

Technical Catalogue

CompAC™

Low power AC drives
0.12 kW - 37 kW



ABB Automation



Instant ordering
and advice



Easy to pay,
most credit cards
accepted



Fast delivery
within hours



Simple documentation
easy to read



Support line



2 year worldwide
warranty

ABB

Nobody looks after you better. Every drive you buy comes with comprehensive support services from instant advice through fast delivery to worldwide warranty cover.
Buying a drive has never been so quick and easy.



...instant advice and ordering

Take advantage of our fast advice and ordering service by calling us on the special Comp-AC telephone number shown on the back page.



...an easy way to pay

You can now call us with most major credit cards to get your drive in a matter of hours.



...a rapid delivery service

Once you have ordered your drive, we'll get it to you in a few hours, with remote locations taking just a little longer.



...simple documentation

We've cut the paper work! One instruction card tells you all you need to know to install and use your drive.



...round the clock help

Our 'SupportLine' answers any queries you may have about running your drives.



...worldwide warranty cover

We can support your drives globally through our network of offices in virtually every country.

Just ring the special Comp-AC number on the back page for everything you need to know about our Comp-AC drives and support services.

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New

These are new products or features.
Please check availability with your local supplier.

Comp-AC™

- The Comp-AC range covers 0.12 - 37 kW. All Comp-AC drives benefit from the same proven technology and reliability. Comp-AC drives have an excellent track record and there are already hundreds of thousands of installed units.
- Comp-AC comprises product types ACS 100, ACS 140 and ACS 400. See pages 6 and 7.
- Comp-AC also includes a unique set of services designed to ensure that the entire process from drive selection to worldwide support and warranty is as straightforward as possible for the user.
- Building on its experience in designing and producing drives, ABB has reduced the parts used in Comp-AC drives in order to maximise their reliability.

Flexible application macros

A selection of pre-set application macros ensures fast commissioning. By changing just a single variable, all macro-specific parameters are automatically set and all the control terminals are automatically configured.

The **factory** application macro is intended for applications where the drive is used without a control panel, providing a general purpose I/O configuration. Different macros are available for 50 Hz and 60 Hz power supply.

The **ABB Standard** (typically used in Europe) and the 3-wire (typically used in the United States) application macros are configured for general purpose applications, and offer two additional pre-set speeds compared to the factory application macro.

The **alternate** application macro has an I/O-configuration adopted to a sequence of DI-control signals used when alternating the direction of the drive.

The **motor potentiometer** application macro provides a cost-effective interface for PLCs that vary the speed of the drive using only digital signals.

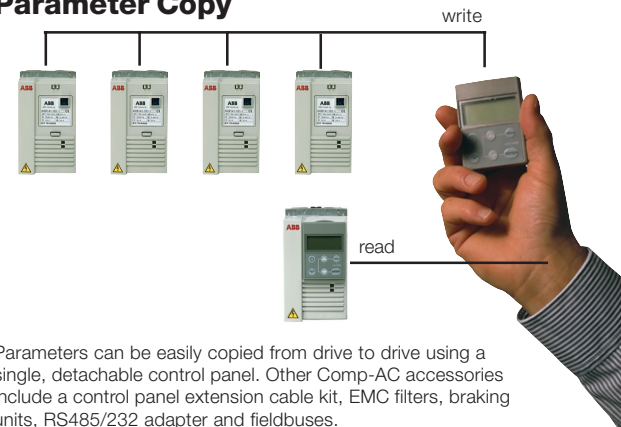
The **Hand/Auto** application macro offers an I/O-configuration typically used in HVAC applications.

The **PID Control** application macro is intended for use with closed-loop control systems such as pressure and flow control.

The **Premagnetise** application macro enables rapid starting by eliminating the delay normally experienced while flux builds up in the motor.

The **Pump and Fan Control (PFC)** macro can drive a load such as a pump, fan or compressor station with one to four pumps, enabling speed control for one pump and on/off control for the others.

Parameter Copy



Parameters can be easily copied from drive to drive using a single, detachable control panel. Other Comp-AC accessories include a control panel extension cable kit, EMC filters, braking units, RS485/232 adapter and fieldbuses.

EMC Compliant

The Comp-AC range of drives conforms to the European Union Electro Magnetic Compatibility directive, a requirement for CE marking.

To decrease electromagnetic disturbances and harmonics, EMC filters and input/output chokes are available as options. These features make the Comp-AC well suited for both residential and industrial installations.

EMC note: (EN 61800-3, First Environment restricted distribution). The standard versions of the drives in the Comp-AC range meet the requirements of the Second Environment. An appropriate EMC filter is required only when operating in the First Environment.



With features such as dynamic braking and flying start, Comp-AC drives are a practical choice for many applications in building automation such as air handling. The built-in PID control keeps variables such as temperature, pressure, or humidity under control. Comp-AC drives are quiet in operation and therefore well suited for office and residential environments.

Precise control of a wide range of processes

Fast and precise speed control means that uniform end-product quality can be achieved cost-efficiently. Comp-AC drives are suitable for machinery applications such as conveying, packaging, mixing, ventilation, pumping and similar. The Comp-AC drives offer the benefits of efficient control to virtually every type of industrial process where AC motors are used.

High repeatability for constant product quality

High repeatability ensures constant product quality across a range of applications, and is one of the cornerstones in the design of the Comp-AC drives. The very low variance in response time and accuracy enables control of processes within narrow tolerances whilst ensuring predictable behaviour of machinery. In addition, the serial communication feature along with the digital control interface maintains constantly high repeatability.

Wide choice of mounting options

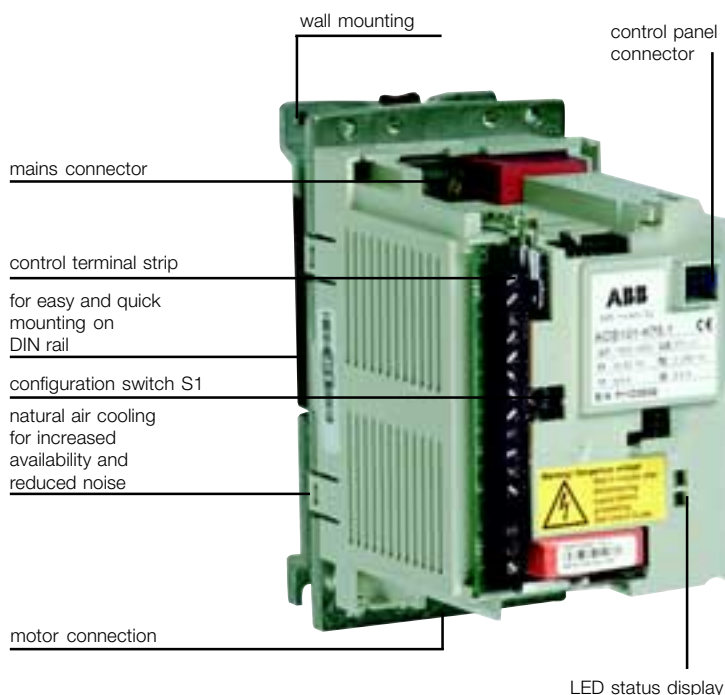
Catering for the different requirements of end users, panel builders and OEMs, Comp-AC drives provide three different ways of mounting: conventional wall mounting, time saving DIN-rail mounting and flange mounting. Mounting using an external heatsink is also now available, see page 8 for heatsinkless units.



The reliability of the drives in the Comp-AC range makes these suitable for all types of continuous processes, such as pumping and mixing. An IP 54 enclosure is available for operation in harsh industrial environments.



In material handling and packaging applications, where precise positioning of goods is essential, the high repeatability of the drives in the Comp-AC range is a clear advantage. In addition, the seven pre-set speeds enable easy speed changes, when switching to a different size, weight or type of material. The drives can be easily integrated with any existing control logic, since the drive is compatible with both negative and positive control logic.



Technical Specification

Mains connection

Voltage: 1-phase and 3-phase, 200 to 240 V, $\pm 10\%$ (ACS 100, ACS 140)

3-phase, 380 to 480 V, $\pm 10\%$ (ACS 140, ACS 400)

Frequency: 48 to 63 Hz

Power Factor: approx. 0.98

Motor connection

Voltage: 3-phase, from 0 to U_{SUPPLY}

Frequency: ACS 100/140: 0 to 300 Hz,

ACS 400: 0 to 250 Hz

Continuous loading capability (constant torque at a max. ambient temperature of 40°C):

Rated output current I_2 .

Overload capacity (at a max. ambient temp. of 40°C):

- at constant torque $1.5 \times I_{2N}$, for 1 minute every 10 minutes
- at constant torque $1.25 \times I_{2N}$, for 2 minutes every 10 minutes

Characteristic data for short-time, intermittent and periodic load cycles are available on request.

Switching frequency:

ACS 100/140: Standard 4 kHz, Low-noise 8 kHz, Silent 16 kHz ^{New}

ACS 400: Standard 4 kHz, Low-noise: 8 kHz

Acceleration time: 0.1 to 1800 s

Deceleration time: 0.1 to 1800 s

Programmable control connections

Two analogue inputs (only one in ACS 100):

- Voltage signal: 0 (2) to 10 V, 200 k Ω single-ended
- Current signal: 0 (4) to 20 mA, 500 Ω single-ended
- Potentiometer reference value:
10 V $\pm 2\%$ max. 10 mA, $1 \text{ k}\Omega \leq R \leq 10 \text{ k}\Omega$
- Response time: $\leq 60 \text{ ms}$
- Resolution: 0.1 %
- Accuracy: $\pm 1\%$

In ACS 140/400 one analog output:

0 (4) to 20 mA, load $< 500 \Omega$

Auxiliary voltage: 12 V DC, max. 100 mA,
in ACS 400 24 V, max. 250 mA

Five digital inputs (only three in ACS 100):

- 12 V... 24 V DC with internal or external supply, PNP and NPN
- In ACS 100 ABB standard, 3-wire or alternate
- Input impedance: 1.5 k Ω
- Response time: $\leq 9 \text{ ms}$

Two relay outputs

(only one fault relay in ACS 100):

- Switching voltage: 12 to 250 V AC or max 30 V DC/0.5 A

- Maximum continuous current: 10 mA to 2 A

Serial communication for the control panel or external control: Modbus protocol

Environmental limits

Ambient temperatures:

- Output current = I_2 , $f_{\text{switch}} = 4 \text{ kHz}$: 0 to 40 °C

ACS 100/140 additionally:

- Output current = $0.8 \cdot I_2$, $f_{\text{switch}} = 4 \text{ kHz}$: 40 to 50 °C
- Output current = I_2 , $f_{\text{switch}} = 8 \text{ kHz}$: 0 to 30 °C
- Output current = $0.9 \cdot I_2$, $f_{\text{switch}} = 8 \text{ kHz}$: 30 to 40 °C
- Output current = $0.75 \cdot I_2$, $f_{\text{switch}} = 16 \text{ kHz}$: 0 to 30°C ¹⁾

ACS 400 additionally:

- Output current = $0.9 \cdot I_2$, $f_{\text{switch}} = 4 \text{ kHz}$: 40 to 50 °C
- Output current = $0.8 \cdot I_2$, $f_{\text{switch}} = 8 \text{ kHz}$: 0 to 40 °C

Altitude:

- Output current = I_2 : 0 to 1000 m
- Output current reduced by 1 % per 100 m over 1000 m to 2000 m

Relative humidity: lower than 95 % (without condensation)

Protection class:

ACS 100/140: IP 20

ACS 400: IP 21 or IP 54

Paint colour: NCS 1502-Y, RAL 9002, PMS 420 C

Contamination levels: no conductive dust, corrosive liquids or gases (IEC 721-3-3).

Product compliance

- Low Voltage Directive 73/23/EEC with supplements
- EMC Directive 89/336/EEC with supplements
- Quality assurance system ISO 9001 and ISO 14001
- CE, UL, ULc and C-Tick approvals

Options

- Extension cable 3 m with IP 65 Kit for control panels PEC-98-0008
- EMC input filters are required only in First Environment
- Braking units and choppers
- Motor and line chokes

ACS 140/400:

- RS 485/232 adapter
- DriveWindow Light

ACS 400:

- Control panel ACS-PAN-A
- Control panel ACS100-PAN
- DDCS adapter for fieldbus modules

¹⁾ Except ACS 143-1K1-3 and ACS 143-2K1-3 where output current = $0.55 \times I_2$, $f_{\text{SWITCH}} = 16 \text{ kHz}$: 0 to 30 °C

■ standard feature	ACS 100	ACS 140	ACS 400
Functions			
Start; normal/flying/torque boost		■	■
Start; premagnetising		■	■
IR compensation	■	■	■
Stop; ramp/coasting	■	■	■
Stop; DC brake	■	■	■
DC hold	■	■	■
U/f -ratio; linear/square	■	■	■
Acceleration/deceleration 1 (s)	0.1 ... 1800	0.1 ... 1800	0.1 ... 1800
Acceleration/deceleration 2 (s)		0.1 ... 1800	0.1 ... 1800
S-ramp; fast/medium/slow	■	■	■
Preset speeds	■ 1	■ 7	■ 7
Critical frequencies		■ 2	■ 2
Slip compensation		■ New	■
Application Macros			
Factory	■	■	■
ABB Standard	■	■	■
3-wire	■	■	■
Alternate	■	■	■
Motor potentiometer		■	■
Hand/Auto Control		■	■
PID Control (process)		■	■
Premagnetise		■	■
Pump and Fan Control (PFC)			■
Protection, fault functions			
Overload protection	■	■	■
Stall protection		■	■
Output overcurrent	■	■	■
Output short circuit	■	■	■
Ground fault, motor cable	■	■	■
Under load			■
Network failure	■	■	■
Low input signal level (AI<min)	■	■	■
Panel fault	■	■	■
Over voltage	■	■	■
Under voltage	■	■	■
External fault		■	■
Automatic fault reset, under voltage	■	■	■
Automatic fault reset, over voltage, over current, AI<min		■	■
Fault history	■ 1	■ 3	■ 3
Supervision functions (programmable) ¹⁾			
Speed		■	■
Current		■	■
Torque		■	■
Output power		■	■
Reference setpoint		■	■

¹⁾ Many other signals can also be monitored, see the user's manual.

Technical Data

1-phase Supply Voltage 200 - 240 V

Standard series^{New}

Order code ACS 101- ³⁾ ACS 141- ³⁾	Nominal motor P_N ²⁾ kW	Nominal ratings			Max. output current A	Over-current (peak) A	Over-temp. (heat sink) °C	Line fuse ¹⁾ A	Power losses	
		Frame size/ weight kg	Input current I_{1N} A	Output current I_{2N} A					Power circuit W	Control circuit W
K18-1	0.12	A/0.9	2.7	1.0	1.5	3.2	90	6	7	8
K25-1	0.18	A/0.9	4.4	1.4	2.1	4.5	90	6	10	10
K37-1	0.25	A/0.9	5.4	1.7	2.6	5.5	90	10	12	12
K75-1	0.37	A/0.9	6.9	2.2	3.3	7.1	90	10	13	14
1K1-1	0.55	A/0.9	9.0	3.0	4.5	9.7	90	10	19	16
1K6-1	0.75	B/1.2	10.8	4.3	6.5	13.8	90	16	27	17
2K1-1	1.1	C/1.6	14.8	5.9	8.9	19.0	95	16	39	18
2K7-1	1.5	C/1.6	18.2	7.0	10.5	23.5	95	20	48	19
4K1-1	2.2	D/1.9	22.0	9.0	13.5	34.5	95	25	70	20

Heatsinkless series^{New}

The drives in the heatsinkless series are minimised in volume in order to save space. They are fitted with a base plate only and need to be installed on an external sink which dissipates the heat generated, see power circuit losses below.

These drives are typically used in machines, where space is limited or increased flexibility in assembly positions is required.

Order code ACS 101- ³⁾ ACS 141- ³⁾	Nominal motor P_N ²⁾ kW	Nominal ratings			Max. output current A	Over-current (peak) A	Over-temp. (heat sink) °C	Line fuse ¹⁾ A	Power losses	
		Frame size/ weight kg	Input current I_{1N} A	Output current I_{2N} A					Power circuit W	Control circuit W
H18-1	0.12	H/0.8	2.7	1.0	1.5	3.2	90	6	7	8
H25-1	0.18	H/0.8	4.4	1.4	2.1	4.5	90	6	10	10
H37-1	0.25	H/0.8	5.4	1.7	2.6	5.5	90	10	12	12
H75-1	0.37	H/0.8	3.2	2.2	3.3	7.1	90	10	13	14
1H1-1	0.55	H/0.8	9.0	3.0	4.5	9.7	90	10	19	16
1H6-1	0.75	H/0.8	10.8	4.3	6.5	13.8	90	16	27	17

Mounting options, standard series

In addition to the conventional wall mounting and time-saving DIN rail mounting, ACS 100/140 also offers flange-mounting. The heat sink is located outside the enclosure and hence the major share of the power loss is external to the enclosure.



mounting on DIN rail



wall mounting

Technical Data

3-phase Supply Voltage 200 - 240 V

Standard series ^{New}

Order code ACS 103- ³⁾ ACS 143- ³⁾	Nominal motor P_N ²⁾ kW	Nominal ratings			Max. output current A	Over-current (peak) A	Over-temp. (heat sink) °C	Line fuse ¹⁾ A	Power losses	
		Frame size/weight kg	Input current I_{1N} A	Output current I_{2N} A					Power circuit W	Control circuit W
K75-1	0.37	A/0.8	3.2	2.2	3.3	7.1	90	6	13	14
1K1-1	0.55	A/0.8	4.2	3.0	4.5	9.7	90	6	19	16
1K6-1	0.75	B/1.1	5.3	4.3	6.5	13.8	90	6	27	17
2K1-1	1.1	C/1.5	7.2	5.9	8.9	19.0	90	10	39	18
2K7-1	1.5	C/1.5	8.9	7.0	10.5	23.5	95	10	48	19
4K1-1	2.2	D/1.8	12.0	9.0	13.5	34.5	95	16	70	20

¹⁾ Fuse type: UL class CC or T. For non-UL installations IEC269 gG.

²⁾ P_N rated motor power. The power ratings in kW apply to most 2- and 4-pole IEC 34 motors. The current ratings are the same regardless of supply voltages. The rated current of the Comp-AC drive must be higher than or equal to the rated motor current to achieve the rated motor power given in the table.

³⁾ The ACS 101/103 and the ACS 141/143 have different features, outlined on pages 6 and 7.

Use 60 °C rated power cable (75 °C if T_{amb} above 45 °C).

Protection limits/Overvoltage

- Running VDC: 420 (corr. to 295 V input)
- Start inhibit VDC: 390 (corr. to 276 V input)

Protection limits/Undervoltage

- Running VDC: 200 (corr. to 142 V input)
- Start inhibit VDC: 230 (corr. to 162 V input)

Max. motor cable length is 75 m except 0.12 to 0.25 kW it is 50 m.
If longer motor cable is required, use the output choke. See page 21.

Max. wire sizes/Power terminals (mm²)

- 4 single core/torque 0.8 Nm

Max. wire sizes/Control terminals (mm²)

- 0.5-1.5 (AWG22...AWG16/torque 0.4 Nm)

Dimensions



Technical Data

3-phase Supply Voltage 380 - 480 V ± 10 %

Order code	Nominal ratings									Over-current limit (peak)	Max.motor cable length ⁹⁾ fsw = 4 kHz fsw = 8 kHz m	Max. wire sizes Power terminals ⁴⁾ mm ²	Line fuse ²⁾ A	Power losses	
	Nominal motor P _{NSQ} ⁶⁾ Squared torque kW	Frame size/ weight kg	Input current I _{1NSQ} A	Cont. output current I _{2NSQ} ³⁾ A	110% I _{2NSQ} ¹⁰⁾ A	Nominal motor P _N ⁶⁾ Constant torque kW	Input current I _{1N} A	Cont. output current I _{2N} A	150% I _{2N} ¹¹⁾ A					Power circuit W	Control circuit W
ACS 143-															
K75-3 ^{New 1)}	0.37	A/0.8 ⁵⁾	2.0	1.2	1.8	0.37	2.0	1.2	1.8	4.2	30/30		6	14	14
1K1-3 ^{New 1)}	0.55	A/0.8 ⁵⁾	2.8	1.7	2.6	0.55	2.8	1.7	2.6	5.6	50/50		6	20	16
1K6-3 ^{New 1)}	0.75	B/1.1 ⁵⁾	3.6	2.0	3.0	0.75	3.6	2.0	3.0	6.6	75/75	4, single core/ torque 0.8 Nm	6	27	17
2K1-3 ^{New 1)}	1.1	B/1.1 ⁵⁾	4.8	2.8	4.2	1.1	4.8	2.8	4.2	9.2	75/75		6	39	18
2K7-3 ^{New 1)}	1.5	C/1.5 ⁵⁾	5.8	3.6	5.4	1.5	5.8	3.6	5.4	11.9	75/75		10	48	19
4K1-3 ^{New 1)}	2.2	D/1.8 ⁵⁾	7.9	4.9	7.4	2.2	7.9	4.9	7.4	16.3	75/75		10	70	20
ACS 401-															
0004-3-X	3.0	R1/5.8 ⁷⁾	6.2	6.6	7.3	2.2	4.7	4.9	7.4	20.3	100/50		10	90	6
0005-3-X	4.0	"	8.3	8.8	9.7	3.0	6.2	6.6	9.9	27.5	100/50	10, AWG6 (stranded)/ Torque 1.3-1.5 Nm	10	120	6
0006-3-x	5.5	"	11.1	11.6	12.8	4.0	8.8	8.8	13.2	37	100/50		16	170	6
0009-3-X	7.5	R2/9.0 ⁷⁾	14.8	15.3	16.8	5.5	11.1	11.6	17.4	48	200/100		16	230	6
0011-3-X	11	"	21.5	23	25.3	7.5	14.8	15.3	23	64	200/100		25	330	6
0016-3-X	15	R3/18.5 ⁷⁾	29	30	33	11	21.5	23	34	76	200/100		35	450	6
0020-3-X	18.5	"	35	38	42	15	29	30	45	99	200/100	16, AWG4 (stranded)/ Torque 1.5-1.8 Nm	50	560	6
0025-3-X	22	R4/27 ⁷⁾	41	44	48	18.5	35	38	57	125	200/100		50	660	6
0030-3-X	30	"	56	59	65	22	41	44	66	145	200/100	35, AWG2 (stranded)/ Torque 3.2-3.7 Nm	60	900	6
0041-3-X	37	"	68	72	79	30	56	59	88	195	200/100		80	1100	6

¹⁾ Heatsinkless versions also available, see page 8.

Order code type: ACS 143-xHx-3.

²⁾ Fuse type: UL class CC or T. For non-UL installations IEC269 gG.

Use 60 °C rated power cable (75 °C if T_{amb} above 45 °C).

³⁾ Power stages are designed for the continuous I_{2N}/I_{2NSQ} current. These values apply at altitudes less than 1000 m ASL.

⁴⁾ Follow local regulations for cable cross-sections. Shielded motor cable is recommended.

⁵⁾ For dimension see ACS 140 page 9.

⁶⁾ P_{NSQ}/P_N rated motor power. The power ratings in kW apply to most 2- and 4-pole IEC 34 motors. The current ratings are the same regardless of the supply voltages. The rated current of the Comp-AC must be higher than or equal to the rated motor current to achieve the rated motor power given in the table. P_{NSQ}: Pump and fan applicable values (squared torque). P_N: Other applications (constant torque values).

⁷⁾ For dimensions see page 11.

⁹⁾ If longer motor cable is required, use output choke, see page 22.

¹⁰⁾ 110 % I_{NSQ} short term overload current allowed for one minute every 10 minutes.

¹¹⁾ 150 % I_{2NS} short term overload current allowed for one minute every 10 minutes.

Switching frequency kHz: ACS 143- 4 (Standard), 8 (Low-noise),

16 (silent)

ACS 401- 4 (Standard), 8 (Low-noise)

Protection limits/Overvoltage

Trip limits

- Running V DC: 842 (corr. to 595 V input)

- Start inhibit V DC: 661 (corr. to 380 - 415 V input)

765 (corr. to 440 - 480 V input)

Protection limits/Undervoltage:

- Running V DC: 333 (corr. to 247 V input)

- Start inhibit V DC: 436 (corr. to 380 - 415 V input)

505 (corr. to 440 - 480 V input)

Control terminals mm²: 0.5 – 1.5 (AWG22...AWG16)/torque 0.4 Nm

Order Code Key	ACS 401 - 004 - 3 - 2
AC Drive	
Product Type	S = Standard product
ACS 400 Product Family	
Input Bridge	0 = 6-pulse rectifier
Enclosure Type	1 = Wall mounted
Accessories	0 = Standard Unit
Rated Output Power in kVA	See ACS 400 rating tables, section S, table 11
Voltage Rating	(1 = 200 ...240 V AC available soon) 3 = 380 ...480 V AC
Enclosure Class	2 = IP 21 5 = IP 54



Going to extremes to serve you

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Technical Data

3-phase Supply Voltage 380 - 480 V $\pm$ 10 %

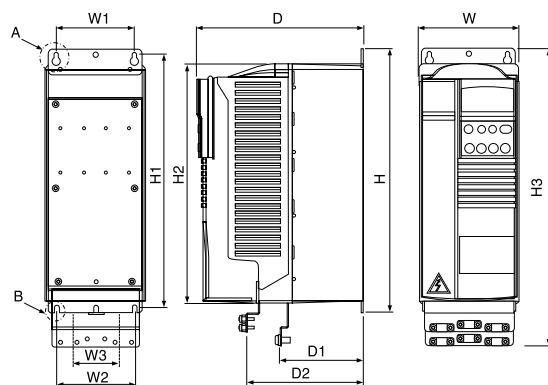
Dimensions IP 21 enclosures

Frame size, IP 21 ACS 401-	W	W1	W2	W3	H	H1	H2	H3	D	D1	D2	a	b	c	d	Weight
mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	kg
0004	125	98	98	-	330	318	300	373	209	105	147	5.5	10	5.5	5.5	5.8
0005	125	98	98	-	330	318	300	373	209	105	147	5.5	10	5.5	5.5	5.8
0006	125	98	98	-	330	318	300	373	209	105	147	5.5	10	5.5	5.5	5.8
0009	125	98	98	-	430	417	400	473	221	117	159	5.5	10	5.5	5.5	9.0
0011	125	98	98	-	430	417	400	473	221	117	159	5.5	10	5.5	5.5	9.0
0016	203	98	160	98	545	528	500	586	248	144	200	6.5	13	8	6.5	18.5
0020	203	98	160	98	545	528	500	586	248	144	200	6.5	13	8	6.5	18.5
0025	203	98	160	98	636	619	600	686	280	177	233	6.5	13	8	6.5	27
0030	203	98	160	98	636	619	600	686	280	177	233	6.5	13	8	6.5	27
0041	203	98	160	98	636	619	600	686	280	177	233	6.5	13	8	6.5	27

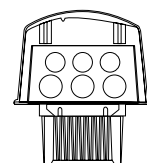
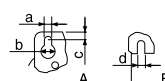
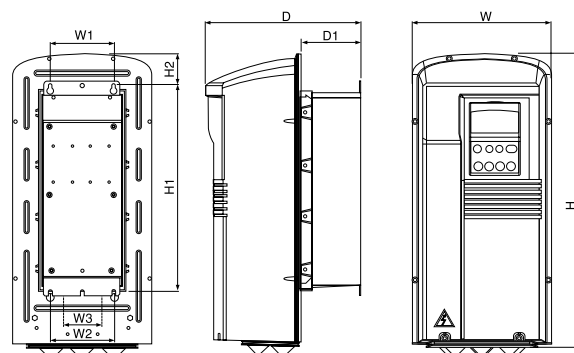
Dimensions IP 54 enclosures

Frame size, IP 54 ACS 401-	W	W1	W2	W3	H	H1	H2	D	D1	a	b	c	d	Weight
mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	kg
0004	215	98	98	-	453	318	330	240	94	5.5	10	5.5	5.5	7.2
0005	215	98	98	-	453	318	330	240	94	5.5	10	5.5	5.5	7.2
0006	215	98	98	-	453	318	330	240	94	5.5	10	5.5	5.5	7.2
0009	215	98	98	-	551	417	430	253	107	5.5	10	5.5	5.5	11.2
0011	215	98	98	-	551	417	430	253	107	5.5	10	5.5	5.5	11.2
0016	257	98	160	98	642	528	545	280	132	6.5	13	8	6.5	22.3
0020	257	98	160	98	642	528	545	280	132	6.5	13	8	6.5	22.3
0025	257	98	160	98	742	619	636	312	145	6.5	13	8	6.5	32.3
0030	257	98	160	98	742	619	636	312	145	6.5	13	8	6.5	32.3
0041	257	98	160	98	742	619	636	312	145	6.5	13	8	6.5	32.3

Units with IP 21 enclosures



Units with IP 54 enclosures



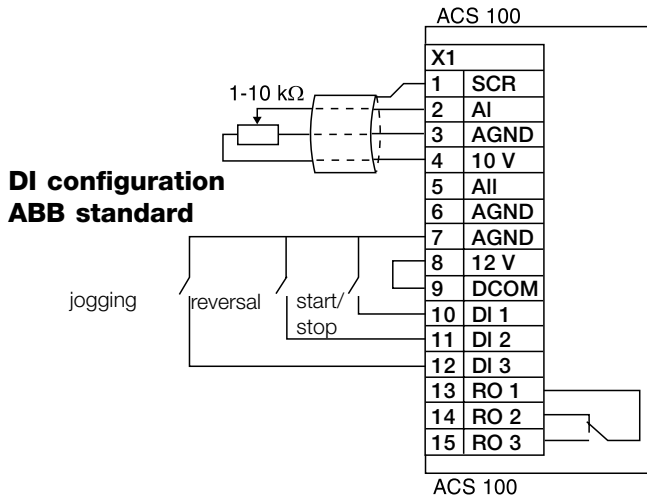
Same load capability for IP 54 units and IP 21 units

Units conforming to the IP 54 and IP 21 environmental protection classes have the same internal frame but different external plastic enclosures. An additional internal fan improves the cooling in IP 54 units. The two types have the same load capability.

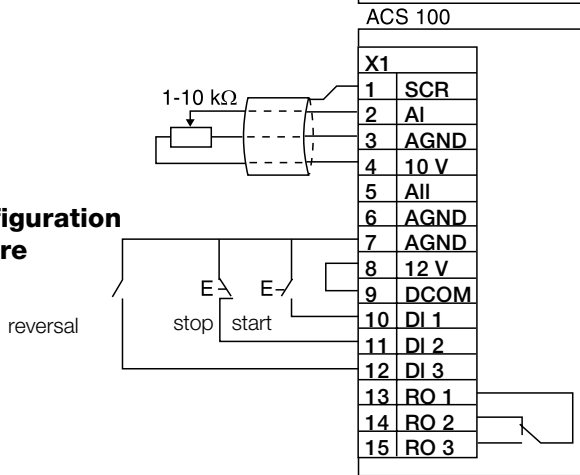
Technical Data

Connection Diagrams 200 - 240 V¹⁾

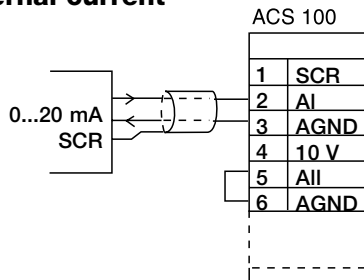
ACS 100



DI configuration 3-wire



Frequency reference value from an external current source



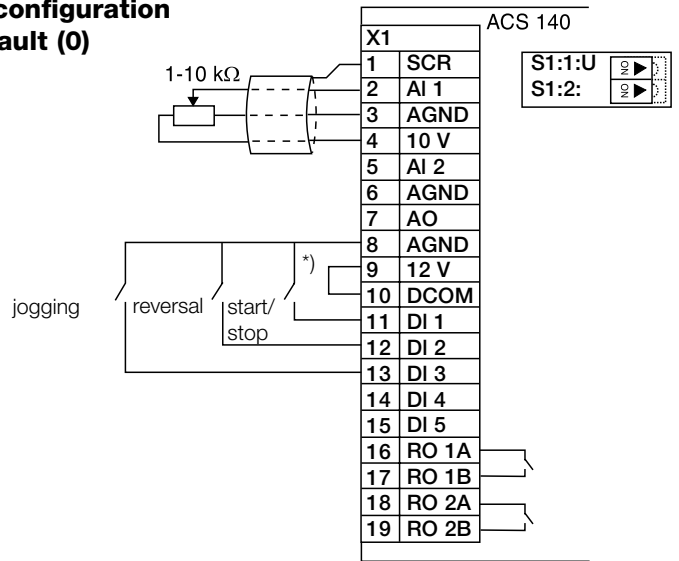
Refitting the cover

The supply voltage may be switched on only after the cover has been refitted and snapped into place.

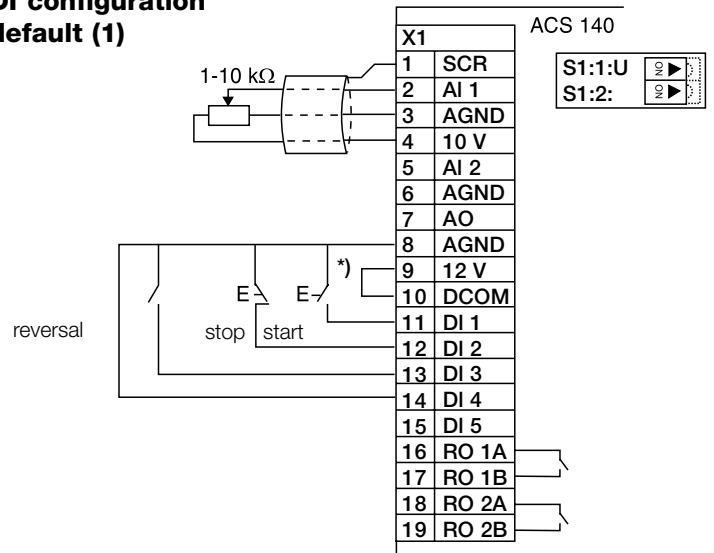
¹⁾ For more examples, see user's manual.

ACS 140

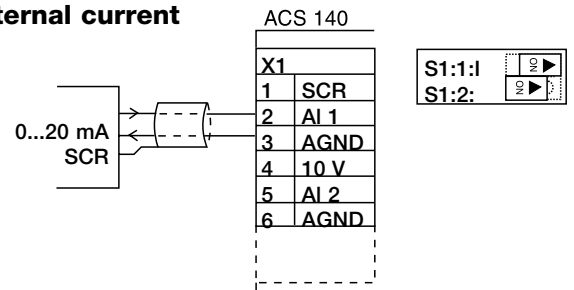
DI configuration default (0)



DI configuration default (1)

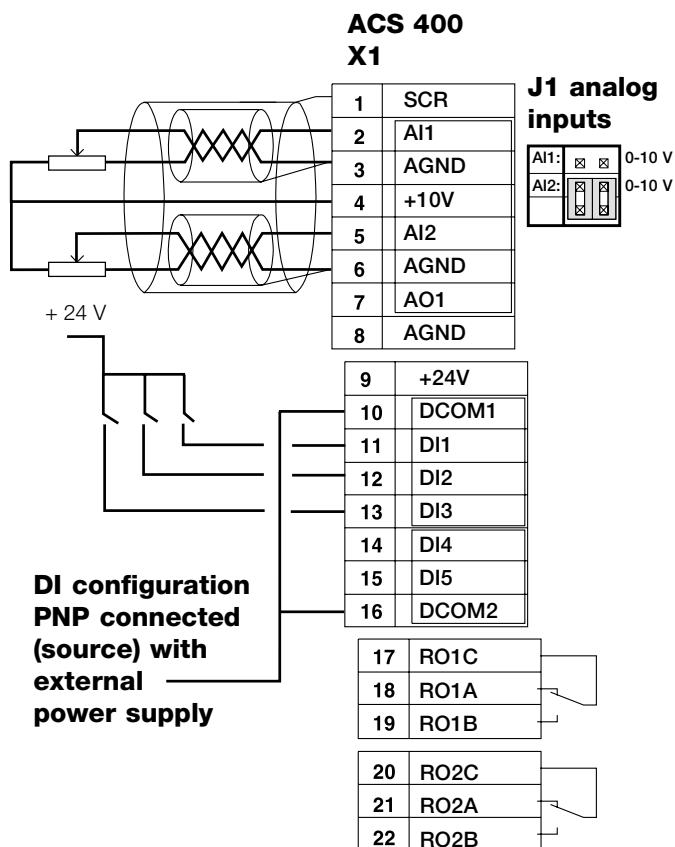
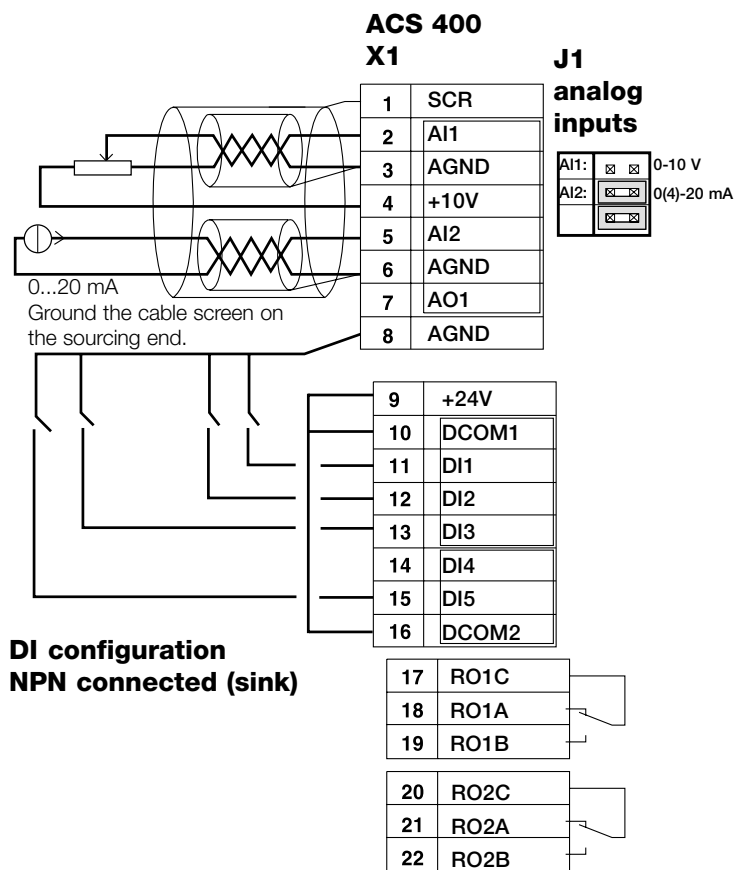


Frequency reference value from an external current source

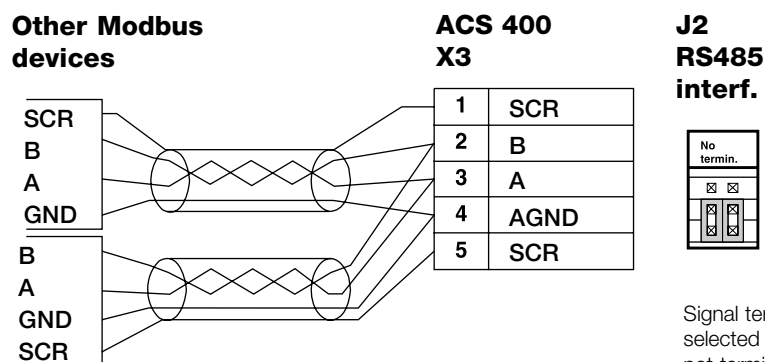


*) If external voltages are used open the jumper X1: 9,10. Use the DCOM and digital inputs.

Connection Diagrams 380 - 480 V¹⁾



RS485 Multidrop application



¹⁾ For more examples, see user's manual.
For power 0.37 to 2.2 kW, see ACS 140 connection diagrams on page 12.

Options

Control Panels

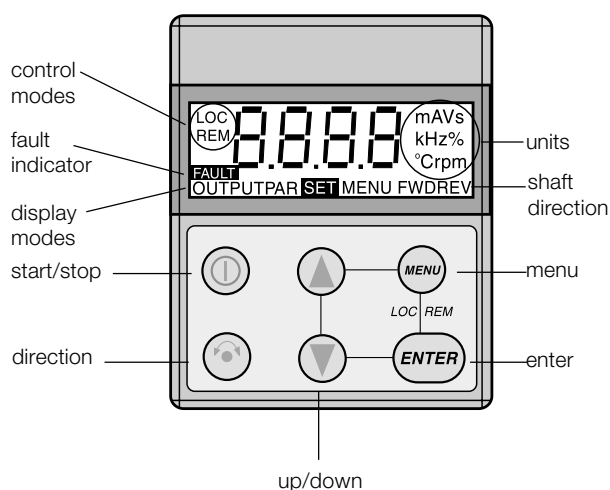


ACS100-PAN control panel for ACS 100/140/400

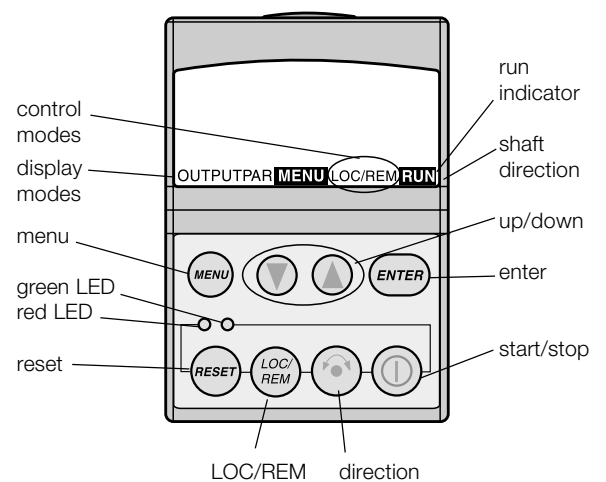
ACS 100/140 drives are fitted with a detachable control panel as standard. Using the control panel, parameters can be exchanged between two drives of the same type. The ACS-100-PAN can also be used for copying parameters from ACS 400 drives.

ACS-PAN-A control panel for ACS 400

ACS-PAN-A is a detachable multi-lingual alphanumeric control panel with LCD display. The control panel can be used for copying parameters between ACS 400 drives.



Order code: ACS 100 - PAN



Order code: ACS - PAN - A

DriveWindow Light

Comp-AC set-up and control tool

Win95, Win98, WinNT compatible



DriveWindow Light operates both off- and on-line. No additional PC hardware required. DriveWindow Light uses the PC's RS-232/485 port and Modbus serial communication protocol.

Order code:
DriveWindow
Light
61478876

Windows-based, user-friendly

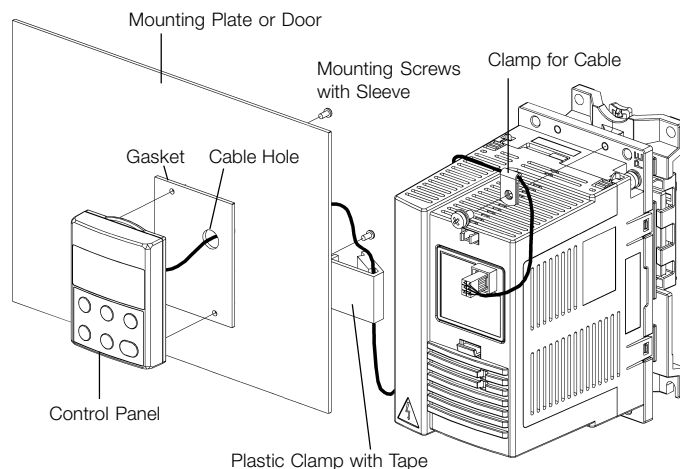
ABB's DriveWindowLight is an easy-to-use tool for commissioning and control of drives. It provides even more flexibility and operating possibilities for Comp-AC drives. It has features for programming, monitoring, trouble shooting and maintenance. It is also an excellent training tool. DriveWindowLight operates with Comp-AC types ACS 140 / 400.

DriveWindow Light features

- All software included for drive to screen operation in one package.
- Off- and on-line viewing and changing of drive parameters.
- Backup and restore parameters. In a fault situation the parameters can be reloaded resulting in time savings.
- Monitoring of actual signal values.
- Datalogger for fast and accurate measurements.
- Fault logger. DriveWindowLight indicates the reason for the fault, and also collects fault history data from the drive.

Panel Extension Cable Kit for ACS 100/140/400

Protection
class IP 65
Order code:
PEC-98-0008



This option includes:
Gasket, 3 m connection cable
ACS...panel, drilling jig and
fixing material for the cables.

Options

Fieldbus Control



ABB AC Drives can connect to all major automation systems. This is achieved with a dedicated gateway concept between the fieldbus systems and ABB Distributed Drive Communication System¹⁾ (DDCS). DDCS is a high speed optical link combining fast data transfer and excellent noise immunity.

The wide range of fieldbus gateways means that the automation system can be chosen independently of the Comp-AC drives.

¹⁾ Available as an option for ACS 400 (not for ACS 100/140).

Fieldbus Control Highlights

Greater Manufacturing Flexibility

Drive Control

The drive Control Word (16 bit) provides a wide variety of functions from Start, Stop and Reset to Ramp Generator control. Typical setpoint values like Speed and Torque can be transmitted to the drive with 15 bit accuracy.

Drive Monitoring

Frequency and current can be monitored and used to provide control data for the manufacturing process.

Drive Diagnostics

Accurate and reliable diagnostic information can be obtained via the drive Alarm and Fault Words, helping to cut drive down-time and production losses.

Drive Parameter Handling

Total integration of the drives into the production process is achieved by parameter reading and writing.

Reduced Installation and Engineering Effort

Cabling

A single twisted pair replaces the large amount of control cabling required in conventional systems. This reduces costs and increases system reliability.

Commissioning and Assembly

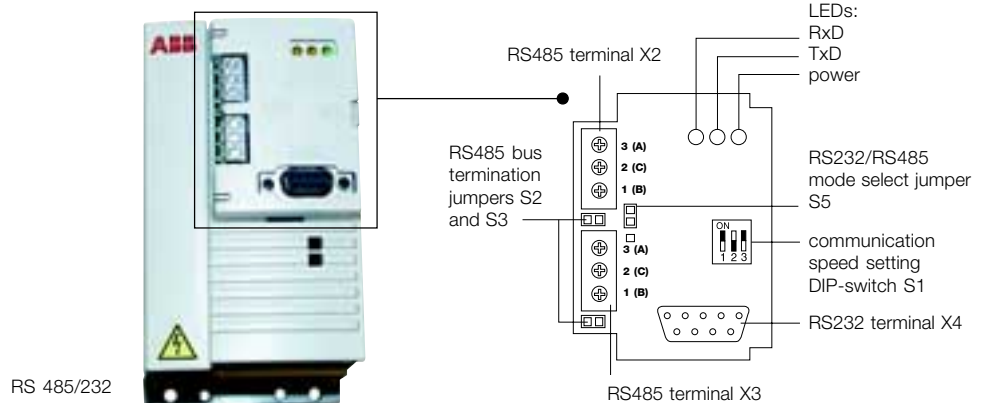
The modular machine configuration allows pre-commissioning of single machine sections and provides easy and fast assembly of the complete installation.

ACS 140 Gateways

When an RS 485/232 adapter is used, several ACS 140 units can be controlled using Modbus protocol.

RS485/232 adapter for ACS 140/400

Order code: ACS 140 RS 485/232



ACS 400 Gateways

The ACS 400 comes with the Modbus gateway as standard.

In addition, the following gateways are available in conjunction with the DDCS module.

Fieldbus	Order code	Protocol Mode	Device Profile	Baudrate (min.-max.)	Service Channel (Parameter R/W)
Profibus	NPBA-02	FMS, DP	Adjustable Speed Drives	9.6-1500 kbit/s	Supported
InterBus-S	NIBA-01	I/O, PCP	ABB Drives	500 kbit/s	Supported
Modbus	NMBA-01	RTU	ABB Drives	1.2-19.2 kbit/s	Supported
Modbus Plus ¹⁾	NMBP-01	N.A.	ABB Drives	1000 kbit/s	Supported
DeviceNet	NDNA-02	N.A.	AC Drives, DC Drives	125-500 kbit/s	Supported
CANopen ²⁾	NCAN-02	N.A.	Drives and Motion Control	1000 kbit/s	Supported
LONWORKS®	NLON-01	LonTalk®	Variable Speed Motor Drive	78 kbit/s	Supported
ABB CS 31	NCSA-01	Word, Binary	ABB Drives	187.5 kbit/s	Not supported
ABB AF100	NAFA-01	N.A.	ABB Drives	1500 kbit/s	Not supported
FLN/N2	NBAA-01	FLN	ABB Drives	1.2-19.2 kbit/s	Partially Supported
		N2	ABB Drives	9.6 kbit/s	Partially Supported

N.A. = Not Applicable

¹⁾ Software version 1.3 or later is compatible with ACS 400.

²⁾ Fieldbus module version 1.2 or later is compatible with ACS 400.

Gateway Module Technical Data

Power supply

Supply voltage: 24 V d.c.±10 %

Current consumption: 60..160 mA

Connections

Bus-line: Screw terminals

Drive link: Fibre optics

Environmental limits

Ambient temperature: 0..50 °C

Altitude: up to 2000 m ASL

Enclosure

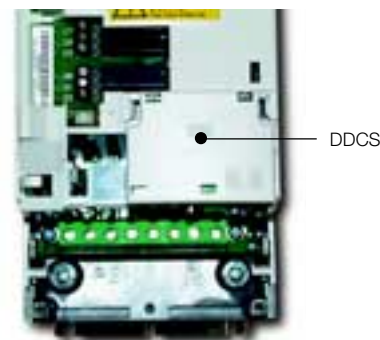
Degree of protection: IP 20

Drive interface

Protocol: DDCS

Baudrate: 4 Mbit/s

DDCS adapter for ACS 400 allows connection of fieldbus modules.



Order code: ACS 400-DDCS

EMC Filters

Series ACS 100/140-IFxx-x²⁾New

EMC - note: EN 61800-3, First Environment restricted distribution³⁾

Our converters meet the requirements of the Second Environment as standard.

An appropriate EMC filter is required only when operating in the First Environment.

1-phase supply voltage 200 - 240 V, 0.12 - 2.2 kW

Converter type ACS 101/141-	Filter order code ^{New}	A	B	C	D	E	F	G	H	I	Max. ¹⁾ Motor Cable length m Switching Frequency		
		mm	mm	mm	mm	mm	mm	mm	mm	mm	4 kHz	8 kHz	16 kHz
K18-1	ACS 100/140-IFAB-1	58	172	25	58	136	81	186	180	42	30	20	10
K25-1	ACS 100/140-IFAB-1	58	172	25	58	136	81	186	180	42	30	20	10
K37-1	ACS 100/140-IFAB-1	58	172	25	58	136	81	186	180	42	30	20	10
K75-1	ACS 100/140-IFAB-1	58	172	25	58	136	81	186	180	42	30	20	10
1K1-1	ACS 100/140-IFAB-1	58	172	25	58	136	81	186	180	42	30	20	10
1K6-1	ACS 100/140-IFAB-1	58	172	25	58	136	81	186	217	42	30	20	10
2K1-1	ACS 100/140-IFCD-1	58	272	25	58	208	81	286	200	42	30	20	10
2K7-1	ACS 100/140-IFCD-1	58	272	25	58	208	81	286	200	42	30	20	10
4K1-1	ACS 100/140-IFCD-1	58	272	25	58	235	81	286	207	42	30	20	10

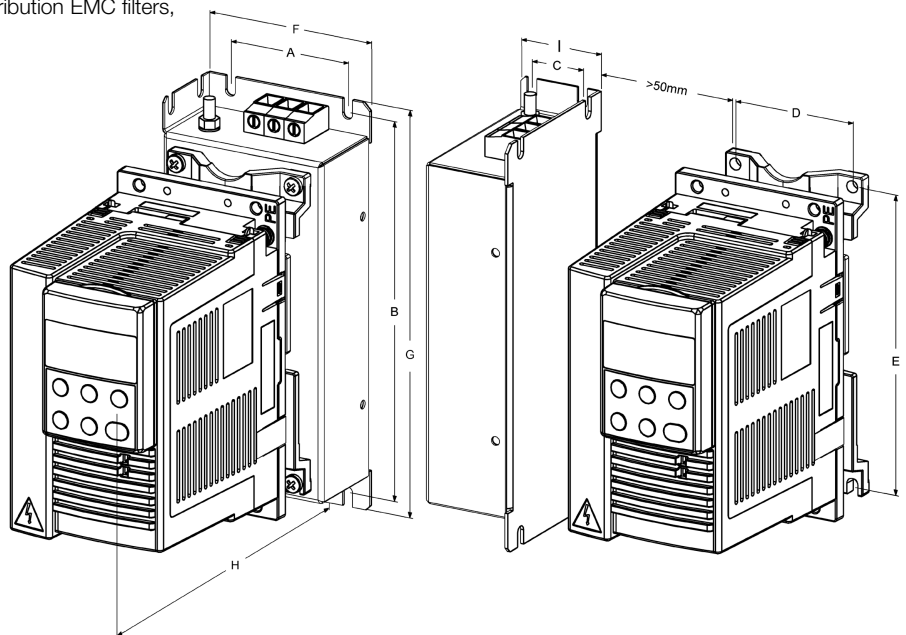
3-phase supply voltage 380 - 480 V, 0.37 - 2.2 kW

Converter type ACS 143-	Filter order code ^{New}	A	B	C	D	E	F	G	H	I	Max. ¹⁾ Motor Cable length m Switching Frequency		
		mm	mm	mm	mm	mm	mm	mm	mm	mm	4 kHz	8 kHz	16 kHz
K75-3	ACS 140-IFAB-3	58	172	25	58	136	81	186	191	42	30	20	10
1K1-3	ACS 140-IFAB-3	58	172	25	58	136	81	186	191	42	30	20	10
1K6-3	ACS 140-IFAB-3	58	172	25	58	136	81	186	228	42	30	20	10
2K1-3	ACS 140-IFAB-3	58	172	25	58	208	81	186	211	42	30	20	10
2K7-3	ACS 140-IFCD-3	58	272	25	58	208	81	286	211	42	30	20	10
4K1-3	ACS 140-IFCD-3	58	272	25	58	235	81	286	218	42	30	20	10

¹⁾ EMC Filter order code ACS 100-FLT-C and ACS 140-FLT-C allows motor cable up to 100 m length. Please contact ABB distributor.

²⁾ Protection class IP 20.

³⁾ For First Environment unrestricted distribution EMC filters, please contact ABB distributor.



EMC Filters

Series ACS 400-IFx1-3

Selection table and dimensions for IP 20 EMC filters 3-phase supply voltage 380 - 480 V, 3.0 - 37 kW

Converter type ACS 401-	Filter order code ACS 400- ²⁾	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H IP 21 mm	H IP 54 mm	I mm	Max. ¹⁾ Motor Cable length m Switching Frequency	
												4 kHz	8 kHz
0004	IF11-3	90	362	35	98	318	120	378	269	300	60	100	-
0005	IF11-3	90	362	35	98	318	120	378	269	300	60	100	-
0006	IF11-3	90	362	35	98	318	120	378	269	300	60	100	-
0009	IF21-3	90	461	35	98	417	120	477	281	313	60	100	100
0011	IF21-3	90	461	35	98	417	120	477	281	313	60	100	100
0016	IF31-3	140	330	50	98	528	170	350	-	-	80	100	100
0020	IF31-3	140	330	50	98	528	170	350	-	-	80	100	100
0025	IF41-3	160	380	50	98	619	200	400	-	-	80	100	100
0030	IF41-3	160	380	50	98	619	200	400	-	-	80	100	100
0041	IF41-3	160	380	50	98	619	200	400	-	-	80	100	100

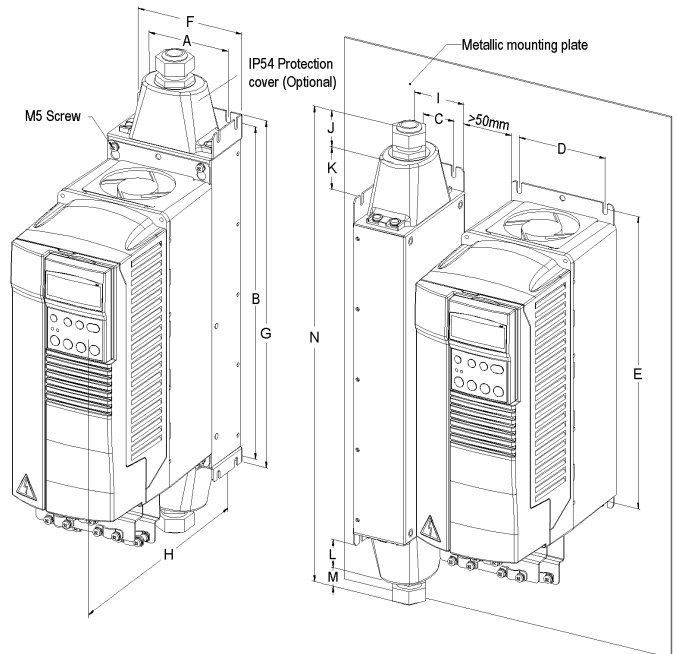
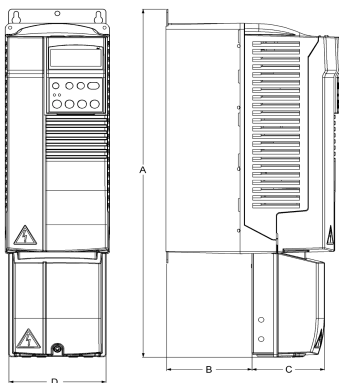
Selection table and dimensions for IP 21/IP 54 EMC filter covers

EMC filter type ACS 400-	IP 54 protection cover order code	Cable diameter	J mm	K mm	L mm	M mm	N mm
-IF11-3	IFC-99-001	9-16	35	45	max. 38	max. 38	max. 533.5
	IFC-99-002	13-20					
-IF21-3	IFC-99-002	13-20	35	45	max. 38	max. 38	max. 633
	IFC-99-003	18-25					
-IF31-3	IFC-99-004	13-20	65	85	max. 47	max. 47	max. 594
	IFC-99-005	18-25					
	IFC-99-006	25-31					
-IF41-3	IFC-99-005	18-25	65	85	max. 47	max. 47	max. 644
	IFC-99-006	25-31					
	IFC-99-007	32-38					

Always use RFI Ferrite ACS-CHK-A or ACS-CHK-C with series ACS400-IFx1-3 EMC filters. The motor cable including the shield must be fed through the hole in the ferrite. Ferrites ACS-CHK-A or ACS-CHK-C are supplied in the same package as the input filter.

Series ACS 400-IF22-3^{New}

Dimensions for regular IP 21 EMC filter for ACS 400 frequency converter



Converter type ACS 401-	A mm	B mm	C mm	D mm	Max motor cable length fsw = 4 kHz, fsw = 8 kHz m
0004	453	102	87	116	10
0005	453	102	87	116	10
0006	453	102	87	116	10
0009	553	114	87	116	10
0011	553	114	87	116	10

Braking Units & Choppers

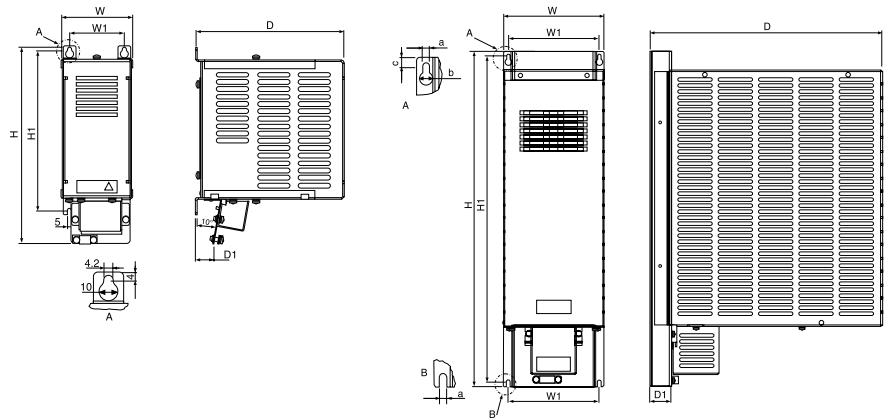
Compact-sized braking units which include braking chopper and resistor.

Braking unit technical data

Braking unit order code	Frequency converter input voltage	Resistor OHM	Continuous output W	Max. output 20 s W
ACS-BRK-A	200 – 240 V AC 380 – 480 V AC	400	150	350 1000
ACS-BRK-B	200 – 240 V AC 380 – 480 V AC	150	400	1000 2400
ACS-BRK-C	200 – 240 V AC 380 – 480 V AC	32	2000	4500 12000
ACS-BRK-D	200 – 240 V AC 380 – 480 V AC	10.5	7000	14000 42000
ACS-BRK-E (Coming soon)	200 – 240 V AC –	4	5000	30000
ACS-BRK-F	200 – 240 V AC –	50	400	2400

Dimensions

Braking unit order code	Width mm	Height mm	Depth mm	H1 mm	W1 mm	Weight kg	Mounting screw
ACS-BRK-A	90	240	180	196	67	1.2	4 mm
ACS-BRK-B	90	300	285	230	67	1.5	4 mm
ACS-BRK-C	150	500	347	486	136	7.5	5 mm
ACS-BRK-D	270	600	450	582	252	20.5	6 mm
ACS-BRK-E (Coming soon)	270	600	450	582	252	18.5	6 mm
ACS-BRK-F	90	300	285	230	67	1.5	4 mm



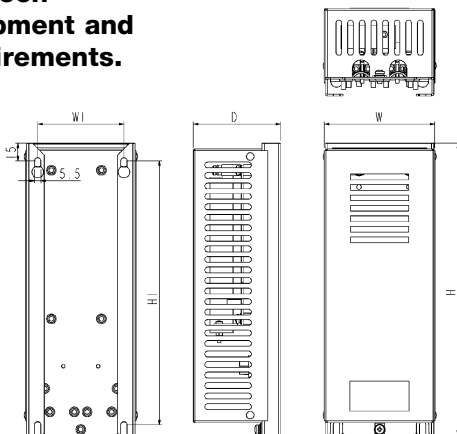
Braking chopper^{New} technical data

Braking chopper order code	Frequency converter input voltage	Resistance OHM	Continuous output W	Max. output 20 s W
ACS-BRK-BL	200 - 240 V AC 380 - 480 V AC	150	400	1000 2400
ACS-BRK-CL	200 - 240 V AC 380 - 480 V AC	32	2000	4500 12000

With braking chopper customer selects resistor used. This ensures optimum match between equipment and requirements.

Dimensions

Braking unit order code	Width mm	Height mm	Depth mm	H1 mm	W1 mm	Mounting screw
ACS-BRK-BL	93	250	75	226	74	5mm
ACS-BRK-CL	125	360	106.5	336	103	5mm



Input and Output Chokes

Output chokes are used when motor cables above normal length are required. Cable can be roughly 1.5 times standard cable length (see below).

This is possible because the output choke reduces capacitive currents and voltage reflections. The maximum switching frequency with output chokes is 4 kHz.

Optional input chokes can be used with the ACS 100/140 in case of bad supply net. The chokes eliminate converter trips caused by overvoltage spikes. They also reduce line harmonics and therefore help to prevent other sensitive equipment in the same net from tripping. Note that ACS 400 already has an input choke in the intermediate circuit as the standard and therefore we do not recommend using an additional input choke with this drive.

Converter code	Choke order code		Max. motor cable length	
	Input choke ¹⁾	Output choke ¹⁾	with choke m	without choke m
1-phase Supply Voltage 200 - 240 V, 0.12 - 2.2 kW				
ACS 1x1-		New		
x18-1	SACL21	ACS-CHK-B3	100	50
x25-1	SACL21	ACS-CHK-B3	100	50
x37-1	SACL21	ACS-CHK-B3	100	50
x75-1	SACL21	ACS-CHK-B3	150	75
1x1-1	SACL21	ACS-CHK-B3	150	75
1x6-1	SACL22	ACS-CHK-B3	150	75
2K1-1	SACL22	ACS-CHK-C3	150	75
2K7-1	SACL23	ACS-CHK-C3	150	75
4K1-1	SACL24	ACS-CHK-C3	150	75
3-phase Supply Voltage 200 - 240 V, 0.37 - 2.2 kW				
ACS 1x3-	New	New		
K75-1	ACS-CHK-B3	ACS-CHK-B3	150	75
1K1-1	ACS-CHK-B3	ACS-CHK-B3	150	75
1K6-1	ACS-CHK-B3	ACS-CHK-B3	150	75
2K1-1	ACS-CHK-B3	ACS-CHK-C3	150	75
2K7-1	ACS-CHK-C3	ACS-CHK-C3	150	75
4K1-1	ACS-CHK-C3	ACS-CHK-C3	150	75
3-phase Supply Voltage 380 - 480 V, 0.37 - 2.2 kW				
ACS 143-	New	New		
x75-3	ACS-CHK-A3	ACS-CHK-B3	100	30
1x1-3	ACS-CHK-A3	ACS-CHK-B3	100	50
1x6-3	ACS-CHK-A3	ACS-CHK-B3	150 ²⁾	75
2x1-3	ACS-CHK-B3	ACS-CHK-B3	150 ²⁾	75
2K7-3	ACS-CHK-B3	ACS-CHK-C3	150 ²⁾	75
4K1-3	ACS-CHK-C3	ACS-CHK-C3	150 ²⁾	75

¹⁾ This new series of chokes replaces previous types.

²⁾ If supply voltage is higher or equal to 440 V maximum cable length is 100 m.

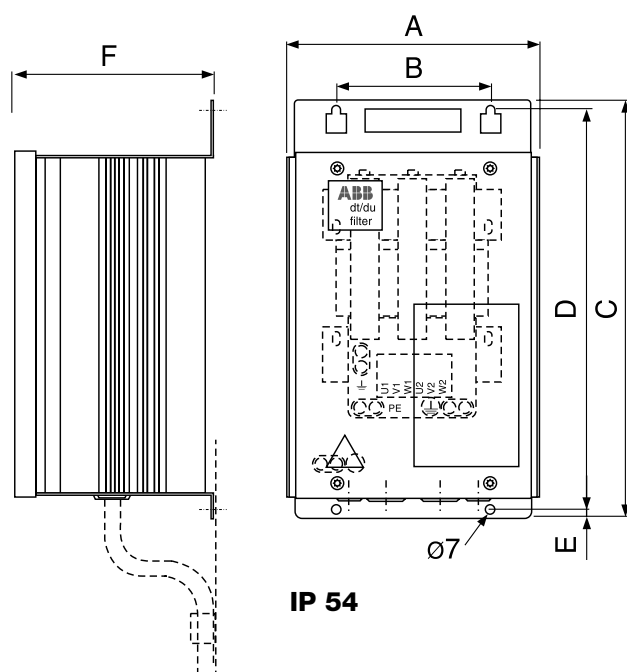
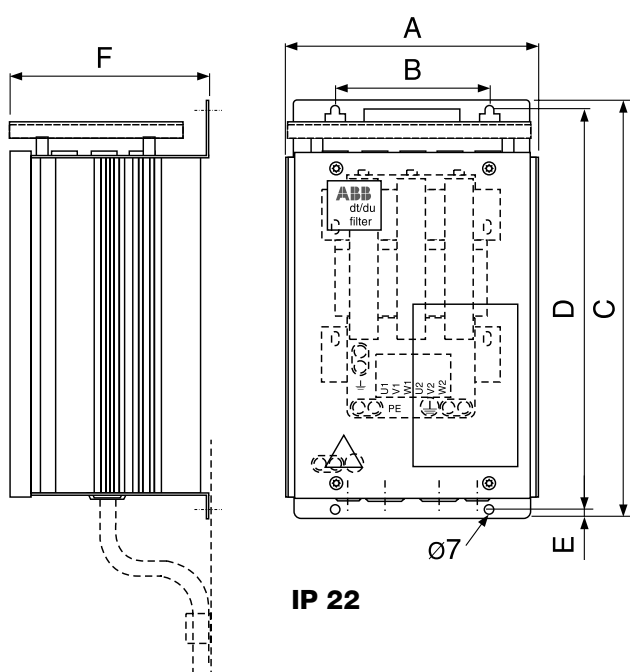
Technical data

Chokes	L/mH	Dimensions H x W x D mm	Weight kg	Max. cable mm ²	I/A
ACS-CHK-A3	4.0	300x102x112	3.2	4	4.0
ACS-CHK-B3	1.5	300x102x112	4.0	4	8.0
ACS-CHK-C3	0.8	300x102x112	4.0	4	14.0
SACL21	3.2	76x63x62	1.0	4	8.5
SACL22	1.5	92x76x63	1.3	10	15
SACL23	0.7	92x76x63	1.3	10	22
SACL24	0.7	92x76x63	1.9	6	28

Output Chokes

Selection table ACS 400

Frequency converter code	Output choke code	Max. cable mm ²	I/A	Max. cable length with choke	Max. cable length without choke
ACS 401-0004-3	NOCH-0016-6X	10	15	150	100
ACS 401-0005-3	NOCH-0016-6X	10	15	150	100
ACS 401-0006-3	NOCH-0016-6X	10	15	150	100
ACS 401-0009-3	NOCH-0030-6X	10	28	250	200
ACS 401-0011-3	NOCH-0030-6X	10	28	250	200
ACS 401-0016-3	NOCH-0030-6X	16	28	250	200
ACS 401-0020-3	NOCH-0030-6X	16	28	250	200
ACS 401-0025-3	NOCH-0070-6X	35	65	300	200
ACS 401-0030-3	NOCH-0070-6X	35	65	300	200
ACS 401-0041-3	NOCH-0070-6X	35	65	300	200



Dimensions

Choke order code	A	B	C	D	E	F	kg/1
NOCH-0016-62 (IP 22)	199	120	323	309	7	154	6
NOCH-0030-62 (IP 22)	249	160	348	334	7	172	9
NOCH-0070-62 (IP 22)	279	180	433	419	7	202	15.5
NOCH-0016-65 (IP 54)	199	120	323	309	7	154	6
NOCH-0030-65 (IP 54)	249	160	348	334	7	172	9
NOCH-0070-65 (IP 54)	279	180	433	419	7	202	15.5

Comp-AC at your service, everywhere

The ABB Group's philosophy "Think Global, Act Local" means that no matter where you are, or where you need a Comp-AC drive, you can simply connect to our eCommerce site

www.comp-ac.com or call your local ABB office for the service you want. ABB's worldwide presence is built on strong local companies working together across borders to achieve a uniform level of service for all our customers.

By combining the experience and know-how gained in local and global markets we ensure our customers in all industries can gain the full benefit from our products.

You can find further details about all our variable speed drive products and services on the ABB website:

www.abb.com/motors&drives

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Fax: +1 800- 9CompAC

Yugoslavia (Belgrad)
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Fax: +381 11 324 1623

Easy Selection

Specification Chart

All Comp-AC drives come with these standard features:

- Compliance with the EU's EMC and Low Voltage Directives, with effect from the date of publication.
- Manufactured to ISO 9000
- Parameter copy/paste facility in control panels
- Protected against
 - power loss
 - earth fault
 - short circuit
 - overcurrent and voltage
 - overtemperature
 - motor overload

				Mounting Arrangement			Built-in I/O										Comm		
				Wall Mounted	Flange Mounted	DIN Rail Mounted	1 Analogue Input	2 Analogue Inputs	1 Analogue Output	1 - 3 Digital Inputs	1 - 5 Digital Inputs	1 Relay Output	2 Relay Outputs	Profibus	Modbus	CS31	AF 100 (ABB protocol)	Interbus S	DeviceNet
New 1ph , 200V – 240V																			
Power Rating	Height (mm)	Width (mm)	Depth (mm)																
0.12 kW	146	80	149	●	●	●	●	○	○	●	○	●	○		○				
0.18 kW	146	80	149	●	●	●	●	○	○	●	○	●	○		○				
0.25 kW	146	80	149	●	●	●	●	○	○	●	○	●	○		○				
0.37 kW *	146	80	149	●	●	●	●	○	○	●	○	●	○		○				
0.55 kW *	146	80	149	●	●	●	●	○	○	●	○	●	○		○				
0.75kW *	146	80	186	●	●	●	●	○	○	●	○	●	○		○				
1.1kW *	218	80	186	●	●	●	●	○	○	●	○	●	○		○				
1.5kW *	218	80	169	●	●	●	●	○	○	●	○	●	○		○				
2.2kW *	245	80	176	●	●	●	●	○	○	●	○	●	○		○				
3ph, 380V – 480V																			
0.37 kW New	146	80	149	●	●	●	●	●	●	●	●	●	●		○				
0.55 kW New	146	80	149	●	●	●	●	●	●	●	●	●	●		○				
0.75kW New	146	80	186	●	●	●	●	●	●	●	●	●	●		○				
1.1kW New	218	80	186	●	●	●	●	●	●	●	●	●	●		○				
1.5kW New	218	80	169	●	●	●	●	●	●	●	●	●	●		○				
2.2kW New	245	80	176	●	●	●	●	●	●	●	●	●	●		○				
3 – 5.5kW	300	125	209	●	○		●	●	●	●	●	●	●	○	●	○	○	○	○
7.5 – 11kW	400	125	221	●	○		●	●	●	●	●	●	●	○	●	○	○	○	○
15 – 18.5kW	500	203	247	●	○		●	●	●	●	●	●	●	○	●	○	○	○	○
22 – 37kW	600	203	280	●	○		●	●	●	●	●	●	●	○	●	○	○	○	○

* Also available in 3ph, 200V – 240V

Going to extremes to serve you

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Communication Facilities						IP Rating		Features														Control Interface			
Net **	BDCS	CANopen	LonWorks®	IP 20	IP 21	IP 54 (Dimensions, see page 11)	1 – 7 Preset Speeds	Flying Start	PID Control	Factory	ABB Standard	Alternate	Applications Macros				Motorised Potentiometer	Hand/Auto	Pre Magnetise	PFC	Dynamic Braking	Hardwired via I/O (No Panel)	4 Digit Display Panel	30 Character Multilingual Display	PC Control
			●			○	○	○	○	○	○	○	○	○		○	○	●		○					
			●			○	○	○	○	○	○	○	○	○		○	○	●		○					
			●			○	○	○	○	○	○	○	○	○		○	○	●		○					
			●			○	○	○	○	○	○	○	○	○		○	○	●		○					
			●			○	○	○	○	○	○	○	○	○		○	○	●		○					
			●			○	○	○	○	○	○	○	○	○		○	○	●		○					
			●			○	○	○	○	○	○	○	○	○		○	○	●		○					
			●			○	○	○	○	○	○	○	○	○		○	○	●		○					
			●			●	●	●	●	●	●	●	●	●		○	○	●		○					
			●			●	●	●	●	●	●	●	●	●		○	○	●		○					
			●			●	●	●	●	●	●	●	●	●		○	○	●		○					
			●			●	●	●	●	●	●	●	●	●		○	○	●		○					
			●			●	●	●	●	●	●	●	●	●		○	○	●		○					
○	○	○		●	○	●	●	●	●	●	●	●	●	●	●	○	○	○	○	○					
○	○	○		●	○	●	●	●	●	●	●	●	●	●	●	○	○	○	○	○					
○	○	○		●	○	●	●	●	●	●	●	●	●	●	●	○	○	○	○	○					
○	○	○		●	○	●	●	●	●	●	●	●	●	●	●	○	○	○	○	○					

●

 Standard

○

 Options

● Standard

○ Options

Instant Quote / Order Form

It could not be easier. Take your drive specifications from the chart on pages 24-25 and simply enter them on this Comp-AC™ Select form. Then fax or post to us and by return we will give you an instant quotation. Need to order more drives? Photocopy this page and use it again.

Indicate your requirements and leave the rest to us

1 Product order code

If item n:o 1 is used go straight to item n:o 13

2 Option order code

3 Power rating (kW)

Voltage (V)

Phase ☐ Single ☐ Three

4 Quantity

5 Built in I/Os

Analogue Inputs	Analogue Outputs	Digital Inputs	Relay Outputs
☐ 1	☐ 1	☐ 1-3	☐ 1
☐ 2		☐ 1-5	☐ 2

6 Communication facilities

Available only ≥ 3 kW

☐ Profibus	☐ CS 31	☐ CANopen
☐ Modbus (< 3 kW also)	☐ DDCS	☐ LONWORKS
☐ AF 100 (ABB Protocol)	☐ ModBus Plus	☐ FLN/N2
☐ Interbus S	☐ DeviceNet	

7 IP Rating ☐ 20 ☐ 21 (≥ 3 kW only) ☐ 54 (≥ 3 kW only)

8 Special features

☐ Up to 7 preset speeds
☐ Flying start
☐ PID Control
☐ Application macros
☐ Dynamic braking
☐ PFC

9 Location

☐ Residential
☐ Commercial (incl. offices and light industry)
☐ Industrial
Other (e.g. hospital)

10 Control interface

☐ Hardwired via I/O
(Choose one *only* from the following)

☐ 4 digit display panel	Quantity
☐ 30 character multilingual display (≥ 3 kW only)	
☐ PC control	

11 Application

☐ Pump ☐ Fan ☐ Conveyor
Other

12 Application type

☐ Speed Control ☐ Open Loop
☐ Torque Control ☐ Closed Loop

13 ☐ Request for Quotation ☐ Information

Once you have completed this form, fax it for an instant quotation/information to the fax number shown on page 23.

INSTANT QUOTE (for ABB use only)

Thank you for your enquiry, we are pleased to give you the following quote:

Customer	Reference	
Unit price		
Total order cost		
Delivery cost		
Tax		
Total cost		

Once you have received your quotation, please complete the payment section below

Name

Position

Company

Address

Country Postcode

Tel. Fax

Email

14 Instant ordering & payment

I would like to order this drive ☐

Please invoice me ☐ Charge my account ☐

Purchase Order/Account no.

*Please debit my credit card ☐

Visa ☐ Mastercard ☐ Other

Card no.

Expiry Date

Signature Date

*Subject to status

By submitting an order you are agreeing to ABB's Terms and Conditions of Sale (next page)

Terms and Conditions of Sale

Title: Except with respect to licensed software (for which title does not pass; use being licensed), title to the Comp-AC Drives product shall remain in ABB until receipt of full payment.

Warranty: ABB warrants the Comp-AC Drives product (excluding software) against defects in materials and workmanship for a period of twenty-four (24) months after date of purchase. Should any defect appear during this period, return the Comp-AC Drives product for replacement by ABB, replacement shipping paid. Any replacement product may be either new or refurbished, provided that it shall meet the published specifications' functionality of the returned Comp-AC Drives product.

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