

## DC DIN SHUNTS CURRENT TRANSFORMERS

### KEY FEATURES

- Managing Resistive Load
- Class 0.5 (Class 0.2 available)
- Output Range  
50 mV to 150 mV
- Isolating base is adapted to be assembled on a 35 mm DIN rail.
- Additional chemical coating: laccering or silver (available)

### APPROVALS

- DIN43 703 (dimensions)
- IEC51 (BS89) EN60051

TE Connectivity's (TE) Crompton Instruments range of direct current shunts provides an accurate millivolt signal, exactly proportional to the system current. They can be used to drive ammeter indicators, overload protection and control devices.

These shunts enable the measurement of D.C. current in ranges from 10A to 10000A with various output options available.

#### Installation

For maximum heat dissipation, mount shunts in the horizontal plane. Ample ventilation should be provided. Busbars should be adequately rated, clean and level, with a thin coat of silicone grease applied to the contact surface area. Shunts are supplied with bolts, nuts and washer, these must be tightened fully.

#### Warning

Shunts are uninsulated and protection against accidental contact may be necessary in order to comply with Health & Safety regulations.

**Customers can count on consistent, high quality products, driven by TE's proven innovation and backed by our extraordinary customer support.**

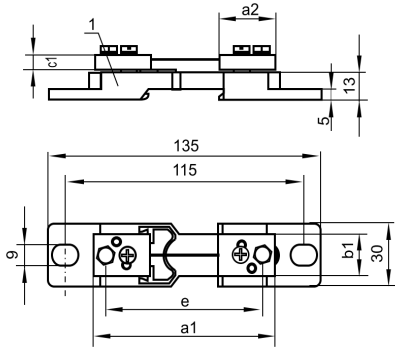
# DC Din Shunts



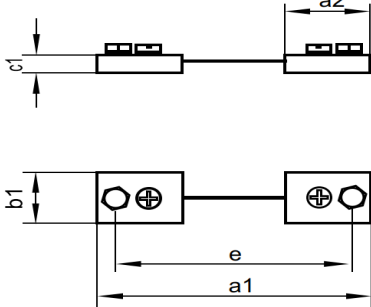
SPECIFICATION			
Technical parameters			
Overload range	continuously 5s max. ≤ 2,000A > 2,000 - 10,000A	1.2 times rated current 5 times rated current 2 times rated current	according to EN 60051-8:2000
Accuracy class	0.5 (Class 0.2 on request)		
Climatic suitability	climatic class 3		
Operating temperature	-10 - +55°C		according to VDE/VDI 3540
Storage temperature	-25 - +65°C		
Relative humidity	≤ 75% annual average, non condensing		
Testing voltage of shunts with an isolating base	5kV		
Short duration overload up to 5 seconds	for range up to 2kA - 5 Ins for range 2kA < I <sub>n</sub> < 10kA - 2 I <sub>n</sub>		
Rating	10A up to 10000A		
Outputs	50mV, 60mV, 75mV, 100mV, 150mV		

## DIMENSIONS

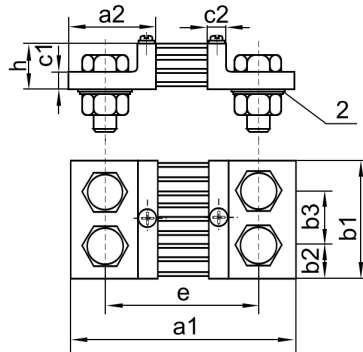
### ST1 with base



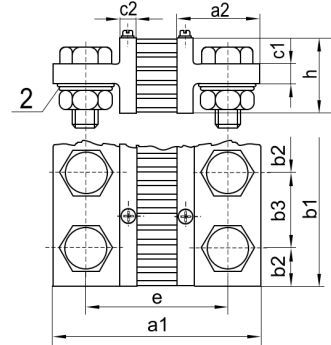
### ST1 without base



### ST2



### ST3



ST1		ST2						ST3		
50mV Models	10-25A (with base)	30-200A (no base)	200-250A	300-800A	1000A	1500A	2000-3000A	4000-5000A	6000-8000A	10000A
a1	90	93	138	138	158	158	158	158	168	178
a2	28	33	55	55	65	65	65	65	70	75
b1	20	20	30	40	60	90	120	120	154	206
b2	-	-	15	20	30	21	30	30	25	25
b3	-	-	-	-	-	48	60	60	52	52
c1	8	8	10	10	10	10	10	15	25	30
c2	-	-	10	10	10	10	10	10	15	20
e	78	73	98	98	108	108	108	108	118	128
h	-	-	30	30	30	30	30	60	130	170
busbar connection bolts	2 x 1	2 x 1	2 x 1	2 x 1	2 x 1	2 x 2	2 x 2	2 x 2	2 x 3	2 x 4
Bolt size	M5 x 12	M8 x 16	M12 x 40	M16 x 45	M20 x 50	M16 x 45	M20 x 50	M20 x 60	M20 x 75	M20 x 80
Nut	-	-	M12	M16	M20	M16	M20	M20	M20	M20



**DIMENSIONS (CONTINUED)**

ST1			ST2					ST3		
60mV Models	10-25A (with base)	30-200A (no base)	200-250A	300-800A	1000A	1500A	2000-3000A	4000-5000A	6000-8000A	10000A
a1	90	100	145	145	165	165	165	165	175	185
a2	28	33	55	55	65	65	65	65	70	75
b1	20	20	30	40	60	90	120	120	154	206
b2	-	-	15	20	30	21	30	30	25	25
b3	-	-	-	-	-	48	60	60	52	52
c1	8	8	10	10	10	10	10	15	25	30
c2	-	-	10	10	10	10	10	10	15	20
e	78	80	105	105	115	115	115	115	125	135
h	-	-	30	30	30	30	30	60	130	170
busbar connection bolts	2 x 1	2 x 1	2 x 1	2 x 1	2 x 1	2 x 2	2 x 2	2 x 2	2 x 3	2 x 4
Bolt size	M5 x 12	M8 x 16	M12 x 40	M16 x 45	M20 x 50	M16 x 45	M20 x 50	M20 x 60	M20 x 75	M20 x 80
Nut	-	-	M12	M16	M20	M16	M20	M20	M20	M20

ST1			ST2					ST3		
75mV Models	10-25A (with base)	30-200A (no base)	200-250A	300-600A	800-1000A	1500A	2000A	3000-5000A	6000-8000A	10000A
a1	90	115	160	160	180	180	180	190	190	200
a2	28	33	55	55	65	65	65	70	70	75
b1	20	25	30	40	60	120	120	120	154	206
b2	-	-	15	20	30	30	30	30	25	25
b3	-	-	-	-	-	60	60	60	52	52
c1	8	8	10	10	10	10	15	25	25	30
c2	-	-	10	10	10	10	10	15	15	20
e	78	95	120	120	130	130	130	140	140	150
h	-	-	30	30	30	30	60	130	130	170
busbar connection bolts	2 x 1	2 x 1	2 x 1	2 x 1	2 x 1	2 x 2	2 x 2	2 x 2	2 x 3	2 x 4
Bolt size	M5 x 12	M8 x 16	M12 x 40	M16 x 45	M20 x 50	M16 x 45	M20 x 50	M20 x 60	M20 x 75	M20 x 80
Nut	-	-	M12	M16	M20	M16	M20	M20	M20	M20



**DIMENSIONS (CONTINUED)**

ST1			ST2				ST3			
100mV Models	10-25A (with base)	30-200A (no base)	200-250A	300-800A	1000A	1500-2000A	3000A	4000-5000A	6000-8000A	10000A
a1	90	145	190	190	210	210	210	220	220	230
a2	28	33	55	55	65	65	65	70	70	75
b1	20	25	30	40	60	120	120	120	154	206
b2	-	-	15	20	30	30	30	30	25	25
b3	-	-	-	-	-	60	60	60	52	52
c1	8	8	10	10	10	10	15	25	25	30
c2	-	-	10	10	10	10	10	15	15	20
e	78	125	150	150	160	160	160	170	170	180
h	-	-	30	30	30	30	60	130	130	170
busbar connection bolts	2 x 1	2 x 1	2 x 1	2 x 1	2 x 1	2 x 2	2 x 2	2 x 2	2 x 3	2 x 4
Bolt size	M5 x 12	M8 x 16	M12 x 40	M16 x 45	M20 x 50	M16 x 45	M20 x 60	M20 x 75	M20 x 75	M20 x 80
Nut	-	-	M12	M16	M20	M16	M20	M20	M20	M20

ST1			ST2				ST3			
150mV Models	10-25A (with base)	30-200A (no base)	200-250A	300-800A	1000A	1500-2000A	3000A	4000-5000A	6000-8000A	10000A
a1	90	225	270	270	290	290	290	300	300	310
a2	28	33	55	55	65	65	65	70	70	75
b1	20	25	30	40	70	90	120	120	154	206
b2	-	-	15	20	35	21	30	30	25	25
b3	-	-	-	-	-	48	60	60	52	52
c1	8	8	10	10	10	15	15	25	25	30
c2	-	-	10	10	10	10	10	15	15	20
e	78	205	230	230	240	240	240	250	250	260
h	-	-	50	50	60	60	60	130	130	170
busbar connection bolts	2 x 1	2 x 1	2 x 1	2 x 1	2 x 1	2 x 2	2 x 2	2 x 2	2 x 3	2 x 4
Bolt size	M5 x 12	M8 x 16	M12 x 40	M16 x 45	M20 x 50	M16 x 60	M20 x 50	M20 x 75	M20 x 75	M20 x 80
Nut	-	-	M12	M16	M20	M16	M20	M20	M20	M20

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