

Current instrument transformer support type for indoor use

**CT17,5-xx.xxX**

Product catalog and reference price list

includes  
DIN models

## Technical parameters

## Values

Highest voltage of equipment	13,8 ÷ 17,5 kV
Power frequency test voltage for 1 min	34 ÷ 42 kV
Lighting impulse test voltage for 1,2 / 50 µs	95 kV
Rated primary current (Ip)	5 ÷ 3200 A
Rated short-time thermal current (Ith) for 1 or 3 seconds	0,5 ÷ 100 kA
Burden	1 ÷ 60 VA
Accuracy class of measuring windings	0,2 S ÷ 3 %
Security factor (FS)	5 or 10
Accuracy class of protection windings	5P or 10P

## Product description

The instrument transformers type CT17,5-xx.xxX, are designed for indoor use in electric distribution panels, for measuring and protection.

They are designed to be resistant up to 12 kV insulation level, molded in epoxy resin under vacuum.

The mounting of transformer inside the panel, is realizing through the base metal plate with four screws.

The transformer can be mounted in any position.

During operation, the end connectors of used secondary windings must be obligatory connected to the base metal plate.

Both connectors of unused secondary windings, must be obligatory connected to the metal plate.

The connection to ground will be realized with the M8 screw, which is on the base metal plate.

All secondary connectors are situated in a terminal box, covered by a transparent sealing cup, which has two sealing screw M4.

The primary of CT17,5-xx.xxX transformers are designed with single or with multi turns.

The size of transformers (short or long version) depends of the accuracy class of measuring windings, the accuracy class of protection windings and the power of these windings.

The transformers CT17,5-xx.xxX will be delivered with all necessary screws to be connected in circuit and with the necessary plates in case of primary reconnectable transformers.

## Technical parameters

The design and execution of transformers are realized according to IEC 61869 - 2.

The nominal current of primary winding:

5; 10; 15; 20; 25; 30; 40; 50; 75; 100; 150; 200; 300; 400; 500; 600; 750; 1000; 1250; 1500; 2000; 2500; 3000 and 3200 A

The transformers with reconnectable primary, can be manufactured up to 400-800 A.

The secondary current can be 1 or 5 A.

Accuracy class:

- Measuring winding: 0,2S; 0,2; 0,5S; 0,5; 1; 3.
  - Security factor: FS5; FS10.
- Protection winding: 5P; 10P
  - Precision limit factor: 5; 10, 15, 20, 30.

Frequency: 50 or 60 Hz.

Altitude: max. 1000 m.

Ambient operation temperature:

- 5 ... + 40 °C.

Ambient transportation and storage temperature:

- 25 ... + 40 °C.

Cantilever strength: 5 kN

The transformers with other parameters and according to other standards can be manufactured upon customer request.

Recommended torques for screws:

M 4	0,8 ... 1,2 Nm
M 5	2,9 ... 3,5 Nm
M 8	17,0 ... 20,0 Nm
M12	58,0 ... 70,0 Nm

## Encoding of current instrument transformers - CT

# CTX-xx.xxX

Transformer type

Highest voltage of equipment in  
3,6; 7,2; 12; 17,5; 24 kV

Winding type:

- 1 - Non reconnectable primary,  
Non reconnectable secondary
- 2 - Reconnectable primary,  
Non reconnectable secondary
- 3 - Non reconnectable primary,  
Reconnectable secondary

Primary connectors:

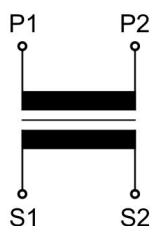
- 1 - Connector P1 to secondary terminals
- 2 - Connector P2 to secondary terminals

Constructive types:  
N - Without barriers  
B - With barriers

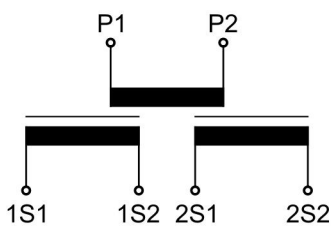
Fixing bracket dimensions:  
1 - 148 x 334 mm  
2 - 148 x 454 mm  
3 - 184 x 354 mm  
4 - 184 x 464 mm  
5 - 178 x 354 mm  
6 - 178 x 454 mm

Width of primary connectors:  
1 - 40 mm  
2 - 60 mm  
3 - 80 mm

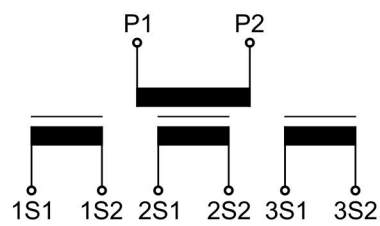
## Marking example of secondary winding terminals



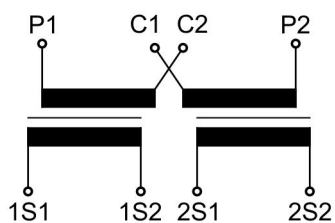
a) with one secondary



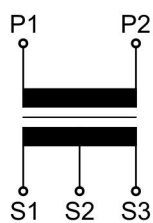
b) with two secondary



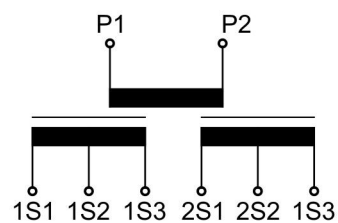
c) with three secondary



d) with two secondary and, reconnectable in primary side



e) with one secondary and reconnectable in secondary side



f) with two secondary and reconnectable in secondary side

Reference prices for  $I_{th} = 1s$  and insulation level 17,5 / 38 / 95 kV

Product code	Ratio < A >	Burden < VA >	Class	FS / ALF	$I_{th} / I_{dyn}$ < kA >	Price Euro no VAT
CT17,5-11.11N	5 // 5 / 5	10 / 10	0,5 / 5P	FS5 / 10	1 / 2,5	
CT17,5-11.11N	10 // 5 / 5	10 / 10	0,5 / 5P	FS5 / 10	2 / 5	
CT17,5-11.11N	15 // 5 / 5	10 / 10	0,5 / 5P	FS5 / 10	2 / 5	
CT17,5-11.11N	20 // 5 / 5	10 / 10	0,5 / 5P	FS5 / 10	4 / 10	
CT17,5-11.11N	25 // 5 / 5	10 / 10	0,5 / 5P	FS5 / 10	4 / 10	
CT17,5-11.11N	30 // 5 / 5	10 / 10	0,5 / 5P	FS5 / 10	4 / 10	
CT17,5-11.11N	40 // 5 / 5	10 / 10	0,5 / 5P	FS5 / 10	6,3 / 16	
CT17,5-11.11N	50 // 5 / 5	10 / 10	0,5 / 5P	FS5 / 10	6,3 / 16	
CT17,5-11.11N	75 // 5 / 5	10 / 10	0,5 / 5P	FS5 / 10	12,5 / 31	
CT17,5-11.11N	100 // 5 / 5	10 / 10	0,5 / 5P	FS5 / 10	16 / 40	
CT17,5-11.11N	125 // 5 / 5	10 / 10	0,5 / 5P	FS5 / 10	20 / 50	
CT17,5-11.11N	150 // 5 / 5	10 / 10	0,5 / 5P	FS5 / 10	25 / 63	
CT17,5-11.11N	200 // 5 / 5	10 / 10	0,5 / 5P	FS5 / 10	25 / 63	
CT17,5-11.11N	250 // 5 / 5	10 / 10	0,5 / 5P	FS5 / 10	40 / 100	
CT17,5-11.11N	300 // 5 / 5	10 / 10	0,5 / 5P	FS5 / 10	40 / 100	
CT17,5-11.11N	400 // 5 / 5	10 / 10	0,5 / 5P	FS5 / 10	40 / 100	
CT17,5-11.11N	500 // 5 / 5	10 / 10	0,5 / 5P	FS5 / 10	50 / 125	
CT17,5-11.11N	600 // 5 / 5	10 / 10	0,5 / 5P	FS5 / 10	50 / 125	
CT17,5-11.11N	750 // 5 / 5	10 / 10	0,5 / 5P	FS5 / 10	50 / 125	
CT17,5-11.11N	1000 // 5 / 5	10 / 10	0,5 / 5P	FS5 / 10	63 / 160	
CT17,5-11.11N	1250 // 5 / 5	10 / 10	0,5 / 5P	FS5 / 10	63 / 160	
CT17,5-11.31N	1500 // 5 / 5	10 / 10	0,5 / 5P	FS5 / 10	63 / 160	
CT17,5-11.31N	2000 // 5 / 5	10 / 10	0,5 / 5P	FS5 / 10	80 / 200	
CT17,5-11.31N	2500 // 5 / 5	10 / 10	0,5 / 5P	FS5 / 10	100 / 250	
CT17,5-11.31N	3000 // 5 / 5	10 / 10	0,5 / 5P	FS5 / 10	100 / 250	
CT17,5-11.31N	3200 // 5 / 5	10 / 10	0,5 / 5P	FS5 / 10	100 / 250	

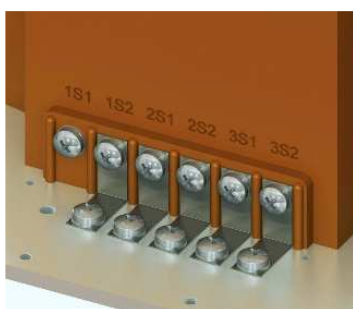
Possible insulation levels for CT17,5-xx.xxX:

13,8 / 34 / 95 kV

17,5 / 38 / 95 kV

17,5 / 42 / 95 kV

Position and marking examples for secondary terminals:

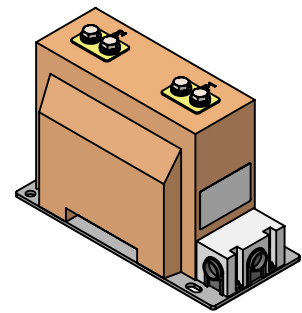
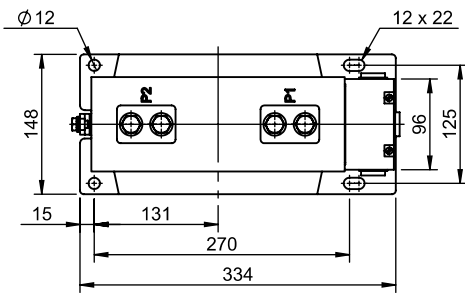
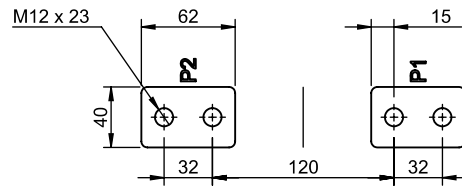
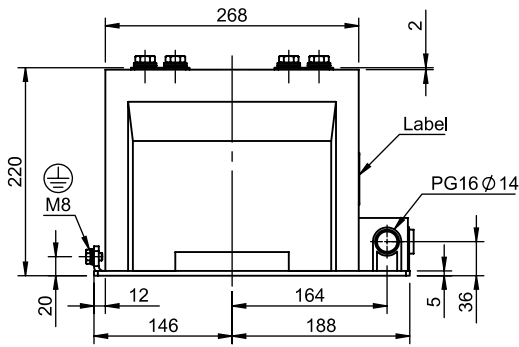


with three secondary windings

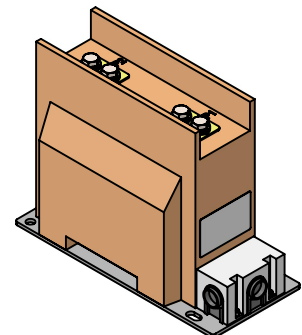
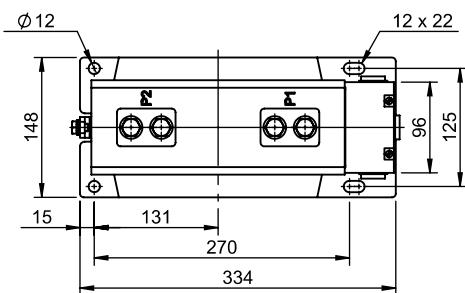
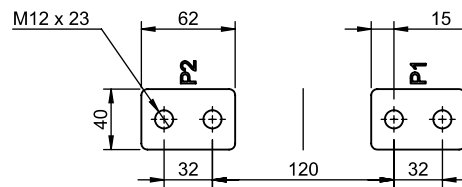
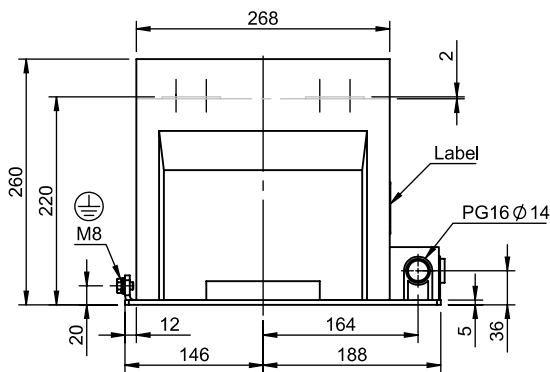


with three reconnectable secondary windings

CT17,5-11.11N  
 Weight: ≤ 25 kg  
 Creepage distance: 208 mm



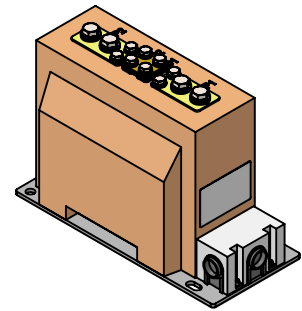
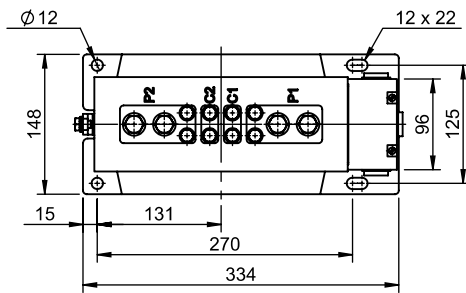
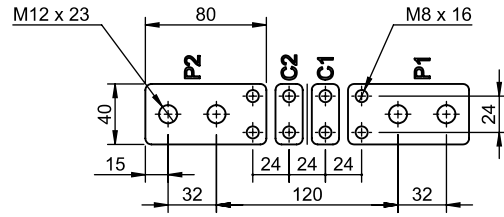
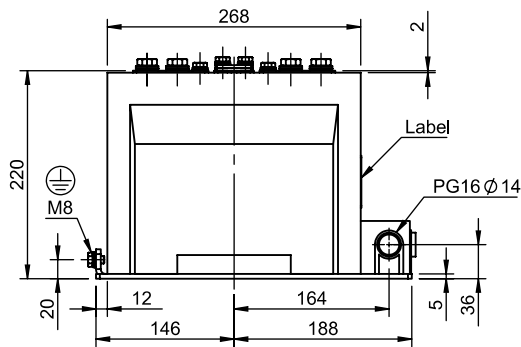
CT17,5-11.11B  
 Weight: ≤ 25 kg  
 Creepage distance: 208 mm



CT17,5-21.11N

Weight: ≤ 26 kg

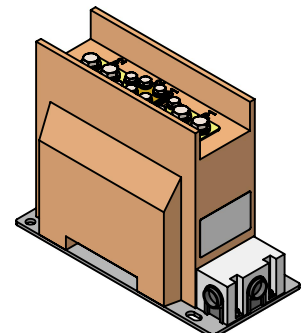
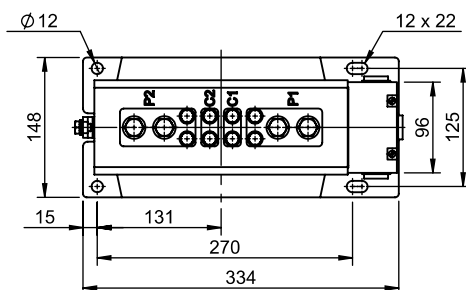
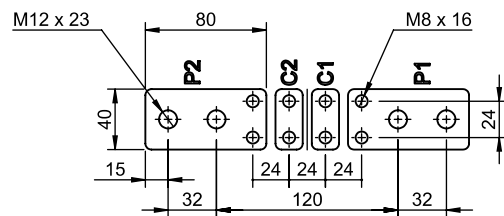
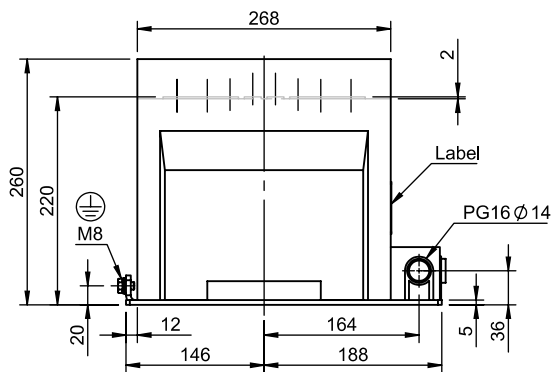
Creepage distance: 208 mm



CT17,5-21.11B

Weight: ≤ 26 kg

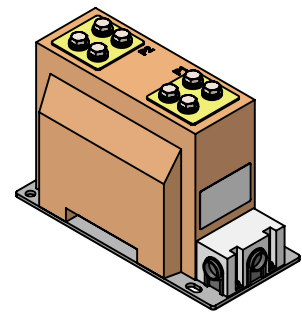
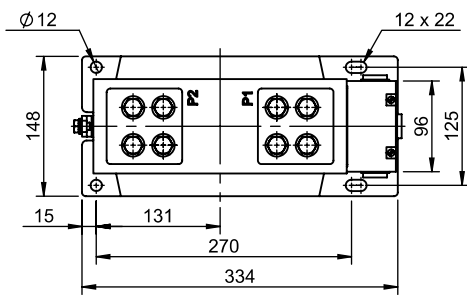
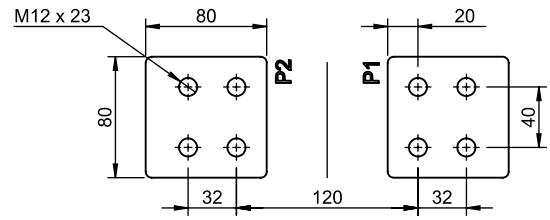
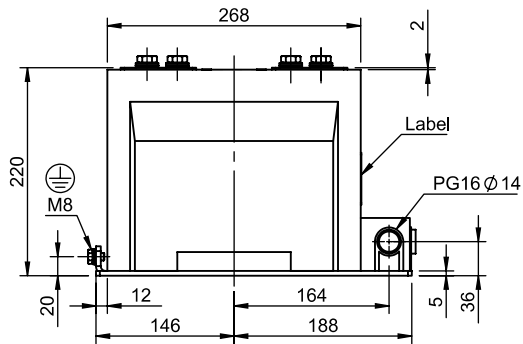
Creepage distance: 208 mm



CT17,5-11.31N

Weight:  $\leq 32$  kg

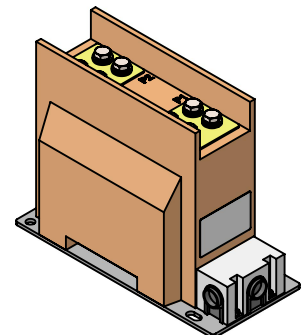
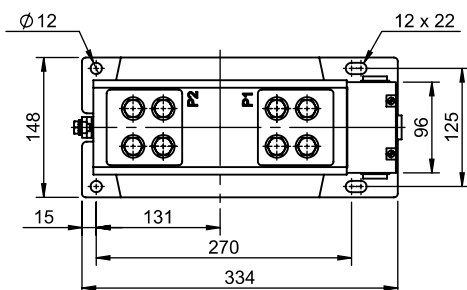
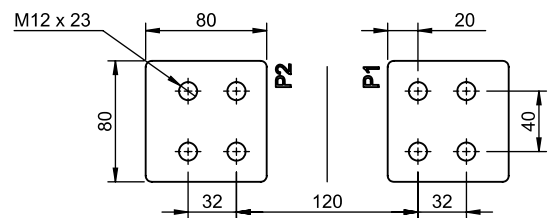
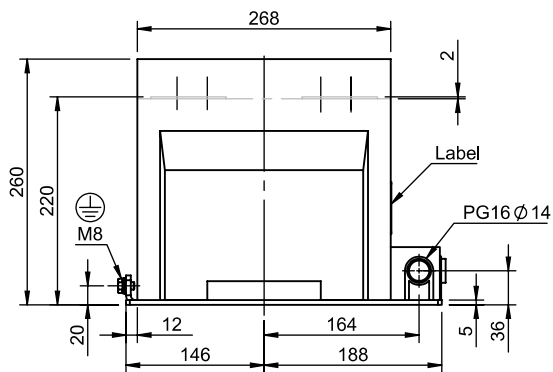
Creepage distance: 194 mm



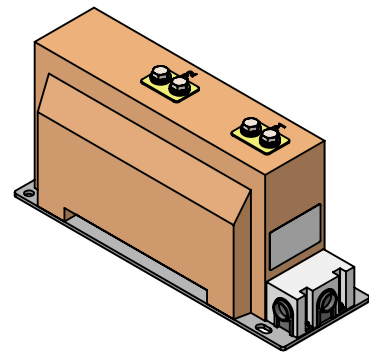
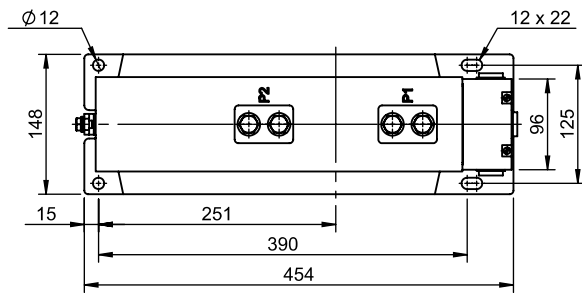
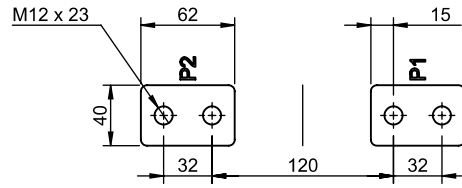
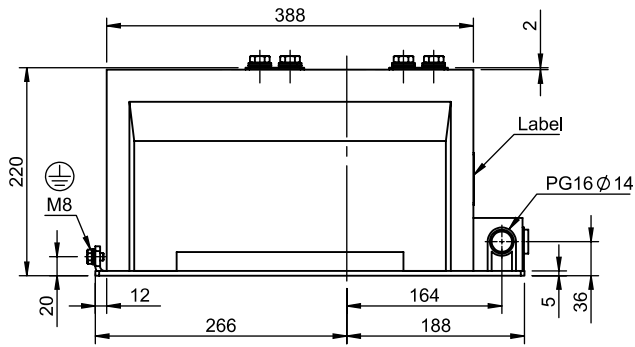
CT17,5-11.31B

Weight:  $\leq 32$  kg

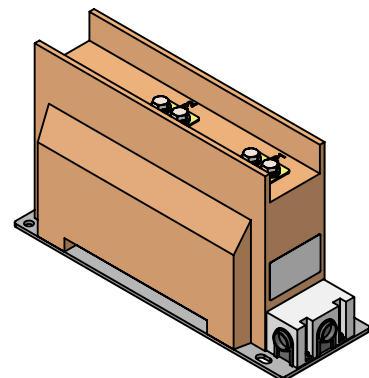
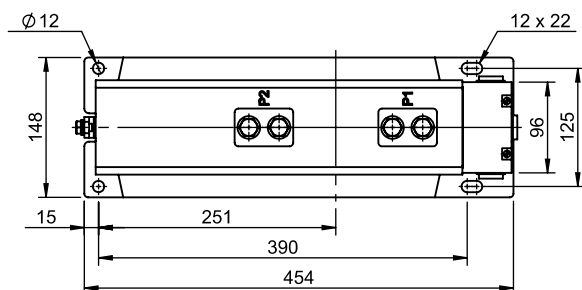
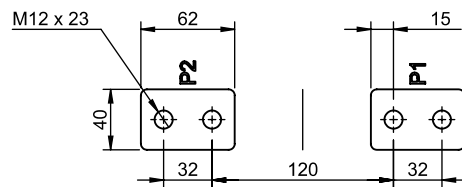
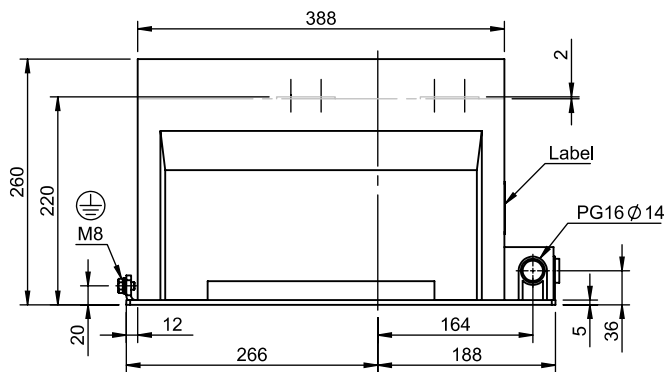
Creepage distance: 194 mm



CT17,5-11.12N  
 Weight: ≤ 38 kg  
 Creepage distance: 208 mm



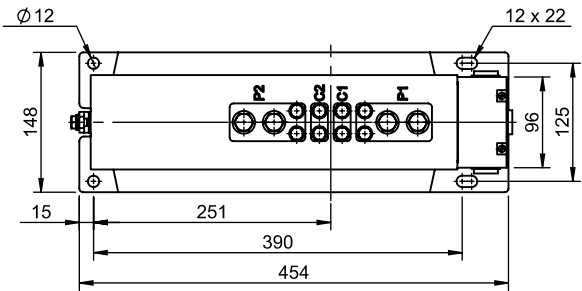
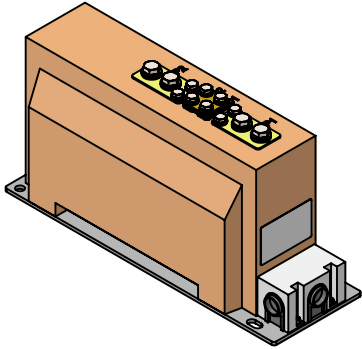
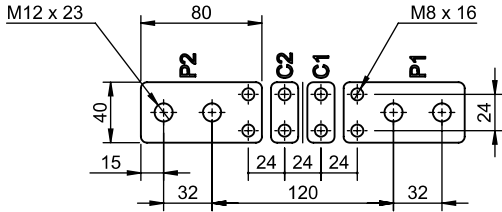
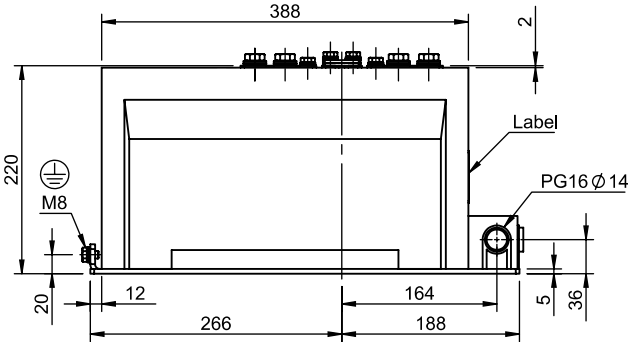
CT17,5-11.12B  
 Weight: ≤ 38 kg  
 Creepage distance: 208 mm



CT17,5-21.12N

Weight: ≤ 39 kg

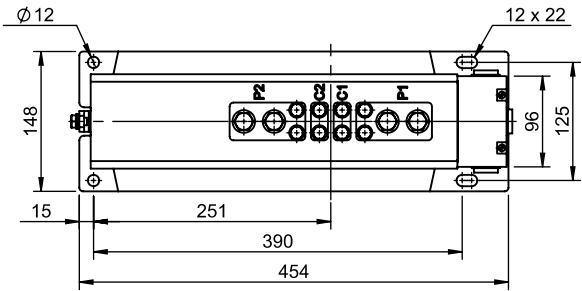
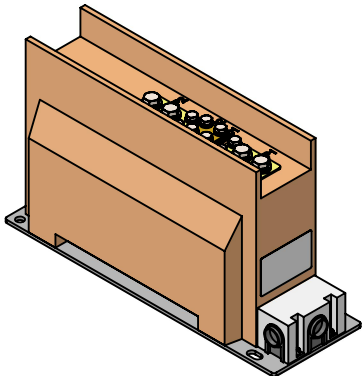
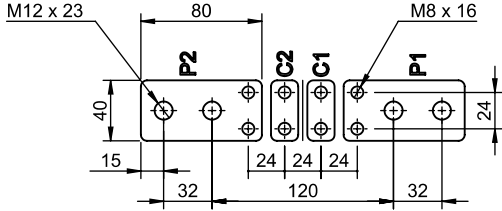
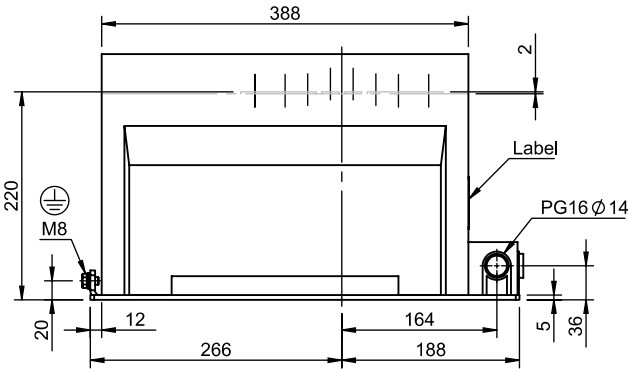
Creepage distance: 208 mm



CT17,5-21.12B

Weight: ≤ 39 kg

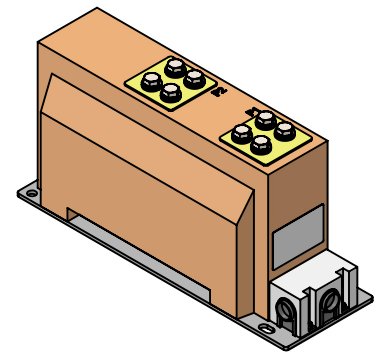
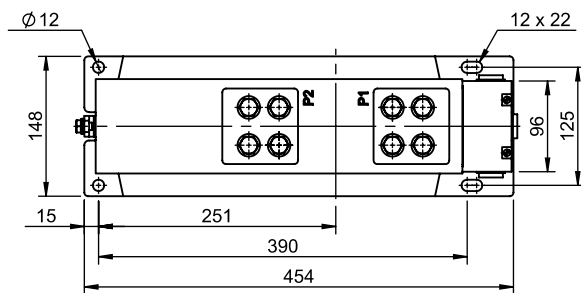
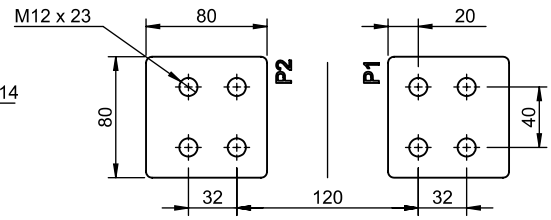
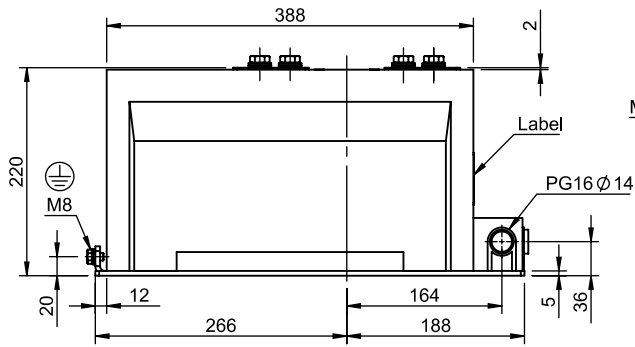
Creepage distance: 208 mm



CT17,5-11.32N

Weight:  $\leq 46$  kg

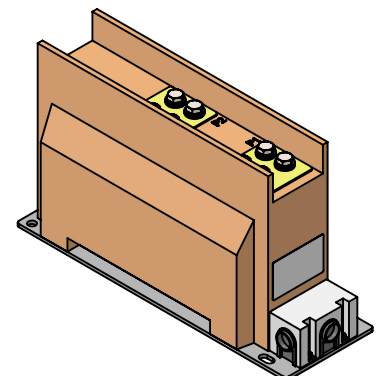
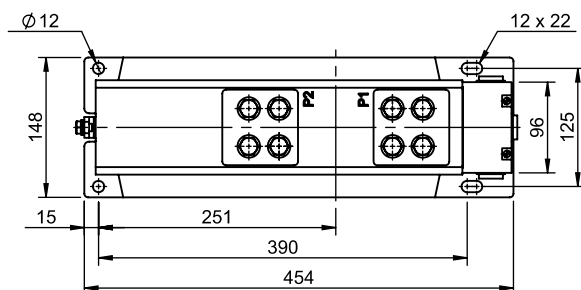
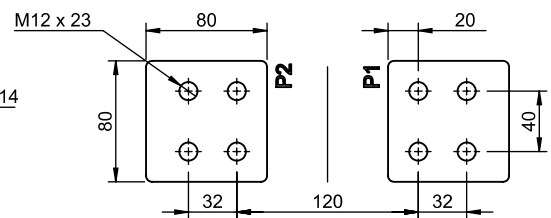
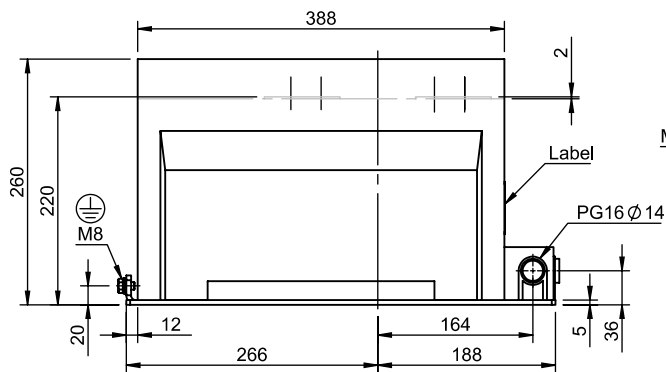
Creepage distance: 194 mm



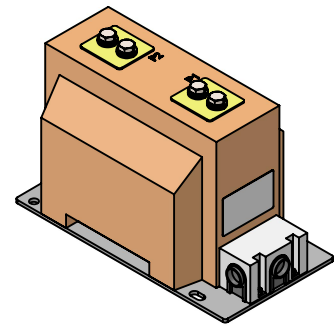
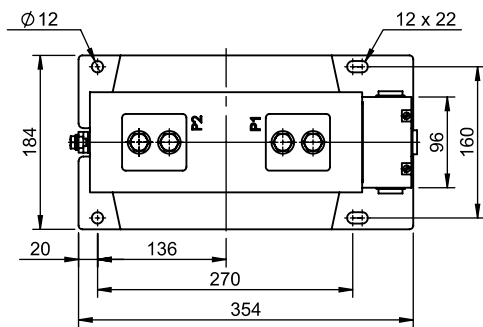
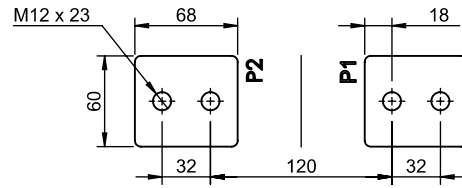
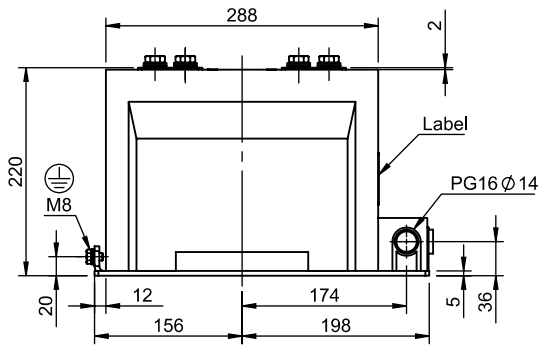
CT17,5-11.32B

Weight:  $\leq 46$  kg

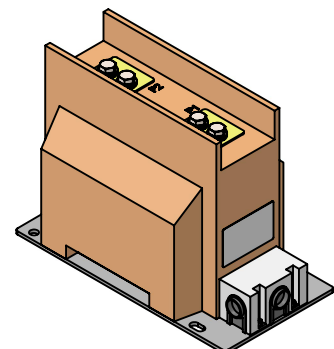
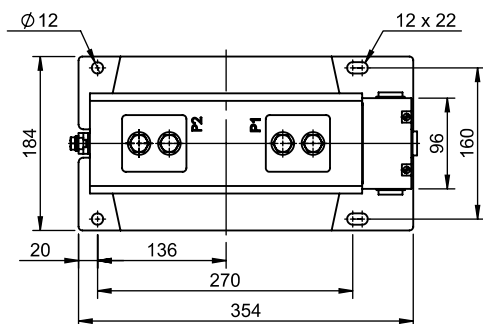
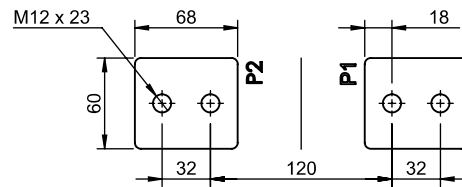
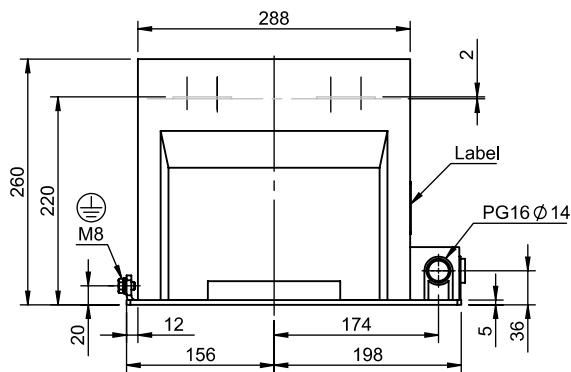
Creepage distance: 194 mm



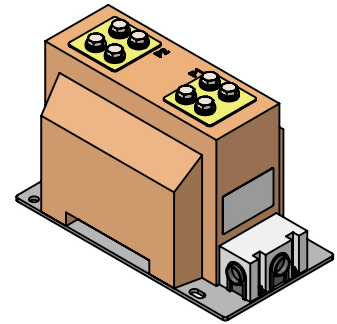
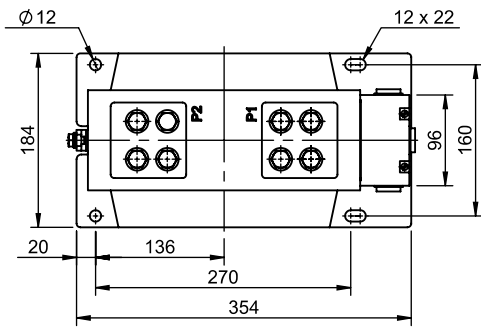
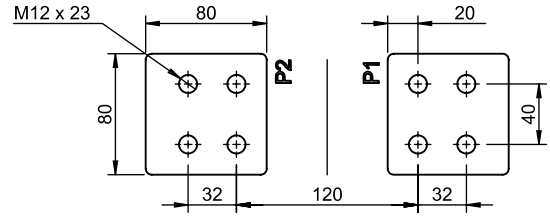
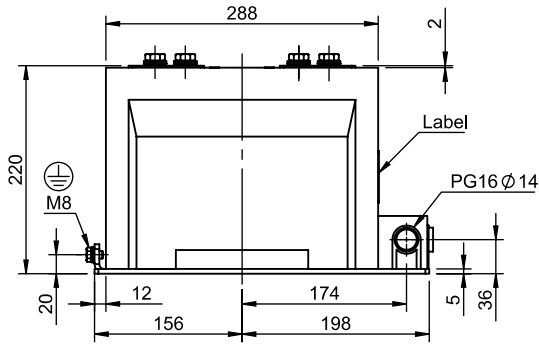
CT17,5-11.23N  
 Weight: ≤ 40 kg  
 Creepage distance: 214 mm



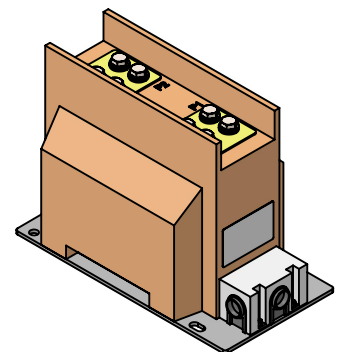
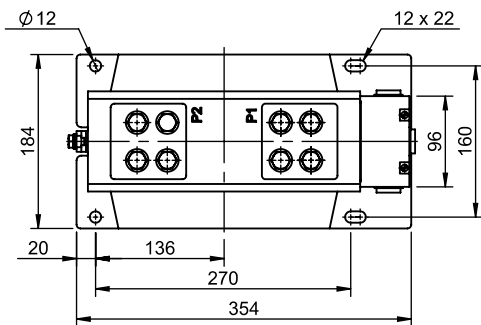
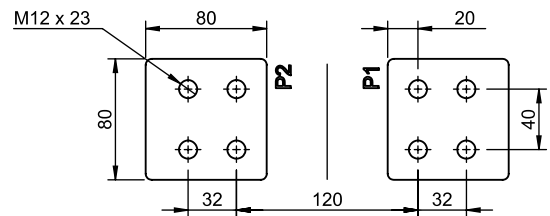
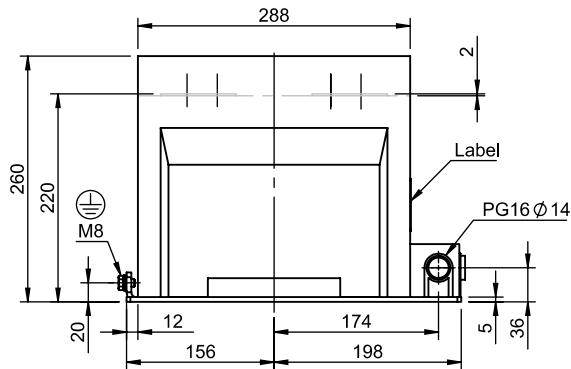
CT17,5-11.23B  
 Weight: ≤ 40 kg  
 Creepage distance: 214 mm



CT17,5-11.33N  
 Weight: ≤ 43 kg  
 Creepage distance: 204 mm



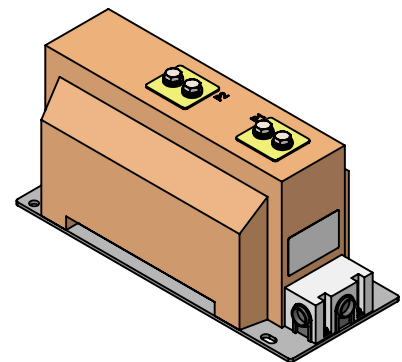
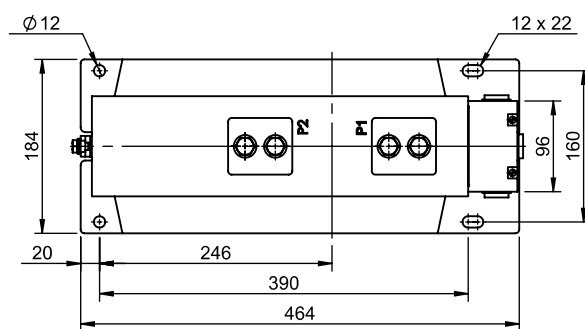
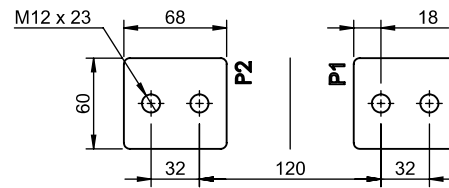
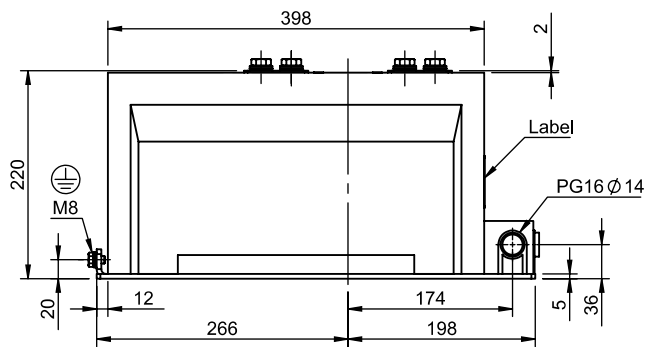
CT17,5-11.33B  
 Weight: ≤ 43 kg  
 Creepage distance: 204 mm



CT17,5-11.24N

Weight:  $\leq 56$  kg

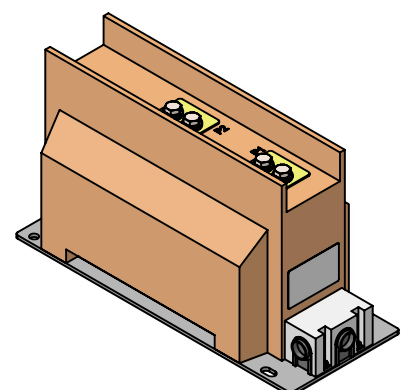
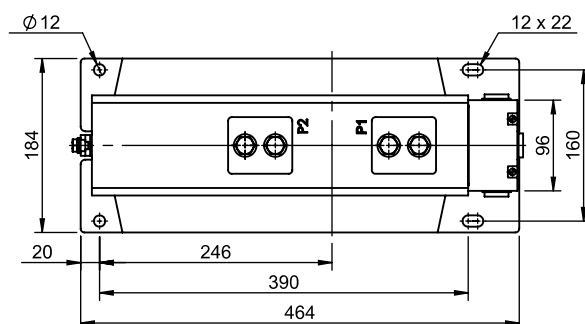
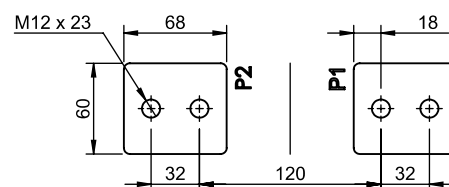
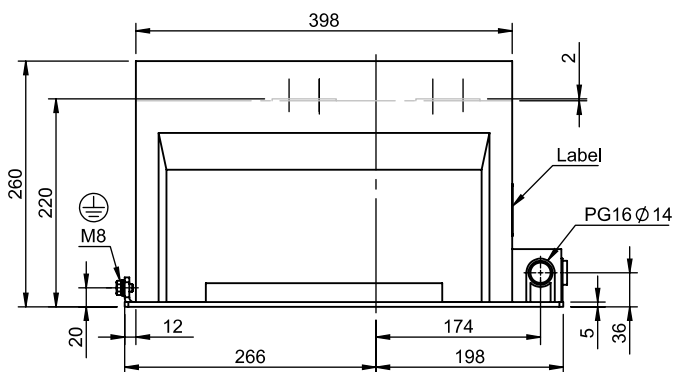
Creepage distance: 214 mm



CT17,5-11.24B

Weight:  $\leq 56$  kg

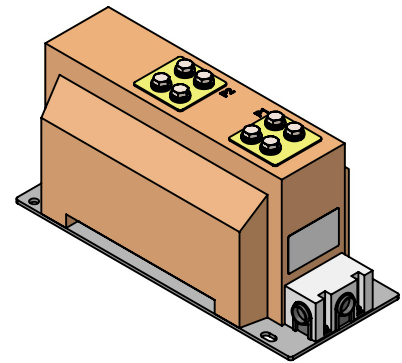
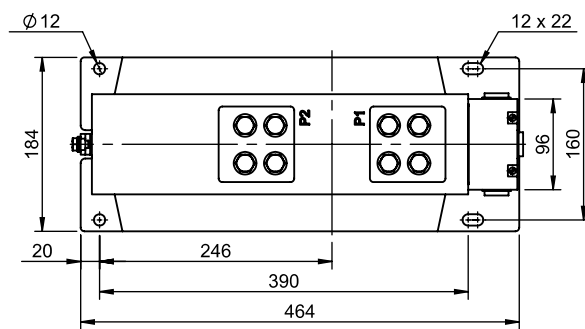
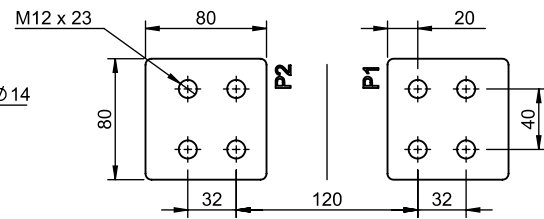
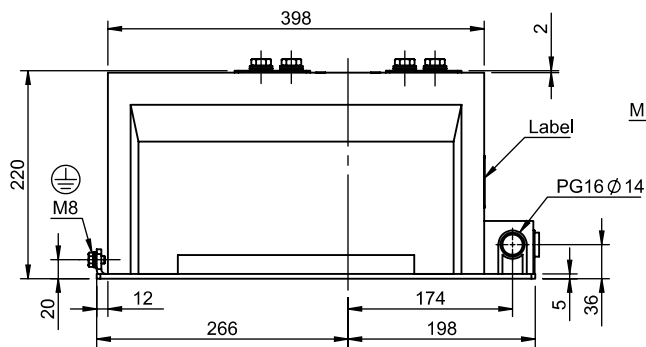
Creepage distance: 214 mm



CT17,5-11.34N

Weight: ≤ 59 kg

Creepage distance: 204 mm



CT17,5-11.34B

Weight: ≤ 59 kg

Creepage distance: 204 mm

