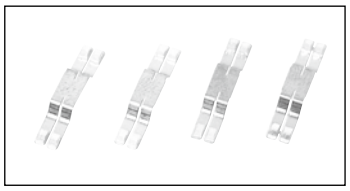
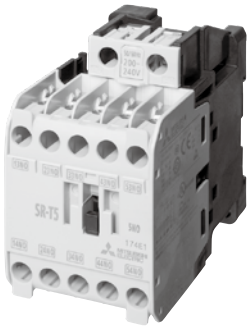
6.3 SR-T□ Standard Type (AC Operated) Contactor Relays

● Features

- **Rail mounting is fully adopted**
  IEC 35 mm rail mounting mechanism that dramatically reduces assembly time has been fully adopted.
- **High contact reliability**
  The full adoption of twin contacts improves the contact reliability.



- **Clearly visible coil rating**
- **The make and break contacts can be used at different voltages**
  Strengthened insulation between poles and between upper and lower contacts of the same pole.
- **Live part protection covers are standard equipment**



SR-T5

SR-T9

- **Easy wiring**
  Uses self-lifting terminal screws that can reliably tighten wires, ring crimp lugs and square-tip crimp lugs.
- **Extensive contact arrangements**
  Selectable according to the required number of contacts.
- **A Wide selection of optional units**
  Auxiliary Contact Units (UT-AX□)
  The 2-pole and 4-pole contact units can be easily added to SR-T5.
  Surge Absorber Units (UT-SA□)
  For the surge absorber unit that can be mounted in one-touch, the C-R type and indicator type are available aside from the varistor type.

● Rating (SR, SRD, SRL, SRLD, SR-T□DL, SR-T□BC, SRD-T□BC, SR-T□SQ and SRD-T□SQ)

Frame				T5	T9
No. of Contacts				5	9
Contact Arrangement				5a 4a1b 3a2b	9a 7a2b 5a4b
Contact Rating	Rated Insulation Voltage [V]			690	
	Conventional Free Air Thermal Current Ith [A]			10	
	AC Rated Operational Current [A]	Category AC-15 (Coil Load)	AC120V AC240V AC440V AC550V	6 3 1.5 1.2	
		Category AC-12 (Resistive Load)	AC120V AC240V AC440V AC550V	10 8 5 5	
	DC Rated Operational Current [A]	Category DC-13 (Coil Load)	DC24V DC48V DC110V DC220V	3 1.5 0.6(2) 0.3(0.8)	
		Category DC-12 (Resistive Load)	DC24V DC48V DC110V DC220V	10 8 5(8) 1(3)	

Note 1. JIS C8201-5-1 classifications are class AC-15 applicable to AC solenoid and class DC-13 applicable to DC solenoid switching. JIS C8201-5-1 classifications are class AC-12 applicable to AC resistive load switching and class DC-12 applicable to DC resistive load switching.
Note 2. The value in parentheses for the DC rated operational current indicates the rated operating current when switching a 2-pole load in series.
Note 3. The making and breaking capacities are 10 times with AC-15 and 1.1 times with DC-13.
Note 4. Electrical durability of 500,000 operations. (For AC-15, it is 1 million times at 220 V 2 A and 3 million times at 1 A.)
Note 5. The minimum operating voltage and current differ depending on the allowable fault rate. Select them from Figure 1 on page 162.
Note 6. The withstand voltage is AC2500 V for 1 minute.
Note 7. SR-T5 and SRD-T5 with spring clamp terminals (SQ) can also be manufactured.

MS-T Series Contactor Type Contactor Relays

Performance (SR, SRD, SRL, SRLD, SR-T□DL, SR-T□BC, SRD-T□BC, SR-T□SQ and SRD-T□SQ)

Frame		Making and Breaking Capacities				Switching Frequency	Switching Durability	
		Category	Rated Operational Voltage	Making Current [A]	Breaking Current [A]		Electrical	Mechanical
SR - T Series	T5 T9	AC-15	AC120V	66	66	1800 Times/Hour [Standard Type] 1200 Times/Hour [Mechanically Latched Delay Open Type]	Class AC-15 (AC Coil Load) 240 V 3 A, 0.5 mil. times 240 V 2 A, 1 mil. times 440 V 1.5 A, 0.5 mil. times Class DC-13 (DC Coil Load) 110 V 0.6 A, 0.5 mil. times 220 V 0.3 A, 0.5 mil. times	10 mil. times [Standard Type] 0.5 mil. times [Mechanically Latched Type] 0.5 mil. times [Delay Open Type]
			AC240V	55	55			
			AC550V	33	33			
		DC-13	DC24V	20	20			
			DC48V	10	10			
			DC110V	2(5)	2(5)			
			DC220V	0.4(1.5)	0.4(1.5)			

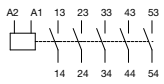
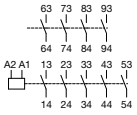
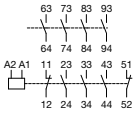
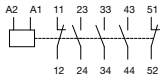
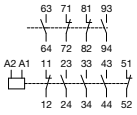
Note 1. The DC values in parentheses are the making and breaking capacities when using 2-poles in series.
Note 2. Making current capacity tests are performed 100 times, while breaking current capacity tests are performed 25 times.

Properties (SR-T□, SR-T□JH, SR-T□BC and SR-T□SQ)

Frame	Coil Input [VA]		Coil Power Consumption [W]	Coil Current [A]	Contact Arrangement	Operating Voltage [V]		Operating Time [ms]			
	Inrush	Normal				Close	Open	Coil ON → Make Contact ON	Coil ON → Break Contact OFF	Coil OFF → Make Contact OFF	Coil OFF → Break Contact ON
T5	45	7	2.2	0.03	5a	115 to 145	75 to 115	12 to 20	———	4 to 16	———
					3a2b	120 to 150	75 to 115	12 to 20	7 to 14	4 to 16	6 to 17
T9					9a	125 to 156	85 to 125	12 to 20	———	4 to 16	———
					5a4b	130 to 160	80 to 120	12 to 20	7 to 15	4 to 16	5 to 16

Note 1. The above indicates rough property indices for AC200V coils.
Note 2. The operating voltage is that at a 20°C cold state at 60 Hz. Voltages for coils other than AC200V can be calculated proportionately.
Note 3. The input and power consumption are average values. These are almost the same for coils other than AC200V.
Note 4. The operating time is the value when applying 200 V at 60 Hz. These are almost the same for coils other than AC200V.
Make contacts and break contacts cannot be overlapped in time.
Note 5. The coil current is the average normal value with a 220 V, 60 Hz applied voltage. Divide the regular input by the coil voltage for coils other than AC200V.

Contact Arrangement/Contact Placement

Frame	T5	T9
Contact Arrangement	5a	9a
	4a1b	7a2b
	3a2b	5a4b
Contact Placement	 5a	 9a
	 4a1b	 7a2b
	 3a2b	 5a4b

Related Reference Page

Item	Reference Page	Remarks
· Operation Coil	Page 43	—
· How to Order	Page 177	—
· Combining with Optional Units	Pages 165, 196	—

Combining With Additional Auxiliary Contact Block

The SR-T Series contactor type Contactor Relay is usable in combination with the following additional auxiliary contact blocks.

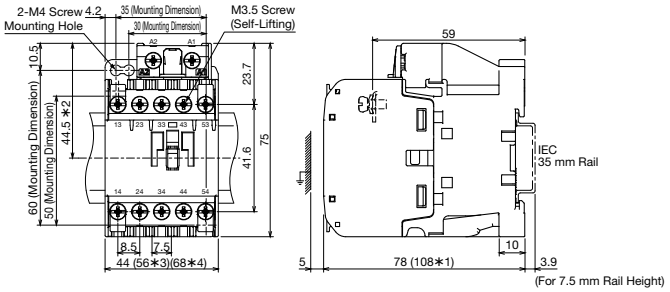
Contactor Relay \ Auxiliary Contact Blocks		Front clip-on						Side clip-on	
		UT-AX4(BC)			UT-AX2(BC)			UT-AX11(BC)	UT-AX11(BC)
Model Name	Contact Arrangement	4a	3a1b	2a2b	2a	1a1b	2b	1a1b + 1a1b	1a1b
SR-T5(BC) SRD-T5(BC)	5a	9a	8a1b	7a2b	7a	6a1b	5a2b	7a2b	6a1b
	4a1b	8a1b	7a2b	6a3b	6a1b	5a2b	4a3b	6a3b	5a2b
	3a2b	7a2b	6a3b	5a4b	5a2b	4a3b	3a4b	5a4b	4a3b

Note 1. The auxiliary contact blocks cannot be mounted on SR(D)-T9(BC).
Note 2. The Contactor Relay is not usable with front clip-on blocks mounted at the same time.
Note 3. The contact arrangements in ■ are the standard combinations.

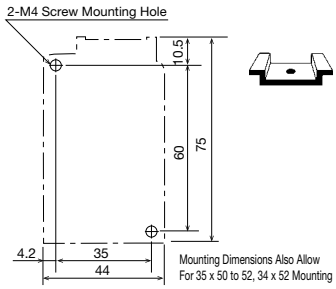
Outline Drawings (The diagrams show models without "BC".)

SR-T5(BC)

0.27 kg



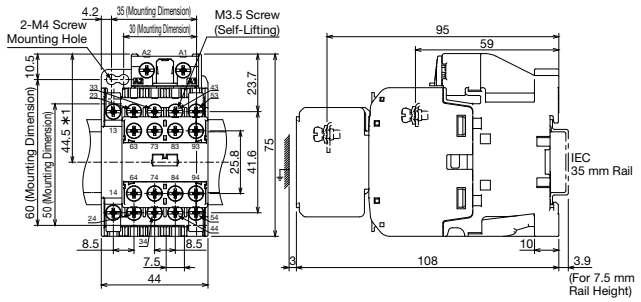
∗1 Dimension: Including Head-On Auxiliary Contact Unit (UT-AX2(BC)/UT-AX4(BC))
∗2 Dimension: Width Dimension from Center of IEC 35 mm Rail
∗3, ∗4 Dimension: Including Side-On Auxiliary Contact Unit (UT-AX11(BC)) -
∗3 Has 1 Piece, ∗4 Has 2 Pieces (Both Sides)



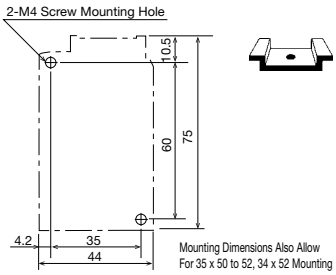
Model Name	Model Name
SR-T5	SR-T5BC

SR-T9(BC)

0.32 kg



∗1 Dimension: Width Dimension from Center of IEC 35 mm Rail



Model Name	Model Name
SR-T9	SR-T9BC

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