

Company Profile

Since its founding in 1976, the staff and engineers of HASCO RELAYS AND ELECTRONICS INTERNATIONAL CORP. have dedicated themselves to manufacturing the most reliable, cost effective, and technologically advanced electromechanical relays available.

HASCO RELAYS AND ELECTRONICS INTERNATIONAL CORP. manufactures and ships worldwide from our 100% wholly owned factory and warehouse distribution center located in Suzhou, China; and from our corporate offices and distribution facility in New York, U.S.A.

Our products are extensively implemented throughout the automotive, aerospace, fire, safety, security, and telecom industries; in lighting controls, liquid level sensors, HVAC, UPS units and industrial controls.



Relays · Reed Relays · Reed Switches



Hasco Relays & Electronics Int'l Corp

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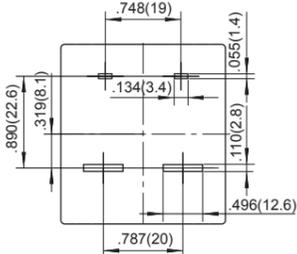
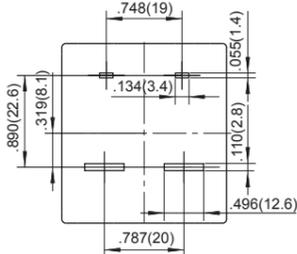
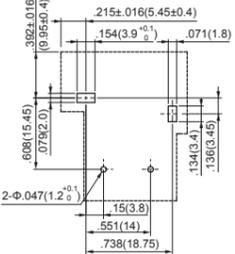
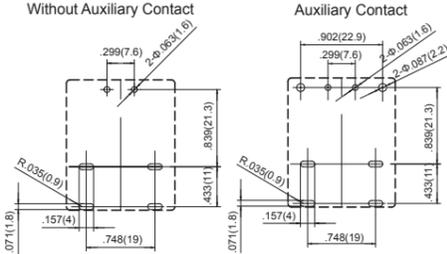
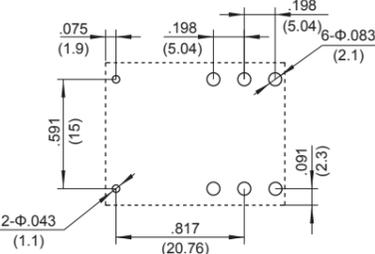
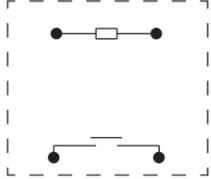
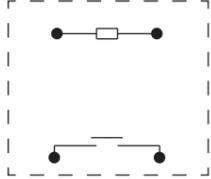
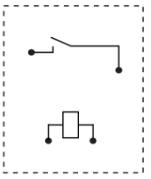
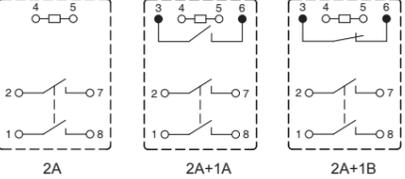
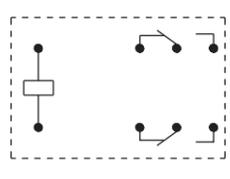
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Factory:

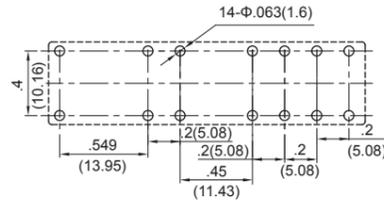
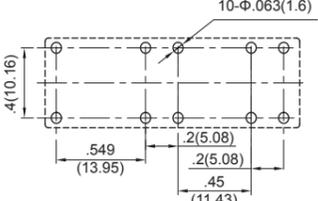
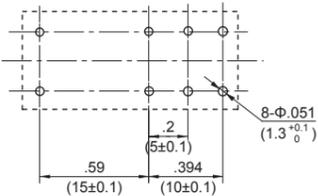
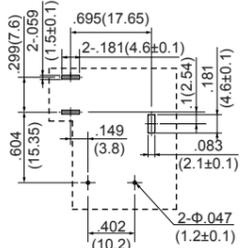
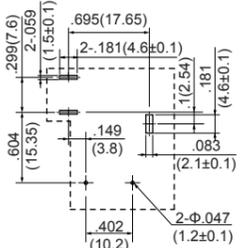
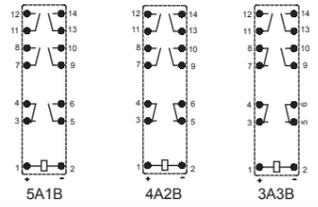
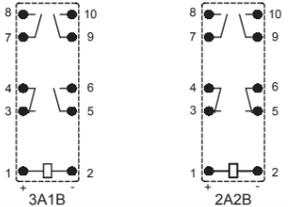
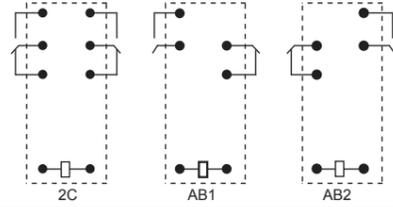
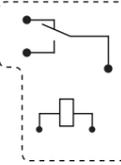
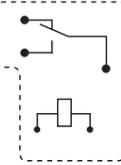
Hasco (Suzhou) Electronics Company Ltd.

SuZhou China

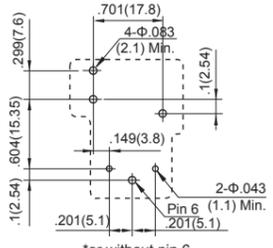
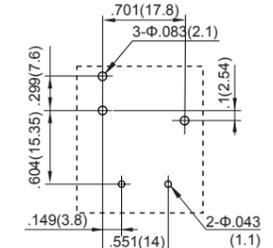
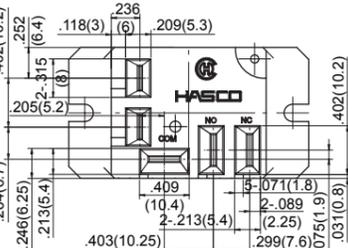
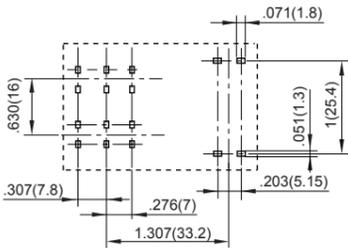
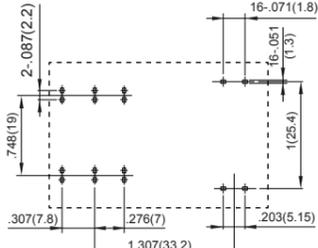
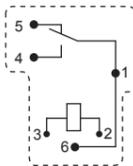
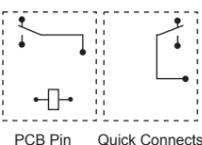
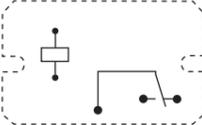
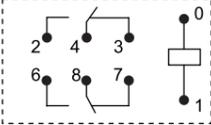
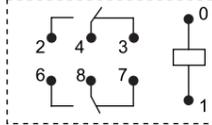


P/N	HAG01	HAG01M	HAT905G	HAG02	HAP02
Appearance					
Outline L×W×H (mm)	1.835×1.693×1.693 (46.6×43×43)	1.835×1.693×1.693 (46.6×43×43)	1.268×1.079×.764 (32.2×27.4×19.4)	1.476×1.181×1.575 (37.5×30×40)	1.142×.772×.618 (29×19.6×15.7)
Features	High capacity: Max. switching current 160A SPDM contact configuration with large contact gap 3.0mm Coil holding voltage can be reduced to 50~55% V of the nominal coil voltage for saving energy	With arc extinguishing magnets High performance DC relay for photovoltaic power generation systems, energy storage system and xEV charging device, etc	4KVAC dielectric strength (between coil and contacts) Max. switching current 60A Apply to EV AC charging equipment	Contact gap 3.6mm (main contacts) RT III type water-sealed relay Suitable for inverters, charging piles and energy storage systems for solar photovoltaic power generation	Low height, only 15.7mm 5KVAC dielectric strength (between coil and contacts) Creepage/clearance distance >10mm, Meets reinforce insulation
Contact Rating					
Contact Arrangement	1A	1A	1A	2A, 2A+1A, 2A+1B	2A, 2C
Contact Resistance	≤10mΩ(20A 6VDC)	≤10mΩ(20A 6VDC)	≤50mΩ(1A 24VDC)	≤100mΩ (1A 6VDC)	≤100mΩ(1A 6VDC)
Contact Material	AgSnO	AgSnO	AgSnO	AgSnOIn	AgSnO
Contact Rating	40A/400VAC	15A/500VDC	60A/277VAC	40A/277VAC	16A/277VAC
Max.Switching Voltage	800VAC	500VDC	277VAC	480VAC/60VDC	277VAC
Max. Switching Current	160A	15A	60A	40A	16A
Max. Switching Power	48000VA	7500W	16620VA	11080VA	4432VA
Mechanical Life	1×10 ⁶ OPS	1×10 ⁶ OPS	1×10 ⁶ OPS	5×10 ⁶ OPS	5×10 ⁶ OPS
Electrical Life	5×10 ⁴ OPS	3×10 ⁴ OPS	5×10 ⁴ OPS	1×10 ⁵ OPS	1×10 ⁵ OPS
Coil Data					
Normal Voltage	6, 9, 12, 24	6, 9, 12, 24	6, 12, 24, 48, 110	6, 9, 12, 24, 48	5, 6, 9, 12, 24, 48
Coil Power	Approx. 2500mW	Approx. 2500mW	1200mW	Approx. 1880mW	Approx. 800mW
Characteristics					
Insulation Resistance	1000MΩ(500VDC)	1000MΩ(500VDC)	1000MΩ(500VDC)	1000MΩ(500VDC)	1000MΩ(500VDC)
Dielectric Strength between Coil & Contacts	5000VAC 1min	5000VAC 1min	4000VAC 1min	5000VAC 1min	5000VAC 1min
Dielectric Strength between Open Contacts	2000VAC 1min	2000VAC 1min	1500VAC 1min	2000VAC 1min	1000VAC 1min
Operate Time/Release Time	≤30ms/≤10ms	≤30ms/≤10ms	≤15ms/≤10ms	≤30ms/≤10ms	≤10ms/≤5ms
Operation Temperature	-40°C~+85°C	-40°C~+85°C	-40°C~+105°C	-40°C~+85°C	-40°C~+105°C
PBC Layout					
Wiring Diagram					
Terminal Type	PCB	PCB	PCB	PCB	PCB
Approval	 File No.:E75887	 File No.:R 50471143	   File No.:E75887 File No.:R 50514896 File No.:CQC22002338071	   File No.:E75887 File No.:R 50492936 File No.:CQC21002292050	  File No.:E75887 File No.:R 50461488

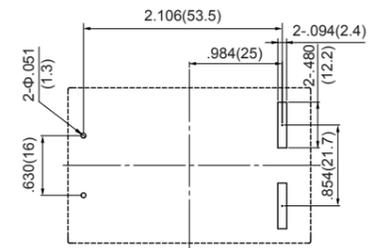
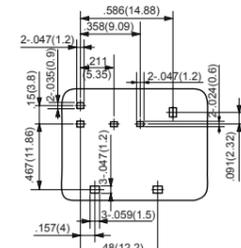
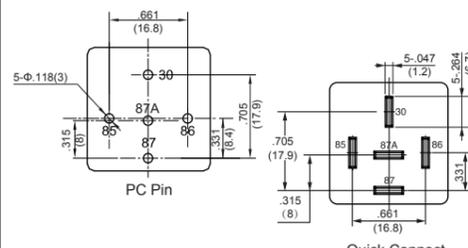
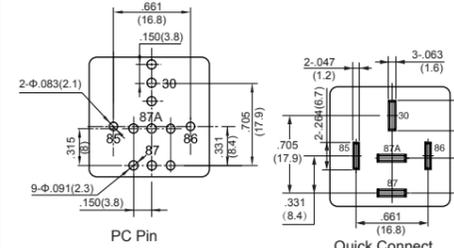
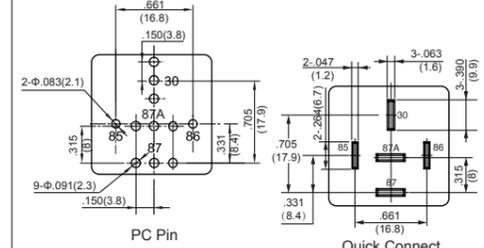
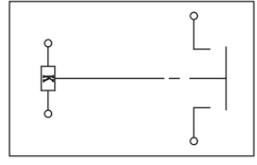
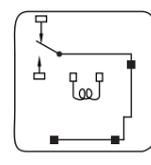
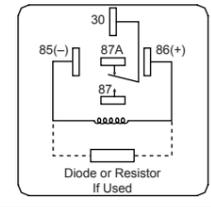
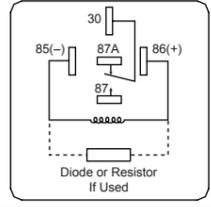
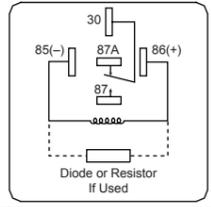
Note: The data shown above are initial values.

P/N	HAA01	HAA02	HAA03	HAT905	HAT905K	
Appearance						
Outline L×W×H (mm)	1.969×.512×.945 (50×13×24)	1.575×.512×.945 (40×13×24)	1.142×.496×1.004 (29×12.6×25.5)	1.248×1.134×.776 (31.7×28.8×19.7)	1.248×1.134×.776 (31.7×28.8×19.7)	
Features	6A switching capacity Low input power: 500mW Forcibly guided contacts according to EN50205	6A switching capacity Low input power: 360mW Forcibly guided contacts according to EN50205	8A switching capacity Forcibly guided contacts according to EN50205	4KVAC high dielectric strength between contacts and coil is available Max. switch capacity up to 50A	4KVAC high dielectric strength between contacts and coil is available Max. switch capacity up to 50A	
Contact Rating						
Contact Arrangement	5A1B, 4A2B, 3A3B	3A1B, 2A2B	2C, AB1, AB2	1A, 1B, 1C	1A, 1B, 1C	
Contact Resistance	≤100mΩ(1A 6VDC)	≤100mΩ(1A 6VDC)	≤100mΩ(1A 6VDC)	≤50mΩ(1A 24VDC)	≤50mΩ(1A 24VDC)	
Contact Material	Gold Flash+Silver Alloy	Gold Flash+Silver Alloy	Silver Alloy	AgCdO, AgSnO	AgCdO, AgSnO	
Contact Rating	6A 277VAC/30VDC	6A 277VAC/30VDC	8A 277VAC/30VDC	50A/277VAC, 30A/28VDC	50A/277VAC, 30A/28VDC	
Max.Switching Voltage	400VAC/30VDC	400VAC/30VDC	400VAC/30VDC	277VAC/28VDC	277VAC/28VDC	
Max. Switching Current	6A	6A	8A	50A	50A	
Max. Switching Power	1662VA/180W	1662VA/180W	2216VA/240W	13850VA/840W	13850VA/840W	
Mechanical Life	1×10 ⁷ OPS	1×10 ⁷ OPS	1×10 ⁷ OPS	1×10 ⁷ OPS	1×10 ⁷ OPS	
Electrical Life	1×10 ⁵ OPS	1×10 ⁵ OPS	1×10 ⁵ OPS	1×10 ⁴ OPS	1×10 ⁴ OPS	
Coil Data						
Normal Voltage	6, 9, 12, 18, 21, 24, 36, 48, 110	6, 9, 12, 18, 21, 24, 36, 48, 110	5, 6, 9, 12, 15, 18, 21, 24, 36, 40, 48, 60, 80, 110	5, 6, 9, 12, 15, 18, 22, 24, 48, 110	5, 6, 9, 12, 15, 18, 22, 24, 48, 110	
Coil Power	500mW(110V:Approx. 580mW)	360mW(110V:Approx. 420mW)	700mW	1200mW	P:900mW Blank:1200mW	
Characteristics						
Insulation Resistance	1000MΩ(500VDC)	1000MΩ(500VDC)	1000MΩ(500VDC)	100MΩ(500VDC)	100MΩ(500VDC)	
Dielectric Strength between Coil & Contacts	4000VAC 1min	4000VAC 1min	4000VAC 1min	2000VAC 1min	2000VAC 1min	
Dielectric Strength between Open Contacts	1500VAC 1min	1500VAC 1min	1500VAC 1min	1500VAC 1min	1500VAC 1min	
Operate Time/Release Time	≤20ms/≤20ms	≤20ms/≤20ms	≤15ms/≤10ms	≤15ms/≤10ms	≤15ms/≤10ms	
Operation Temperature	-40°C~+85°C	-40°C~+85°C	-40°C~+85°C	-40°C~+85°C	-40°C~+85°C	
PBC Layout						
Wiring Diagram						
Terminal Type	PCB	PCB	PCB	PCB	PCB	
Approval	 File No.:E75887	 File No.:R 50507988	 File No.:CQC21002307826	 File No.:E75887	 File No.:R 50562547	 File No.:CQC22002369669
	 File No.:E75887	 File No.:R 50290157				

Note: The data shown above are initial values.

P/N	HAT901	HAT902	HAT903	HAT904	HAT904G
Appearance					
Outline L×W×H (mm)	1.252×1.079×.775 (31.8×27.4×19.7)	1.28×1.079×1.112 (32.4×27.4×28.25)	1.976×1.075×1.108 (50.2×27.3×27.45)	PC Pin:2.05×1.326×1.051/Quick Connect:2.7×1.326×1.039 PC Pin:(52×33.7×26.7)/Quick Connect:(68.6×33.7×26.4)	2.05×1.36×1.14 (52×34.5×29)
Features	4kV Type: 4000VAC high dielectric strength (between contacts and coil) Max. switch capacity up to 40A Wide contact gap available	4kV Type: 4000VAC high dielectric strength (between contacts and coil) Max. switch capacity up to 40A Wide contact gap available Suitable for .25"(6.35mm) Q.C. terminals	Max. switch capacity up to 40A Wide contact gap available Suitable for .25"(6.35mm) Q.C. terminals	50A switching capacity Meets 8mm spacing, 4KVAC dielectric strength Meets UL Class F insulation system	Max. switching current 30A 3kV dielectric strength(between coil and contacts) 2 Form A and 2 Form C configurations available
Contact Rating					
Contact Arrangement	1A, 1B, 1C	1A, 1B, 1C	1A, 1B, 1C	2A, 2C	2A, 2C
Contact Resistance	≤50mΩ(1A 24VDC)	≤50mΩ(1A 24VDC)	≤50mΩ(1A 24VDC)	≤50mΩ(1A 24VDC)	≤100mΩ(1A 24VDC)
Contact Material	Silver Alloy(Cd, Non-Cd)	Silver Alloy(Cd, Non-Cd)	Silver Alloy(Cd, Non-Cd)	AgSnO	AgSnOIn
Contact Rating	30A/40A 277VAC, 30A/28VDC	30A/40A 277VAC, 30A/28VDC	30A/40A 277VAC, 30A/28VDC	N.O.:50A/277VAC, 30A/30VDC N.C.:3A/277VAC	N.O.:30A/120VDC, N.C.:20A/277VAC
Max.Switching Voltage	277VAC/28VDC	277VAC/28VDC	277VAC/28VDC	277VAC/30VDC	N.O.:180VDC/277VAC, N.C.:277VAC
Max. Switching Current	40A	40A	40A	50A/40A	N.O.:Capacitive load in-rush(1000uF/200A/0.5Ω/1ms), N.C.:12A
Max. Switching Power	11080VA/840W	11080VA/840W	11080VA/840W	13850VA/1200W	N.O.:5400W, N.C.:5540VA
Mechanical Life	1×10 ⁷ OPS	1×10 ⁷ OPS	1×10 ⁷ OPS	5×10 ⁶ OPS	5×10 ⁶ OPS
Electrical Life	5×10 ⁴ OPS	5×10 ⁴ OPS	5×10 ⁴ OPS	2×10 ⁶ OPS	1×10 ⁴ OPS
Coil Data					
Normal Voltage	DC:5, 6, 9, 12, 15, 18, 22, 24, 48, 110 AC:12, 24, 110, 120, 220, 240, 277	DC:5, 6, 9, 12, 15, 18, 22, 24, 48, 110 AC:12, 24, 110, 120, 220, 240, 277	DC:5, 6, 9, 12, 15, 18, 22, 24, 48, 110 AC:12, 24, 110, 120, 220, 240, 277	DC:5, 6, 12, 24, 28, 48, 110 AC:12, 24, 120, 208, 220, 240, 277	12, 24
Coil Power	DC:Approx. 900mW AC:2VA	DC:Approx. 900mW AC:2VA	DC:Approx. 900mW AC:2VA	DC:Approx. 1700mW AC:Approx. 4.0VA	Rated power: 16W, Holding power: 1.5W
Characteristics					
Insulation Resistance	1000MΩ(500VDC)	1000MΩ(500VDC)	1000MΩ(500VDC)	1000MΩ(500VDC)	1000MΩ(500VDC)
Dielectric Strength between Coil & Contacts	2000VAC/2500VAC/4000VAC 1min	2000VAC/2500VAC/4000VAC 1min	2000VAC/2500VAC 1min	4000VAC 1min	3000VAC 1min
Dielectric Strength between Open Contacts	1500VAC 1min	1500VAC 1min	1500VAC 1min	1500VAC 1min	1000VAC 1min
Operate Time/Release Time	≤15ms/≤10ms	≤15ms/≤10ms	≤15ms/≤10ms	≤25ms/≤25ms	≤50ms/≤50ms
Operation Temperature	DC:-55°C~+85°C; AC:-55°C~+60°C	DC:-55°C~+85°C; AC:-55°C~+60°C	DC:-55°C~+85°C; AC:-55°C~+60°C	DC:-40°C~+85°C, AC:-40°C~+65°C	-40°C~+85°C
PBC Layout					
Wiring Diagram					
Terminal Type	PCB	PCB&QC	QC	PCB&QC	PCB
Approval	 File No.:E75887	 File No.:R 50194653	 File No.:E75887  File No.:R 50194653	   File No.:E75887 File No.:R 50491935 File No.:CQC21002292049	  File No.:E75887 File No.:R 50569514

Note: The data shown above are initial values.

P/N	HAG12	CARB	CAR40	CAR80	CAR100
Appearance					
Outline L×W×H (mm)	2.795×1.693×.969 (71×43×24.6)	1.043×.827×.842 (26.5×21×21.4)	1.028×1.028×.949 (26.1×26.1×24.1)	1.118×1.118×1.102 (28.4×28.4×28)	1.118×1.118×1.035/-2015:1.26×1.26×1.102 (28.4×28.4×26.3)/-2015:(32×32×28)
Features	Application: telecommunication equipment, solar, construction machinery, electrical vehicle, electric forklift, train, UPS Heavy load capacity: 120A contact switching capacity	Contact rating 30A Small size Open type and Sealed type are available	Contact rating 40A High temperature design Mounting Tab option	High contact rating 80A Quick connect and P.C.Board terminals Mounting Tab option	High contact rating 100A Quick connect and P.C.Board terminals
Contact Rating					
Contact Arrangement	1A	1A, 1B, 1C	1A, 1C	1A, 1C	1A, 1C
Contact Resistance	≤10mΩ(20A 6VDC)	≤50mΩ(1A 24VDC)	≤50mΩ(1A 24VDC)	≤50mΩ(1A 24VDC)	≤50mΩ(1A 24VDC)
Contact Material	AgSnO	AgSnO	AgSnO	AgSnO	AgSnO
Contact Rating	120A/305VAC, 120A/60VDC	N.O.:30A/240VAC, 20A/28VDC N.C.:15A/240VAC, 15A/28VDC	N.O.:40A/14VDC, N.C.:30A/14VDC	N.O.:80A/14VDC, N.C.:60A/14VDC	N.O.:100A/14VDC, N.C.:100A/14VDC
Max.Switching Voltage	600VAC/60VDC	380VAC/75VDC	75VDC	75VDC	75VDC
Max. Switching Current	120A	30A	40A	80A	100A
Max. Switching Power	48000VA/7200W	7200VA/560W	560W	1120W	1400W
Mechanical Life	1×10 ⁶ OPS	1×10 ⁷ OPS	1×10 ⁶ OPS	1×10 ⁷ OPS	1×10 ⁶ OPS
Electrical Life	1×10 ⁴ OPS	1×10 ⁵ OPS	1×10 ⁵ OPS	1×10 ⁵ OPS	1×10 ⁵ OPS
Coil Data					
Normal Voltage	12, 18, 24	6, 9, 12, 24, 48	6, 12, 24, 36, 48	6, 12, 24, 36, 48	6, 12, 24
Coil Power	4800mW	6V:1900mW, 9-12V:1600mW 24V:1500mW, 48V:1000mW	1800mW	1800mW	1800mW
Characteristics					
Insulation Resistance	1000MΩ(500VDC)	100MΩ(500VDC)	100MΩ(500VDC)	100MΩ(500VDC)	100MΩ(500VDC)
Dielectric Strength between Coil & Contacts	5000VAC 1min (50Hz/60Hz)	1500VAC 1min	500VAC 1min	500VAC 1min	500VAC 1min
Dielectric Strength between Open Contacts	2000VAC 1min (50Hz/60Hz)	1000VAC 1min	500VAC 1min	500VAC 1min	500VAC 1min
Operate Time/Release Time	≤30ms/≤15ms	≤15ms/≤10ms	≤10ms/≤10ms	≤15ms/≤10ms	≤12ms/≤5ms
Operation Temperature	-40°C~+85°C	-40°C~+85°C	-40°C~+85°C	-40°C~+85°C	-40°C~+85°C
PBC Layout					
Wiring Diagram					
Terminal Type	PCB	PCB	PCB&QC	PCB&QC	PCB&QC
Approval	 File No.:E198243  File No.:R 50574994	 File No.:E75887	 File No.:E75887  File No.:R 50451203	 File No.:E75887	 File No.:R 50304236

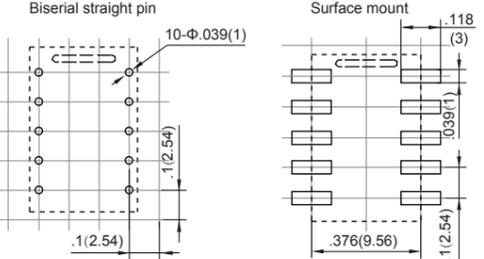
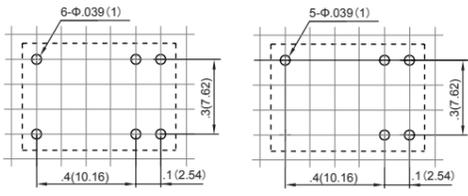
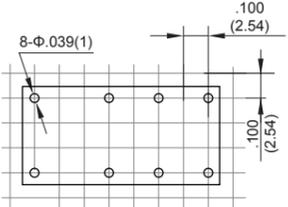
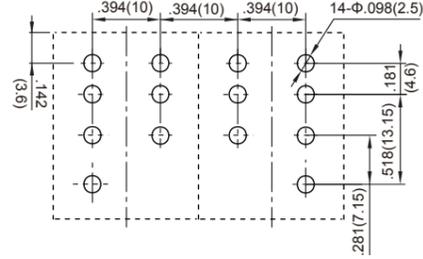
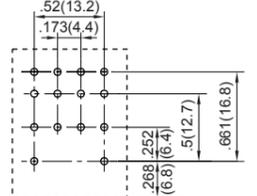
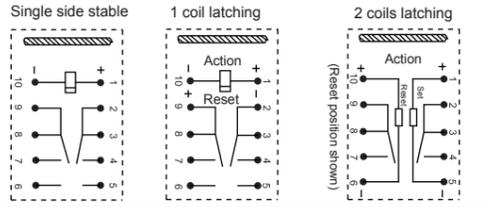
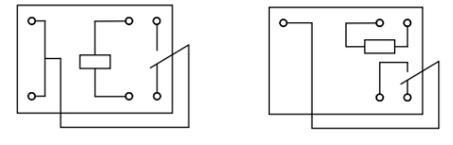
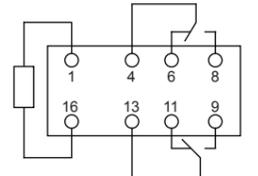
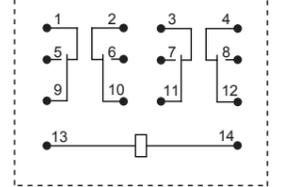
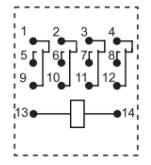
Note: The data shown above are initial values.

P/N	SPR		PR				PLT		HPK		HPR	
Appearance												
Outline L×W×H (mm)	1.142×.5×.618 (29×12.7×15.7)		1.138×.496×1.004 (28.9×12.6×25.5)				.827×.63×.811 (21×16×20.6)		.85×.63×.811 (21.6×16×20.6)		.779×.389×.598 (19.8×9.9×15.2)	
Features	Small size for high density mounting Up to 5KVAC Dielectric strength		High breakdown voltage(5000VAC between coil and contact) Large switching capacity(20A 277VAC)				20A or 25A switching capacity Surge voltage up to 6KVAC(between coil and contacts) Explosion-proof products available		35A switching capability Surge voltage up to 6kV (between coil and contacts) Creepage Distance up to 6mm		10A switching capability Subminiature, standard PCB layout Sealed Type, Dust Cover Type and Flux Tight Type is available.	
Contact Rating												
Contact Arrangement	1A, 1B, 1C		2A, 2B, 2C		1A, 1C		2A, 2C		1A, 1B, 1C		1A, 1C	
Contact Resistance	≤100mΩ(1A 24VDC)		≤50mΩ(1A 24VDC)				≤100mΩ(1A 24VDC)		≤100mΩ(1A 24VDC)		≤100mΩ(1A 24VDC)	
Contact Material	AgSnO		AgSnO ₂ , AgSnOIn				AgSnO, AgSnOIn		AgSnO		AgSnO	
Contact Rating	20A/277VAC, 16A/277VAC 16A/24VDC		8A/277VAC, 8A/24VDC		10A/277VAC 10A/30VDC		20A/277VAC 20A/30VDC		10A/277VAC 5A/30VDC		12A/277VAC, 6A/30VDC 15A/277VAC, 18A/277VAC	
Max.Switching Voltage	440VAC/300VDC		277VAC/30VDC				400VAC		400VAC(NO)		277VAC	
Max. Switching Current	20A		8A		10A		20A		10A		18A	
Max. Switching Power	5540VA		2216VA		2770VA/300W		5540VA/600W		2770VA/300W		4986VA	
Mechanical Life	1×10 ⁷ OPS		Normal:1×10 ⁷ OPS 1.5mm:5×10 ⁵ OPS 2mm:3×10 ⁵ OPS				1×10 ⁷ OPS		1×10 ⁷ OPS		1×10 ⁵ OPS	
Electrical Life	1×10 ⁵ OPS		1×10 ⁵ OPS				1×10 ⁵ OPS		1×10 ⁵ OPS		1×10 ⁵ OPS	
Coil Data												
Normal Voltage	5, 6, 9, 12, 24, 48, 60, 110		Normal/1.5mm:5, 6, 9, 12, 24, 48, 110V 2mm:5, 6, 9, 12, 24, 48V				3, 5, 6, 9, 12, 18, 24, 48		6, 9, 12, 24, 48		5, 6, 9, 12, 24	
Coil Power	400mW(60,110V:480mW)		Normal:530mW 1.5mm:800mW 2mm:1400mW 110V:840mW				20A:360mW 25A:450mW		Approx. 1650mW		Standard Type: 400mW Sensitive Type: 200mW	
Characteristics												
Insulation Resistance	1000MΩ(500VDC)		1000MΩ(500VDC)				100MΩ(500VDC)		100MΩ(500VDC)		1000MΩ(500VDC)	
Dielectric Strength between Coil & Contacts	5000VAC 1min		5000VAC 1min				2500VAC 1min		4000VAC 1min		4000VAC 1min	
Dielectric Strength between Open Contacts	1000VAC 1min		1000VAC 1min(Normal); 2000VAC 1min(1.5mm) 2500VAC 1min(2mm)				1000VAC 1min		1500VAC 1min		750VAC 1min	
Operate Time/Release Time	≤10ms/≤5ms		≤15ms/≤5ms				≤10ms/≤5ms		≤15ms/≤10ms		≤20ms/≤10ms	
Operation Temperature	-40°C~+85°C/-40°C~+105°C		-40°C~+85°C				-40°C~+105°C		-40°C~+85°C(105°C for Class H)		-40°C~+85°C	
PBC Layout												
Wiring Diagram												
Terminal Type	PCB		PCB				PCB		PCB		PCB	
Approval	File No.:E75887 File No.:R 50215857		File No.:E75887 File No.:R 50261062				File No.:E75887 File No.:R 50267950		File No.:E75887 File No.:R 50390115		File No.:E75887 File No.:R 50325379	

Note: The data shown above are initial values.

P/N	KLT	KLT-L	SPR-L	HAT901-L	HAP01
Appearance					
Outline L×W×H (mm)	.756×.610×.610 (19.2×15.5×15.5)	.756×.610×.610 (19.2×15.5×15.5)	1.142×.5×.618 (29×12.7×15.7)	1.252×1.079×.775 (31.8×27.4×19.7)	.945×.394×.622 (24×10×15.8)
Features	Highly reliable, low cost Miniature size & large switch capacity up to 20A High dielectric strength type Fully Sealed	Highly reliable, low cost Miniature size & large switch capacity up to 15A High dielectric strength type	Small size for high density mounting Up to 5KVAC Dielectric strength For inrush peak currents up to 80A	Large switch capacity up to 40A Green Energy Saving	Dielectric strength(between contact and coil): 5000V 16A switching capacity
Contact Rating					
Contact Arrangement	1A, 1B, 1C	1A, 1C	1A, 1C	2A, 2C	1A
Contact Resistance	≤100mΩ(1A 24VDC)	≤100mΩ(1A 24VDC)	≤100mΩ(1A 24VDC)		≤50mΩ(1A 24VDC)
Contact Material	AgSnO	AgSnO	AgSnO		AgSnO
Contact Rating	3A 277VAC/28VDC; 6A 277VAC/28VDC; 10A 277VAC/28VDC; 12A 277VAC/28VDC; 15A 277VAC/28VDC; 20A 277VAC/28VDC	3A 120VAC/28VDC; 6A 120VAC/28VDC; 12A 120VAC/28VDC; 15A/120VAC/28VDC	20A/277VAC, 16A/24VDC	12A/240VAC, 8A/24VDC	40A/277VAC, 30A/28VDC
Max.Switching Voltage	277VAC/28VDC	120VAC/28VDC	440VAC/300VDC		277VAC/28VDC
Max. Switching Current	20A	15A	20A	12A	40A
Max. Switching Power	5540VA/560W	1800VA/420W	5540VA	2880VA	11080VA/840W
Mechanical Life	1×10 ⁶ OPS	1×10 ⁶ OPS	1×10 ⁷ OPS		1×10 ⁷ OPS
Electrical Life	5×10 ⁴ OPS	3×10 ⁴ OPS	5×10 ⁴ OPS		3×10 ⁴ OPS
Coil Data					
Normal Voltage	3, 5, 6, 9, 12, 18, 24, 48	5, 6, 9, 12, 24, 48	5, 6, 12, 24, 48, 60, 110		5, 6, 9, 12, 24, 48
Coil Power	3A-15A:360mW 20A:450mW	800mW	1 Coil:400mW(60,110V:480mW) 2 Coils: 5V=595mW 6V=655mW 12V=600mW 24V=650mW		1200mW
Characteristics					
Insulation Resistance	100MΩ(500VDC)	100MΩ(500VDC)	1000MΩ(500VDC)		1000MΩ(500VDC)
Dielectric Strength between Coil & Contacts	1500VAC 1min	1500VAC 1min	5000VAC 1min		2000VAC/2500VAC/4000VAC 1min
Dielectric Strength between Open Contacts	750VAC 1min	1000VAC 1min	1000VAC 1min		1500VAC 1min
Operate Time/Release Time	≤8ms/≤5ms	≤8ms/≤5ms	≤10ms/≤10ms		≤15ms/≤10ms
Operation Temperature	-55°C~+105°C	-40°C~+85°C	-55°C~+85°C		-40°C~+85°C
PBC Layout					
Wiring Diagram					
Terminal Type	PCB	PCB	PCB		PCB
Approval	File No.:E75887 File No.:R 50306227	File No.:E75887 File No.:R 50383370	File No.:E75887 File No.:R 50311399		File No.:E75887 File No.:R 50390114

Note: The data shown above are initial values.

P/N	T	BAS/BS/SC	CAS/CS	UJ	UJJ
Appearance					
Outline L×W×H (mm)	.563×.366×.197 (14.3×9.3×5)	.62×.43×.44 (15.7×10.9×11.2)	CAS: .807×.402×.445/CS: .807×.402×.492 (CAS: 20.5×10.2×11.3/CS: 20.5×10.2×12.5)	UJ1/UJ2: 1.102×.846×1.417 UJ3: 1.102×1.24×1.417 UJ4: 1.102×1.634×1.417 UJ1/UJ2: (28×21.5×36) UJ3: (28×31.5×36) UJ4: (28×41.5×36)	Standard: 1.102×.846×1.378 FLANGE TOP: 1.732×.846×1.378 Standard: (28×21.5×35) FLANGE TOP: (44×21.5×35)
Features	Meets FCC part 68 requirements High sensitivity:140mW nominal operating power SMT and DIP types available	Small Package Fully sealed Sensitive type and standard type are available	Sensitive type and standard type are available Fully sealed	1 pole, 2 pole, 3 pole and 4 pole contact arrangement is available Many types of terminal style Transparent dust-proof cover, variety of installation methods Multiple sockets available	2 pole,3 pole and 4 pole contact arrangement is available Many types of terminal style Transparent dust-proof cover, variety of installation methods
Contact Rating					
Contact Arrangement	2C	1C	2C	1C, 2C	3C, 4C
Contact Resistance	≤100mΩ(10mA 6VDC)	≤100mΩ(1A 24VDC)	≤100mΩ(100mA 6VDC)	≤100mΩ(1A 6VDC)	
Contact Material	Silver Alloy, Gold Flash	AgSnO	Silver Alloy, Gold FLash	Silver Alloy	
Contact Rating	1A/30VDC; 0.5A/125VAC	N.O.:2A/240VAC, 2A/30VDC N.C.:1A/240VAC, 2A/30VDC	5A/120VAC, 5A/30VDC	2A/30VDC, 2.5A/12VDC, 0.5A/125VAC, 0.6A/120VAC	15A/240VAC, 10A/30VDC
Max.Switching Voltage	250VAC/220VDC	240VAC/30VDC	120VAC/30VDC	240VAC/120VDC	
Max. Switching Current	1A	2A	5A	2A	15A
Max. Switching Power	62.5VA/30W	480VA/60W	600VA/150W	72VA/60W	3600VA/300W
Mechanical Life	1×10 ⁶ OPS	5×10 ⁶ OPS		1×10 ⁶ OPS	2×10 ⁷ OPS
Electrical Life	1×10 ⁵ OPS	5×10 ⁴ OPS	1×10 ⁴ OPS	1×10 ⁵ OPS	1×10 ⁵ OPS
Coil Data					
Normal Voltage	3, 5, 6, 9, 12, 24	3, 5, 6, 9, 12, 24, 48	5, 6, 9, 12, 18, 24, 48	DC:5, 6, 12, 24, 48, 110 AC:6, 12, 24, 48, 120, 220	
Coil Power	Single side stable:140mW(24VDC:200mW) 1 coil latching:100mW(24VDC:150mW) 2 coils latching:200mW(24VDC:300mW)	Standard Type:450mW Sensitive Type:200mW	Standard:500~590mW Sensitive:150~300mW	DC:900mW~1800mW AC:1.2VA~2.5VA	
Characteristics					
Insulation Resistance	1000MΩ(500VDC)	100MΩ(500VDC)	1000MΩ(500VDC)	100MΩ(500VDC)	1000MΩ(500VDC)
Dielectric Strength between Coil & Contacts	1000VAC 1min	1000VAC 1min	1000VAC 1min	2000VAC 1min	2000VAC 1min
Dielectric Strength between Open Contacts	1000VAC 1min	500VAC 1min	1000VAC 1min	1000VAC 1min	1000VAC 1min
Operate Time/Release Time	≤2ms/≤1.5ms	≤10ms/≤5ms	≤7ms/≤5ms	≤20ms/≤20ms	≤20ms/≤20ms
Operation Temperature	-40°C~+85°C	-40°C~+85°C	-40°C~+85°C	-40°C~+85°C	-40°C~+85°C
PBC Layout					
Wiring Diagram					
Terminal Type	PCB	PCB	PCB	PCB&QC	PCB&QC
Approval	 File No.:E75887	 File No.:E75887  File No.:R 50300956	 File No.:E75887	 File No.:E75887	 File No.:E75887

Note: The data shown above are initial values.