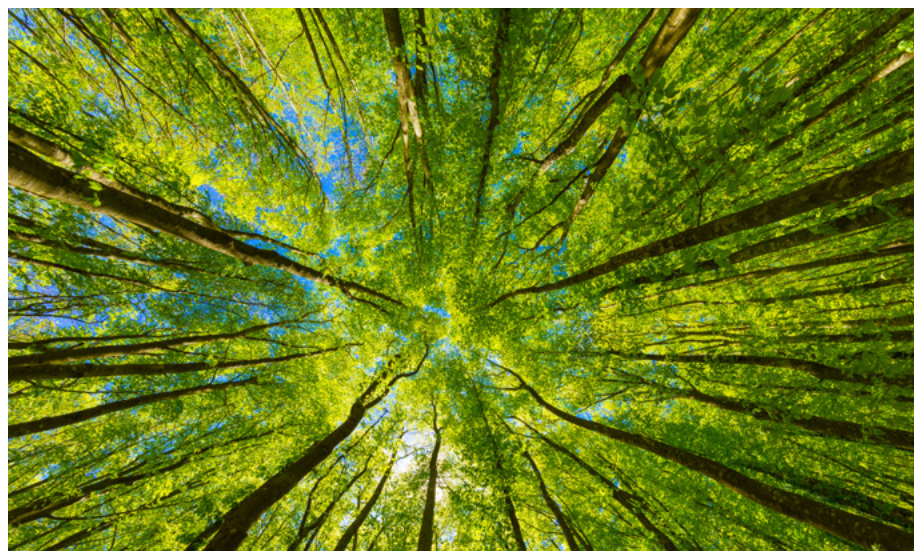


Use the **navigation bar** below to move through the chapters of the document

INDUSTRY PRIORITIES

Sustainable, efficient, reliable and digital

Solutions contributing to reliable and efficient chemical, oil and gas industry



NET-ZERO

Chemical, Oil and Gas companies are progressing on their net-zero journey to reduce carbon emissions from operations in a move toward carbon-neutrality, reach sustainability targets, and improved working environments.



ALTERNATIVE FUEL SOURCES

Hydrogen, biomass, biofuels, renewable natural gas offer lower-carbon alternatives to traditional energy resources. Alternative sources support industrial processes, refining, and power generation.



ENERGY EFFICIENCY

Operators are adopting high-efficiency motors, drives, and digital control systems to improve the performance of rotating equipment, reduce energy consumption, and lower life-cycle costs. Electrification replaces fossil-fuel-based systems with cleaner, more reliable alternatives that also reduce maintenance needs.



RELIABILITY

Operators are focusing on reliability to reduce unplanned downtime, extend equipment life, and ensure consistent performance. For rotating equipment, this supports safer operations, regulatory compliance, and protection of both assets and personnel.



DIGITALIZATION

Digitalization extends beyond connectivity and dashboards – it enables intelligent insights through condition monitoring and predictive maintenance. These capabilities improve operational stability, maximize uptime, and allow operators to optimize decision-making across the asset life cycle.

BENEFITS OF GOING ELECTRIC



High system efficiency



High reliability and availability



OPEX reduction



Optimized lifetime performance



Process precision



Safe and continuous operations

HOW ABB EMPOWERS CHEMICAL, OIL AND GAS INDUSTRY



Electrification

Global and local support

Comprehensive portfolio

Digitalization

High performance

Green energy

Sustainability

Alternative fuels

Domain expertise

Energy efficiency

Oil and gas applications

Regulatory compliance

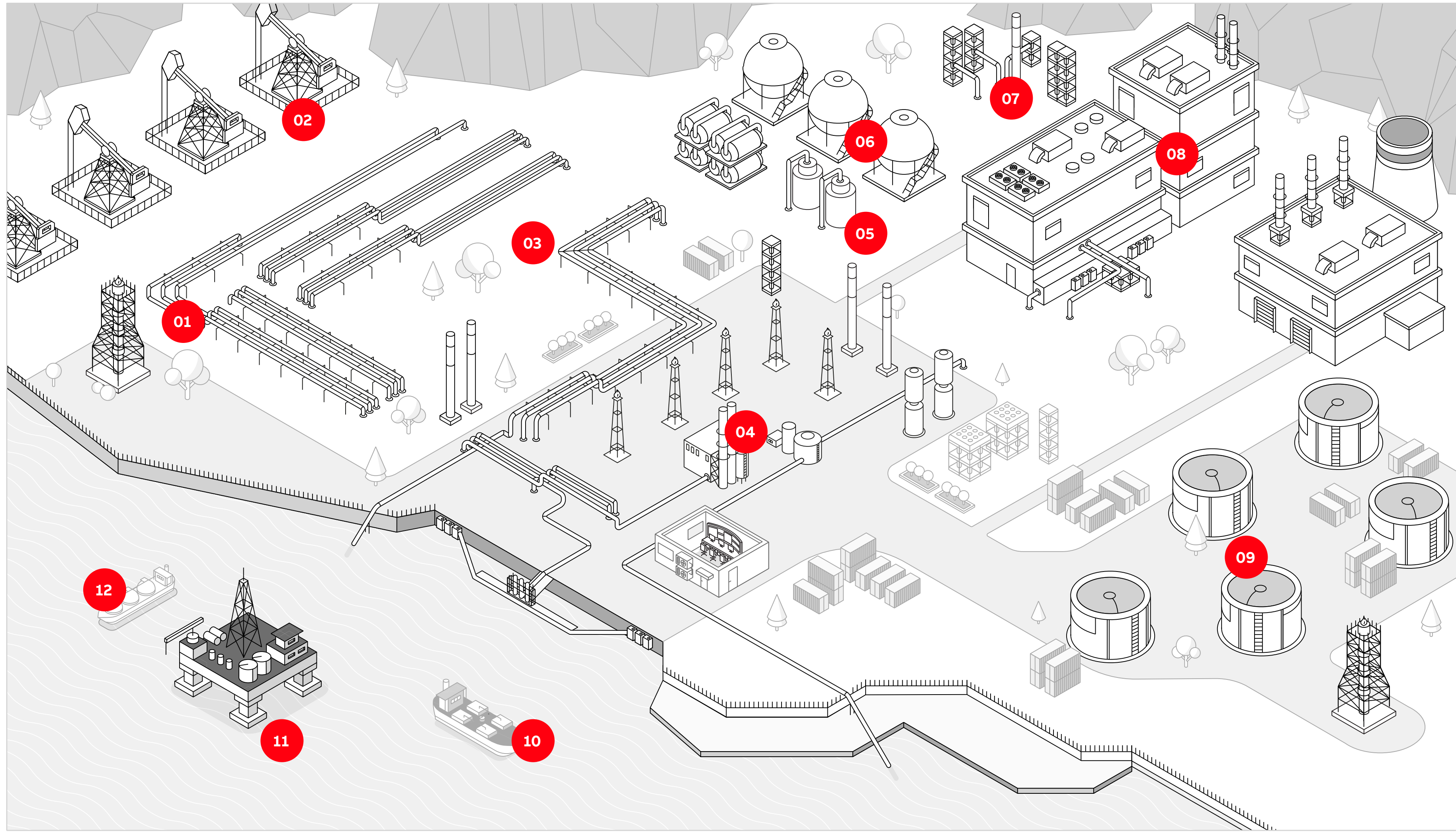
Reliability

Safety

Productivity

Life cycle management

PROCESSES THAT FEATURE ABB'S SOLUTIONS



PROCESSES

- 01. Drilling
- 02. Artificial lifting systems
- 03. Oil and gas pipelines
- 04. Refineries
- 05. Hydrogen
- 06. Carbon capture and storage (CCS)
- 07. Alternative fuels
- 08. Petrochemical plants
- 09. Storage facilities
- 10. Floating production storage and offloading (FPSO)
- 11. Oil platforms and subsea systems
- 12. Liquefied natural gas (LNG)

OUR SOLUTIONS

LOW VOLTAGE
AC DRIVES



LOW VOLTAGE
DC DRIVES



POWER
CONTROLLERS



IEC LOW
VOLTAGE MOTORS



NEMA LOW
VOLTAGE MOTORS



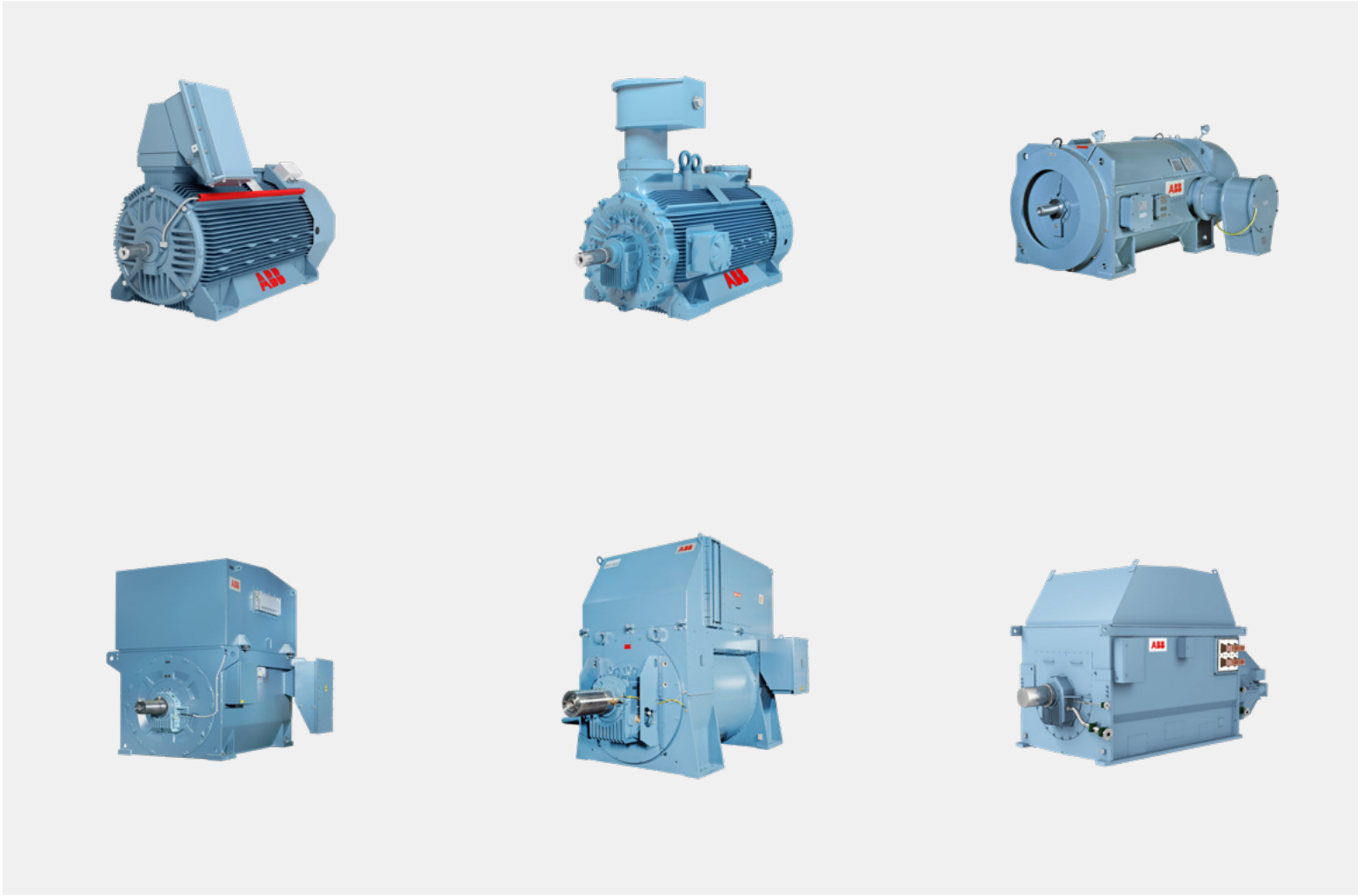
MEDIUM VOLTAGE
AC DRIVES



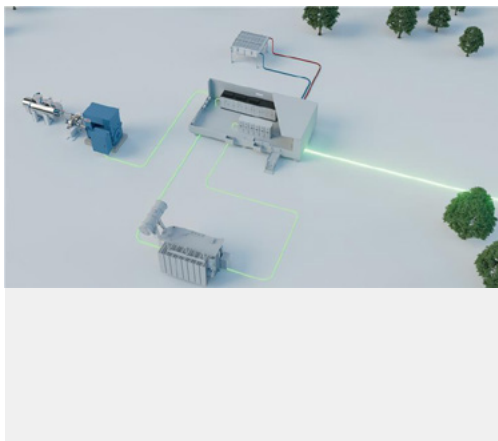
PLC
AUTOMATION



HIGH VOLTAGE
MOTORS



VARIABLE SPEED
DRIVE SYSTEMS



SERVICES



Click on the offering to explore more details
and get all the information you need

GLOBAL SUPPORT AVAILABLE LOCALLY

At your service



Over **140**
years servicing
our customers



Over **1,200**
field service engineers



~**600**
Service partners



Services in more than
70 countries



~**50**
Service workshops

CUSTOMER SUCCESS HIGHLIGHTS

REFERENCE 01



LNG plant electrification

ABB provided leading solutions for LNG plant electrification, including ACS5000W drives and synchronous motors for the main refrigeration, booster, and boil-off gas compressor.

Working closely with OEM and end user, ABB ensured smooth execution and commissioning. This resulted in reliable, high-performance solutions that met all process and operational requirements.

REFERENCE 02



Gas turbine replacement

ABB engineered a solution to replace a gas turbine with an electric drive train for a centrifugal compressor. It included high-power drives, transformers, explosion-proof motors, and cooling systems with a redundant LCI concept for maximum reliability.

Aligned with the customer's Path to Zero CO₂ reduction program, ABB's solution met all technical requirements and supported long-term sustainability goals.

REFERENCE 03



Renewable natural gas

ABB delivered a comprehensive drive solution for renewable natural gas (RNG) plants, supplying 477 ACS580MV and 258 ACS880 drives, along with a customized e-house solution tailored to project needs.

ABB's high-quality products and pioneering technology met tight project timelines. Supported by strong domain expertise and an experienced team, we ensured smooth execution and commissioning.

CUSTOMER SUCCESS HIGHLIGHTS

REFERENCE 04



Blue hydrogen

ABB delivered a comprehensive solution for a blue hydrogen manufacturing facility, featuring highly efficient synchronous motors and a MEGADRIVE LCI.

With a "one-stop-shop" approach, ABB provided best-in-class technology and coordinated seamlessly between the factory and teams. This ensured smooth execution and met the customer's performance and efficiency goals.

REFERENCE 05



Pumps and fans

A global fertilizer producer is replacing 3,500 motors with ABB SynRM VSDS for pumps and fans, taking advantage of SynRM's efficiency and extended bearing life.

Annual savings of €500,000 – €650,000 from energy efficiency and €150,000 from reduced maintenance – highlight ABB's contribution to sustainable and cost-effective operations.

REFERENCE 06



Air fin coolers

A leading air fin cooler manufacturer partnered with ABB to supply 554 explosion-proof LV motors (15 kW – 45 kW) for Zone 2 hazardous areas. ABB engaged in six months of technical collaboration and delivered tailored solutions to meet strict requirements.

Competitive pricing strengthened the customer's air cooler package and reinforced a 15-year partnership built on high-quality products and dependable support.

CUSTOMER SUCCESS HIGHLIGHTS

REFERENCE 07



Extruders

ABB provided motors and drives for the world's largest single-site polyolefin complex. It included drives, synchronous and induction motors, and transformer converters.

Close collaboration between the OEM and ABB teams enabled the development of an optimized solution, delivering a high-performance drivetrain tailored for this demanding application.

REFERENCE 08



Fertilizer company

Yara International is committed to maintaining a high level of efficiency in all its operations. In the past, maintenance traditionally had been a combination of run to failure and time-based periodic maintenance.

They've adopted ABB Smart Sensors, which allowed them to shift from time-based to condition-based maintenance and plan maintenance according to actual needs.

REFERENCE 09



FPSO

ABB provided motor and drive solutions for a Floating Production Storage and Offloading project in the "pre-salt" region of Rio de Janeiro. The package included ACS1000 and ACS5000 drives, custom induction motors (4.1 MW and 15.4 MW), and external oil transformers.

ABB's expertise and strong technical support ensured timely delivery, seamless integration, and full alignment with the customer's technical requirements. Backed by an experienced team, we delivered smooth project execution and successful commissioning.

AB B

ACS880



Input voltage:
230, 400, 500 AND 690 V

Input section:
DIODE (6-,12-,24- PULSE), IGBT,
REGENERATIVE RECTIFIER

Power range:
0.55 TO 6000 KW

Motor / load type:
INDUCTION, PM, SYNRM, HPD,
EXTERNALLY EXITED
SYNCHRONOYS, ATEX

Degree of protection:
MODULES IP00-IP55
CABINETS IP22-IP54

Cooling system:
AIR, LIQUID

DCS880



Transformer:
EXTERNAL

Power range:
MODULES: UP TO 5.5MW
CABINETS: UP TO 18 MW

Motor / load type:
DC MOTORS
NON-MOTORIC DC LOADS
(ELECTROLYZER, BATTERIES,
MAGNETS,...)

Output voltage:
UP TO 1,500 V_{DC}

Degree of protection:
IP00 (MODULES)
IP21/ IP42/IP54 (CABINETS)

Cooling system:
AIR

DCT880



Transformer:
EXTERNAL

Power range:
UP TO 5.4 MW

Motor / load type:
RESISTIVE
UV / IR LAMPS
TRANSFORMERS

Output voltage:
110 VAC TO 990 VAC

Degree of protection:
IP00 (MODULES)
IP21 (CABINETS – HIGHER ON
REQUEST)

Cooling system:
AIR

**Type of power
semiconductor:**
THYRISTOR

ACS580MV



Input voltage:
3.3 TO 13.8 KV

Transformer:
INTEGRATED

Input section:
DIODE

Power range:
200 TO 6300 KW

Motor / load type:
INDUCTION
PMSM

Output voltage:
3.3 TO 11 KV

Degree of protection:
IP21 (STANDARD)
IP42 (OPTION)

Cooling system:
AIR

ACS8080



Input voltage:
UP TO 13.8 KV
(TRANSFORMERLESS UP TO 6.6 KV)

Transformer:
INTEGRATED, EXTERNAL

Input section:
DIODE (12-, 24-PULSE)
ACTIVE (AFE)

Power range:
300 TO 6700 KW / 400 TO 9000 HP

Motor / load type:
INDUCTION
PMSM
SYNCHRONOUS

Output voltage:
3.3 TO 6.9 KV

Degree of protection:
IP21 (STANDARD)
IP42 (OPTION)

Cooling system:
AIR

External transformer project specific:
PROJECT SPECIFIC, DTL
(DIRECT-TO-LINE)

SOME OPTIONS AND VARIANTS ARE UNDER DEVELOPMENT.
CONSULT ABB FOR CLARIFICATION.

ACS5000



Input voltage:

1920 TO 1980 V
3700 TO 3960 V

Transformer:

INTEGRATED, EXTERNAL

Input section:

DIODE (36-PULSE, 18-PULSE
AS AN OPTION FOR FRAMES 1)

Power range:

5 TO 36 MW (HIGHER ON
REQUEST)

Motor / load type:

INDUCTION
SYNCHRONOUS

Output voltage:

0 TO 6.9 KV
(UP TO 13.8 KV ON REQUEST)

Degree of protection:

IP42 (STANDARD)

Cooling system:

LIQUID

ACS6080



Input voltage:
6-PULSE DIODE RECTIFIER:
3300 V
12- AND 24-PULSE DIODE
RECTIFIER: 1725 V
6-, 12-, AND 18-PULSE ACTIVE
RECTIFIER: 3160 V

Transformer:
EXTERNAL

Input section:
DIODE (6-,12-, OR 18-PULSE)
ACTIVE (AFE/ARU) (6-,12-, OR
24- PULSE)

Power range:
5 TO 36 MW

Motor / load type:
INDUCTION
PMSM
SYNCHRONOUS

Output voltage:
2.3 TO 3.3 KV

Degree of protection:
IP32 (STANDARD)
IP42, 54 (OPTION)

Cooling system:
LIQUID

MEGADRIVE LCI



Input voltage:
ANY VOLTAGE LEVEL CAN BE
APPLIED TO THE APPROPRIATE
PRIMARY SIDE OF THE INPUT
TRANSFORMER

Transformer:
EXTERNAL

Input section:
THYRISTOR (6-, 12-, OR
24-PULSE)

Power range:
2 TO 150 MW

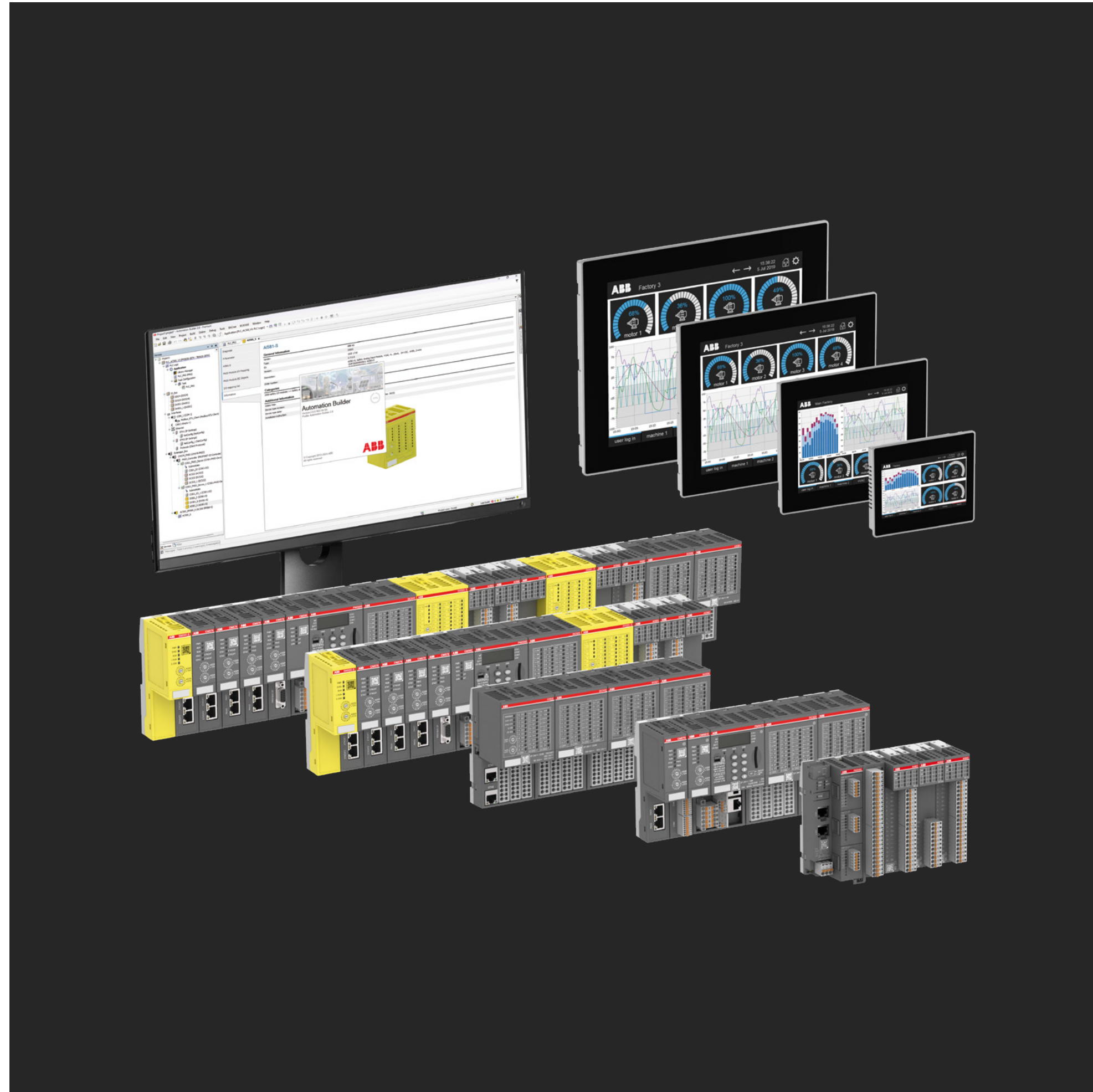
Motor / load type:
SYNCHRONOUS

Output voltage:
2 TO 2 X 10 KV (2 X 25 KV)

Degree of protection:
IP30 (STANDARD)
IP31, 41, 54 (OPTION)

Cooling system:
AIR OR LIQUID

AC500 PLC PLATFORM



One PLC platform:
DESIGNED TO PERFORM
ACROSS A WIDE RANGE OF
APPLICATIONS – FROM BASIC
TO HIGHLY DEMANDING

One HMI platform:
DELIVERING INTUITIVE
VISUALIZATION FOR VERSATILE
INDUSTRIAL APPLICATIONS
– FROM BASIC TO HIGH-END
OPERATIONS

One I/O platform:
ENGINEERED TO SCALE FROM
BASIC I/O NEEDS TO COMPLEX
AUTOMATION SYSTEMS

Machine safety option:
BUILT FOR UNCOMPROMISING
SAFETY – SUPPORTING
SIL 3 / PL E IN DEMANDING
APPLICATIONS

Cyber security capabilities:
DESIGNED TO MEET THE
HIGHEST LEVEL OF SECURITY
TO SUPPORT CUSTOMER
IN CRITICAL APPLICATION

Communication capabilities:
COMMUNICATION FROM
DEVICE TO CLOUD
AND SUPPORTING THE
MOST COMMON INDUSTRIAL
PROTOCOL

PROCESS PERFORMANCE INDUCTION MOTORS



Power range:
0.09 KW – 1300 KW

Voltage rate:
230 V – 690 V

Frequency:
50 HZ / 60 HZ

Shaft height:
71 – 500

Number of poles:
2 – 12

Nominal speed:
UP TO 3600 RPM

Winding:
COPPER

Insulation:
INSULATION CLASS F,
TEMPERATURE RISE CLASS B,
UNLESS OTHERWISE STATED

Enclosure:
CAST IRON

Bearings:
DEEP GROOVE BALL BEARINGS

Cooling type:
IC411 (STD.), IC 416

Mounting:
B3, B5, B35, B14, V1

Degree of protection:
IP55 (STD.), IP56, IP65, IP66

Basic standards:
IEC 60034-1

Efficiency:
IE2, IE3, IE4, IE5

Surface treatment:
CORROSION CLASS C3
(STD, OTHERS AVAILABLE AS
OPTION)

INDUCTION MOTORS FOR EXPLOSIVE ATMOPHERES



Power range:
0.12 KW – 1000 KW

Voltage rate:
230 V – 690 V

Frequency:
50 HZ / 60 HZ

Shaft height:
71 – 450

Number of poles:
2 – 12

Nominal speed:
UP TO 3600 RPM

Winding:
COPPER

Insulation:
INSULATION CLASS F,
TEMPERATURE RISE CLASS B,
UNLESS OTHERWISE STATED

Enclosure:
CAST IRON

Bearings:
DEEP GROOVE BALL BEARINGS

Cooling type:
IC411 (STD.), IC 416

Mounting:
B3, B5, B35, B14, V1

Degree of protection:
IP55 (STD.), IP56, IP65, IP66

Basic standards:
IEC 60034-1

Efficiency:
IE2, IE3, IE4

Surface treatment:
CORROSION CLASS C3 (STD,
OTHERS AVAILABLE AS
OPTION)

Type of Ex protection:
EX DB, EX DB EB, EX EC, EX T

Certification:
IECEX, ATEX AND WIDE RANGE
OF NATIONAL CERTIFICATES

INCREASED SAFETY SYNRM MOTORS



Power range:
132 – 315

Voltage rate:
230 V – 690 V

Frequency:
50 HZ / 60 HZ

Shaft height:
132 – 315

Number of poles:
4

Nominal speed:
UP TO 3600 RPM

Winding:
COPPER

Insulation:
INSULATION CLASS F,
TEMPERATURE RISE CLASS B,
UNLESS OTHERWISE STATED

Enclosure:
CAST IRON

Bearings:
DEEP GROOVE BALL BEARINGS

Cooling type:
IC411 (STD.), IC 416

Mounting:
B3, B5, B35, B14, V1

Degree of protection:
IP55 (STD.), IP56, IP65, IP66

Basic standards:
IEC TS 60034-30-2

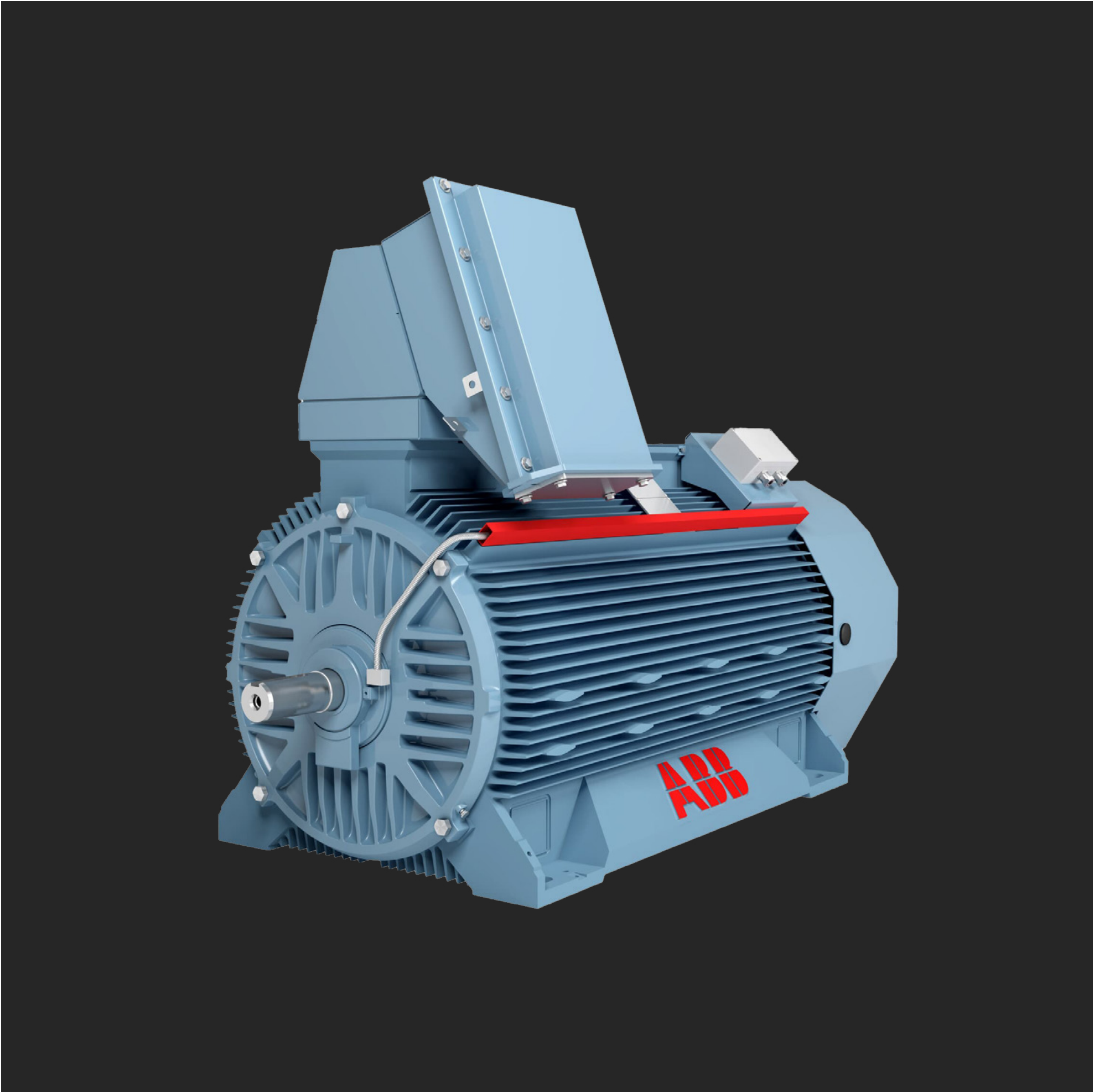
Efficiency:
IE5

Surface treatment:
CORROSION CLASS C3
(STD, OTHERS AVAILABLE
AS OPTION)

Type of Ex protection:
EX EB, EX EC, EX T

Certification:
IECEX, ATEX AND RANGE OF
NATIONAL CERTIFICATES

HIGH VOLTAGE RIB COOLED MOTORS: AXR, HXR



Power range:
100 TO 2240 KW

Voltage rate:
UP TO 11.5 KV

Frequency:
50/60 HZ, VSD

Shaft height:
315, 355, 400, 450, 500, 560

Number of poles:
2 TO 12

Nominal speed:
UP TO 3600 RPM

Winding:
COPPER

Insulation:
INSULATION CLASS F,
TEMPERATURE RISE CLASS B,
UNLESS OTHERWISE STATED

Enclosure:
CAST IRON

Cooling type:
IC411, IC416

Degree of protection:
IP55 (STD.), IP56, IP65, IP66

Basic standards:
IEC AND NEMA (ELECTRICAL)

Gas group:
IIA, IIB, IIC

Ex certification:
ATEX, UKCA, IECEx, CCC, PESO,
INMETRO, ECAS-EX

Type of ex protection:
EX EC, EX EB, EX PZC, EX PXB,
NEC / CEC

HIGH VOLTAGE RIB COOLED FLAMEPROOF MOTORS, AMD R



Power range:
100 TO 1600 KW

Voltage rate:
UP TO 11 KV

Frequency:
50/60 HZ, VSD

Shaft height:
355, 400, 450, 500

Number of poles:
2 TO 18

Nominal speed:
UP TO 3600 RPM

Winding:
COPPER

Insulation:
INSULATION CLASS F,
TEMPERATURE RISE CLASS B,
UNLESS OTHERWISE STATED

Enclosure:
CAST IRON

Cooling type:
IC411, IC416

Degree of protection:
IP55 (STD.), IP56, IP65, IP66

Basic standards:
IEC, NEMA (ELECTRICAL)

Gas group:
IIB, IIC

Ex certification:
ATEX, UKCA, IECEx, CCC, PESO,
INMETRO, ECAS-EX

Type of ex protection:
EX DB, EC DB EB

HIGH VOLTAGE TUBE COOLED FLAMEPROOF MOTORS, AMD T



Power range:
100 TO 7500 KW

Voltage rate:
UP TO 11 KV

Frequency:
50/60 HZ, VSD

Shaft height:
500, 560, 630, 710, 900

Number of poles:
2 TO 18

Nominal speed:
UP TO 3600 RPM

Winding:
COPPER

Insulation:
INSULATION CLASS F,
TEMPERATURE RISE CLASS B,
UNLESS OTHERWISE STATED

Enclosure:
STEEL

Cooling type:
IC511, IC516

Degree of protection:
IP55 (STD.), IP56

Basic standards:
IEC, NEMA (ELECTRICAL)

Gas group:
IIB FULL RANGE/ IIB+H2 FOR
710 / IIC FOR 500

Ex certification:
ATEX, IECEX, CCC, CCOE

Type of ex protection:
EX DB, EC DB EB

HIGH VOLTAGE MODULAR INDUCTION MOTORS, AMI



Power range:
UP TO 28500 KW

Voltage rate:
575 TO 13,8 KV

Frequency:
50/60 HZ, VSD

Shaft height:
400, 450, 500, 560, 630, 710,
800, 900, 1000

Number of poles:
2 TO 24

Nominal speed:
UP TO 4000 RPM

Winding:
COPPER

Insulation:
INSULATION CLASS F,
TEMPERATURE RISE CLASS B,
UNLESS OTHERWISE STATED

Enclosure:
STEEL

Cooling type:
IC01 / IP23 (WP I), IC01 / IPW24
(WP II),
IC81W / IP55 (TEWAC), IC611 /
IP55 (TEAAC)

Degree of protection:
IP55, IP56, IP23, IP24W

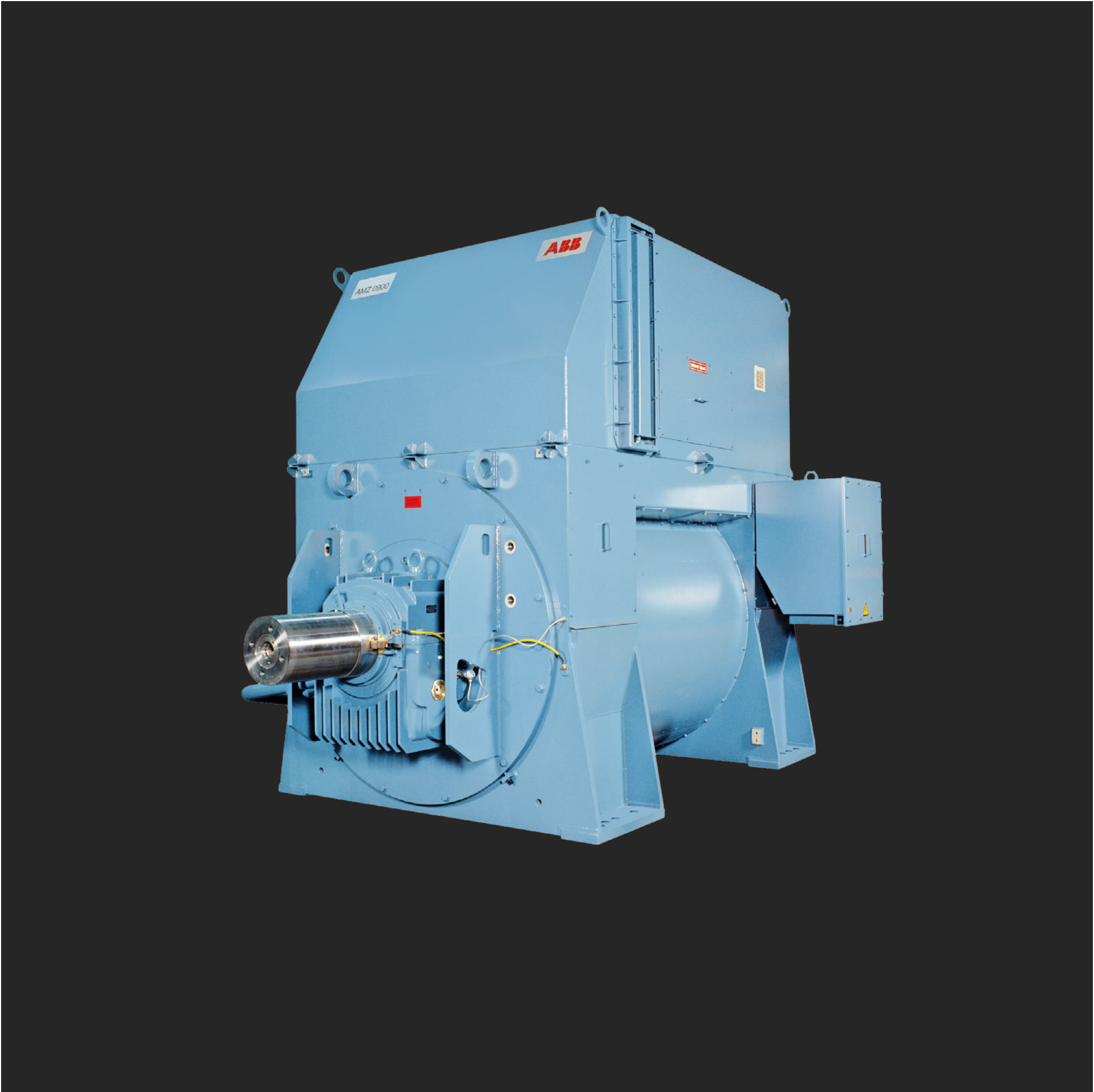
Basic standards:
IEC AND NEMA (ELECTRICAL)

Gas group:
IIA, IIB, IIC

Ex certification:
ATEX, UKCA, IECEx, CCC, PESO,
INMETRO, ECAS-EX

Type of ex protection:
EX EC, EX EB, EX TC, EX PZC, EX
PXB, NEC / CEC

SLOW SPEED SYNCHRONOUS MOTORS, AMZ



Power range:
UP TO 65 MW

Voltage rate:
UP TO 15 KV

Frequency:
50/60 HZ, VSD

Shaft height:
710, 900, 1120, 1250, 1600,
2000, 2500, (2800)

Number of poles:
4 TO 40 (POLE NUMBERS 4
AND 6 ONLY
AS VSD FOR SMALL FRAME
SIZES)

Nominal speed:
UP TO 1800 RPM (VSD), UP TO
900 RPM (DOL)

Winding:
COPPER

Insulation:
INSULATION CLASS F,
TEMPERATURE RISE CLASS B
OR F

Enclosure:
STEEL

Cooling type:
IC01, IC611, IC616, IC81W,
IC8A6W7, WPII

Degree of protection:
IP23, IPW24, IP44, IP54, IP55,
IP56

Basic standards:
IEC AND NEMA (ELECTRICAL)

Gas group:
IIA, IIB, IIC

Ex certification:
ATEX, IECEx, UKCA, CCC,
CSA-EX AND OTHERS ON
REQUEST

Type of ex protection:
EX EC, EX P, CLASS I DIV 2/
ZONE 2, NEC / CEC

HIGH SPEED SYNCHRONOUS MOTORS, AMS



Power range:
UP TO 75 MW

Voltage rate:
UP TO 15 KV

Frequency:
50/60 HZ, VSD

Shaft height:
710, 800, 900, 1000, 1120, 1250, 1400

Number of poles:
4 AND 6

Nominal speed:
UP TO 1800 RPM

Winding:
COPPER

Insulation:
INSULATION CLASS F,
TEMPERATURE RISE CLASS B,
UNLESS OTHERWISE STATED

Enclosure:
STEEL

Cooling type:
IC01, IC616, IC81W, IC86, IC06,
WP11

Degree of protection:
IP23, IPW24, IP54, IP55, IP56

Basic standards:
IEC AND NEMA (ELECTRICAL)

Gas group:
IIA, IIB, IIC

Ex certification:
ATEX, IECEx, CCC, PESO,
INMETRO, ECAS-EX

Type of ex protection:
EX EC, EX P, CLASS I DIV 2/
ZONE 2, NEC / CEC

XEX SEVERE DUTY



Power range:
1-900 HP

Voltage range:
230 / 460, 460, AND 575

Frame sizes:
143T – 588

Number of poles:
2 – 8

Nominal speed:
UP TO 3600 RPM

Winding:
COPPER

Insulation:
CLASS F WITH CLASS B RISE

Bearings:
REGREASEABLE

Degree of protection:
IP55 (143 – L449 FRAME)
IP66 (> 586 FRAME)

Efficiency:
NEMA PREMIUM®

Division / Class:
DIV 2, CLASS I, GRP A, B, C,
DIV 2, CLASS II, GRP, F&G 5000
FRAMES

Inverter duty:
SUITABLE FOR INVERTER DUTY
USE PER NEMA MG1 PART
31.4.4.2

Warranty:
3 YEARS

IEEE 841-2021 COMPLIANT MOTORS



Power range:
1 – 300HP (IEEE 841XL)
1 – 100 HP (SD100 IEEE 841)
75-400 HP (SD200 841)

Voltage range:
460 AND 575

Frame sizes:
143T – 449T NEMA

Number of poles:
2 – 6 (8*)

Nominal speed:
UP TO 3600 RPM

Insulation:
CLASS F WITH CLASS B RISE
CLASS H FOR SD200 841

Bearings:
REGREASABLE WITH PLS
(PATENTED LUBRICATION
SYSTEM)

Degree of protection:
IP56

Efficiency:
NEMA PREMIUM®
*NEMA SUPER PREMIUM AS
OPTION FOR SD200 841

Division / Class:
DIV 2, CLASS I, GRP A, B, C, D

Inverter duty:
SUITABLE FOR INVERTER DUTY
USE PER NEMA MG1 PART
31.4.4.2

Warranty:
5 YEARS

Certifications and tests:
IEEE 841 – 2021,
IEEE 45,
API 610 (VERTICAL P-BASE)
DOCUMENTED TEST REPORT

PRODUCT WEBPAGES:

* OPTIONAL

API 661 COMPLIANT MOTORS



Power range:
5 – 75 HP (661XL)
5 - 100 HP (SD661)

Voltage range:
460

Frame sizes:
182T – 365T

Number of poles:
4

Nominal speed:
UP TO 3600 RPM

Insulation:
CLASS F WITH CLASS B RISE

PRODUCT WEBPAGES:

Bearings:
ROLLER BEARING FOR BELTED APPLICATIONS, REGREASABLE WITH PLS (PATENTED LUBRICATION SYSTEM)

Degree of protection:
IP56

Efficiency:
NEMA PREMIUM®

Division / Class:
DIV 2, CLASS I, GRP A, B, C, D

Inverter duty:
SUITABLE FOR INVERTER DUTY USE PER NEMA MG1 PART 31.4.4.2

Warranty:
5 YEARS

Certifications and tests:
API 661 (INCLUDING 40K HR L10 LIFE),
IEEE 841 – 2021,
IEEE 45,
DOCUMENTED TEST REPORT

EXPLOSION PROOF



Power range:
1/4 – 60 HP (GENERAL PURPOSE XP)
1 – 250 HP (SEVERE DUTY XP)
1/2 – 200 HP (DRILL RIG DUTY XP)
1 - 300 HP (XP100)

Voltage range:
208 – 230 / 460, 230 / 460, 575

Frame sizes:
48 – 447 T

Number of poles:
2 – 6

Nominal speed:
UP TO 3600 RPM

Insulation:
CLASS F WITH CLASS B RISE

Degree of protection:
IP54 (GENERAL PURPOSE XP),
IP55 THRU 320 FRAME,
IP66 > 360 FRAME (SEVERE DUTY XP,
DRILL RIG DUTY XP)

Efficiency:
NEMA PREMIUM®

Division / Class:
DIV 1, CLASS I GRP C&D AND
CLASS II GRP F&G (GEN. PURPOSE XP)
DIV 1, CLASS I, GRP C&D AND
CLASS II, GRP E,
F&G (SEVERE DUTY XP)
DIV 1, CLASS I, GRP C&D (DRILL RIG DUTY)

Inverter duty:
DOL OR WITH VFD

Warranty:
3 YEARS

Certifications and tests:
UL AND CSA STANDARDS
FOR USE IN DIVISION BASED
HAZARDOUS LOCATIONS PER
NFPA70 NATIONAL ELECTRIC
CODE AND C22.1, CANADIAN
ELECTRIC CODE

SD100/SD200



Power range:
1 – 400 HP (SD100)
125 – 800 HP (SD200)

Voltage range:
230 / 460, 460, 575

Frame sizes:
143 – S449SS (SD100)
444 – 5013 (SD200)

Number of poles:
2 – 8

Nominal speed:
UP TO 3600 RPM

Insulation:
CLASS F WITH CLASS B RISE (SD100)
CLASS H WITH CLASS B RISE (SD200)

Bearings:
REGREASABLE WITH PLS (POSITIVE LUBRICATION SYSTEM)

Degree of protection:
IP55

Efficiency:
NEMA PREMIUM®
NEMA SUPER PREMIUM*

Division / Class:
DIV 2, CLASS I, GRP A, B, C, D (140 - 250 FRAMES)
DIV 2, CLASS I, GRP A, B, C & D, CLASS II F & G (280 – 440 FRAMES)

Inverter duty:
SUITABLE FOR INVERTER DUTY
USE PER NEMA MG1 PART 31.4.4.2

Warranty:
3 YEARS

PRODUCT WEBPAGES:

* OPTIONAL

SP4 NEMA PREMIUM EFFICIENT MOTORS



Power range:
1 - 20 HP (GENERAL PURPOSE)
25 - 300 (SEVERE DUTY)

Voltage range:
230/460, 460

Number of poles:
2 – 6

Nominal speed:
UP TO 3600 RPM

Degree of protection:
IP22 (GP OPEN)
IP54 (GP ENCLOSED)
IP55 (SEVERE DUTY)

Efficiency:
NEMA SUPER PREMIUM (IE4)

Division / Class:
DIV 2, CLASS I, GRP A,B,C,D (SD)
DIV 2, CLASS II, GRP F&G (SD)

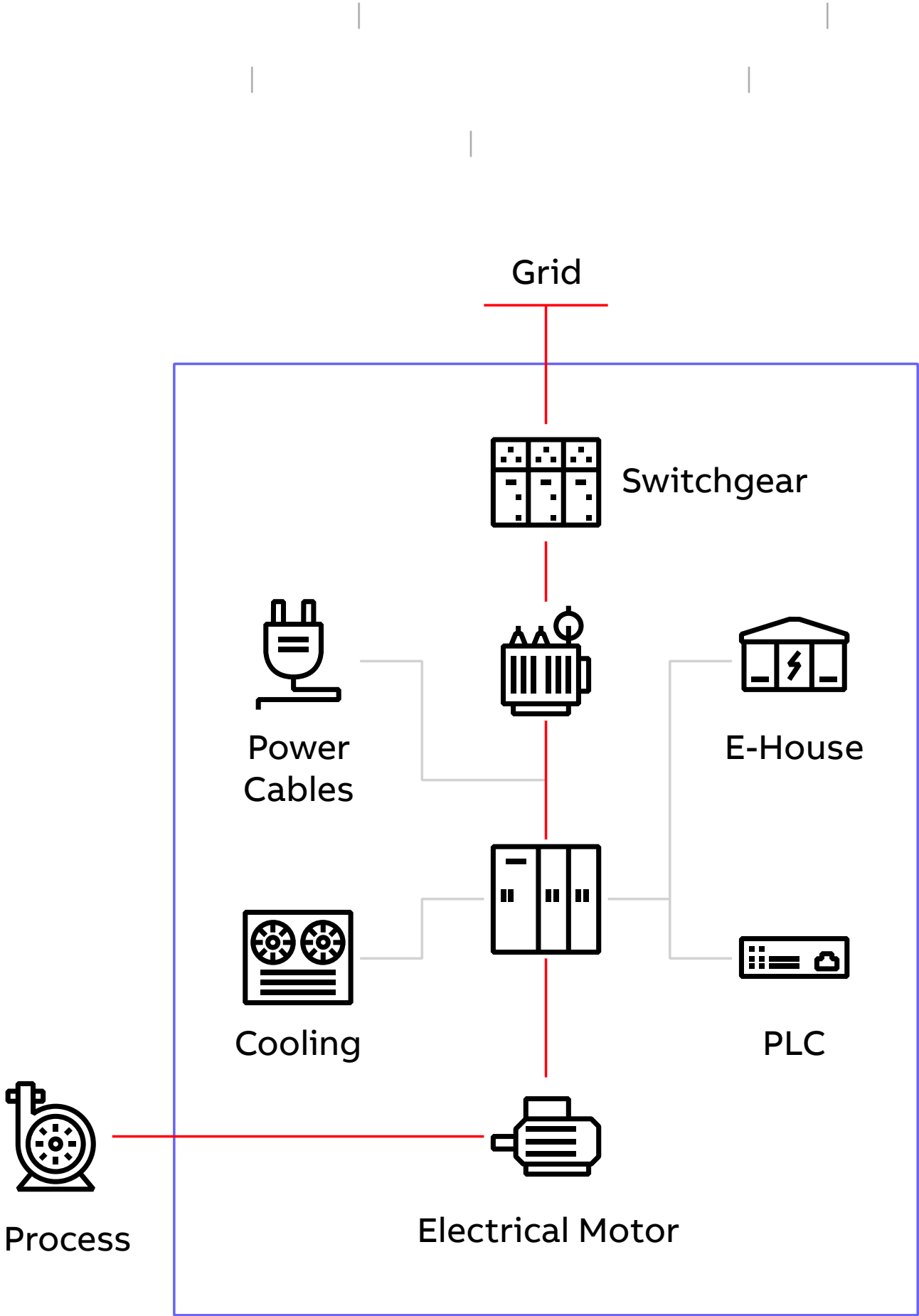
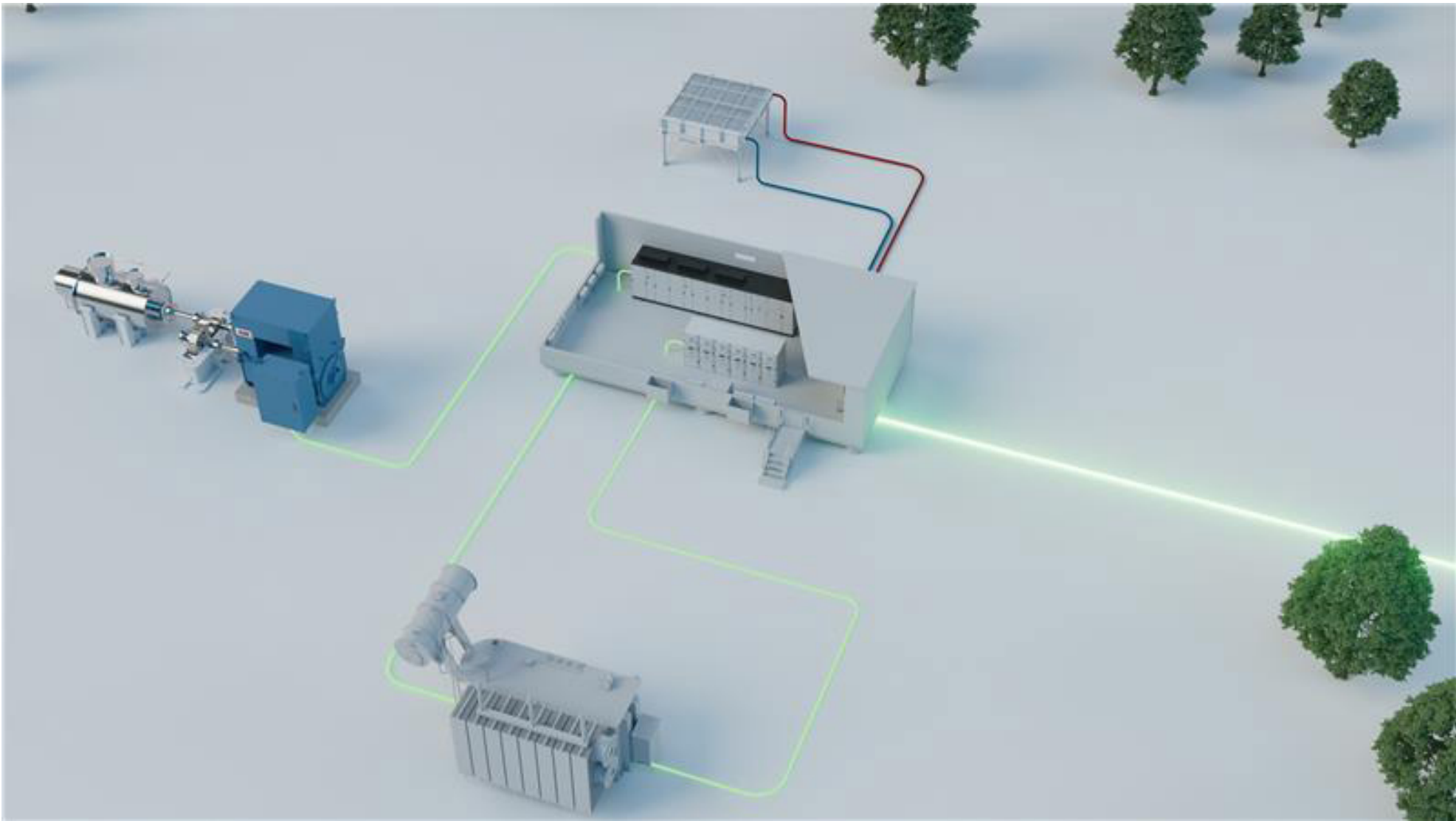
Inverter duty:
SUITABLE FOR INVERTER DUTY
USE PER NEMA MG1 PART 31.4.4.2

Warranty:
4 YEARS

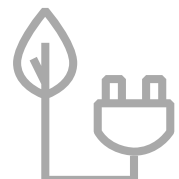
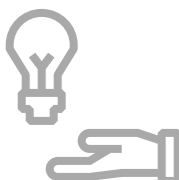
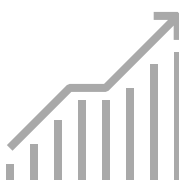
* OPTIONAL

OPTIMIZED VARIABLE SPEED DRIVE SYSTEMS

One-stop shop for complex drive solutions



We provide our customers with the following benefits:

-  Full ABB responsibility
-  Sustainability and efficiency
-  Project simplification
-  Domain expertise and know-how
-  Profitability boost

OPERATE & MAINTAIN

Reliability and uptime



Our services help to keep your assets running safely and efficiently throughout their lifetime.

Service examples:

- Preventive maintenance
- Technical support
- Spare parts & repairs
- Reconditioning
- Service agreements

Customer values:

- Maximized uptime
- Global support when and wherever you need it
- Improved OPEX control

MODERNIZE & EXTEND LIFE

Modernization and lifetime extension



Our services modernize your aging assets, extend their lifetime and improve their performance.

Service examples:

- Upgrades & retrofits
- Energy efficiency upgrades
- Digital enablement

Customer values:

- Extended asset life
- Lower life-cycle cost
- Improved performance

OPTIMIZE & TRANSITION

Asset optimization, energy efficiency and end-of life



Our services help you to optimize your asset's performance and make informed decisions on how to operate and maintain your assets effectively.

Service examples:

- Training & technical consulting
- Predictive maintenance
- Asset health & monitoring
- Energy appraisal & CO₂ reduction
- Decommissioning, take-back & recycling
- End-of-life replacements

Customer values:

- Minimized unplanned downtime
- Optimized resource and energy efficiency
- Smooth transition to a new product at the end of your asset's life