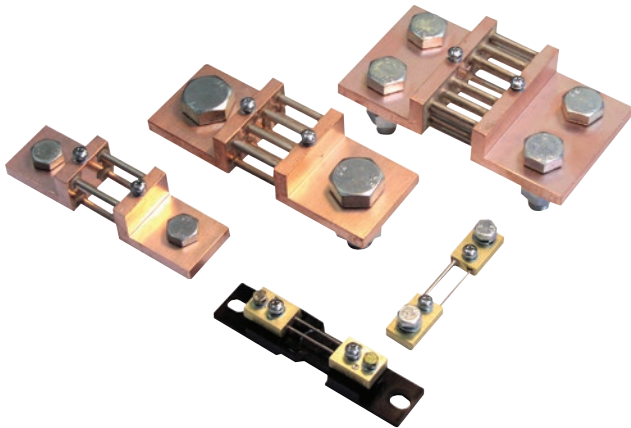


CROMPTON INSTRUMENTS DC DIN SHUNTS

OUTPUT RANGE 50 MV TO 150 MV



ENABLE THE MEASUREMENT OF D.C. CURRENT
IN RANGES FROM 10A TO 10000A

APPLICATIONS

- Ammeter indicators
- Overload protection
- Control devices.

RELEVANT STANDARDS AND TEST REPORTS

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

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:
lackering or silver (available)

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.

ORDERING INFORMATION

50mV Models	ST1		ST2					ST3		
	10-25A (with base)	30-150A (no base)	150-250A	300-800A	1000A	1500A	2500A	4000-5000A	6000-8000A	10000A
a1 (max)	90	110	155	155	175	175	175	175	185	195
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	70	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 25	M8 x 25	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

60mV Models	10-25A (with base)	30-150A (no base)	150-250A	300-800A	1000A	1500A	2000-3000A	4000-5000A	6000-8000A	10000A
a1 (max)	90	110	155	155	175	175	175	175	185	195
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	15	15	20
e	70	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 25	M8 x 25	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

75mV Models	10-25A (with base)	30-150A (no base)	150-250A	300-600A	800-1000A	1500A	2000A	3000-5000A	6000-8000A	10000A
a1 (max)	100	120	165	165	185	185	185	185	195	205
a2	28	33	55	55	65	65	65	65	70	75
b1	20	20	30	40	60	90	120	120	154	310
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	15	15	20
e	88	100	125	125	135	135	135	135	145	155
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 25	M8 x 25	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

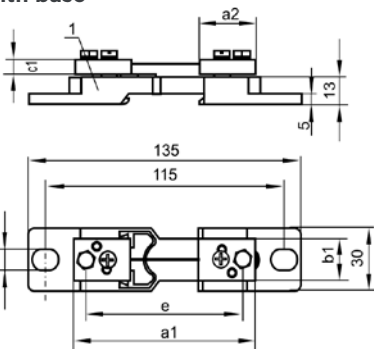
ORDERING INFORMATION

100mV Models	10-25A (with base)	30-150A (no base)	150-250A	400-600A	1000A	1500-2000A	3000A	4000-5000A	6000-8000A	10000A
a1 (max)	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 25	M8 x 25	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

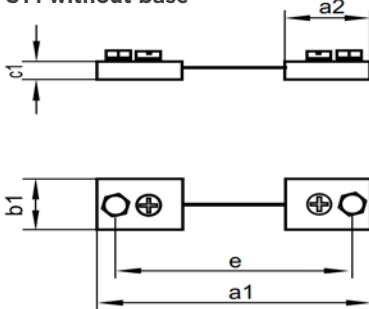
150mV Models	10-25A (with base)	30-150A (no base)	150-250A	300-800A	1000A	1500-2000A	3000A	4000-5000A	6000-8000A	10000A
a1 (max)	100	225	270	270	290	290	290	300	300	310
a2	28	33	55	55	65	65	65	70	70	75
b1	20	25	30	40	70	120	120	120	154	206
b2	-	-	15	20	35	30	30	30	25	25
b3	-	-	-	-	-	60	60	60	52	52
c1	8	8	10	10	10	15	15	25	25	30
c2	-	-	10	10	10	10	10	15	15	20
e	88	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 25	M8 x 25	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

DIMENSIONAL INFORMATION & CONNECTION DIAGRAM

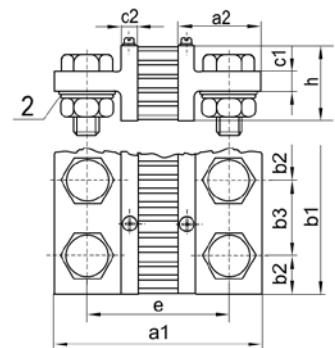
ST1 with base



ST1 without base



ST3



TECHNICAL SPECIFICATIONS

Parameters			
Overload range	continuously 5s max. $\leq 2,000A$ $> 2,000 - 15,000A$	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 - +50 °C		according to VDE/VDI 3540
Storage temperature	-20 - +70 °C		
Relative humidity	30% to 80% RH @ 30°C variation -0.2%, 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<In<15kA - 2 In		
Rating	10A up to 10000A		
Outputs	50mV, 60mV, 75mV, 100mV, 150mV		

Learn more: [TE.com/energy](https://www.te.com/energy)

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