

MEDIUM VOLTAGE AC DRIVES

ABB industrial drives

ACS2000 drives
250 to 3680 kW



**The flexibility you require.
The reliability you expect.**

Table of contents

04	The ACS2000 industrial drive
06–07	Benefits that add value
08	Reliability across all applications
10	Simple drive system integration
11	More efficiency with drive packages
12–14	Standard solution with versatile features
15	ACS2000 configurations
16	ACS2000 direct-to-line configuration
17	ACS2000 configuration with external transformer
18	ACS2000 configuration with integrated transformer
19	Technical data
20–25	Ratings, types and voltages
26–27	Services to match your needs
28	A lifetime of peak performance
29	ABB Ability™ Condition Monitoring for drives

The ACS2000 industrial drive

The solution for everyday process control

The industrial all-rounder for a wide variety of applications provides high flexibility to configure the drive to your specific needs.

As part of ABB's industrial drives family ACS2000 medium voltage drives meet the needs of various industrial applications, such as those found in mining, cement, power, chemical, oil and gas, water and wastewater, marine, food and beverage.

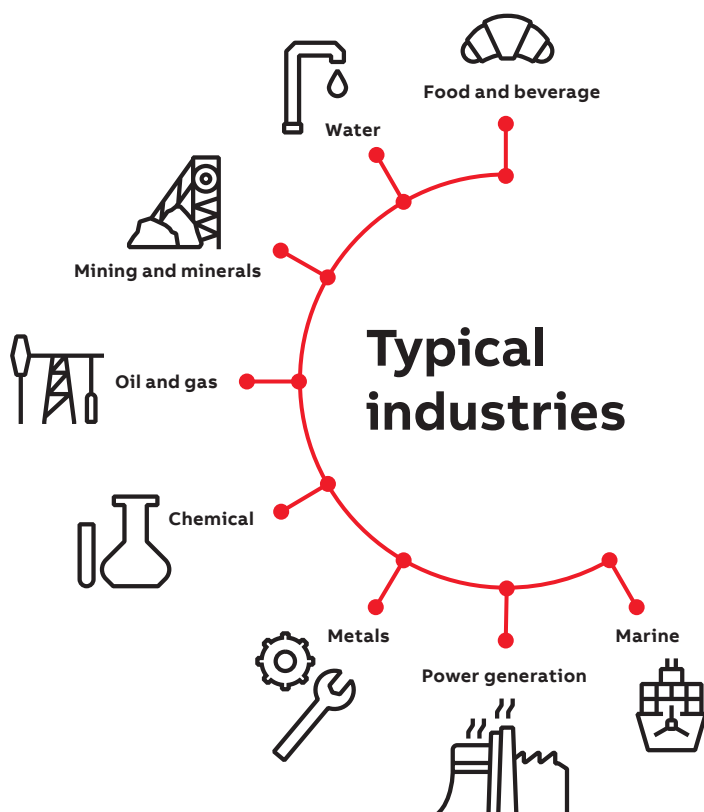
At the core of the drives is ABB's direct torque control (DTC), which enables highly accurate process control. Reliable control ensures high productivity, availability and efficiency of your operations.

Flexible and reliable

With its compact footprint, constant power factor and configuration options, the ACS2000 can be easily integrated into your systems. Different line supply connections provide perfect voltage matching and low harmonic distortion. The drive can be operated direct-to-line or with an integrated or external transformer to allow for flexibility of connection to your supply network.

The ACS2000 is available as a low harmonic drive for optimal performance or as a regenerative drive increasing your energy savings even further. Market-specific product variants make the drive compatible with common IEC and NEMA motor voltages so that you can use the drive in all your global operations.

Wide-ranging versatility makes the ACS2000 fit perfectly into different conditions and environments all over the world. Benefit from the drive's state-of-the-art design and robust control platform that ensures reliable operations every day, everywhere.





MAIN SUPPLY

OFF



ON



GND SWITCH
UNLOCKED

EMERGENCY OFF



Benefits that add value

Our strong industrial drives family includes the features and functions you require, and make it easy for your business opportunities to work.

Energy efficiency

Our medium voltage drives run your motors based on the demands of your process rather than running them at full speed and ensure optimized power consumption and process efficiency. In this way you can save energy and reduce CO₂ emissions.

Best fit for your application

For your standard applications in all industries, the ACS2000 is a perfect fit. With a range of pre-engineered options, you can drive pumps, fans, conveyors, extruders and compressors, even in harsh environments. Thanks to its IEC- and NEMA-specific designs you can use the drive for your operations all over the world.

Design flexibility for smooth integration

You can easily connect the ACS2000 to the grid using an integrated or external transformer, or a direct-to-line connection. The drive is suitable for applications with regeneration capability, further reducing energy consumption. The design concept eliminates the need for costly harmonic analyses or the installation of network filters.

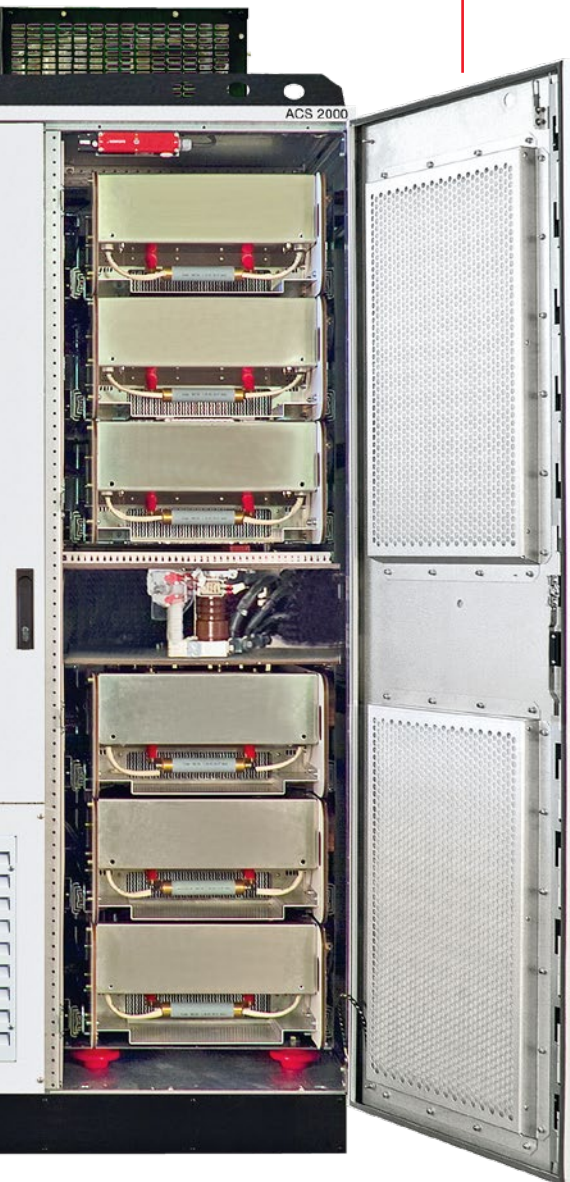
Adapts to different requirements

Maximum motor compatibility

You have total compatibility with common IEC and NEMA motor voltages due to our patented multilevel topology. With an optional output sine filter you can retrofit older motors or drive special applications and use long motor cables.



They support you in improving your processes by integrating your variable speed process control needs into a flexible and comprehensive drive solution.

**High reliability through state-of-the-art design**

Availability is ensured with the latest high voltage IGBT (Insulated Gate Bipolar Transistor) technology and a fuseless design using the minimum number of power components. Reliability is further increased with the drive's power loss ride-through function.

Increased productivity due to precise process control

Reduce your energy consumption and increase process efficiency by using ABB's direct torque control (DTC) method. The drive control is immediate and smooth under all conditions ensuring optimum output and productivity.

Maximum reliability**High personnel safety**

Your workforce and goods are protected from dangerous electric arcs with the ACS2000's arc resistant design. Certified functional safety features and an integrated DC grounding switch make your systems safe and reliable.

Serviceability

Service and maintenance for the ACS2000 is simple and smooth as you have easy front access to all components. In addition to various diagnostic tools, you will profit from convenient remote monitoring.

Reliability across all applications

The ACS2000 medium voltage drive provides reliable motor control for a wide range of applications.



Applications

Cement, mining and minerals

Conveyors, crushers, mills, mine hoists, fans and pumps

Chemical, oil and gas

Pumps, compressors, extruders, mixers and blowers

Metals

Fans and pumps

Marine

Fans, pumps, compressors, propulsion and thrusters

Power generation

Fans, pumps, conveyors and coal mills

Water

Pumps

Food and beverage

Fans, pumps, sugar mills

Other applications

Test stands and wind tunnels



Simple drive system integration

Installing a medium voltage drive could not be easier with ABB's three cables in – three cables out concept.

Easier than you think

Along with its flexible line supply connection options and advanced software tools, the ACS2000 allows smooth and simple drive system integration into any industrial environment.

Flexible connection to grid

The ACS2000 is available with two line side connection configurations, the diode front end (DFE) and the active front end (AFE). The latter allows the operation of applications with regeneration capabilities. Both configurations are available with integrated or external transformer. In addition, the direct-to-line (DTL) variant can be connected to the grid without a transformer.

Flexible control interface

An open communication concept enables the connection to higher-level process controllers. The ACS2000 can be fitted with all major fieldbus adapters for smooth integration, monitoring and controlling of different processes.

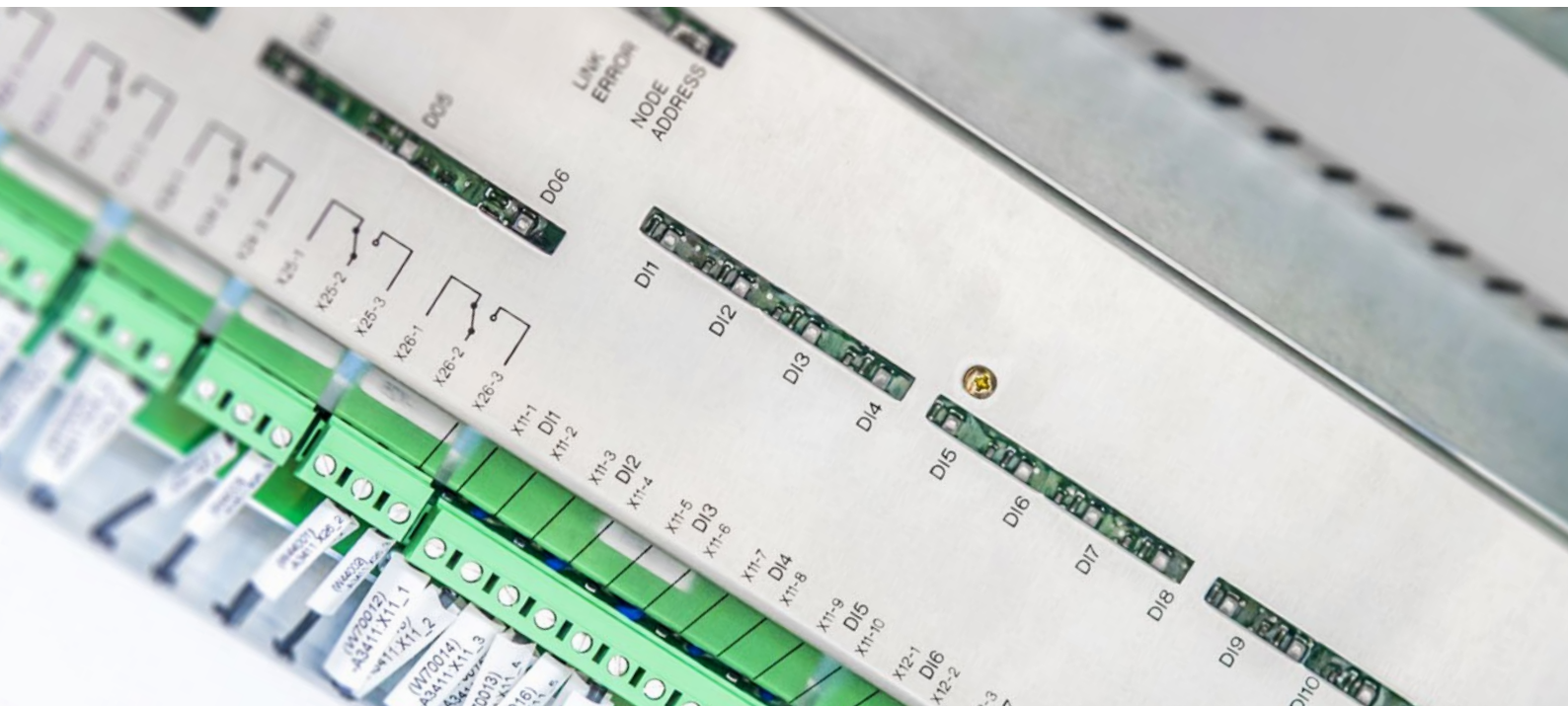
DriveStartup

The commissioning wizard DriveStartup is an advanced tool which simplifies and speeds-up commissioning, and ensures that the correct settings are defined.

Configurable disconnect for NEMA version

We offer you a configurable disconnect option package. Flexible, self-contained switchgear solution does not require upstream control coordination. It provides a visible blade switch disconnect and integral input contactor with options such as a motor protection relay, control power transformer and other customer controls.

Flexible connectivity



More efficiency with drive packages

Packaged drive solutions provide you with ultimate efficiency and reliability to optimize your cost of ownership.

All-in-one package

Committed to supporting you in your business, we offer packaged drive solutions for applications in various industries. Customer-specific drive packages including medium voltage converters, motors and transformers can be developed as turnkey solutions meeting your individual requirements.

Matched performance

To ensure design integrity and an optimum match of equipment, ABB products have undergone combined tests ensuring performance predictability for your application.

Single point of contact

The combined power of the ABB offering is geared to deliver on customer expectations. We deliver motor-drive solutions that support your technical and commercial needs, from quotation through delivery and service, over the entire product life-cycle.

Converter motors

With ABB's induction motors you will benefit from high versatility, reliability and simplicity.

Converter transformers

ABB offers converter transformers for all ratings, as well as for indoor or outdoor mounting. Particularly designed for operation with variable speed drives, the transformer adapts the converter to the supply network and provides a galvanic isolation between drive and supply network.



Standard solution with versatile features

Design flexibility

The ACS2000 provides different line supply connections, which are available with a diode front end (DFE) or for regenerative applications with an active front end (AFE). Further, the drive is suitable for IEC or NEMA markets.

Direct-to-line

The ACS2000 direct-to-line features an active front end (AFE), which enables operation without a transformer. This can lower investment costs substantially. Due to its compact size and lighter weight compared to a drive requiring a transformer, you will save on transportation costs and need less space in the electrical room.

External transformer

For applications where a voltage-matching input transformer is needed or galvanic isolation from the power supply is required, the ACS2000 can be connected to a conventional oil or dry-type converter transformer. This solution minimizes your cooling demand in the e-house (electrical house).

Integrated transformer

Alternatively, the ACS2000 is also available with an integrated input transformer allowing quick and easy installation and commissioning.

Market-specific designs

IEC- and NEMA-specific variants are available, covering local market requirements and making the drive suitable for use in all your operations worldwide.

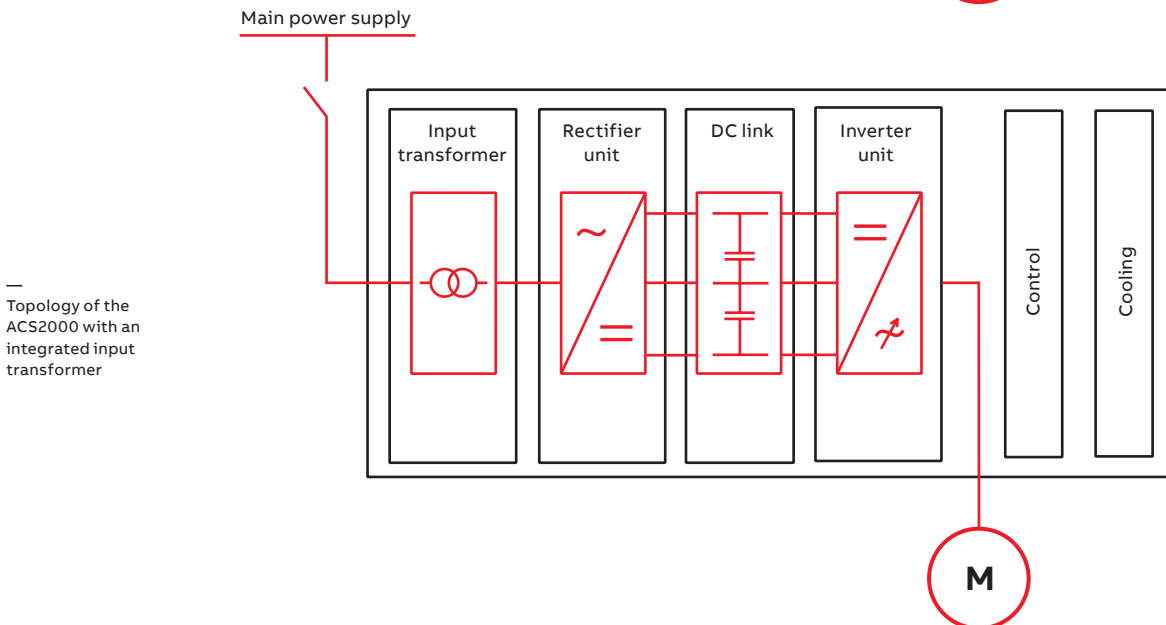
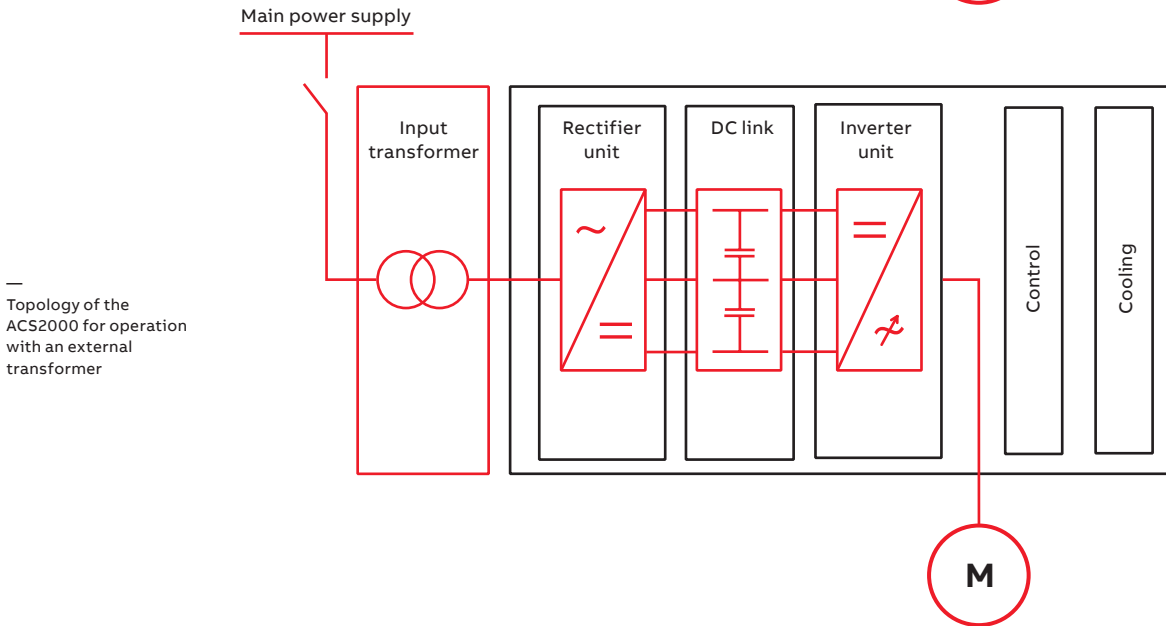
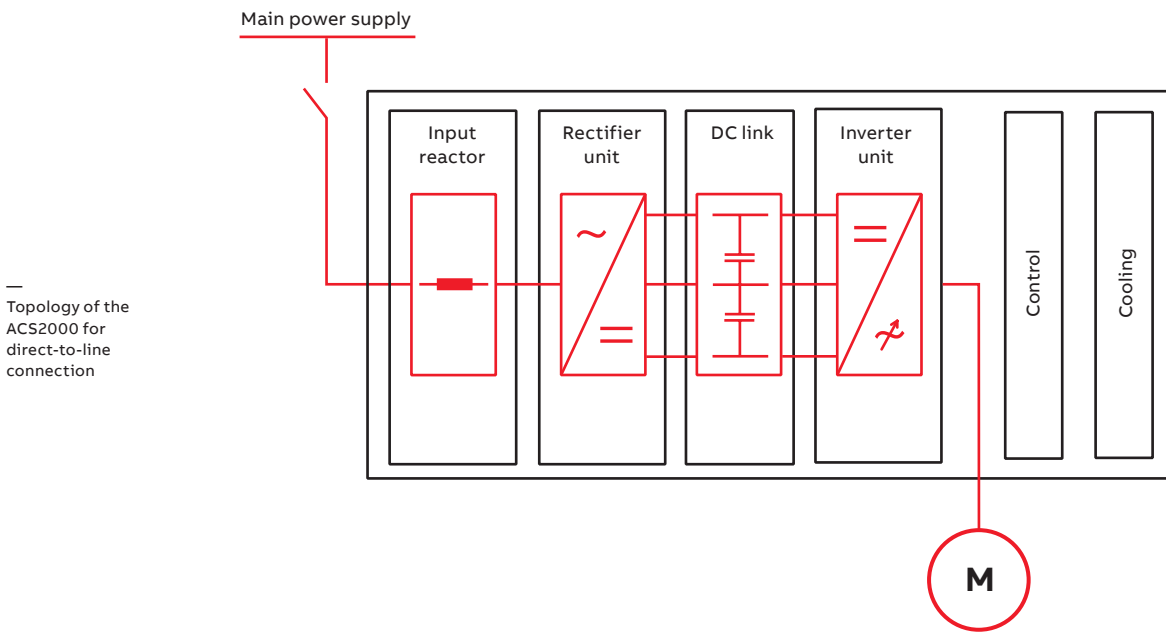
Low harmonic signature

The ACS2000 meets the most stringent requirements for harmonic distortion as defined by relevant standards for all supply connections. This avoids the need for harmonic analysis or the installation of network filters.

Regeneration

The ACS2000 regenerative drive features an active front end (AFE) for applications with high braking energy which allows full power flow both in motoring and generating mode. Regeneration offers significant energy savings compared to other braking methods as energy is fed back to the supply network.

Regeneration is especially suitable for applications with frequent starts and stops. It allows energy efficient continuous braking of applications such as downhill conveyors or expanders in gas pipelines.



Power factor correction

For applications where other loads connected to the same line supply cause leading or lagging power factor, the ACS2000 is available with a static VAR compensation option. With static VAR compensation, a smooth line supply voltage profile can be maintained and reactive power penalties can be avoided.

Powerful performance with DTC

Precise and reliable process control, together with low energy consumption, result in top performance. The ACS2000 drive control platform uses ABB's award-winning direct torque control (DTC), resulting in the highest torque and speed performance as well as the lowest losses ever achieved in medium voltage AC drives. Control of the drive is immediate and smooth under all conditions.

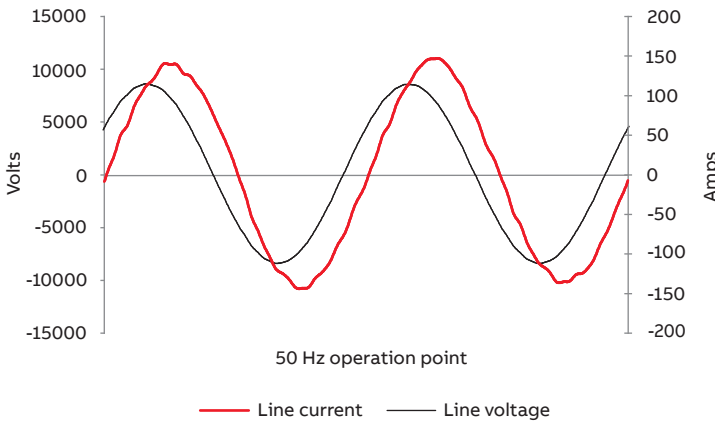
Motor friendly output waveform for use with new or existing motors

The ACS2000 provides near sinusoidal current and voltage waveforms making it compatible for use with standard motors and cable insulation. This is achieved with ABB's patented multilevel topology which utilizes one DC link enabling a multi-level output waveform with a minimum number of power components.

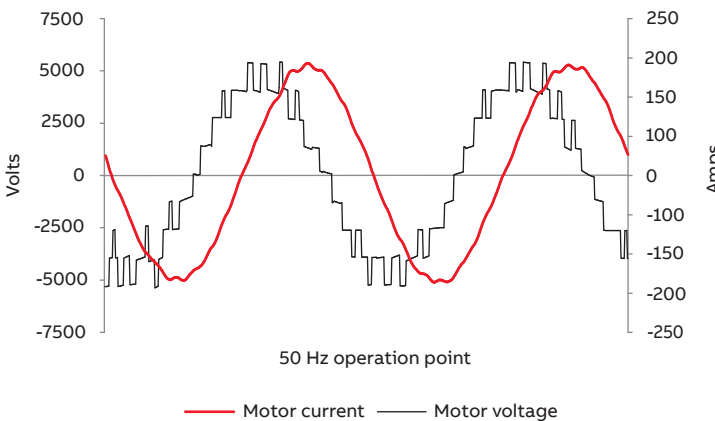
Output sine filter – perfect output power quality for special applications

An output sine filter is optionally available. Side effects of an inverter such as voltage reflections and common mode voltages will be totally eliminated, resulting in an excellent waveform of voltage and current supplied to the motor. The output sine filter is used for very long motor cables, for retrofitting of old motors with an aged insulation system and for special applications such as electric submersible pumps (ESP) and conveyors in underground mines.

—
Line current and voltage



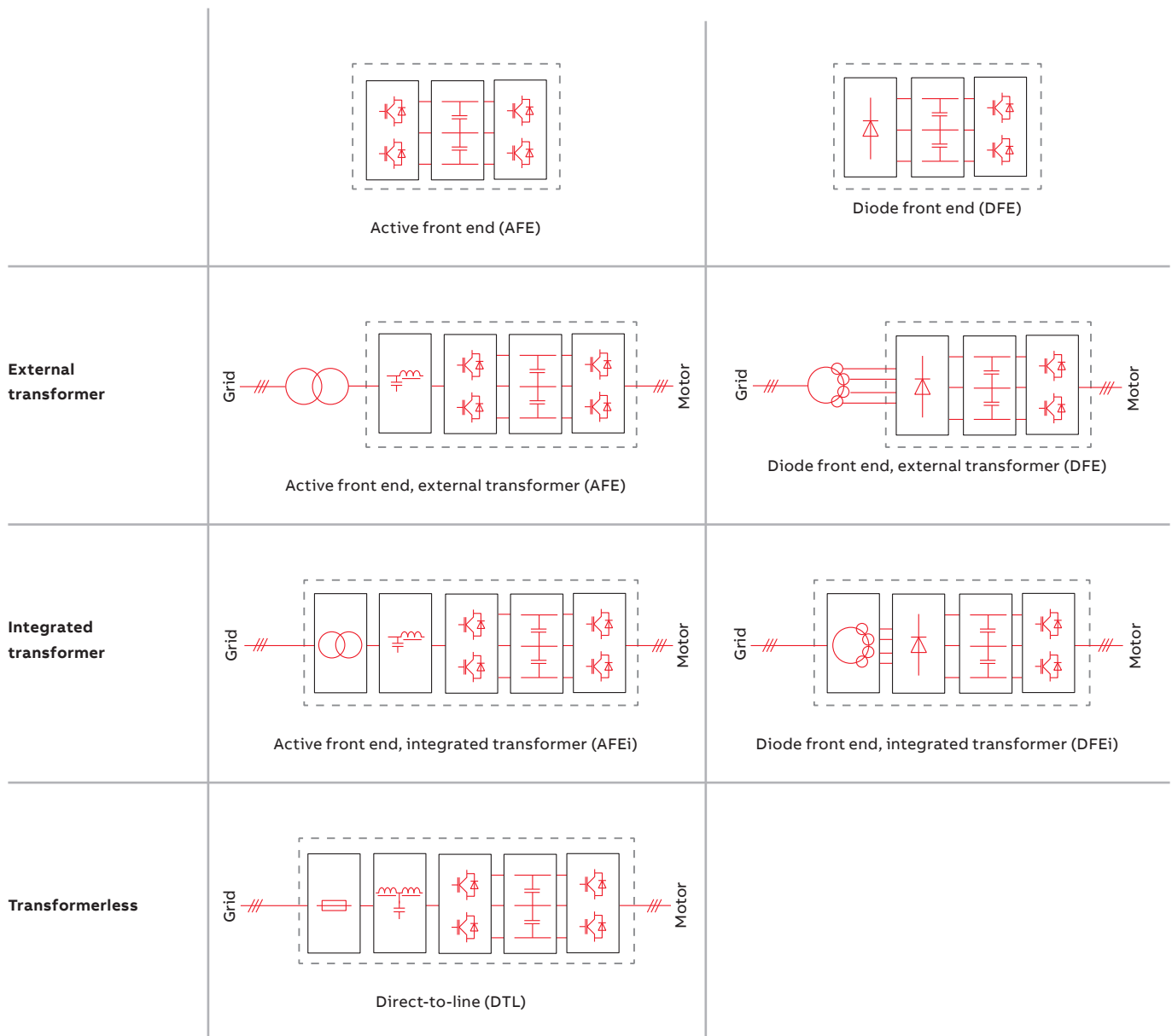
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Motor current and voltage



ACS2000 configurations

Different configurations of the ACS2000 adapt the drive to meet the requirements of your application and fit into your industrial environment.

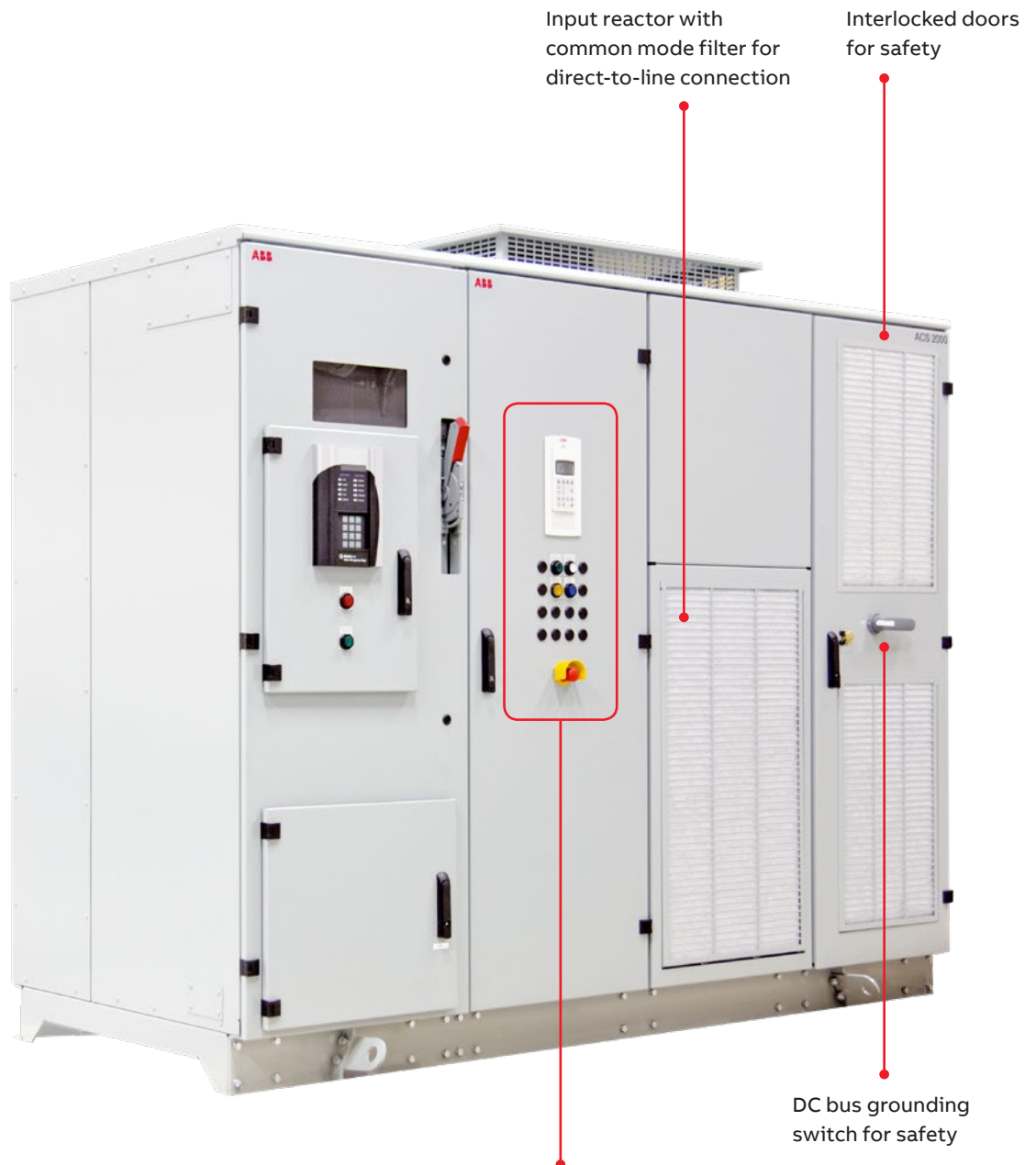
—
Five different configurations are possible by combining either an active front end or diode front end with an external, integrated or no transformer.



ACS2000 direct-to-line configuration

Smallest footprint and light weight is possible with the direct-to-line version.

—
ACS2000 direct-to-line,
800 kW, 4.0 to 4.16 kV,
NEMA enclosure



User-friendly drive control panel for local operation

- Keypad with multi-language display
- Main supply on/off push buttons
- Emergency off push button

ACS2000 configuration with external transformer

Minimized heat losses into the electrical room eliminate the need for additional ventilation systems when using an external transformer.

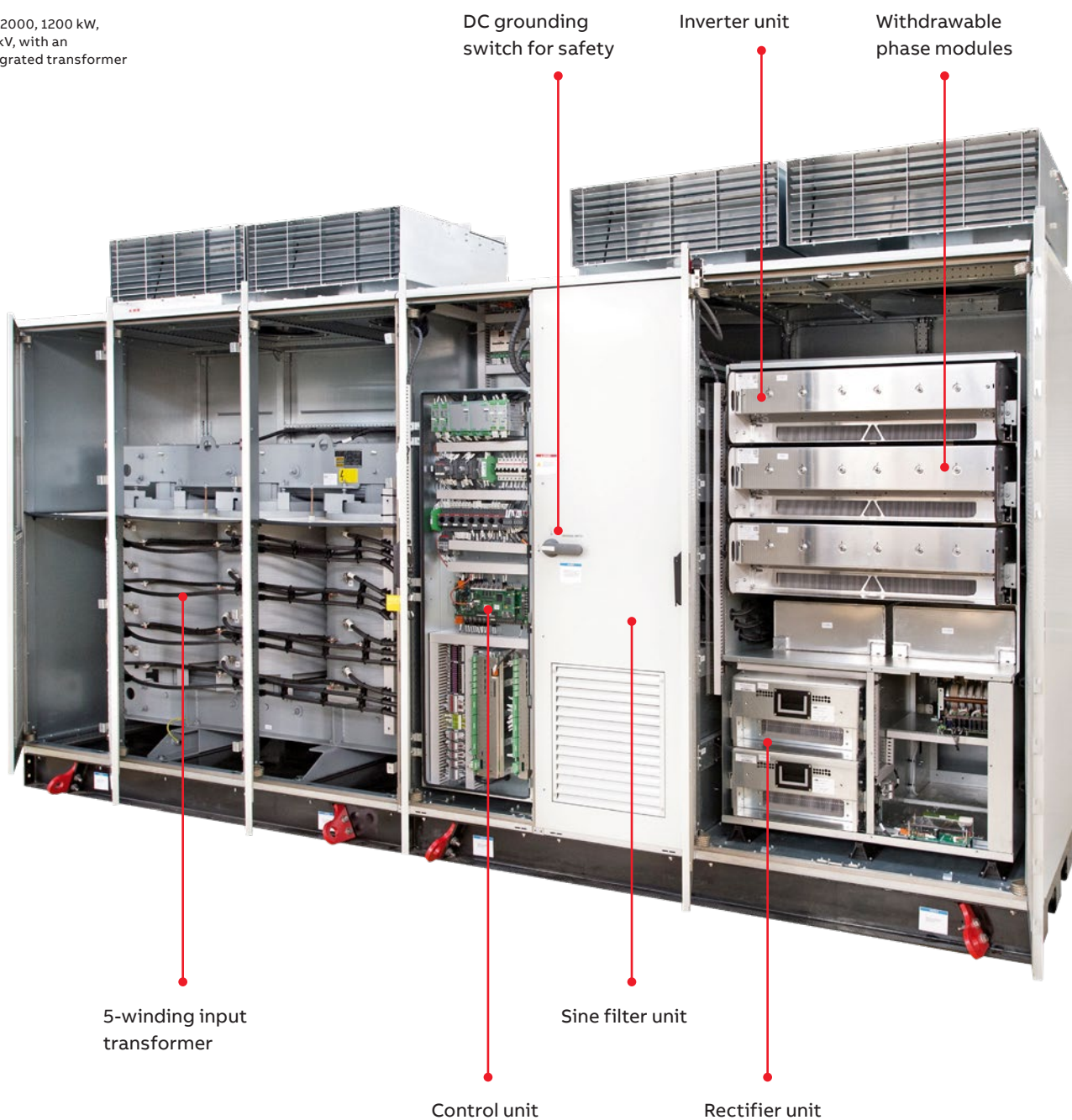
—
ACS2000, 800 kW,
6.6 kV, for operation
with an external
transformer



ACS2000 configuration with integrated transformer

Easy installation is possible with the ACS2000 with integrated transformer, simplifying the integration of the drive into your systems.

—
ACS2000, 1200 kW,
6.6 kV, with an
integrated transformer



Technical data

Input	
Input configuration	24-pulse diode rectifier or active front end
Input voltage	1850 V, 1930 V (higher on request) 4.16 kV, 6.0 kV, 6.6 kV, 6.9 kV (higher on request)
Input voltage variation	±10%, 4.16 kV, 6.0 kV, 6.6 kV -10% to +5%, 6.9 kV
Input frequency	50/60 Hz
Input frequency variation	<5% (higher on request)
Input power factor	Diode rectifier: >0.95 Active rectifier: 1
Input harmonics	Complies with IEC 61000, IEEE 519, GB/T 14549
Auxiliary voltage	110 V, 220 V, DC 110 V, 120 V, 230 V, 50/60 Hz 380 V, 400 V, 415 V, 440 V, 460 V, 480 V, 575 V, 600 V, 50/60 Hz, 3-phase
Output	
Output power	250 to 3680 kW
Output voltage	4.16 to 6.9 kV
Output frequency	0 to 90 Hz
Motor type	Induction
Efficiency of converter	97.5%
Motor harmonics	<5% THDi, compatible to standard DOL motors
Mechanical	
Enclosure	Standard: IP21, NEMA 1 Optional: IP42
Cable entry	Top/bottom
Environmental	
Altitude	2000 m.a.s.l. (higher on request)
Ambient air temperature	+1 to +40 °C (higher on request)
External cooling water temperature	n.a.
Noise	<85 dB(A)
Cooling type	Air
Standards	EN, IEC, CE, NEMA, IEEE, UL

Ratings, types and voltages

4 kV, low harmonic drive

Motor data ¹⁾			Type code	Converter data							
Nominal ratings ²⁾				Power (kVA)	Direct-to-line		With external transformer		With integrated transformer		
(kW)	(hp)	(A)			Length (mm)	Weight (kg)	Length (mm)	Weight (kg)	Length (mm)	Weight (kg)	
4000 V											
225	300	40	ACS2000-040-A01A-L1-010	310	1970	2100	1970	2100	n/a	n/a	
260	350	47	ACS2000-040-A01B-L1-010	360	1970	2100	1970	2100	n/a	n/a	
300	400	54	ACS2000-040-A01C-L1-010	410	1970	2100	1970	2100	n/a	n/a	
335	450	61	ACS2000-040-A01D-L1-010	460	1970	2100	1970	2100	n/a	n/a	
375	500	67	ACS2000-040-A01E-L1-010	515	1970	2100	1970	2100	n/a	n/a	
450	600	81	ACS2000-040-A01F-L1-010	615	1970	2100	1970	2100	n/a	n/a	
520	700	94	ACS2000-040-A01G-L1-010	720	1970	2100	1970	2100	n/a	n/a	
595	800	108	ACS2000-040-A01H-L1-010	820	1970	2100	1970	2100	n/a	n/a	
670	900	121	ACS2000-040-A01J-L1-010	880	1970	2100	1970	2100	n/a	n/a	
745	1000	135	ACS2000-040-A01K-L1-010	935	2915	2100	2915	2100	n/a	n/a	
935	1250	168	ACS2000-040-A02A-L1-010	1285	2915	3100	2915	3100	n/a	n/a	
1120	1500	202	ACS2000-040-A02B-L1-010	1540	2915	3100	2915	3100	n/a	n/a	
1305	1750	236	ACS2000-040-A02C-L1-010	1715	2915	3100	2915	3100	n/a	n/a	
1490	2000	269	ACS2000-040-A02D-L1-010	1865	2915	3100	2915	3100	n/a	n/a	
1680	2250	303	ACS2000-040-A03A-L1-010	2310	3485	4100	3485	4100	n/a	n/a	
1865	2500	337	ACS2000-040-A03B-L1-010	2565	3485	4100	3485	4100	n/a	n/a	
2050	2750	370	ACS2000-040-A03C-L1-010	2695	3485	4100	3485	4100	n/a	n/a	
2240	3000	404	ACS2000-040-A03D-L1-010	2800	3485	4100	3485	4100	n/a	n/a	

¹⁾ Indicative information: Induction motor efficiency 93%, power factor 0.86

²⁾ Nominal rating for no-overload operation

Dimensions

- Height: 2500 mm including cooling fans
- Depth: 1180 mm

Ratings, types and voltages

4 kV, regenerative drive

Motor data ¹⁾			Type code ³⁾	Converter data							
Nominal ratings ²⁾				Power (kVA)	Direct-to-line		With external transformer		With integrated transformer		
(kW)	(hp)	(A)			Length (mm)	Weight (kg)	Length (mm)	Weight (kg)	Length (mm)	Weight (kg)	
4000 V											
225	300	40	ACS2000-040-A01A-T1-010	310	1970	2100	1970	2100	n/a	n/a	
260	350	47	ACS2000-040-A01B-T1-010	360	1970	2100	1970	2100	n/a	n/a	
300	400	54	ACS2000-040-A01C-T1-010	410	1970	2100	1970	2100	n/a	n/a	
335	450	61	ACS2000-040-A01D-T1-010	460	1970	2100	1970	2100	n/a	n/a	
375	500	67	ACS2000-040-A01E-T1-010	515	1970	2100	1970	2100	n/a	n/a	
450	600	81	ACS2000-040-A01F-T1-010	615	1970	2100	1970	2100	n/a	n/a	
520	700	94	ACS2000-040-A01G-T1-010	720	1970	2100	1970	2100	n/a	n/a	
595	800	108	ACS2000-040-A01H-T1-010	820	1970	2100	1970	2100	n/a	n/a	
670	900	121	ACS2000-040-A01J-T1-010	880	1970	2100	1970	2100	n/a	n/a	
745	1000	135	ACS2000-040-A01K-T1-010	935	2915	2100	2915	2100	n/a	n/a	
935	1250	168	ACS2000-040-A02A-T1-010	1285	2915	3100	2915	3100	n/a	n/a	
1120	1500	202	ACS2000-040-A02B-T1-010	1540	2915	3100	2915	3100	n/a	n/a	
1305	1750	236	ACS2000-040-A02C-T1-010	1715	2915	3100	2915	3100	n/a	n/a	
1490	2000	269	ACS2000-040-A02D-T1-010	1865	2915	3100	2915	3100	n/a	n/a	
1680	2250	303	ACS2000-040-A03A-T1-010	2310	3485	4100	3485	4100	n/a	n/a	
1865	2500	337	ACS2000-040-A03B-T1-010	2565	3485	4100	3485	4100	n/a	n/a	
2050	2750	370	ACS2000-040-A03C-T1-010	2695	3485	4100	3485	4100	n/a	n/a	
2240	3000	404	ACS2000-040-A03D-T1-010	2800	3485	4100	3485	4100	n/a	n/a	

¹⁾ Indicative information: Induction motor efficiency 93%, power factor 0.86

²⁾ Nominal rating for no-overload operation

Dimensions

- Height: 2500 mm incl. cooling fans
- Depth: 1180 mm

Ratings, types and voltages

6 kV, low harmonic drive

Motor data ¹⁾			Type code ³⁾	Converter data						
Nominal ratings ²⁾				Power	Direct-to-line		With external transformer		With integrated transformer	
(kW)	(hp)	(A)			Length (mm)	Weight (kg)	Length (mm)	Weight (kg)	Length (mm)	Weight (kg)
6000 V										
250	335	30	ACS2000-060-A01A-xy-010	315	n/a	n/a	1700	1595	3300	3515
315	420	38	ACS2000-060-A01B-xy-010	395	n/a	n/a	1700	1595	3300	3515
355	475	43	ACS2000-060-A01C-xy-010	445	n/a	n/a	1700	1595	3300	3570
400	535	48	ACS2000-060-A01D-xy-010	500	n/a	n/a	1700	1595	3600	3615
450	605	54	ACS2000-060-A01E-xy-010	565	n/a	n/a	1700	1595	3600	3835
500	670	60	ACS2000-060-A01F-xy-010	625	n/a	n/a	1700	1595	3600	4065
560	750	67	ACS2000-060-A01G-xy-010	700	n/a	n/a	1700	1595	3600	4120
630	845	76	ACS2000-060-A01H-xy-010	790	n/a	n/a	1700	1595	3600	4345
710	950	85	ACS2000-060-A01J-xy-010	890	n/a	n/a	1700	1595	3600	4285
800	1 070	96	ACS2000-060-A01K-xy-010	1000	n/a	n/a	1700	1595	3600	4285
900	1 205	108	ACS2000-060-A02A-xy-010	1125	n/a	n/a	2150	1920	4050	4665
1000	1 340	120	ACS2000-060-A02B-xy-010	1250	n/a	n/a	2150	1920	4050	5100
1120	1 500	135	ACS2000-060-A02C-xy-010	1400	n/a	n/a	2150	1920	4050	5200
1260	1 690	152	ACS2000-060-A02D-xy-010	1575	n/a	n/a	2150	1920	4350	5470
1420	1 905	171	ACS2000-060-A02E-xy-010	1775	n/a	n/a	2150	1920	4350	5920
1600	2 145	192	ACS2000-060-A02F-xy-010	2000	n/a	n/a	2150	1920	4350	6075
1800	2 415	217	ACS2000-060-A03A-x4-010	2250	n/a	n/a	2500	2340	4900	6100
2000	2 680	241	ACS2000-060-A03B-x4-010	2500	n/a	n/a	2500	2340	4900	6480
2200	2 950	265	ACS2000-060-A03C-x4-010	2750	n/a	n/a	2500	2340	4900	6790
2400	3 215	289	ACS2000-060-A03D-x4-010	3000	n/a	n/a	2500	2340	4900	6940
2500	3 350	301	ACS2000-060-A04A-x4-010	3125	n/a	n/a	2500	2340	5100	8240
2800	3 755	337	ACS2000-060-A04B-x4-010	3500	n/a	n/a	2500	2340	5100	8570
3200	4 290	385	ACS2000-060-A04C-x4-010	4000	n/a	n/a	2500	2340	5100	8800
6600 V										
275	370	30	ACS2000-066-A01A-xy-010	345	n/a	n/a	1700	1595	3300	3515
345	465	38	ACS2000-066-A01B-xy-010	435	n/a	n/a	1700	1595	3300	3515
390	525	43	ACS2000-066-A01C-xy-010	490	n/a	n/a	1700	1595	3300	3570
440	590	48	ACS2000-066-A01D-xy-010	550	n/a	n/a	1700	1595	3600	3615
495	665	54	ACS2000-066-A01E-xy-010	620	n/a	n/a	1700	1595	3600	3835
550	735	60	ACS2000-066-A01F-xy-010	690	n/a	n/a	1700	1595	3600	4065
615	825	67	ACS2000-066-A01G-xy-010	770	n/a	n/a	1700	1595	3600	4120
695	930	76	ACS2000-066-A01H-xy-010	865	n/a	n/a	1700	1595	3600	4345
780	1 045	85	ACS2000-066-A01J-xy-010	975	n/a	n/a	1700	1595	3600	4285
880	1 180	96	ACS2000-066-A01K-xy-010	1100	n/a	n/a	1700	1595	3600	4285
990	1 325	108	ACS2000-066-A02A-xy-010	1240	n/a	n/a	2150	1920	4050	4665
1 100	1 475	120	ACS2000-066-A02B-xy-010	1375	n/a	n/a	2150	1920	4050	5100
1 230	1 650	135	ACS2000-066-A02C-xy-010	1540	n/a	n/a	2150	1920	4050	5200
1 385	1 860	152	ACS2000-066-A02D-xy-010	1735	n/a	n/a	2150	1920	4350	5470
1 560	2 095	171	ACS2000-066-A02E-xy-010	1955	n/a	n/a	2150	1920	4350	5920
1 760	2 360	192	ACS2000-066-A02F-xy-010	2200	n/a	n/a	2150	1920	4350	6075
1 980	2 655	217	ACS2000-066-A03A-x4-010	2475	n/a	n/a	2500	2340	4900	6100
2 200	2 950	241	ACS2000-066-A03B-x4-010	2750	n/a	n/a	2500	2340	4900	6480
2 420	3 245	265	ACS2000-066-A03C-x4-010	3025	n/a	n/a	2500	2340	4900	6790
2 640	3 540	289	ACS2000-066-A03D-x4-010	3300	n/a	n/a	2500	2340	4900	6940
2 750	3 685	301	ACS2000-066-A04A-x4-010	3440	n/a	n/a	2500	2340	5100	8240
3 080	4 130	337	ACS2000-066-A04B-x4-010	3850	n/a	n/a	2500	2340	5100	8570
3 520	4 720	385	ACS2000-066-A04C-x4-010	4400	n/a	n/a	2500	2340	5100	8800

Ratings, types and voltages

6 kV, low harmonic drive

Motor data ¹⁾			Type code ³⁾	Converter data							
Nominal ratings ²⁾				Power (kVA)	Direct-to-line		With external transformer		With integrated transformer		
(kW)	(hp)	(A)			Length (mm)	Weight (kg)	Length (mm)	Weight (kg)	Length (mm)	Weight (kg)	
6900 V											
290	385	30	ACS2000-069-A01A-xy-010	360	n/a	n/a	1700	1595	3300	3515	
360	485	38	ACS2000-069-A01B-xy-010	455	n/a	n/a	1700	1595	3300	3515	
410	545	43	ACS2000-069-A01C-xy-010	510	n/a	n/a	1700	1595	3300	3570	
460	615	48	ACS2000-069-A01D-xy-010	575	n/a	n/a	1700	1595	3600	3615	
520	695	54	ACS2000-069-A01E-xy-010	645	n/a	n/a	1700	1595	3600	3835	
575	770	60	ACS2000-069-A01F-xy-010	720	n/a	n/a	1700	1595	3600	4065	
645	865	67	ACS2000-069-A01G-xy-010	805	n/a	n/a	1700	1595	3600	4120	
725	970	76	ACS2000-069-A01H-xy-010	905	n/a	n/a	1700	1595	3600	4345	
815	1 095	85	ACS2000-069-A01J-xy-010	1020	n/a	n/a	1700	1595	3600	4285	
920	1 235	96	ACS2000-069-A01K-xy-010	1150	n/a	n/a	1700	1595	3600	4285	
1 035	1 385	108	ACS2000-069-A02A-xy-010	1295	n/a	n/a	2150	1920	4050	4665	
1 150	1 540	120	ACS2000-069-A02B-xy-010	1440	n/a	n/a	2150	1920	4050	5100	
1 290	1 725	135	ACS2000-069-A02C-xy-010	1610	n/a	n/a	2150	1920	4050	5200	
1 450	1 940	152	ACS2000-069-A02D-xy-010	1810	n/a	n/a	2150	1920	4350	5470	
1 635	2 190	171	ACS2000-069-A02E-xy-010	2040	n/a	n/a	2150	1920	4350	5920	
1 840	2 465	192	ACS2000-069-A02F-xy-010	2300	n/a	n/a	2150	1920	4350	6075	
2 070	2 775	217	ACS2000-069-A03A-x4-010	2590	n/a	n/a	2500	2340	4900	6100	
2 300	3 085	241	ACS2000-069-A03B-x4-010	2875	n/a	n/a	2500	2340	4900	6480	
2 530	3 390	265	ACS2000-069-A03C-x4-010	3165	n/a	n/a	2500	2340	4900	6790	
2 760	3 700	289	ACS2000-069-A03D-x4-010	3450	n/a	n/a	2500	2340	4900	6940	
2 875	3 855	301	ACS2000-069-A04A-x4-010	3595	n/a	n/a	2500	2340	5100	8240	
3 220	4 315	337	ACS2000-069-A04B-x4-010	4025	n/a	n/a	2500	2340	5100	8570	
3 680	4 935	385	ACS2000-069-A04C-x4-010	4600	n/a	n/a	2500	2340	5100	8800	

¹⁾ Indicative information: Induction motor efficiency 93%, power factor 0.86

²⁾ Nominal rating for no-overload operation

³⁾ ,x' indicates the different converter types

L - for direct-to-line operation

E - for operation with external transformer

J - for operation with integrated transformer

,y' indicates the pulse number

1- to 6-pulse active front end

4- to 24-pulse diode front end

Dimensions

- Height: 2650 mm including cooling fans
2650 mm including redundant cooling fans
- Depth: 1200 mm

Ratings, types and voltages

6 kV, regenerative drive

Motor data ¹⁾			Type code ³⁾	Converter data							
Nominal ratings ²⁾				Power	Direct-to-line		With external transformer		With integrated transformer		
(kW)	(hp)	(A)			Length (mm)	Weight (kg)	Length (mm)	Weight (kg)	Length (mm)	Weight (kg)	
6000 V											
250	335	30	ACS2000-060-A01A-x1-010	315	2205	2305	1705	1580	3405	2850	
315	420	38	ACS2000-060-A01B-x1-010	395	2205	2305	1705	1580	3405	2940	
355	475	43	ACS2000-060-A01C-x1-010	445	2205	2305	1705	1580	3405	3030	
400	535	48	ACS2000-060-A01D-x1-010	500	2205	2305	1705	1580	3405	3130	
450	605	54	ACS2000-060-A01E-x1-010	565	2205	2305	1705	1580	3405	3230	
500	670	60	ACS2000-060-A01F-x1-010	625	2205	2305	1705	1580	3405	3330	
560	750	67	ACS2000-060-A01G-x1-010	700	2205	2305	1705	1580	3405	3450	
630	845	76	ACS2000-060-A01H-x1-010	790	2205	2305	1705	1580	3405	3580	
710	950	85	ACS2000-060-A01J-x1-010	890	2205	2305	1705	1580	3405	3720	
800	1 070	96	ACS2000-060-A01K-x1-010	1000	2205	2305	1705	1580	3405	3750	
900	1 205	108	ACS2000-060-A02A-x1-010	1125	3800	4310	3000	2590	5200	5140	
1000	1 340	120	ACS2000-060-A02B-x1-010	1250	3800	4310	3000	2590	5200	5140	
1120	1 500	135	ACS2000-060-A02C-x1-010	1400	3800	4310	3000	2590	5200	5300	
1260	1 690	152	ACS2000-060-A02D-x1-010	1575	3800	4310	3000	2590	5200	5490	
1420	1 905	171	ACS2000-060-A02E-x1-010	1775	3800	4310	3000	2590	5200	5700	
1600	2 145	192	ACS2000-060-A02F-x1-010	2000	3800	4310	3000	2590	5200	5940	
6600 V											
275	370	30	ACS2000-066-A01A-x1-010	345	2205	2305	1705	1580	3405	2850	
345	465	38	ACS2000-066-A01B-x1-010	435	2205	2305	1705	1580	3405	2940	
390	525	43	ACS2000-066-A01C-x1-010	490	2205	2305	1705	1580	3405	3030	
440	590	48	ACS2000-066-A01D-x1-010	550	2205	2305	1705	1580	3405	3130	
495	665	54	ACS2000-066-A01E-x1-010	620	2205	2305	1705	1580	3405	3230	
550	735	60	ACS2000-066-A01F-x1-010	690	2205	2305	1705	1580	3405	3330	
615	825	67	ACS2000-066-A01G-x1-010	770	2205	2305	1705	1580	3405	3450	
695	930	76	ACS2000-066-A01H-x1-010	865	2205	2305	1705	1580	3405	3580	
780	1 045	85	ACS2000-066-A01J-x1-010	975	2205	2305	1705	1580	3405	3720	
880	1 180	96	ACS2000-066-A01K-x1-010	1100	2205	2305	1705	1580	3405	3750	
990	1 325	108	ACS2000-066-A02A-x1-010	1240	3800	4310	3000	2590	5200	5140	
1 100	1 475	120	ACS2000-066-A02B-x1-010	1375	3800	4430	3000	2590	5200	5140	
1 230	1 650	135	ACS2000-066-A02C-x1-010	1540	3800	4310	3000	2590	5200	5300	
1 385	1 860	152	ACS2000-066-A02D-x1-010	1735	3800	4310	3000	2590	5200	5490	
1 560	2 095	171	ACS2000-066-A02E-x1-010	1955	3800	4310	3000	2590	5200	5700	
1 760	2 360	192	ACS2000-066-A02F-x1-010	2200	3800	4310	3000	2590	5200	5940	

Ratings, types and voltages

6 kV, regenerative drive

Motor data ¹⁾			Type code ³⁾	Converter data						
Nominal ratings ²⁾				Power (kVA)	Direct-to-line		With external transformer		With integrated transformer	
(kW)	(hp)	(A)			Length (mm)	Weight (kg)	Length (mm)	Weight (kg)	Length (mm)	Weight (kg)
6900 V										
290	385	30	ACS2000-069-A01A-x1-010	360	2205	2305	1705	1580	3405	2850
360	485	38	ACS2000-069-A01B-x1-010	455	2205	2305	1705	1580	3405	2940
410	545	43	ACS2000-069-A01C-x1-010	510	2205	2305	1705	1580	3405	3030
460	615	48	ACS2000-069-A01D-x1-010	575	2205	2305	1705	1580	3405	3130
520	695	54	ACS2000-069-A01E-x1-010	645	2205	2305	1705	1580	3405	3230
575	770	60	ACS2000-069-A01F-x1-010	720	2205	2305	1705	1580	3405	3330
645	865	67	ACS2000-069-A01G-x1-010	805	2205	2305	1705	1580	3405	3450
725	970	76	ACS2000-069-A01H-x1-010	905	2205	2305	1705	1580	3405	3580
815	1 095	85	ACS2000-069-A01J-x1-010	1020	2205	2305	1705	1580	3405	3720
920	1 235	96	ACS2000-069-A01K-x1-010	1150	2205	2305	1705	1580	3405	3750
1 035	1 385	108	ACS2000-069-A02A-x1-010	1295	3800	4310	3000	2590	5200	5140
1 150	1 540	120	ACS2000-069-A02B-x1-010	1440	3800	4310	3000	2590	5200	5140
1 290	1 725	135	ACS2000-069-A02C-x1-010	1610	3800	4310	3000	2590	5200	5300
1 450	1 940	152	ACS2000-069-A02D-x1-010	1810	3800	4310	3000	2590	5200	5490
1 635	2 190	171	ACS2000-069-A02E-x1-010	2040	3800	4310	3000	2590	5200	5700
1 840	2 465	192	ACS2000-069-A02F-x1-010	2300	3800	4310	3000	2590	5200	5940

¹⁾ Indicative information: Induction motor efficiency 93%, power factor 0.86

²⁾ Nominal rating for no-overload operation

³⁾ ,x' indicates the different converter types

T - for direct-to-line operation

R - for operation with external transformer

N - for operation with integrated transformer

Dimensions

- Height: 2550 mm including cooling fans
2780 mm including redundant cooling fans
- Depth: 1200 mm

Services to match your needs

Your service needs depend on your operation, life cycle of your equipment and business priorities. We have identified our customers' four most common needs and defined service options to satisfy them. What is your choice to keep your drives at peak performance?

Is uptime your priority?

Keep your drives running with precisely planned and executed maintenance.

Example services include:

- ABB Ability Life Cycle Assessment
- Installation and Commissioning
- Spare Parts
- Preventive Maintenance
- Reconditioning
- ABB Drive Care agreement
- Drive Exchange



Operational efficiency

Is rapid response a key consideration?

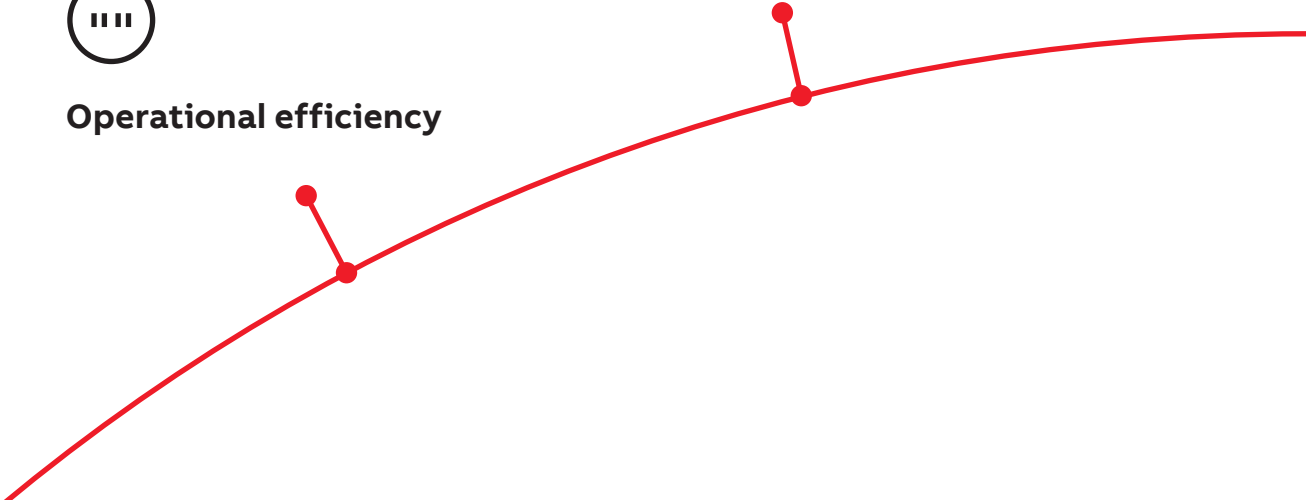
If your drives require immediate action, our global network is at your service.

Example services include:

- Technical Support
- On-site Repair
- ABB Ability Remote Assistance
- Response time agreements
- Training



Rapid response



Drives service

Your choice, your future

The future of your drives depends on the service you choose.

Whatever you choose, it should be a well-informed decision. No guesswork. We have the expertise and experience to help you find and implement the right service for your drive equipment. You can start by asking yourself these two critical questions:

- Why should my drive be serviced?
- What would my optimal service options be?

From here, you have our guidance and full support along the course you take, throughout the entire lifetime of your drives.

Need to extend your assets' lifetime?

Maximize your drive's lifetime with our services.

Example services include:

- ABB Ability Life Cycle Assessment
- Upgrades, Retrofits and Modernization
- Replacement, Disposal and Recycling



Life cycle management

Your choice, your business efficiency

ABB Drive Care agreement lets you focus on your core business. A selection of predefined service options matching your needs provides optimal, more reliable performance, extended drive lifetime and improved cost control. So you can reduce the risk of unplanned downtime and find it easier to budget for maintenance.

Is performance most critical to your operation?

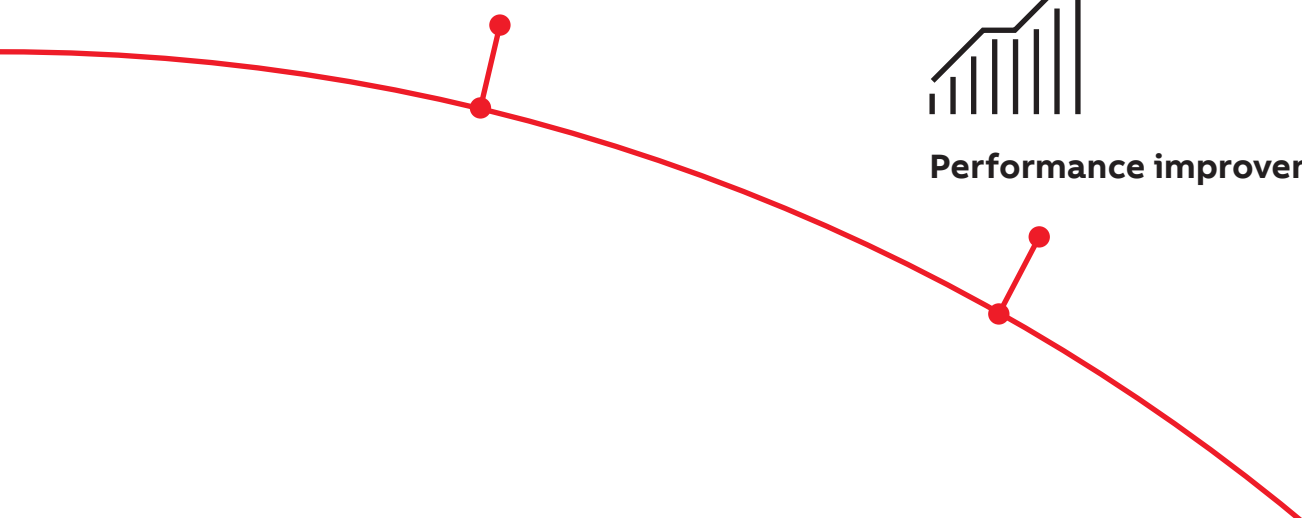
Get optimal performance out of your machinery and systems.

Example services include:

- ABB Ability Remote Services
- Engineering and Consulting
- Inspection and Diagnostics
- Upgrades, Retrofits and Modernization
- Workshop Repair
- Tailored services



Performance improvement



A lifetime of peak performance

You're in control of every life cycle phase of your drives. At the heart of drive services is a four-phase product life cycle management model. This model defines the services recommended and available throughout drives lifespan.

Now it's easy for you to see the exact service and maintenance available for your drives.

ABB drives life cycle phases explained:



Full range of life cycle services and support

Limited range of life cycle services and support

Replacement and end-of-life services

Product	Product is in active sales and manufacturing phase.	Serial production has ceased. Product may be available for plant extensions, as a spare part or for installed base renewal.	Product is no longer available.	Product is no longer available.
	Services	Full range of life cycle services is available. Product enhancements may be available through upgrade and retrofit solutions.	Limited range of life cycle services is available. Spare parts availability is limited to available stock.	Replacement and end-of-life services are available.

Keeping you informed

We notify you every step of the way using life cycle status statements and announcements.

Your benefit is clear information about your drives' status and precise services available. It helps you plan the preferred service actions ahead of time and make sure that continuous support is always available.

Step 1

Life Cycle Status Announcement

Provides early information about the upcoming life cycle phase change and how it affects the availability of services.

Step 2

Life Cycle Status Statement

Provides information about the drive's current life cycle status, availability of product and services, life cycle plan and recommended actions.

ABB Ability™ Condition Monitoring for drives



ABB Ability Condition Monitoring for Drives is a service that delivers you accurate, real-time information about drive events to ensure your equipment is available, reliable and maintainable. When you have the facts, you can make the right decisions.



Make best decisions

You know your process, we know the drives. Our monitoring system provides you with data and information from the drives for your best decisions.



Reduce the risks

You have the information when needed most. Our monitoring system is continuously collecting data for you to set warning limits and to trouble-shoot potential problems.



Available on your need

You can combine Remote Assistance Service with Condition Monitoring. Our experts will always be on hand to consult with you.



Check the service availability for your drive types with your local ABB representative.

Need help?

Contact ABB or third party channel company.

abb.com/drives/services

abb.com/searchchannels



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

abb.com/drives

abb.com/drivespartners

abb.com/motors&generators