



ABB GENERAL PURPOSE DRIVES

## ACS530-04 drive modules

### Quick installation guide



Related Manuals

Ecodesign  
(EU 2019/1781)

About this document

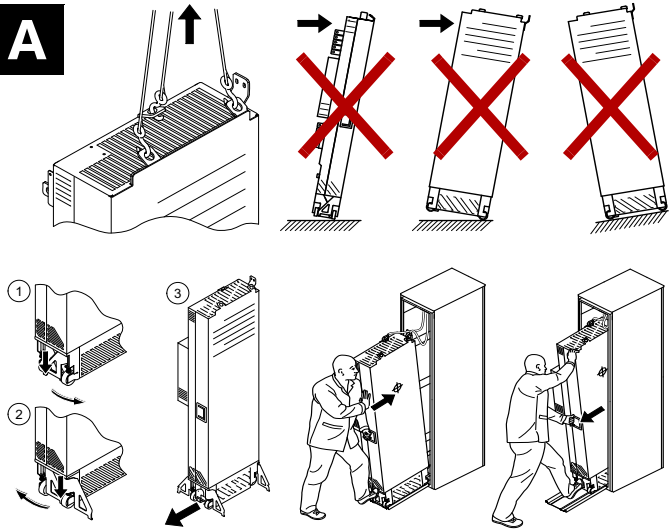
3AXD50000810383  
Rev A EN 2021-07-31  
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### Safety Instructions

See figure A. If you ignore the 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 electrical professional, do not do installation or maintenance work. Go through these steps before you begin any installation or maintenance work.
- Clearly identify the work location and equipment.
  - Disconnect all possible voltage sources.
    - Open the main disconnector of the drive enclosure.
    - Open the disconnector of the supply transformer. The main disconnecting device in the drive enclosure does not disconnect the voltage from the AC input power busbars of the drive enclosure.
    - Make sure that reconnection is not possible. Lock the disconnectors to the open position and attach a warning notice to them. Follow the correct lock out and tag out procedures.
    - Disconnect any external power sources from the control circuits before you touch the control cables.
    - After you disconnect the drive, always wait for 5 minutes to let the intermediate circuit capacitors discharge before you continue.
  - Protect any other energized parts in the work location against contact.
  - Take special precautions when close to bare conductors.
  - Measure that the installation is de-energized.
    - Use a multimeter with an impedance of at least 1 Mohm.
    - 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.
  - Install temporary grounding as required by the local regulations.
  - Ask the person in control of the electrical installation work for a permit to 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

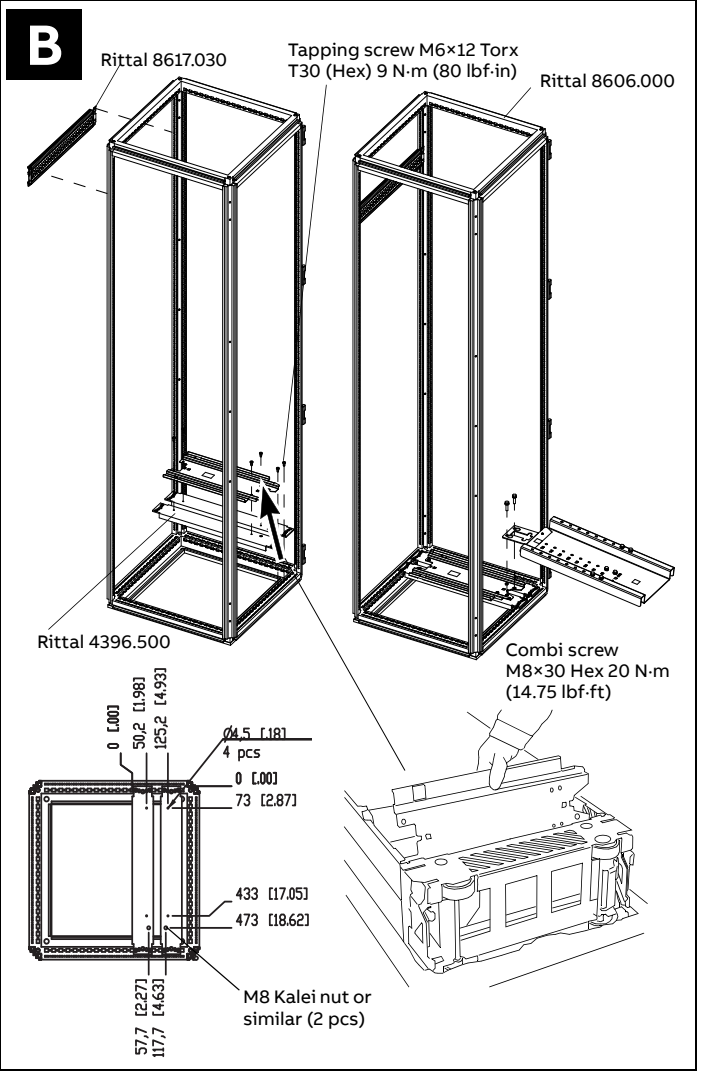
See the table [Losses, cooling data and noise](#) for the losses and the cooling air flow through the drive. The allowed operating temperature range of the drive without derating is -15 to +40 °C. For more information, see the hardware manual.

### Protect the drive and input power cables

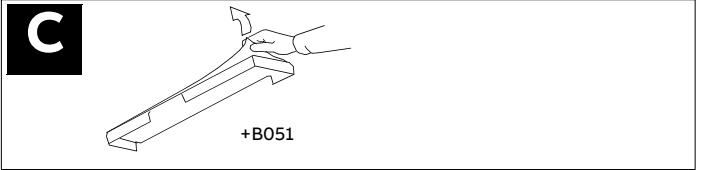
See [Fuses \(IEC\)](#) for aR fuses for protection against short-circuit in the input power cable or drive.

### Install the drive module in a cabinet

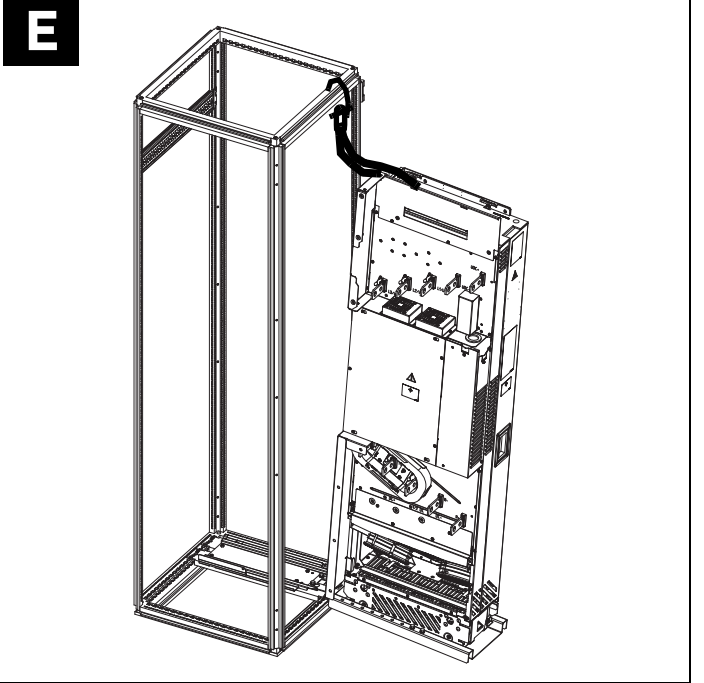
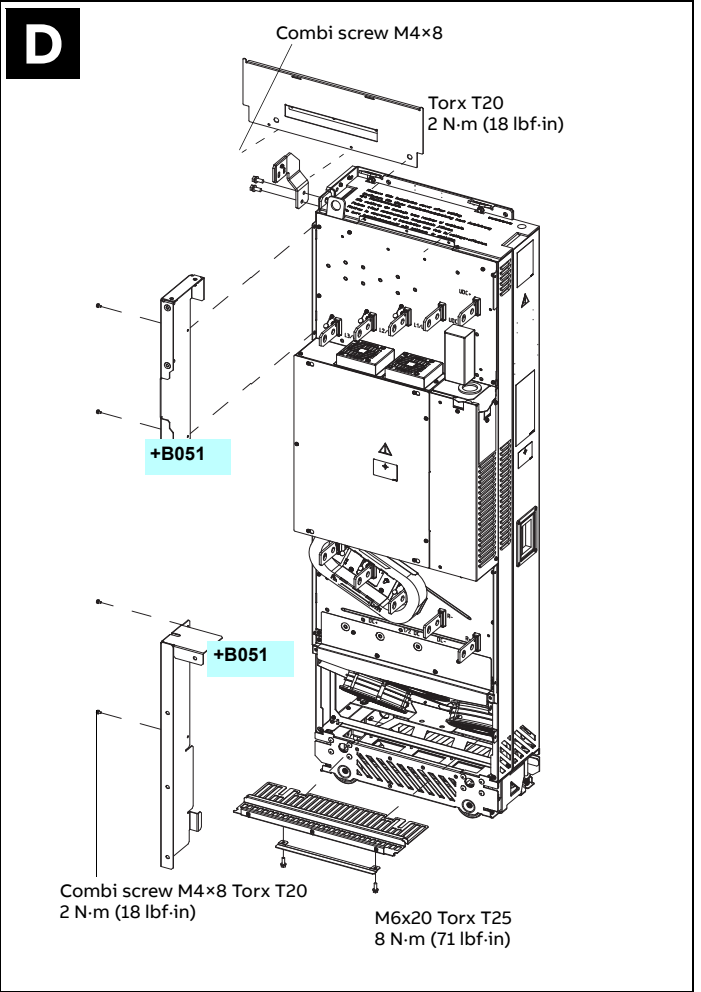
- See figure B:
- Install the punched section to the back of the cabinet frame.
  - Install the support rails and pedestal guide plate to the cabinet bottom frame.
  - Install the telescopic insertion/extraction ramp to the pedestal guide plate.



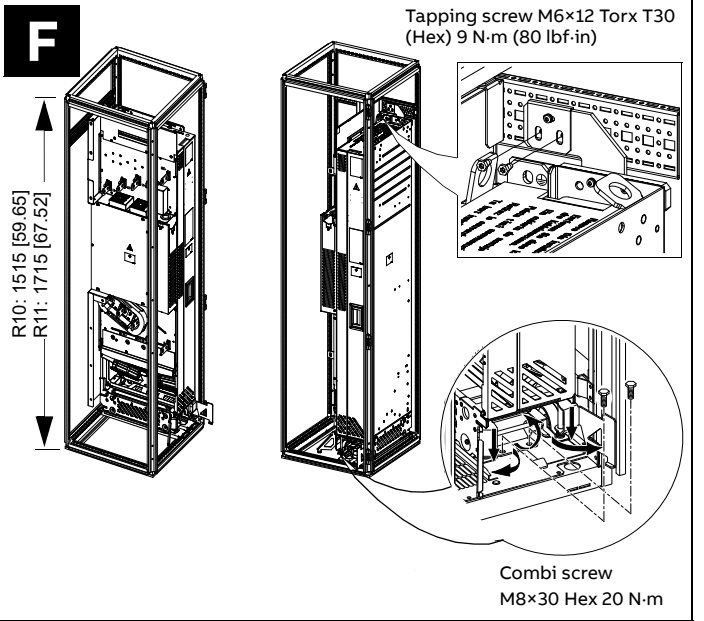
- Option +B051:**
- See figure C, Remove the sheeting from the clear plastic shrouds from both sides.



- See figure D and figure E:
- Install the fastening bracket to the drive module.
  - 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.
  - To prevent the drive module from falling, attach its lifting lugs with chains to the cabinet frame.
  - Push the drive module into the cabinet along the telescopic insertion/extraction ramp.
  - Remove the ramp.



- See figure F
- Attach the drive module to the pedestal guide plate.
  - Attach the drive module from its top to the punched section at the cabinet back. **Note:** The fastening bracket grounds the drive module to the cabinet frame.

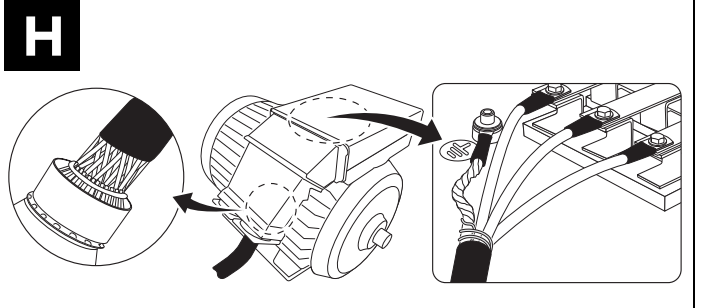
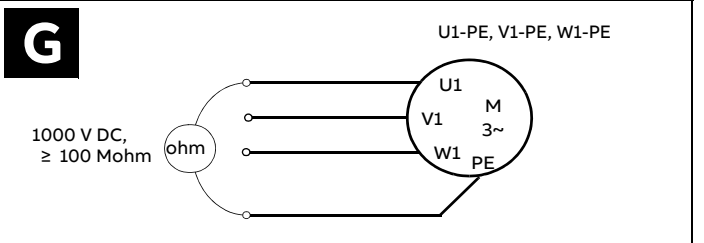


### Measure the insulation of the input and motor cables and the motor

Before you connect the input power cable to the drive, measure its insulation according to local regulations. See figure H, Ground the motor cable shield at the motor end. For minimal interference, make a 360-degree grounding at the cable entry, or keep the pig tail short.

Measure the insulation of the motor and motor cable when the motor cable is disconnected from the drive, see figure G, Measure the insulation resistance between each phase conductor and the Protective Earth conductor. Use a measuring voltage of 1000 V DC. The insulation resistance of an ABB motor must be more than 100 Mohm (reference value at 25 °C). For the insulation resistance of other motors, refer to the manufacturer's instructions.

**Note:** Moisture inside the motor casing reduces the insulation resistance. If you suspect moisture, dry the motor and repeat the measurement.



### Check the grounding system compatibility

**WARNING!** Do not install the drive with ground-to-phase varistor connected to a system that the varistor is not suitable for. If you do, the varistor circuit can be damaged.

#### EMC filter compatibility

The drive has an internal EMC filter (+E210) as standard. You can install the drive with the EMC filter connected to a symmetrically grounded TN-S system, IT system, corner-grounded delta, mid-point-grounded delta and TT system.

#### Ground-to-phase varistor compatibility

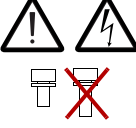
The drive is equipped with an internal ground-to-phase varistor as standard. You can install the drive with the ground-to-phase varistor connected to a symmetrically grounded TN-S system, corner-grounded delta and mid-point-grounded delta system. If you install the drive to an IT system or a TT system, you need to disconnect the varistor. See section *Ground-to-phase varistor disconnecting instructions – IEC, not North America* in the hardware manual.

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

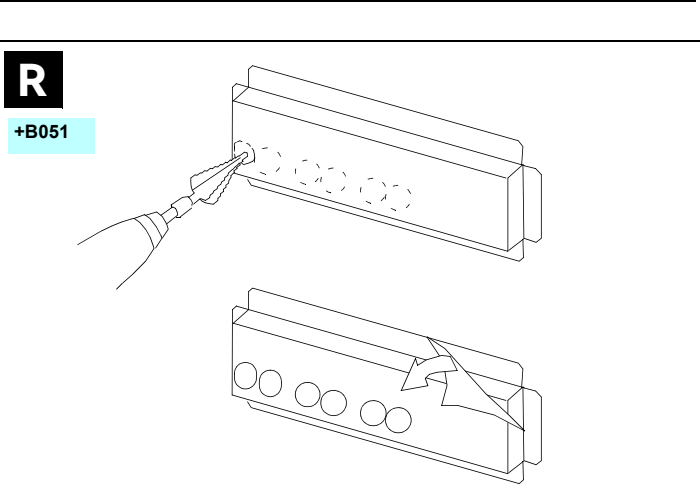
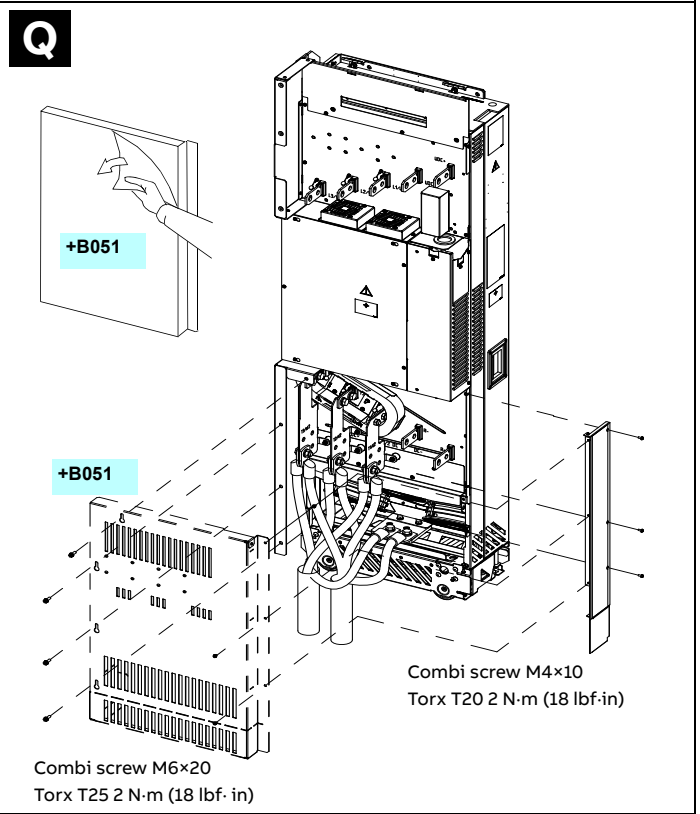
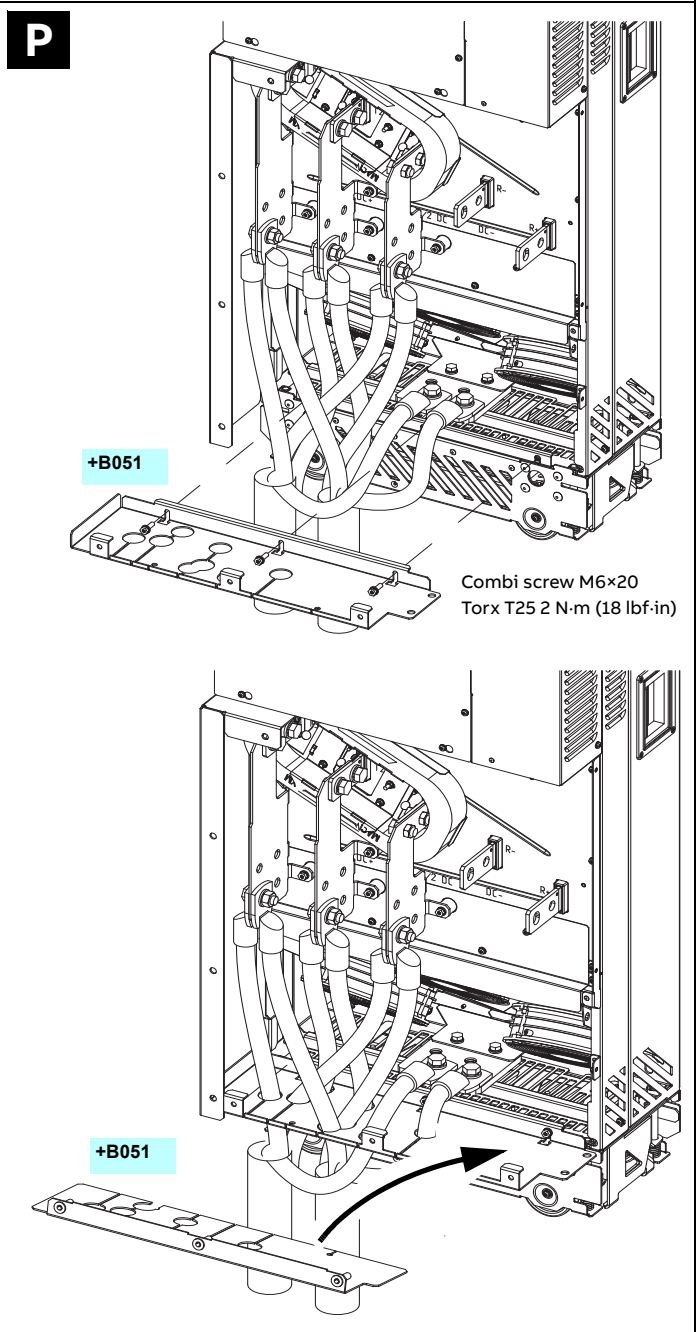
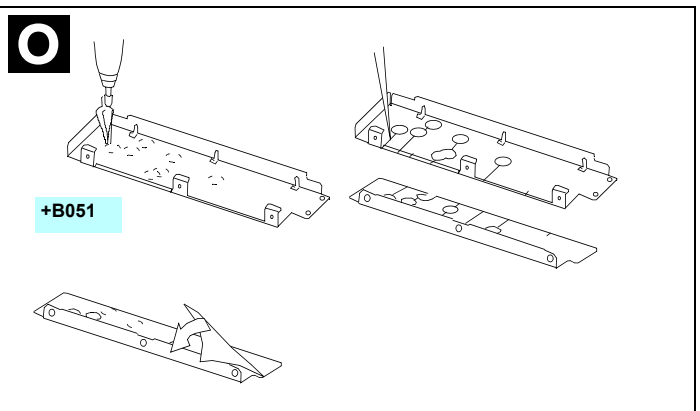
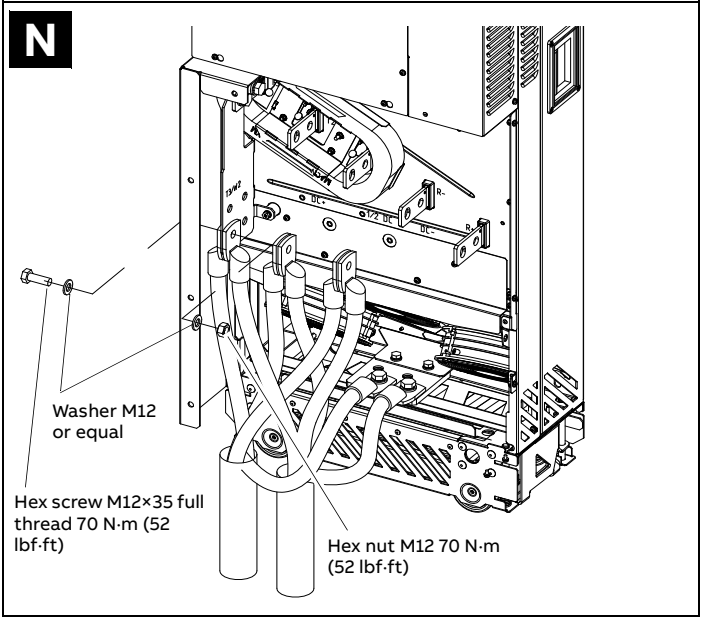
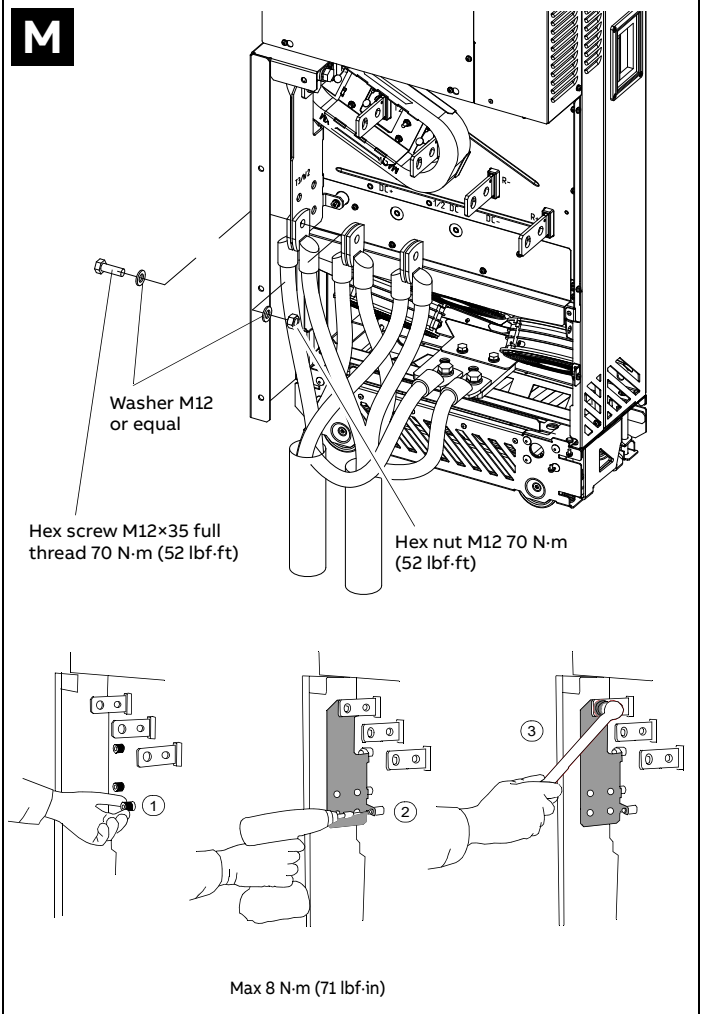
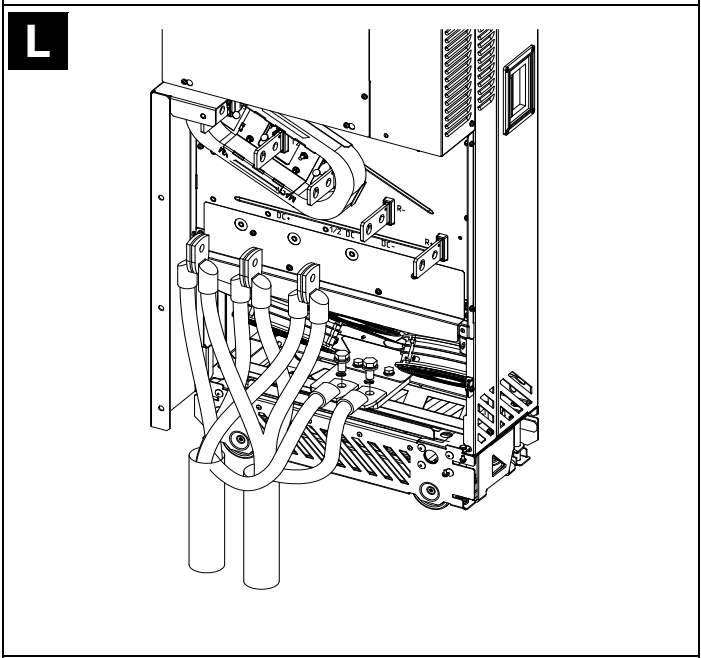
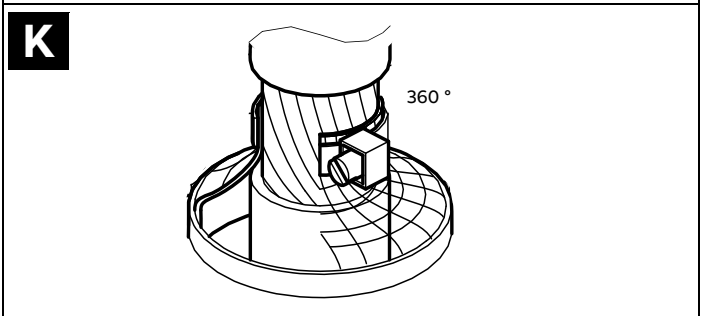
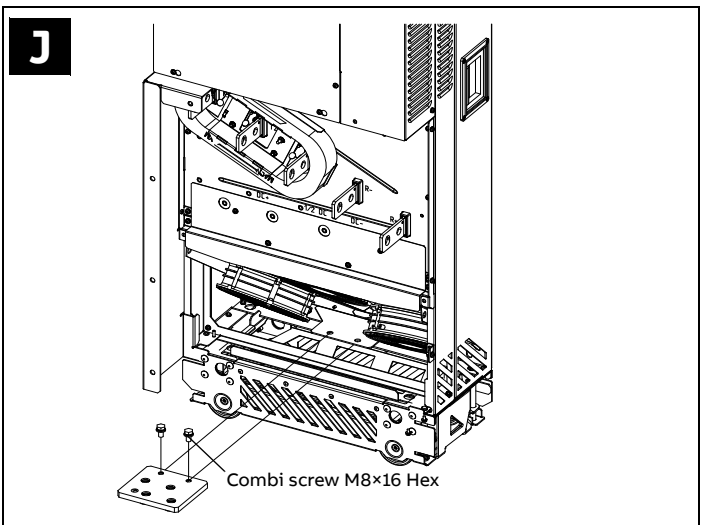
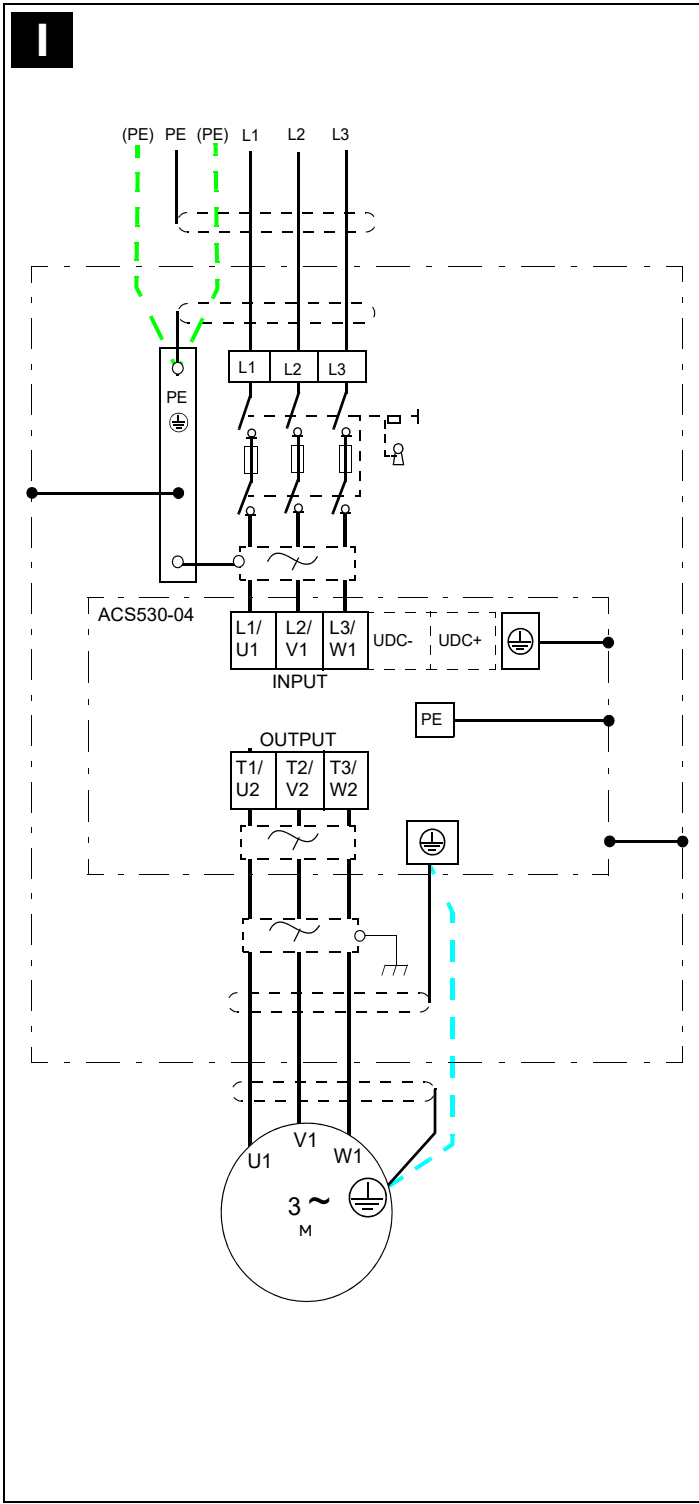
See figure I:

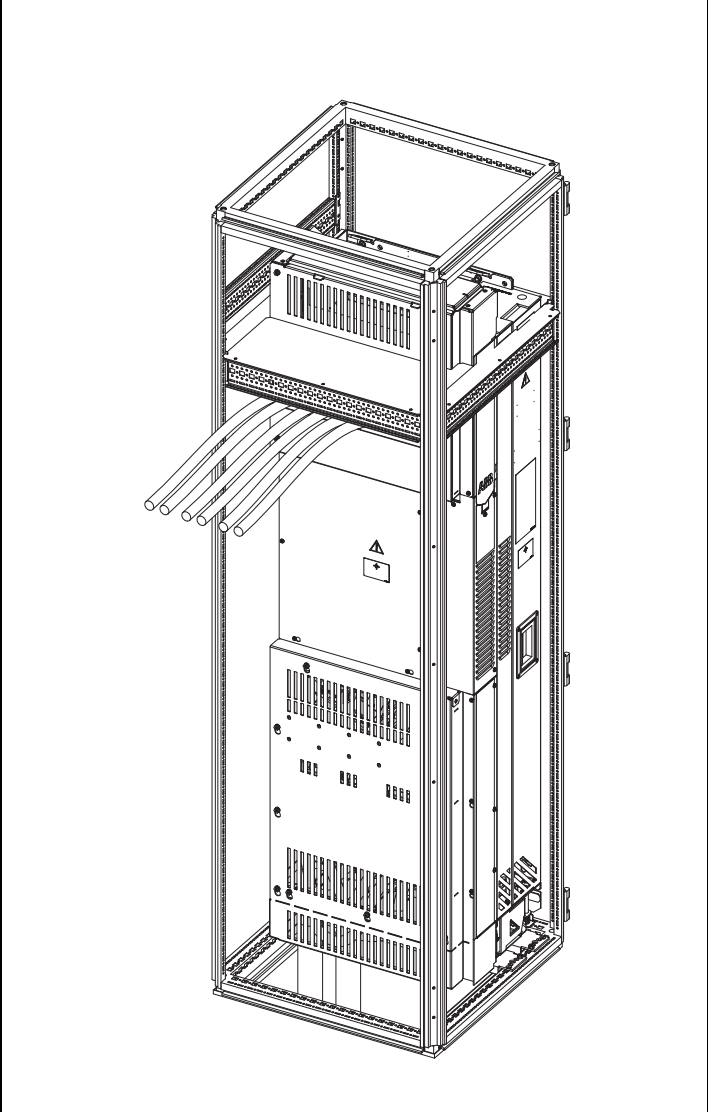
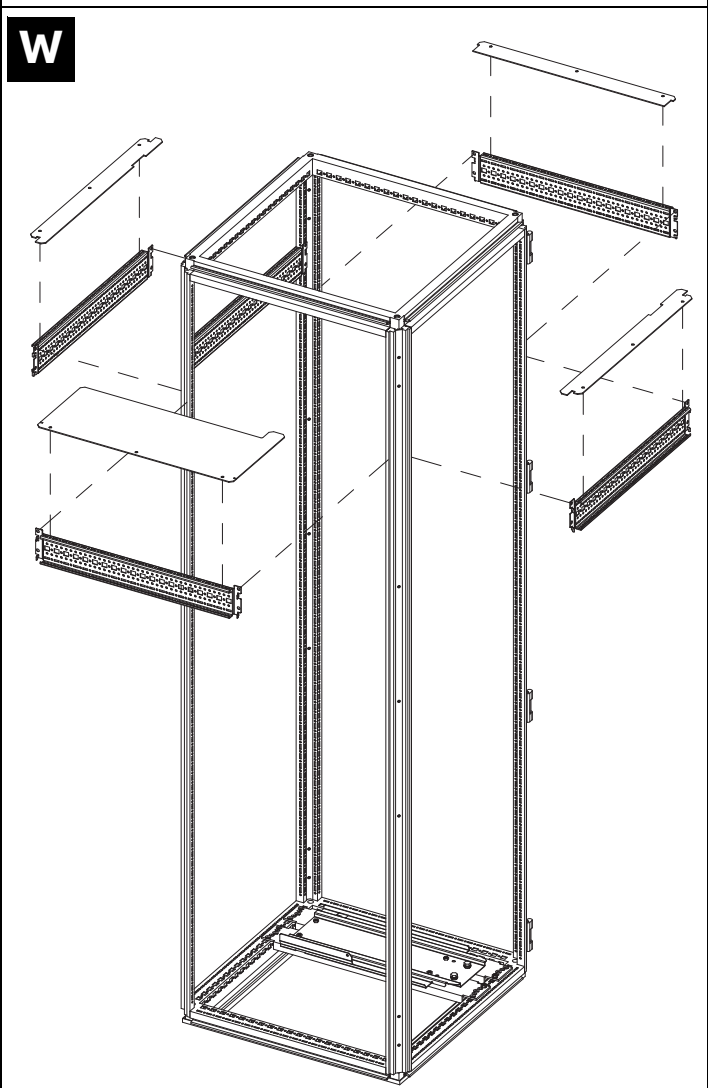
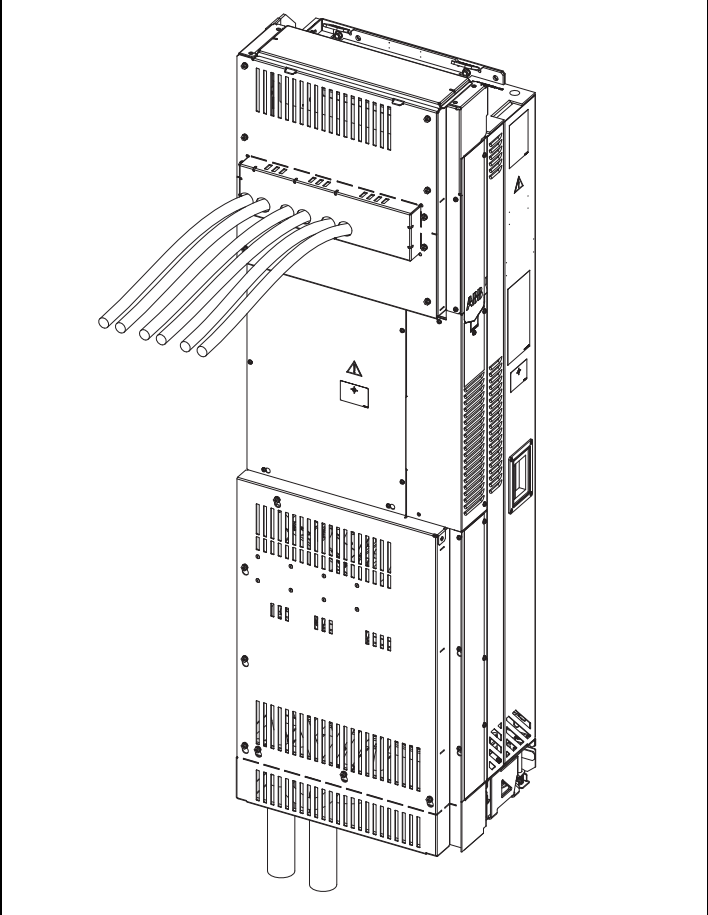
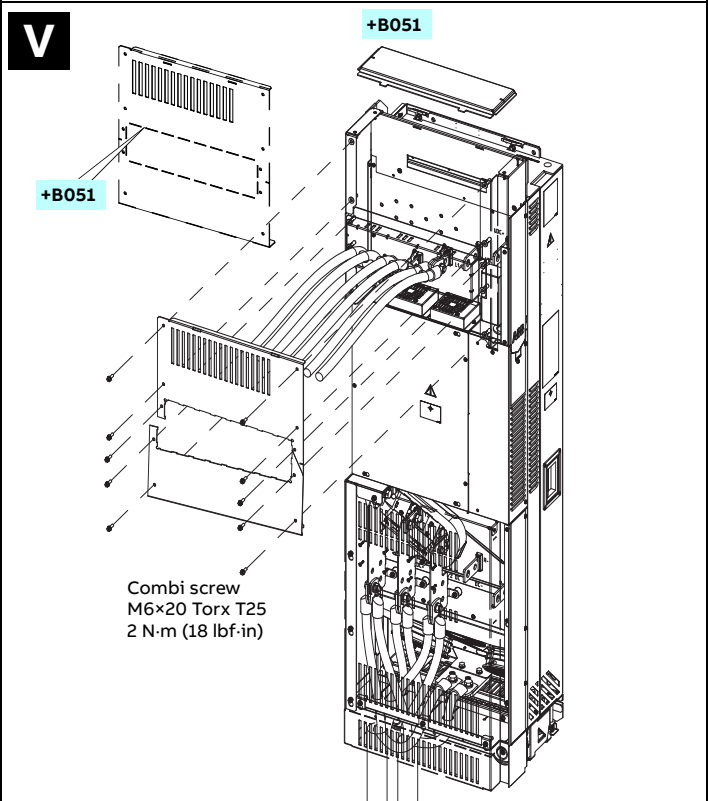
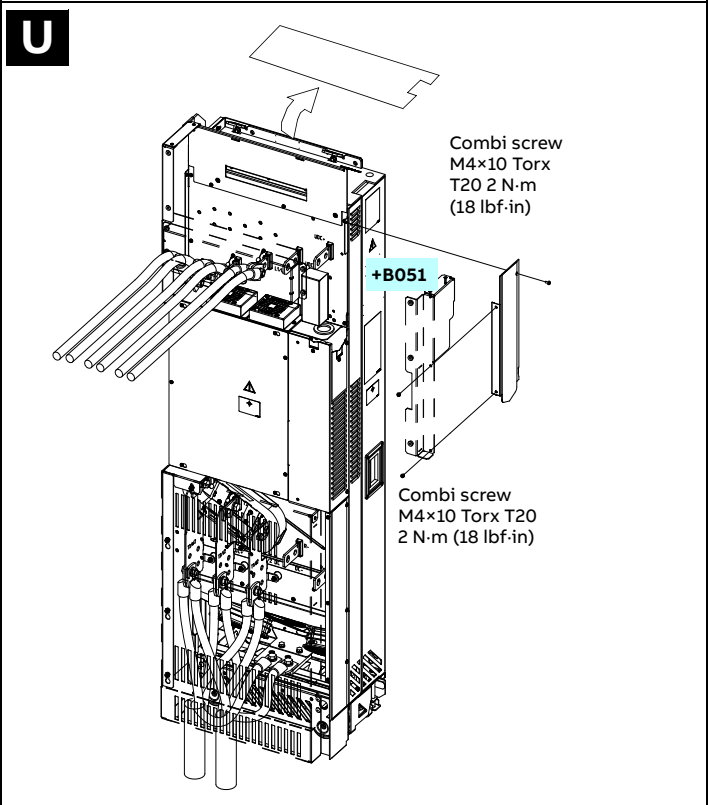
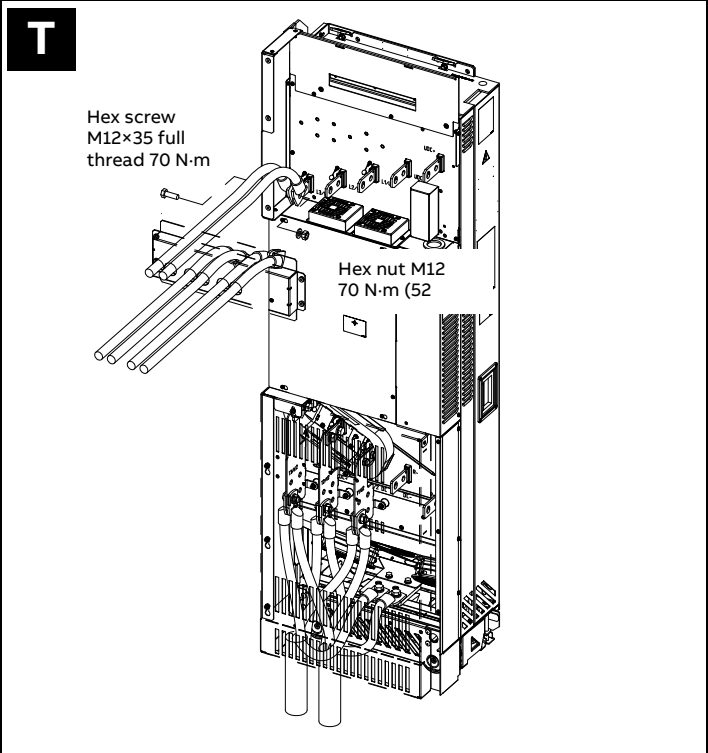
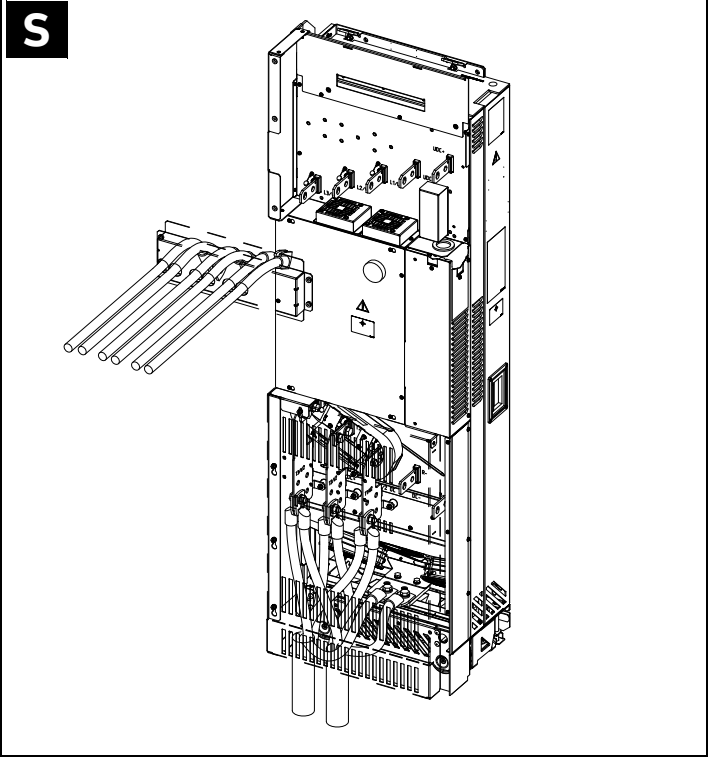
Step	Task (motor cables)	Figure
1	Install the grounding terminal to the drive module base.	J
2	Run the motor cables to the cabinet. Ground the cable shields 360 degrees at the cabinet entry.	K
3	Connect the twisted shields of the motor cables to the grounding terminal.	L



Step	Task (motor cables)	Figure
4	Screw in and tighten the insulators to the drive module by hand. Install the T3/W2 connection terminal to the insulators.  <b>WARNING!</b> Do not use longer screws or greater tightening torque than given in the installation drawing. Doing either can damage the insulator and cause dangerous voltage to be present at the module frame.	M
5	Connect the phase T3/W2 conductors to the T3/W2 terminal.	N
6	Install the T2/V2 connection terminal to the insulators. See the warning in step 4.	-
7	Connect the phase T2/V2 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 T1/U2 conductors to the T1/U2 terminal.	-
10	<b>Option +B051</b> (if there is no bottom plate in the cabinet and degree of protection of IP20 is needed): <ul style="list-style-type: none"><li>Carefully step drill sufficiently big holes to the inner clear plastic shrouds for the motor cables to be 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.</li><li>Remove the plastic sheeting from both sides of the shrouds.</li></ul>	O
11	<b>Option +B051:</b> Put the inner clear plastic shrouds of figure O around the motor cables.	P
12	<b>Option +B051:</b> Remove the plastic sheeting from both sides of the output clear plastic shroud. Install the shroud to the drive module.	Q
13	<b>Option +B051:</b> Install the lower front cover to the drive module.	Q

Step	Task (input cables)	Figure
1	Ground the input cable shields (if present) 360 degrees at the cabinet entry.	-
2	Connect the twisted shields of the input cables and separate ground cable (if present) to the cabinet grounding busbar.	-
3	<b>Option +B051:</b> <ul style="list-style-type: none"><li>Carefully step drill sufficiently big holes to the cable entry clear plastic shroud for the cables to be connected.</li><li>Align the holes in the vertical direction according to the alignment holes in the shroud. Smooth the hole edges.</li><li>Remove the plastic sheeting from both sides of the shroud.</li><li>Attach the cables firmly to the cabinet frame to prevent chafing against the hole edges.</li></ul>	R
4	<b>Option +B051:</b> Put the conductors of the input cables through the drilled holes in the clear plastic shroud.	S
5	Connect the input power cable conductors to the L1/U1, L2/V1 and L3/W1 connection busbars.	T
6	<b>Option +B051:</b> Move the clear plastic shroud along the input cables to its final position. Install the front clear plastic shroud.	U
7	Install the upper front cover.	U
8	Remove the cardboard protective covering from the drive module air outlet.	U
9	<b>Option +B051:</b> Cut a hole in the side clear plastic shroud for the cable entry clear plastic shroud. Install the side and top shrouds to the drive module.	V





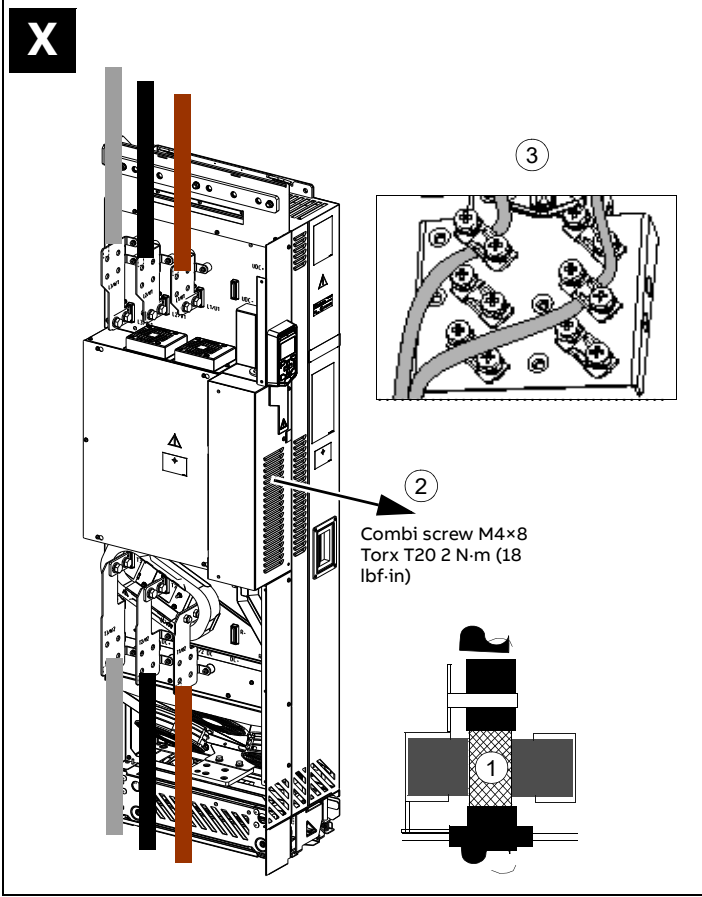
## Install the air baffles

See figure W and *Generic cabinet planning instructions* in the hardware manual.

## Connect the control cables

See figure X.

1. Ground the outer shields of all external control cables 360 degrees at the cabinet entry.
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. Wire the option modules if included in the delivery.



## Default I/O connections ( ABB standard macro)

X1 Voltage and analog input and output reference	
1	SCR Signal cable shield (screen)
2	AI1 Output frequency reference1: 0-10 V
3	AGND Analog input circuit, common ground
4	+10V 10 V DC reference power
5	AI2 Not configured
6	AGND Analog input circuit, common ground
7	AO1 Output frequency: 0...20 mA
8	AO2 Motor current: 0...20 mA
9	AGND Analog output circuit, common ground

X2 Aux. voltage output and programmable digital	
10	+24V Aux-voltage output +24V DC, max.
11	DGND Aux-voltage output common ground
12	DCOM Digital input common use
13	DI1 Stop (0) / Start (1)
14	DI2 Forward/Reverse selection
15	DI3 Constant frequency selection
16	DI4 Constant frequency selection
17	DI5 Ramp selection: Ramp1 (0)/Ramp2 (1)
18	DI6 Not configured

X6 Relay outputs	
19	RO1C Ready run
20	RO1A 250 V AC / 30 V DC
21	RO1B 2 A
22	RO2C Running
23	RO2A 250 V AC / 30 V DC
24	RO2B 2 A
25	RO3C Fault (-1)
26	RO3A 250 V AC / 30 V DC
27	RO3B 2 A

X5 Embedded fieldbus	
29	B+ Embedded Modbus RTU (EIA-485)
30	A-
31	DGND Communication signal ground, Do not connect to the shielding of the communication line.
S4	TERM Termination resistor switch
S5	BIAS Bias resistor switch

X4 Safe torque off	
34	OUT1 Safe torque off. Factory connection. Both circuits must be closed for the drive to start. See chapter Safe torque off in drive hardware manual.
35	OUT2
36	SGND
37	IN1
38	IN2

X10 24 V ACDC	
40	24 V AC/ DC+ in 24V AC/DC input, for control unit power supply when externally voltage is disconnected.
41	24 V AC/ DC- in

## Terminal size:

- R10...R11: 0.14...1.5 mm<sup>2</sup>(all terminals)
- Tightening torque: 0.5...0.6 N-m (0.4 lbf-ft)

## Notes:

- 1) The signal source is powered externally. See the manufacturer's instructions. To use sensors supplied by the drive auxiliary voltage output, see chapter *Electrical installation*, section *Connection examples of two-wire and three-wire sensors* in the *Hardware manual* of the drive.
- 2) Ground the outer shield of the cable 360 degrees under the grounding clamp on the grounding frame for the control cables.
- 3) Connected with jumpers at the factory.
- 4) **Note:** Use shielded twisted-pair cables for digital signals.

Input signal	Output signal
<ul style="list-style-type: none"><li>• Constant frequency selection (DI3)(DI4)</li><li>• Output frequency reference1: 0-10 V (AI1)</li><li>• Stop (0) / Start (1) (DI1)</li><li>• Forward/Reverse selection (DI2)</li><li>• Ramp selection:<ul style="list-style-type: none"><li>• Ramp1 (0)</li><li>• Ramp2 (DI5)</li></ul></li></ul>	<ul style="list-style-type: none"><li>• Analog output AO1: Output frequency</li><li>• Analog output AO2: Motor current</li><li>• Relay output 1: Ready run</li><li>• Relay output 2: Running</li><li>• Relay output 3: Fault (-1)</li></ul>



List of most commonly used parameters

By default, drive shows short parameter list. For the complete list of parameters, refer to the drive firmware manual.


Par. No.	Par. No.	Settings/Range (default value on bold)
Group 99 Motor data		
99.04	Motor control mode	1
99.06	Motor nominal current	0.0...6400.0
99.07	Motor nominal voltage	0.0...960.0
99.08	Motor nominal frequency	0.0 ... 500.0
99.09	Motor nominal speed	0 ... 30000
99.10	Motor nominal power	0.00... 10000.00 kW or 0.00... 13404.83 hp
99.11	Motor nominal cos φ	0.00 ... 1.00
99.12	Motor nominal torque	0.000...4000000.000 N·m or 0.000...2950248.597 lb·ft
99.15	Motor polepairs calculated	0...1000
99.16	Motor phase order	0...1
Group 01 Actual values (read-only)		
01.01	Motor speed used	-30000.00...30000.00
01.06	Output frequency	-500.00...500.00
01.07	Motor current	0.00...30000.00
01.10	Motor torque	-1600.0...1600.0
01.11	DC voltage	0.00...2000.00
01.13	Output voltage	0...2000
01.14	Output power	-32768.00...32767.00
Group 5 Diagnostics (read-only)		
05.02	Run-time counter	0 ... 65535 d
05.11	Inverter temperature	-40.0 ... 160.0 %
Group 10 Standard DI, RO		
10.24	RO1 source	[2] Ready run, [7] Running, [14] Fault, [16] Fault/Warning
10.27	RO2 source	[2] Ready run, [7] Running, [14] Fault, [15] Fault(-1)
10.30	RO3 source	[2] Ready run, [7] Running, [14] Fault, [15] Fault(-1)
Group 12 Standard AI		
12.15	AI1 unit selection	[2]V, [10]mA
12.16	AI1 filter time	0.000...30.000
12.17	AI1 min	-22.000 ... 22.000 mA or V, 0mA or 0V
12.18	AI1 max	-22.000 ... 22.000 mA or V, 20mA or 10V
12.19	AI1 minimum scaled value	-32768.000 ... 32767.000, 0
12.20	AI1 maximum scaled value	-32768.000 ... 32767.000, 50
12.25	AI2 AI2 unit selection	[2]V, [10]mA
12.26	AI2 filter time	0.000...30.000, 0.100 s
12.27	AI2 min	-22.000 ... 22.000 mA 或 V, 0mA or 0V
12.28	AI2 max	-22.000 ... 22.000 mA 或 V, 20mA or 10V
12.29	AI2 minimum scaled value	-32768.000 ... 32767.000, 50
12.30	AI2 maximum scaled value	-32768.000 ... 32767.000, 50
Group 13 Standard AO		
13.12	AO1 source	[3]Output frequency, [4]Motor current
13.15	AO1 unit selection	[2]V, [10]mA
13.16	AO1 Filtering time	0.000...30.000
13.17	AO1 source min	-32768.000 ... 32767.000, 0
13.18	AO1 source max	-22.000 ... 22.000 mA or V, 50
13.19	AO1 out at AO1 src min	-22.000 ... 22.000 mA or V, 20mA or 10V
13.20	AO1 out at AO1 src max	-22.000 ... 22.000 mA or V, 20mA or 10V
Group 19 Operation mode		
19.11	Ext1/Ext2 selection	[0]EXT1, [1]EXT2, [3]DI1, [4]DI2, [5]DI3, [6]DI4, [7]DI5, [32]Embedded fieldbus
Group 20 Start/stop/direction		
20.01	Ext1 commands	[0]Not selected, [1]In1 Start, [2]In1 Start;In2 Dir, [3]In1 Start fwd;In2 Start rev, [4]In1P Start;In2 Stop,[5]In1P Start;In2 Stop;In3 Dir, [6]In1P Start fwd;In2P Start rev;In3 Stop, [14]Embedded fieldbus
20.03	Ext1 in1 source	[0]Always off, [2]DI1, [3]DI2, [4]DI3, [5]DI4, [6]DI5
20.04	Ext1 in2 source	[0]Always off, [2]DI1, [3]DI2, [4]DI3, [5]DI4, [6]DI5
20.05	Ext1 in3 source	[0]Always off, [2]DI1, [3]DI2, [4]DI3, [5]DI4, [6]DI5
20.06	Ext2 commands	[0]Not selected, [1]In1 Start, [2]In1 Start;In2 Dir, [3]In1 Start fwd;In2 Start rev, [4]In1P Start;In2 Stop,[5]In1P Start;In2 Stop;In3 Dir, [6]In1P Start fwd;In2P Start rev;In3 Stop, [14]Embedded fieldbus
20.08	Ext2 in1 source	[0]Always off, [2]DI1, [3]DI2, [4]DI3, [5]DI4, [6]DI5, [7]DI6
20.09	Ext2 in2 source	[0]Always off, [2]DI1, [3]DI2, [4]DI3, [5]DI4, [6]DI5
20.10	Ext2 in3 source	[0]Always off, [2]DI1, [3]DI2, [4]DI3, [5]DI4, [6]DI5
20.21	Direction	[0]Request, [1]Forward, [2]Reverse
Group 21 Start/stop mode		
21.02	Magnetization time	0 ... 10000 ms, 500ms
21.03	Stop mode	[0]Coast, [1]Ramp
Group 28 Frequency reference chain		
28.11	Ext1 frequency ref1	[1]AI1 scaled, [2]AI2 scaled, [8]EFB ref1, [9]EFB ref2, [16]PID
28.15	Ext2 frequency ref1	[0]Zero, [1]AI1 scaled, [2]AI2 scaled, [8]EFB ref1, [9]EFB ref2, [16]PID
28.22	Constant frequency sel 1	[0]Always off, [2]DI1, [3]DI2, [4]DI3, [5]DI4, [6]DI5
28.23	Constant frequency sel 2	[0]Always off, [2]DI1, [3]DI2, [4]DI3, [5]DI4, [6]DI5
28.26	Constant freqency1	-500.00 ... 500.00Hz, 5Hz
28.27	Constant frequency2	-500.00 ... 500.00Hz, 10Hz
28.28	Constant frequency3	-500.00 ... 500.00Hz, 15Hz
28.72	Freq acceleration time 1	0.000 ... 1800.000 s, 20s
28.73	Freq deceleration time 1	0.000 ... 1800.000 s, 20s
Group 30 Limits		
30.13	Minimum frequency	-500.00...500.00

30.14	Maximum frequency	-500.00...500.00
30.17	Maximum current	0.00...30000.00
30.19	Minimum torque 1	-1600.0...0.0
30.20	Maximum torque 1	0.0...1600.0
Group 31 Fault functions		
31.11	Fault reset selection	[0]Disable, [2] DI1, [3]DI2, [4]DI3, [5]DI4, [6]DI5
31.12	Auto reset selection	0000h...FFFFh
Group 40 Process PID set 1		
40.07	Process PID operation mode	[0]OFF, [1]ON, [2]ON when drive running
40.08	Set 1 feedback 1 source	[2]AI2 scaled, [8]AI1 percent, [9]AI2 percent
40.16	Set 1 setpoint 1 source	[0]Not selected, [2]Internal setpoint, [11]AI1 percent, [12]AI2 percent
40.24	Set 1 internal setpoint 0	-200000.00 ... 200000.00, 0
40.31	Deviation inversion	[0] Not inverted (Ref-Fbk) , [1] Inverted (Fbk-Ref)
40.32	Gain	0.01 ... 100.00, 1.0
40.33	Integration time	0.0 ... 9999.0 s, 60s
Group 45 Energy efficiency		
45.11	Energy optimizer	[0]Disable, [1]Enable
Group 58 Embedded fieldbus		
58.01	Protocol enable	[0]None, [1]ModbusRTU
58.03	Node address	0 ... 255, 1
58.04	Baud rate	[1]4800, [2]9600, [3]19200, [4]38400, [5]57600, [6]76800, [7]115200
58.05	Parity	[0]NONE 1, [1]8 NONE 2, [2]8 EVEN 1, [3]8 ODD 1, [28] EVEN 1
58.06	Communication control	[0]Enabled, [1]Refresh settings
58.14	Communication loss action	[0]No action, [1]Fault, [2]Last speed, [5]Warning
Group 76 PFC configuration		
76.01	PFC status	0000h...FFFFh
76.02	PFC system status	0...3, 100...103, 200...202, 300...302, 400, 500, 600, 700, 800...801, 4...9
76.11	Pump status 1	0000h...FFFFh
76.12	Pump status 2	0000h...FFFFh
76.21	PFC configuration	
76.30	Start point 1	0.00...32767.00
76.41	Stop point 1	0.00...32767.00
Group 77 PFC maintenance and monitoring		
77.10	PFC runtime change	-
77.11	Pump 1 running time	0.00...42949672.95
77.12	Pump 2 running time	0.00...42949672.95
77.13	Pump 3 running time	0.00...42949672.95
77.14	Pump 4 running time	0.00...42949672.95
Group 96 System		
96.01	Language	[0]Not selected, [1033]EN, [2052]CN
96.04	Marco selection	[0]Finalization, [1] ABB standard macro, [2] Hand/Auto macro, [3] Hand/PID macro, [11]3- wire macro, [12]Alternate macro, [13]Motor potentiometer macro, [14] PID control macro, [15] control panel PID, [16]PFC, [18]SPFC
96.06	Parameter restore	[0]Finalization [34560]Restore defaults

Warnings and faults

Warning	Fault	Aux. code	Description
A2A1	2281	Current calibration	<b>Warning:</b> Current offset and gain measurement calibration will occur at next start. <b>Fault:</b> Output phase current measurement fault.
A2B1	2310	Overcurrent	Output current has exceeded internal fault limit. In addition to an actual overcurrent situation, this warning may also be caused by an earth fault or supply phase loss.
A2B3	2330	Earth leakage	Drive has detected load unbalance typically due to earth fault in motor or motor cable.
A2B4	2340	Short circuit	Short-circuit in motor cable(s) or motor.
-	3130	Input phase loss	Intermediate circuit DC voltage is oscillating due to missing input power line phase or blown fuse.
-	3181	Wiring or earth fault	Incorrect input power and motor cable connection (ie. input power cable is connected to drive motor connection).
A3A1	3210	DC link overvoltage	Intermediate circuit DC voltage too high (when the drive is stopped).
A3A2	3220	DC link undervoltage	Intermediate circuit DC voltage too low (when the drive is stopped).
-	3381	Output phase loss	Motor circuit fault due to missing motor connection (all three phases are not connected).
-	5090	STO hardware failure	STO hardware diagnostics has detected hardware failure.
A5A0	5091	Safe torque off	Safe torque off function is active.
A7CE	6681	EFB comm loss	Communication break in embedded fieldbus (EFB) communication.
A7C1	7510	FBA A communication	Cyclical communication between drive and fieldbus adapter module A or between PLC and fieldbus adapter module A is lost.
A7AB	-	Extension I/O configuration failure	Installed C-type module is not the same as configured or the communication between the drive and module has been disturbed.
AFF6	-	Identification run	Motor ID run will occur at next start.
-	FA81	Safe torque off 1	Safe torque off function is active, ie. STO circuit 1 is broken.
-	FA82	Safe torque off 2	Safe torque off function is active, ie. STO circuit 2 is broken.

Fuses (IEC)

Manufacturer Bussmann. Type (IEC 60269) = 3. Voltage rating 690 V.							
ACS530 -04-	Input current (A)	Ultrarapid (aR) fuses					
		Type DIN 43653 (bolted style)			Type DIN 43620 (blade style)		
							
		Nominal current	$\hat{I}_t$	Fuse	Nominal current	$\hat{I}_t$	Fuse
		A	A <sup>2</sup> s		A	A <sup>2</sup> s	
U <sub>n</sub> = 400 V							
505A-4	505	800	465000	170M6012	1600	4150000	170M855 7D
585A-4	585	1000	945000	170M6014	1600	4150000	170M855 7D
650A-4	650	1000	945000	170M6014	1600	4150000	170M855 7D
725A-4	725	1250	195000 0	170M6016	-	-	-
820A-4	820	1600	390000 0	170M6269	-	-	-
880A-4	880	1600	390000 0	170M6269	-	-	-
3AXD00000586715							

Losses, cooling data and noise

ACS530-04- ...	Frame size	Air flow		Loss <sup>1)</sup>		Noise	
		m <sup>3</sup> /h	cfm	W		dB(A)	
505A-4	R10	1200	707	6492		72	
585A-4	R10	1200	707	6840		72	
650A-4	R10	1200	707	8046		72	
725A-4	R11	1200	707	8108		72	
820A-4	R11	1200	707	9652		72	
880A-4	R11	1420	848	10887		71	
3AXD00000586715							

1) The table shows the typical drive losses when it operates at 90% of the nominal output frequency and 100% of the nominal output current. See IEC61800-9-2.

Markings


The applicable markings are shown on the type label of the product.



Declaration of conformity



EU Declaration of Conformity

We Manufacturer: ABB Beijing Drive Systems Co., Ltd. Address: No.1, Block D, A-10 Jluxianqiao Bellu, Chaoyang District, Beijing 100015, P.R. China. Phone: +86 010 58217788 Declare under our sole responsibility that the following products: Frequency converters  ACS530-01-xxAx-4 (Frame R1-R9, 3ph 380-480Vac)  ACS530-01-xxAx-4 (Frame B0-B2, 3ph 380-480Vac)  ACS530-04-xxxA-4 (Frame R10-R11, 3ph 380-480Vac)					
are in conformity with the relevant requirements of European Union Directives, which have been notified in this single declaration that consists of individual Declarations of conformity, provided that the equipment is selected, installed and used according to given instructions.  The harmonised standards and other standards, which have been applied, are specified on the individual Declarations of conformity for particular EU directive.					
		EU Directives			
Low Voltage Directive		2014/35/EU		LVD	
EMC Directive		2014/30/EU		EMC	
Machinery Directive		2006/42/EC		MD	
RoHS Directive		2011/65/EU		RoHS	
Delegated Directive (EU)		2015/863			
Ecodesign Directive		2009/125/EC		Ecodesign	
Individual EU Declaration of Conformity:					
Product	LVD	EMC	MD	RoHS	Ecodesign
ACS530-01-xxAx-4(R1-R9)					
ACS530-01-xxAx-4(B0-B2)	3AXD10000528499		3AXD10000528501	3AXD10000539067	3AXD10001394393
ACS530-04-xxxA-4(R10-R11)					
Beijing, 29 July 2021					
Signed for and on behalf of:					
 Yu Wang Local Division Manager ABB Beijing Drive Systems Co., Ltd		 XuMing Wang Product Engineering and Quality Manager ABB Beijing Drive Systems Co., Ltd			
1/1		3AXD10000539070 Rev. D			