

300 HP – 4290 HP, 4.0 – 6.9 kV

# ACS2000 Medium Voltage Drive

The flexibility you require. The reliability you expect.

Power and productivity  
for a better world™



# The ACS2000 industrial drive

The ACS2000 medium voltage drive is part of ABB's industrial drives family that meets the needs of your industrial applications.

Our strong industrial drives family includes the features and functions you require, and make it easy for your business opportunities to work. They support you in improving your processes by integrating your variable speed process control needs into a flexible and comprehensive drive solution. These are our industrial drives, our benchmark of performance, expertise and quality.

The industrial drives cover a wide power and voltage range, including voltages up to 6.9 kV and powers up to 8000 HP. At the core of the drives is ABB's Direct Torque Control (DTC) technology that enables highly accurate process control.

Use our industrial drives for applications such as those found in mining, cement, power, chemical, oil and gas, water and wastewater, marine, food and beverage.

## Contents

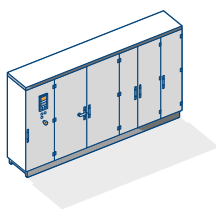
<b>04</b>	ABB Medium Voltage Drives portfolio
<b>06</b>	ACS2000 for everyday process control
<b>08</b>	Key benefits
<b>10</b>	Applications
<b>12</b>	System integration
<b>13</b>	Packaged drive solutions
<b>14</b>	Service and support
<b>16</b>	Technical features
<b>18</b>	Configurations
<b>23</b>	Technical data
<b>23</b>	Ratings, types and voltages



# ABB Medium Voltage Drives

## Product portfolio

A broad range of variable speed drives for medium voltage applications allows you to select the drive that best meets your individual requirements. Get the perfect match for you.



### ACS1000 industrial drive

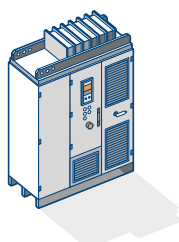
Whatever your industry, the ACS1000 is an all-rounder to control your standard applications and optimize your processes.

#### Power range

400 – 6700 HP

#### Output voltage

2.3 – 4.16 kV



### ACS2000 industrial drive

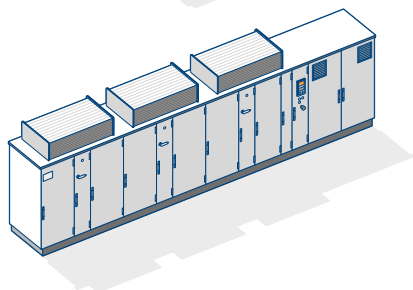
The ACS2000 is an industrial all-rounder that perfectly adapts to a wide variety of standard applications across all industries.

#### Power range

300 – 4,300 HP

#### Output voltage

4.0 – 6.9 kV



### ACS5000 special purpose drive

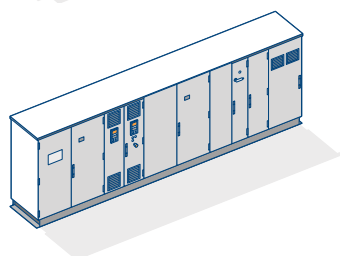
The ACS5000 effortlessly controls your high power applications such as compressors, pumps and fans.

#### Power range

1500 – 48,250 HP  
(higher on request)

#### Output voltage

6.0 – 13.8 kV



### ACS6000 special purpose drive

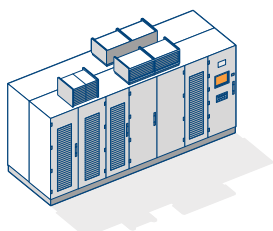
Look no further than the ACS6000 if your high performance applications require a single- or multi-motor drive solution.

#### Power range

6800 – 48,250 HP

#### Output voltage

2.3 – 3.3 kV



### MEGADRIE-LCI special purpose drive

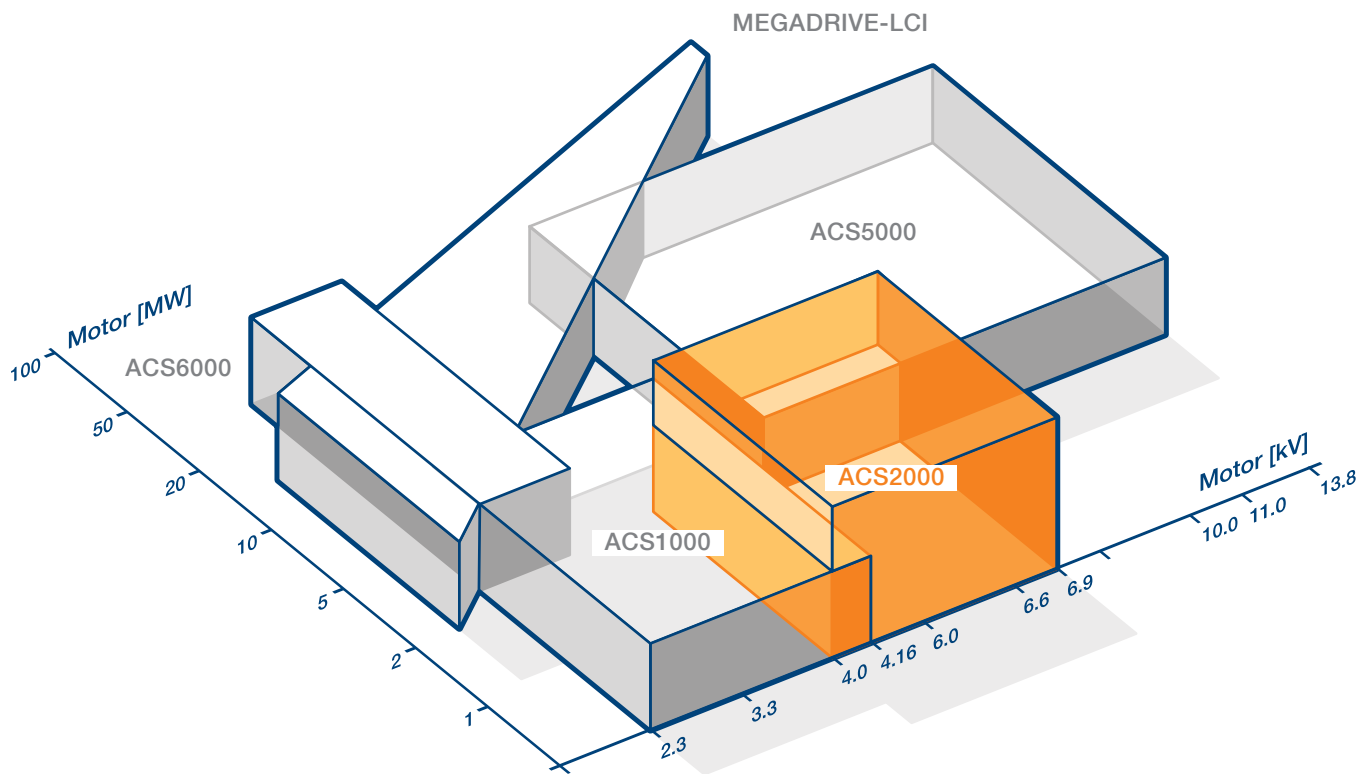
The well-proven technology offered in the MEGADRIE-LCI controls your high power applications and provides soft starting of large synchronous motors.

#### Power range

1500 – 100,000 HP  
(higher on request)

#### Output voltage

2.1 – 10 kV



Our product portfolio comprises medium voltage drives in the range of 250 kW to more than 100 MW.

#### Get more using less

Our broad portfolio of medium voltage drives will help you to increase your productivity and profitability. Your processes will use only the energy required to carry out the job and no more. Precise control ensures efficient operation with high uptime and optimized use of raw materials. This will all add up to cost and time savings for you.

#### Delivering global support and peace of mind

Our worldwide network offers you fast service and support around the clock, providing peace of mind by always being there when you need us.

#### Reliable performance you can count on

Depending on your industry and application, we provide you with drive solutions that meet your individual needs and requirements. Our variable speed drives – from 250 kW to more than 100 MW – control a wide range of medium voltage applications.

Through the use of quality components and the integration of special features, our drives ensure high process availability and safety for your business. With well-proven drive technology at the heart, your operations will run smoothly and reliably every day.

# ACS2000

## The solution for everyday process control

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

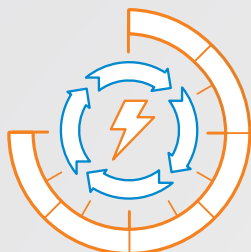
The ACS2000 is available as a low harmonic drive for optimal performance or as a regenerative drive increasing your energy savings even further. Market-specific product variants make the drive compatible with common IEC and NEMA motor voltages so that you can use the drive in all your global operations.

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.



# ACS2000

## Benefits that add value

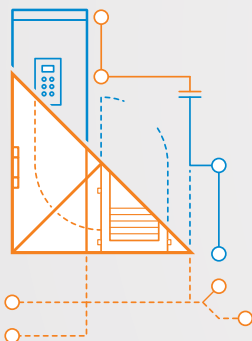
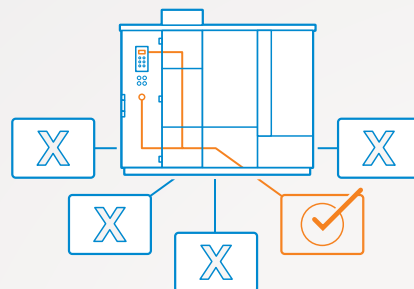


### Energy efficiency

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 CO<sub>2</sub> 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 market-specific designs (IEC / NEMA) you can use the drive for your operations all over the world.

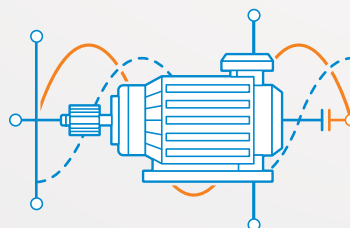


### Design flexibility for smooth integration

You can easily integrate the ACS2000 into your systems by 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.

### 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.





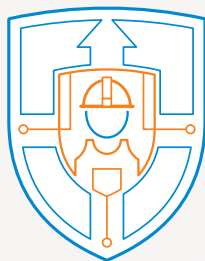


## High reliability through state-of-the-art design

Availability is ensured with the latest high voltage IGBT (Integrated 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) technology. The drive control is immediate and smooth under all conditions ensuring optimum output and productivity.

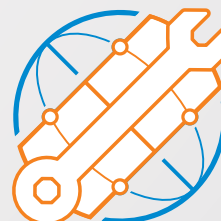


## High personnel safety

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.

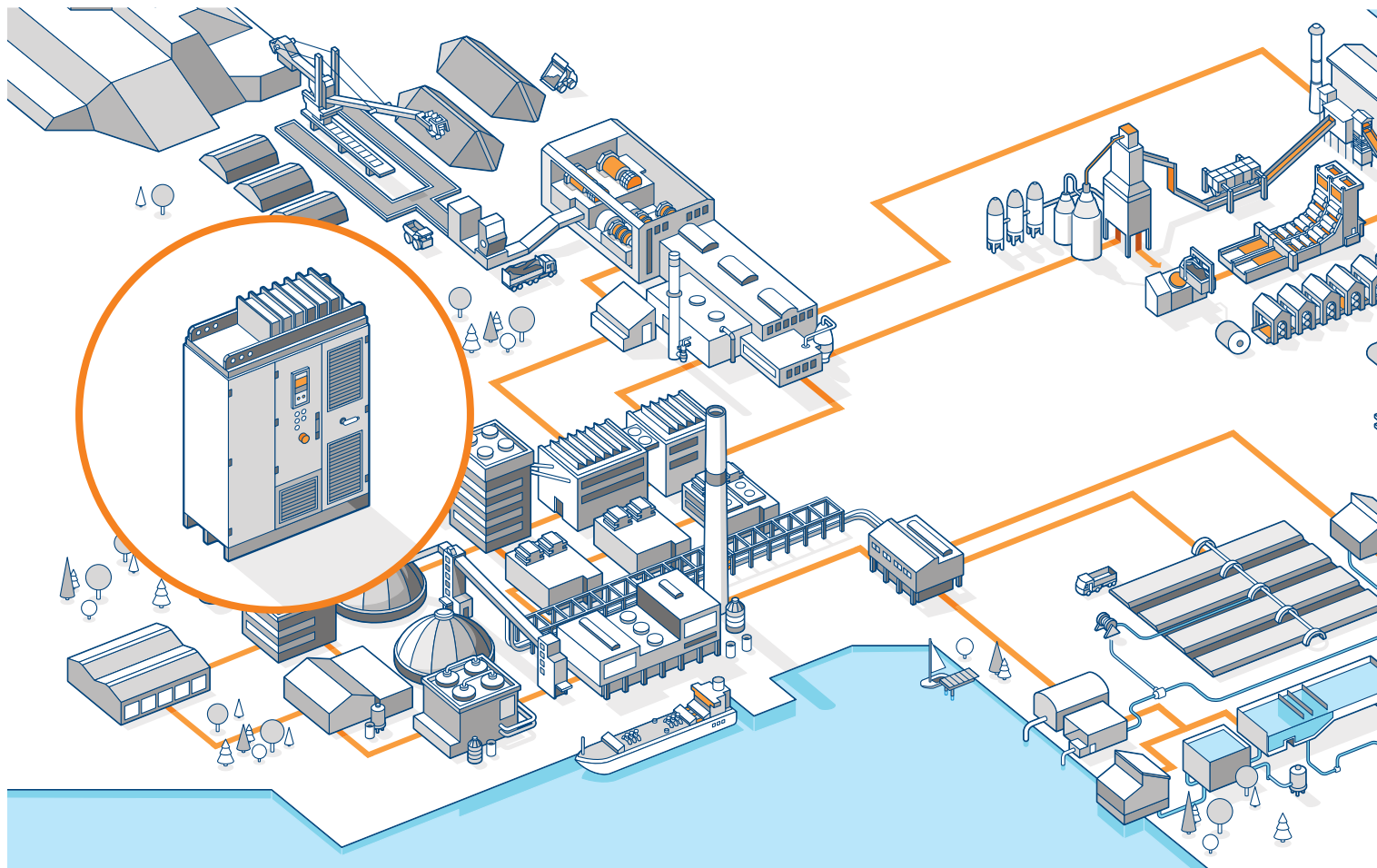
## Serviceability

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 by convenient remote monitoring.

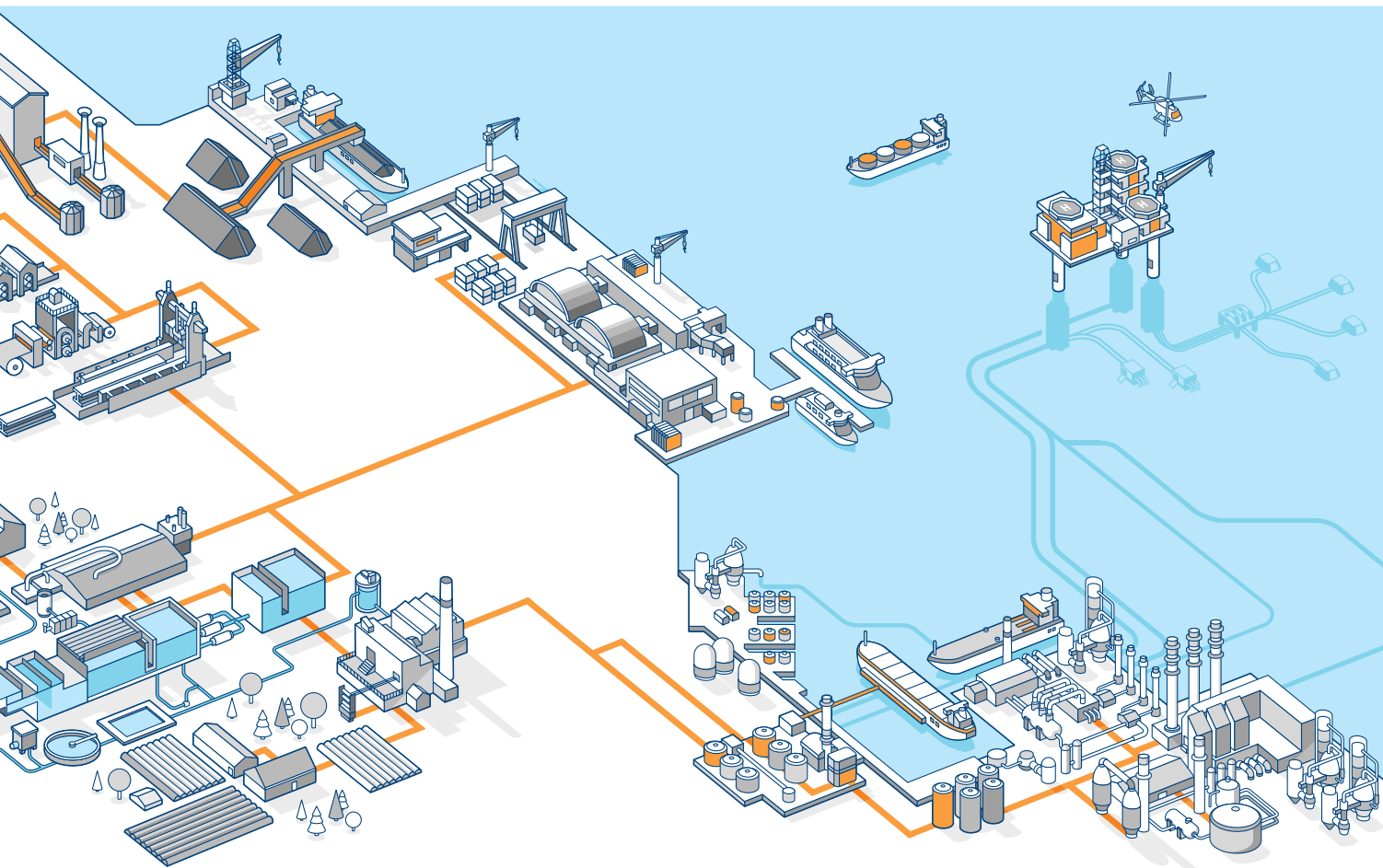


# ACS2000

## 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

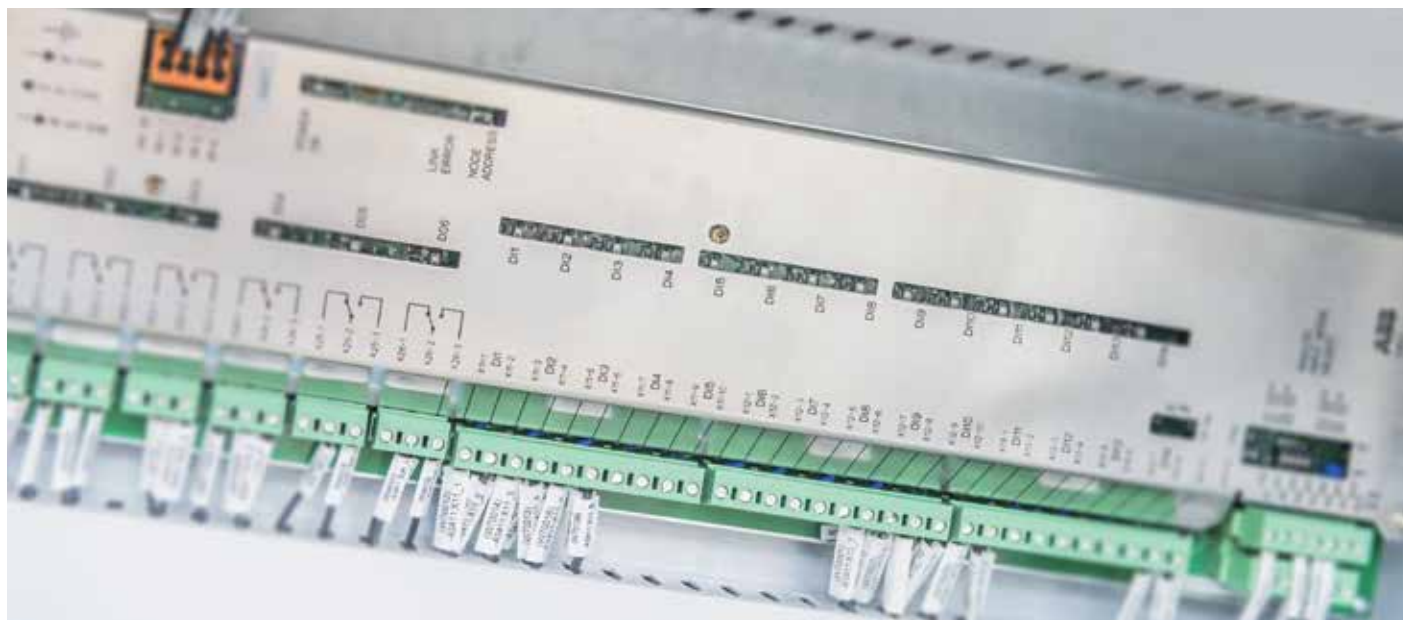
Fans, pumps, sugar mills

### Other applications

Test stands and wind tunnels

# ACS2000

## 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 for a flexible, self-contained switchgear solution where no control coordination is required upstream. 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.

# ACS2000

## 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 for your applications you will benefit from high versatility, reliability and simplicity.

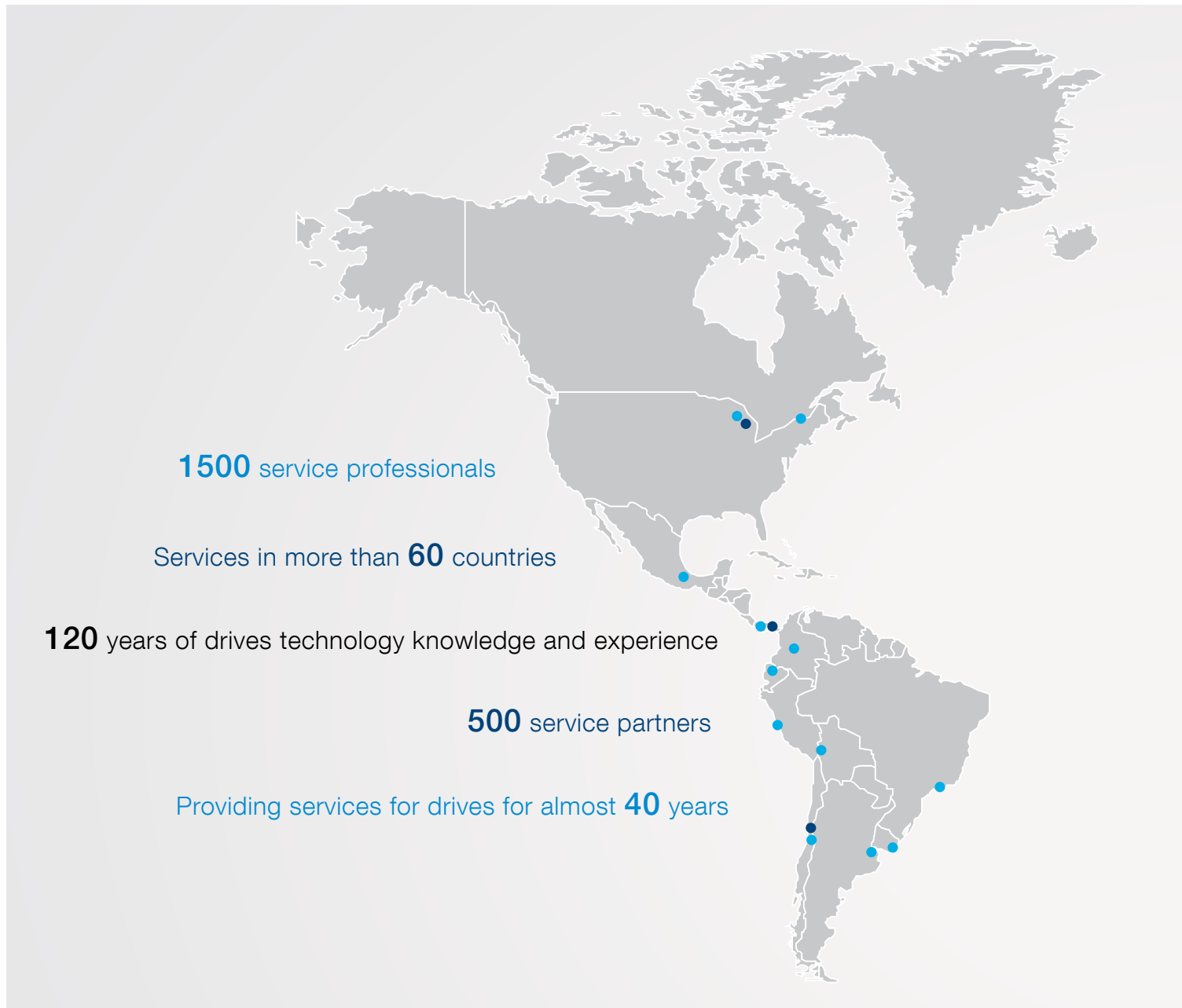
### Converter transformers

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.



# Service and support

## You choose, we respond, globally



For everyone who makes the decision to choose our expert drive service solutions, we are with them every step of the way. To guide and facilitate whatever service choices suit their business, for the entire drive's lifetime. With expert service and advice and on-time delivery, every time.

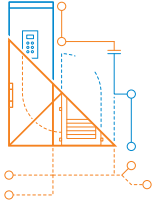
For decades we have built one of the most comprehensive service networks, globally. It is well-structured to ensure you have all the experts close at hand, locally and globally. We have local drives and control service units complemented by external ABB value providers in over 60 countries. Regional service centers, training centers and authorized drive service workshops form a well-structured and large service organization, making sure that ABB drives and control service team is never too far from your site.



- Regional Service Centers
- Local Service Units

# Technical features

## Standard solution with versatile features



### Design flexibility

The ACS2000 provides different line supply connections which are available for regenerative applications with an active front end (AFE) or for low harmonic applications with a diode front end (DFE). 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.

### Integrated transformer

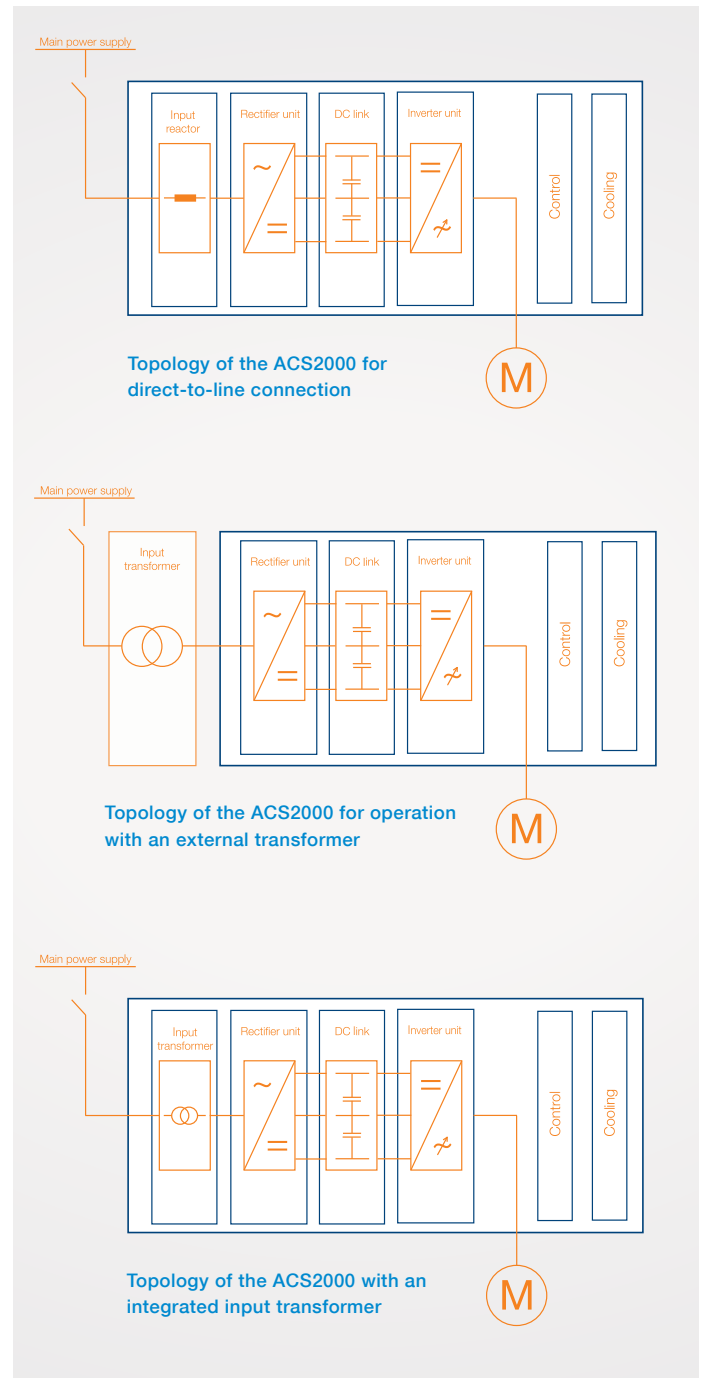
Alternatively, the ACS2000 is also available with an integrated input transformer allowing quick and easy installation and commissioning.

### Market-specific designs

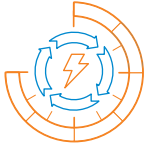
IEC- and NEMA-specific variants are available, covering local market requirements and making the drive suitable for use in all your operations worldwide.

### Low harmonic signature

The ACS2000 low harmonic drive features a diode front end (DFE) which meets the most stringent requirements for harmonic distortion as defined by relevant standards. 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

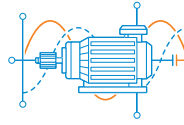
For applications where other loads connected to the same line supply cause leading or lagging power factor, the ACS2000 is available with a static VAR compensation option. With static VAR compensation, a smooth line supply voltage profile can be maintained and reactive power penalties can be avoided.



### 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

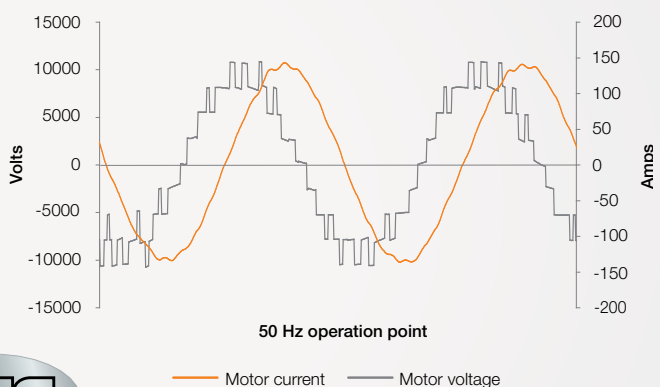
and cable insulation. This is achieved with ABB's patented multilevel topology which utilizes one DC link enabling a multi-level output waveform with a minimum number of power components.

### 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.

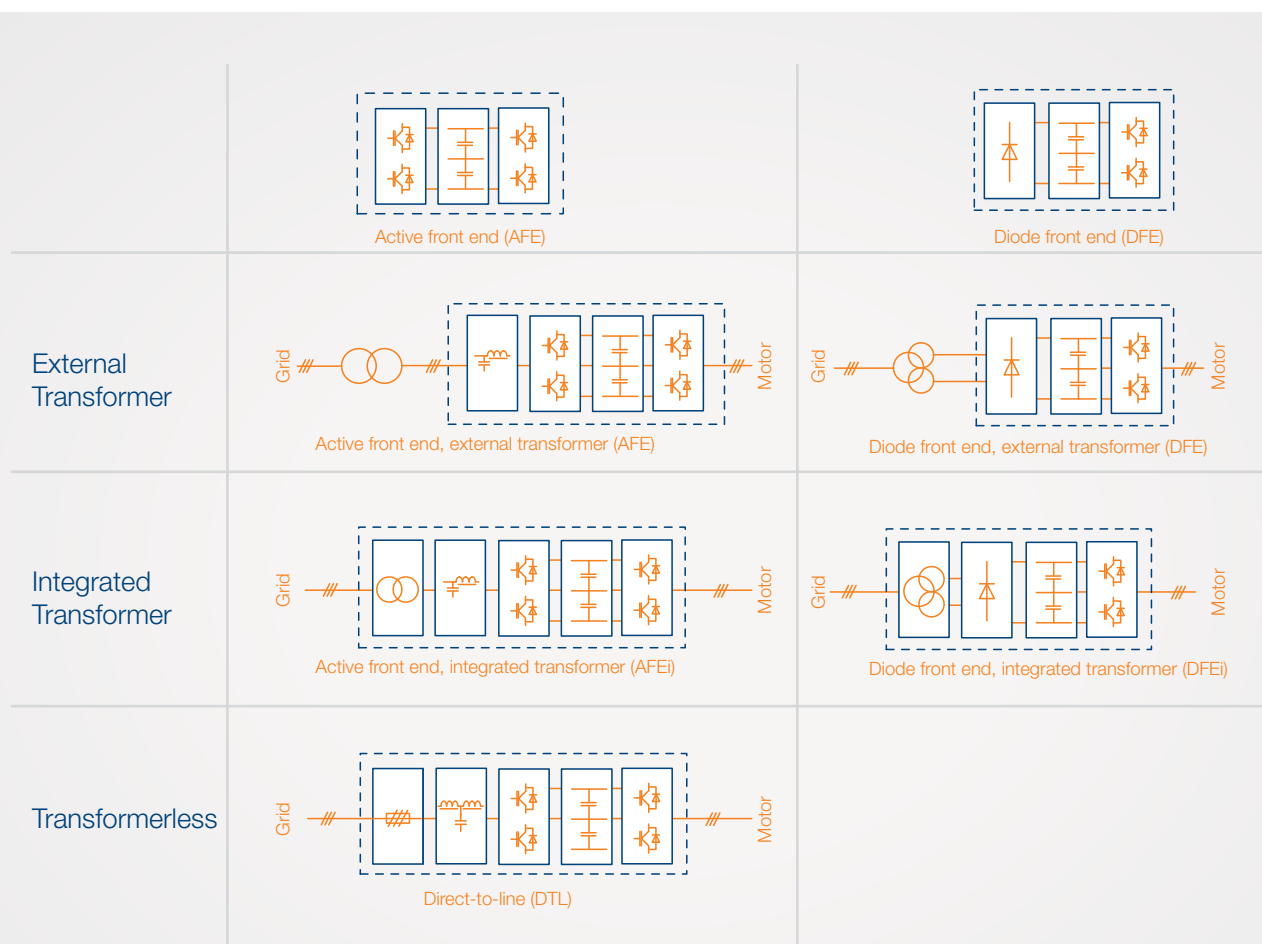
Line and motor current and voltage



# 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,  
1000 HP, 4.0 - 4.16 kV, NEMA enclosure



# 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, 1000 HP, 6.6 kV,  
for operation with an external transformer



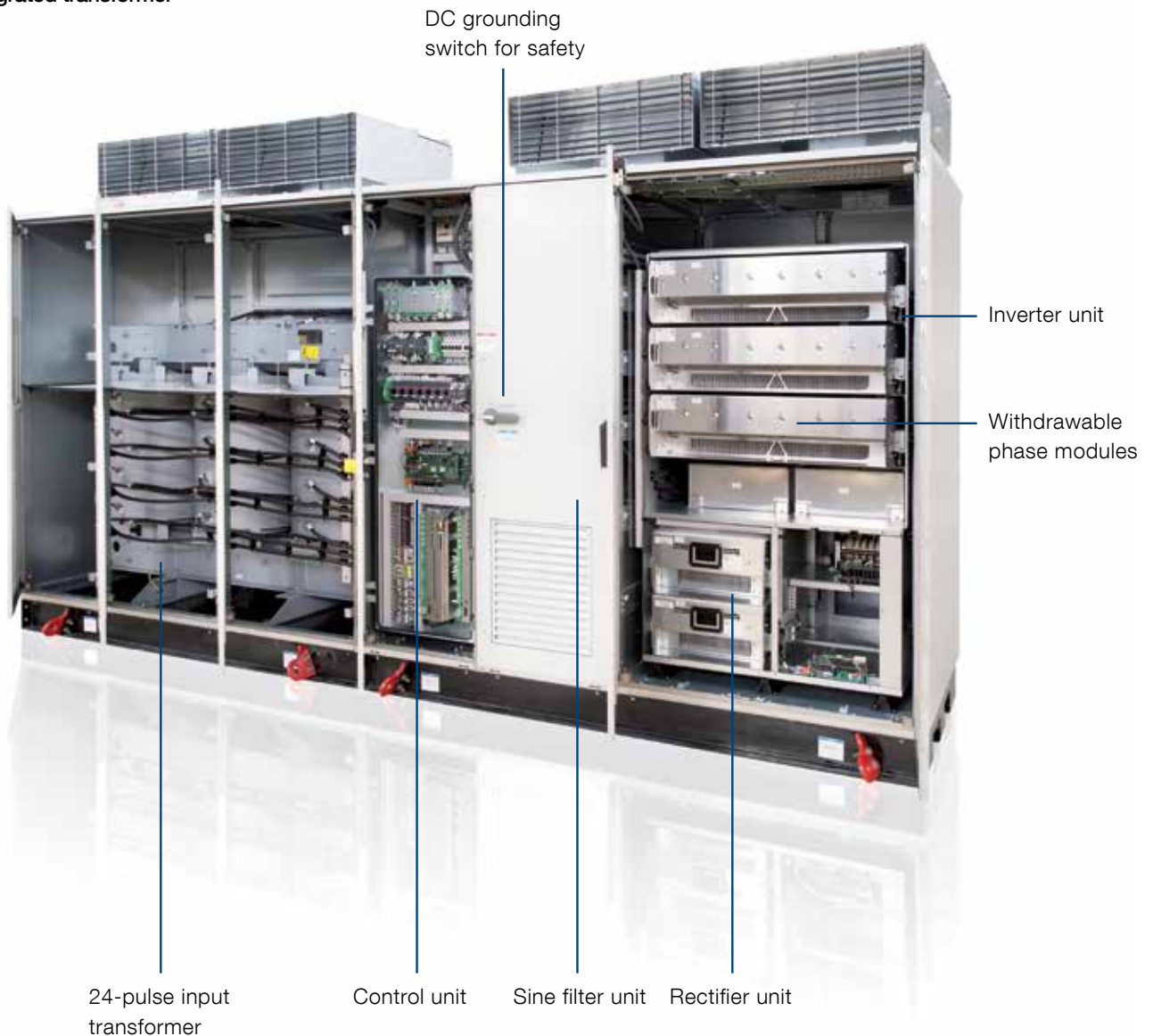


# ACS2000

## Configuration with integrated transformer

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

ACS2000, 1500 HP, 6.6 kV,  
with an integrated transformer



# Technical data

## At a glance

<b>Input</b>	
Input configuration	24-pulse diode rectifier or active front end
Input voltage	1850, 1930 V, 24-pulse diode rectifier 4.16, 6.0, 6.6, 6.9 kV, active front end
Input voltage variation	±10%, 4.16, 6.0, 6.6 kV -10 – +5%, 6.9 kV
Input frequency	50/60 Hz
Input frequency variation	<5%
Input power factor	Diode rectifier: >0.95 Active rectifier: 1
Input harmonics	Compliance with IEC 61000, IEEE 519, GB/T 14549
Auxiliary voltage	110, 220 V, DC 110, 120, 230 V, 50/60 Hz 380, 400, 415, 440, 460, 480, 575, 600 V, 50/60 Hz, 3 phase
<b>Output</b>	
Output power	300 – 4290 HP (250 – 3200 kW)
Output voltage	4.16 – 6.9 kV
Output frequency	0 – 75 Hz
Motor type	Induction
Efficiency of converter	97.5%
Motor harmonics	<5% THDi, compatible to standard DOL motors
<b>Mechanical</b>	
Enclosure	Standard: IP21, NEMA 1 Optional: IP42
Cable entry	Top/bottom
<b>Environmental</b>	
Altitude	2000 m.a.s.l. (higher on request)
Ambient air temperature	+1 – +40 °C (optional 55 °C)
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 <sup>1</sup>			Converter data							
Nominal rating <sup>2</sup>			Type code	Power kVA	direct-to-line		with external transformer		with integrated transformer	
kW	hp	A			Length in	Weight lbs	Length in	Weight lbs	Length in	Weight lbs
4000 V										
225	300	40	ACS2000-040-A01A-L1-010	310	78	4629	78	4629	n/a	n/a
260	350	47	ACS2000-040-A01B-L1-010	360	78	4629	78	4629	n/a	n/a
300	400	54	ACS2000-040-A01C-L1-010	410	78	4629	78	4629	n/a	n/a
335	450	61	ACS2000-040-A01D-L1-010	460	78	4629	78	4629	n/a	n/a
375	500	67	ACS2000-040-A01E-L1-010	515	78	4629	78	4629	n/a	n/a
450	600	81	ACS2000-040-A01F-L1-010	615	78	4629	78	4629	n/a	n/a
520	700	94	ACS2000-040-A01G-L1-010	720	78	4629	78	4629	n/a	n/a
595	800	108	ACS2000-040-A01H-L1-010	820	78	4629	78	4629	n/a	n/a
670	900	121	ACS2000-040-A01J-L1-010	880	78	4629	78	4629	n/a	n/a
745	1000	135	ACS2000-040-A01K-L1-010	935	115	8157	115	8157	n/a	n/a
935	1250	168	ACS2000-040-A02A-L1-010	1285	115	8157	115	8157	n/a	n/a
1120	1500	202	ACS2000-040-A02B-L1-010	1540	115	8157	115	8157	n/a	n/a
1305	1750	236	ACS2000-040-A02C-L1-010	1715	115	8157	115	8157	n/a	n/a
1490	2000	269	ACS2000-040-A02D-L1-010	1865	115	8157	115	8157	n/a	n/a
1680	2250	303	ACS2000-040-A03A-L1-010	2310	138	9038	138	9038	n/a	n/a
1865	2500	337	ACS2000-040-A03B-L1-010	2565	138	9038	138	9038	n/a	n/a
2050	2750	370	ACS2000-040-A03C-L1-010	2695	138	9038	138	9038	n/a	n/a
2240	3000	404	ACS2000-040-A03D-L1-010	2800	138	9038	138	9038	n/a	n/a

# Ratings, types and voltages

## 4 kV, regenerative drive

Motor data <sup>1</sup>			Converter data							
Nominal rating <sup>2</sup>			Type code	Power kVA	direct-to-line		with external transformer		with integrated transformer	
kW	hp	A			Length in	Weight lbs	Length in	Weight lbs	Length in	Weight lbs
4000 V										
225	300	40	ACS2000-040-A01A-T1-010	310	78	4629	78	4629	n/a	n/a
260	350	47	ACS2000-040-A01B-T1-010	360	78	4629	78	4629	n/a	n/a
300	400	54	ACS2000-040-A01C-T1-010	410	78	4629	78	4629	n/a	n/a
335	450	61	ACS2000-040-A01D-T1-010	460	78	4629	78	4629	n/a	n/a
375	500	67	ACS2000-040-A01E-T1-010	515	78	4629	78	4629	n/a	n/a
450	600	81	ACS2000-040-A01F-T1-010	615	78	4629	78	4629	n/a	n/a
520	700	94	ACS2000-040-A01G-T1-010	720	78	4629	78	4629	n/a	n/a
595	800	108	ACS2000-040-A01H-T1-010	820	78	4629	78	4629	n/a	n/a
670	900	121	ACS2000-040-A01J-T1-010	880	78	4629	78	4629	n/a	n/a
745	1000	135	ACS2000-040-A01K-T1-010	935	115	8157	115	8157	n/a	n/a
935	1250	168	ACS2000-040-A02A-T1-010	1285	115	8157	115	8157	n/a	n/a
1120	1500	202	ACS2000-040-A02B-T1-010	1540	115	8157	115	8157	n/a	n/a
1305	1750	236	ACS2000-040-A02C-T1-010	1715	115	8157	115	8157	n/a	n/a
1490	2000	269	ACS2000-040-A02D-T1-010	1865	115	8157	115	8157	n/a	n/a
1680	2250	303	ACS2000-040-A03A-T1-010	2310	138	9038	138	9038	n/a	n/a
1865	2500	337	ACS2000-040-A03B-T1-010	2565	138	9038	138	9038	n/a	n/a
2050	2750	370	ACS2000-040-A03C-T1-010	2695	138	9038	138	9038	n/a	n/a
2240	3000	404	ACS2000-040-A03D-T1-010	2800	138	9038	138	9038	n/a	n/a

### Notes:

- <sup>1</sup> Indicative information: Induction motor efficiency 93%, power factor 0.86  
<sup>2</sup> Nominal rating for no-overload operation

### Dimensions:

**Height:** 83 in cabinet height  
99 in incl. cooling fans  
**Depth:** 45 in



# Ratings, types and voltages

## 6 kV, low harmonic drive

Motor data <sup>1</sup>			Converter data							
Nominal rating <sup>2</sup>			Type code <sup>3</sup>	Power kVA	direct-to-line		with external transformer		with integrated transformer	
kW	hp	A			Length in	Weight lbs	Length in	Weight lbs	Length in	Weight lbs
6000 V										
250	305	30	ACS2000-060-A01A-xy-010	315	87	5511	69	3306	132	6878
315	385	38	ACS2000-060-A01B-xy-010	395	87	5511	69	3306	132	6878
355	435	43	ACS2000-060-A01C-xy-010	445	87	5511	69	3306	132	6922
400	485	48	ACS2000-060-A01D-xy-010	500	87	5511	69	3306	143	7120
450	550	54	ACS2000-060-A01E-xy-010	565	87	5511	69	3306	143	7451
500	610	60	ACS2000-060-A01F-xy-010	625	87	5511	69	3306	143	7517
560	680	67	ACS2000-060-A01G-xy-010	700	87	5511	69	3306	143	7605
630	770	76	ACS2000-060-A01H-xy-010	790	87	5511	69	3306	143	8289
710	865	85	ACS2000-060-A01J-xy-010	890	87	5511	69	3306	143	8487
800	975	96	ACS2000-060-A01K-xy-010	1000	87	5511	69	3306	143	8928
900	1095	108	ACS2000-060-A02A-xy-010	1125	150	9391	86	3968	161	9766
1000	1220	120	ACS2000-060-A02B-xy-010	1250	150	9391	86	3968	161	10229
1120	1365	135	ACS2000-060-A02C-xy-010	1400	150	9391	86	3968	161	10604
1260	1535	152	ACS2000-060-A02D-xy-010	1575	150	9391	86	3968	173	10912
1420	1730	171	ACS2000-060-A02E-xy-010	1775	150	9391	86	3968	173	11155
1600	1950	192	ACS2000-060-A02F-xy-010	2000	150	9391	86	3968	173	11684
1800	2195	217	ACS2000-060-A03A-x4-010	2250	n/a	n/a	100	4629	195	13426
2000	2435	241	ACS2000-060-A03B-x4-010	2500	n/a	n/a	100	4629	195	13470
2200	2680	265	ACS2000-060-A03C-x4-010	2750	n/a	n/a	100	4629	195	14484
2400	2925	289	ACS2000-060-A03D-x4-010	3000	n/a	n/a	100	4629	195	15498
2500	3045	301	ACS2000-060-A04A-x4-010	3125	n/a	n/a	100	4629	202	15498
2800	3410	337	ACS2000-060-A04B-x4-010	3500	n/a	n/a	100	4629	202	16799
3200	3900	385	ACS2000-060-A04C-x4-010	4000	n/a	n/a	100	4629	202	18077
6600 V										
250	335	27	ACS2000-066-A01A-xy-010	315	87	5511	69	3306	132	6878
315	420	34	ACS2000-066-A01B-xy-010	395	87	5511	69	3306	132	6878
355	475	39	ACS2000-066-A01C-xy-010	445	87	5511	69	3306	132	6922
400	535	44	ACS2000-066-A01D-xy-010	500	87	5511	69	3306	143	7120
450	605	49	ACS2000-066-A01E-xy-010	565	87	5511	69	3306	143	7451
500	670	55	ACS2000-066-A01F-xy-010	625	87	5511	69	3306	143	7517
560	750	61	ACS2000-066-A01G-xy-010	700	87	5511	69	3306	143	7605
630	845	69	ACS2000-066-A01H-xy-010	790	87	5511	69	3306	143	8289
700	940	77	ACS2000-066-A01J-xy-010	875	87	5511	69	3306	143	8487
800	1070	87	ACS2000-066-A01K-xy-010	1000	87	5511	69	3306	143	8928
900	1205	98	ACS2000-066-A02A-xy-010	1125	150	9391	86	3968	161	9766
1000	1340	109	ACS2000-066-A02B-xy-010	1250	150	9391	86	3968	161	10229
1120	1500	122	ACS2000-066-A02C-xy-010	1400	150	9391	86	3968	161	10604
1260	1690	138	ACS2000-066-A02D-xy-010	1575	150	9391	86	3968	173	10912
1420	1905	155	ACS2000-066-A02E-xy-010	1775	150	9391	86	3968	173	11155
1600	2145	175	ACS2000-066-A02F-xy-010	2000	150	9391	86	3968	173	11684
1800	2415	197	ACS2000-066-A03A-x4-010	2250	n/a	n/a	100	4629	195	13426
2000	2680	219	ACS2000-066-A03B-x4-010	2500	n/a	n/a	100	4629	195	13470
2200	2950	241	ACS2000-066-A03C-x4-010	2750	n/a	n/a	100	4629	195	14484
2400	3215	262	ACS2000-066-A03D-x4-010	3000	n/a	n/a	100	4629	195	15498
2500	3350	273	ACS2000-066-A04A-x4-010	3125	n/a	n/a	100	4629	202	15498
2800	3755	306	ACS2000-066-A04B-x4-010	3500	n/a	n/a	100	4629	202	16799
3200	4290	350	ACS2000-066-A04C-x4-010	4000	n/a	n/a	100	4629	202	18077

### Notes:

<sup>1</sup> Indicative information: Induction motor efficiency 93%, power factor 0.86

<sup>2</sup> Nominal rating for no-overload operation

<sup>3</sup> „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 - 6 pulse active front end

4 - 24 pulse diode front end

### Dimensions:

**Height:** 83 in cabinet height

99 in incl. cooling fans

107 in incl. redundant cooling fans

**Depth:** 45 in

# Ratings, types and voltages

## 6 kV, low harmonic drive (continued)

Motor data <sup>1</sup>			Converter data							
Nominal rating <sup>2</sup>			Type code <sup>3</sup>	Power kVA	direct-to-line		with external transformer		with integrated transformer	
kW	hp	A			Length in	Weight lbs	Length in	Weight lbs	Length in	Weight lbs
6900 V										
250	335	26	ACS2000-069-A01A-xy-010	315	87	5511	69	3306	132	6878
315	420	33	ACS2000-069-A01B-xy-010	395	87	5511	69	3306	132	6878
355	475	37	ACS2000-069-A01C-xy-010	445	87	5511	69	3306	132	6922
400	535	42	ACS2000-069-A01D-xy-010	500	87	5511	69	3306	3630	7120
450	605	47	ACS2000-069-A01E-xy-010	565	87	5511	69	3306	143	7451
500	670	52	ACS2000-069-A01F-xy-010	625	87	5511	69	3306	143	7517
560	750	59	ACS2000-069-A01G-xy-010	700	87	5511	69	3306	143	8289
630	845	66	ACS2000-069-A01H-xy-010	790	87	5511	69	3306	143	8289
710	950	74	ACS2000-069-A01J-xy-010	890	87	5511	69	3306	143	8487
800	1070	84	ACS2000-069-A01K-xy-010	1000	87	5511	69	3306	143	8928
900	1205	94	ACS2000-069-A02A-xy-010	1125	150	9391	86	3968	161	9766
1000	1340	105	ACS2000-069-A02B-xy-010	1250	150	9391	86	3968	161	10229
1120	1500	117	ACS2000-069-A02C-xy-010	1400	150	9391	86	3968	161	10604
1260	1690	132	ACS2000-069-A02D-xy-010	1575	150	9391	86	3968	173	10912
1420	1905	149	ACS2000-069-A02E-xy-010	1775	150	9391	86	3968	173	11155
1600	2145	167	ACS2000-069-A02F-xy-010	2000	150	9391	86	3968	173	11684
1800	2415	188	ACS2000-069-A03A-x4-010	2250	n/a	n/a	100	4629	195	13426
2000	2680	209	ACS2000-069-A03B-x4-010	2500	n/a	n/a	100	4629	195	13470
2200	2950	230	ACS2000-069-A03C-x4-010	2750	n/a	n/a	100	4629	195	14484
2400	3215	251	ACS2000-069-A03D-x4-010	3000	n/a	n/a	100	4629	195	15498
2500	3350	262	ACS2000-069-A04A-x4-010	3125	n/a	n/a	100	4629	202	15498
2800	3755	293	ACS2000-069-A04B-x4-010	3500	n/a	n/a	100	4629	202	16799
3200	4290	335	ACS2000-069-A04C-x4-010	4000	n/a	n/a	100	4629	202	18077

### Notes:

<sup>1</sup> Indicative information: Induction motor efficiency 93%, power factor 0.86

<sup>2</sup> Nominal rating for no-overload operation

<sup>3</sup> '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 - 6 pulse active front end

4 - 24 pulse diode front end

### Dimensions:

**Height:** 83 in cabinet height

99 in incl. cooling fans

107 in incl. redundant cooling fans

**Depth:** 45 in.

# Ratings, types and voltages

## 6 kV, regenerative drive

Motor data <sup>1</sup>			Type code <sup>3</sup>	Power kVA	Converter data					
Nominal rating <sup>2</sup>					direct-to-line		with external transformer		with integrated transformer	
kW	hp	A			Length in	Weight lbs	Length in	Weight kg	Length in	Weight lbs
6000 V										
250	305	30	ACS2000-060-A01A-x1-010	315	87	5511	68	3417	135	6283
315	385	38	ACS2000-060-A01B-x1-010	395	87	5511	68	3417	135	6481
355	435	43	ACS2000-060-A01C-x1-010	445	87	5511	68	3417	135	6680
400	485	48	ACS2000-060-A01D-x1-010	500	87	5511	68	3417	135	6900
450	550	54	ACS2000-060-A01E-x1-010	565	87	5511	68	3417	135	7120
500	610	60	ACS2000-060-A01F-x1-010	625	87	5511	68	3417	135	7341
560	680	67	ACS2000-060-A01G-x1-010	700	87	5511	68	3417	135	7605
630	770	76	ACS2000-060-A01H-x1-010	790	87	5511	68	3417	135	7892
710	865	85	ACS2000-060-A01J-x1-010	890	87	5511	68	3417	135	8201
800	975	96	ACS2000-060-A01K-x1-010	1000	87	5511	68	3417	135	8267
900	1095	108	ACS2000-060-A02A-x1-010	1125	150	9391	119	5621	205	11331
1000	1220	120	ACS2000-060-A02B-x1-010	1250	150	9391	119	5621	205	11331
1120	1365	135	ACS2000-060-A02C-x1-010	1400	150	9391	119	5621	205	11684
1260	1535	152	ACS2000-060-A02D-x1-010	1575	150	9391	119	5621	205	12103
1420	1730	171	ACS2000-060-A02E-x1-010	1775	150	9391	119	5621	205	12566
1600	1950	192	ACS2000-060-A02F-x1-010	2000	150	9391	119	5621	205	13095
6600 V										
250	335	27	ACS2000-066-A01A-x1-010	315	87	5511	68	3417	135	6283
315	420	34	ACS2000-066-A01B-x1-010	395	87	5511	68	3417	135	6481
355	475	39	ACS2000-066-A01C-x1-010	445	87	5511	68	3417	135	6680
400	535	44	ACS2000-066-A01D-x1-010	500	87	5511	68	3417	135	6900
450	605	49	ACS2000-066-A01E-x1-010	565	87	5511	68	3417	135	7120
500	670	55	ACS2000-066-A01F-x1-010	625	87	5511	68	3417	135	7341
560	750	61	ACS2000-066-A01G-x1-010	700	87	5511	68	3417	135	7605
630	845	69	ACS2000-066-A01H-x1-010	790	87	5511	68	3417	135	7892
700	940	77	ACS2000-066-A01J-x1-010	875	87	5511	68	3417	135	8201
800	1070	87	ACS2000-066-A01K-x1-010	1000	87	5511	68	3417	135	8267
900	1205	98	ACS2000-066-A02A-x1-010	1125	150	9391	119	5621	205	11331
1000	1340	109	ACS2000-066-A02B-x1-010	1250	150	9391	119	5621	205	11331
1120	1500	122	ACS2000-066-A02C-x1-010	1400	150	9391	119	5621	205	11684
1260	1690	138	ACS2000-066-A02D-x1-010	1575	150	9391	119	5621	205	12103
1420	1905	155	ACS2000-066-A02E-x1-010	1775	150	9391	119	5621	205	12566
1600	2145	175	ACS2000-066-A02F-x1-010	2000	150	9391	119	5621	205	13095
6900 V										
250	335	26	ACS2000-069-A01A-x1-010	315	87	5511	68	3417	135	6283
315	420	33	ACS2000-069-A01B-x1-010	395	87	5511	68	3417	135	6481
355	475	37	ACS2000-069-A01C-x1-010	445	87	5511	68	3417	135	6680
400	535	42	ACS2000-069-A01D-x1-010	500	87	5511	68	3417	135	6900
450	605	47	ACS2000-069-A01E-x1-010	565	87	5511	68	3417	135	7120
500	670	52	ACS2000-069-A01F-x1-010	625	87	5511	68	3417	135	7341
560	750	59	ACS2000-069-A01G-x1-010	700	87	5511	68	3417	135	7605
630	845	66	ACS2000-069-A01H-x1-010	790	87	5511	68	3417	135	7892
710	950	74	ACS2000-069-A01J-x1-010	890	87	5511	68	3417	135	8201
800	1070	84	ACS2000-069-A01K-x1-010	1000	87	5511	68	3417	135	8267
900	1205	94	ACS2000-069-A02A-x1-010	1125	150	9391	119	5621	205	11331
1000	1340	105	ACS2000-069-A02B-x1-010	1250	150	9391	119	5621	205	11331
1120	1500	117	ACS2000-069-A02C-x1-010	1400	150	9391	119	5621	205	11684
1260	1690	132	ACS2000-069-A02D-x1-010	1575	150	9391	119	5621	205	12103
1420	1905	149	ACS2000-069-A02E-x1-010	1775	150	9391	119	5621	205	12566
1600	2145	167	ACS2000-069-A02F-x1-010	2000	150	9391	119	5621	205	13095

### Notes:

<sup>1</sup> Indicative information: Induction motor efficiency 93%, power factor 0.86

<sup>2</sup> Nominal rating for no-overload operation

<sup>3</sup> „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:** 83 in cabinet height

99 in incl. cooling fans

107 in incl. redundant cooling fans

**Depth:** 45 in.

# Contact us

For more information contact your local ABB representative or:

**ABB Inc.**

**Medium Voltage Drives**

16250 W. Glendale Drive

New Berlin, WI 53151

Tel: 800-752-0696

E-Mail: [mv.drives.sales@us.abb.com](mailto:mv.drives.sales@us.abb.com)

[www.abb.com/drives](http://www.abb.com/drives)



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