

FEATURES

- 50A switching capacity
- Lamp load up to 5000W
- Motor load up to 5HP
- Max. inrush current 500A/2ms
- 1 A, 1 B and 1 C configurations
- 4KV dielectric strength between coil and contacts
- Manual switch function available
- Relays with 1.5mm contact gap are available
- Environmental friendly product (ROHS compliant)
- Outline Dimensions:(39.0×15.0×30.2)mm
- UL and CUL File No.: E179937

CONTACT DATA

Contact form	1 A , 1 B& 1 C
Contact resistance (Initial)	20mΩ (at 1A 24VDC)
Contact rating	Resistive: 1A,1B: 50A/277VAC, 1x10 ⁵ ops 1C: 40A/277VAC, 3 x 10 ⁴ ops Incandescent lamp: 5000W 240VAC, 3 x 10 ⁴ ops Electronic ballast: 16A277VAC, 6000ops Motor: 5HP 277VAC, 3 x 10 ⁴ ops
Max. switching power	1A: 12500VA 1C: 10000VA
Max. switching volt	440VAC
Max. switching current	50A
Max. continuous current	50A
Contact material	AgSnO2

CHARACTERISTICS

Insulation resistance	1000MΩ at 500VDC
Dielectric strength	4000VAC, 1min. between coil&contacts 1500VAC, 1min. between open contacts
Creepage distance(input to output)	1A,1B:8mm 1C:6mm
Set time	15 ms
Reset time	15 ms
Max. operate frequency	1A,1B:20 cycles/min 1C: 10 cycles/min
Vibration resistance	10 – 55Hz, DA 1.5mm
Shock resistance	Malfunction: 98m/s ² ; Mechanical: 980m/s ²
Humidity	5%-85%RH
Ambient temperature	- 40°C to + 70°C
Life expectancy - Mechanical	1 x 10 ⁶ operations

COIL SPECIFICATIONS-1.Latching (1 coils)

Nominal voltage (VDC)	Pick-up voltage VDC (Max.)	Drop-out voltage VDC (Min.)	Pulse Duration ms(Min)	Coil resistance ($\Omega \pm 10\%$)	Power consumption(W)
6	4.8	0.6	50	24	1.5
9	7.2	0.9	50	54	1.5
12	9.6	1.2	50	96	1.5
24	19.2	2.4	50	384	1.5
48	38.4	4.8	50	1536	1.5

2.Lacting (2 coils)

Nominal voltage (VDC)	Pick-up voltage VDC (Max.)	Drop-out voltage VDC (Min.)	Pulse Duration ms (Min)	Coil resistance ($\Omega \pm 10\%$)	Power consumption(W)
6	4.8	0.6	50	12+12	3.0
9	7.2	0.9	50	27+27	3.0
12	9.6	1.2	50	48+48	3.0
24	19.2	2.4	50	192+192	3.0
48	38.4	4.8	50	768+768	3.0

ORDERING INFORMATION

ME-51 - 1 - L2 - 12 Z 1 S T R W

Model No.	Version	Sort	Coil Voltage	Contact Form	Termination	Protection	Contact material	Polarity	Customer special code
ME-51	1:No auxiliary convexity, no manual switch 2:No auxiliary convexity, with manual switch 3:With auxiliary convexity no manual switch 4:With auxiliary convexity, with manual switch 5:No auxiliary convexity, with manual switch, the reverse action	L1: Single coil latching L2: Double coils latching	6-48 VDC	H: 1 A D: 1 B Z: 1C (No for 5)	Nil: PCB 1:Extra long 5:Wide 6:Bending extra long 7:Double PCB	Nil: Flux proofed S:Sealed (Only for 1,3)	T:AgSnO2	Nil: Positive polarity R : Negative polarity	Nil: Standard type W: Relays with 1.5mm contact gap(Only for H model, No approval)

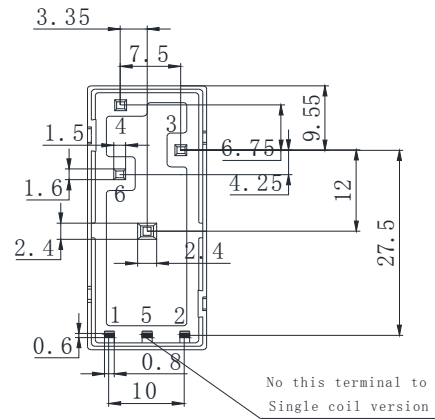
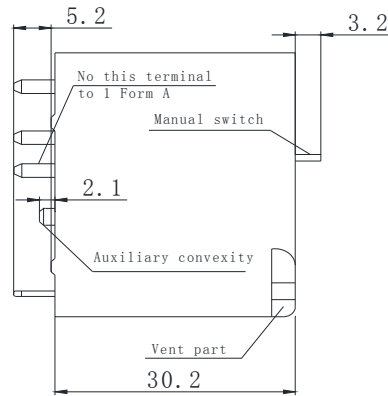
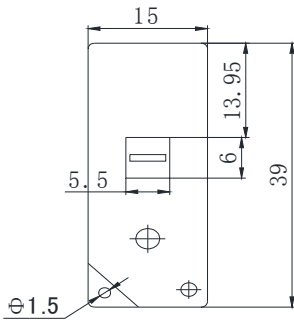
(339):Stands for special polarity (see Wiring Diagram)

Dimensions(unit:mm)

Tolerance:±0.5

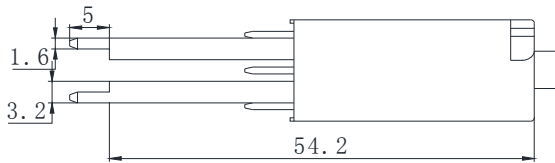
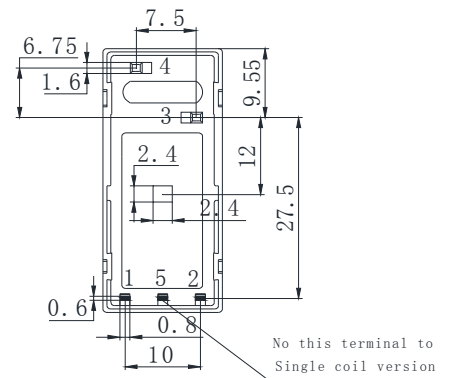
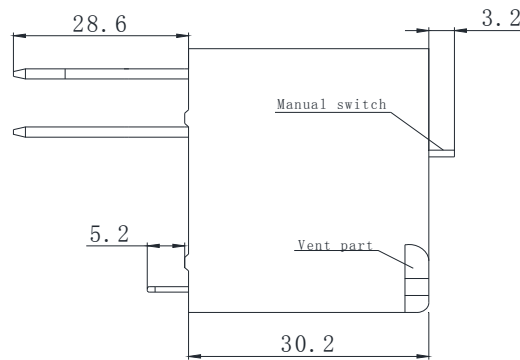
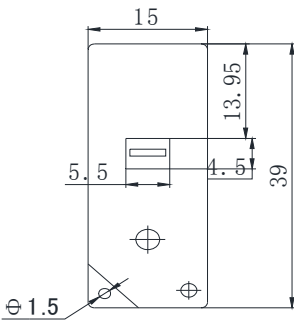
Outline Dimensions

ME-51-1, ME-51-2, ME-51-3, ME-51-4



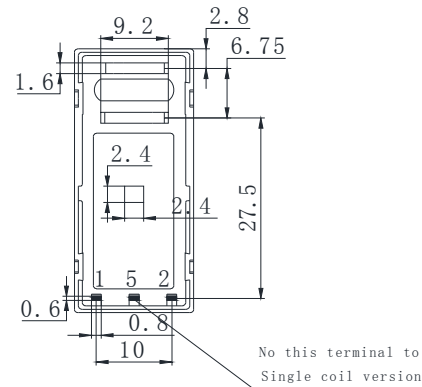
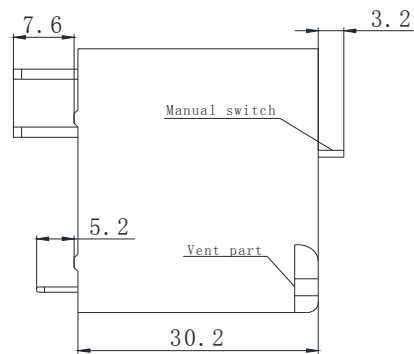
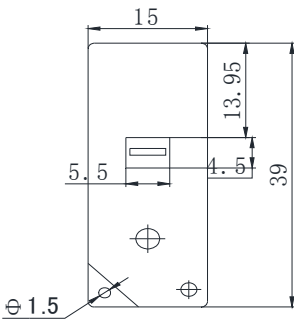
ME-51-1/H1

ME-51-2/H1



ME-51-1/H5

ME-51-2/H5

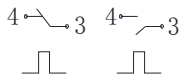


Wiring Diagram

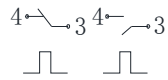
ME-51-1, ME-51-2, ME-51-3, ME-51-4

Positive polarity

Single coil latching, 1 From A Double coils latching, 1 From A

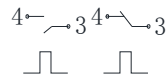


1(+) 2(-) 1(-) 2(+)
set reset



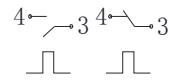
1(-) 5(+) 5(+) 2(-)
set reset

Single coil latching, 1 From B



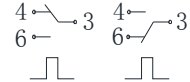
1(-) 2(+) 1(+) 2(-)
set reset

Double coils latching, 1 From B

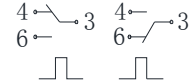


5(+) 2(-) 1(-) 5(+)
set reset

Single coil latching, 1 From C Double coils latching, 1 From C



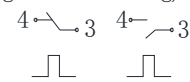
1(+) 2(-) 1(-) 2(+)
set reset



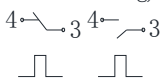
1(-) 5(+) 5(+) 2(-)
set reset

Negative polarity

Single coil latching, 1 From A Double coils latching, 1 From A

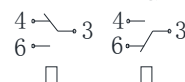


1(-) 2(+) 1(+) 2(-)
set reset

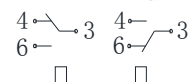


1(+) 5(-) 5(-) 2(+)
set reset

Single coil latching, 1 From C Double coils latching, 1 From C

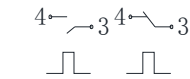


1(-) 2(+) 1(+) 2(-)
set reset

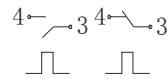


1(+) 5(-) 5(-) 2(+)
set reset

Single coil latching, 1 From B Double coils latching, 1 From B



1(+) 2(-) 1(-) 2(+)
set reset

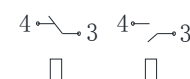


5(-) 2(+) 1(+) 5(-)
set reset

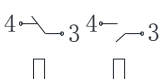
ME-51-5

Positive polarity

Single coil latching, 1 From A Double coils latching, 1 From A

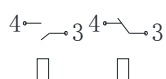


1(-) 2(+) 1(+) 2(-)
set reset

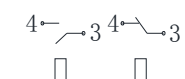


1(+) 5(-) 5(-) 2(+)
set reset

Single coil latching, 1 From B Double coils latching, 1 From B



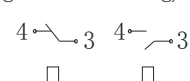
1(+) 2(-) 1(-) 2(+)
set reset



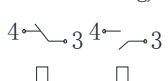
5(-) 2(+) 1(+) 5(-)
set reset

Positive polarity

Single coil latching, 1 From A Double coils latching, 1 From A

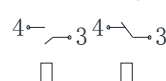


1(+) 2(-) 1(-) 2(+)
set reset

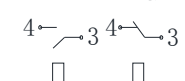


1(-) 5(+) 5(+) 2(-)
set reset

Single coil latching, 1 From B Double coils latching, 1 From B



1(-) 2(+) 1(+) 2(-)
set reset

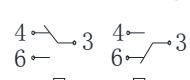


5(+) 2(-) 1(-) 5(+)
set reset

ME-51-1, ME-51-2, ME-51-3, ME-51-4, ME-51-5

(339):Special polarity

Double coils latching



2(-) 5(+) 1(-) 5(+)
set reset

Notice:

- 1. When choose the relay with PCB termination, the recommended welding temperature range and duration is 240 to 260 , 2s to 5s; Please do not use the reflow welding method. If the reflow is really required, Please contact our technicals; the normal recommended wave soldering temperature is 250 within 2s.**
- 2. Relay is on the reset or set status when being released from stock, with the consideration of shock risen from transit and relay mounting, relay would be changed to set or reset status , there fore when application (connecting the power supply), Please reset the relay to set or reset status on request.**
- 3. In order to maintain set or reset time. Do not energize voltage to set coil and reset coil simultaneously. And also long energized time (more than 1 min)should be avoided.**

Disclaimer: All the specifications are subject to change without notice.