

- Current 1A .. 20 000A
- Accuracy class 0,5
- Voltage drops 60mV, 100mV, 150mV, 300mV

Shunts are used for measuring DC currents. There is a voltage drop which is proportional to passing current. These shunts are produced with accuracy class 0,5 (EN 60051) for rated current from 1A to 15kA with voltage drop 60mV, 100mV, 150mV, 300mV. Other voltage drop, accuracy class or rated current is possible by request. According to rated current we offer shunts with three types of design: A, B and C.

- Design A with an insulating clamp for mounting on a rail or to the base (till 25 A/ 60, 100, 150 or 300 mV); Without a catch clamping (30 ... 150 A, 200 A), design with catch clamping by request.
- Design B Metallic L-Profiles without insulating clamp (from 200A)
- Design C Metallic T-Profiles without insulating clamp (from 400A)

**Technical data:**

Accuracy class 0,5 ( EN 60051 )  
 Ambient temperature 23°C/ ± 1K  
 Lifetime > 10 years

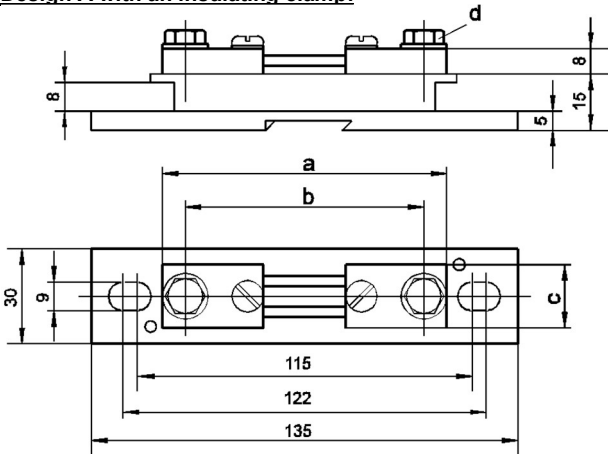
**Working conditions:**

- climate climatic class 3  
 - temperature -10°C...+55°C  
 - relative humidity < 95%  
 - working time > 200.000 hours

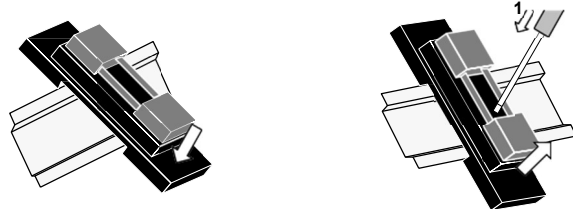
Overloading: Max. 120% rated current: permanently  
 5 sec overloading: till 250A: 10x rated current  
 250A...2kA: 5x rated current  
 2kA...10kA: 2x rated current

Material: resistance: manganin  
 profile: brass (design A)  
 brass or cooper (design B)  
 cooper (design C)  
 insulating clamp self-extinguishing black lexan (UL 94 V-0)  
 Connecting screws: for current: according to dimensional drawing  
 for voltage: M5x8  
 Test voltage on insulating catch clamp: 5 kV

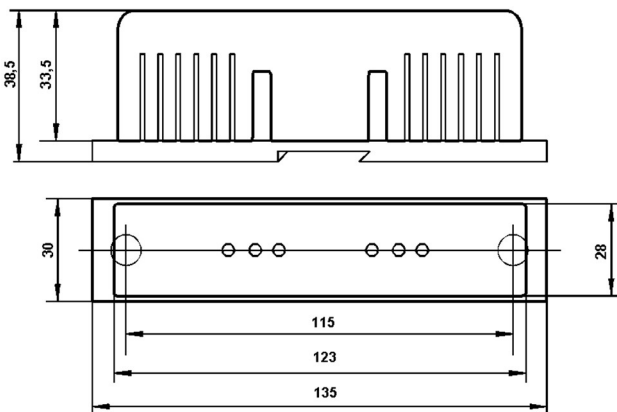
**Design A with an insulating clamp:**



Rated voltage drop:	60 ... 300 mV	60 mV
Dimensions (mm)	1 ... 25 A	30 ... 150 (200) A
a	90	100
b	78	80
c	20	20
d	M5 x 12	M8 x 16



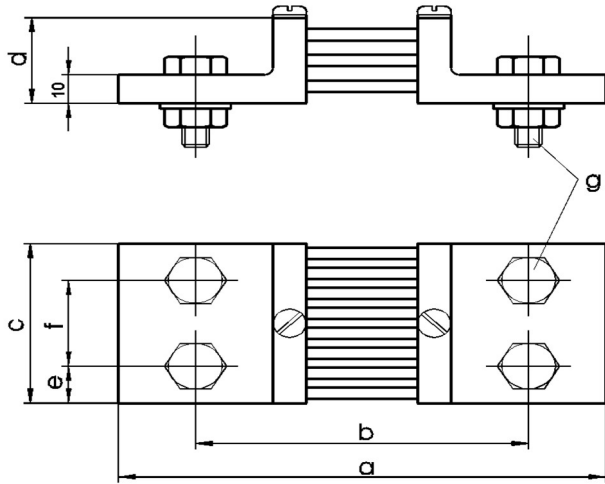
**Design A with an insulating clamp and cover:**



**Design A with an insulating clamp**

Rated voltage drop:	100 mV	150 mV	300 mV
Dimensions (mm)	30 ... 150 A	30 ... 150 A	30 ... 150 A
a	145	225	384
b	125	205	364
c	25	25	25
d	M8 x 16	M8 x 16	M8 x 16

**Design B:**



**Rated voltage drop 60 mV**

Dimension	200 A	400 A	1 000 A	1 500 A
	250 A	600 A		
a	190	190	210	210
b	150	150	160	160
c	30	40	60	120
d	30	30	30	30
e	15	20	30	30
f	-	-	-	60
g	M12x40	M16x45	M20x50	M20x50

**Rated voltage drop 100 mV**

Dimension (mm)	200 A	400 A	1 000 A	1 500 A	2 500 A
	250 A	600 A			
a	145	145	165	165	165
b	105	105	115	115	115
c	30	40	60	90	120
d	30	30	30	30	30
e	15	20	30	21	30
f	-	-	-	48	60
g	M12x40	M16x45	M20x50	M16x45	M20x50

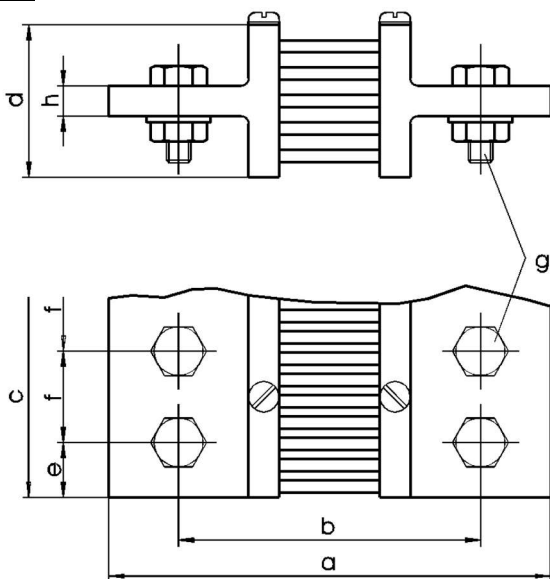
**Rated voltage drop 150 mV**

Dimension (mm)	200 A	400 A	1 000 A
	250 A	600 A	
a	270	270	290
b	230	230	240
c	30	40	70
d	50	50	60
e	15	20	35
g	M12x40	M16x45	M20x50

**Rated voltage drop 300 mV**

Dimension (mm)	200 A	400 A	1 000 A
	250 A	600 A	
a	429	429	449
b	389	389	399
c	30	40	70
d	50	50	60
e	15	20	35
g	M12x40	M16x45	M20x50

**Design C:**



**Rated voltage drop 60 mV**

Dimension (mm)	4 000 A	6 000 A	10 000 A	15 000 A	20 000 A
a	165	175	185	185	185
b	115	125	135	135	135
c	120	154	206	310	362
d	60	130	170	170	170
e	30	25	25	25	25
f	60	52	52	52	52
g	M20x50	M20x75	M20x80	M20x80	M20x80
h	15	25	30	30	30

**Rated voltage drop 100 mV**

Dimension (mm)	1 500 A	2 500 A	4 000 A	6 000 A
a	290	290	300	300
b	240	240	250	250
c	90	120	120	154
d	60	60	130	130
e	21	30	30	25
f	48	60	60	52
g	M16x60	M20x60	M20x75	M20x75
h	15	15	25	25

**Rated voltage drop 150 mV**

Dimension (mm)	1 500 A	2 500 A	4 000 A	6 000 A	10 000 A
a	290	290	300	300	310
b	240	240	250	250	260
c	90	120	120	154	206
d	60	60	130	130	170
e	21	30	30	25	25
f	48	60	60	52	52
g	M16x60	M20x60	M20x75	M20x75	M20x80
h	15	15	25	25	30

**Rated voltage drop 300 mV**

Dimension (mm)	1 500 A	2 500 A	4 000 A	6 000 A
a	449	449	459	459
b	399	399	409	409
c	90	120	120	154
d	60	60	130	130
e	21	30	30	25
f	48	60	60	52
g	M16x60	M20x60	M20x75	M20x75
h	15	15	25	25

**Weight:**

Rated current	60 mV	100 mV <sup>1)</sup>	150 mV	300 mV <sup>1)</sup>
1 A 0,12 kg	0,12 kg	0,12 kg	0,12 kg	0,14 kg
1,5 A	0,13 kg	0,12 kg	0,12 kg	0,14 kg
2 A <sup>1) 2)</sup>	0,13 kg	0,12 kg	0,12 kg	0,14 kg
2,5 A	0,12 kg	0,12 kg	0,12 kg	0,14 kg
3 A <sup>1) 2)</sup>	0,12 kg	0,12 kg	0,12 kg	0,14 kg
4 A	0,13 kg	0,12 kg	0,12 kg	0,14 kg
5 A <sup>1) 2)</sup>	0,12 kg	0,12 kg	0,12 kg	0,14 kg
6 A	0,12 kg	0,12 kg	0,13 kg	0,14 kg
8 A <sup>1) 2)</sup>	0,13 kg	0,13 kg	0,13 kg	0,15 kg
10 A	0,13 kg	0,13 kg	0,13 kg	0,15 kg
12 A <sup>1) 2)</sup>	0,13 kg	0,13 kg	0,13 kg	0,15 kg
15 A	0,13 kg	0,13 kg	0,13 kg	0,15 kg
20 A <sup>1) 2)</sup>	0,13 kg	0,14 kg	0,14 kg	0,16 kg
25 A	0,13 kg	0,14 kg	0,14 kg	0,16 kg
30 A <sup>1) 2)</sup>	0,12 kg	0,13 kg	0,15 kg	0,20 kg
40 A	0,12 kg	0,14 kg	0,16 kg	0,20 kg
50 A <sup>1) 2)</sup>	0,12 kg	0,14 kg	0,16 kg	0,20 kg
60 A	0,12 kg	0,14 kg	0,17 kg	0,20 kg
80 A <sup>1) 2)</sup>	0,12 kg	0,15 kg	0,18 kg	0,20 kg
100 A	0,12 kg	0,17 kg	0,20 kg	0,25 kg
150 A	0,13 kg	0,20 kg	0,23 kg	0,30 kg
200 A <sup>1) 2)</sup>	0,61 kg	0,65 kg	0,68 kg	0,80 kg
250 A	0,61 kg	0,65 kg	0,68 kg	0,80 kg
300 A <sup>1) 2)</sup>	0,61 kg	0,68 kg	0,72 kg	0,90 kg
400 A	0,83 kg	1,00 kg	1,05 kg	1,30 kg
500 A <sup>1) 2)</sup>	0,83 kg	1,10 kg	1,15 kg	1,40 kg
600 A	0,85 kg	1,11 kg	1,16 kg	1,60 kg
800 A <sup>1) 2)</sup>	0,90 kg	1,12 kg	1,30 kg	1,80 kg
1000 A	1,45 kg	2,00 kg	2,15 kg	2,80 kg
1200 A <sup>1) 2)</sup>	1,45 kg	2,10 kg	2,25 kg	3,10 kg
1500 A	1,96 kg	2,50 kg	3,10 kg	3,70 kg
2000 A <sup>1)</sup>	2,30 kg <sup>3)</sup>	2,80 kg <sup>3)</sup>	5,10 kg <sup>2)</sup>	6,40 kg <sup>2)</sup>
2500 A	2,90 kg	3,20 kg	5,20 kg	6,00 kg
3000 A <sup>1)</sup>	3,00 kg <sup>3)</sup>	3,50 kg <sup>3)</sup>	7,00 kg <sup>2)</sup>	6,90 kg <sup>2)</sup>
4000 A	4,25 kg	5,80 kg	10,50 kg	13,10 kg
5000 A <sup>1)</sup>	4,30 kg <sup>3)</sup>	7,30 kg <sup>3)</sup>	13,40 kg <sup>2)</sup>	16,80 kg <sup>2)</sup>
6000 A	10,50 kg	12,00 kg	15,00 kg	17,70 kg
8000 A <sup>1)</sup>	12,00 kg <sup>3)</sup>	-	25,40 kg <sup>2)</sup>	-
10000 A	21,00 kg	-	28,00 kg	-
15000 A	32,00 kg	-	-	-
20000 A <sup>1)</sup>	44,00 kg	-	-	-

<sup>1)</sup> It is not according to DIN series

<sup>2)</sup> dimensions as next closest rated current

<sup>3)</sup> dimensions as next lower rated current

**Your order should include:**

- type of shunt (for example "A" with insulating clamp) (It is possible to order a cover too.)
- rated current (for example 100A)
- voltage drop (for example 60mV)
- Accuracy class (for example 0,5)
- number of pieces