

ABB DRIVES FOR WATER

ACQ580-04 R10 and R11 drives

Quick installation guide



List of related manuals in English

Drive hardware manuals and guides	Code (English)
<i>ACQ580-04 drive modules (200 to 500 kW) hardware manual</i>	3AXD50000048677
<i>ACQ580-04 drive modules (200 to 500 kW) quick installation guide</i>	3AXD50000048678
<i>ACX-AP-x Assistant control panels user's manual</i>	3AUA0000085685
Drive firmware manuals	
<i>ACQ580 pump control program firmware manual</i>	3AXD50000035867
<i>ACQ580 drives with pump control program quick start-up guide</i>	3AXD50000048773
Option manuals and guides	
<i>DPMP-02/03 mounting platform for control panels installation guide</i>	3AUA0000136205
<i>DPMP-06/07 mounting platform for control panels installation guide</i>	3AXD50000289561
<i>Manuals and quick guides for I/O extension modules, fieldbus adapters, etc.</i>	
<i>CCA-01 communication adapter quick guide</i>	3AXD50000018457
<i>CPTC-02 ATEX-certified thermistor protection module, Ex II (2) GD (+L537+Q971) user's manual</i>	3AXD50000030058
<i>FDNA-01 DeviceNet™ adapter module user's manual</i>	3AFE68573360
<i>FEIP-21 EtherNet/IP fieldbus adapter module User's manual</i>	3AXD50000158621
<i>FENA-01/-11/-21 Ethernet adapter module user's manual</i>	3AUA0000093568
<i>FMBT-21 Modbus/TCP Adapter Module User's Manual</i>	3AXD50000158607
<i>FPBA-01 PROFIBUS DP adapter module user's manual</i>	3AFE68573271
<i>FPNO-21 PROFINET IO fieldbus adapter module user's manual</i>	3AXD50000158614
<i>FSCA-01 RS-485 adapter module user's manual</i>	3AUA0000109533
<i>FOCH du/dt filters hardware manual</i>	3AFE68577519
<i>Flange mounting kit quick installation guide for ACX580-01 frames R0 to R5</i>	3AXD50000036610
<i>Flange mounting kit quick installation guide for ACQ580-01 frames R6 to R9</i>	3AXD50000019099
<i>Flange mounting kit installation supplement</i>	3AXD50000019100
Tool and maintenance manuals and guides	
<i>Drive composer PC tool user's manual</i>	3AUA0000094606
<i>Converter module capacitor reforming instructions</i>	3BFE64059629
<i>NETA-21 remote monitoring tool user's manual</i>	3AUA0000096939
<i>NETA-21 remote monitoring tool installation and startup guide</i>	3AUA0000096881

You can find manuals and other product documents in PDF format on the Internet. See section [Document library on the Internet](#) on the inside of the back cover. For manuals not available in the Document library, contact your local ABB representative.

The code below opens an online listing of the manuals applicable to this product.



ACQ580-04 manuals

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Quick installation guide

Contents of this guide

This guide tells you briefly how to install the drive module into a 600 mm wide cabinet. For installation examples in different cabinets and more detailed instructions, engineering guide lines, technical data and complete safety instructions, see the hardware manual (www.abb.com/drives: Select Document Library and search for document number 3AXD50000048677 [English]).

Obey the safety instructions

See figure A on page 13. If you ignore these instructions, injury or death, or damage to the equipment can occur.



WARNING! Handle the drive module carefully. Open the support legs by pressing each leg a little down and turning it aside (1, 2).

Do not tilt the drive module. It is **heavy** and its **center of gravity is high**. The module will overturn from a sideways tilt of 5 degrees. Do not leave the module unattended on a sloping floor.

To prevent the drive module from falling, attach its top lifting lugs with chains to the cabinet frame before you push the module into the cabinet. Work carefully preferably with help from another person. Keep a constant pressure with one foot on the base of the module to prevent the module from falling on its back.



WARNING! If you are not a qualified electrician, do not do installation or maintenance work. Go through these steps before you begin any installation or maintenance work.

1. Clearly identify the work location.
 2. Disconnect all possible voltage sources.
 - Open the main disconnecter of the drive.
 - Open the disconnecter of the supply transformer as the main disconnecter of the drive does not remove the voltage from the input busbars of the drive.
 - Make sure that reconnection is not possible. Lock the disconnecters to open position and attach a warning notice to them.
 - Disconnect any external power sources from the control circuits before you do work on the control cables.
 - After you disconnect the drive, always wait for 5 minutes to let the intermediate circuit capacitors discharge before you continue.
 3. Protect any other energized parts in the work location against contact.
 4. Take special precautions when close to bare conductors.
 5. Measure that the installation is de-energized.
 - Use a multimeter with an impedance of at least 1 Mohm.
-

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- Make sure that the voltage between the drive module input power terminals (L1/U1, L2/V1, L3/W1) and the grounding (PE) busbar is close to 0 V.
 - Make sure that the voltage between the drive module UDC+ and UDC- terminals and the grounding (PE) busbar is close to 0 V.
6. Install temporary grounding as required by the local regulations.
 7. Ask for a permit to work from the person in control of the electrical installation work.

Select the power cables

Size the power cables according to local regulations to carry the nominal current given on the type designation label of your drive.

Ensure the cooling and fuses (UL)

See the table below for the losses and cooling air flow through the drive. The allowed operating temperature range of the drive without derating is -15 to +40 °C.

Drive type	Air flow	Heat dissipation	UL class	Fuse
	ft ³ /min	W		Type
ACQ580-505A-4	707	5602	T	JJS-600
ACQ580-585A-4	707	6409	L	A4BY800
ACQ580-650A-4	707	8122	L	A4BY800
ACQ580-725A-4	707	8764	L	A4BY800
ACQ580-820A-4	707	9862	L	A4BY900
ACQ580-880A-4	848	10578	L	A4BY1000

For more information, see the *hardware manual 3AXD5000004867748677 (English)*.

Protect the drive and input power cables

See the table above for the UL class fuses for branch circuit protection per NEC. Check that the operating time of the fuse is below 0.1 seconds. Obey local regulations.

Install the drive module into a cabinet

See figure B on page 13:

- Install the punched section to the back of the cabinet frame.
- Remove the pedestal guide plate from the bottom of the drive module.
- Install the support rails and pedestal guide plate to the cabinet bottom frame.
- Install the telescopic insertion ramp to the pedestal guide plate.

For option +B051: See figure C on page 13:

- Remove the sheeting from the clear plastic shrouds from both sides.

See figure D on page 13:

- Install the mounting bracket to the drive module.
- For option +B051:
 - Install the bottom grille to the drive module if there is no bottom plate in the cabinet and degree of protection of IP20 is needed for the drive module from the bottom side.

- Install the top metallic shroud to the drive module.
- Install the back shrouds to the drive module.

See figure E on page 13:

- Attach the drive module to the cabinet frame with chains.
- Push the drive module into the cabinet along the telescopic insertion ramp.
- Remove the ramp.

See figure F on page 13:

- Attach the drive module to the pedestal guide plate.
- Attach the drive module from top to the punched section at the cabinet back.

Note: The mounting bracket grounds the drive module to the cabinet frame.

Check the insulation of the input and motor cables and the motor

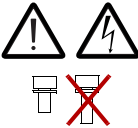
Check the insulation of the input cable according to local regulations before you connect it to the drive.

See figure H on page 14. Ground the motor cable shield at the motor end. For minimal interference, make a 360-degree grounding at the cable lead-through, or keep the pig tail short.

Check the insulation of the motor and motor cable when the motor cable is disconnected from the drive, see figure I on page 14. Measure the insulation resistance between each phase conductor and then between each phase conductor and the Protective Earth conductor using a measuring voltage of 1000 V DC. The insulation resistance of an ABB motor must exceed 100 Mohm (reference value at 25 °C or 77 °F). For the insulation resistance of other motors, consult the manufacturer's instructions. **Note:** Moisture inside the motor casing will reduce the insulation resistance. If you suspect moisture, dry the motor and repeat the measurement.

Connect the power cables (and install the shrouds for option +B051)

See figure G on page 14.

Step	Task (motor cables)	Figure	Page
1	Install the grounding terminal to the drive module base.	J	14
2	Run the motor cables to the cabinet. Ground the cable shields 360 degrees at the cabinet lead-through.	K	14
3	Connect the twisted shields of the motor cables to the grounding terminal.	L	14
4	<p>Screw in and tighten the insulators to the drive module by hand. Install the T3/W2 connection terminal to the insulators.</p>  <p>WARNING! Do not use longer screws or bigger tightening torque than given in the installation drawing. They can damage the insulator and cause dangerous voltage to be present at the module frame.</p>	M	14
5	Connect the phase conductors to the T3/W2 terminal.	N	14
6	Install the T2/V2 connection terminal to the insulators. See the warning in step 4.	-	-
7	Connect the phase conductors to the T2/V2 connection terminal.	-	-
8	Install the T1/U2 connection terminal to the insulators. See the warning in step 4.	-	-
9	Connect the phase conductors to the T1/U2 terminal.	-	-
10	<p>For option +B051 (if there is no bottom plate in the cabinet and degree of protection of IP20 is needed):</p> <ul style="list-style-type: none"> Step drill carefully sufficiently big holes to the inner clear plastic shrouds for the motor cables to the connected. Smooth the hole edges. Cut the shroud from the holes to the edge to make it possible to put the shroud around the cables. Remove the plastic sheeting from the shrouds from both sides. 	O	15
11	<u>For option +B051:</u> Put the inner clear plastic shrouds of figure O around the motor cables.	P	15
12	<u>For option +B051:</u> Remove the plastic sheeting from the output clear plastic shroud from both sides. Install the shroud to the drive module.	Q	15
13	<u>For option +B051:</u> Install the lower front cover to the drive module.	Q	15

Step	Task (input cables)	Figure	Page
1	Ground the input cable shields (if present) 360 degrees at the cabinet lead-through.	-	-
2	Connect the twisted shields of the input cables and separate ground cable (if present) to the cabinet grounding busbar.	-	-

Step	Task (input cables)	Figure	Page
3	<p><u>For option +B051:</u></p> <ul style="list-style-type: none"> • Step drill carefully sufficiently big holes to the lead-through clear plastic shroud for the cables to be connected. • Align the holes in the vertical direction according to the alignment holes in the shroud. Smooth the hole edges. • Remove the plastic sheeting from both sides of the shroud. • Attach the cables firmly to the cabinet frame to prevent chafing against the hole edges. 	R	15
4	<u>For option +B051:</u> Put the conductors of the input cables through the drilled holes in the clear plastic shroud.	S	15
5	Connect the input power cable conductors to the L1/U1, L2/V1 and L3/W1 connection busbars.	T	15
6	<u>For option +B051:</u> Move the lead-through clear plastic shroud along input cables to its final position. Install the front clear plastic shroud.	U	16
7	Install the upper front cover.	U	16
8	Remove the cardboard protective covering from the drive module air outlet.	U	16
9	<u>For option +B051:</u> Cut the hole for the lead-through clear plastic shroud in the side clear plastic shroud. Install the side and top clear plastic shrouds to the drive module.	V	16

Install the air baffles

See figure W on page 16 and *Guidelines for planning the cabinet installation* in the hardware manual.

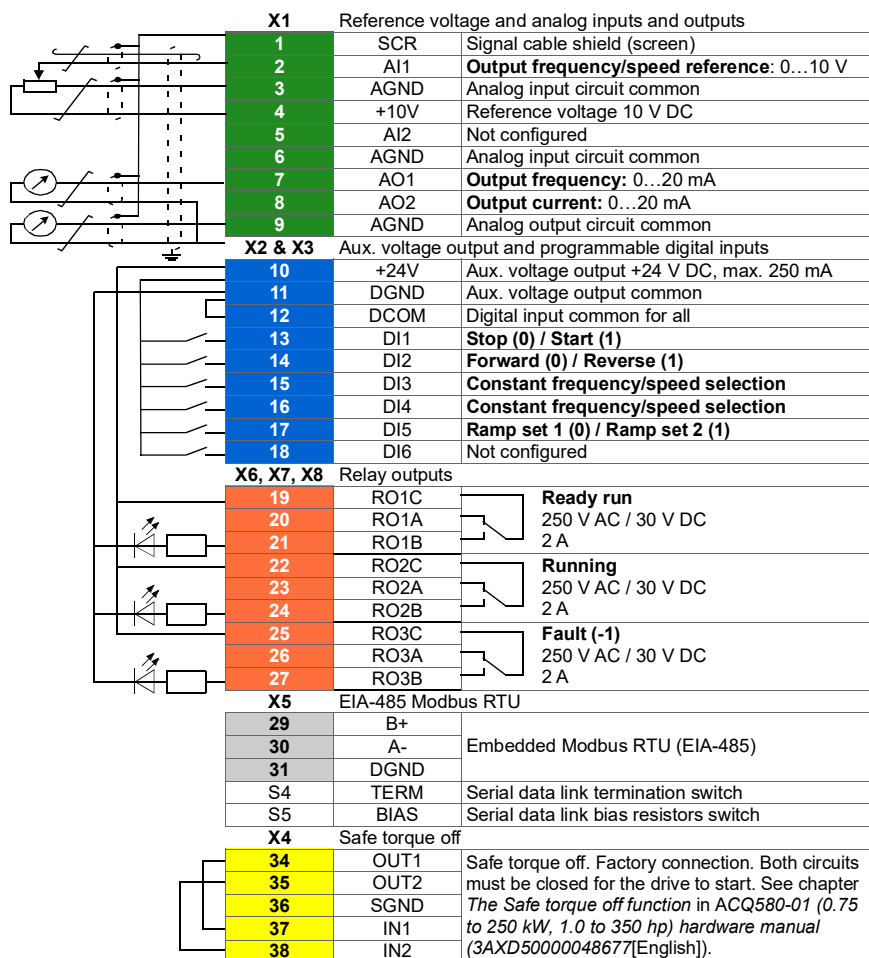
Connect the control cables

See figure X on page 16.

1. Ground the outer shields of all external control cables 360 degrees at the cabinet lead-through.
2. Ground the pair-cable shields of external control cables to a grounding clamp below the control unit. Leave the other end of the shields unconnected or ground them indirectly via a high-frequency capacitor with a few nanofarads, eg, 3.3 nF / 630 V.
3. Connect the conductors to the appropriate terminals of the control unit. See page 10.
4. Wire the optional modules if included in the delivery.

Default I/O connections

Default I/O connections are shown below.



Total load capacity of the Auxiliary voltage output +24V (X2:10) is 6.0 W (250 mA / 24 V DC).

Wire sizes:

0.2...2.5 mm² (24...14 AWG): Terminals +24V, DGND, DCOM, B+, A-, DGND, Ext. 24V

0.14...1.5 mm² (26...16 AWG): Terminals DI, AI, AO, AGND, RO, STO

Tightening torques: 0.5...0.6 N·m (0.4 lbf·ft)

Total load capacity of the Auxiliary voltage output +24V (X2:10) is 6.0 W (250 mA / 24 V DC).

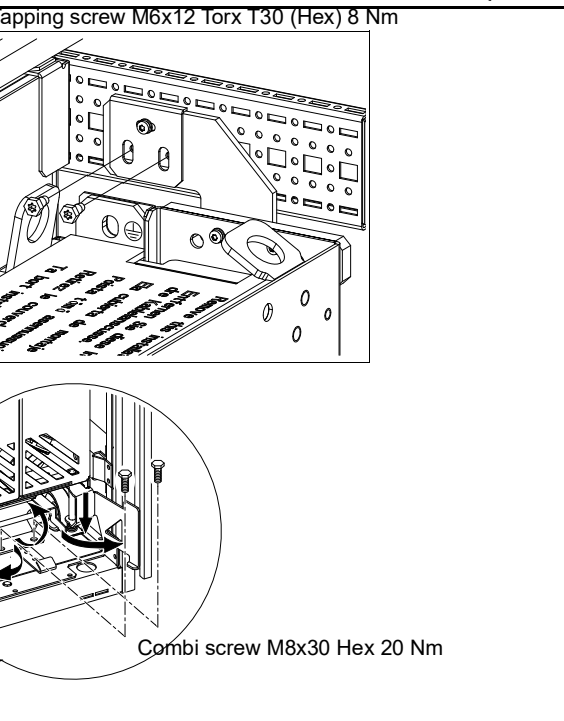
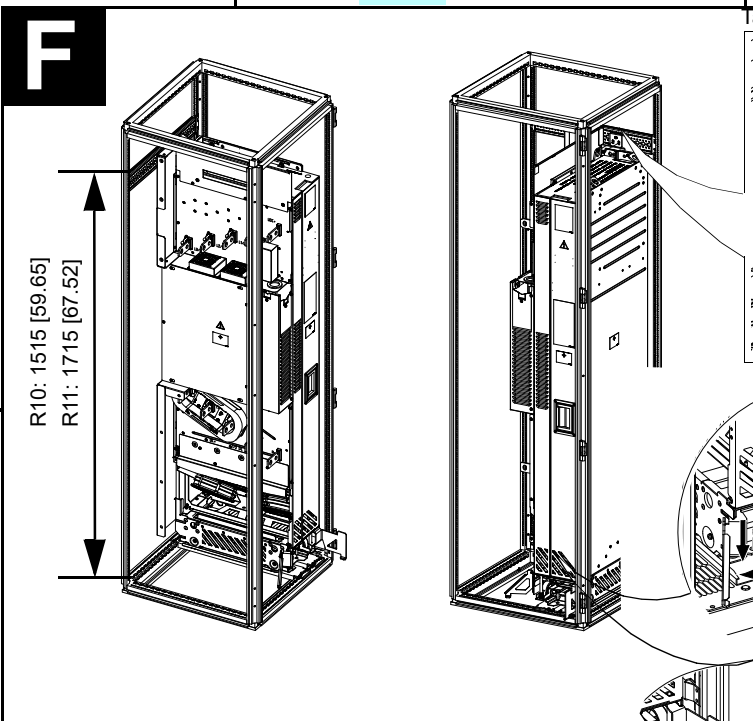
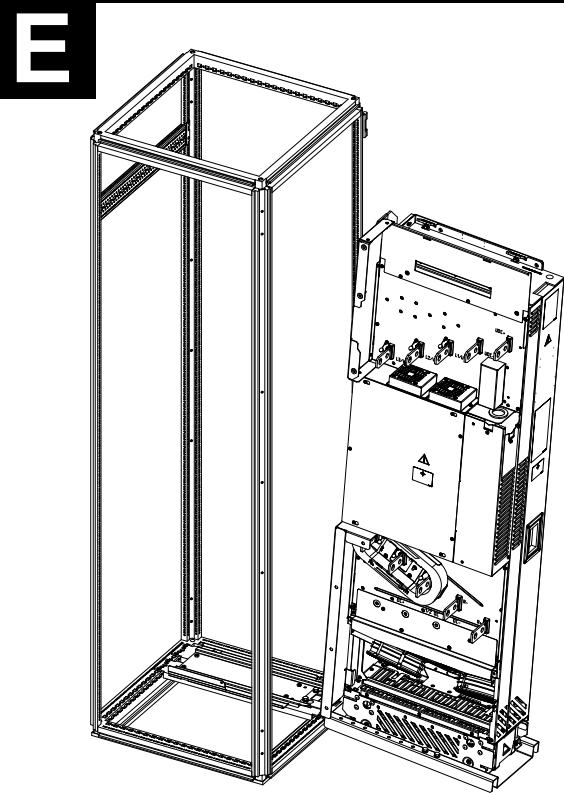
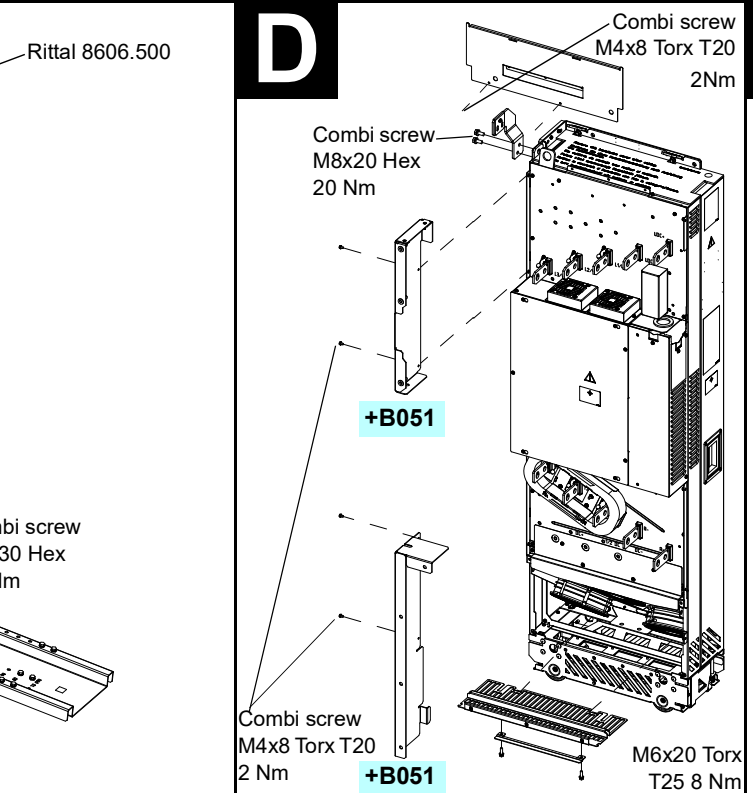
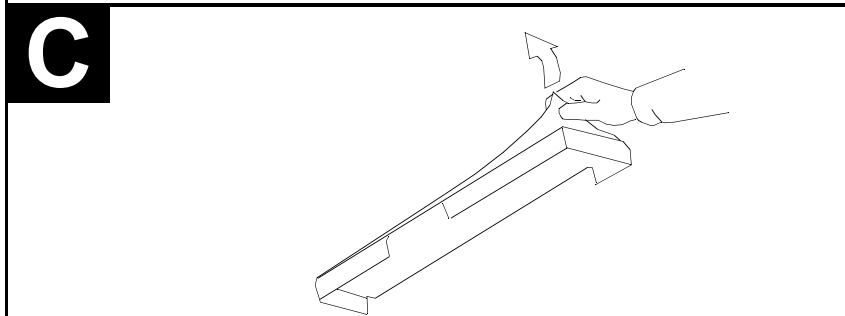
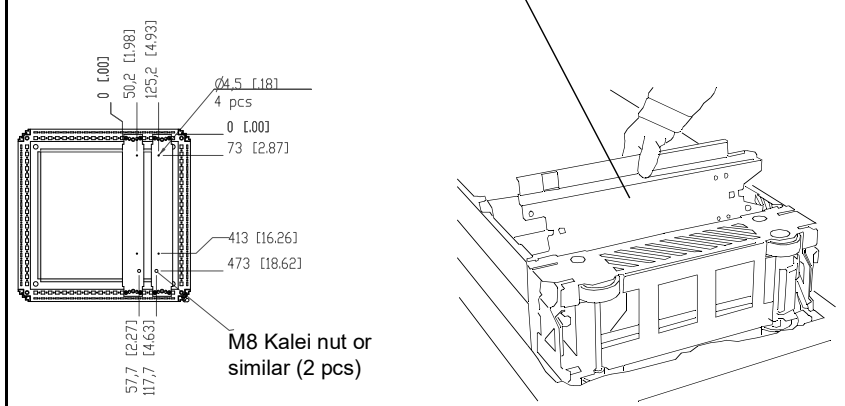
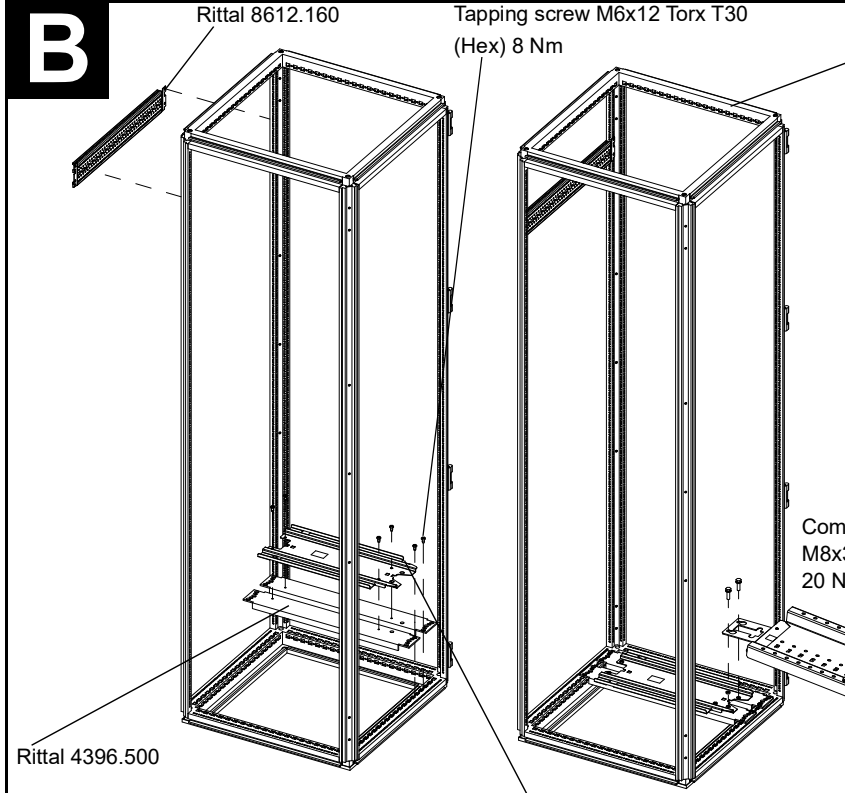
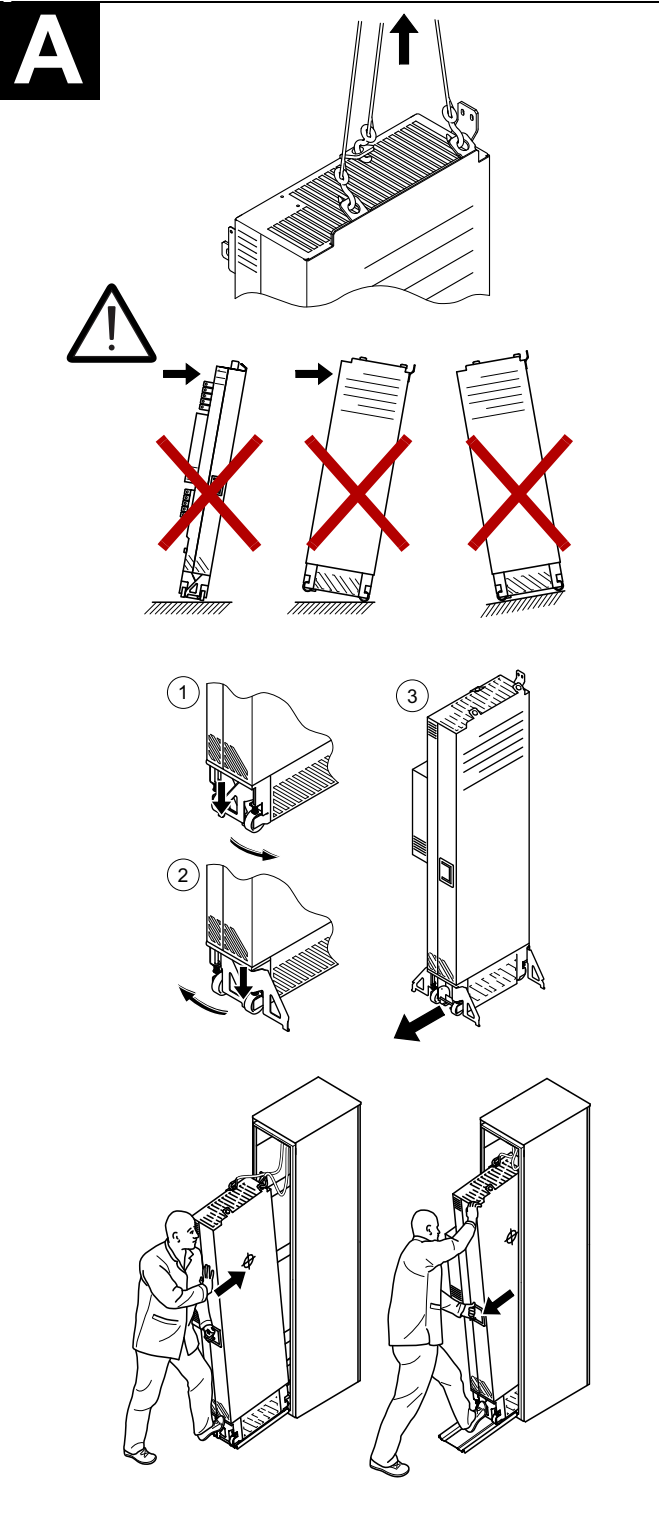
Wire sizes: 0.14...2.5 mm² (26...16 AWG): All terminals

Tightening torques: 0.5...0.6 N·m (0.4 lbf·ft)

UL checklist

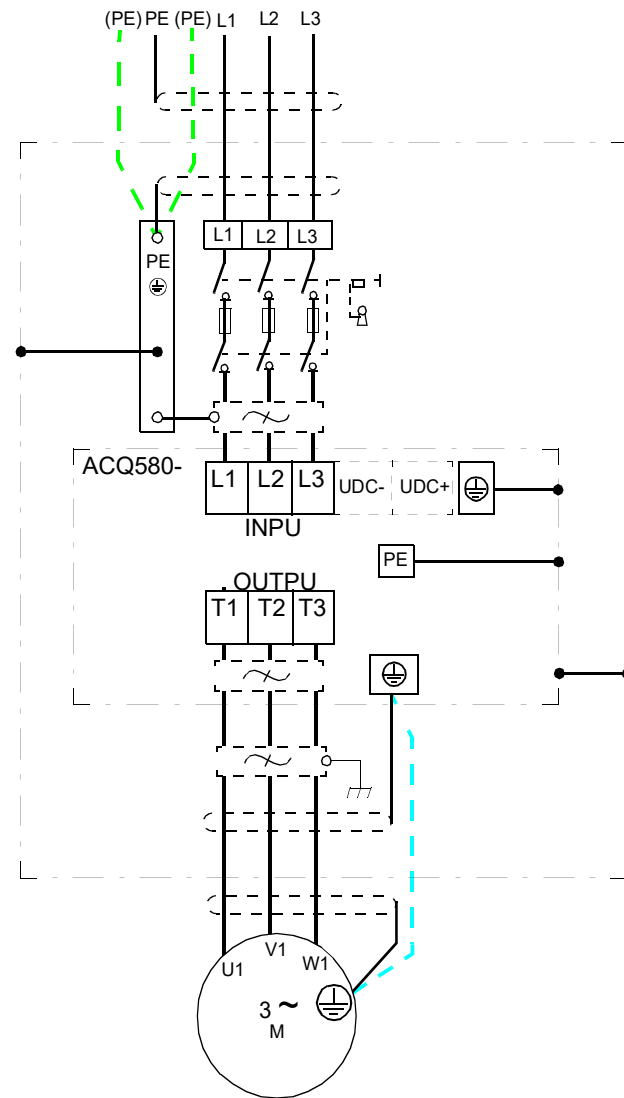
- The drive must be installed in clean air according to enclosure classification. Cooling air must be clean, free from corrosive materials and electrically conductive dust.
 - The maximum ambient air temperature is 40 °C (104 °F) at rated current. The current is derated for 40 to 55 °C (104 to 131 °F).
 - The drive is suitable for use in a circuit capable of delivering not more than 100,000 rms symmetrical amperes, 600 V maximum. The ampere rating is based on tests done according to UL 61800-5-1.
 - The cables located within the motor circuit must be rated for at least 75 °C (167 °F) in UL-compliant installations.
 - The input cable must be protected with fuses. Circuit breakers must not be used without fuses in the USA. Suitable IEC (class aR) fuses and UL (class T) fuses are listed in the hardware manual. For suitable circuit breakers, contact your local ABB representative.
 - For installation in the United States, branch circuit protection must be provided in accordance with the National Electrical Code (NEC) and any applicable local codes. To fulfill this requirement, use the UL classified fuses.
 - For installation in Canada, branch circuit protection must be provided in accordance with the Canadian Electrical Code and any applicable provincial codes. To fulfill this requirement, use the UL classified fuses.
 - The drive provides overload protection in accordance with the National Electrical Code (NEC).
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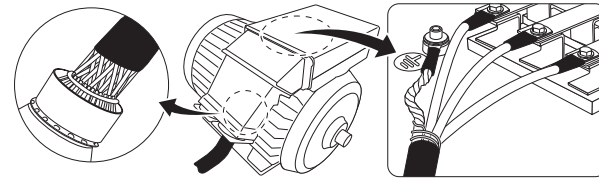


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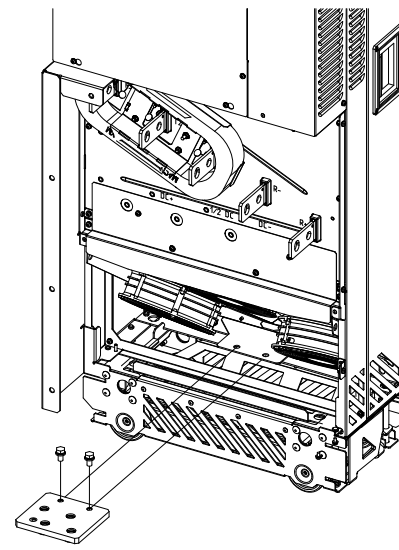
Drive Type	Air flow	Heat dissipation	UL Fuse Information	
	ft ³ /min	W	UL Class	UL Type
$U_N = 480\text{ V}$				
ACQ580-505A-4	707	5602	T	JJS-600
ACQ580-585A-4	707	6409	L	A4BY800
ACQ580-650A-4	707	8122	L	A4BY800
ACQ580-725A-4	707	8764	L	A4BY800
ACQ580-820A-4	707	9862	L	A4BY900
ACQ580-880A-4	848	10578	L	A4BY1000



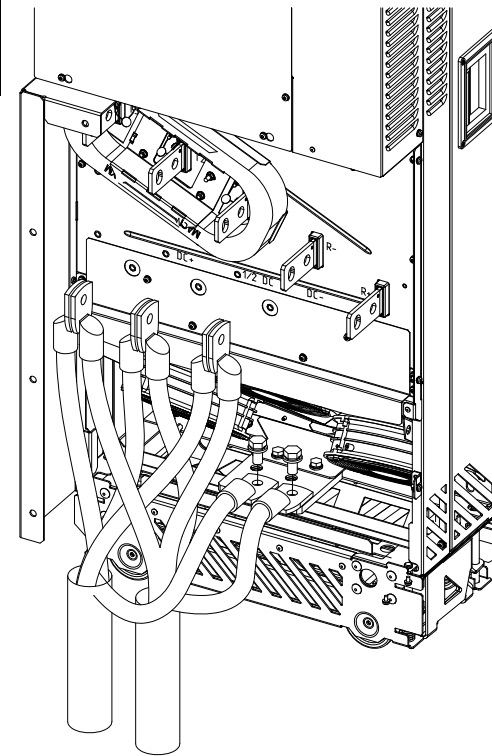
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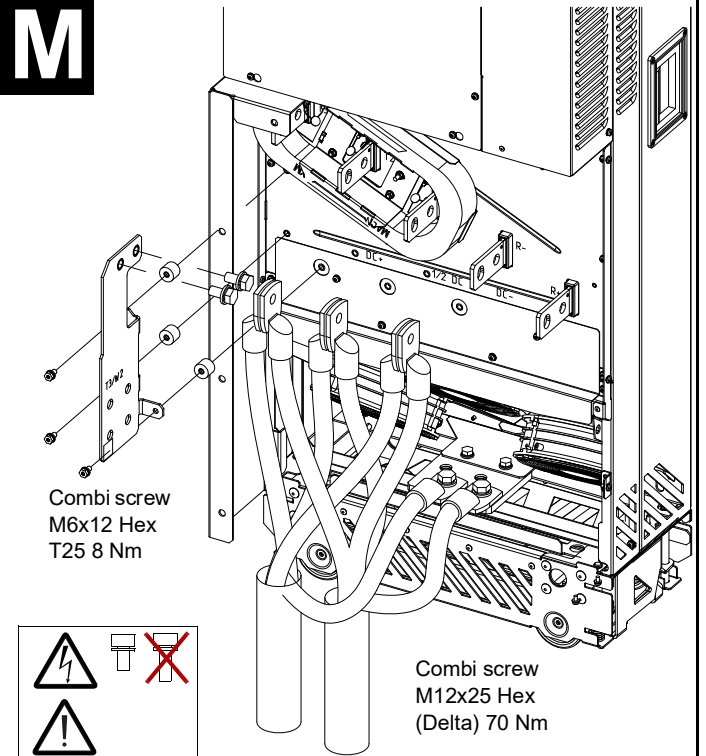
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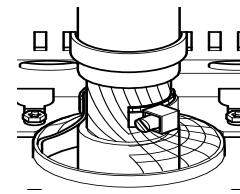
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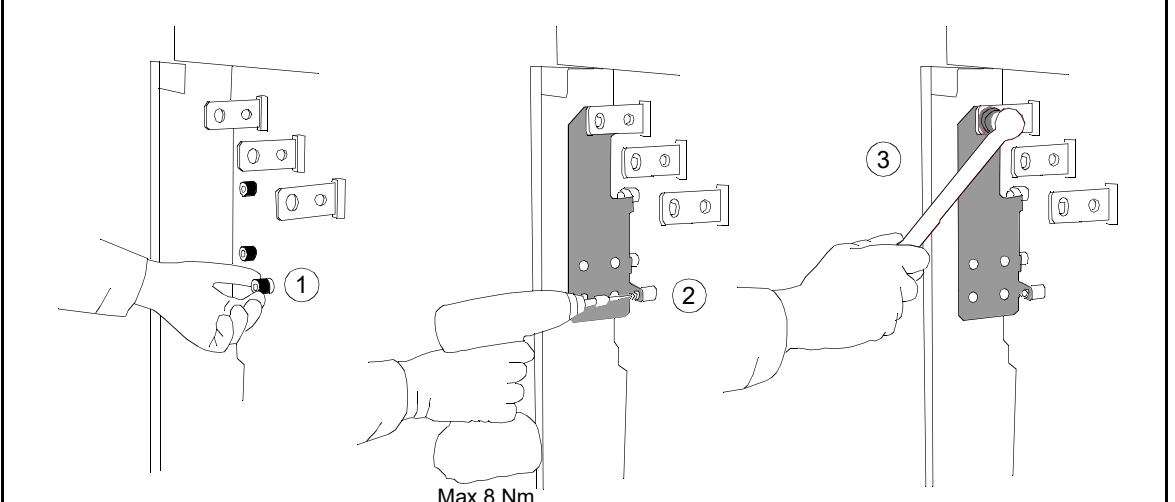
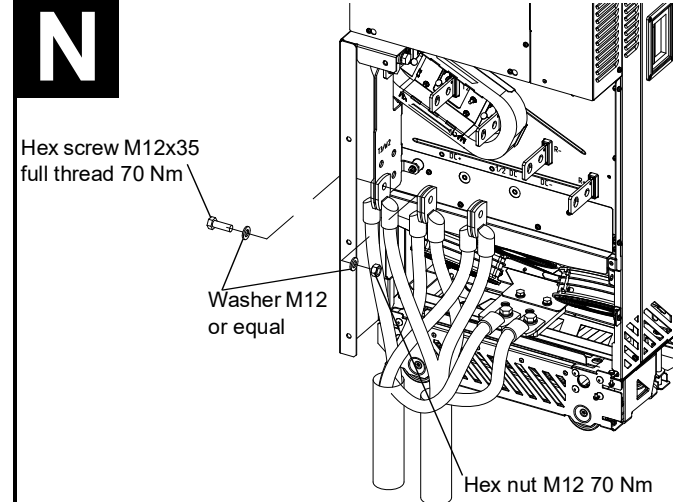
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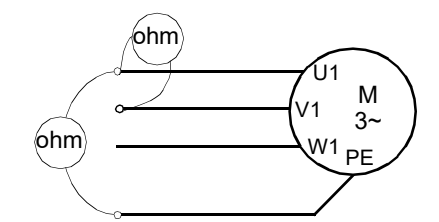


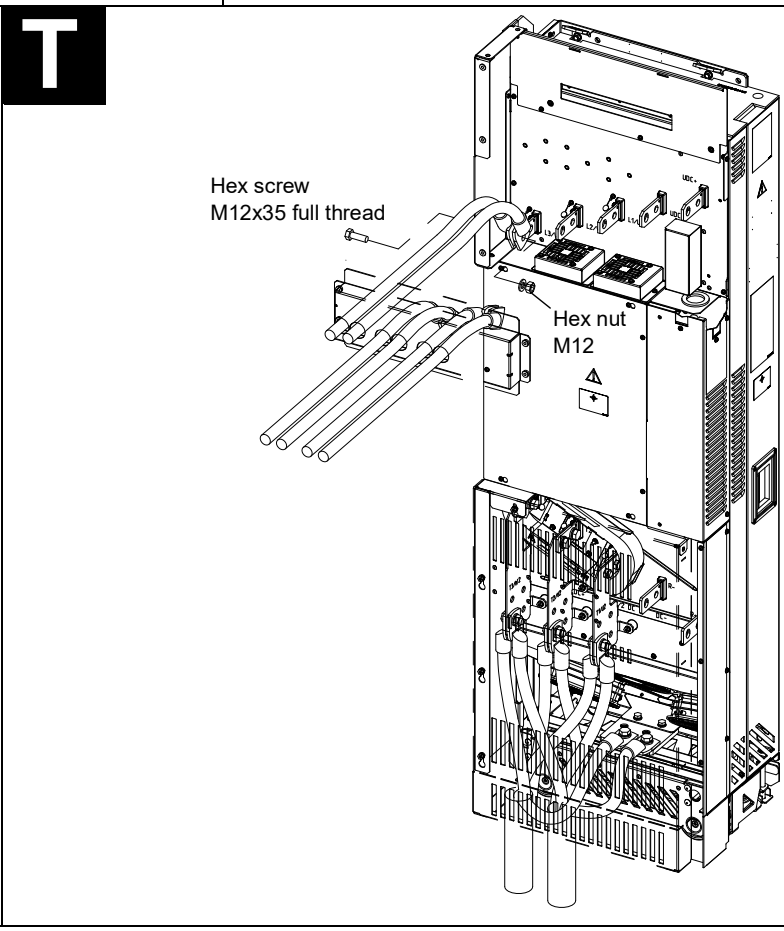
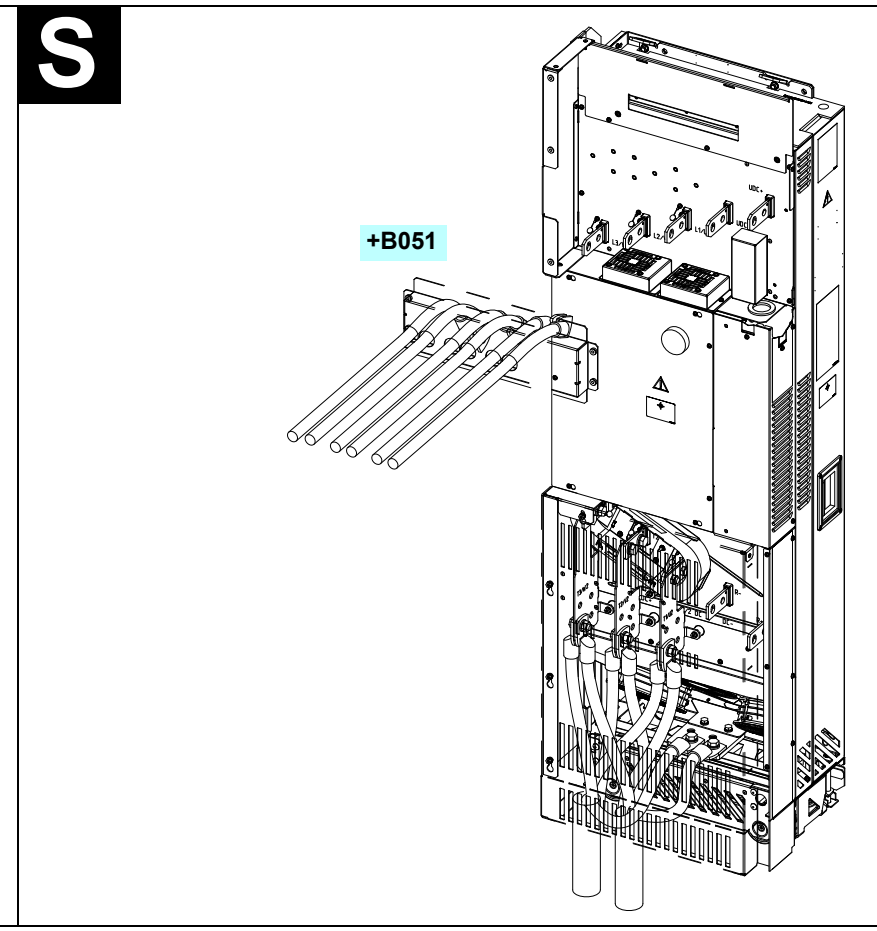
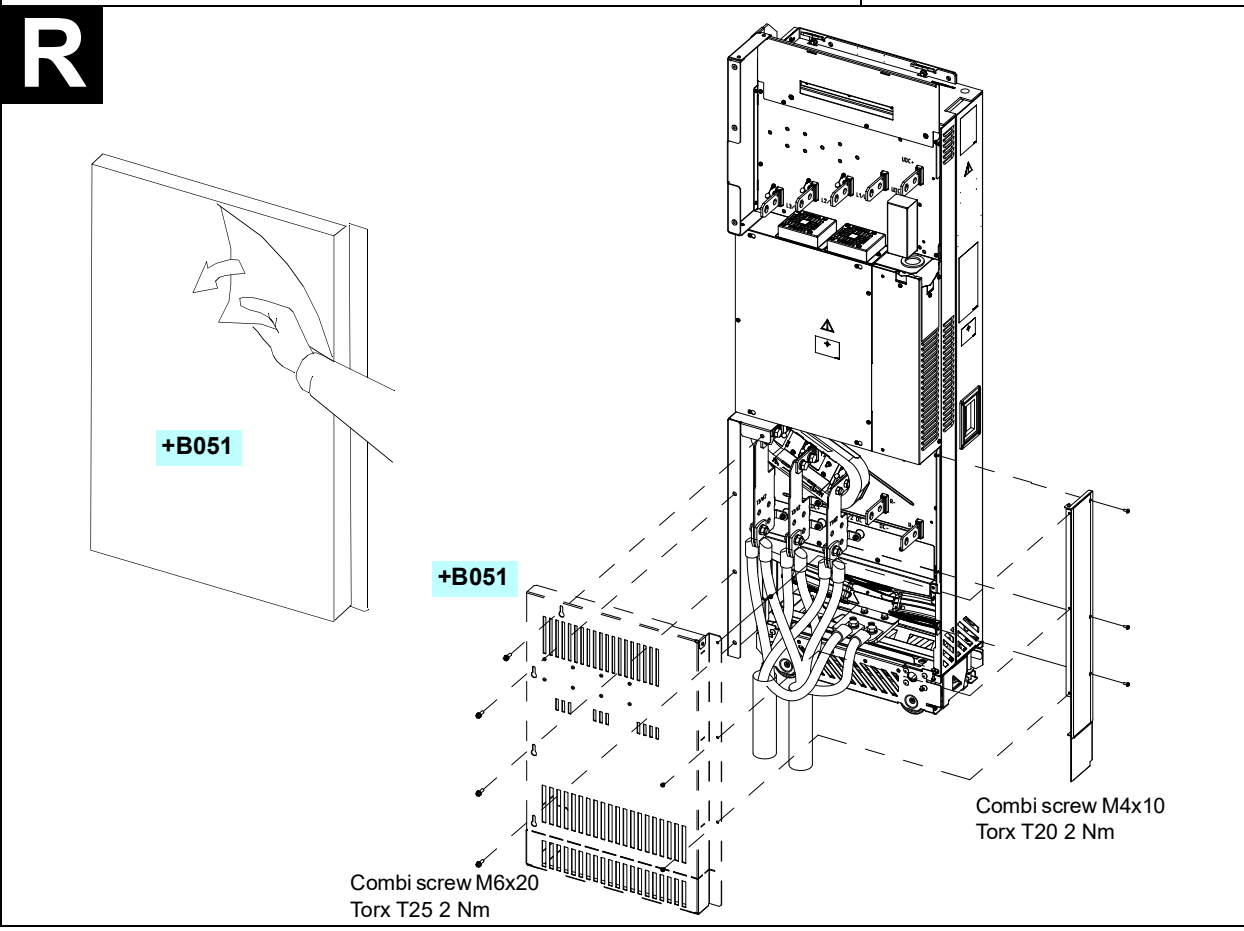
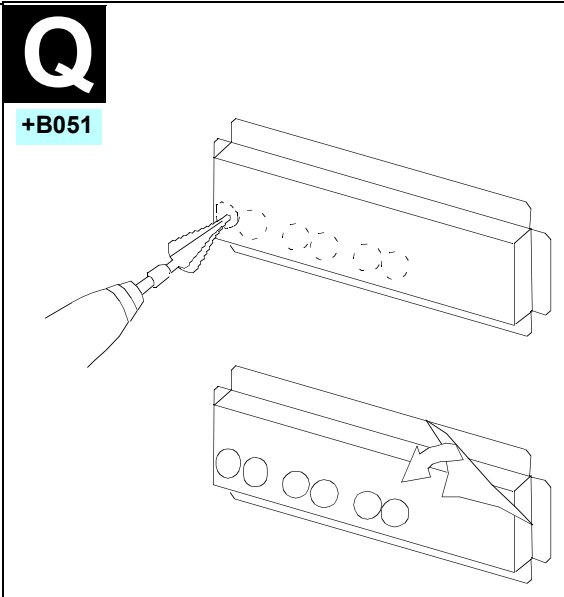
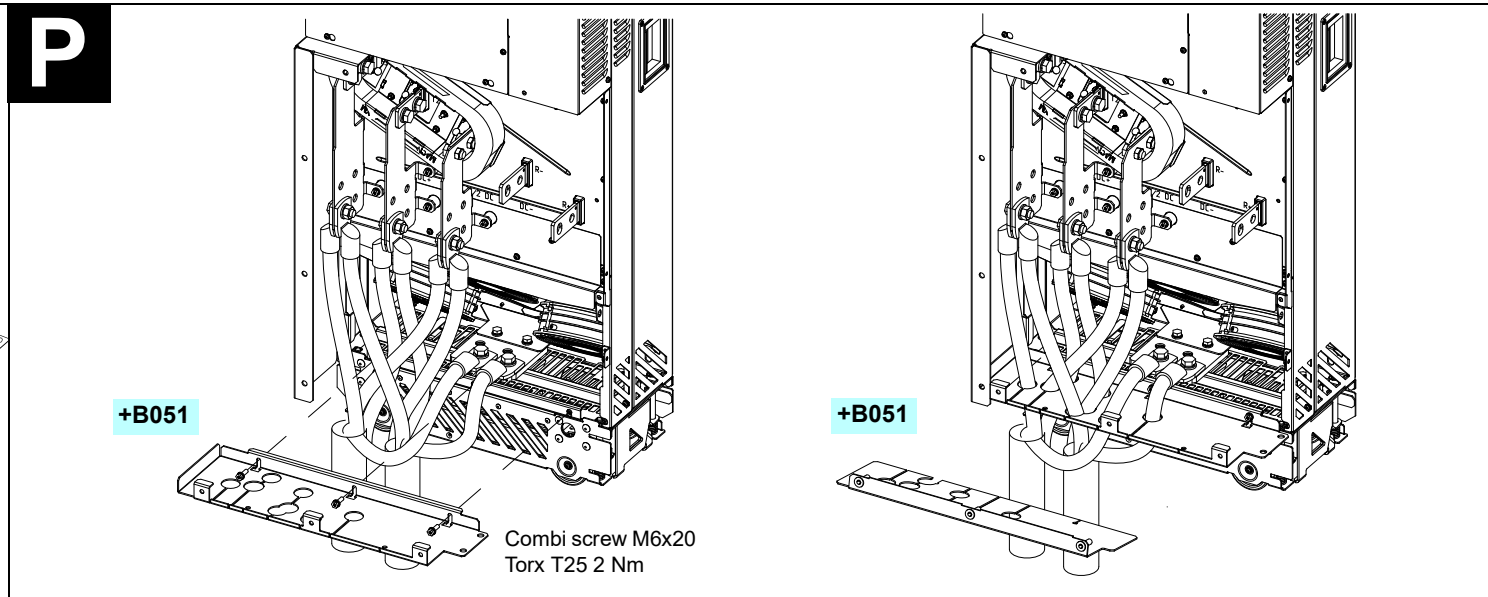
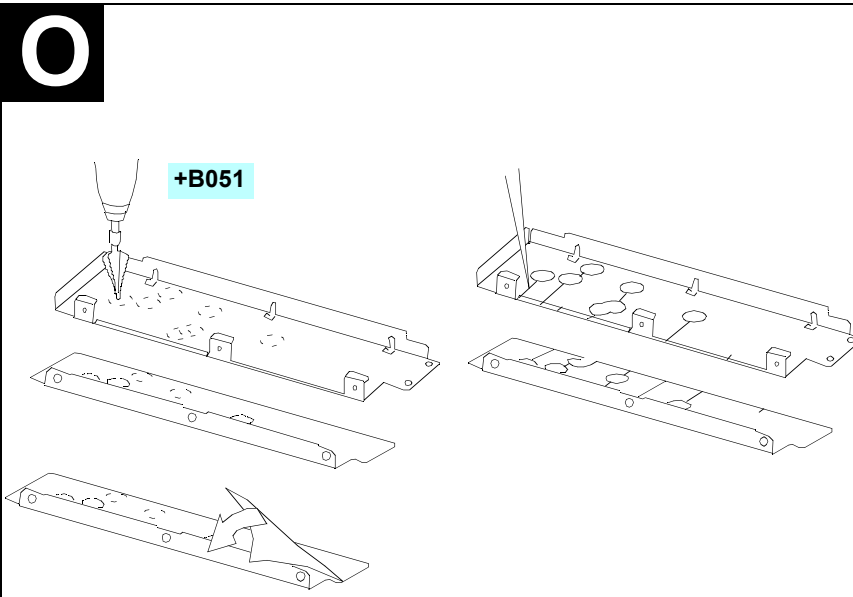
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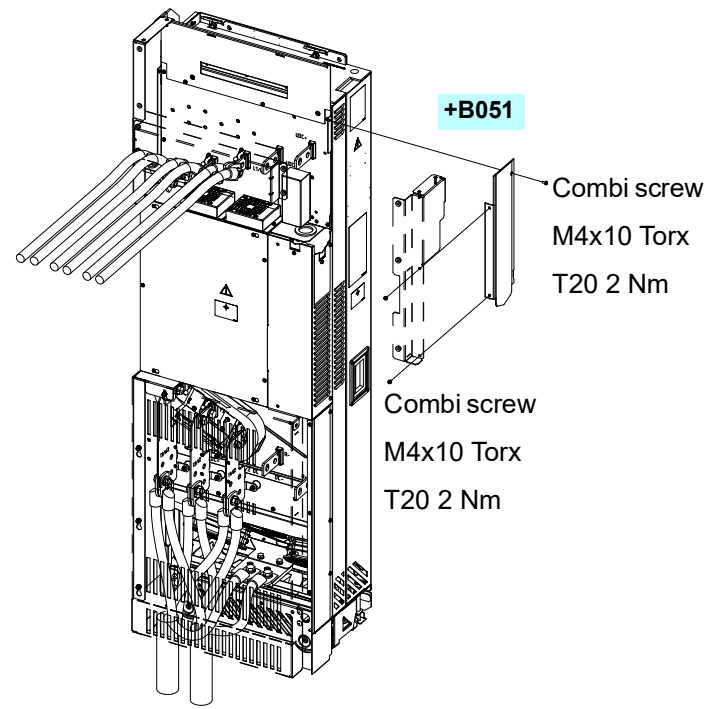
Max 8 Nm

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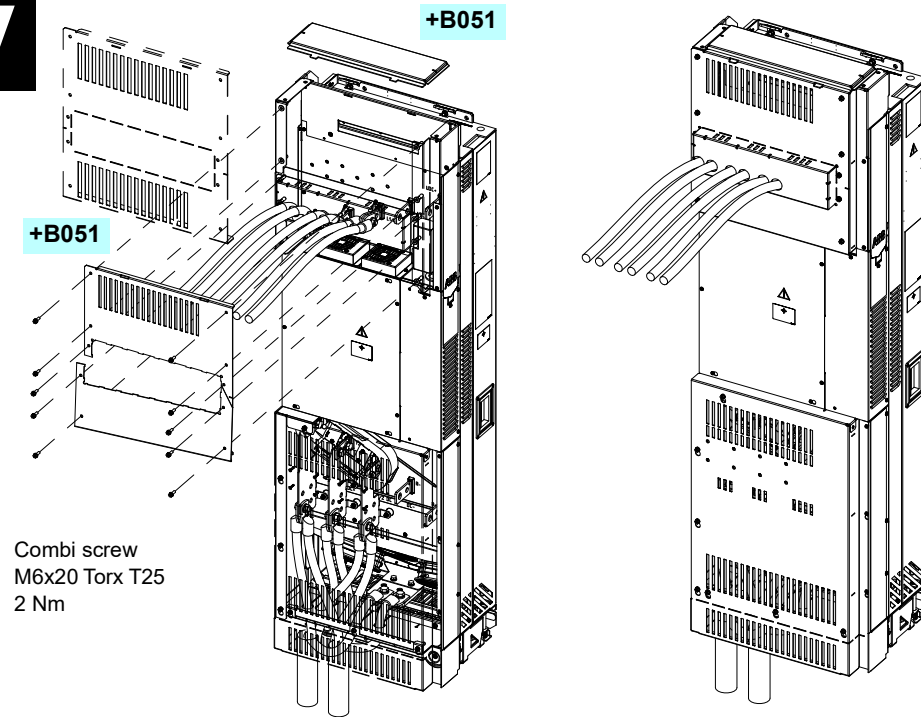




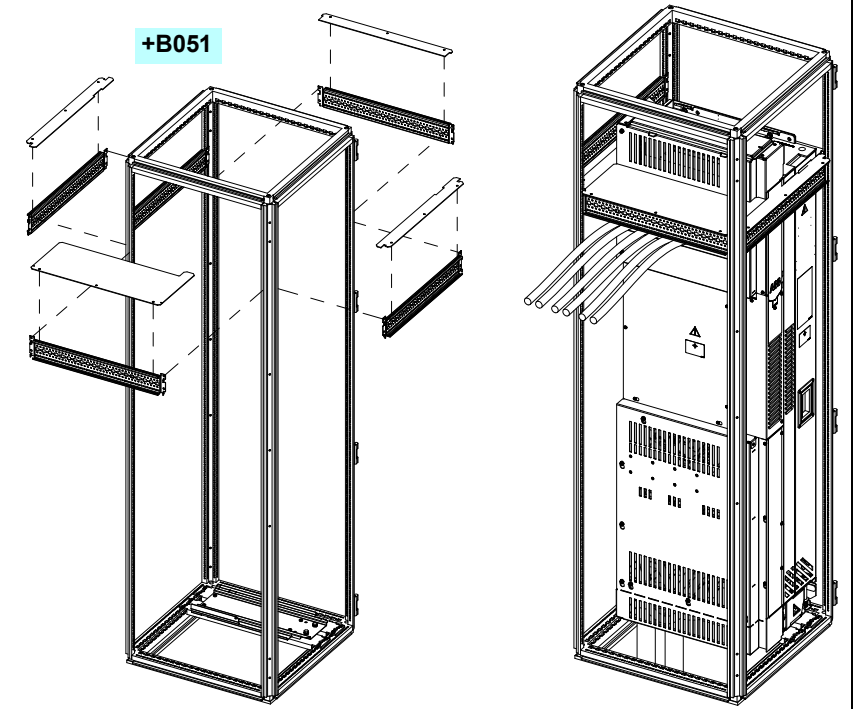
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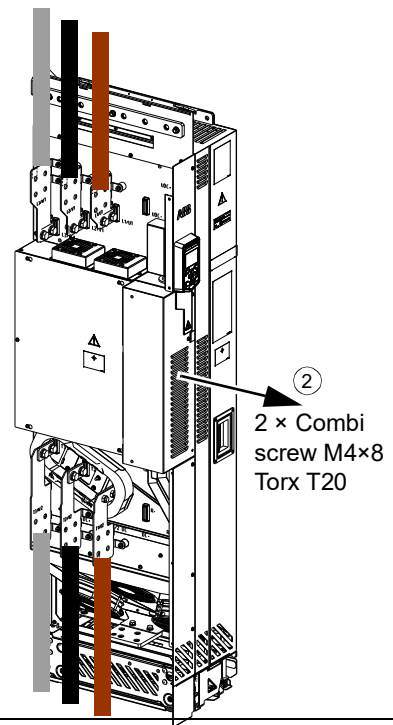
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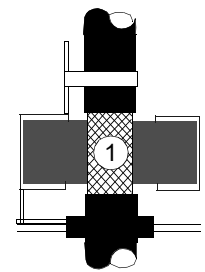
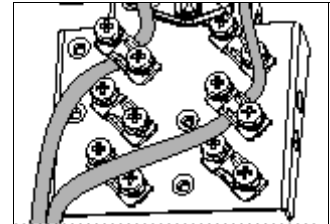
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ABB DRIVES FOR WATER

Quick start-up guide

Basic ACQ580 program setup

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







Quick start-up guide




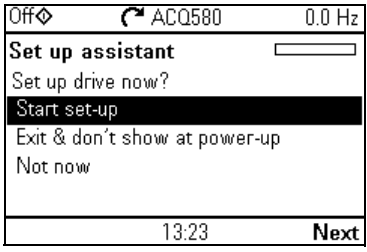




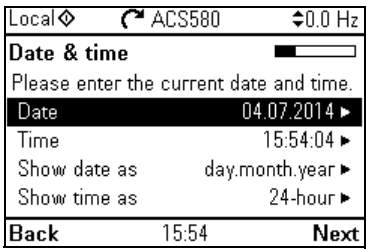






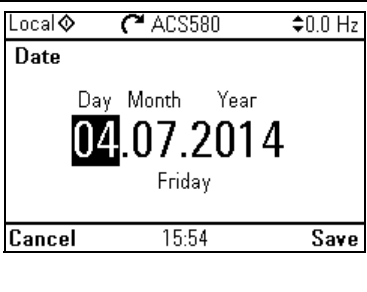
This guide describes how to start-up the drive using the First start assistant on the Hand-Off-Auto control panel. For complete information on start-up, see *ACQ580 firmware manual* (3AXD50000035867 [English]).





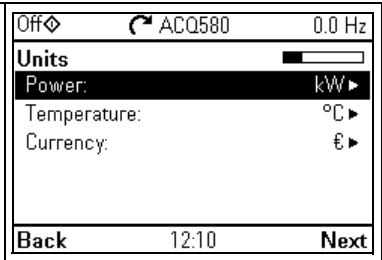



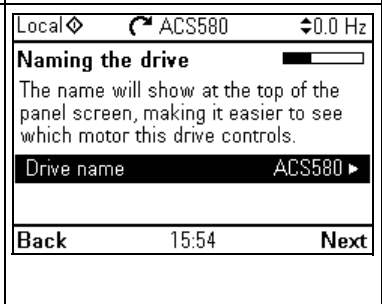

Before you start

Ensure that the drive has been installed as described in

Start-up with the First start assistant on a Hand-Off-Auto control panel




Safety	
<input type="checkbox"/>	Make sure that the installation work is complete. Make sure that cover of the drive and the cable box, if included, are on place.
<input type="checkbox"/>	 Check that the starting of the motor does not cause any danger. Decouple the driven machine if there is a risk of damage in case of an incorrect direction of rotation.
Hints on using the assistant control panel	
<p>The two commands at the bottom of the display (Options and Menu in the figure on the right), show the functions of the two softkeys  and  located below the display. The commands assigned to the softkeys vary depending on the context.</p> <p>Use keys , ,  and  to move the cursor and/or change values depending on the active view.</p> <p>Key  shows a context-sensitive help page.</p>	
1 – First start assistant guided settings: Language, date and time, and motor nominal values	
<input type="checkbox"/>	Have the motor or pump name plate data at hand. Power up the drive.





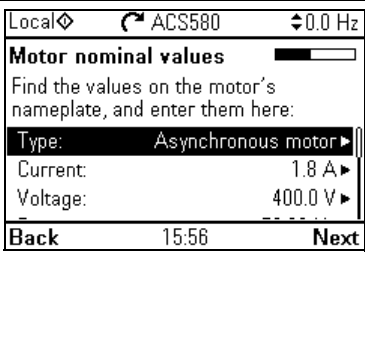





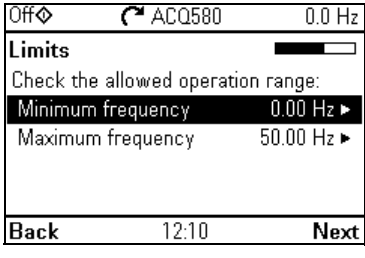



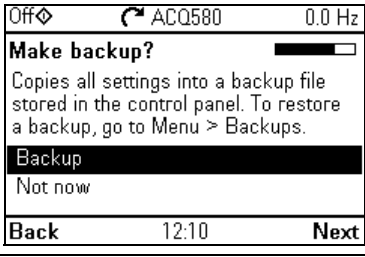


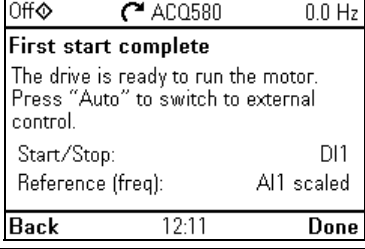

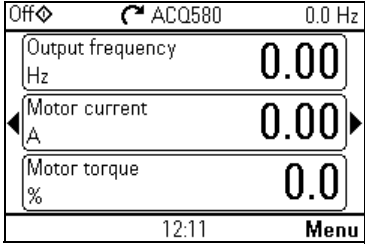

<p><input type="checkbox"/> The First start assistant guides you through the first start-up.</p> <p>The assistant begins automatically. Wait until the control panel enters the view shown on the right.</p> <p>Select the language you want to use by highlighting it (if not already highlighted) and pressing  (OK).</p> <p>Note: After you have selected the language, it takes a few minutes for the control panel to wake up.</p>	 <p>English Deutsch Suomi Français Italiano Nederlands Svenska</p> <p>OK ▶</p>
<p><input type="checkbox"/> Select Start set-up and press  (Next).</p>	 <p>Off ◊ ACQ580 0.0 Hz</p> <p>Set up assistant</p> <p>Set up drive now? <input type="checkbox"/></p> <p>Start set-up</p> <p>Exit & don't show at power-up Not now</p> <p>13:23 Next</p>
<p><input type="checkbox"/> Set the date and time as well as date and time display formats.</p> <ul style="list-style-type: none"> Go to the edit view of a selected row by pressing . Scroll the view with  and . <p>Go to the next view by pressing  (Next).</p>	 <p>Local ◊ ACS580 0.0 Hz</p> <p>Date & time</p> <p>Please enter the current date and time.</p> <p>Date 04.07.2014 ▶</p> <p>Time 15:54:04 ▶</p> <p>Show date as day.month.year ▶</p> <p>Show time as 24-hour ▶</p> <p>Back 15:54 Next</p>
<p><input type="checkbox"/> To change a value in an edit view:</p> <ul style="list-style-type: none"> Use  and  to move the cursor left and right. Use  and  to change the value. Press  (Save) to accept the new setting, or press  (Cancel) to go back to the previous view without making changes. 	 <p>Local ◊ ACS580 0.0 Hz</p> <p>Date</p> <p>Day Month Year</p> <p>04.07.2014</p> <p>Friday</p> <p>Cancel 15:54 Save</p>

<p><input type="checkbox"/> Change the units shown on the panel if needed.</p> <ul style="list-style-type: none"> Go to the edit view of a selected row by pressing . Scroll the view with  and . <p>Go to the next view by pressing  (Next).</p>	 <p>Off  ACQ580 0.0 Hz</p> <p>Units</p> <p>Power: kW ▶</p> <p>Temperature: °C ▶</p> <p>Currency: € ▶</p> <p>Back 12:10 Next</p>
<p><input type="checkbox"/> To give the drive a name that will be shown at the top, press .</p> <p>If you do not want to change the default name (ACQ580), continue by pressing  (Next).</p> <p>For information on editing text, see <i>ACQ580 firmware manual</i> (3AXD50000035867 [English]).</p> <p>Hint: Name the drive, for example, Pump 1.</p>	 <p>Local  ACS580 0.0 Hz</p> <p>Naming the drive</p> <p>The name will show at the top of the panel screen, making it easier to see which motor this drive controls.</p> <p>Drive name ACS580 ▶</p> <p>Back 15:54 Next</p>


Refer to the motor or pump nameplate for the following nominal value settings of the motor. Enter the values exactly as shown on the motor or pump nameplate.

Example of a nameplate of an induction (asynchronous) motor:



 ABB Motors  									
3 ~ motor		M2AA 200 MLA 4							
IEC 200 M/L 55									
No									
					Ins. cl. F		IP 55		
V	Hz	kW	r/min	A	cos φ	IA/IN	tE/S		
690 Y	50	30	1475	32.5	0.83				
400 D	50	30	1475	56	0.83				
660 Y	50	30	1470	34	0.83				
380 D	50	30	1470	59	0.83				
415 D	50	30	1475	54	0.83				
440 D	60	35	1770	59	0.83				
Cat. no		3GAA 202 001 - ADA							
6312/C3			6210/C3				180 kg		
IEC 34-1									


<p><input type="checkbox"/> Check that the motor data is correct. Values are predefined on the basis of the drive size but you should verify that they correspond to the motor.</p> <p>Start with the motor type. Go to the edit view of a selected row by pressing .</p> <ul style="list-style-type: none"> • Scroll the view with  and . <p>Motor nominal $\cos\Phi$ and nominal torque are optional.</p> <p>Press  (Next) to continue.</p>	 <p>Local  ACS580 0.0 Hz</p> <p>Motor nominal values</p> <p>Find the values on the motor's nameplate, and enter them here:</p> <p>Type: Asynchronous motor</p> <p>Current: 1.8 A</p> <p>Voltage: 400.0 V</p> <p>Back 15:56 Next</p>
<p><input type="checkbox"/> Adjust the limits according to your needs.</p> <ul style="list-style-type: none"> • Go to the edit view of a selected row by pressing . • Scroll the view with  and . <p>Go to the next view by pressing  (Next).</p>	 <p>Off  ACQ580 0.0 Hz</p> <p>Limits</p> <p>Check the allowed operation range:</p> <p>Minimum frequency 0.00 Hz</p> <p>Maximum frequency 50.00 Hz</p> <p>Back 12:10 Next</p>
<p><input type="checkbox"/> If you want to make a backup of the settings made so far, select Backup and press  (Next).</p> <p>If you do not want to make a backup, select Not now and press  (Next).</p>	 <p>Off  ACQ580 0.0 Hz</p> <p>Make backup?</p> <p>Copies all settings into a backup file stored in the control panel. To restore a backup, go to Menu > Backups.</p> <p>Backup</p> <p>Not now</p> <p>Back 12:10 Next</p>
<p><input type="checkbox"/> The first start is now complete and the drive is ready for use.</p> <p>Press  (Done) to enter the Home view.</p>	 <p>Off  ACQ580 0.0 Hz</p> <p>First start complete</p> <p>The drive is ready to run the motor. Press "Auto" to switch to external control.</p> <p>Start/Stop: DI1</p> <p>Reference (freq): AI1 scaled</p> <p>Back 12:11 Done</p>
<p><input type="checkbox"/> The Home view monitoring the values of the selected signals is shown on the panel.</p> <p>For changing the signals and their display style shown in the Home view, see <i>ACQ-AP-x assistant control panels user's manual</i> (3AUA0000085685 [English]).</p>	 <p>Off  ACQ580 0.0 Hz</p> <p>Output frequency 0.00 Hz</p> <p>Motor current 0.00 A</p> <p>Motor torque 0.0 %</p> <p>12:11 Menu</p>

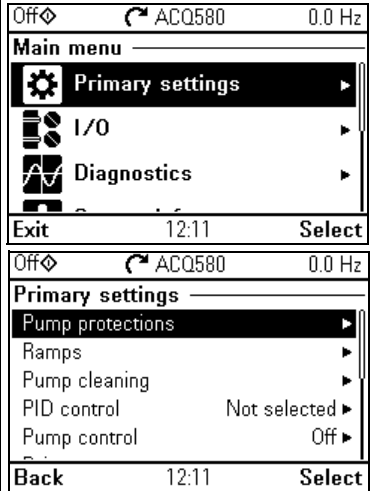
2 – Additional settings in the Primary settings menu

- Make any additional adjustments, for example, pump protections, starting from the **Main** menu – press  (**Menu**) to enter the **Main** menu.

Select **Primary settings** and press  (**Select**) (or ).

In the **Primary settings** menu, select **Pump protections** and press  (**Select**) (or ).

To get more information on the **Primary settings** menu items, press  to open the help page.



3 – Hand/Off/Auto operation



The drive can be in remote control or local control, and in local control there are additionally two different modes.

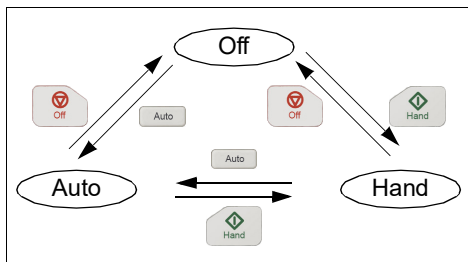
Remote control: Drive is controlled from the I/O or the fieldbus.

- Top row of the view shows Auto.

Local control: Drive is controlled from the control panel.

- Top row of the view shows Off, that is, the drive is in the Off mode. Drive is stopped.
- Top row of the view shows Hand, that is, the drive is in the Hand mode. Drive is running. The initial reference in the Hand mode is copied from the drive reference. Symbol \blacklozenge on the top row indicates that you can change the reference with \blacktriangle and \blacktriangledown .

The following diagram shows the state transitions when you press the Hand, Off or Auto button:



Note: When you restart the drive while fault 7081 Control panel loss is active, the mode changes from Hand or Off to Auto.

Auto	ACQ580	30.0 Hz
Output frequency	Hz	30.00
Motor current	A	0.46
Motor torque	%	8.9
		12:30
		Menu

Off	ACQ580	0.0 Hz
Output frequency	Hz	0.00
Motor current	A	0.00
Motor torque	%	0.0
		12:37
		Menu

Hand	ACQ580	30.0 Hz
Output frequency	Hz	30.00
Motor current	A	0.46
Motor torque	%	8.8
Reference		12:38
		Menu

Off	ACQ580	0.0 Hz
Fault 7081 Aux code: 0000 0000		
Control panel loss		12:41:43
Control panel loss fault		
Hide		12:42
		Reset

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Further information

Product and service inquiries

Address any inquiries about the product to your local ABB representative, quoting the type designation and serial number of the unit in question. A listing of ABB sales, support and service contacts can be found by navigating to www.abb.com/searchchannels.

Product training

For information on ABB product training, navigate to new.abb.com/service/training.

Providing feedback on ABB manuals

Your comments on our manuals are welcome. Navigate to new.abb.com/drives/manuals-feedback-form.

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