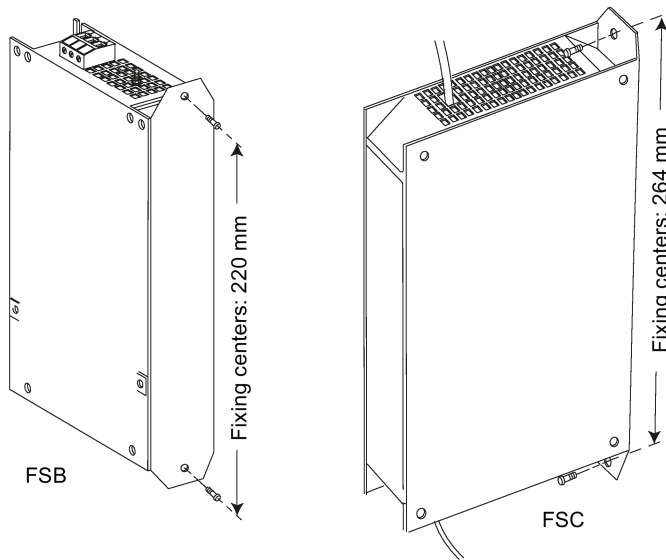



B.1 Options



Order number 6SE6400-...	Dimensions (mm)						Weight (kg)	Fixing screw		Cable cross section (mm <sup>2</sup> )	
	A	B	C	D	E	F		Size	Tightening torque (Nm)	Min.	Max.
3CC00-4AB3	200	75.5	50	56	56	187	0.5	M4 (2)	1.1	1.0	2.5
3CC01-0AB3	200	75.5	50	56	56	187	0.5	M4 (2)			
3CC02-6BB3	213 (233*)	150	50	138	120	200	1.2	M4 (4)	1.5	1.5	6.0
3CC03-5CB3	245 (280*)	185	50 (50/80*)	174	156	230	1.0	M5 (4)	2.25	2.5	10

\* Height with side-mounting bracket

B.1.7 Output reactor

 <b>CAUTION</b>
<p><b>Pulse frequency restriction</b></p> <p>The output reactor works only at 4kHz switching frequency. Before the output reactor is used, parameters P1800 and P0290 must be modified as follows: P1800 = 4 and P0290 = 0 or 1.</p>

Functionality

The output reactors reduce the voltage stress on the motor windings. At the same time, the capacitive charging / discharging currents, which place an additional load on the inverter output when long motor cables are used, are reduced.

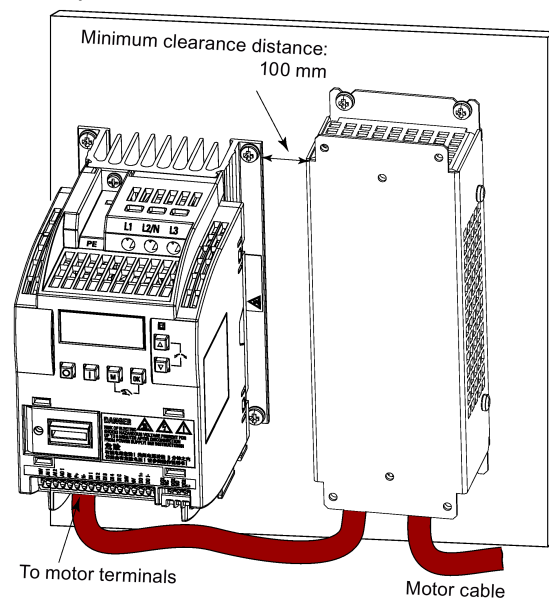
Make sure you use a shielded cable (maximum length: 100 m) to connect the output reactor.

## Ordering data

Frame size	Inverter power rating	Output reactor		
		Order number	Voltage	Current
<b>Three phase AC 400 V inverters</b>				
FSA	0.37 kW	6SL3202-0AE16-1CA0	380 V to 480 V	6.1 A
	0.55 kW			
	0.75 kW			
	1.1 kW			
	1.5 kW			
	2.2 kW			
FSB	3 kW	6SL3202-0AE18-8CA0	380 V to 480 V	9.0 A
	4 kW			
FSC	5.5 kW	6SL3202-0AE23-8CA0	380 V to 480 V	39.0 A
FSD	7.5 kW			
	11 kW			
FSE	15 kW	6SE6400-3TC03-8DD0	200 V to 480 V	45.0 A
	18.5 kW			
	22 kW	6SE6400-3TC05-4DD0	200 V to 480 V	68.0 A
<b>Single phase AC 230 V inverters</b>				
FSA	0.12 kW	6SE6400-3TC00-4AD3	200 V to 240 V	4.0 A
	0.25 kW			
	0.37 kW			
	0.55 kW			
	0.75 kW			
FSB	1.1 kW	6SE6400-3TC01-0BD3	200 V to 480 V	10.4 A
	1.5 kW			
FSC	2.2 kW	6SE6400-3TC03-2CD3	200 V to 480 V	26.0 A
	3 kW			

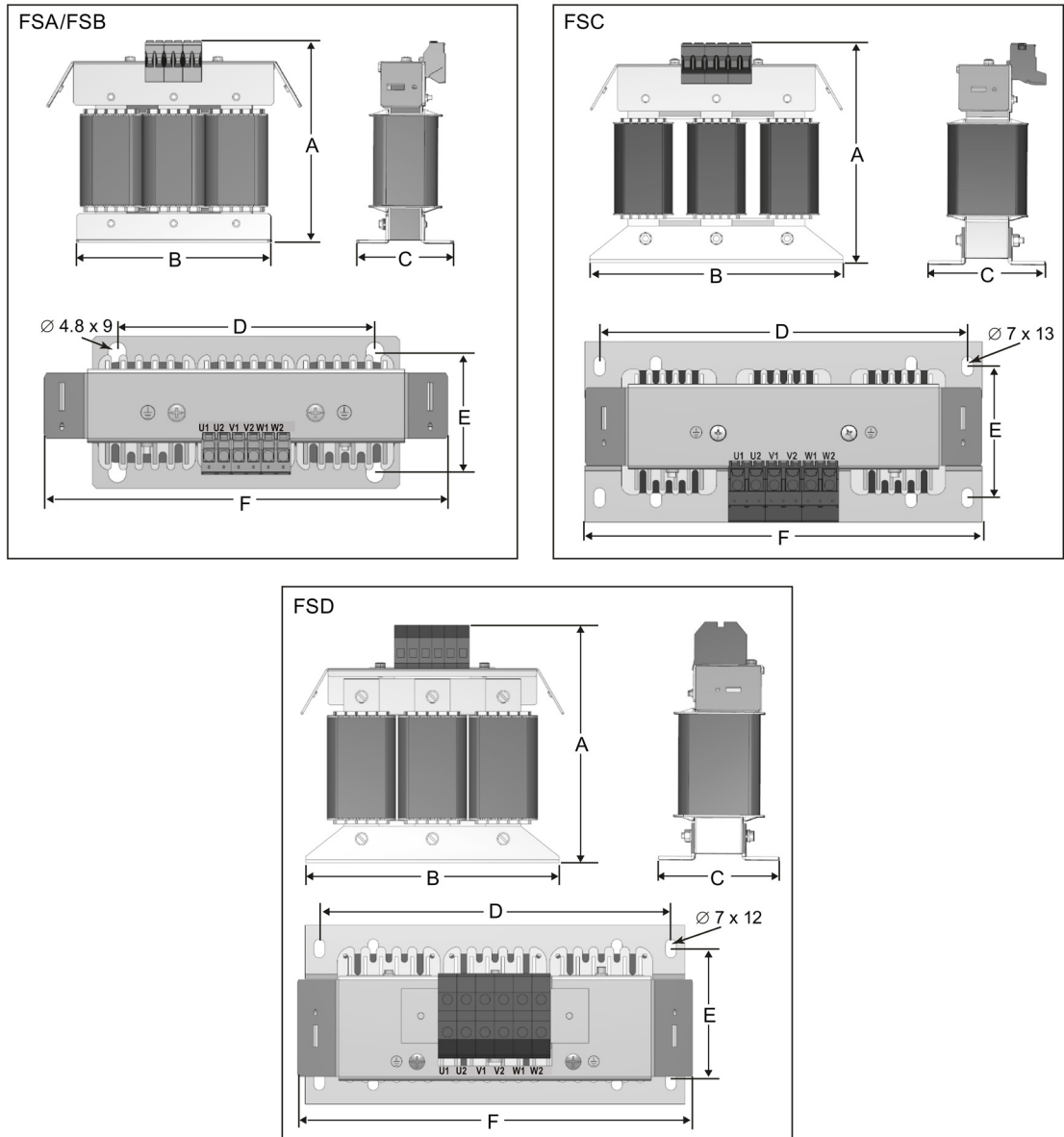
## Connecting the output reactor to the inverter

The following illustration takes the output reactors for the 230 V variants of inverters as an example.



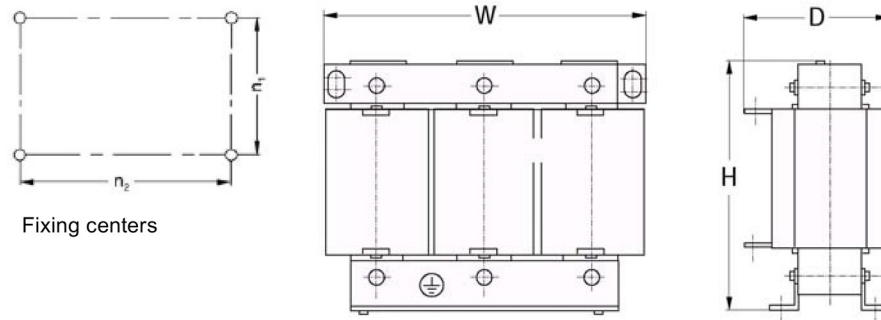
Mounting dimensions

For three phase AC 400 V inverters FSA to FSD



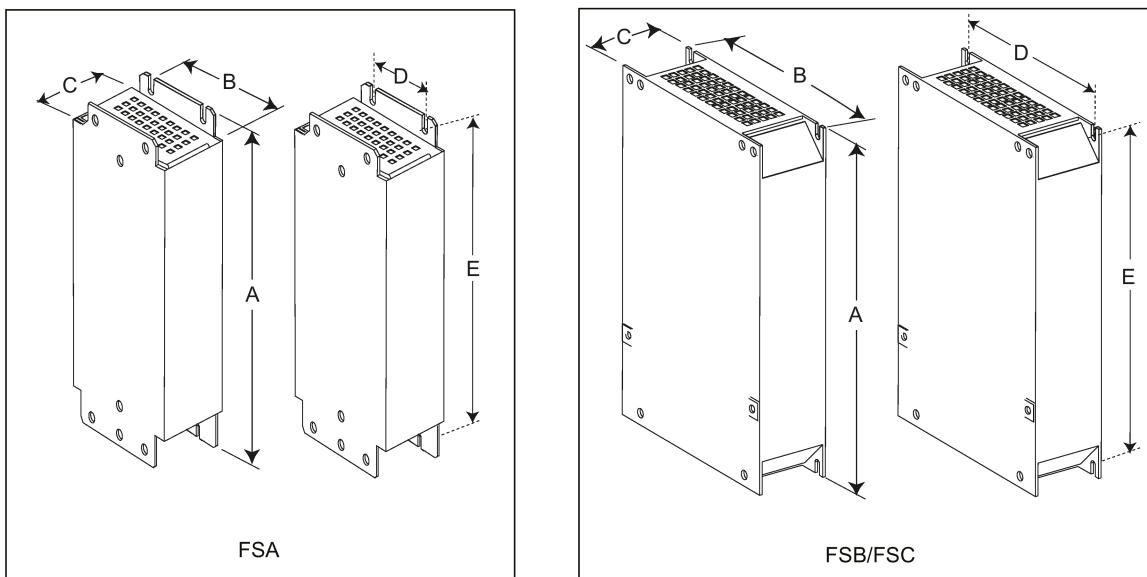
Order number	Dimensions (mm)						Weight (kg)	Fixing screw		Cable cross section (mm <sup>2</sup> )
	A	B	C	D	E	F		Size	Tightening torque (Nm)	
6SL3202-...	175	178	72.5	166	56.5	207	3.4	M4 (4)	3.0	4.0
0AE16-1CA0	175	178	72.5	166	56.5	207	3.4	M4 (4)	3.0	4.0
0AE18-8CA0	180	178	72.5	166	56.5	207	3.9	M4 (4)	3.0	4.0
0AE21-8CA0	215	243	100	225	80.5	247	10.1	M5 (4)	5.0	10.0
0AE23-8CA0	235	243	114.7	225	84.7	257	11.2	M5 (4)	5.0	16.0

## For three phase AC 400 V inverter FSE




Order number	Electrical characteristics			Connecting bolt	Overall dimensions (mm)			Fixing dimensions (mm)		Fixing screw	Weight (kg)
	Voltage (V)	Current (A)	Torque (Nm)		H	W	D	n1	n2		
6SE6400 -	200 to 480	54	3.5 to 4.0	M5	210	225	150	70	176	M6	10.7

## For single phase AC 230 V inverters



Order number 6SE6400-...	Dimensions (mm)					Weight (kg)	Fixing screw		Cable cross section (mm <sup>2</sup> )	
	A	B	C	D	E		Size	Tightening torque (Nm)	Min.	Max.
3TC00-4AD3	200	75.5	50	56	187	1.3	M4 (4)	1.1	1.0	2.5
3TC01-0BD3	213	150	80	120	200	4.1	M4 (4)	1.5	1.5	6.0
3TC03-2CD3	245	185	80	156	232	6.6	M4 (4)	2.25	2.5	10

### B.1.8 External EMC filter class B

 <b>WARNING</b>
<p><b>Risk of equipment damage and electric shocks</b></p> <p>Some of the EMC filters in the table below have pin crimps for the connection to the inverter's PE and mains terminals.</p> <p>Use of these pin crimps can cause damage to the equipment and even electric shocks.</p> <p>For safety reasons, replace the pin crimps using appropriately sized UL/cUL-certified fork or ring crimps for PE terminal connection, and using UL/cUL-certified fork crimps or stranded cables for mains terminal connection.</p>

#### Note

The EMC filter with an order number of 6SE6400-2FL02-6BB0 in the following table has two DC terminals (DC+, DC-) that are not used and should not be connected. The cables of these terminals need to be cut back and suitably insulated (for example, with heat shrink shroud).

### Functionality

In order to achieve EN61800-3 Category C2 Radiated and Conducted Emission, the external EMC filters shown below are required for the SINAMICS V20 inverters (400 V filtered and unfiltered variants, as well as 230 V unfiltered variants). In this case, only a screened output cable can be used, and the maximum cable length is 25 m for the 400 V variants or 5 m for the 230 V variants.