

Transforming difficult installations into perfect solutions. Siemens **Transformers**.

GEAFOL standard housing

Power Transmission and Distribution

SIEMENS

The **inexpensive** solution

GEAFOL® cast-resin transformers have been designed for decentralized installation directly at the load centres for electric power consumers. To provide protection for the transformers against environmental influences on the one hand and to prevent people from coming into contact with the transformer on the other, we have designed an inexpensive solution: the GEAFOL standard housing.



Comprehensive – for indoors and outdoors

The housing has been designed for free-standing GEAFOL cast-resin transformers in electrical locations whether installed indoors (degree of protection IP 20 or IP 23) or outdoors (IP 23). There are five sizes covering transformer ratings from 100 to 2500 kVA. For higher ratings the housing is individually sized to the transformer's dimensions.

Light, stable and easy to assemble

The lightweight housing is made of self-supporting sheet-steel components so that it is inherently stable. The housing can be assembled within a short time without the need for any special training. The housing is mounted around the already installed transformer by bolting the sheets together. Four rag bolts are used to anchor it to the floor. There are no mechanical connections to the transformer (for noise isolation).

Corrosion-resistant

The sheet-steel parts of the housing for indoor installation have a plastic coating (standard colour RAL 7032). The sheet-steel parts of the housing for outdoor installation are galvanized in addition. The ventilation slots are made of salt-water-proof, polished aluminum sheets with no paint finish.

Fully equipped

The end walls are each fitted with an earthing contact. All parts of the housing are grounded with grounding bolts. The standard version of the housing is equipped with two cable brackets for cables brought in from below. The cables are led to the transformer terminals within the housing. For connections brought in from above or from the side, cutouts or flange frames may be provided in the roof or the side walls, upon request.

Well ventilated

The natural ventilation within the housing has been designed to ensure that output is not reduced below an IP 00 degree of protection (see transformers listed in the table next page).

Easy to transport

The housing construction kits are light and compact, which makes them simple and inexpensive to transport. Delivery on pallet.

Technical data at a glance

Rated power S_r [kVA]	Rated voltage HV U_r [kV]	Type	Housing size	Rated power S_r [kVA]	Rated voltage HV U_r [kV]	Type	Housing size
100	10	4GB50 44-3CA	1	630	10	4GB58 44-3CA	2
	20	4GB50 64-3CA	2		20	4GB58 64-3CA	2
	10	4GB50 44-3DA	1		10	4GB58 44-3DA	2
	20	4GB50 64-3DA	2		20	4GB58 64-3DA	2
	10	4GB50 44-3GA	1		10	4GB58 44-3GA	3
	20	4GB50 64-3GA	2		20	4GB58 64-3GA	2
	10	4GB50 44-3HA	1		10	4GB58 44-3HA	2
	20	4GB50 64-3HA	2		20	4GB58 64-3HA	2
160	10	4GB52 44-3CA	1	(800) ¹⁾	10	4GB59 44-3CA	3
	20	4GB52 64-3CA	2		20	4GB59 64-3CA	3
	10	4GB52 44-3DA	1		10	4GB59 44-3DA	3
	20	4GB52 64-3DA	2		20	4GB59 64-3DA	3
	10	4GB52 44-3GA	1		10	4GB59 44-3GA	3
	20	4GB52 64-3GA	2		20	4GB59 64-3GA	3
	10	4GB52 44-3HA	1		10	4GB59 44-3HA	3
	20	4GB52 64-3HA	2		20	4GB59 64-3HA	3
250	10	4GB54 44-3CA	2	1000	10	4GB60 44-3CA	3
	20	4GB54 64-3CA	2		20	4GB60 64-3CA	3
	10	4GB54 44-3DA	2		10	4GB60 44-3DA	3
	20	4GB54 64-3DA	2		20	4GB60 64-3DA	3
	10	4GB54 44-3GA	2		10	4GB60 44-3GA	3
	20	4GB54 64-3GA	2		20	4GB60 64-3GA	4
	10	4GB54 44-3HA	2		10	4GB60 44-3HA	3
	20	4GB54 64-3HA	2		20	4GB60 64-3HA	4
(315) ¹⁾	10	4GB55 44-3CA	2	(1250) ¹⁾	10	4GB61 44-3DA	4
	20	4GB55 64-3CA	2		20	4GB61 64-3DA	4
	10	4GB55 44-3DA	2		10	4GB61 44-3HA	4
	20	4GB55 64-3DA	2		20	4GB61 64-3HA	4
	10	4GB55 44-3GA	2	1600	10	4GB62 44-3DA	4
	20	4GB55 64-3GA	2		20	4GB62 64-3DA	4
	10	4GB55 44-3HA	2		10	4GB62 44-3HA	4
	20	4GB55 64-3HA	2		20	4GB62 64-3HA	4
400	10	4GB56 44-3CA	2	(2000) ¹⁾	10	4GB63 44-3DA	5
	20	4GB56 64-3CA	2		20	4GB63 64-3DA	5
	10	4GB56 44-3DA	2		10	4GB63 44-3HA	5
	20	4GB56 64-3DA	2		20	4GB63 64-3HA	5
	10	4GB56 44-3GA	2	2500	10	4GB64 44-3DA	5
	20	4GB56 64-3GA	2		20	4GB64 64-3DA	5
	10	4GB56 44-3HA	2		10	4GB64 44-3HA	5 ²⁾
	20	4GB56 64-3HA	2		20	4GB64 64-3HA	5 ³⁾
(500) ¹⁾	10	4GB57 44-3CA	2	>2500	Housings available on request		
	20	4GB57 64-3CA	2				
	10	4GB57 44-3DA	2				
	20	4GB57 64-3DA	2				
	10	4GB57 44-3GA	2				
	20	4GB57 64-3GA	2				
	10	4GB57 44-3HA	2				
	20	4GB57 64-3HA	2				

Table 1: Selection Data*) **)

*) Other versions and special equipment available on request

**) 30 kV series available on request

1) Power ratings in parentheses are not standardized

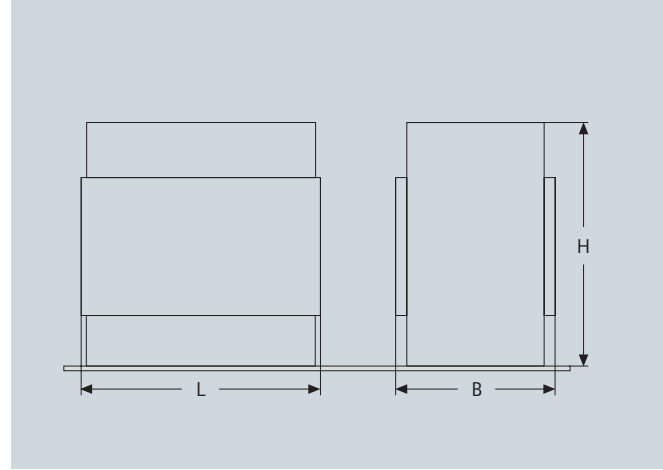
2) IP 20: Height + 100 mm

3) IP 20/IP 23I/IP 23 F: Width + 100 mm, Height + 100 mm

Dimensions and weights

In addition to the standard housings we also supply housings with framework construction and doors, which can also be fitted with roof fans. These housing types can be installed in combination with low and medium-voltage cabinets. Furthermore we offer housings with air-water-cooling (heat exchanger).

Please contact us for more information.

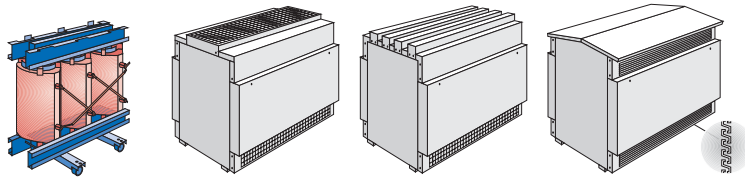


Housing size	Maximum housing dimensions [mm]				Housing weight [kg]	
	IP 20/23		IP 20	IP 23	IP 20	IP 23
	L	B	H	H		
1	1390	1010	1335	1395	121	134
2	1860	1280	1535	1595	177	207
3	1860	1280	1885	1945	211	247
4	2120	1500	2120	2225	252	302
5	2360	1500	2340	2495	290	370

Table 2: Indoor

Housing size	Maximum housing dimensions [mm]			Housing weight [kg]
	L	B	H	
Degree of protection IP 23				
1	1440	1070	1540	153
2	1880	1320	1845	233
3	1880	1320	2245	267
4	2240	1540	2480	325
5	2380	1540	2950	392

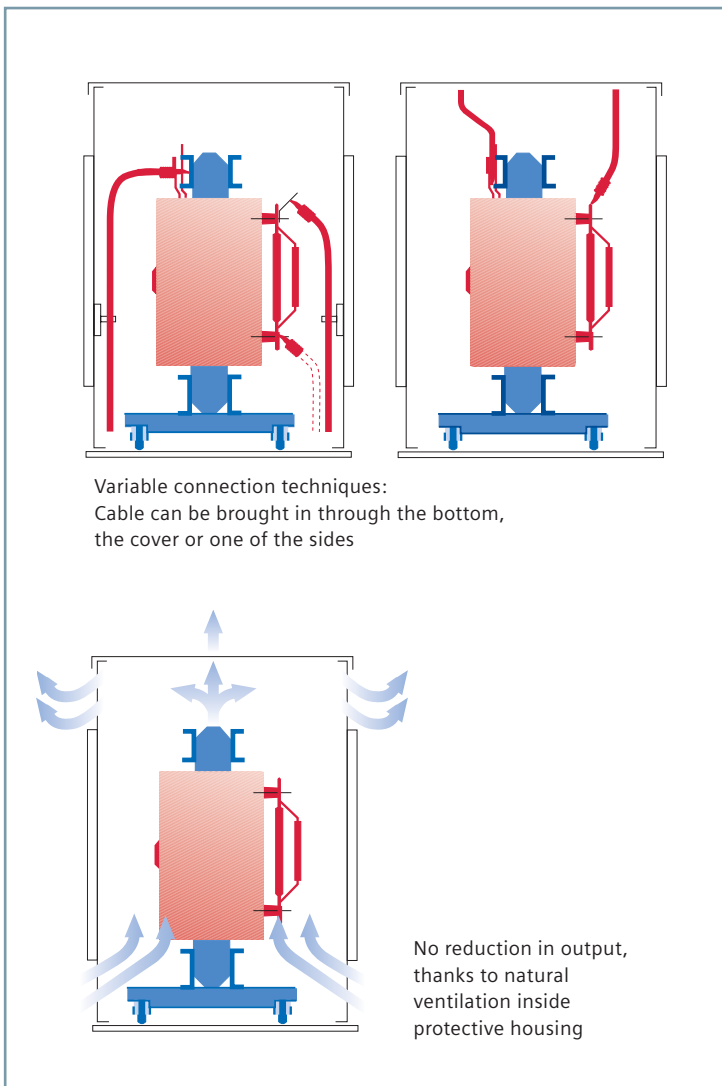
Table 3: Outdoor



Installation	Indoors	Indoors	Indoors	Outdoors	
Degree of protection	IP 00	IP 20	IP 23	IP 23	
Environmental conditions					
Locked electrical locations ¹⁾	•	•	•	•	
Electrical locations ¹⁾	–	•	•	•	
Water up to 60° to ⊥	–	–	•	•	
Snow	–	–	–	•	
Direct sunlight	–	–	–	•	
Salt-laden atmosphere	•	•	•	•	Special paint
Corrosive chemical environment	•	•	•	•	Special paint
Accidental contact	–	•	•	•	
Foreign bodies >12 mm dia.	–	•	•	•	
Prodding with wire	–	–	On request	•	

Table 4

1) According to VDE 0100 Parts 200 and 731



Design of housing cover, degree of protection IP 23 (indoor installation)

Drawing shows cross-section of ventilation slots in cover

Photo: Cover strips are bent down at ends and fastened by bolting to walls.

Prod-proof ventilation slots for additional safety.



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