

RATINGS

Electromechanical Coil Ratings

Rated Voltage		Rated Current ±15% (mA)*	Circuit AC Resistance ±15% (Ω)*	Circuit DC Resistance ±15% (Ω)*	Operating Characteristics			Power Consumption
					Pickup Voltage	Dropout Voltage	Maximum Allowable Voltage	
DC	6V	35	-	170	90% max	7% min	110%	0.21W
	9V	18.6	-	485				0.2W
	12V	14.6	-	820				0.2W
	18V	11.6	-	1550				0.2W
	24V	10.6	-	2270				0.25W
AC/DC	12V	15.5	755	800	90% max	7% min	110%	0.2W
	18V	13.3	1365	1345				0.25W
	24V	13.7	1730	1790				0.33W
	48V	4	11880	12230				0.2W
	60V	3.4	17600	17910				0.2W
	110V - 125V	3.4 - 3.9	31790 - 31890	32450 - 32900				0.5W
	220V - 240V	3.3 - 3.6	65670 - 66070	65940 - 68570				0.85W

*±10% for 6V, 9V and 12V

Electromechanical Contact Ratings

Allowable Contact Power	Resistive Load	1500VA, 180W DC
Rated Load	Resistive Load	250V AC 6A, 30V DC 6A
Allowable Switching Current		6A
Allowable Switching Voltage		400V AC, 125V DC
Allowable Switching Power		1500VA, 180W DC
Minimum Applicable Load		6V DC/10mA

Solid State Input Ratings

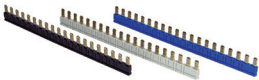
Type	Control Voltage Range	Output / Input Voltage	Pickup Voltage	Dropout Voltage	Maximum Operation Time	Maximum Release Time
	4.5-12V DC	24V DC / 6V DC	4.5V DC	1.5V DC	120µs	200µs
	19.6-30V DC	24V DC / 24V DC	19.6V DC	5V DC	350µs	200µs
	96-132V AC	24V DC / 120V AC	96V AC	12V AC	11ms	14ms
	192-264V AC	24V DC / 240V AC	192V AC	24V AC	11ms	14ms
	4.5-12V DC	48V DC / 6V DC	4.5V DC	1.5V DC	40µs	300µs
	19.6-30V DC	48V DC / 24V DC	19.6V DC	5V DC	40µs	300µs
	96-132V AC	48V DC / 120V AC	96V AC	12V AC	8ms	14ms
	192-264V AC	48V DC / 240V AC	192V AC	24V AC	8ms	14ms
Zero Crossing	4.5-12V DC	240V AC / 6V DC	4.5V DC	2V DC	10ms	10ms
	19.6-30V DC	240V AC / 24V DC	19.6V DC	5V DC	10ms	10ms
	96-132V AC	240V AC / 120V AC	96V AC	12V AC	16ms	20ms
	192-264V AC	240V AC / 240V AC	192V AC	24V AC	16ms	20ms
Random Crossing	4.5-12V DC	240V AC / 6V DC	4.5V DC	2V DC	300µs	10ms
	19.6-30V DC	240V AC / 24V DC	19.6V DC	5V DC	300µs	10ms
	96-132V AC	240V AC / 120V AC	96V AC	12V AC	8ms	20ms
	192-264V AC	240V AC / 240V AC	192V AC	24V AC	8ms	20ms

Solid State Output Ratings

Typical Input Voltage	24V DC	48V DC	240V AC
Output Device	MOSFET	Photo-transistor	Triac
Operating Voltage Range	0-24V DC	0-48V DC	24-280V AC (47-63Hz)
Maximum Load Current	3.5A	100mA	2A
Minimum Load Current	1mA	1mA	70mA
Maximum Blocking Voltage	30V DC	60V DC	600V AC
Maximum Surge Current	9A (10ms)	300mA (10ms)	120A pk (16.6ms)
Maximum I2t for Fusing	—	—	60A² sec
Typical On-State Leakage Current	0.4V	1V	1.1V (peak)
Maximum Off-State Leakage Current	0.001mA	0.001mA	4mA
Switching Configuration	Normally Open	Normally Open	Normally Open

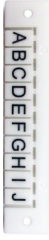
ACCESSORIES

Jumpers, Spacer, and Screwdriver

Item	Color	Part Number
Jumper (20 combs) Note 1, 2, 4 	Black	SV9Z-J20B
	Gray	SV9Z-J20W
	Blue	SV9Z-J20S
Spacer (circuit separator) Note 3, 4 	-	SV9Z-SA2W
Screwdriver 	-	BC1S-SD0

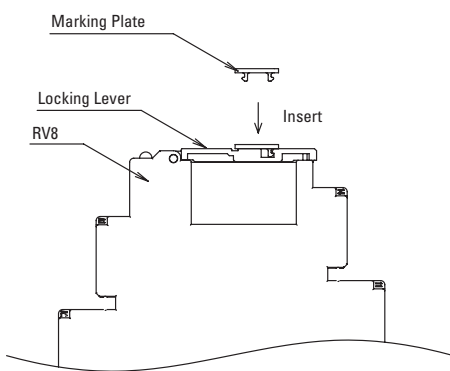
- Jumper combs come with 20 points, if shorter lengths are needed simply cut off the excess points.
- Ensure that the total current to the jumper does not exceed the overall rated current (Rated current: 6A).
- Width of spacer: 2mm
- When using a cut jumper, please use a spacer on the cut side. For additional information see instruction sheet.

Marking Plates (Blank and Pre-marked)

Item	Part Number	Engraving
 Vertical Orientation	SV9Z-PW10	blank
	SV9Z-PW10-①1-10	1-10
	SV9Z-PW10-①11-20	11-20
	SV9Z-PW10-①21-30	21-30
	SV9Z-PW10-①31-40	31-40
	SV9Z-PW10-①41-50	41-50
	SV9Z-PW10-①51-60	51-60
	SV9Z-PW10-①61-70	61-70
	SV9Z-PW10-①71-80	71-80
	SV9Z-PW10-①81-90	81-90
 Horizontal Orientation	SV9Z-PW10-①91-100	91-100
	SV9Z-PW10-①A-J	A-J
	SV9Z-PW10-①K-T	K-T
	SV9Z-PW10-①U-Z	U-Z
	SV9Z-PW10-①GROUND	
	SV9Z-PW10-①AC	

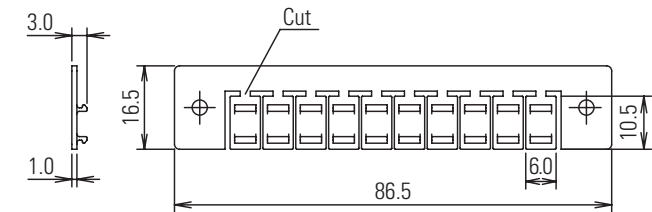
- In place of ① insert orientation code: V=Vertical, H=Horizontal
- Each unit has 10 pieces (marking plates).

Marking Plate Placement



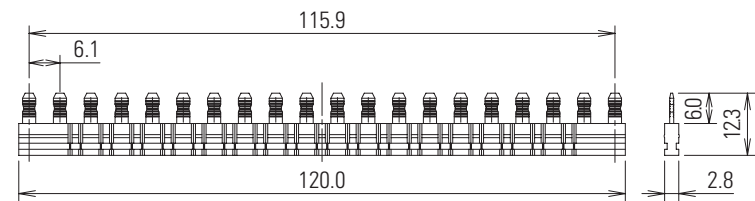
Dimensions (mm)

SV9Z-PW10* Marking Plate



*Available blank or pre-marked.

SV9Z-J20* Jumper



*Available in black, gray and blue.

SV9Z-SA2W Spacer

