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ПРОМЫШЛЕННЫЕ ПРИВОДЫ

Техническое описание на преобразователи ACS800-104



Inverter module hardware

The ACS800-104 range of inverter modules contains components for building the inverter unit(s) of a common DC bus system drive.

The chapter *ACS800-104 ordering information* lists the order codes of the inverter module components. See also the *Dimensional drawings* for dimensions of the modules and related equipment.

The section *Control interfaces* below shows the available control and I/O options.

The ACS800-104 inverter modules have coated circuit boards as standard. A Prevention of Unexpected Start feature is optionally available, consisting of a built-in AGPS board.

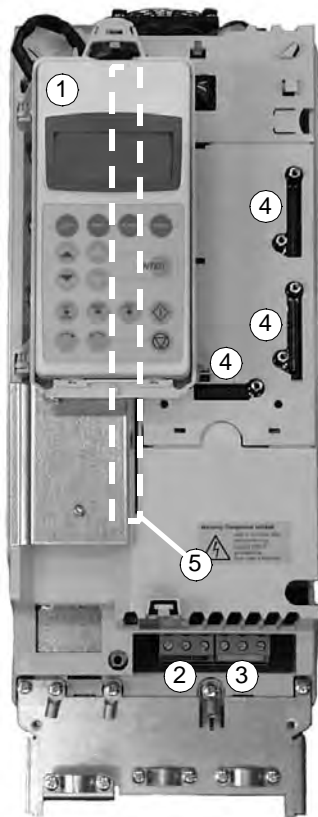
Frames R2i to R5i

The DC input and motor output cables are connected to screw terminal blocks at the bottom of the module, covered by a metal housing.

Frame R2i to R5i modules do not require an external charging circuit.

External du/dt filters are available; see the chapter *ACS800-104 ordering information*.

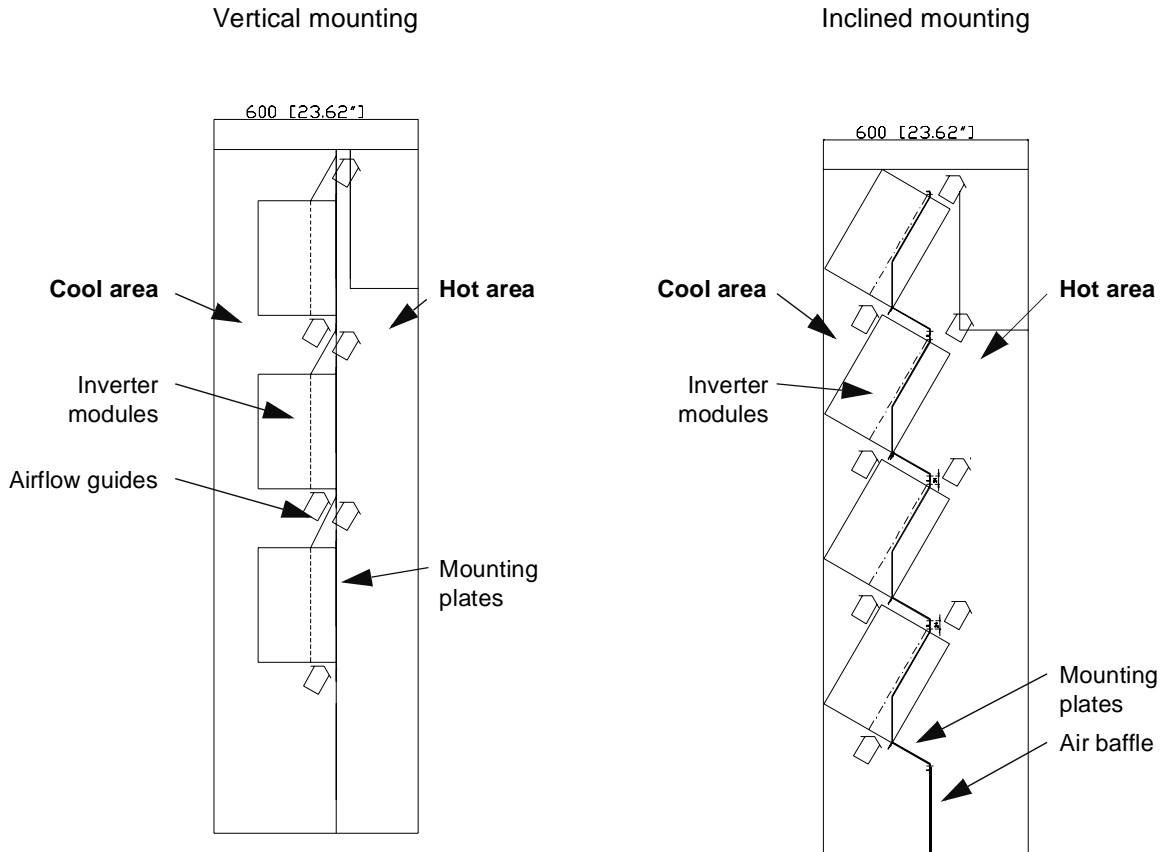
Module layout (Frame size R3i pictured)



Item	Explanation
1	Control panel mounting platform and CDP 312R control panel (optional). Can be turned aside.
2	DC (input) connections
3	Motor (output) connection
4	Slots for optional I/O modules
5	I/O terminal blocks on RMIO (obscured)

Cabinet layout

Several modules can be installed in one cubicle. The modules can be mounted vertically, or in a slightly inclined position to save more vertical space. See the chapter *Cabinet construction*. Drawings of mounting accessories for both vertical and inclined mounting, suitable for common cabinet systems, are shown under *Dimensional drawings*. (The plates for inclined mounting can be ordered from ABB.)



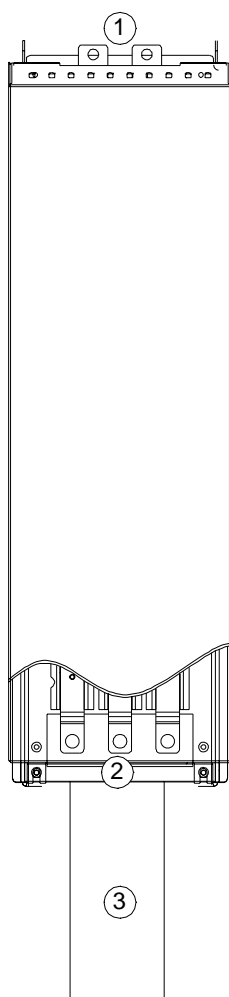
Frames R6i and R7i

Frame R6i and R7i modules have the DC input connection at the top of the module, while the AC connection is at the bottom. The DC voltage is connected to the input busbars either through fuses only or through a switch fuse with charging control circuitry.

The drive control unit (type RDCU) containing the RMIO board is to be installed separately.

The modules require an external cooling fan that has to be supplied from 230 V or 115 V AC auxiliary voltage. For attaching the fan to the module, mounting plate 64138375 is recommended; alternatively, a combined mounting plate/air baffle can be constructed.

Module layout

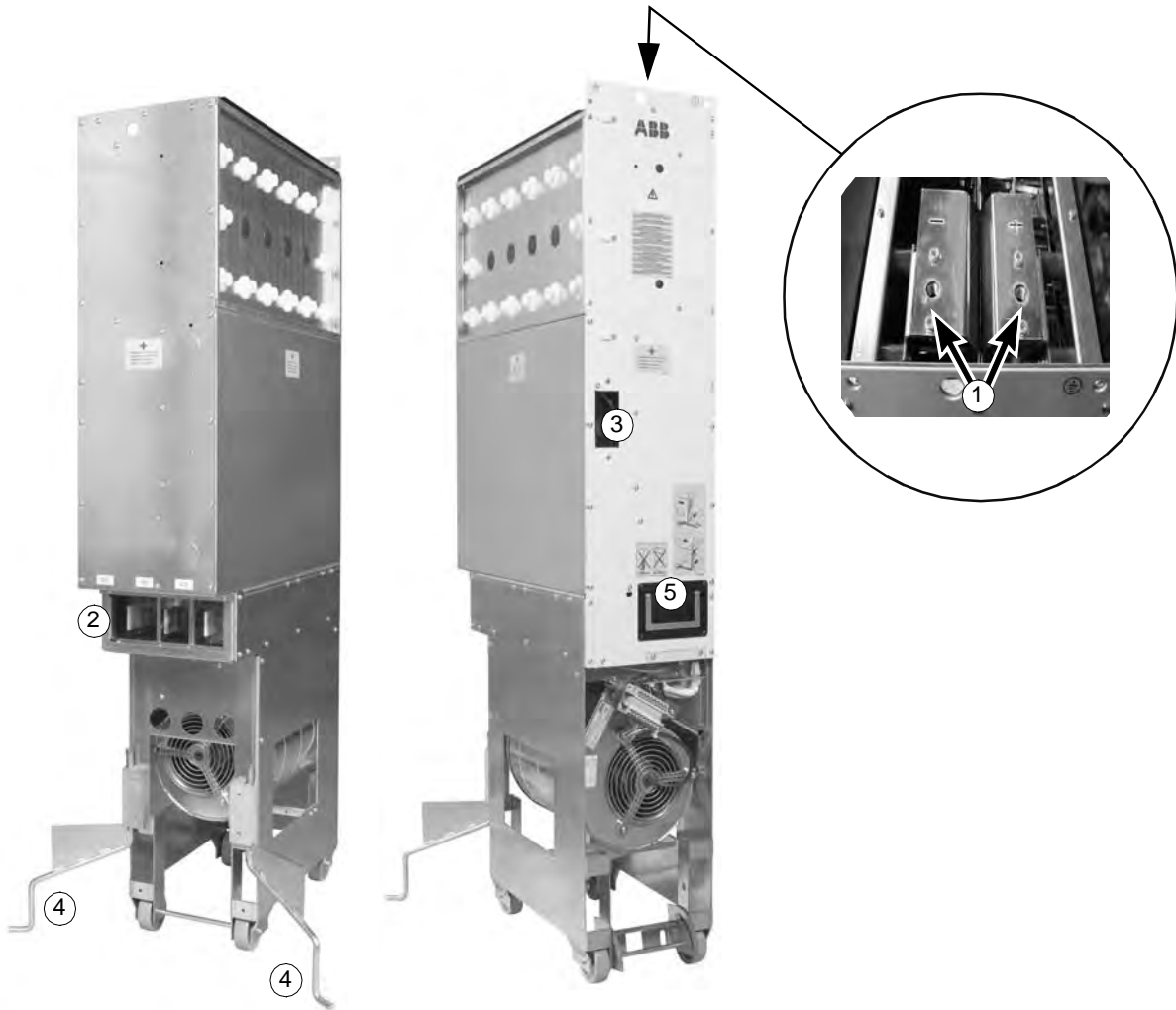


Item	Explanation
1	DC (input) connections
2	Motor (output) connection
3	Cooling fan

Cabinet layout

See the chapter *Cabinet construction*.

Module layout



Item	Explanation
1	DC (input) connections
2	Output busbars. To be aligned with the quick connector socket mounted in the cubicle. Direct connection of cables without using the quick connector is also possible.
3	Fibre optic connectors of the AINT board. Connected to the RDCU drive control unit (via an NPBU branching unit in case of parallel inverter modules).
4	Retractable support legs
5	Handle

Type code

Each module has a type designation label attached, containing e.g. the type code of the unit. The type code contains information on the specifications and configuration of the unit.

- The first 17 digits form the basic code. It describes the basic construction of the unit. The fields in the basic code are separated with hyphens.
- The option codes follow the basic code. Each option code starts with an identifying letter (common for the whole product series), followed by descriptive digits. The option codes are separated by plus signs.

The main selections are described below. Not all options are necessarily available for all types. For more information, contact your local ABB representative.

Basic code

Digit no.	Name/Description	Alternatives	Description
1...6	Product series	ACS800	
8...10	Construction	104	Inverter module
12...14	Size	0003 and up	3 kVA and up
16	Voltage rating	3	380/400/415 V. Nominal voltage: 400 V.
		5	380/400/415/440/460/480/500 V. Nominal voltage: 500 V.
		7	525/575/600/660/690 V. Nominal voltage: 690 V.

Option codes

Ident. letter	Name/Description	Alternatives	Description
C		C126	Speed-controlled cooling fan supplied from the DC bus. Frame R8i only.
E	Filters	E205	Internal output (du/dt) filters. Frame R8i only.
P	Protection class	P901	Coated circuit boards. This feature is standard.
Q	Safety features	Q950	Prevention of unexpected start (built-in AGPS board).

ACS800-104 ordering information

What this chapter contains

This chapter lists the components and accessories specific to the ACS800-104 inverter module range.

See the *ACS800 Product Reference* (3AFE 64813340 [English]) for generic equipment for the ACS 800 product family such as control panels, I/O options, application programs and PC tools.

Inverter modules

The following tables list the ACS800-104 inverter modules available.

Notes:

- The application program for the modules must be specified when ordering
- Control panel (CDP 312R) is not included
- Frame R6i and R7i modules require an external fan
- The modules have coated circuit boards as standard equipment.

Frame sizes R2i to R7i

Option key: **+Q950**: Prevention of unexpected start (for more information, see the document *ACS 800 MultiDrive; Planning the Electrical Installation* [3AFE 64783742, English]).

<i>Inverter modules (R2i to R7i)</i>				
ACS800-104 type	Frame size	$P_{\text{cont.max}}$ (kW)	Order code	
			(no options)	+Q950
$U_N = 400 \text{ V (380/400/415 V)}$				
ACS800-104-0003-3	R2i	1.5	64685724	64741730
ACS800-104-0004-3	R2i	2.2	64704338	64751972
ACS800-104-0005-3	R2i	3	64704346	64751999
ACS800-104-0006-3	R2i	4	64704354	64752162
ACS800-104-0009-3	R2i	5.5	64704362	64752243
ACS800-104-0011-3	R3i	7.5	64702262	64752464
ACS800-104-0016-3	R3i	11	64704478	64752529
ACS800-104-0020-3	R3i	15	64704486	64752723
ACS800-104-0025-3	R4i	22	64702271	64752812
ACS800-104-0030-3	R4i	30	64704524	64752855
ACS800-104-0040-3	R5i	37	64702246	64759833
ACS800-104-0050-3	R5i	45	64702254	64759922
ACS800-104-0060-3	R5i	55	64704320	64759965
ACS800-104-0100-3	R7i	75	68253390	68260400
ACS800-104-0120-3	R7i	90	68253411	68260418
$U_N = 500 \text{ V (380/400/415/440/460/480/500 V)}$				
ACS800-104-0004-5	R2i	2.2	64704419	64752065

Inverter modules (R2i to R7i)				
ACS800-104 type	Frame size	$P_{\text{cont.max}}$ (kW)	Order code	
			(no options)	+Q950
ACS800-104-0005-5	R2i	3	64704427	64752111
ACS800-104-0006-5	R2i	4	64704435	64752146
ACS800-104-0009-5	R2i	5.5	64704443	64752201
ACS800-104-0011-5	R2i	7.5	64704451	64752278
ACS800-104-0016-5	R3i	11	64704494	64752626
ACS800-104-0020-5	R3i	15	64704508	64752707
ACS800-104-0025-5	R3i	18.5	64704516	64752758
ACS800-104-0030-5	R4i	22	64704532	64752839
ACS800-104-0040-5	R4i	30	64704541	64752863
ACS800-104-0050-5	R5i	37	64704567	64759990
ACS800-104-0060-5	R5i	45	64704583	64760033
ACS800-104-0070-5	R5i	55	64704591	64760041
ACS800-104-0100-5	R6i	75	68260434	68260469
ACS800-104-0120-5	R7i	90	68260442	68260477
ACS800-104-0140-5	R7i	110	68260451	68260493
$U_N = 690 \text{ V (525/575/600/660/690 V)}$				
ACS800-104-0011-7	R4i	11	64771116	64772473
ACS800-104-0016-7	R4i	15	64772074	64772481
ACS800-104-0020-7	R4i	18.5	64772082	64772490
ACS800-104-0025-7	R4i	22	64772091	64772503
ACS800-104-0030-7	R4i	30	64772104	64772511
ACS800-104-0040-7	R4i	30	64772171	64772520
ACS800-104-0050-7	R5i	45	64772325	64772538
ACS800-104-0060-7	R5i	55	64772376	64772546
ACS800-104-0070-7	R6i	55	68260515	68260540
ACS800-104-0100-7	R7i	75	68260523	68260558
ACS800-104-0120-7	R7i	90	68260531	68260566

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Frame size R8i and multiples

Multiple R8i inverter modules can be connected in parallel to produce higher output powers. The table below shows the quantity and order code of inverter modules required for each inverter unit.

Option key:

+C126: Speed-controlled cooling fan supplied from the DC bus

+E205: du/dt filtering (required for 690 V modules, and parallel-connected modules)

+Q950: Prevention of unexpected start (factory-installed in parallel-connected modules) (for more information, see the document *ACS800 MultiDrive; Planning the Electrical Installation* [3AFE 64783742, English]).

<i>Inverter modules (R8i and multiples)</i>											
Inverter unit type	Order code									Consists of modules of type...	
ACS800-104...	Qty	no options	+C126	+E205	+Q950	+C126 +E205	+C126 +Q950	+E205 +Q950	+C126 +E205 +Q950	Qty	ACS800-104-...
<i>U_N = 400 V</i>											
0170-3	1	68262194	68260906	68262330	68262283	68260949	68260922	68262445	68260965	1	0170-3
0210-3	1	68262208	68260914	68262356	68262291	68260957	68260931	68262526	68260973	1	0210-3
0260-3	1	68262224	68259231	68262364	68262305	68259746	68259762	68262551	68259754	1	0260-3
0320-3	1	68262232	64766058	68262411	68262313	64766121	64766139	68262577	64766031	1	0320-3
0390-3	1	64694383	64793969	64694367	64694375	64793985	64794001	64694332	64793993	1	0390-3
0510-3	1	64694324	64794019	64694294	64694308	64792580	64794051	64694286	64792598	1	0510-3
0770-3	1	–	–	–	–	–	–	68259410	68259436	2	0390-3
1030-3	1	–	–	–	–	–	–	68259461	68259487	2	0510-3
1540-3	1	–	–	–	–	–	–	68259941	68259975	3	0510-3
2050-3	1	–	–	–	–	–	–	68260027	68260051	4	0510-3
<i>U_N = 500 V</i>											
0210-5	1	68263531	68260981	68263689	68263611	68261023	68261007	68263751	68261040	1	0210-5
0260-5	1	68263565	68260990	68263697	68263620	68261031	68261015	68263760	68261066	1	0260-5
0320-5	1	68263581	68259258	68263719	68263638	68259703	68259738	68263816	68259720	1	0320-5
0400-5	1	68263590	64766252	68263727	68263646	64766244	64766236	68263824	64766201	1	0400-5
0460-5	1	64694197	64794124	64650289	64694189	64794159	64794183	64650297	64794167	1	0460-5
0610-5	1	64694162	64794191	64650301	64694154	64794205	64794221	64650319	64794213	1	0610-5
0910-5	1	–	–	–	–	–	–	68260116	68260132	2	0460-5
1210-5	1	–	–	–	–	–	–	68260574	68260591	2	0610-5
1820-5	1	–	–	–	–	–	–	68260612	68260647	3	0610-5
2430-5	1	–	–	–	–	–	–	68260655	68260671	4	0610-5
<i>U_N = 690 V</i>											
0210-7	1	–	–	68263841	–	68261074	–	68263921	68261091	1	0210-7
0260-7	1	–	–	68263859	–	68259665	–	68263930	68259681	1	0260-7
0320-7	1	–	–	68263875	–	68261082	–	68263956	68261104	1	0320-7
0400-7	1	–	–	68263883	–	64766406	–	68263972	64766309	1	0400-7
0440-7	1	–	–	64650327	–	64793918	–	64650335	64793926	1	0440-7
0580-7	1	–	–	64650343	–	64792571	–	64650351	64794086	1	0580-7
0870-7	1	–	–	–	–	–	–	68260728	68261155	2	0440-7
1160-7	1	–	–	–	–	–	–	68261163	68261198	2	0580-7
1740-7	1	–	–	–	–	–	–	68261201	68261210	3	0580-7
2320-7	1	–	–	–	–	–	–	68261228	68261236	4	0580-7

DC fuses and fuse bases; DC switch fuses

The inverter unit can be connected to the DC bus through either fuses only or a switch fuse. See the chapter *Circuit diagrams*.

Fitting a switch fuse enables the isolation and reconnection of an inverter module even when the DC bus is energised. On the other hand, an external circuit is required for controlled charging of the capacitor bank of the module when the switch fuse is closed. For frame R2i to R5i inverter modules, only the DC fuses are required in addition to the switch fuse kit since the modules contain an internal charging circuit. R6i, R7i and R8i (and multiples) inverter units require the switch fuse kit, DC fuses, and fuses for the charging circuit.

The tables below specify the DC fuses, DC fuse bases, switch fuse kits, and charging circuit fuses for the ACS800-104 inverter units.

DC fuses and fuse bases/Switch fuse kits for inverter modules										
Module type ACS800-104-...	DC fuse				DC fuse base				Switch fuse kit (see below)	
	Qty	Type	Info	Order code	Qty	Type	Info	Order code	Qty	Order code
0003-3 0004-5 0004-3 0005-5 0005-3 0006-5 0006-3 0009-5 0009-3 0011-5	2	170M 1561	25A 660V	10028566	1	OFAX 00S2L	2x125A 690V	58065749	1	64089650
0011-3 0016-5 0016-3 0020-5	2	170M 1564	50A 660V	09838767	1	OFAX 00S2L	2x125A 690V	58065749	1	64089650
0020-3 0025-5 0025-3 0030-5	2	170M 1566	80A 660V	09838791	1	OFAX 00S2L	2x125A 690V	58065749	1	64089650
0030-3 0040-5 0040-3 0050-5 0050-3 0060-5	2	170M 1569	160A 660V	10003521	1	OFAX 00S2L	2x125A 690V	58065749	1	64089650
0060-3 0070-5	2	170M 1570	200A 660V	10003539	1	OFAX 00S2L	2x125A 690V	58065749	1	64089650
0100-5	2	170M 1570	200A 660V	10003539	1	OFAX 00S2L	2x125A 690V	58065749	1	64089561
0100-3 0120-5 0120-3 0140-5	2	170M 3818	350A 660V	10028582	1	OFAX 1S2	2x250A 690V	10029082	1	64349619 (230V) 64349627 (115V)
0170-3 0210-5 0210-3 0260-5 0260-3 0320-5 0320-3 0400-5	2	170M 8545	800A 690V	64786423	2	OFASA 3	630A 690V	35009841	1	64808796
0390-3 0460-5	2	170M 8547	1250A 690V	64786512	2	OFASA 3	630A 690V	35009841	1	64808796
0510-3 0610-5	2	170M 8550	1600A 690V	64673734	2	OFASA 3	630A 690V	35009841	1	64808796
0770-3 0910-5	4	170M 8547	1250A 690V	64786512	4	OFASA 3	630A 690V	35009841	1	64808800
1030-3 1210-5	4	170M 8550	1600A 690V	64673734	4	OFASA 3	630A 690V	35009841	1	64808800
1540-3 1820-5	6	170M 8550	1600A 690V	64673734	6	OFASA 3	630A 690V	35009841	1	64808826
2050-3 2430-5	8	170M 8550	1600A 690V	64673734	8	OFASA 3	630A 690V	35009841	2	64808800
0011-7	2	170M 2674	25A 1000V	10032041	1	OFAX 00S2L	2x125A 690V	58065749	1	64089650
0016-7 0020-7	2	170M 2676	35A 1000V	10033250	1	OFAX 00S2L	2x125A 690V	58065749	1	64089650
0025-7 0030-7	2	170M 2679	63A 1000V	10029791	1	OFAX 00S2L	2x125A 690V	58065749	1	64089650
0040-7 0050-7	2	170M 2680	80A 1000V	10029805	1	OFAX 00S2L	2x125A 690V	58065749	1	64089650

DC fuses and fuse bases/Switch fuse kits for inverter modules										
Module type ACS800-104-...	DC fuse				DC fuse base				Switch fuse kit (see below)	
	Qty	Type	Info	Order code	Qty	Type	Info	Order code	Qty	Order code
0060-7	2	170M 2682	125A 1000V	10029813	1	OFAX 00S2L	2x125A 690V	58065749	1	64089650
0070-7	2	170M 2682	125A 1000V	10029813	1	OFAX 00S2L	2x125A 690V	58065749	1	64089684
0100-7 0120-7	2	170M 4700	200A 1000V	10001731	1	OFAX 1S2	2x250A 690V	10029082	1	64349643 (230V) 64349651 (115V)
0210-7 0260-7 0320-7 0400-7	2	170M 6205	630A 1000V	10001773	2	OFASA 3	630A 690V	35009841	1	64808796
0440-7	2	170M 6203	800A 1250V	10029881	2	OFASA 3	630A 690V	35009841	1	64808842
0580-7	2	170M 8650	1000A 1000V	64673769	2	OFASA 3	630A 690V	35009841	1	64808842
0870-7	4	170M 6203	800A 1250V	10029881	4	OFASA 3	630A 690V	35009841	1	64808851
1160-7	4	170M 8650	1000A 1000V	64673769	4	OFASA 3	630A 690V	35009841	1	64808851
1740-7	6	170M 8650	1000A 1000V	64673769	6	OFASA 3	630A 690V	35009841	1	64808877
2320-7	8	170M 8650	1000A 1000V	64673769	8	OFASA 3	630A 690V	35009841	2	64808851

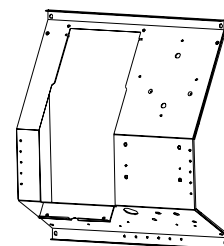
Switch fuse kit contents	
Order code	Kit contents
64089561	1-Switch Fuse (OESA00-160D2PL) • 1-Mounting Frame for 4 aux. contacts • 4-Aux. Contact (2-NO, 1-NO gold-plated, 1-NC) • 1-Resistor (ZRF 30x167,5) • 1-Contactor (LP1-D501124) • 1-Relay, 11-pole • 1-Relay Socket
64089650	1-Switch Fuse (OESA00-160D2PL) • 1-Mounting Frame for 4 aux. contacts • 4-Aux. Contact (2-NO, 1-NO gold-plated, 1-NC)
64089684	1-Switch Fuse (OESA00D2PL) • 1-Mounting Frame for 4 aux. contacts • 4-Aux. Contact (2-NO, 1-NO gold-plated, 1-NC) • 2-Resistor (ZRF 30x165) • 1-Contactor (BC 25-30-10/24) • 1-Relay, 11-pole • -Relay Socket
64349619	1-Switch Fuse (OESA250DR2PL-21/1, including: locking device, charging contacts, 1-NC contact, 1-NO contact) • 1-Aux. Contact (OZXK 2, including: 2-NC contact, 2-NO contact) • 2-Resistor (ZRF 30x167,5) • 1-Charging Monitoring Unit (NCHM-21C) • 1-Wire Set, OESA control wiring
64349627	1-Switch Fuse (OESA250DR2PL-X, including: locking device, charging contacts, 1-NC contact, 1-NO contact) • 1-Aux. Contact (OZXK 2, including: 2-NC contact, 2-NO contact) • 2-Resistor (ZRF 30x167,5) • 1-Charging Monitoring Unit (NCHM-11C) • 1-Wire Set, OESA control wiring
64349643	1-Switch Fuse (OESA250DR2PL-21/1, including: locking device, charging contacts, 1-NC contact, 1-NO contact) • 1-Aux. Contact (OZXK 2, including: 2-NC contact, 2-NO contact) • 2-Resistor (ZRF 30x165) • 1-Charging Monitoring Unit (NCHM-21C) • 1-Wire Set, OESA control wiring
64349651	1-Switch Fuse (OESA250DR2PL-X, including: locking device, charging contacts, 1-NC contact, 1-NO contact) • 1-Aux. Contact (OZXK 2, including: 2-NC contact, 2-NO contact) • 2-Resistor (ZRF 30x165) • 1-Charging Monitoring Unit (NCHM-11C) • 1-Wire Set, OESA control wiring
64808796	1-Switch Fuse (OESL630/32D02) • 2-Resistor (ZRF 30x167,5) • 1-Switch fuse controller (ASFC-01C)
64808800	1-Switch Fuse (OESL630/32D04) • 4-Resistor (ZRF 30x167,5) • 1-Switch fuse controller (ASFC-01C)
64808826	1-Switch Fuse (OESL630/32D06) • 6-Resistor (ZRF 30x167,5) • 1-Switch fuse controller (ASFC-01C)
64808842	1-Switch Fuse (OESL630/32D02) • 2-Resistor (ZRF 30x165) • 1-Switch fuse controller (ASFC-01C)
64808851	1-Switch Fuse (OESL630/32D04) • 4-Resistor (ZRF 30x165) • 1-Switch fuse controller (ASFC-01C)
64808877	1-Switch Fuse (OESL630/32D06) • 6-Resistor (ZRF 30x165) • 1-Switch fuse controller (ASFC-01C)

Charging circuit fuses for inverter modules								
Module type ACS800-104-...	Fuse				Fuse base			
	Qty	Type	Info	Order code	Qty	Type	Info	Order code
0100-3 0100-5 0120-3 0120-5 0140-5	2	170M 1564	50A 660V	09838767	1	OFAX 00S2L	2x125A 690V	58065749
0170-3 0210-5 0070-7 0210-3 0260-5 0100-7 0260-3 0320-5 0120-7 0320-3 0400-5 0210-7 0260-7 0320-7 0400-7 0440-7 0580-7 0870-7 1160-7 1740-7	2	170M 2690	10A 1000V	10032601	1	OFAX 00S2L	2x125A 690V	58065749
0390-3 0460-5 0510-3 0610-5 0770-3 0910-5 1030-3 1210-5 1540-3 1820-5	2	170M 1564	50A 660V	09838767	1	OFAX 00S2L	2x125A 690V	58065749
2050-3 2430-5	4	170M 1564	50A 660V	09838767	2	OFAX 00S2L	2x125A 690V	58065749
2320-7	4	170M 2690	10A 1000V	10032601	2	OFAX 00S2L	2x125A 690V	58065749

Inclined mounting plates for R2i to R5i modules

Ready-made mounting plates for inclined mounting of frame R2i to R5i inverter modules – as exemplified in the chapter *Cabinet construction* – are available. The designs are also shown in *Dimensional drawings*.

<i>Inclined mounting plates for R2i to R5i modules</i>	
Frame size	Order code
R2i	64739328
R3i	64739174
R4i	64739344
R5i	64739352



64739328

Cooling fans for R6i and R7i modules

Frame R6i and R7i inverter modules require an external cooling fan that is to be fed from the 230/115 V AC auxiliary voltage source. There are two types available depending on the voltage.

The inverter module and the cooling fan are connected by either the mounting plate listed below (#64138375; a separate air baffle required) or a combined air baffle/mounting plate. Both mounting plates are shown in *Dimensional drawings*.

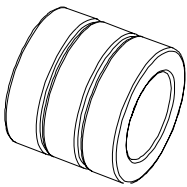
<i>Cooling fans for R6i and R7i modules</i>		
Kit	Information	Order code
Fan (230 VAC)	Fan type: G2E140-P151-09. Connection cable length: 1.5 m (5 ft).	64114158
Fan (115 VAC)	Fan type: G2E140-AI32-ABB. Connection cable length: 1.5 m (5 ft).	64114191
Mounting plate	Use a separate air baffle.	64138375

Common mode filters for R6i to R8i modules

Common mode filtering reduces bearing currents and is required for electromagnetic compatibility (EMC). The filtering is implemented by using toroids.

With R6i and R7i modules, the toroids are installed on the output (motor) cable according to the instructions given in *Electrical installation*, section *Power connections – Frames R6i and R7i*.

With R8i modules, common mode filtering is implemented by installing three toroidal cores onto the DC input of each module. The DC busbar sets listed later in this chapter contain holders for the common mode filters.

<i>Common mode filters for R6i to R8i modules</i>			
Kit	Contents	Quantity	Order code
Common mode filter kit		1 kit per inverter module	64315811

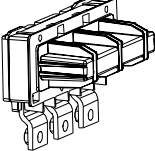
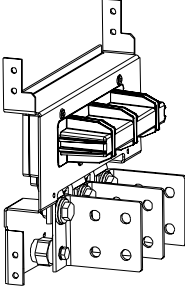
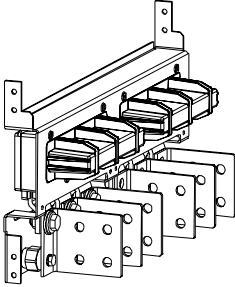
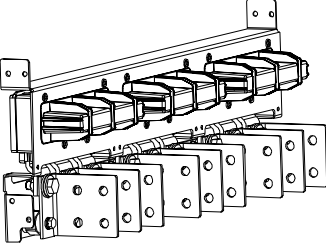
Installation parts for R8i modules

The following tables list the R8i installation parts available from ABB.

Also refer to the drawings in the chapters *Cabinet construction* and *Dimensional drawings*.

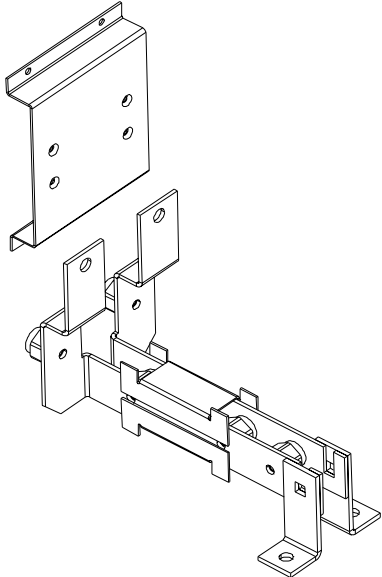
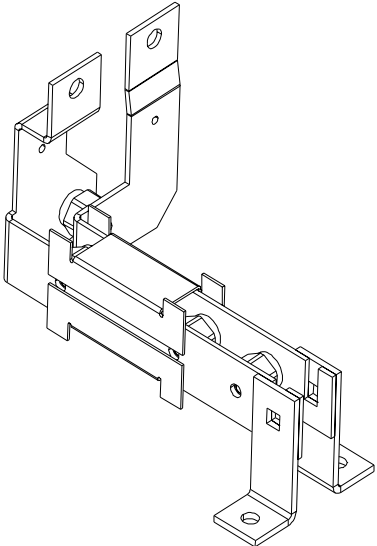
Quick connector chassis socket kits

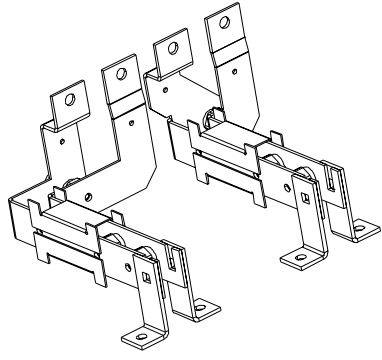
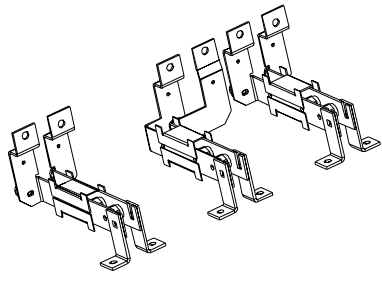
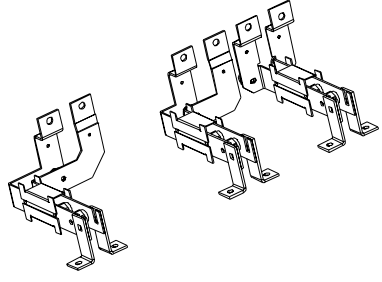
The chassis socket part of the quick connector is to be mounted on the rear pillars of the cubicle. The socket can also be mounted on the back plate.

Quick connector kits for R8i modules			
Kit	For...	Contents of 1 kit	Order code
Connector only	Single R8i module	1 pc Quick connector 	64698401
Connector with mounting parts and output busbars	Single R8i module	1 pc Quick connector 1 pc Mounting plate 3 pcs Output busbar 3 pcs Support insulator 	68239427
	Two R8i modules side by side	2 pcs Quick connector 1 pc Mounting plate 6 pcs Output busbar 6 pcs Support insulator 	68239435
	Three R8i modules side by side	3 pcs Quick connector 1 pc Mounting plate 9 pcs Output busbar 9 pcs Support insulator 	68242231
	1 + 2 R8i modules	68239427 + 68239435	68260744

DC busbar kits

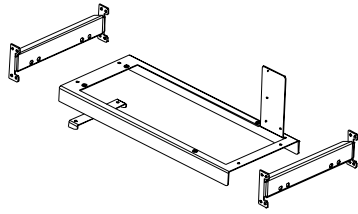
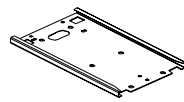
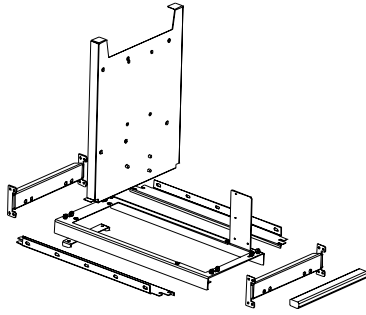
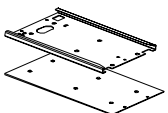
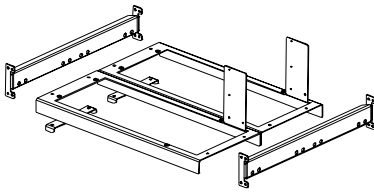
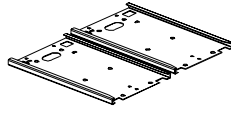
These kits contain the parts needed to connect the DC busbars of the inverter module and the DC switch fuse or DC fuses. The common mode filters (optionally available) are to be installed on the DC busbars.

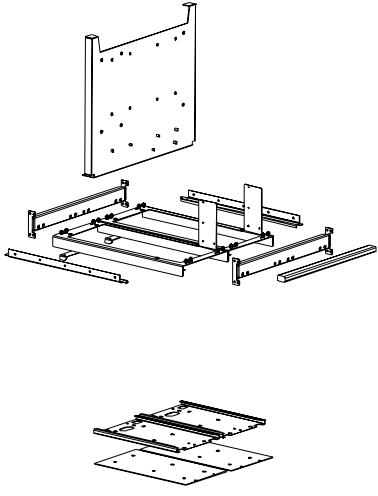
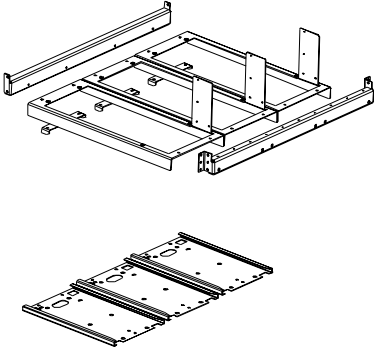
DC busbar kits for R8i modules			
Kit	For...	Contents of 1 kit	Order code
Connecting busbars from fuse bases to DC input of module	Single R8i module	4 pcs Busbar 2 pcs Holder for common mode filters 5 pcs Support insulator 1 pc Mounting plate for fuse bases 	64806823
Connecting busbars from switch fuse (OESL) to DC input of module	Single R8i module (2-pole switch fuse)	4 pcs Busbar 2 pcs Holder for common mode filters 5 pcs Support insulator 	68256747

DC busbar kits for R8i modules			
Kit	For...	Contents of 1 kit	Order code
Connecting busbars from switch fuse (OESL) to DC input of module	Two R8i modules side by side (4-pole switch fuse)	8 pcs Busbar 4 pcs Holder for common mode filters 8 pcs Support insulator 	68256771
	Three R8i modules side by side (6-pole switch fuse)	12 pcs Busbar 6 pcs Holder for common mode filters 15 pcs Support insulator 	68256780
	1 + 2 R8i modules in adjacent Rittal TS 8 cubicles (6-pole switch fuse)	12 pcs Busbar 6 pcs Holder for common mode filters 15 pcs Support insulator 	68260752

Upper and lower guides

These parts guide the top and bottom of the module when it is being inserted into the cubicle.

Guiding parts kits for R8i modules		
For...	Contents of 1 kit	Order code
Single R8i module	<p>1 pc Lower guide 1 pc Upper guide 1 pc Upper guide, rear 2 pcs Crossmember</p>  	68256836
Single R8i module in Rittal TS 8 cubicle	<p>Kit #68256836 and 1 pc Floor plate 1 pc Mounting plate 2 pcs Air baffle 1 pcs EMC sealing, conductive (comes in 2 pieces)</p>  	68283027
Two R8i modules side by side	<p>2 pcs Lower guide 2 pcs Upper guide 2 pcs Upper guide, rear 2 pcs Crossmember</p>  	68259517

Guiding parts kits for R8i modules		
For...	Contents of 1 kit	Order code
Two R8i modules in a Rittal TS 8 cubicle	Kit #68259517 and 2 pcs Floor plate 1 pc Mounting plate 2 pcs Air baffle 1 pcs EMC sealing, conductive (comes in 3 pieces) 	68283035
Three R8i modules side by side	3 pcs Lower guide 3 pcs Upper guide 3 pcs Upper guide, rear 1 pcs Crossmember, front 1 pcs Crossmember, rear 	68259541
1 + 2 R8i modules in adjacent Rittal TS 8 cubicles	68283027 + 68283035	68260833

Technical data

What this chapter contains

This chapter contains the technical data for the ACS800-104 inverter modules and associated optional equipment.

IEC ratings

Frame R2i to R7i

Inverter module type	Frame size	Nominal ratings		No-overload use	Light-overload use		Heavy-duty use	
		$I_{\text{cont,max}}$ A	I_{max} A	$P_{\text{cont,max}}$ kW	I_{2N} A	P_N kW	$I_{2\text{hd}}$ A	P_{hd} kW
$U_N = 400 \text{ V}$								
ACS800-104-0003-3	R2i	5.1	6.5	1.5	4.7	1.5	3.4	1.1
ACS800-104-0004-3	R2i	6.5	8.2	2.2	5.9	2.2	4.3	1.5
ACS800-104-0005-3	R2i	8.5	10.8	3	7.7	3.0	5.7	2.2
ACS800-104-0006-3	R2i	10.9	13.8	4	10.2	4.0	7.5	3.0
ACS800-104-0009-3	R2i	13.9	17.6	5.5	12.7	5.5	9.3	4.0
ACS800-104-0011-3	R3i	19	24	7.5	18	7.5	14	5.5
ACS800-104-0016-3	R3i	25	32	11	24	11	19	7.5
ACS800-104-0020-3	R3i	34	46	15	31	15	23	11
ACS800-104-0025-3	R4i	44	62	22	41	18.5	32	15
ACS800-104-0030-3	R4i	55	72	30	50	22	37	18.5
ACS800-104-0040-3	R5i	72	86	37	69	30	49	22
ACS800-104-0050-3	R5i	86	112	45	80	37	60	30
ACS800-104-0060-3	R5i	103	138	55	94	45	69	37
ACS800-104-0100-3	R7i	147	224	75	141	75	112	55
ACS800-104-0120-3	R7i	178	294	90	171	90	147	75
$U_N = 500 \text{ V}$								
ACS800-104-0004-5	R2i	4.9	6.5	2.2	4.5	2.2	3.4	1.5
ACS800-104-0005-5	R2i	6.2	8.2	3	5.6	3.0	4.2	2.2
ACS800-104-0006-5	R2i	8.1	10.8	4	7.7	4.0	5.6	3.0
ACS800-104-0009-5	R2i	10.5	13.8	5.5	10.0	5.5	7.5	4.0
ACS800-104-0011-5	R2i	13.2	17.6	7.5	12.0	7.5	9.2	5.5
ACS800-104-0016-5	R3i	19	24	11	18	11	13	7.5
ACS800-104-0020-5	R3i	25	32	15	23	15	18	11
ACS800-104-0025-5	R3i	34	46	18.5	31	18.5	23	15
ACS800-104-0030-5	R4i	42	62	22	39	22	32	18.5
ACS800-104-0040-5	R4i	48	72	30	44	30	36	22
ACS800-104-0050-5	R5i	65	86	37	61	37	50	30
ACS800-104-0060-5	R5i	79	112	45	75	45	60	37
ACS800-104-0070-5	R5i	96	138	55	88	55	69	45
ACS800-104-0100-5	R6i	112	168	75	108	75	84	55
ACS800-104-0120-5	R7i	135	224	90	130	90	112	75
ACS800-104-0140-5	R7i	164	270	110	157	110	135	90
$U_N = 690 \text{ V}$								
ACS800-104-0011-7	R4i	13	14	11	11.5	7.5	8.5	5.5

Inverter module type	Frame size	Nominal ratings		No-overload use	Light-overload use		Heavy-duty use	
		$I_{cont,max}$ A	I_{max} A	$P_{cont,max}$ kW	I_{2N} A	P_N kW	I_{2hd} A	P_{hd} kW
ACS800-104-0016-7	R4i	17	19	15	15	11	11	7.5
ACS800-104-0020-7	R4i	22	28	18.5	20	15	15	11
ACS800-104-0025-7	R4i	25	38	22	23	18.5	19	15
ACS800-104-0030-7	R4i	33	44	30	30	22	22	18.5
ACS800-104-0040-7	R4i	36	54	30	34	30	27	22
ACS800-104-0050-7	R5i	51	68	45	46	37	34	30
ACS800-104-0060-7	R5i	57	84	55	52	45	42	37
ACS800-104-0070-7	R6i	65	104	55	62	55	52	45
ACS800-104-0100-7	R7i	88	130	75	84	75	65	55
ACS800-104-0120-7	R7i	105	176	90	101	90	88	75

Frame R8i and multiples

Inverter unit type	Frame size	Inverter modules used	Nominal ratings		No-overload use	Light-overload use		Heavy-duty use	
			$I_{cont,max}$ A	I_{max} A	$P_{cont,max}$ kW	I_{2N} A	P_N kW	I_{2hd} A	P_{hd} kW
$U_N = 400\text{ V}$									
ACS800-104-0170-3	1xR8i	ACS800-104-0170-3	250	342	132	240	110	187	90
ACS800-104-0210-3	1xR8i	ACS800-104-0210-3	292	400	160	280	132	218	110
ACS800-104-0260-3	1xR8i	ACS800-104-0260-3	370	506	200	355	200	277	132
ACS800-104-0320-3	1xR8i	ACS800-104-0320-3	469	642	250	450	250	351	200
ACS800-104-0390-3	1xR8i	ACS800-104-0390-3	565	773	315	542	300	423	220
ACS800-104-0510-3	1xR8i	ACS800-104-0510-3	741	1014	400	711	400	554	315
ACS800-104-0770-3	2xR8i	ACS800-104-0390-3	1111	1521	630	1067	560	831	450
ACS800-104-1030-3	2xR8i	ACS800-104-0510-3	1452	1988	900	1394	710	1086	560
ACS800-104-1540-3	3xR8i	ACS800-104-0510-3	2156	2951	1250	2070	1120	1613	900
ACS800-104-2050-3	4xR8i	ACS800-104-0510-3	2845	3894	1600	2731	1600	2128	1120
$U_N = 500\text{ V}$									
ACS800-104-0210-5	1xR8i	ACS800-104-0210-5	250	363	160	240	160	187	110
ACS800-104-0260-5	1xR8i	ACS800-104-0260-5	315	457	200	302	200	236	132
ACS800-104-0320-5	1xR8i	ACS800-104-0320-5	365	530	250	350	250	273	160
ACS800-104-0400-5	1xR8i	ACS800-104-0400-5	455	660	315	437	315	340	200
ACS800-104-0460-5	1xR8i	ACS800-104-0460-5	525	762	355	504	355	393	250
ACS800-104-0610-5	1xR8i	ACS800-104-0610-5	700	1016	500	672	450	524	355
ACS800-104-0910-5	2xR8i	ACS800-104-0460-5	1050	1524	710	1008	710	785	500
ACS800-104-1210-5	2xR8i	ACS800-104-0610-5	1372	1991	900	1317	900	1026	710
ACS800-104-1820-5	3xR8i	ACS800-104-0610-5	2037	2956	1400	1956	1400	1524	1120
ACS800-104-2430-5	4xR8i	ACS800-104-0610-5	2688	3901	2000	2580	1800	2011	1400
$U_N = 690\text{ V}$									
ACS800-104-0210-7	1xR8i	ACS800-104-0210-7	170	254	160	163	160	127	90
ACS800-104-0260-7	1xR8i	ACS800-104-0260-7	215	322	200	206	200	161	132
ACS800-104-0320-7	1xR8i	ACS800-104-0320-7	289	432	250	277	250	216	160
ACS800-104-0400-7	1xR8i	ACS800-104-0400-7	336	503	315	323	315	251	200
ACS800-104-0440-7	1xR8i	ACS800-104-0440-7	382	571	355	367	355	286	250
ACS800-104-0580-7	1xR8i	ACS800-104-0580-7	486	727	450	467	450	364	315
ACS800-104-0870-7	2xR8i	ACS800-104-0440-7	729	1091	710	700	710	545	500
ACS800-104-1160-7	2xR8i	ACS800-104-0580-7	953	1425	900	914	900	713	630
ACS800-104-1740-7	3xR8i	ACS800-104-0580-7	1414	2116	1400	1358	1400	1058	900
ACS800-104-2320-7	4xR8i	ACS800-104-0580-7	1866	2792	1800	1792	1800	1396	1400

PDM-00184674

Symbols

Nominal ratings

- $I_{\text{cont.max}}$ Continuous RMS output current. No overloadability at 40 °C.
 I_{max} Maximum output current. Allowable for 10 seconds at start, otherwise as long as allowed by drive temperature. **Note:** Maximum motor shaft power is 150% P_{hd} .

Typical ratings for no-overload use

- $P_{\text{cont.max}}$ Typical motor power. The power ratings apply to most IEC 34 motors at nominal voltage (400, 500 or 690 V).

Typical ratings for light-overload use (10% overloadability)

- I_{2N} Continuous rms current. 10% overload is allowed for 1 minute every 5 minutes.
 P_N Typical motor power. The power ratings apply to most IEC 34 motors at nominal voltage (400, 500 or 690 V).

Typical ratings for heavy-duty use (50% overloadability)

- I_{2hd} Continuous rms current. 50% overload is allowed for 1 minute every 5 minutes.
 P_{hd} Typical motor power. The power ratings apply to most IEC 34 motors at nominal voltage (400, 500 or 690 V).

Derating

The load capacity (current and power) decreases if the installation site altitude exceeds 1000 metres (3300 ft), or if the ambient temperature exceeds 40 °C (104 °F).

Temperature derating

In the temperature range +40 °C (+104 °F) to +50 °C (+122 °F) the rated output current is decreased 1 % for every additional 1 °C (1.8 °F). The output current is calculated by multiplying the current given in the rating table by the derating factor.

Example If the ambient temperature is +50 °C (+122 °F) the derating factor is $100\% - 1 \frac{\%}{\text{°C}} \cdot 10 \text{ °C} = 90\%$ or 0.90. The output current is then $0.90 \cdot I_{2N}$ or $0.90 \cdot I_{2hd}$.

Note: $I_{\text{cont.max}}$ rating is not allowed above 40 °C (104 °F).

Altitude derating

In altitudes from 1000 to 4000 m (3300 to 13123 ft) above sea level, the derating is 1% for every 100 m (328 ft). For a more accurate derating, use the *DriveSize* PC tool. If the installation site is higher than 2000 m (6600 ft) above sea level, please contact your local ABB distributor or office for further information.

Dimensions, noise, DC capacitance

Inverter module/unit type	Frame size	Height	Width	Depth	Weight	Noise level	DC capacitance
		mm (in.)	mm (in.)	mm (in.)	kg (lbs)	dBA	μF
$U_N = 400\text{ V}$							
ACS800-104-0003-3	R2i	401 (15.79)	165 (6.50)	*193 (7.60)	9 (20)	62	350
ACS800-104-0004-3	R2i	401 (15.79)	165 (6.50)	*193 (7.60)	9 (20)	62	350
ACS800-104-0005-3	R2i	401 (15.79)	165 (6.50)	*193 (7.60)	9 (20)	62	350
ACS800-104-0006-3	R2i	401 (15.79)	165 (6.50)	*193 (7.60)	9 (20)	62	350
ACS800-104-0009-3	R2i	401 (15.79)	165 (6.50)	*193 (7.60)	9 (20)	62	350
ACS800-104-0011-3	R3i	466 (18.35)	173 (6.81)	*232 (9.13)	12 (26)	62	820
ACS800-104-0016-3	R3i	466 (18.35)	173 (6.81)	*232 (9.13)	12 (26)	62	820
ACS800-104-0020-3	R3i	466 (18.35)	173 (6.81)	*232 (9.13)	12 (26)	62	820
ACS800-104-0025-3	R4i	525 (20.67)	240 (9.45)	*252 (9.92)	15 (33)	62	1000
ACS800-104-0030-3	R4i	525 (20.67)	240 (9.45)	*252 (9.92)	15 (33)	62	1000
ACS800-104-0040-3	R5i	673 (26.50)	265 (10.43)	*276 (10.87)	23 (51)	65	2000
ACS800-104-0050-3	R5i	673 (26.50)	265 (10.43)	*276 (10.87)	23 (51)	65	2000
ACS800-104-0060-3	R5i	673 (26.50)	265 (10.43)	*276 (10.87)	23 (51)	65	2400
ACS800-104-0100-3	R7i	**744 (29.29)	**228 (8.98)	**367 (14.45)	**37 (82)	64	3300
ACS800-104-0120-3	R7i	**744 (29.29)	**228 (8.98)	**367 (14.45)	**37 (82)	64	4700
ACS800-104-0170-3	1xR8i	1397 (55.00)	245 (9.65)	596 (23.46)	150 (330)	72	8200
ACS800-104-0210-3	1xR8i	1397 (55.00)	245 (9.65)	596 (23.46)	150 (330)	72	8200
ACS800-104-0260-3	1xR8i	1397 (55.00)	245 (9.65)	596 (23.46)	150 (330)	72	8200
ACS800-104-0320-3	1xR8i	1397 (55.00)	245 (9.65)	596 (23.46)	150 (330)	72	10250
ACS800-104-0390-3	1xR8i	1397 (55.00)	245 (9.65)	596 (23.46)	150 (330)	72	12300
ACS800-104-0510-3	1xR8i	1397 (55.00)	245 (9.65)	596 (23.46)	150 (330)	72	14350
ACS800-104-0770-3	2xR8i	***1397 (55.00)	***245 (9.65)	***596 (23.46)	***150 (330)	74	24600
ACS800-104-1030-3	2xR8i	***1397 (55.00)	***245 (9.65)	***596 (23.46)	***150 (330)	74	28700
ACS800-104-1540-3	3xR8i	***1397 (55.00)	***245 (9.65)	***596 (23.46)	***150 (330)	76	43050
ACS800-104-2050-3	4xR8i	***1397 (55.00)	***245 (9.65)	***596 (23.46)	***150 (330)	76	57400
$U_N = 500\text{ V}$							
ACS800-104-0004-5	R2i	401 (15.79)	165 (6.50)	*193 (7.60)	9 (20)	62	350
ACS800-104-0005-5	R2i	401 (15.79)	165 (6.50)	*193 (7.60)	9 (20)	62	350
ACS800-104-0006-5	R2i	401 (15.79)	165 (6.50)	*193 (7.60)	9 (20)	62	350
ACS800-104-0009-5	R2i	401 (15.79)	165 (6.50)	*193 (7.60)	9 (20)	62	350
ACS800-104-0011-5	R2i	401 (15.79)	165 (6.50)	*193 (7.60)	9 (20)	62	350
ACS800-104-0016-5	R3i	466 (18.35)	173 (6.81)	*232 (9.13)	12 (26)	62	820
ACS800-104-0020-5	R3i	466 (18.35)	173 (6.81)	*232 (9.13)	12 (26)	62	820
ACS800-104-0025-5	R3i	466 (18.35)	173 (6.81)	*232 (9.13)	12 (26)	62	820
ACS800-104-0030-5	R4i	525 (20.67)	240 (9.45)	*252 (9.92)	15 (33)	62	1000
ACS800-104-0040-5	R4i	525 (20.67)	240 (9.45)	*252 (9.92)	15 (33)	62	1000
ACS800-104-0050-5	R5i	673 (26.50)	265 (10.43)	*276 (10.87)	23 (51)	65	2000
ACS800-104-0060-5	R5i	673 (26.50)	265 (10.43)	*276 (10.87)	23 (51)	65	2000
ACS800-104-0070-5	R5i	673 (26.50)	265 (10.43)	*276 (10.87)	23 (51)	65	2400
ACS800-104-0100-5	R6i	**744 (29.29)	**228 (8.98)	**367 (14.45)	**37 (82)	64	2270
ACS800-104-0120-5	R7i	**744 (29.29)	**228 (8.98)	**367 (14.45)	**37 (82)	64	4530
ACS800-104-0140-5	R7i	**744 (29.29)	**228 (8.98)	**367 (14.45)	**37 (82)	64	4530
ACS800-104-0210-5	1xR8i	1397 (55.00)	245 (9.65)	596 (23.46)	150 (330)	72	8200
ACS800-104-0260-5	1xR8i	1397 (55.00)	245 (9.65)	596 (23.46)	150 (330)	72	8200
ACS800-104-0320-5	1xR8i	1397 (55.00)	245 (9.65)	596 (23.46)	150 (330)	72	8200
ACS800-104-0400-5	1xR8i	1397 (55.00)	245 (9.65)	596 (23.46)	150 (330)	72	10250
ACS800-104-0460-5	1xR8i	1397 (55.00)	245 (9.65)	596 (23.46)	150 (330)	72	12300

Inverter module/unit type	Frame size	Height	Width	Depth	Weight	Noise level	DC capacitance
		mm (in.)	mm (in.)	mm (in.)	kg (lbs)	dBA	μ F
ACS800-104-0610-5	1xR8i	1397 (55.00)	245 (9.65)	596 (23.46)	150 (330)	72	14350
ACS800-104-0910-5	2xR8i	***1397 (55.00)	***245 (9.65)	***596 (23.46)	***150 (330)	74	24600
ACS800-104-1210-5	2xR8i	***1397 (55.00)	***245 (9.65)	***596 (23.46)	***150 (330)	74	28700
ACS800-104-1820-5	3xR8i	***1397 (55.00)	***245 (9.65)	***596 (23.46)	***150 (330)	76	43050
ACS800-104-2430-5	4xR8i	***1397 (55.00)	***245 (9.65)	***596 (23.46)	***150 (330)	76	57400
$U_N = 690$ V							
ACS800-104-0011-7	R4i	525 (20.67)	240 (9.45)	*252 (9.92)	15 (33)	62	670
ACS800-104-0016-7	R4i	525 (20.67)	240 (9.45)	*252 (9.92)	15 (33)	62	670
ACS800-104-0020-7	R4i	525 (20.67)	240 (9.45)	*252 (9.92)	15 (33)	62	670
ACS800-104-0025-7	R4i	525 (20.67)	240 (9.45)	*252 (9.92)	15 (33)	62	670
ACS800-104-0030-7	R4i	525 (20.67)	240 (9.45)	*252 (9.92)	15 (33)	62	670
ACS800-104-0040-7	R4i	525 (20.67)	240 (9.45)	*252 (9.92)	15 (33)	62	670
ACS800-104-0050-7	R5i	673 (26.50)	265 (10.43)	*276 (10.87)	23 (51)	65	1330
ACS800-104-0060-7	R5i	673 (26.50)	265 (10.43)	*276 (10.87)	23 (51)	65	1330
ACS800-104-0070-7	R6i	**744 (29.29)	**228 (8.98)	**367 (14.45)	**37 (82)	64	1570
ACS800-104-0100-7	R7i	**744 (29.29)	**228 (8.98)	**367 (14.45)	**37 (82)	64	2200
ACS800-104-0120-7	R7i	**744 (29.29)	**228 (8.98)	**367 (14.45)	**37 (82)	64	2200
ACS800-104-0210-7	1xR8i	1397 (55.00)	245 (9.65)	596 (23.46)	150 (330)	72	4600
ACS800-104-0260-7	1xR8i	1397 (55.00)	245 (9.65)	596 (23.46)	150 (330)	72	4600
ACS800-104-0320-7	1xR8i	1397 (55.00)	245 (9.65)	596 (23.46)	150 (330)	72	6130
ACS800-104-0400-7	1xR8i	1397 (55.00)	245 (9.65)	596 (23.46)	150 (330)	72	6130
ACS800-104-0440-7	1xR8i	1397 (55.00)	245 (9.65)	596 (23.46)	150 (330)	72	7670
ACS800-104-0580-7	1xR8i	1397 (55.00)	245 (9.65)	596 (23.46)	150 (330)	72	9200
ACS800-104-0870-7	2xR8i	***1397 (55.00)	***245 (9.65)	***596 (23.46)	***150 (330)	74	15330
ACS800-104-1160-7	2xR8i	***1397 (55.00)	***245 (9.65)	***596 (23.46)	***150 (330)	74	18400
ACS800-104-1740-7	3xR8i	***1397 (55.00)	***245 (9.65)	***596 (23.46)	***150 (330)	76	27600
ACS800-104-2320-7	4xR8i	***1397 (55.00)	***245 (9.65)	***596 (23.46)	***150 (330)	76	36800

*Excluding control panel (optional)

**Excluding cooling fan. Refer to *Dimensional drawings*

***Single module only

Power loss and cooling characteristics

See the dimensional drawings for free space requirements.

Inverter module/ unit type	Frame size	Power loss	Nominal air flow	Minimum effective area of air inlet		Minimum effective area of air outlet		Max. pressure drop of cabinet at nominal air flow
				unfiltered	with Lufffilter/ airTex G150	unfiltered	with Lufffilter/ airTex G150	
				W (Btu/h)	m ³ /h (ft ³ /min)	cm ² (in ²)	cm ² (in ²)	
$U_N = 400\text{ V}$								
ACS800-104-0003-3	R2i	80 (280)	35 (21)	100 (16)	200 (31)	160 (25)	320 (50)	12
ACS800-104-0004-3	R2i	100 (340)	35 (21)	100 (16)	200 (31)	160 (25)	320 (50)	12
ACS800-104-0005-3	R2i	110 (380)	35 (21)	100 (16)	200 (31)	160 (25)	320 (50)	12
ACS800-104-0006-3	R2i	130 (450)	35 (21)	100 (16)	200 (31)	160 (25)	320 (50)	12
ACS800-104-0009-3	R2i	160 (550)	35 (21)	100 (16)	200 (31)	160 (25)	320 (50)	12
ACS800-104-0011-3	R3i	200 (680)	69 (41)	200 (31)	400 (62)	320 (50)	640 (99)	12
ACS800-104-0016-3	R3i	270 (920)	69 (41)	200 (31)	400 (62)	320 (50)	640 (99)	12
ACS800-104-0020-3	R3i	350 (1200)	69 (41)	200 (31)	400 (62)	320 (50)	640 (99)	12
ACS800-104-0025-3	R4i	420 (1440)	103 (61)	300 (47)	600 (93)	480 (74)	960 (149)	12
ACS800-104-0030-3	R4i	490 (1680)	103 (61)	300 (47)	600 (93)	480 (74)	960 (149)	12
ACS800-104-0040-3	R5i	650 (2220)	168 (99)	400 (62)	800 (124)	640 (99)	1280 (198)	17
ACS800-104-0050-3	R5i	790 (2700)	168 (99)	400 (62)	800 (124)	640 (99)	1280 (198)	17
ACS800-104-0060-3	R5i	950 (3250)	168 (99)	400 (62)	800 (124)	640 (99)	1280 (198)	17
ACS800-104-0100-3	R7i	1500 (5120)	480 (283)	325 (50)	650 (101)	520 (81)	1040 (161)	67
ACS800-104-0120-3	R7i	1800 (6150)	480 (283)	325 (50)	650 (101)	520 (81)	1040 (161)	67
ACS800-104-0170-3	1xR8i	2200 (7510)	1280 (750)	575 (90)	1150 (180)	920 (140)	1840 (290)	150
ACS800-104-0210-3	1xR8i	2700 (9220)	1280 (750)	575 (90)	1150 (180)	920 (140)	1840 (290)	150
ACS800-104-0260-3	1xR8i	3700 (12700)	1280 (750)	575 (90)	1150 (180)	920 (140)	1840 (290)	150
ACS800-104-0320-3	1xR8i	4500 (15400)	1280 (750)	575 (90)	1150 (180)	920 (140)	1840 (290)	150
ACS800-104-0390-3	1xR8i	5800 (19800)	1280 (750)	575 (90)	1150 (180)	920 (140)	1840 (290)	150
ACS800-104-0510-3	1xR8i	7900 (27000)	1280 (750)	575 (90)	1150 (180)	920 (140)	1840 (290)	150
ACS800-104-0770-3	2xR8i	11400 (38900)	2560 (1510)	960 (150)	1920 (295)	1536 (240)	3072 (475)	180
ACS800-104-1030-3	2xR8i	15300 (52300)	2560 (1510)	960 (150)	1920 (295)	1536 (240)	3072 (475)	180
ACS800-104-1540-3	3xR8i	22500 (76900)	3840 (2260)	1440 (225)	2880 (445)	2304 (355)	4608 (715)	180
ACS800-104-2050-3	4xR8i	29500 (101000)	5120 (3010)	1920 (295)	3840 (595)	3072 (475)	6144 (950)	180
$U_N = 500\text{ V}$								
ACS800-104-0004-5	R2i	100 (340)	35 (21)	100 (16)	200 (31)	160 (25)	320 (50)	12
ACS800-104-0005-5	R2i	110 (380)	35 (21)	100 (16)	200 (31)	160 (25)	320 (50)	12
ACS800-104-0006-5	R2i	130 (450)	35 (21)	100 (16)	200 (31)	160 (25)	320 (50)	12
ACS800-104-0009-5	R2i	160 (550)	35 (21)	100 (16)	200 (31)	160 (25)	320 (50)	12
ACS800-104-0011-5	R2i	200 (680)	35 (21)	100 (16)	200 (31)	160 (25)	320 (50)	12
ACS800-104-0016-5	R3i	270 (920)	69 (41)	200 (31)	400 (62)	320 (50)	640 (99)	12
ACS800-104-0020-5	R3i	350 (1200)	69 (41)	200 (31)	400 (62)	320 (50)	640 (99)	12
ACS800-104-0025-5	R3i	420 (1440)	69 (41)	200 (31)	400 (62)	320 (50)	640 (99)	12
ACS800-104-0030-5	R4i	490 (1680)	103 (61)	300 (47)	600 (93)	480 (74)	960 (149)	12
ACS800-104-0040-5	R4i	650 (2220)	103 (61)	300 (47)	600 (93)	480 (74)	960 (149)	12
ACS800-104-0050-5	R5i	790 (2700)	168 (99)	400 (62)	800 (124)	640 (99)	1280 (198)	17
ACS800-104-0060-5	R5i	950 (3250)	168 (99)	400 (62)	800 (124)	640 (99)	1280 (198)	17
ACS800-104-0070-5	R5i	1150 (3930)	168 (99)	400 (62)	800 (124)	640 (99)	1280 (198)	17
ACS800-104-0100-5	R6i	1500 (5120)	480 (283)	325 (50)	650 (101)	520 (81)	1040 (161)	67
ACS800-104-0120-5	R7i	1800 (6150)	480 (283)	325 (50)	650 (101)	520 (81)	1040 (161)	67
ACS800-104-0140-5	R7i	2100 (7170)	480 (283)	325 (50)	650 (101)	520 (81)	1040 (161)	67
ACS800-104-0210-5	1xR8i	2500 (8540)	1280 (750)	575 (90)	1150 (180)	920 (140)	1840 (290)	150

Inverter module/ unit type	Frame size	Power loss	Nominal air flow	Minimum effective area of air inlet		Minimum effective area of air outlet		Max. pressure drop of cabinet at nominal air flow
				unfiltered	with Lufffilter/ airTex G150	unfiltered	with Luftfilter/ airTex G150	
				W (Btu/h)	m ³ /h (ft ³ /min)	cm ² (in ²)	cm ² (in ²)	
ACS800-104-0260-5	1xR8i	3300 (11300)	1280 (750)	575 (90)	1150 (180)	920 (140)	1840 (290)	150
ACS800-104-0320-5	1xR8i	3900 (13300)	1280 (750)	575 (90)	1150 (180)	920 (140)	1840 (290)	150
ACS800-104-0400-5	1xR8i	4700 (16100)	1280 (750)	575 (90)	1150 (180)	920 (140)	1840 (290)	150
ACS800-104-0460-5	1xR8i	5700 (19500)	1280 (750)	575 (90)	1150 (180)	920 (140)	1840 (290)	150
ACS800-104-0610-5	1xR8i	7700 (26300)	1280 (750)	575 (90)	1150 (180)	920 (140)	1840 (290)	150
ACS800-104-0910-5	2xR8i	11300 (38600)	2560 (1510)	960 (150)	1920 (295)	1536 (240)	3072 (475)	180
ACS800-104-1210-5	2xR8i	14900 (50900)	2560 (1510)	960 (150)	1920 (295)	1536 (240)	3072 (475)	180
ACS800-104-1820-5	3xR8i	22000 (75100)	3840 (2260)	1440 (225)	2880 (445)	2304 (355)	4608 (715)	180
ACS800-104-2430-5	4xR8i	28900 (98700)	5120 (3010)	1920 (295)	3840 (595)	3072 (475)	6144 (950)	180
$U_N = 690\text{ V}$								
ACS800-104-0011-7	R4i	300 (1030)	103 (61)	300 (47)	600 (93)	480 (74)	960 (149)	12
ACS800-104-0016-7	R4i	340 (1160)	103 (61)	300 (47)	600 (93)	480 (74)	960 (149)	12
ACS800-104-0020-7	R4i	440 (1500)	103 (61)	300 (47)	600 (93)	480 (74)	960 (149)	12
ACS800-104-0025-7	R4i	530 (1810)	103 (61)	300 (47)	600 (93)	480 (74)	960 (149)	12
ACS800-104-0030-7	R4i	610 (2080)	103 (61)	300 (47)	600 (93)	480 (74)	960 (149)	12
ACS800-104-0040-7	R4i	690 (2360)	103 (61)	300 (47)	600 (93)	480 (74)	960 (149)	12
ACS800-104-0050-7	R5i	840 (2870)	168 (99)	400 (62)	800 (124)	640 (99)	1280 (198)	17
ACS800-104-0060-7	R5i	1010 (3450)	168 (99)	400 (62)	800 (124)	640 (99)	1280 (198)	17
ACS800-104-0070-7	R6i	1100 (3760)	480 (283)	325 (50)	650 (101)	520 (81)	1040 (161)	67
ACS800-104-0100-7	R7i	1500 (5120)	480 (283)	325 (50)	650 (101)	520 (81)	1040 (161)	67
ACS800-104-0120-7	R7i	1800 (6150)	480 (283)	325 (50)	650 (101)	520 (81)	1040 (161)	67
ACS800-104-0210-7	1xR8i	3300 (11300)	1280 (750)	575 (90)	1150 (180)	920 (140)	1840 (290)	150
ACS800-104-0260-7	1xR8i	4000 (13700)	1280 (750)	575 (90)	1150 (180)	920 (140)	1840 (290)	150
ACS800-104-0320-7	1xR8i	4600 (15700)	1280 (750)	575 (90)	1150 (180)	920 (140)	1840 (290)	150
ACS800-104-0400-7	1xR8i	5200 (17800)	1280 (750)	575 (90)	1150 (180)	920 (140)	1840 (290)	150
ACS800-104-0440-7	1xR8i	6800 (23200)	1280 (750)	575 (90)	1150 (180)	920 (140)	1840 (290)	150
ACS800-104-0580-7	1xR8i	7400 (25300)	1280 (750)	575 (90)	1150 (180)	920 (140)	1840 (290)	150
ACS800-104-0870-7	2xR8i	12900 (44100)	2560 (1510)	960 (150)	1920 (295)	1536 (240)	3072 (475)	180
ACS800-104-1160-7	2xR8i	14400 (49200)	2560 (1510)	960 (150)	1920 (295)	1536 (240)	3072 (475)	180
ACS800-104-1740-7	3xR8i	21300 (72800)	3840 (2260)	1440 (225)	2880 (445)	2304 (355)	4608 (715)	180
ACS800-104-2320-7	4xR8i	28100 (96000)	5120 (3010)	1920 (295)	3840 (595)	3072 (475)	6144 (950)	180

Materials

Module	<ul style="list-style-type: none">• PC/ABS 2.5 mm, colour NCS 1502-Y (RAL 90021 / PMS 420 C)• hot-dip zinc coated steel sheet 1.5 to 2 mm, thickness of coating 100 micrometres• cast aluminium AlSi (R2i and R3i)• extruded aluminium AlSi (R4i and R5i)
Packaging	Corrugated cardboard (frames R2i to R5i and option modules), expanded polystyrene. Plastic covering of the package: PE-LD, bands PP or steel.
Disposal	<p>The drive contains raw materials that should be recycled to preserve energy and natural resources. The package materials are environmentally compatible and recyclable. All metal parts can be recycled. The plastic parts can either be recycled or burned under controlled circumstances, according to local regulations. Most recyclable parts are marked with recycling marks.</p> <p>If recycling is not feasible, all parts excluding electrolytic capacitors and printed circuit boards can be landfilled. The DC capacitors (C1-1 to C1-x) contain electrolyte and the printed circuit boards contain lead, both of which will be classified as hazardous waste within the EU. They must be removed and handled according to local regulations.</p> <p>For further information on environmental aspects and more detailed recycling instructions, please contact your local ABB distributor.</p>

Applicable standards

	The drive complies with the following standards. The compliance with the European Low Voltage Directive is verified according to standards EN 50178 and EN 60204-1.
<ul style="list-style-type: none">• EN 50178 (1997)• EN 60204-1 (1997)	Electronic equipment for use in power installations Safety of machinery. Electrical equipment of machines. Part 1: General requirements. <i>Provisions for compliance:</i> The final assembler of the machine is responsible for installing - an emergency-stop device - a supply disconnecting device.
<ul style="list-style-type: none">• EN 60529: 1991 (IEC 529), IEC 60664-1 (1992)	Degrees of protection provided by enclosures (IP code)
<ul style="list-style-type: none">• EN 61800-3 (1996) + Amendment A11 (2000)	EMC product standard including specific test methods
<ul style="list-style-type: none">• UL 508C	UL Standard for Safety, Power Conversion Equipment, second edition
<ul style="list-style-type: none">• CSA C22.2 No. 14-95	Industrial control equipment

Equipment warranty and liability

The manufacturer warrants the equipment supplied against defects in design, materials and workmanship for a period of twelve (12) months after installation or twenty-four (24) months from date of manufacturing, whichever first occurs. The local ABB office or distributor may grant a warranty period different to the above and refer to local terms of liability as defined in the supply contract.

The manufacturer is not responsible for

- any costs resulting from a failure if the installation, commissioning, repair, alternation, or ambient conditions of the drive do not fulfil the requirements specified in the documentation delivered with the unit and other relevant documentation.
- units subjected to misuse, negligence or accident
- units comprised of materials provided or designs stipulated by the purchaser.

In no event shall the manufacturer, its suppliers or subcontractors be liable for special, indirect, incidental or consequential damages, losses or penalties.

If you have any questions concerning your ABB drive, please contact the local distributor or ABB office. The technical data, information and specifications are valid at the time of printing. The manufacturer reserves the right to modifications without prior notice.

По вопросам продаж и поддержки обращайтесь:

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