

Energy Division

Crompton Instruments DC DIN Shunts

A range of direct current shunts which 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.

ST* series complies with DIN43 703 for dimensions and IEC51 (BS89) EN60051 for performance.

Specifications

Input	
Accuracy class	0.5
Temperature Coefficient	0.1%/10° K
Overload withstand	1.2 rated current
5 second withstand	10A - 250A = 10 x rated current 250A - 2000A = 5 x rated current 2000A - 10000A = 2 x rated current
Operating temperature	-25°C to +55°C
Rating	10A up to 10000A
Outputs	50mV, 60mV, 75mV, 100mV, 150mV

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.

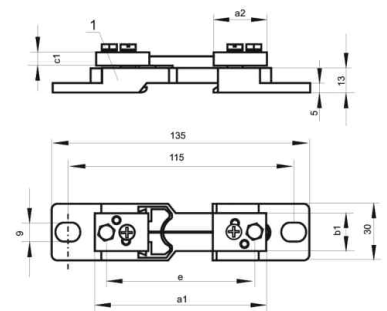
Warning

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

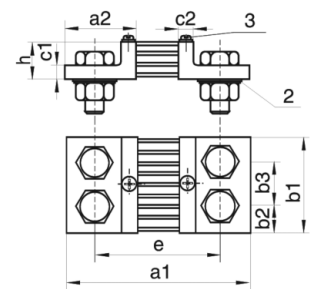
Model	Rating
ST1, ST2, ST3	10A, 20A, 25A, 30A, 40A, 50A, 60A, 80A, 100A, 125A, 150A, 200A, 250A, 400A, 600A 800A, 1000A, 1500A, 2000A, 2500A, 4000A, 5000A, 6000A, 8000A, 10000A

Part Number example: **ST1-10A/60MV**

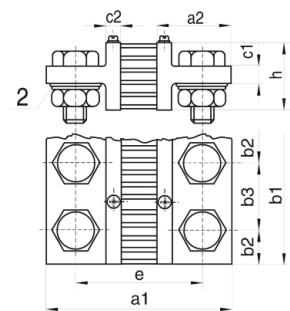
ST1



ST2



ST3



	ST1			ST2				ST3		
50mV Models										
	10-30A	40-200A	200-250A	400-600A	1000A	1500A	2000-2500A	4000A	6000A	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

	10-30A	40-200A	200-250A	400-600A	1000A	1500A	2000-2500A	4000A	5000-6000A	8000-10000A
60mV Models										
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
No of terminals	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

	10-30A	40-150A (No Base)	200-250A	400-600A	800-1000A	1500A	2000-2500A	4000A	5000-6000A	10000A
75mV Models										
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
No of terminals	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

	10-30A	40-150A (No Base)	200-250A	400-600A	800-1000A	1500A	2000-2500A	4000A	6000A	10000A
100mV Models										
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	30	130	130	170
No of terminals	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

	10-30A	40-150A (No Base)	200-250A	400-600A	1000A	1500A	2000-2500A	4000A	5000-6000A	10000A
150mV Models										
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
No of terminals	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

While Tyco Electronics and its affiliates referenced herein have made every reasonable effort to ensure the accuracy of the information contained in this brochure, Tyco Electronics cannot assure that this information is error free. For this reason, Tyco Electronics does not make any representation or offer any guarantee that such information is accurate, correct, reliable or current. Tyco Electronics reserves the right to make any adjustments to the information at any time. Tyco Electronics expressly disclaims any implied warranty regarding the information contained herein, including, but not limited to, the implied warranties of merchantability or fitness for a particular purpose. Tyco Electronics' only obligations are those stated in Tyco Electronics' Standard Terms and Conditions of Sale. Tyco Electronics will in no case be liable for any incidental, indirect or consequential damages arising from or in connection with, including, but not limited to, the sale, resale, use or misuse of its products. Users should rely on their own judgement to evaluate the suitability of a product for a certain purpose and test each product for its intended application. TE logo, Tyco Electronics and Crompton are Trademarks of Crompton Parkinson Ltd and is used under licence. Other trademarks or company names used herein are the property of respective owners.

Energy Division – economical solutions for the electrical power industry: cable accessories, connectors & fittings, electrical equipment, instruments, lighting controls, insulators & insulation enhancement and surge arresters.

Tyco Electronics UK Ltd
Energy Division
Freebournes Road
Witham, Essex CM8 3AH

Phone: +44 (0)870 870 7500
Fax: +44 (0)870 240 5289
Email: electrical@tycoelectronics.com
www.crompton-instruments.com

 **Tyco Electronics**
Our commitment. Your advantage.