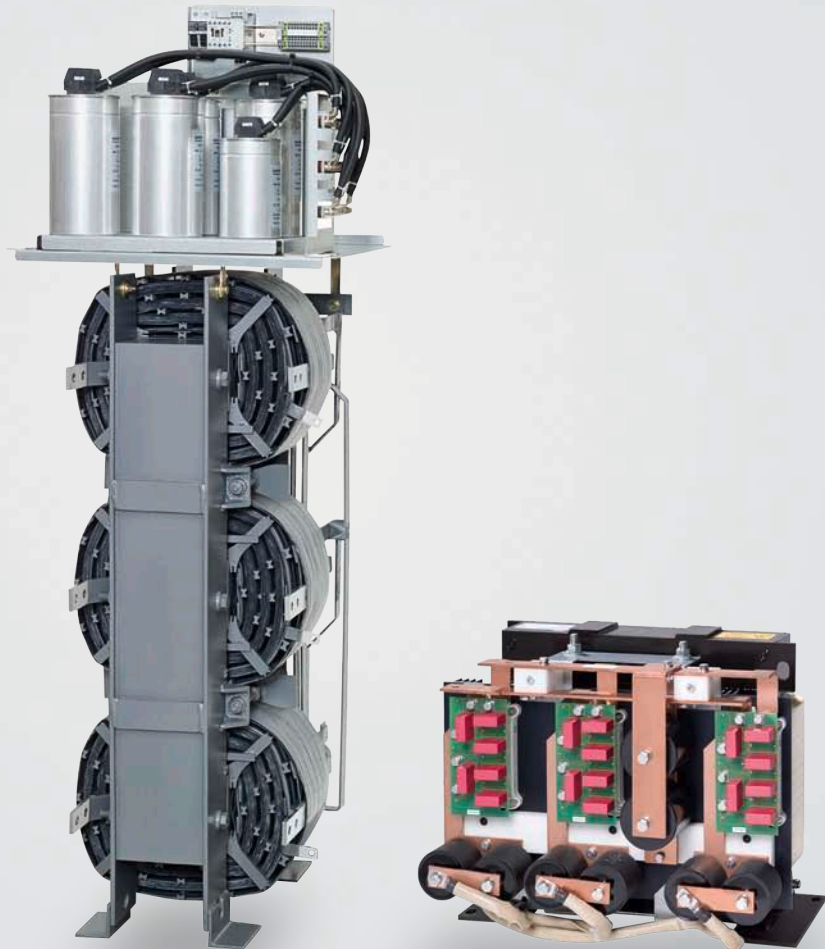


SINAMICS G130, SINAMICS G150
SINAMICS S120, SINAMICS S150

Line Harmonics Filter compact
dv/dt filter compact plus VPL

Catalog News D 11 N and D 21.3 N · 03/2010



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SINAMICS S120

Chassis Format Units and
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PM 22



SINAMICS Drives

SINAMICS G130

SINAMICS G150

SINAMICS S120

SINAMICS S150

Line Harmonics Filter compact dv/dt filter compact plus VPL

Catalog News

D 11 N and D 21.3 N · 03/2010



The products and systems described in this catalog are manufactured/distributed under application of a certified quality management system in accordance with DIN EN ISO 9001 and DIN EN ISO 14001 (Certified Registration No. 002241 QM UM). The certificate is recognized by all IQNet countries.

Refer to the Industry Mall for current updates of this catalog:

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SINAMICS G150

Drive Converter Cabinet Units

Line Harmonics Filter compact

Introduction

Frequency converters for variable-speed drives generate current and voltage harmonics that have a negative impact on the line supply.

This is the reason that it is important to take measures to limit these line harmonics to the values specified by international standards and directives, e.g. IEEE 519.

Active as well as passive technologies can be used for this purpose:

- For active technologies, self-commutated, closed-loop controlled, line-side converters are used, which as a result of their closed-loop control principle, generate line currents that are almost sinusoidal. These technologies offer the option of implementing four-quadrant operation and can be very quickly switched over between motoring and generating. They represent a very high quality solution to reduce the line harmonics; however, they are also complex and expensive. Further, they also reduce the efficiency and the availability of the converter to an extent that cannot be neglected.
Another possibility of reducing the line harmonics is to use a 12-pulse circuit that is fed from a 3-winding transformer. However, this solution is relatively uneconomical for drives with lower power ratings.
- Generally, passive technologies represent the most favorably priced and simplest solution to reduce line harmonics. In this case, a suitably dimensioned and optimized lowpass filter is connected between the converter and line supply, which then filters out the harmonics generated by the converter. By exclusively using rugged, passive components, an extremely efficient and cost-effective solution is obtained with a high degree of availability and without any noticeable influence on the drive efficiency.

With the new Line Harmonics Filter compact (LHF compact), Siemens now offers a solution based on passive technology.



Line Harmonics Filter compact

SINAMICS G150 with integrated LHF compact are available as compact drive converter cabinet units SINAMICS G150 Clean Power.

This description is a supplementary order document for Catalog D 11.

Catalog D 11 includes all additional descriptions and ordering data for SINAMICS G150 drive converter cabinet units.

SINAMICS G150

Drive Converter Cabinet Units

Line Harmonics Filter compact

Overview

For SINAMICS G150 drive converter cabinet units, the Line Harmonics Filter compact (LHF compact) is supplied in the cabinet integrated as compact SINAMICS G150 Clean Power unit. When ordering the drive converter cabinet unit, the suffix “-Z” must be attached to the converter order number followed by order code **L01**.



SINAMICS G150 Clean Power

Option L01 SINAMICS G150 Clean Power with integrated Line Harmonics Filter compact

Instead of the previous line reactor that was generally used, an innovative LHF compact is integrated in the converter cabinet; this minimizes the harmonics that occur due to the principle of operation. As a consequence, the unit fully complies with the limit values stipulated in standard IEEE 519 from 1992 without any exceptions.

Option **L01** can be combined with options **L13** (line contactor) and **L26** (main switch including the fuses or circuit breaker). The switches, fuses or contactors additionally integrated with this option are located between the input terminals and LHF compact so that the filter is switched and protected together with the converter.

SINAMICS G150 Clean Power with integrated LHF compact is available in all of the available degrees of protection up to IP54 (→ options **M21** to **M54**).

Note: Option **L01** cannot be combined with options **L22** (without line reactor), **L23** (line reactor $u_K = 2\%$) and **M66** (marine version).

The width of the drive converter cabinet unit is increased as a result of this ultra-compact filter.

Selection and ordering data

Type rating	Dimensions ¹⁾ W x H x D	Drive converter cabinet unit SINAMICS G150 Clean Power with integrated Line Harmonics Filter compact
		Only for converters, version A
kW	mm	Order No. with suffix “-Z” and Order code

Line voltage 380 ... 480 V 3 AC, 50 Hz

new

110	1200 x 2000 x 600	6SL3710-1GE32-1AA0-Z	L01
132		6SL3710-1GE32-6AA0-Z	L01
160		6SL3710-1GE33-1AA0-Z	L01
200	1400 x 2000 x 600	6SL3710-1GE33-8AA0-Z	L01
250		6SL3710-1GE35-0AA0-Z	L01
315	1800 x 2000 x 600	6SL3710-1GE36-1AA0-Z	L01
400		6SL3710-1GE37-5AA0-Z	L01
450		6SL3710-1GE38-4AA0-Z	L01
560	2200 x 2000 x 600	6SL3710-1GE41-0AA0-Z	L01
630	3600 x 2000 x 600	6SL3710-2GE41-1AA0-Z	L01
710		6SL3710-2GE41-4AA0-Z	L01
900		6SL3710-2GE41-6AA0-Z	L01

Line voltage 500 ... 600 V 3 AC, 50 Hz

new

110	1200 x 2000 x 600	6SL3710-1GF31-8AA0-Z	L01
132		6SL3710-1GF32-2AA0-Z	L01
160		6SL3710-1GF32-6AA0-Z	L01
200		6SL3710-1GF33-3AA0-Z	L01
250	1800 x 2000 x 600	6SL3710-1GF34-1AA0-Z	L01
315		6SL3710-1GF34-7AA0-Z	L01
400		6SL3710-1GF35-8AA0-Z	L01
500	2200 x 2000 x 600	6SL3710-1GF37-4AA0-Z	L01
560		6SL3710-1GF38-1AA0-Z	L01
630	3600 x 2000 x 600	6SL3710-2GF38-6AA0-Z	L01
710		6SL3710-2GF41-1AA0-Z	L01
1000	4400 x 2000 x 600	6SL3710-2GF41-4AA0-Z	L01

Line voltage 660 V ... 690 V 3 AC, 50 Hz

new

75	1200 x 2000 x 600	6SL3710-1GH28-5AA0-Z	L01
90		6SL3710-1GH31-0AA0-Z	L01
110		6SL3710-1GH31-2AA0-Z	L01
132		6SL3710-1GH31-5AA0-Z	L01
160		6SL3710-1GH31-8AA0-Z	L01
200		6SL3710-1GH32-2AA0-Z	L01
250		6SL3710-1GH32-6AA0-Z	L01
315		6SL3710-1GH33-3AA0-Z	L01
400	1800 x 2000 x 600	6SL3710-1GH34-1AA0-Z	L01
450		6SL3710-1GH34-7AA0-Z	L01
560		6SL3710-1GH35-8AA0-Z	L01
710	2200 x 2000 x 600	6SL3710-1GH37-4AA0-Z	L01
800		6SL3710-1GH38-1AA0-Z	L01
1000	3600 x 2000 x 600	6SL3710-2GH41-1AA0-Z	L01
1350	4400 x 2000 x 600	6SL3710-2GH41-4AA0-Z	L01
1500		6SL3710-2GH41-5AA0-Z	L01

Note:

The use of SINAMICS G150 Clean Power on 60 Hz line supply is not permissible!

¹⁾ For degree of protection IP20.
The cabinet height increases by

- 250 mm for degree of protection IP21
- 400 mm for degrees of protection IP23, IP43 and IP54.

SINAMICS G130, SINAMICS G150, SINAMICS S120, SINAMICS S150

AC low-voltage converters

dv/dt filter compact plus VPL

Introduction

The dv/dt filter compact plus VPL (**V**oltage **P**eak **L**imiter) limits both the voltage peaks at the output of frequency converters as well as the voltage rate-of-rise.

This means that standard motors can be operated with SINAMICS converters up to line voltages of 690 V, i.e.

- a special motor insulation is not required,
- the bearing currents are reduced, and therefore
- insulated bearings are not required.

The voltage rate-of-rise dv/dt as well as the peak voltage are reduced to the stringent limit values of standard IEC 60034-25 (limit curve A).

The voltage peaks that are “cut off” are not simply wasted in the form of heat in resistors, but are fed back into the voltage DC link. As a consequence, almost no energy is lost.

Further, when compared to the previous dv/dt filter plus VPL, the dv/dt filter compact plus VPL version has significantly smaller dimensions. This means that the filter can, for example, be integrated in the SINAMICS G150 cabinet without requiring an additional cabinet.

For SINAMICS G130 and SINAMICS S120 chassis format, the filter can be ordered as a supplementary component. For SINAMICS G150, SINAMICS S120 Cabinet Modules and SINAMICS S150 it can be ordered as option.



The properties and technical data of the dv/dt filter compact plus VPL for the specified applications are described in the following. This description is a supplementary ordering document for Catalogs D 11 and D 21.3.

Catalog D 11 includes all additional descriptions and ordering data for the SINAMICS G130 built-in units and the SINAMICS G150 drive converter cabinet units.

Catalog D 21.3 contains all additional descriptions and ordering data for the built-in units SINAMICS S120 in the chassis format and cabinet modules and the SINAMICS G150 drive converter cabinet units.

Overview

The dv/dt filter compact plus VPL consists of two components: The dv/dt reactor and the voltage limiting network (**V**oltage **P**eak **L**imiter), which limits voltage peaks and returns the energy to the DC link.

The dv/dt filter compact plus VPL is to be used for motors for which the voltage strength of the insulation system is unknown or insufficient.

dv/dt filters compact plus VPL are not required, for

- standard Siemens motors with supply voltages <500 V and standard insulation
- Siemens motors with supply voltages from 500 V to 690 V and special insulation (also refer to Catalog D 81.1, Chapter "Motors operating with frequency converters").

The maximum permissible motor cable length with dv/dt filter compact plus VPL is for:

- Shielded cables: 100 m (e.g. Protodur NYCWY)
- Unshielded cables: 150 m (e.g. Protodur NYY)

For longer motor cables, the previous dv/dt filter plus VPL is still available (also refer to Catalog D 11 or D 21.3). Here, the following max. permissible cable lengths apply:

- Shielded cables: 300 m (e.g. Protodur NYCWY)
- Unshielded cables: 450 m (e.g. Protodur NYY)

Note: The max. permissible cable length between the dv/dt filter and Power Module/Motor Module is 5 m.

Selection and ordering data

Type rating at 400 V, 500 V or 690 V	Suitable for SINAMICS G130 Power Module	Frame Size		dv/dt filter compact plus VPL
kW	Type 6SL3310-1G...			Order No.
Line voltage 380 ... 480 V 3 AC				
110	...E32-1AA0	F	new	6SL3000-2DE32-6EA0
132	...E32-6AA0			
160	...E33-1AA0	G	new	6SL3000-2DE35-0EA0
200	...E33-8AA0			
250	...E35-0AA0			
315	...E36-1AA0	H	new	6SL3000-2DE38-4EA0
400	...E37-5AA0			
450	...E38-4AA0			
560	...E41-0AA0	J	new	6SL3000-2DE41-4EA0
Line voltage 500 ... 600 V 3 AC				
110	...F31-8AA0	G	new	6SL3000-2DG32-2EA0
132	...F32-2AA0			
160	...F32-6AA0	G	new	6SL3000-2DG33-3EA0
200	...F33-3AA0			
250	...F34-1AA0	H	new	6SL3000-2DG34-1EA0
315	...F34-7AA0	H	new	6SL3000-2DG35-8EA0
400	...F35-8AA0			
500	...F37-4AA0	J	new	6SL3000-2DG38-1EA0
560	...F38-1AA0			
Line voltage 660 ... 690 V 3 AC				
75	...H28-5AA0	F	new	6SL3000-2DG31-0EA0
90	...H31-0AA0			
110	...H31-2AA0	F	new	6SL3000-2DG31-5EA0
132	...H31-5AA0			
160	...H31-8AA0	G	new	6SL3000-2DG32-2EA0
200	...H32-2AA0			
250	...H32-6AA0	G	new	6SL3000-2DG33-3EA0
315	...H33-3AA0			
400	...H34-1AA0	H	new	6SL3000-2DG34-1EA0
450	...H34-7AA0	H	new	6SL3000-2DG35-8EA0
560	...H35-8AA0			
710	...H37-4AA0	J	new	6SL3000-2DG38-1EA0
800	...H38-1AA0			

Type rating at 400 V or 690 V	Suitable for SINAMICS S120 Motor Module chassis format	Frame Size		dv/dt filter compact plus VPL
kW	Type 6SL332.-1T...			Order No.
Line voltage 380 ... 480 V 3 AC				
110	...E32-1AA0	F	new	6SL3000-2DE32-6EA0
132	...E32-6AA0			
160	...E33-1AA0	G	new	6SL3000-2DE35-0EA0
200	...E33-8AA0			
250	...E35-0AA0			
315	...E36-1AA0	H	new	6SL3000-2DE38-4EA0
400	...E37-5AA0			
450	...E38-4AA0			
560	...E41-0AA0	J	new	6SL3000-2DE41-4EA0
710	...E41-2AA0			
800	...E41-4AA0			
Line voltage 500 ... 690 V 3 AC				
75	...G28-5AA0	F	new	6SL3000-2DG31-0EA0
90	...G31-0AA0			
110	...G31-2AA0	F	new	6SL3000-2DG31-5EA0
132	...G31-5AA0			
160	...G31-8AA0	G	new	6SL3000-2DG32-2EA0
200	...G32-2AA0			
250	...G32-6AA0	G	new	6SL3000-2DG33-3EA0
315	...G33-3AA0			
400	...G34-1AA0	H	new	6SL3000-2DG34-1EA0
450	...G34-7AA0	H	new	6SL3000-2DG35-8EA0
560	...G35-8AA0			
710	...G37-4AA0	J	new	6SL3000-2DG38-1EA0
800	...G38-1AA0			
900	...G38-8AA0	J	new	6SL3000-2DG41-3EA0
1000	...G41-0AA0			
1200	...G41-3AA0			

SINAMICS G150, SINAMICS S120 Cabinet Modules, SINAMICS S150

Drive Converter Cabinet Units

dv/dt filter compact plus VPL

Selection and ordering data

For the SINAMICS G150, SINAMICS S120 Cabinet Modules and SINAMICS S150 drive converter cabinet units, the dv/dt filter compact plus VPL is integrated in the cabinet and supplied as compact unit. When ordering the drive converter cabinet unit, the suffix “-Z” must be attached to the converter order number followed by order code **L07**.

Option L07 **dv/dt filter compact plus VPL**

The dimensions of the new integrated dv/dt filter compact plus VPL are so compact that even for high power ratings, it can be completely integrated into the cabinet. A supplementary cabinet is not required.

Further, the EMC properties of the overall system are improved.

The max. permissible motor cable lengths with dv/dt filter compact plus VPL:

- Shielded cables: 100 m (e.g. Protodur NYCWY)
- Unshielded cables: 150 m (e.g. Protodur NYY)

For longer motor cables, the previous dv/dt filter plus VPL can still be supplied. Here, the following max. permissible cable lengths apply:

- Shielded cables: 300 m (e.g. Protodur NYCWY)
- Unshielded cables: 450 m (e.g. Protodur NYY)

Note: The option **L07** cannot be combined with options

L08 (motor reactor),

L10 (dv/dt filter plus VPL),

L15 (sine-wave filter) and

M78 (motor connection from the top).

For SINAMICS S120 Cabinet Modules, option **L07** cannot be combined with option **L37** (output switch).

SINAMICS G130, SINAMICS G150, SINAMICS S120, SINAMICS S150

AC low-voltage converters

dv/dt filter compact plus VPL

Technical data

<i>Line voltage</i> 380 ... 480 V 3 AC		dv/dt filter compact plus VPL 6SL3000-2DE...			
		...32-6EA0	...35-0EA0	...38-4EA0	...41-1EA0
Rated current	A	260	490	840	1405
$I_{th max}$	A	260	490	840	1405
Power loss, max.					
• at 50 Hz 400 V	kW	0.21	0.29	0.518	Reactor: 1.027 VPL: 0.127 Total: 1.154
• at 60 Hz 460 V	kW	0.215	0.296	0.529	Reactor: 1.077 VPL: 0.12 Total: 1.197
• at 150 Hz 400 V	kW	0.255	0.344	0.609	Reactor: 1.354 VPL: 0.09 Total: 1.444
Power connection, input and output		Hole for M10	Hole for M10	Hole for M12	2 × Elongated hole 14 × 18 mm
• Conductor cross-section, max. (DIN VDE)		Provided for busbar connection	Provided for busbar connection	Provided for busbar connection	Provided for busbar connection
DC link connection DCPS, DCNS		Threaded socket M8	Threaded socket M8	Hole for M8	Hole for M8
• Conductor cross-section, max. (DIN VDE)	mm ²	16	25	50	95
PE/GND connection		Threaded socket M6	Threaded socket M6	Threaded socket M6	Reactor: Threaded socket M6 VPL: Threaded socket M6
Motor cable length, max.					
• Unshielded	m	150	150	150	150
• Shielded	m	100	100	100	100
Degree of protection		IP00	IP00	IP00	IP00
Dimensions					
• Width	mm	310	350	440	Reactor: 430 VPL: 277
• Height	mm	283	317	369	Reactor: 385 VPL: 360
• Depth	mm	238	260	311	Reactor: 323 VPL: 291
Frame size		FSF	FSG	FSH	FSJ
Weight, approx.	kg	41	61	103	Reactor: 168.8 VPL: 19.2 Total: 188
Approvals		UL CSA (available soon)	UL CSA (available soon)	UL CSA (available soon)	UL CSA (available soon)
Suitable for SINAMICS G130 Power Module (380 ... 480 V 3 AC)					
Type 6SL3310-1GE... (type rating)		...32-1AA0 (110 kW) ...32-6AA0 (132 kW)	...33-1AA0 (160 kW) ...33-8AA0 (200 kW) ...35-0AA0 (250 kW)	...36-1AA0 (315 kW) ...37-5AA0 (400 kW) ...38-4AA0 (450 kW)	...41-0AA0 (560 kW)
Suitable for SINAMICS S120 Motor Module, chassis format (380 ... 480 V 3 AC)					
Type 6SL332.-1TE... (type rating)		...32-1AA0 (110 kW) ...32-6AA0 (132 kW)	...33-1AA0 (160 kW) ...33-8AA0 (200 kW) ...35-0AA0 (250 kW)	...36-1AA0 (315 kW) ...37-5AA0 (400 kW) ...38-4AA0 (450 kW)	...41-0AA0 (560 kW) ...41-2AA0 (710 kW) ...41-4AA0 (800 kW)

SINAMICS G130, SINAMICS G150, SINAMICS S120, SINAMICS S150

AC low-voltage converters

dv/dt filter compact plus VPL

Technical data (continued)

<i>Line voltage</i> 500 ... 690 V 3 AC		dv/dt filter compact plus VPL 6SL3000-2DG...			
		...31-0EA0	...31-5EA0	...32-2EA0	...33-3EA0
Rated current	A	100	150	215	330
$I_{th \max}$	A	100	150	215	330
Power loss, max.					
• at 50 Hz 500/690 V	kW	0.227	0.27	0.305	0.385
• at 60 Hz 575 V	kW	0.236	0.279	0.316	0.399
• at 150 Hz 500/690 V	kW	0.287	0.335	0.372	0.48
Power connection, input and output		Hole for M10	Hole for M10	Hole for M10	Hole for M10
• Conductor cross-section, max. (DIN VDE)		Provided for busbar connection	Provided for busbar connection	Provided for busbar connection	Provided for busbar connection
DC link connection DCPS, DCNS		Threaded socket M8	Threaded socket M8	Threaded socket M8	Threaded socket M8
• Conductor cross-section, max. (DIN VDE)	mm ²	16	16	25	25
PE/GND connection		Threaded socket M6	Threaded socket M6	Threaded socket M6	Threaded socket M6
Motor cable length, max.					
• Unshielded	m	150	150	150	150
• Shielded	m	100	100	100	100
Degree of protection		IP00	IP00	IP00	IP00
Dimensions					
• Width	mm	310	310	350	350
• Height	mm	283	283	317	317
• Depth	mm	238	238	260	260
Frame size		FSF	FSF	FSG	FSG
Weight, approx.	kg	34	36	51	60
Approvals		UL CSA (available soon)	UL CSA (available soon)	UL CSA (available soon)	UL CSA (available soon)
Suitable for SINAMICS G130 Power Module (500 ... 600 V 3 AC)					
Type 6SL3310-1GF... (type rating)	–	–	...31-8AA0 (110 kW)	...32-6AA0 (160 kW)	...33-3AA0 (200 kW)
			...32-2AA0 (132 kW)	...33-3AA0 (200 kW)	
Suitable for SINAMICS G130 Power Module (660 ... 690 V 3 AC)					
Type 6SL3310-1GE... (type rating)	...28-5AA0 (75 kW)	...31-2AA0 (110 kW)	...31-8AA0 (160 kW)	...32-6AA0 (250 kW)	...33-3AA0 (315 kW)
	...31-0AA0 (90 kW)	...31-5AA0 (132 kW)	...32-2AA0 (200 kW)	...33-3AA0 (315 kW)	
Suitable for SINAMICS S120 Motor Module, chassis format (500 ... 690 V 3 AC)					
Type 6SL332.-1TG... (type rating)	...28-5AA0 (75 kW)	...31-2AA0 (110 kW)	...31-8AA0 (160 kW)	...32-6AA0 (250 kW)	...33-3AA0 (315 kW)
	...31-0AA0 (90 kW)	...31-5AA0 (132 kW)	...32-2AA0 (200 kW)	...33-3AA0 (315 kW)	

SINAMICS G130, SINAMICS G150, SINAMICS S120, SINAMICS S150

AC low-voltage converters

dv/dt filter compact plus VPL

Technical data (continued)

<i>Line voltage</i> 500 ... 690 V 3 AC		dv/dt filter compact plus VPL 6SL3000-2DG...			
		...34-1EA0	...35-8EA0	...38-1EA0	...41-3EA0
Rated current	A	410	575	810	1270
$I_{th max}$	A	410	575	810	1270
Power loss, max.					
• at 50 Hz 500/690 V	kW	0.55	0.571	Reactor: 0.88 VPL: 0.084 Total: 0.964	Reactor: 0.926 VPL: 0.124 Total: 1.055
• at 60 Hz 575 V	kW	0.568	0.586	Reactor: 0.918 VPL: 0.08 Total: 0.998	Reactor: 0.993 VPL: 0.111 Total: 1.104
• at 150 Hz 500/690 V	kW	0.678	0.689	Reactor: 1.137 VPL: 0.059 Total: 1.196	Reactor: 1.23 VPL: 0.089 Total: 1.319
Power connection, input and output		Hole for M12	Hole for M12	2 × Elongated hole 14 × 18 mm	2 × Elongated hole 14 × 18 mm
• Conductor cross-section, max. (DIN VDE)		Provided for busbar connection	Provided for busbar connection	Provided for busbar connection	Provided for busbar connection
DC link connection DCPS, DCNS		Hole for M8	Hole for M8	Hole for M8	Hole for M8
• Conductor cross-section, max. (DIN VDE)	mm ²	50	50	95	95
PE/GND connection		Threaded socket M6	Threaded socket M6	Reactor: Threaded socket M6 VPL: Threaded socket M6	Reactor: Threaded socket M6 VPL: Threaded socket M6
Motor cable length, max.					
• Unshielded	m	150	150	150	150
• Shielded	m	100	100	100	100
Degree of protection		IP00	IP00	IP00	IP00
Dimensions					
• Width	mm	440	440	Reactor: 430 VPL: 277	Reactor: 430 VPL: 277
• Height	mm	369	369	Reactor: 385 VPL: 360	Reactor: 385 VPL: 360
• Depth	mm	311	311	Reactor: 323 VPL: 291	Reactor: 323 VPL: 291
Frame size		FSH	FSH	FSJ	FSJ
Weight, approx.	kg	87	100	Reactor: 171.2 VPL: 18.8 Total: 190	Reactor: 175.8 VPL: 19.2 Total: 195
Approvals		UL CSA (available soon)	UL CSA (available soon)	UL CSA (available soon)	UL CSA (available soon)
Suitable for SINAMICS G130 Power Module (500 ... 600 V 3 AC)					
Type 6SL3310-1GF... (type rating)		...34-1AA0 (250 kW)	...34-7AA0 (315 kW) ...35-8AA0 (400 kW)	...37-4AA0 (500 kW) ...38-1AA0 (560 kW)	–
Suitable for SINAMICS G130 Power Module (660 ... 690 V 3 AC)					
Type 6SL3310-1GE... (type rating)		...34-1AA0 (400 kW)	...34-7AA0 (450 kW) ...35-8AA0 (560 kW)	...37-4AA0 (710 kW) ...38-1AA0 (800 kW)	–
Suitable for SINAMICS S120 Motor Module, chassis format (500 ... 690 V 3 AC)					
Type 6SL332.-1TG... (type rating)		...34-1AA0 (400 kW)	...34-7AA0 (450 kW) ...35-8AA0 (560 kW)	...37-4AA0 (710 kW) ...38-1AA0 (800 kW)	...38-8AA0 (900 kW) ...41-0AA0 (1000 kW) ...41-3AA0 (1200 kW)

SINAMICS G130, SINAMICS G150, SINAMICS S120, SINAMICS S150

AC low-voltage converters

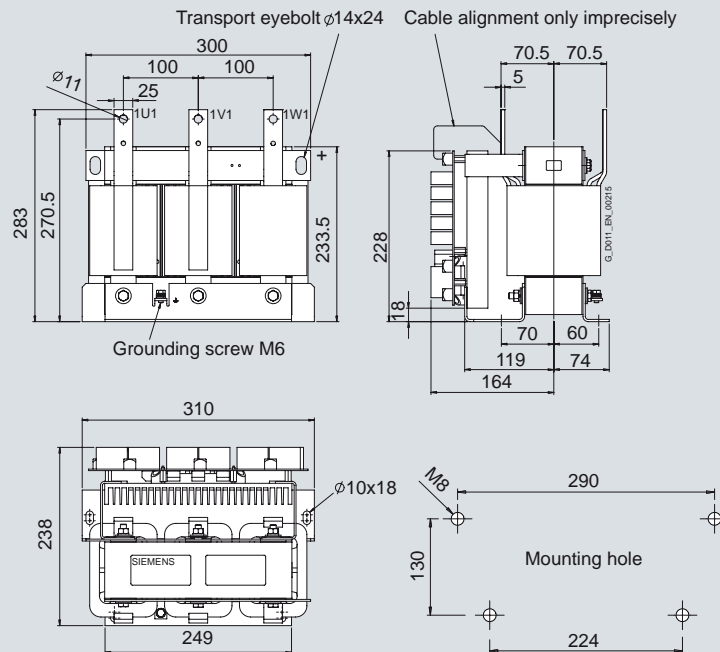
dv/dt filter compact plus VPL

Dimension drawings

6SL3000-2DE32-6EA0 (380 ... 480 V)

6SL3000-2DH31-0EA0 (500 ... 690 V)

6SL3000-2DH31-5EA0 (500 ... 690 V)



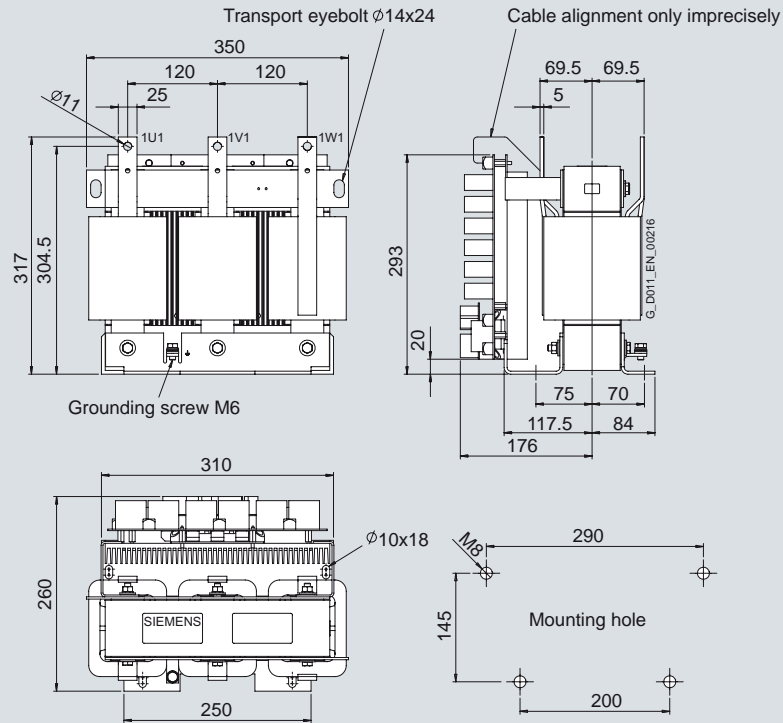
SINAMICS G130, SINAMICS G150, SINAMICS S120, SINAMICS S150

AC low-voltage converters

dv/dt filter compact plus VPL

Dimension drawings (continued)

6SL3000-2DE35-0EA0 (380 ... 480 V)
 6SL3000-2DH32-2EA0 (500 ... 690 V)
 6SL3000-2DH33-3EA0 (500 ... 690 V)



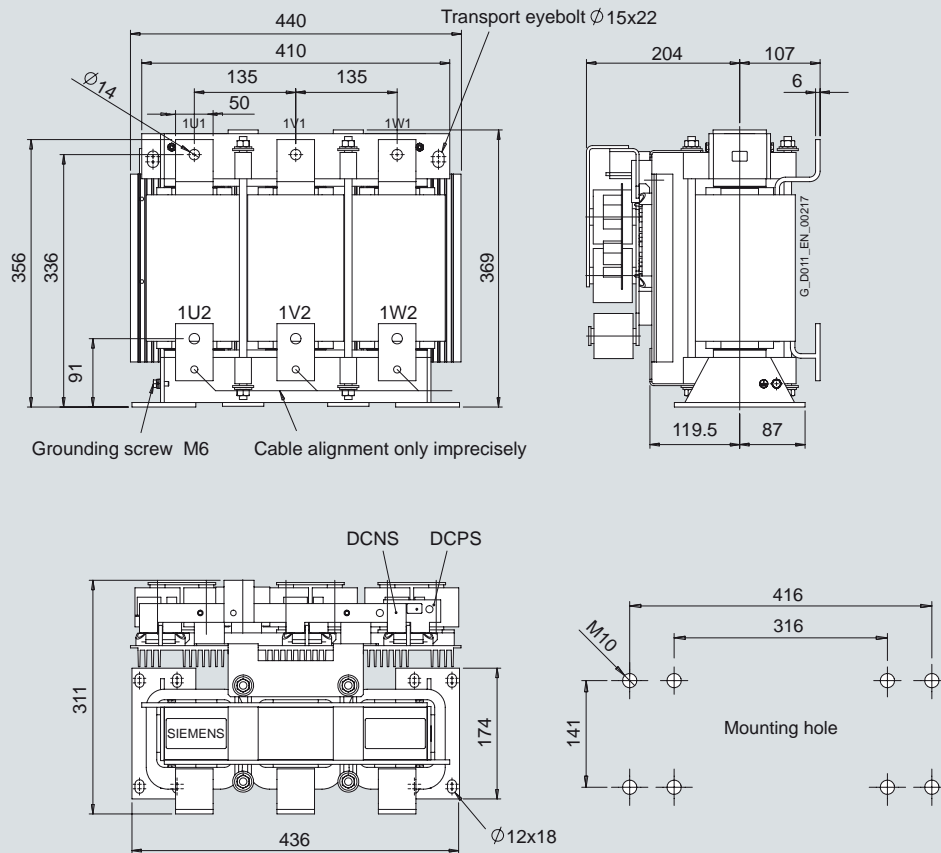
SINAMICS G130, SINAMICS G150, SINAMICS S120, SINAMICS S150

AC low-voltage converters

dv/dt filter compact plus VPL

Dimension drawings (continued)

6SL3000-2DE38-4EA0 (380 ... 480 V)
 6SL3000-2DH34-1EA0 (500 ... 690 V)
 6SL3000-2DH35-8EA0 (500 ... 690 V)



SINAMICS G130, SINAMICS G150, SINAMICS S120, SINAMICS S150

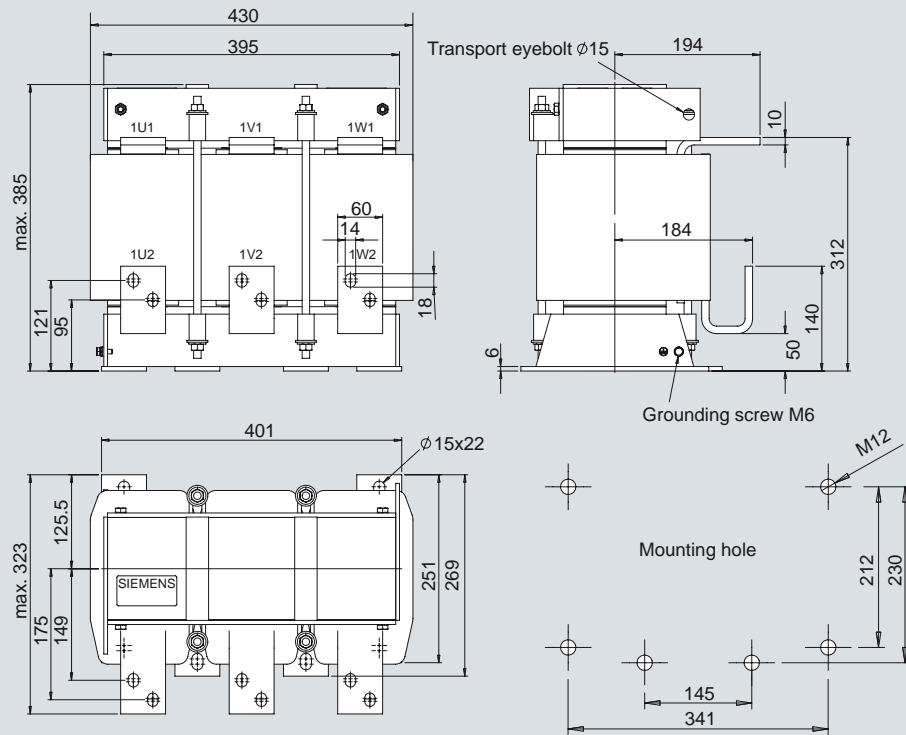
AC low-voltage converters

dv/dt filter compact plus VPL

Dimension drawings (continued)

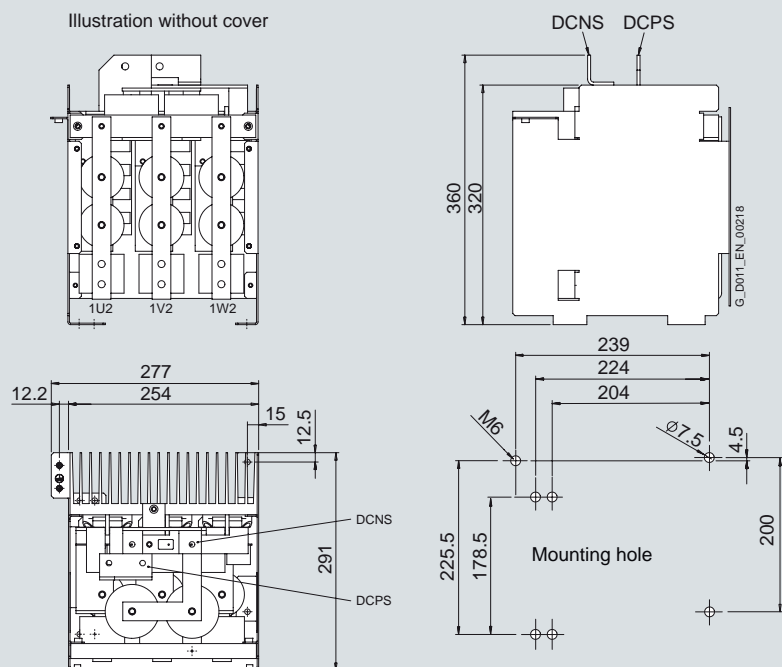
6SL3000-2DE41-4EA0 (380 ... 480 V)
 6SL3000-2DH38-1EA0 (500 ... 690 V)
 6SL3000-2DH41-3EA0 (500 ... 690 V)

dv/dt reactor



Voltage limiting circuit VPL

Illustration without cover



SINAMICS G130, SINAMICS G150, SINAMICS S120, SINAMICS S150

AC low-voltage converters

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