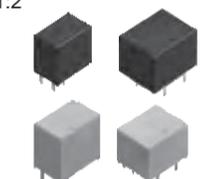
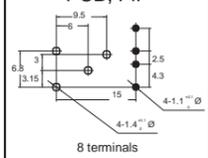
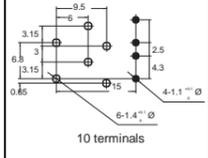
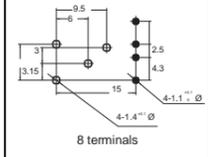
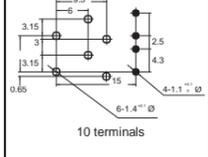
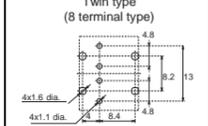
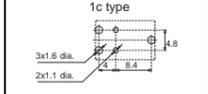
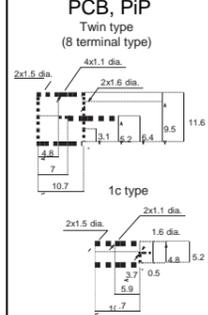
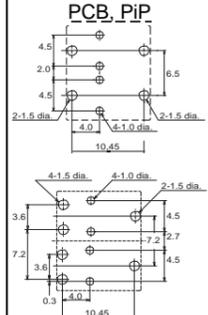
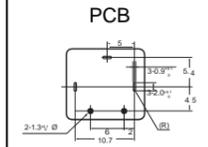
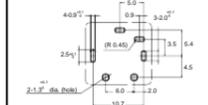
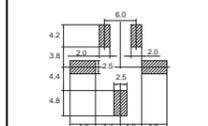


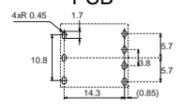
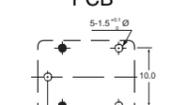
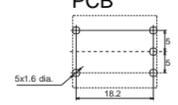
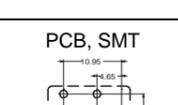
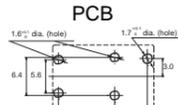
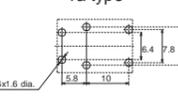
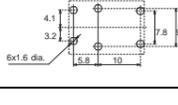
Type □ = Popular type (Picture scale: DIN A4)	Features	Switching current (Min.: see data sheet)	Max. switching voltage	Contact arrangement	Coil voltage
PCB relays					
CT  Single: 17.4 x 7.2 x 13.5mm Twin: 17.4 x 14 x 13.5mm	<ul style="list-style-type: none"> • Super miniature size • Twin (1 Form C x 2) • ACT512 layout = layout of 2 x ACT112 • H-bridge type available (twin relay) • Quiet operation • RTIII (IP67) • Pin in Paste (with vent hole) available 	Max.: 20A (N.O.)  10A (N.C.) 	• 16V DC	1c, 1c x 2	(DC) 12V
CT POWER  Single: 17.4 x 7.2 x 13.5mm Twin: 17.4 x 14 x 13.5mm	<ul style="list-style-type: none"> • Super miniature size • Twin (1 Form C x 2) • Footprint same as CT standard type • 30A switching capacity (motor load) • H-bridge type available (twin relay) • RTIII (IP67) • Pin in Paste (with vent hole) available 	Max.: 30A (N.O.)  10A (N.C.) 	• 16V DC	1c, 1c x 2	(DC) 12V
TB  Single Print: 14 x 9.2 x 13.5mm PiP: 14 x 9.2 x 14.0mm Twin Print: 17.4 x 14 x 13.5mm PiP: 17.4 x 14 x 14.0mm	<ul style="list-style-type: none"> • Super miniature size • Single (1 Form A, 1 Form C) • Twin (1 Form C x 2) • H-bridge type available (twin relay) • RTIII (IP67) • Pin in Paste (with vent hole) available • Lamp load type available 	Max.: 20A (N.O.)  10A (N.C.) 	• 16V DC	1a, 1c 1c x 2 (8 terminals) 1c x 2 (10 terminals)	(DC) 12V

Coil power	Breakdown voltage			Surge withstand voltage	Mounting	Approvals Data sheet
	Between open contacts	Between contact sets	Contacts to coil			
800mW	500Vrms	—	500Vrms	—	PCB, PiP  8 terminals  10 terminals	—
					 8 terminals  10 terminals	
1,440mW (for pick-up voltage max. 5.5V DC) 900mW (for pick-up voltage max. 6.5V DC) 640mW (for pick-up voltage max. 7.7V DC)	500Vrms	—	500Vrms	—	PCB, PiP Twin type (8 terminal type)  1c type 	—

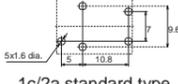
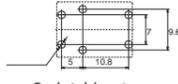
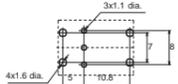
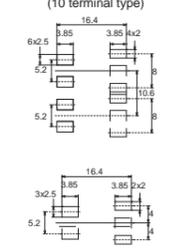
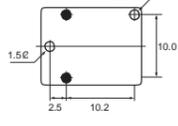
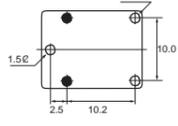
Type □ = Popular type (Picture scale: DIN A4)	Features	Switching current (Min.: see data sheet)	Max. switching voltage	Contact arrangement	Coil voltage
TE  1:2 Single Print: 12 x 7.2 x 13.5mm PiP: 12 x 7.2 x 14.0mm Twin Print: 13.6 x 12 x 13.5mm PiP: 13.6 x 12 x 14.0mm	<ul style="list-style-type: none"> Ultra small size Smallest in its class High capacity in a compact body Single (1 Form C) Twin (1 Form C x 2) H-bridge type available (twin relay) RTIII (IP67) Pin in Paste (with vent hole) available 	Max.: 20A (N.O.)  10A (N.C.) 	• 16V DC	1c 1c x 2 (8 terminals)	(DC) 12V
CJ  1:2 8 Pin Print: 13.7 x 12.2 x 13.5mm PiP: 13.7 x 12.2 x 13.8mm 10 Pin Print: 14.4 x 12.2 x 13.5mm PiP: 14.4 x 12.2 x 13.8mm	<ul style="list-style-type: none"> Ultra small size Twin (1 Form C x 2) High capacity in a compact body H-bridge type available (twin relay) RTIII (IP67) Pin in Paste (with vent hole) available 	Max.: 20A (N.O.)  10A (N.C.) 	• 16V DC	1c, 1c x 2	(DC) 12V
CP  1:2 14 x 13 x 9.5mm	<ul style="list-style-type: none"> Very low profile High capacity 24V DC type available on request RTIII (IP67) 	Max.: 20A (N.O.)  10A (N.C.) 	• 16V DC	1a, 1c	(DC) 12V, 24V
CP POWER  1:2 14 x 13 x 9.5mm	<ul style="list-style-type: none"> Very low profile High capacity type: 45A maximum carrying current Improved heat conduction thanks to additional pin Layout is downward compatible to CP RTIII (IP67) Pin in Paste (with vent hole) available 	Max.: 20A (N.O.)  10A (N.C.) 	• 16V DC	1a, 1c	(DC) 12V
CP (SMD)  1:2 14 x 13 x 10.5mm	<ul style="list-style-type: none"> Very low profile High capacity RTIII (IP67) 	Max.: 20A (N.O.)  10A (N.C.) 	• 16V DC	1c	(DC) 12V

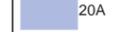
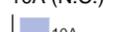
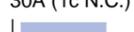
Coil power	Breakdown voltage			Surge withstand voltage	Mounting	Approvals Data sheet
	Between open contacts	Between contact sets	Contacts to coil			
1,309mW (for pick-up voltage max. 5.5V DC) 900mW (for pick-up voltage max. 6.5V DC) 655mW (for pick-up voltage max. 7.7V DC)	500Vrms	—	500Vrms	—	PCB, PiP Twin type (8 terminal type) 	—
Standard: 800mW High sensitivity: 640mW	500Vrms	—	500Vrms	—	PCB, PiP 	—
640mW	500Vrms	—	500Vrms	—	PCB 	—
450mW 640mW	500Vrms	—	500Vrms	—	PCB 	—
640mW	500Vrms	—	500Vrms	—	SMT 	—

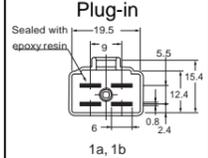
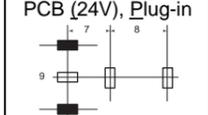
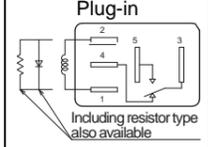
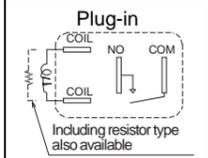
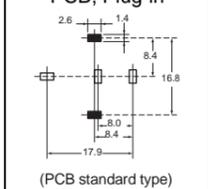
Type □ = Popular type (Picture scale: DIN A4)	Features	Switching current (Min.: see data sheet)	Max. switching voltage	Contact arrangement	Coil voltage
TJ 1:2  15 x 16 x 11.2mm	<ul style="list-style-type: none"> Compact flat type (height: 11.2mm) High capacity switching Thermal resistant type RTIII (IP67) 	Max.: 30A (N.O.)  15A (N.C.) 	• 16V DC	1c	(DC) 12V
CQ 1:2  17 x 13 x 16.6mm	<ul style="list-style-type: none"> Very quiet operation Terminal layout identical to JJM RTIII (IP67) 	Max.: 20A (N.O.)  10A (N.C.) 	• 16V DC	1c	(DC) 12V
TA 1:2  19.8 x 17 x 14mm	<ul style="list-style-type: none"> Very quiet operation Flat type RTIII (IP67) 	Max.: 20A (N.O.)  10A (N.C.) 	• 16V DC	1c	(DC) 12V
CN-M 1:2  15,5 x 11 x 14.4mm	<ul style="list-style-type: none"> Space-saving design High switching capacity (up to 30A) SMD type available RTIII (IP67) Pin in Paste (with vent hole) available 	Max.: 30A (N.O.)  25A (N.C.) 	• 16V DC	1a, 1c	(DC) 12V
CN-H 1:2  17 x 11 x 10.3mm	<ul style="list-style-type: none"> Best space savings in its class Substitute for Micro-ISO relay- Low operating power type High current-carrying capacity RTIII (IP67) 	Max.: 	• 16V DC	1a	(DC) 12V
TG 1:2  17.8 x 12.6 x 18mm	<ul style="list-style-type: none"> Large capacity switching despite small size. Substitute for micro ISO relays Low operating power type RTIII (IP67) 	Max.: 30A (N.O.)  15A (N.C.) 	• 16V DC	1a, 1c	(DC) 12V

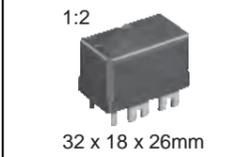
Coil power	Breakdown voltage			Surge withstand voltage	Mounting	Approvals Data sheet
	Between open contacts	Between contact sets	Contacts to coil			
450mW	500Vrms	—	500Vrms	—	PCB 	—
640mW	500Vrms	—	500Vrms	—	PCB 	—
640mW (for pick-up voltage max. 7.7V DC) 900mW (for pick-up voltage max. 6.5V DC)	500Vrms	—	500Vrms	—	PCB 	—
640mW	500Vrms	—	500Vrms	—	PCB, SMT 	—
450mW (for pick-up voltage max. 6.5V DC) 640mW (for pick-up voltage max. 5.5V DC)	500Vrms	—	500Vrms	—	PCB 	—
640mW (for pick-up voltage max. 6.5V DC) (for pick-up voltage max. 7.0V DC)	500Vrms	—	500Vrms	—	PCB 1a type  1c type 	—

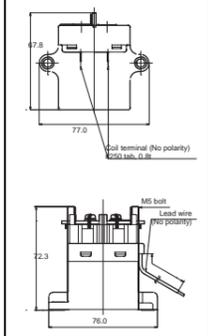
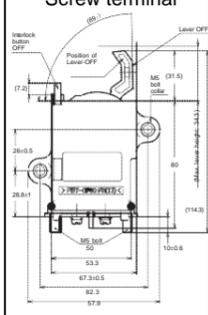
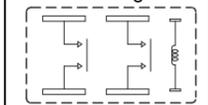
Type □ = Popular type (Picture scale: DIN A4)	Features	Switching current (Min.: see data sheet)	Max. switching voltage	Contact arrangement	Coil voltage
TC 1:2  Print: 17.8 x 13 x 16.0mm PiP: 17.8 x 13 x 16.4mm	<ul style="list-style-type: none"> Large capacity switching despite small size Substitute for micro ISO relays Latching type available High heat resistant type available RTIII (IP67) Pin in Paste (with vent hole) available 	Max.: 30A (N.O.)  15A (N.C.) 	• 16V DC	1a, 1c, 2a (2 coil latching)	(DC) 12V
TH 1:2  Single: 11 x 12 x 8.8mm Twin: 21.6 x 12 x 8.8mm	<ul style="list-style-type: none"> Ultra compact flat type SMD mounting type: 8.8mm High switching capacity (up to 25A) Single (1 Form C) Twin (1 Form C x 2) RTIII (IP67) 	Max.: 20A (N.O.)  10A (N.C.) 	• 16V DC	1c 1c x 2 (10 terminals)	(DC) 12V
JJM 1:2  15.5 x 12 x 13.9mm	<ul style="list-style-type: none"> Compact size Best-selling, familiar blinker sound RTIII (IP67) 	Max.: 20A (N.O.)  10A (N.C.) 	• 16V DC	1a, 1c	(DC) 12V
JJM-DM 1:2  15.5 x 12 x 13.9mm	<ul style="list-style-type: none"> Small size Double make contact arrangement Terminal layout compatible to JJM RTIII (IP67) 	Max.: 2 x 6A  	• 16V DC	Double make contact	(DC) 12V

Coil power	Breakdown voltage			Surge withstand voltage	Mounting	Approvals Data sheet
	Between open contacts	Between contact sets	Contacts to coil			
1,309mW (for pick-up voltage max. 6.5V DC) 900mW (for pick-up voltage max. 7.0V DC) 640mW 7.5V DC) 1,920mW	500Vrms	—	500Vrms	—	PCB, PiP 1a standard type  1c/2a standard type  2a latching type 	—
900mW (for pick-up voltage max. 6.5V DC) 655mW (for pick-up voltage max. 7.7V DC)	500Vrms	—	500Vrms	—	SMT Twin type (10 terminal type) 	—
640mW	500Vrms	—	500Vrms	—	PCB 	—
1000mW	500Vrms	—	500Vrms	—	PCB 	—

Type □ = Popular type (Picture scale: DIN A4)	Features	Switching current (Min.: see data sheet)	Max. switching voltage	Contact arrangement	Coil voltage
Plug-in relays					
CA 1:2  21.5 x 14.4 x 37mm	<ul style="list-style-type: none"> • Small size • Direct plug-in • RTIII (IP67) 	Max.: 20A (1a, 1.4W type)  30A (1a, 1.8W type)  20A (1b, 1c) 	<ul style="list-style-type: none"> • 15V DC (1c-12VDC type) • 16V DC (1a,1b-12VDC type) • 30V DC (1c-24VDC type) 	1a, 1b, 1c	(DC) 12, 24V
CM 1:2  20 x 15 x 22mm	<ul style="list-style-type: none"> • Small substitute for Mini-ISO relay • Micro-ISO terminal type • RTIII (IP67) available 	Max.: 35A (N.O.)  20A (N.C.) 	<ul style="list-style-type: none"> • 16V DC (12V DC type) • 32V DC (24V DC type) 	1a, 1c	(DC) 12, 24V
CV 1:2  22.5 x 15 x 15.7mm	<ul style="list-style-type: none"> • Low profile • 20A Micro-ISO terminal type • RTIII (IP67) 	Max.: 20A (N.O.)  10A (N.C.) 	<ul style="list-style-type: none"> • 16V DC 	1a, 1c	(DC) 12V
CV-N 1:2  22.5 x 15 x 15.7mm	<ul style="list-style-type: none"> • Low profile • Low temperature rise • Low sound pressure level • RTIII (IP67) available 	Max.: 20A (N.O.)  10A (N.C.) 	<ul style="list-style-type: none"> • 14V DC 	1a, 1c	(DC) 12V
CB 1:2  26 x 22 x 25mm	<ul style="list-style-type: none"> • 40A switching current at 85°C • Mini-ISO type terminals • High shock resistance • High thermal resistance • 1 Form A available with 70A switching current • Broad lineup • RTIII (IP67) available 	Max.: 70A (N.O. H type)  40A (1a, 1c N.O.)  30A (1c N.C.) 	<ul style="list-style-type: none"> • 16V DC (12V DC type) • 32V DC (24V DC type) 	1a, 1c	(DC) 12, 24V

Coil power	Breakdown voltage			Surge withstand voltage	Mounting	Approvals Data sheet
	Between open contacts	Between contact sets	Contacts to coil			
1800mW 1400mW (type S)	500Vrms	—	500Vrms	—	Plug-in 	—
1500mW (12V DC type) 1800mW (24V DC type)	500Vrms	—	500Vrms	—	PCB (24V), Plug-in 	—
800mW	500Vrms	—	500Vrms	—	Plug-in 	—
800mW	500Vrms	—	500Vrms	—	Plug-in 	—
1400mW (12V DC type) 1800mW (24V DC type) 1800mW (12V DC, H type)	500Vrms	—	500Vrms	—	PCB, Plug-in 	—

Type □ = Popular type (Picture scale: DIN A4)	Features	Switching current (Min.: see data sheet)	Max. switching voltage	Contact arrangement	Coil voltage
High current/ High voltage relays					
EV  <p>1:8 66.8x49.7x37.9mm 78x40x48.1mm 82.8x40x79mm 75.5x40x80mm 95x45x86.4mm 111x63x75mm</p>	<ul style="list-style-type: none"> 6 versions available: 10, 20, 80, 120, 200A, 300A DC type with sealed capsule for electric and hybrid vehicles Compact size Small arcing space required thanks to blow-out magnets Safety construction High contact reliability 	Max.: 10A (1a) 20A (1a) 80A (1a) 120A (1a) 200A (1a) 300A (1a)	• 400V DC	1a	(DC) 12, 24V
EV QUIET  <p>1:4 76 x 36 x 72.3mm 77 x 67.8 x 37.7mm</p>	<ul style="list-style-type: none"> DC type with sealed capsule, mainly for hybrid vehicles Very quiet operation Small size and light weight Small arcing space required thanks to blow-out magnets Safety construction High contact reliability Standard type for horizontal mounting available 	Max.: 60A (1a)	• 400V DC	1a	(DC) 12V
EV SWITCH  <p>1:4 57.9 x 34.6 x 114.3mm</p>	<ul style="list-style-type: none"> High performance with capsule contact technology High carrying current performance Safety function 	Max.: 80A (1a)	• 400V DC	1a	—
CW  <p>1:2 32 x 18 x 26mm</p>	<ul style="list-style-type: none"> Ideal relay for high output, 3-phase motors (Electric Power Steering) High cut-off current capability and high carrying current RTIII (IP67) 	Max.: 120A	• 14V DC	2a	(DC) 12V

Coil power	Breakdown voltage			Surge withstand voltage	Mounting	Approvals Data sheet
	Between open contacts	Between contact sets	Contacts to coil			
Stable: • 1240mW (10A, 12/24V) • 3900mW (20A, 12V) • 4200mW (80A/120A, 12/24V) • 6000mW (200A, 12/24V) • 3600mW (300A, 12V) • 3800mW (300A, 24V) Inrush: • 37.9W (300A, 12V) • 44.4W (300A, 24V)	2500Vrms	—	2500Vrms	—	Faston terminal (10A, 20A) Screw terminal (60A, 80A, 120A, 200A, 300A)	—
4500mW	Vertical: 2500Vrms Horizontal: 2000Vrms	—	Vertical: 2500Vrms Horizontal: 2000Vrms	—	Screw terminal 	—
—	2500Vrms	—	2500Vrms	—	Screw terminal 	—
1400mW	500Vrms	—	500Vrms	—	Welding 	—