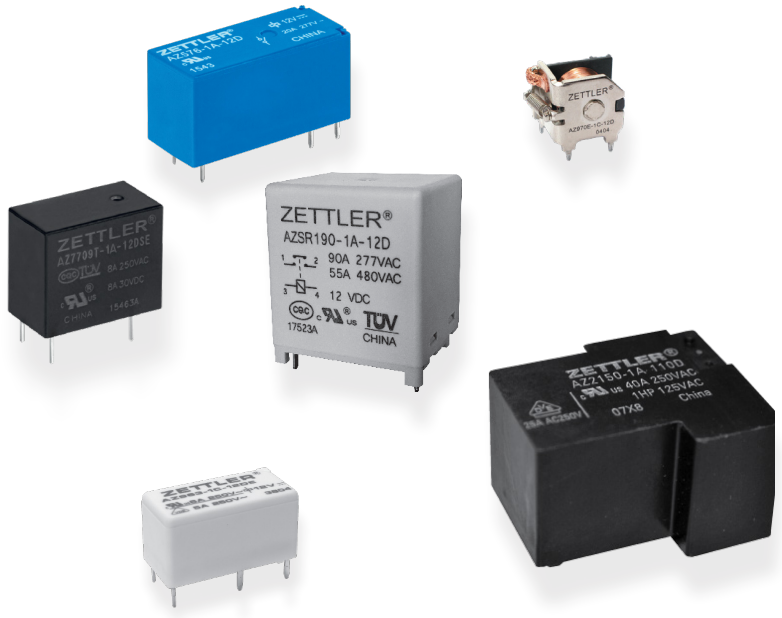
ZETTLER

Short Form Catalog

Relays

Electromechanical Relays



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worldwide. competence in components.

Electromechanical Relays from ZETTLER

The name stands for certified quality. The products are the result of the strict international standardization and our longterm experience in developing and manufacturing of relays. No matter what application, ZETTLER relays are the sophisticated solution.

Our range of products will fully come to your expectations in terms of variety and technology. The wide product range includes Signal Relays for telecommunication, Power Relays for general purpose, Solar Relays for solar inverter applications, E-Mobility Relays for electric car charging equipment, High Power Relays for heavy loads, Automotive Relays for automotive applications as well as DC Relays for medium DC loads.

In addition to established components you will find a series of technical innovations like DC Relays in common design for medium DC loads and extremely small relays on the next pages.

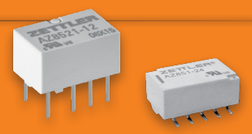
AMERICAN ZETTLER is a member of the worldwide operating ZETTLER Group. In addition to relays the group is manufacturing transformers, bimetal thermoswitches and LCD displays.

Not only components are our business. We offer competence in service and technology. Our engineers will always lead you to the best choice for your application. The ZETTLER engineering departments are working global to meet international standards.

A well assorted warehouse enables a fast and – upon request – delivery on a given day.

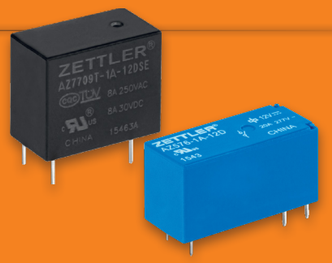
Signal Relays

… for switching of small signals in communications, measurement and controls, automated test equipment (ATE). Signals will be connected with high precision.



Power Relays

… for general purpose. Most of the typical applications in industry, HVAC (Heating, Ventilation, Air Condition), lighting, building control, as well as other control equipments can be solved by using these relays. The special standards for appliances (White Goods) are achieved by many of these relays. They guarantee a safety space (high insulation) between the control unit and the power load. Available with AC and DC coils.



Wide Contact Gap Power Relays

… are designed to fulfill the safety requirements of applications like PV (solar) inverters and E-Mobility charging equipment (EVSE) that must be disconnected from the grid during fault conditions.

Automotive Relays

… for automotive applications. These relays can be used for a huge variety of typical motor applications in cars like central locking, sun roof and window control, seat memory, mirror movement, as well as lights and blinkers.

DC Relays

… miniature power relays for switching or isolating DC circuits.

Suggested Equivalent

Additional Information

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	Series	Contact Form	Contact Ratings Umax (V)	Imax continuous (A)	Pmax (VA / W)	DC coil	AC coil	DC Coil Power at Pickup (mW)	Dielectric Strength Coil / Contact (VAC)	Size L x W x H (mm)	Case Flux proof	Epoxy sealed	open	Page
Signal Relays	AZ8521 / AZ8521S	2C	250 AC	2	62.5 / 60	•		56 - 113	1600	10.0 x 6.5 x 5.4		•		8
	AZ8462 / AZ8462S	2C	250 AC	2	62.5 / 60	•		56 - 152	2000	15.2 x 7.7 x 9.2		•		8
	AZ850 / AZ851	2C	250 AC	2	62.5 / 30	•		56 - 169	1000	14.0 x 9.0 x 5.0		•		8
	AZ951 / AZ952	1C	220 AC	5	62.5 / 150	•		113 - 253	1000	15.75 x 10.75 x 11.81		•		9
	AZ9571	1C	125 AC	1	62.5 / 30	•		96 - 128	1000	12.5 x 7.5 x 10.0		•		9
	AZ822	2C	250 AC	2	125 / 60	•		73 - 174	1000	20.0 x 9.8 x 12.0		•		9
	AZ832	2C	250 AC	2	250 / 60	•		42 - 159	1500	20.2 x 10.0 x 10.65		•		9
Power Relays	AZ921	1A	250 AC	5	1250 / 150	•		59 - 88	3000	20.3 x 5.3 x 12.8		•		10
	AZ6951	1A	250 AC	5	1250 / 150	•		100	3000	18.5 x 6.5 x 12.4		•		10
	AZ9375	1A	277AC	10	1250 / 150	•		113	4000	20.5 x 7.2 x 15.3		•		10
	AZ9405	1A / 1C	277 AC	10	1400 / 150	•		113 - 297	4000	20.0 x 10.0 x 15.2	•	•		11
	AZ888	1A / 2A / 1A + 1B	380 AC	8	2000 / 500	•		96 - 152	3000	20.2 x 11.3 x 10.5	•	•		11
	AZ6991	1A / 1C	400 AC	8	2216 / 180	•		96 - 129	4000	28.0 x 5.0 x 15.0	•	•		11
	AZ770	1A / 1C	400 AC	10	2500 / 150	•		113 - 256	5000	17.85 x 10.35 x 12.95	•	•		11
	AZ7709	1A	250 AC	10	2500 / 300	•		113 - 223	4000	18.9 x 10.7 x 15.7	•	•		12
	AZ6962	1A / 1B / 1C	440 AC	10	2500 / 300	•		108 - 141	5000	28.5 x 10.1 x 12.5	•	•		12
	AZ742	2A / 2C	400 AC	10	2500 / 240	•	•	196 - 235	5000	29.0 x 12.7 x 15.7	•	•		12
	AZ743	2A / 2C	440 AC	10	2500 / 240	•	•	196 - 235	5000	29.0 x 12.7 x 15.7	•	•		13
	AZ733 / AZ733W	2A / 2C	380 AC	12	2500 / 300	•		196 - 257	5000	29.0 x 13 x 28.3	•	•		13
	AZ9403	1A / 1C	400 AC	10	2770 / 150	•		181 - 409	4000	20.5 x 10.2 x 15.3	•	•		13
	AZ943W	1A / 1C	277 AC	10	2770 / 300	•		300 - 312	1500	19.0 x 15.3 x 16.0	•	•		13
	AZ943	1A / 1C	300 AC	15	2770 / 300	•		203 - 206	1500	19.0 x 15.3 x 15.7	•	•		14
	AZ761	1A / 1B / 1C	440 AC	12	3324 / 360	•	•	141 - 235	5000	29.3 x 13.0 x 16.0	•	•		14
	AZ9322	1A / 1B / 1C	277 AC	20	4700 / 480	•		203	1500	20.5 x 16.5 x 20.2	•	•		14
	AZ7555	1A / 1C	277 AC	20	5000 / 480	•		173 - 425	5000	29.2 x 12.8 x 20.6	•	•		15
	AZ762	1A / 1C	440 AC	16	5540 / 480	•	•	141 - 235	5000	29.0 x 12.7 x 15.7	•	•		15
	AZ576	1A / 1C	480 AC	20	5540 / 510	•		196 - 226	5000	29.3 x 12.7 x 15.3	•	•		15
	AZ576P	1A / 1B / 1C	480 AC	20	5540 / 510	•		225	5000	29.3 x 12.7 x 15.3	•	•		15
	AZ7695	1A	250 AC	25	6250 / 750	•		120 - 441	5000	30.1 x 15.7 x 23.3	•	•		16
	AZ2704	1A / 2A	400 AC	30	8310 / 840	•	•	1080 - 1700	4000	50.5 x 33.5 x 36.0				16
	AZ2100	1A / 1B / 1C	277 AC	40	10000 / 600	•		470 - 500	2500	32.23 x 27.4 x 27.9	•	•		16
	AZ2150	1A / 1B / 1C	300 AC	40	10000 / 900	•		470 - 523	2500	26.9 x 31.8 x 19.1	•	•		17
	AZ2280	1A / 1B / 1C	277 AC	40	11080 / 840	•	•	470 - 500	1500	50.2 x 27.5 x 27.8	•	•		17
	AZ2800 / AZ2850	2A / 2C	600 AC	40	11080 / 1200	•	•	470 - 925	4000	59.7 x 34.5 x 26.4	•	•		17
	XMC0 Contactor	1A / 1C / 2A / 3A / 4A	600 AC	90	See datasheet		•	2800 - 9600	2500	See datasheet				17

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Wide Contact Gap Power Relays

Series	Contact Form	Contact Ratings Umax (V)	Imax continuous (A)	Pmax (VA)	DC coil	AC coil	DC Coil Power at Pickup (mW)	Dielectric Strength Coil / Contact (VAC)	Size L x W x H (mm)	Contact Gap (mm)	Page
AZ733W	2A / 2C	380 AC	12	2500	•		196 - 257	5000	29.0 x 13.0 x 28.3	1.5 or 2.0	13
AZEV116	1A + 1B	440 AC	16	6400	•		870	4000	35.0 x 16.0 x 27.9	2.25	18
AZ2704	1A / 2A	400 AC	30	8310	•	•	1080 - 1700	4000	50.5 x 33.5 x 36.0	2.4 or 3.0	16
AZ2150W	1A	440 AC	30	8310	•		623 - 625	4000	26.9 x 31.8 x 19.1	1.75	18
AZEV132	1A + 1B	440 AC	32	8864	•		870	4000	35.0 x 16.0 x 27.9	2.25	18
AZSR131	1A	277 AC	35	9695	•		681 - 792	4500	30.4 x 15.9 x 25.15	1.8 or 2.3	18
AZSR235	1A / 2A	440 AC	35	9695	•		268 - 281	5000	40.0 x 25.0 x 49.2	2.05	19
AZSR143	1A	277 AC	50	11911	•		900	4500	30.4 x 15.9 x 25.15	1.8 or 2.3	19
AZSR250	1A / 2A	440 AC	50	13850	•		268 - 281	5000	40.0 x 25.0 x 49.2	1.85	19
AZSR180	1A	440AC	80	30400	•		100 - 270	5000	40.0 x 25.0 x 49.2	2.05	20
AZSR165	1A	690 AC	80	55200	•		1227 - 1246	4000	38.0 x 33.0 x 41.5	3.6	19
AZSR190	1A	800 AC	100	69000	•		1077 - 1080	5000	38.0 x 33.0 x 43.0	3.6	20
AZSR1200	1A	920 AC	200	110400	•		1662 - 1687	4000	63.3 x 62.0 x 41.7	3.6	20

DC Relays

Automotive Relays

Series	Contact Form	Contact Ratings Umax (V)	Imax continuous (A)	Pmax (W)	DC coil	AC coil	DC Coil Power at Pickup (mW)	Dielectric Strength Coil / Contact (VAC)	Size L x W x H (mm)	Case Flux proof	Case Epoxy sealed	Case open	Page
AZDC110	1A	420 DC	16	3000	•		224 - 225	5000	29.3 x 12.7 x 19.0	•			23
AZDC6	1A / 2A	600 DC	12.5	7500			781 - 790	4000	33.9 x 30.6 x 16.0				23
AZDC105	1A	60 DC	150	9000	•		1800	4000	47.6 x 40.0 x 45.1	•			23
AZ947	1A / 1C / 1U	42 DC	20	280	•		216 - 222	500	15.7 x 12.3 x 14.0	•	•		21
AZ9871	1A / 1C / 2A / 2C	24DC	30	420	•		187 - 609	500	12.9x12.0x9.9 / 23.8x12.9x9.9	•	•		21
AZ983	1A / 1B / 1C	28 DC	80	1120	•		761	500	29.0 x 29.0 x 26.0	•(1)	•		21
AZ970E / AZ971E	1A / 1C	150 DC	40	560	•		514 - 573	500 DC	18.8 x 23.0 x 18.0	•	•	•	21
AZ9731	1A / 1C / 1U	28 DC	40	560	•	•	676	750	26.5 x 26.5 x 24.5	•(1)	•		22
AZ979 / AZ980	1A / 1B / 1C	28 DC	80	1120	•	•	676 - 761	500	29.0 x 29.0 x 26.5	•(1)	•		22
AZ9891J	1C / 2C	16DC	25	480	•		187 - 609	500	12.9x12.0x9.9 / 23.8x12.9x9.9	•	•		22
AZ977	1A / 1C	150 DC	20	280	•	•	405 - 540	1000 DC	23.0 x 15.5 x 26.0	•(1)	•		23

(1) Dust cover

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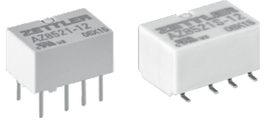

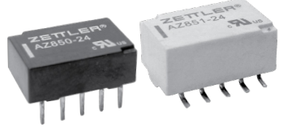



Relay Type	AZ8521 / 8521S THT SMT	AZ8462 / AZ8462S THT SMT	AZ850 / AZ851 THT SMT	AZ951 / AZ952	AZ9571	AZ822	AZ832
Features	• Contact rating: 2 x 60 W / 2 x 62.5 VA • Microminiature size • Coil power at pickup 56 - 113 mW • Bifurcated cossbar contacts • Polarized coil • Epoxy sealed	• Contact rating: 2 x 60 W / 2 x 62.5 VA • Microminiature size • Coil power at pickup 56 - 152 mW • Bifurcated cossbar contacts • Polarized coil • High temperature 105°C • Epoxy sealed	• Contact rating: 2 x 30 W / 2 x 62.5 VA • Microminiature size • Coil power at pickup 56 - 169 mW • Bifurcated cossbar contacts • Polarized coil • Epoxy sealed	• Contact rating: 150 W / 625 VA • Small size • Coil power at pickup 113 - 253 mW • Non polarized coil • Epoxy sealed	• Contact rating: 30 W / 62.5 VA • Microminiature size • Coil power at pickup 96 - 128 mW • Non polarized coil • Epoxy sealed	• Contact rating: 2 x 60 W / 2 x 125 VA • Coil power at pickup 73 - 174 mW • Bifurcated cossbar contacts • Non polarized coil • Epoxy sealed	• Contact rating: 2 x 60 W / 2 x 250 VA • Max. switching 3 A • Coil power at pickup 42 - 159 mW • Bifurcated cossbar contacts • Polarized coil • Epoxy sealed
Size L x W x H	10.0 x 6.5 x 5.4 (SMT: 5,65) mm	15.2 x 7.7 x 9.2 (SMT: 9.7) mm	14.0 x 9.0 x 5.0 (SMT: 6.2) mm	15.75 x 10.75 x 11.81 mm	12.5 x 7.5 x 10.0 mm	20.0 x 9.8 x 12.0 mm	20.2 x 10.0 x 10.65 mm
Other Versions	Latching version AZ8521P SMT version	Latching version AZ8462P SMT version	Latching version AZ850P SMT version (60W switching)	Sensitive coil version 2 pin configurations	Sensitive coil version	–	Sensitive coil version Latching version AZ832P
Contact Forms A = N.O. B = N.C. C = C.O.	2C	2C	2C	1C	1C	2C	2C
Contact Material	AgNi+Au	AgNi+Au	AgPd+Au	AgNi+Au or Ag+Au	AgNi+Au	AgPd+Au	Ag+Au against PdAg
Contact Ratings (at resistive load) max. max. max. max. max.	2 A 250 VAC 220 VDC 62.5 VA 60 W	2 A 250 VAC 220 VDC 62.5 VA 60 W	1 A switching / 2 A continuous 250 VAC 220 VDC 62.5 VA 30 W	5 A 220 VAC 60 VDC 625 VA 150 W	1 A 125 VAC 60 VDC 62.5 VA 30 W	2 A 250 VAC 220 VDC 125 VA 60 W	3 A switching / 2 A continuous 250 VAC 220 VDC 250 VA 60 W
Electrical Life Expectancy (at reated load)	1×10^5	5×10^5	2×10^5	1×10^5	1×10^5	5×10^5	1×10^5
Mechanical Life Expectancy	1×10^8	1×10^8	1×10^8	1×10^7	5×10^6	1×10^8	2×10^7
Standard Types (nominal coil voltage coil resistance)	VDC / Ω 3 / 64,3 4.5 / 145 5 / 178 6 / 257 9 / 579 12 / 1080 24 / 2880	VDC / Ω 3 / 64,3 4.5 / 145 5 / 178 6 / 257 9 / 579 12 / 1080 24 / 4114 48 / 8533	VDC / Ω 3 / 64 5 / 178 6 / 257 12 / 1028 24 / 2880	VDC / Ω std./sens. 3 / 20/45 5 / 56/120 6 / 80/180 9 / - /400 12 / 320/700 18 / -/1575 24 / 1280/2800	VDC / Ω std./sens. 3 / 45/60 5 / 125/167 6 / 180/240 9 / 405/540 12 / 720/960 24 / 2880/3840	VDC / Ω std./sens. 3 / 45/60 5 / 125/167 6 / 180/240 9 / 405/540 12 / 720/960 18 / -/1620 24 / -/2880 48 / 11520/7680	VDC / Ω std./sens. 3 / 45/- 5 / 125/167 6 / 180/240 9 / 405/540 12 / 720/960 24 / 2880/3840 48 / 11520/-
Pickup / Dropout (% of V_{nom})	≤ 75% / ≥ 10%	≤ 75% / ≥ 10%	≤ 75% / ≥ 10%	≤ 75% / ≥ 10%	≤ 80% / ≥ 10%	≤ 70% / ≥ 5%	std.: ≤ 80% / ≥ 10% sens.: ≤ 75% / ≥ 10%
Ambient Temperature	-40°C to +85°C	-40°C to +105°C	THT: -40°C to +70°C SMT: -40°C to +85°C	std.: -25°C to +55°C sens.: -25°C to	+30°C to +70°C	-55°C to +90°C	-40°C to +85°C
Dielectric Strength (coil to contacts)	1600 VAC	2000 VAC	1000 VAC	1000 VAC	1000 VAC	1000 VAC	1500 VAC
Termination	PCB	PCB	PCB	PCB	PCB	PCB	PCB
Operate / Release Time (typ. at V_{nom})	3 / 3 ms	4 / 4 ms	2 / 1 ms	5 / 1 ms	5 / 5 ms	5 / 2 ms	3 / 2 ms
Approvals	UL, CUR	UL, CUR	UL, CUR	UL, CUR	UL, CUR	UL, CUR	UL, CUR
Accessories	–	–	–	–	–	–	–
Send email with a link to the Data Sheet (or click to open)							

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Relay Type	AZ921	AZ6951	AZ9375	AZ9405	AZ888	AZ6991	AZ770
Features	• Contact rating: 5 A / 250 VAC • Extremely slim size: 5 mm • Coil power at pickup 59 - 88 mW • Clearance / creepage ≥ 3 mm • Dielectric strength 3000 VAC • Epoxy sealed version	• Contact rating: 5 A / 250 VAC • Extremely slim size: 6.5 mm • Coil power at pickup 100 mW • Dielectric strength 3000 VAC • Epoxy sealed version	• Contact rating:10A / 277 VAC • Extremely slim size: 7 mm • Coil power at pickup 113 mW • Clearance / creepage ≥ 5.5 mm • Dielectric strength 4000 VAC	• Contact rating: 5 A / 277 VAC • Small size • Coil power at pickup 113 - 297 mW • Clearance / creepage 1A: ≥ 4 / 6 mm • Clearance / creepage 1C: ≥ 3 / 5 mm • Dielectric strength 4000 VAC	• Contact rating: 8 A / 380 VAC • Coil power at pickup 96 - 192 mW • Bifurcated crossbar contacts • Polarized coil, Latching • Epoxy sealed	• Contact rating: 8 A / 277 VAC • Extremely slim size: 5 mm • Coil power at pickup 96 - 129 mW • Clearance / creepage ≥ 6 / 8 mm • Dielectric strength 4000 VAC • Reinforced insulation VDE 0631 / 0700	• Contact rating: 5 A / 250 VAC • Low profile: 12.95 mm • Coil power at pickup 113 - 256 mW • Clearance / creepage ≥ 8 mm • Dielectric strength 5000 VAC • Reinforced insulation VDE 0631 / 0700 • Epoxy sealed version • EN 60335-1 (GWT) version available
Size L x W x H	20.3 x 5.3 x 12.8 mm	18.5 x 6.5 x 12.4 mm	20.5 x 7.2 x 15.3 mm	20.0 x 10.0 x 15.2 mm	20.2 x 11.3 x 10.5 mm	28.0 x 5.0 x 15.0 mm	17.85 x 10.35 x 12.95 mm
Other Versions	2 pin configurations Horizontal version available	–	Epoxy sealed version 2 pin configurations	Epoxy sealed version	Epoxy sealed version	Epoxy sealed version Horizontal version available	10A version AZ770T Sensitive coil version, 2 pin configurations
Contact Forms A = N.O. B = N.C. C = C.O.	1A	1A	1A	1A / 1C	1A, 2A, 1A+1B	1A / 1C	1A / 1C
Contact Material	AgNi, AgNi+Au or $AgSnO_2$	$AgSnO_2$ or $AgSnO_2$+Au	AgNi, AgNi+Au, $AgSnO_2$, $AgSnO_2$+Au	$AgSnO_2$	$AgSnO_2$, $AgSnO_2$+Au	AgNi, AgNi+Au or $AgSnO_2$	AgNi, AgNi+Au or $AgSnO_2$
Contact Ratings (at resistive load) max. max. max. max. max.	5 A 250 VAC 150 VDC 1250 VA 150 W	5 A 250 VAC 30 VDC 1250 VA 150 W	10 A 277 VAC 30 VDC 1250 VA 150 W	10 A 277 VAC 30 VDC 1400 VA 150 W	8 A 380 VAC 240 VDC 2000 VA 500 W	8 A 400 VAC 125 VDC 2216 VA 180 W	10 A 400 VAC 30 VDC 2500 VA 150 W
Electrical Life Expectancy (at reated load)	1×10^5	1×10^5	1×10^5	1×10^5	1×10^6	1×10^5	1×10^5
Mechanical Life Expectancy	2×10^7	2×10^7	5×10^7	1×10^7	1×10^7	1×10^7	1×10^6
Standard Types (nominal coil voltage / coil resistance)	VDC / Ω 5 / 208 6 / 300 9 / 675 12 / 1200 18 / 2700 24 / 3200	VDC / Ω 5 / 125 12 / 720 24 / 2880	VDC / Ω 3 / 45 5 / 125 6 / 180 9 / 405 12 / 720 18 / 1620 24 / 2880	VDC / Ω std./sens. 3 / 22,5/45 5 / 63/125 6 / 90/180 9 / 202,5/400 12 / 360/720 18 / 810/1620 24 / 1440/2800 48 / 5760/-	VDC / Ω 3 / 30/60 5 / 83/167 6 / 120/240 9 / 270/540 12 / 480/960 18 / 1080/2160 24 / 1920/3840	VDC / Ω 5 / 147 12 / 848 24 / 3390 48 / 10600 60 / 16600	VDC / Ω std./sens. 3 / 20/45 5 / 55/25 6 / 80/180 9 / 180/400 12 / 320/720 18 / 720/1600 24 / 1280/2800 48 / 5120/-
Pickup / Dropout (% of V_{nom})	≤ 70% / ≥ 10%	≤ 70% / ≥ 10%	≤ 75% / ≥ 5%	std.: ≤ 70% / ≥ 10% sens.: ≤ 75% / ≥ 10%	std.: ≤ 75% / ≥ 10%	≤ 75% / ≥ 5%	≤ 75% / ≥ 5%
Ambient Temperature	-40°C to +85°C	-25°C to +70°C	-40°C to 90°C	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C
Dielectric Strength (coil to contacts)	3000 VAC	3000 VAC	4000 VAC	4000 VAC	3000 VAC	4000 VAC	5000 VAC
Termination	PCB	PCB	PCB	PCB	PCB	PCB	PCB
Operate / Release Time (typ. at V_{nom})	6 / 3 ms	6 / 3 ms	10 / 4 ms	std.: 10 / 5 ms sens.: 15 / 5 ms	5 / 3 ms	5 / 3 ms	8 / 4 ms
Approvals	TÜV, UL, CUR	UL, CUR	TUV, UL, CUR	TÜV, UL, CUR	UL, CUR	VDE, UL, CUR	VDE, UL, CUR
Accessories	–	–	–	–	–	–	–
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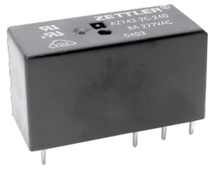


Relay Type	AZ7709	AZ6962	AZ742	AZ743	AZ733 / AZ733W	AZ9403	AZ943W
Features	• Contact rating: 5 A / 250 VAC • Coil power at pickup 113 - 223 mW • Dielectric strength 4000 VAC • 10 A – AZ 7709T	• Contact rating: 10 A / 250 VAC • Low profile: 12.5 mm • Coil power at pickup 108 - 141 mW • Clearance / creepage ≥ 10 mm • Dielectric strength 5000 VAC • Reinforced insulation VDE 0631 / 0700	• Contact rating: 2 x 10 A / 250 VAC • Low profile: 15.7 mm • Coil power at pickup 196 - 235 mW • Clearance / creepage ≥ 10 mm • Dielectric strength 5000 VAC • Reinforced insulation VDE 0631 / 0700 • AC and DC coils	• Contact rating: 2 x 10 A / 250 VAC • Low profile: 15.7 mm • Coil power at pickup 196 - 235 mW • Clearance / creepage ≥ 10 mm • Dielectric strength 5000 VAC • Reinforced insulation VDE 0631 / 0700 • AC and DC coils	• Contact rating: 12 A /380 VAC • Coil power at pickup 196 - 257 mW • Isolation spacing greater than 8mm • Dielectric strength 5000 VAC • Class F (155°C) insulation system available	• Contact rating: 10 A / 125VAC • 5 A / 277 VAC • Small size • Coil power at pickup 181 - 409 mW • Dielectric strength 4000 VAC	• Contact rating: 10 A / 277 VAC • Small size • Coil power at pickup 300 - 312 mW • Dielectric strength 1500 VAC • Wide contact gap ≥ 0.8 mm
Size L x W x H	18.9 x 10.7 x 15.7 mm	28.5 x 10.1 x 12.5 mm	29.0 x 12.7 x 15.7 mm	29.0 x 12.7 x 15.7 mm	29.0 x 13 x 28.3 mm	20.5 x 10.2 x 15.3 mm	19.0 x 15.3 x 16.0 mm
Other Versions	Epoxy sealed version Sensitive coil version	Epoxy sealed version	Epoxy sealed version	Epoxy sealed version	Epoxy sealed version	Epoxy sealed version	Epoxy sealed version
Contact Forms A = N.O. B = N.C. C = C.O.	1A	1A / 1B / 1C	2A / 2C	2A / 2C	2A / 2C	1A / 1C	1A / 1C
Contact Material	AgCdO, $AgSnO_2$, $AgSnO_2In_2O_3$ or	AgNi, AgNi+Au or $AgSnO_2$	AgNi, AgNi+Au or $AgSnO_2$	AgCdO, AgNi, AgNi+Au or $AgSnO_2$	AgCdO, AgNi, or $AgSnO_2$ +Au plated options	$AgSnO_2$	$AgSnO_2$
Contact Ratings (at resistive load)	10 A 250 VAC 30 VDC 2500 VA 300 W	10 A 440 VAC 240 VDC 2500 VA 300 W	10 A 400 VAC 300 VDC 2500 VA 240 W	10 A 440 VAC 125 VDC 2500 VA 240 W	12A 380 VAC 150 VDC 2500 VA 300 W	10 A 400 VAC 150 VDC 2770 VA 150 W	10 A 277 VAC 30 VDC 2770 VA 300 W
Electrical Life Expectancy (at reated load)	1 x 10^5	1 x 10^5	1 x 10^5	1 x 10^5	1 x 10^5	1 x 10^5	2 x 10^4
Mechanical Life Expectancy	1 x 10^7	1 x 10^7	3 x 10^7	1 x 10^7	1 x 10^7	1 x 10^7	1 x 10^6
Standard Types (nominal coil voltage / coil resistance)	VDC / Ω std./sens. 3 / 20/45 5 / 55/125 6 / 80/180 9 / 180/400 12 / 320/720 18 / 720/1600 24 / 1280/2800 48 / 5120/-	VDC / Ω 5 / 113 6 / 164 9 / 360 12 / 620 18 / 1295 24 / 2350 48 / 8000 60 / 12500	VDC / Ω / VAC / Ω/mA 5 / 60 / 12 / 100/63,0 6 / 90 / 24 / 400/31,3 9 / 200 / 48 12 / 360 / 60 24 / 1440 / 110 48 / 5700 / 120 60 / 7500 / 230 110 / 25200 / 240	VDC / Ω / VAC / Ω/mA 5 / 60 / 24 / 350/31,6 6 / 90 / 115 / 8100/6,6 9 / 200 / 230 / 32500/3,2 12 / 360 24 / 1440 48 / 5700 60 / 7500 110 / 25200	VDC / Ω 3 / 17 5 / 47 9 / 97 12 / 155 18 / 380 24 / 660 48 / 2560 110 / 13450	VDC / Ω/sens62 3 / 20/45 5 / 55/125 6 / 80/180 9 / 180/400 12 / 320/720 24 / 1280/2800 48 / 5120/-	VDC / Ω 6 / 65 12 / 270 18 / 600 24 / 1070
Pickup / Dropout (% of V_{nom})	std.: ≤ 70% / ≥ 5% sens.: ≤ 75% / ≥ 5%	≤ 70% / ≥ 10%	DC: ≤ 70% / ≥ 10% AC: ≤ 75% / ≥ 15%	DC: ≤ 70% / ≥ 10% AC: ≤ 75% / ≥ 15%	≤ 75% / ≥ 10%	≤ 75% / ≥ 5%	≤ 75% / ≥ 10%
Ambient Temperature	-40°C to +85°C	-40°C to +85°C	DC: -40°C to +85°C AC: -40°C to +70°C	DC: -40°C to +85°C AC: -40°C to +70°C	-40°C to +85°C	std.: -40°C to +70° sens.: -40°C to +85°C	-40°C to +70°C
Dielectric Strength (coil to contacts)	4000 VAC	5000 VAC	5000 VAC	5000 VAC	5000 VAC	4000 VAC	1500 VAC
Termination	PCB	PCB	PCB	PCB	PCB	PCB	PCB
Operate / Release Time (typ. at V_{nom})	8 / 4 ms	7 / 3 ms	DC: 7 / 3 ms AC: 8 / 7 ms	DC: 7 / 4 ms AC: 10 / 4 ms	8 / 5 ms	8 / 5 ms	10 / 5 ms
Approvals	TÜV, UL, CUR	VDE, UL, CUR	VDE, UL, CUR	VDE, UL, CUR	TÜV, UL, CUR	VDE, UL, CUR	UL, CUR
Accessories	–	–	–	–	–	–	–
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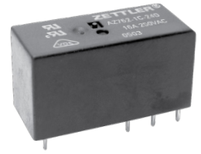
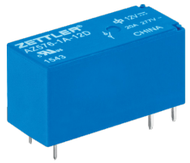


Relay Type	AZ943	AZ761	AZ9322	AZ7555	AZ762	AZ576	AZ576P
Features	• Contact rating: 10 A / 277 VAC • Small size • Coil power at pickup 203 - 206 mW • Dielectric strength 1500 VAC	• Contact rating: 12 A / 250 VAC • Low profile: 16.0 mm • Coil power at pickup 141 - 235 mW • Clearance / creepage ≥ 10 mm • Dielectric strength 5000 VAC • Reinforced insulation VDE 0631 / 0700 • AC and DC coils	• Contact rating: 15 A / 277VAC • Small size • Coil power at pickup 203 mW • Class F insulation (155°C) system available	• Contact rating: 20 A /380 VAC • Coil power at pickup 173 - 425 mW • Dielectric strength 5000 VAC • Class F (155°C) insulation system available	• Contact rating: 16 A / 250 VAC • Low profile: 15.7 mm • Coil power at pickup 141 - 235 mW • Clearance / creepage ≥ 10 mm • Dielectric strength 5000 VAC • Reinforced insulation VDE 0631 / 0700 • AC and DC coils	• Contact rating: 20 A / 277 VAC • Low profile: 15,3 mm • Coil power at pickup 196 - 226 mW • Dielectric strength 5000 VAC • High temperature 105°C	• Contact rating: 20 A / 480 VAC • Low profile: 15.3 mm • Coil power at pickup 225 mW • Dielectric strength 5000 VAC • High temperature 155°C
Size L x W x H	19.0 x 15.3 x 15.7 mm	29.3 x 13.0 x 16.0 mm	20.5 x 16.5 x 20.2 mm	29.2 x 12.8 x 20.6 mm	29.0 x 12.7 x 15.7 mm	29.3 x 12.7 x 15.3 mm	29.3 x 12.7 x 15.3 mm
Other Versions	Epoxy sealed version	Epoxy sealed version Sensitive coil version	Epoxy sealed version	Epoxy sealed version	Epoxy sealed version High inrush version 80 A (1 Form A only)	Epoxy sealed version	Epoxy sealed version
Contact Forms A = N.O. B = N.C. C = C.O.	1A / 1C	1A / 1B / 1C	1A / 1B / 1C	1A / 1C	1A / 1C	1A / 1C	1A / 1B / 1C
Contact Material	$AgSnO_2$	AgCdO, AgNi, AgNi+Au or $AgSnO_2$	$AgSnO_2$, AgSnO+Au	AgCdO, AgNi, or $AgSnO_2$+Au plated options	AgCdO, AgNi, AgNi+Au or $AgSnO_2$	$AgSnO_2$	$AgSnO_2$
Contact Ratings (at resistive load) max. max. max. max. max.	15 A 300 VAC 30 VDC 2770 VA 300 W	12 A 440 VAC 125 VDC 3324 VA 360 W	15 A (AC), 8A (DC) 277 VAC 30 VDC 1800 VA 210 W	20 A 227 VAC 30 VDC 5000 VA 480 W	16 A 440 VAC 125 VDC 5540 VA 480 W	20 A 480 VAC 30 VDC 5540 VAC 510 W	20 A 480 VAC 30 VDC 5540 VA 510 W
Electrical Life Expectancy (at reated load)	1×10^5	1×10^5	1×10^5	7×10^4	1×10^5	1×10^5	1×10^6
Mechanical Life Expectancy	1×10^6	1×10^7	1×10^7	1×10^7	1×10^7	1×10^7	1×10^7
Standard Types (nominal coil voltage coil resistance)	VDC / Ω 5 / 70 6 / 100 9 / 225 12 / 400 18 / 900 24 / 1600 36 / 3600 48 / 6400	VDC / Ω std./sens. 5 / 62/100 6 / 90/144 9 / 200/576 12 / 360/1296 24 / 1440/2304 48 / 5760/9216 60 / 7500/12867 110 / 25200/-	VDC / Ω 3 / 25 5 / 70 6 / 100 9 / 225 12 / 400 18 / 900 24 / 1600 48 / 4500	VDC / ΩStd./Sen/Super Sen. 3 / 13/17/- 5 / 36/48.5/208 9 / 115/155/675 12 / 200/270/1200 18 / 450/600/2700 24 / 820/1100/4800 48 / 3300/4400/19200 110 / -	VDC / Ω / VAC / Ω/mA 5 / 62 / 24 / 350/31,6 6 / 90 / 115 / 8100/6,6 9 / 200 / 230 12 / 360 24 / 1440 48 / 5760 60 / 7500 110 / 25200	VDC / Ω 5 / 62,5 6 / 90 9 / 202,5 12 / 360 24 / 1440 48 / 5760 60 / 9000 110 / 30250	VDC / Ω 5 / 62,5 6 / 90 9 / 202,5 12 / 360 24 / 1440 48 / 5760
Pickup / Dropout (% of V_{nom})	≤ 75% / ≥ 10%	std.: ≤ 70% / ≥ 10% sens.: ≤ 75% / ≥ 10%	≤ 75% / ≥ 10%	≤ 75% / ≥ 10%	≤ 70% / ≥ 10%	≤ 75% / ≥ 10%	≤ 75% / ≥ 10%
Ambient Temperature	-40°C to +85°C	std.: -40°C to +85°C sens.: -40°C to	-40°C to +105°C	-40°C to +85°C	DC: -40°C to +85°C AC: -40°C to +70°C	-40°C to +105°C	-40°C to +105°C
Dielectric Strength (coil to contacts)	1500 VAC	5000 VAC	5000 VAC	5000 VAC	5000 VAC	5000 VAC	5000 VAC
Termination	PCB	PCB	PCB	PCB	PCB	PCB	PCB
Operate / Release Time (typ. at V_{nom})	10 / 5 ms	7 / 3 ms	8 / 3 ms	DC: 7 / 3 ms AC: 8 / 7 ms	15 / 8 ms	8 / 4 ms	10 / 10 ms
Approvals	VDE, TÜV, UL, CUR	UL, CUR	PENDING	UL, CUR	VDE, UL, CUR	TÜV, UL, CUR	UL, CUR
Accessories	–	–	–	–	–	–	–
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Power Relays

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Relay Type	AZ7695	AZ2704	AZ2100	AZ2150	AZ2280	AZ2800/AZ2850	XMC0
Features	• Contact rating: 25 A / 250 VAC • Coil power at holding 120 - 441 mW • Class F (155°C) insulation available • 80 Amp inrush current • Short Circuit Rating 5000 A rms, 250 VA	• Contact rating: 30 A / 400VAC or 150VDC • 900 Amp short circuit current (carrying) • Coil power at pickup 1.8W • Standard 2.4mm contact gap • Wide 3.0mm contact gap available • Class F insulation available	• Contact rating: 40 A / 277 VAC • Coil power at holding 470 - 500 mW • Dielectric strength 2500 VAC • Class F (155°C) version available • Proof Tracking Index (PTI/CTI) 175	• Contact rating: 30 A / 240 VAC • Coil power at holding 470 - 523 mW • Dielectric strength 2500 VAC	• Contact rating: 40 A / 277 VAC • Coil power at holding 470 - 500 mW • Class F (155°C) version available • AC and DC coils available • Quick-connect leads for contacts /coil	• Contact rating: 40 A / 600 VAC • Coil power at holding 470 - 925 mW • Dielectric strength 4000 VAC • Class F (155°C) • AC and DC coils available • AZ2800 Quick-connect • AZ2850 PCB terminals	• Contact ratings up to: 90FL A / 600 VAC • SCCR 100kA, 600VAC • Auxiliary contacts and micro switches • Heavy-duty contacts • Dust-free internal construction • DIN rail and PCB socket accessories
Size L x W x H	30.1 x 15.7 x 23.3 mm	50.5 x 33.5 x 36.0 mm	32.23 x 27.4 x 27.9 mm	31.8 x 26.9 x 19.1 mm	50.2 x 27.5 x 27.8 mm	59.7 x 34.5 x 26.4 mm	Standard, See Datasheet
Other Versions	-	-	Epoxy sealed version	Epoxy sealed version	Epoxy sealed IP67 approved versions	Epoxy sealed version	–
Contact Forms A = N.O. B = N.C. C = C.O.	1A	1X / 2X	1A / 1B / 1C	1A / 1B / 1C	1A / 1B / 1C	2A / 2C	1P, 2P, 3P, 4P, and 1P w/Shunt
Contact Material	$AgSnO_2$	$AgSnO_2$, AgSnO+Au	AgCdO, $AgSnO_2$	AgCdO, $AgSnO_2$	AgCdO, $AgSnO_2$	$AgCdO_2$, $AgSnO_2$	AgCdO, $AgSnO_2$
Contact Ratings (at resistive load) max. max. max. max. max.	25 A 250 VAC 30 VDC 6250 VA 750 W	30 A 400 VAC 150 VDC 8310 VA 840 W	40 A 227 VAC 30 VDC 10000 VA 900 W	40 A (N.O.), 30 A (N.C.) 300 VAC 30 VDC 10000 VA 900 W	40 A 227 VAC 28 VDC 11080 VA 840 W	40 A 600 VAC 30 VDC 1180 VA 1200 W	12 A 400 VAC 300 VDC 3000 VA 360 W
Electrical Life Expectancy (at reated load)	1×10^6	1×10^5	1×10^5	1×10^5	1×10^5	1×10^5	2.5×10^5
Mechanical Life Expectancy	1×10^7	1×10^6	1×10^7	1×10^7	1×10^7	1×10^7	1×10^7
Standard Types (nominal coil voltage / coil resistance)	VDC / Ω 5 / 29 6 / 40 9 / 90 12 / 160 18 / 360 24 / 640 48 / 2560	VDC/VAC / Ω 3/6 / 25/19 6/12 / 70/75 12/24 / 100/300 24/48 / 225/1200 48/120 / 400/5217 100/220 / 900/22000 110/240 / 1600/26667 200/- / 4500/-	VDC / Ω 5 / 27 6 / 40 9 / 97 12 / 155 18 / 380 24 / 660 48 / 2560 110 / 13450	VDC / Ω 5 / 27 6 / 40 9 / 97 12 / 155 18 / 380 24 / 660 48 / 2560 110 / 13450	VDC/VAC / Ω std./sens. 5/12 / 27/25 6/24 / 40/100 9/120 / 95/2500 12/208 / 155/11000 18/240 / 380/13490 24/277 / 660/15000 48/- / 2560/- 110/- / 13450/-	VDC/VAC / Ω 5/12 / 15.3/8 6/24 / 22/35.7 12/120 / 86/830 24/220 / 350/2870 48/240 / 1390/3800 110/227 / 7255/4700	See datasheet for coil data
Pickup / Dropout (% of V_{nom})	≤ 75% / ≥ 10%	≤ 75% / ≥ 5%	≤ 75% / ≥ 10%	≤ 75% / ≥ 10%	≤ 75% / ≥ 10%	≤ 75% / ≥ 10%	≤ 80% / ≥ 20%
Ambient Temperature	-55°C to +85°C	-40°C to +70°C	-55°C to +105°C	-55°C to +85°C	-55°C to +80°C	-55°C to +85°C	25°C to 70°C
Dielectric Strength (coil to contacts)	5000 VAC	4000 VAC	2500 VAC	2500 VAC	2500 VAC	4000 VAC	2500 VAC
Termination	PCB/QC	PCB	PCB	PCB	PCB	PCB/QC	Metal Plate std.
Operate / Release Time (typ. at V_{nom})	20 / 10 ms	30 / 30 ms	15 / 10 ms	8 / 3.5 ms	15 / 10 ms	15 / 10 ms	Vertical and Horizontal mounting
Approvals	TUV, UL, CUR	TUV, UL, CUR	VDE, UL, CUR	VDE, UL, CUR	VDE, UL, CUR	VDE, UL, CUR	UL, CUR
Accessories	–	–	–	–	–	–	Auxiliary contacts and micro switches
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Wide Contact Gap Power Relays

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Relay Type	AZEV116 / AZEV132	AZ2150W	AZSR131
Features	• Contact rating: 32 A / 440 VAC • Contact gap: ≥ 2.25 mm • Coil power at pickup 190 mW • Dielectric strength 4000 VAC • Short cirsuit carrying capability 1500 A • Flux proof	• Contact rating: 30 A / 277 VAC • Contact gap ≥ 1.75 mm • Coil power at holding 277 mW • Clearance / creepage ≥ 3 mm • Dielectric strength 4000 VAC	• Contact rating: 35 A / 277 VAC • Contact gap: ≥ 1.8 mm • Coil power at holding ≥ 172 mW • Dielectric strength 4500 VAC • Flux proof
Size L x W x H	35.0 x 16.0 x 27.9 mm	31.8 x 26.9 x 19.1 mm	30.4 x 15.9 x 25.15 mm
Other Versions	AZEV116: 16 A version	Epoxy sealed version	Contact gap (200) version: ≥ 2.3 mm
Contact Forms A = N.O. B = N.C. C = C.O.	1A + 1B	1A	1A
Contact Material	$AgSnO_2$+$AgSnO_2$+Au	$AgSnO_2$	$AgSnO_2$
Contact Ratings (at resistive load) max. max. max. max. max.	32 A 440 VAC 30 VDC 8864 VA 960 W	30 A 440 VAC 250 VDC 8310 VA 900 W	35 A 277 VAC 9695 VA
Electrical Life Expectancy (at reated load) Mechanical Life Expectancy	3×10^4 1×10^5	3×10^4 2×10^5	3×10^4 3×10^5
Standard Types (nominal coil voltage coil resistance)	VDC / Ω 12 / 93	VDC / Ω 5 / 22,5 6 / 32,5 9 / 73 12 / 130 24 / 520 48 / 2080	VDC / Ω 5 / 18 9 / 58 12 / 103 18 / 230 24 / 410 48 / 1650
Pickup / Dropout (% of V_{nom})	≤ 75% / ≥ 5%	≤ 75% / ≥ 10%	≤ 70% / ≥ 5%
Ambient Temperature	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C
Dielectric Strength (coil to contacts)	4000 VAC	4000 VAC	4500 VAC
Termination	PCB	PCB	PCB
Operate / Release Time (typ. at V_{nom})	30 / 10 ms	15 / 10 ms	20 / 10 ms
Approvals	TÜV, UL, CUR, CQC	VDE, UL, CUR	TÜV, UL, CUR
Accessories	–	–	–
Send email with a link to the Data Sheet (or click to open)			

Relay Type	AZ21501	AZSR143	AZSR235 / AZSR250	AZSR165
Features	• Contact rating: 50 A / 250 VAC • Coil power at holding 842 - 843 mW • Dielectric strength 4000 VAC	• Contact rating: 43 A / 277 VAC • 50A contact ratings available • Contact gap: ≥ 1.8 mm • Coil power at holding ≥ 196 mW • Dielectric strength 4500 VAC • 10kV Surge • Flux proof	• Contact rating: 2 x 50 A / 250 VAC • Contact gap: AZ SR235 →2 x 2.05 mm • Contact gap: AZ SR250 →2 x 1.85 mm • Coil power at holding 54 - 95 mW • Clearance / creepage ≥ 10 mm • Dielectric strength 5000 VAC • Flux proof	• Contact rating: 80 A / 540 VAC • Contact gap: ≥ 3.0 mm • Coil power at holding 351 - 355 mW • Dielectric strength 4000 VAC • Flux proof
Size L x W x H	31.8 x 26.9 x 19.1 mm	35.0 x 16.0 x 27.9 mm	40.0 x 25.0 x 49.2 mm	38.0 x 33.0 x 41.5 mm
Other Versions	Epoxy sealed version	Contact gap (200) version: ≥ 2.0 mm	AZSR235 / AZSR250: 2 x 35 A / 50 A	–
Contact Forms A = N.O. B = N.C. C = C.O.	1A / 1B / 1C	1A	1A / 2A	1A
Contact Material	$AgSnO_2$	$AgSnO_2$	$AgSnO_2$	AgNi, $AgSnO_2$
Contact Ratings (at resistive load) max. max. max. max. max.	50 A 300 VAC 30 VDC 12000 VA 1500 W	50 A 277 VAC 13850 VA	50 A 440 VAC 150 VDC 13850 VA 1500 W	80 A 690 VAC 43200 VA
Electrical Life Expectancy (at reated load) Mechanical Life Expectancy	1×10^4 1×10^7	3×10^4 1×10^5	5×10^4 1×10^6	1×10^3 1×10^6
Standard Types (nominal coil voltage coil resistance)	VDC / Ω 5 / 16,7 6 / 24 9 / 54 12 / 96 18 / 216 24 / 384 48 / 1536 110 / 8067	VDC / Ω 5 / 15.5 9 / 50.5 12 / 90.0 18 / 202.5 24 / 360 48 / 1440	VDC / Ω 5 / 50 9 / 170 12 / 300 18 / 675 24 / 1200	VDC / Ω 6 / 16,2 9 / 36,8 12 / 65 24 / 262
Pickup / Dropout (% of V_{nom})	≤ 75% / ≥ 10%	≤ 75% / ≥ 5%	≤ 75% / ≥ 5%	≤ 75% / ≥ 5%
Ambient Temperature	-55°C to +85°C	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C
Dielectric Strength (coil to contacts)	4000 VAC	4500 VAC	5000 VAC	4000 VAC
Termination	PCB	PCB	PCB	PCB
Operate / Release Time (typ. at V_{nom})	15 / 10 ms	20 / 10 ms	40 / 5 ms	40 / 10 ms
Approvals	UL, CUR	TÜV, UL, CUR	VDE, UL, CUR	TÜV, UL, CUR
Accessories	–	–	–	–

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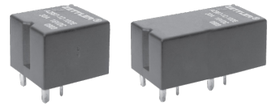
Wide Contact Gap Power Relays

Relay Type	AZSR180	AZSR190	AZSR1160/180/200
Features	• Contact rating: 80 A / 440 VAC • Contact gap: ≥ 2.05 mm • Coil power at holding 100 - 270 mW • Isolation spacing greater than 10 mm • Dielectric strength 5000 VAC • Flux proof	• Contact rating: 90 A / 480 VAC • Contact gap: ≥ 3.6 mm • Coil power at holding 306 - 307 mW • Dielectric strength 5000 VAC • Flux proof	• Contact rating: 160 A / 690 VAC • Contact gap: ≥ 3.15 mm • Coil power at holding 480 mW • Dielectric strength 4000 VAC • Flux proof
Size L x W x H	40.0 x 25.0 x 49.2 mm	38.0 x 33.0 x 43.0 mm	63.3 x 62.0 x 41.7 mm
Other Versions	–	AZSR190T: 100 A Lower profile 41.5 mm height option	Contact gap (200) version: ≥ 3.6 mm
Contact Forms A = N.O. B = N.C. C = C.O.	1A	1A	1A
Contact Material	$AgSnO_2$	AgNi, $AgSnO_2$	AgNi, $AgSnO_2$
Contact Ratings (at resistive load) max. max. max. max. max.	80 A 440 VAC 150 VDC 21160 VA 2400 W	100 A 800 VAC 44000 VA	160 A 690 VAC 110400 VA
Electrical Life Expectancy (at reated load) Mechanical Life Expectancy	1×10^4 1 x 10	1×10^3 1×10^6	1×10^3 1×10^6
Standard Types (nominal coil voltage coil resistance)	VDC / Ω 12 / 300 24 / 1200	VDC / Ω 5 / 18,8 9 / 42,2 12 / 75 24 / 300	VDC / Ω 6 / 12 9 / 27 12 / 48 24 / 192
Pickup / Dropout (% of V_{nom})	≤ 75% / ≥ 5%	≤ 75% / ≥ 10%	≤ 75% / ≥ 5%
Ambient Temperature	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C
Dielectric Strength (coil to contacts)	5000 VAC	5000 VAC	4000 VAC
Termination	PCB	PCB	PCB
Operate / Release Time (typ. at V_{nom})	40 / 5 ms	40 / 10 ms	40 / 15 ms
Approvals	VDE, UL, CUR	TÜV, UL, CUR	TÜV, UL, CUR
Accessories	–	–	–
Send email with a link to the Data Sheet (or click to open)			

Automotive Relays



	AZ947	AZ9871	AZ983	AZ970E / AZ971E open version covered version
Features	• Contact rating: 20 A / 14 VDC • Subminiature size • Coil power at pickup 216 - 222 mW	• Contact rating: 30 A / 14 VDC • Coil power at pickup 187 - 609 mW • Single or double relay • Epoxy sealed	• Contact rating: 80 A / 14 VDC • PCB version • Coil power at pickup 761 mW	• Contact rating: 40 A / 14 VDC • Coil power at pickup 514 - 573 mW • Open, covered or sealed • European footprint
Size L x W x H	15.7 x 12.3 x 14.0 mm	12.9 x 12.0 x 9.9 / 23.8 x 12.9 x 9.9 mm	29.0 x 29.0 x 26.5 mm	23.0 x 18.8 x 18.0 / 26.2 x 21.1 x 21.1 mm
Other Versions	Epoxy sealed version	–	Diode or resistor across coil Epoxy sealed version	AZ970E: open, AZ971E: covered Epoxy sealed version
Contact Forms A = N.O. B = N.C. C = C.O.	1A / 1C / 1U	1A / 1C / 2A / 2C	1A / 1B / 1C	1A / 1C
Contact Material	$AgSnO_2$	$AgSnO_2$	$AgSnO_2$	$AgSnO_2$
Contact Ratings (at resistive load) max. max. max. max. max.	20 A (N.O.) / 6 A (N.C.) 250 VAC 42 VDC 1250 VA 280 W	30 A 24 VDC 420 W	80 A (1 Form A) 60 A (1 Form C / B) 28 VDC 1120 W (1 Form A) 840 W (1 Form C / B)	40 A (1 Form A) 30 A (1 Form C / B) 150 VDC 560 W (1 Form A) 420 W (1 Form C / B)
Electrical Life Expectancy (at reated load) Mechanical Life Expectancy	1×10^5 1×10^7	1×10^5 1×10^7	1×10^5 1×10^7	1×10^5 5×10^6
Standard Types (nominal coil voltage coil resistance)	VDC / Ω 6 / 60 9 / 135 12 / 240 24 / 960	VDC / Ω 10 / 181 12 / 254 24 / 1010	VDC / Ω 6 / 20 12 / 80 24 / 320	VDC / Ω 6 / 19 9 / 50 12 / 90 24 / 362
Pickup / Dropout (% of V_{nom})	≤ 60% / ≥ 5%	≤ 57% / ≥ 12%	≤ 65% / ≥ 10%	≤ 57% / ≥ 6%
Ambient Temperature	-40°C to +85°C	-40°C to +105°C	-40°C to +85°C	-40°C to +105°C
Dielectric Strength (coil to contacts)	500 VAC	500 VAC	500 VAC	500 VDC
Termination	PCB	PCB	PCB	PCB
Operate / Release Time (typ. at V_{nom})	10 / 5 ms	3 / 1.5 ms	7 / 5 ms	5 / 3 ms
Approvals	–	–	–	–
Accessories	–	–	–	–

ZETTLER

Automotive Relays

Relay Type	AZ9731	AZ979 / AZ980 flange mounting plug in	AZ9891J
Features	• Contact rating: 40 A / 14 VDC • Quick connect or plug in version • Coil power at pickup 676 mW	• Contact rating: 80 A / 14 VDC • Quick connect or plug in version • Coil power at pickup 676 - 761 mW	• Contact rating: 30 A / 16 VDC • Coil power at pickup 180 - 194 mW • Single or double relay • Epoxy sealed
Size L x W x H	26.5 x 26.5 x 36.0 mm	29.0 x 29.0 x 26.5 mm	14.3 x 7.5 x 13.8 / 14.3 x 15.7 x 13.8 mm
Other Versions	Diode or resistor across coil Epoxy sealed version (shrouded cover)	Diode or resistor across coil Epoxy sealed version	–
Contact Forms A = N.O. B = N.C. C = C.O.	1A / 1B / 1C / 1U	1A / 1B / C	1C / 2C
Contact Material	$AgSnO_2$	$AgSnO_2$	$AgSnO_2$
Contact Ratings (at resistive load) max. max. max. max. max.	40 A 28 VDC 560 W	80 A (1 Form A) 60 A (1 Form C / B) 28 VDC 1120 W (1 Form A) 840 W (1 Form C / B)	30 A 16 VDC 480 W
Electrical Life Expectancy (at reated load)	1×10^5	1×10^5	3×10^5
Mechanical Life Expectancy	1×10^7	1×10^7	3×10^6
Standard Types (nominal coil voltage coil resistance)	VDC / Ω 6 / 22,5 12 / 90 24 / 360	VDC / Ω 6 / 20 12 / 90 24 / 360	VDC / Ω 6 / 63 12 / 181 24 / 254
Pickup / Dropout (% of V_{nom})	≤ 65% / ≥ 10%	≤ 65% / ≥ 10%	≤ 60% / ≥ 12%
Ambient Temperature	-40°C to +125°C	-40°C to +85°C	-40°C to +105°C
Dielectric Strength (coil to contacts)	750 VAC	500 VAC	500 VAC
Termination	Quick connect or plug in	Quick connect or plug in	PCB
Operate / Release Time (typ. at V_{nom})	7 / 5 ms	7 / 5 ms	10 / 10ms
Approvals	–	–	–
Accessories	ST9721 Sockets	ST980 Sockets	–
Send email with a link to the Data Sheet (or click to open)			

DC Relays

AZ977	AZDC110	AZDC6	AZDC105
• Contact rating: 20 A • Small size • Coil power at pickup 430 - 530 mW • Plug in relay • Dust cover	• Contact rating: 16 A / 180 VDC 10 A / 300 VDC 5 A / 420 VDC 16 A / 300 VAC • Coil power at pickup 224 - 225 mW • Dielectric strength 5000 VAC • Flux proof	• Contact rating: 12.5 A / 600 VDC • Coil power at holding ≥ 222 mW • Dielectric strength 4000 VAC • 6kV surge	• Contact rating: 150 A / 60 VDC • Contact gap: ≥ 3.0 mm • Coil power at pickup 224 - 225 mW • Dielectric strength 4000 VAC • Flux proof
23.0 x 15.5 x 26.0 mm	29.3 x 12.7 x 19.0 mm	33.9 x 30.6 x 16.0	38.0 x 33.0 x 43.0 mm
Diode or resistor across coil Sensitive coil version	–		–
1A / 1C	1A	1A / 2A	1A
$AgSnO_2$	$AgSnO_2$	$AgSnO_2$	$AgSnO_2$
20 A 150 VDC 280 W	16 A 300 VAC 420 VDC 4800 VA 3000 W	12.5 A 600 VDC 7500 W	150 A 60 VDC 9000 W
1×10^5	3×10^4	6×10^3	1×10^3
1×10^6	3×10^7	1×10^5	1×10^6
VDC / Ω std./sens. 6 / 25/32 12 / 97/123 24 / 384/483	VDC / Ω 5 / 62,5 6 / 90 9 / 203 12 / 360 18 / 810 24 / 1440	VDC / Ω 5 / 18 9 / 58 12 / 103 24 / 410 48 / 1650	VDC / Ω 12 / 45 24 / 180 48 / 720
≤ 60% / ≥ 8%	≤ 70% / ≥ 5%	≤ 75% / ≥ 5%	≤ 75% / ≥ 5%
-40°C to +85°C	-40°C to +105°C	-40°C to +90°C	-40°C to +85°C
1000 VDC	5000 VAC	4000 VAC	4000 VAC
Plug in	PCB	PCB	PCB
10 / 7 ms	10 / 5 ms	30 / 10 ms	30 / 10 ms
–	TÜV, UL, CUR	CUR	TÜV, UL, CUR
ST977 Sockets	–	–	–

Suggested Equivalent

Panasonic NAIS (Aromat)	ZETTLER
AEP	AZHVDC
AGQ	AZ852/AZ8521
ALD	AZ9375
ALF	AZ697/AZ6975
ALZ	AZ762/AZ576
DK/DSP	AZ880/AZ888
CB 40 amp	AZ973/AZ974 AZ9731/AZ9741
CJ	AZ989/AZ9891J
CM	AZ988
CT5	AZ921/AZ9891J
DS2	AZ830/AZ83
DS2 Latching	AZ830P/AZ832P
DS2Y	AZ830/AZ832
HD	AZ955/AZ957/AZ9571
HC/HJ/HL	AZ164/AZ164 AZ165/AZ1651/AZ1661
K 4-Pol	AZ421/AZ429
K 6-Pol	AZ431/AZ439
LF-G	AZSR126
JJM	AZ947/AZ9471
JQ	AZ940/AZ9405
JR	AZ755/AZ7555
JS	AZ942/AZ943/AZ942H
JSM	AZ9421A
JT-G	AZ2150W
JTN/JTV	AZ2110/AZ21101/AZ2210 AZ2210 AZ2150/AZ21501 AZ2250
JTN1	AZ2270
JV	AZ9481
JW1	AZ755/7555/AZ576 AZ761/AZ762
JW2	AZ733/AZ743/AZ7335
LD	AZ921
LK	AZ673
PA	AZ921
PC1	AZ987/AZ9871
PE/PF	AZ6991
PQ	AZ940/AZ9405
SW2-DIE	SGC-4F
TQ2	AZ847/AZ850 AZ851/AZ8512
TW	AZ8462
TX2	AZ8462

Fujitsu-Takamisawa	ZETTLER
A	AZ850/AZ851/AZ8512
FBR1	AZ8462
FBR51	AZ947/AZ9471
FBR160	AZ942/AZ943/AZ942H
FBR210	AZ951/AZ952/ AZ954X
FBR240	AZ822/AZ8222
FBR610–K	AZ755/AZ7555
FBR610	AZ697/AZ6975
FBR620	AZ733/AZ743/AZ7335
FRL	AZ971/AZ9711
FTR-B3	AZ852/AZ8521
FRT-C1	AZ8462
FTR-F1	AZ742/AZ743
FTR-F4G	AZ733W
FTR-H1	AZ761/AZ576
FTR-K1	AZ762/AZ576
FTR-K3	AZSR126
FTR-P2	AZ921/AZ9891J
FTR-LY	AZ6991
JS	AZ696/AZ6961/AZ6962
LZ	AZ8/AZ8A
MZ	AZ8/AZ8A
NA	AZ8462
NY	AZ921
RA	AZ822/AZ8222/AZ832
RY	AZ822/AZ8222/AZ832
SY	AZ951Y/AZ955/AZ957/AZ9571
VS	AZ697/AZ6975/AZ761/AZ762/AZ576

Hasco	ZETTLER
2KLT	AZ945
BAS-111	AZ952/AZ954X
BAS-511	AZ952/AZ954X
CAR	AZ973/AZ9731
CAS212	AZ822/AZ8222
HAS-115	AZ822/AZ8222
HAS-211	AZ952
HAS-212	AZ822/AZ8222/AZ830/AZ832
HAT-901	AZ2150/AZ21501/AZ2151
HAT-904	AZ2800/AZ2850
HBS	AZ957/AZ9571
HPR	AZ940/AZ9405
KLT	AZ942/AZ943/AZ942H
KSD	AZ946
MHR	AZ9481
SLT	AZ947/AZ9471
SSD	AZ8/AZ8A
T	AZ850/AZ850P

Suggested Equivalent

Magnecraft (MSD)	ZETTLER
Class 76/277	AZ697/AZ6975/AZ761/AZ762/AZ576/ AZ733/AZ743/AZ7335/AZ755/AZ7555
Class 78	AZ164/AZ1641 AZ165/AZ1651
Class 90	AZ2110/AZ21101/AZ2120/AZ2150/ AZ21501
Class 91	AZ2100/AZ21001 AZ2280/AZ22801
Class 92	AZ2800/AZ2850
Class 178	AZ942/AZ943/AZ942H
Class199/MGN	AZPRD
Class 272	AZ822/AZ8222
Class 232	AZ951/AZ952/AZ954X
Class 270	AZ942/AZ943
Class 281	AZ164/AZ1641 AZ165/AZ1651
Class 283	AZKUP
Class 725	AZ2700

Omron	ZETTLER
G2R	AZ755/AZ7555
G2RK	AZ762P
G2RL	AZ742/AZ743/AZ576 AZ761/AZ762
G4A	AZ769/AZ7695
G5C	AZ9481
G5L/LE	AZ942H/AZ943
G5N	AZ6951
G5Q	AZ9403
G5V-1	AZ955/AZ957/AZ9571
G5V-2	AZ822/AZ8222
G6A	AZ830/AZ832/AZ830P/AZ832P
G6B/C	AZ888
G6D	AZ6951
G6H	AZ850/AZ851/AZ8512/AZ8521
G6K	AZ852/AZ8512
G6R	AZ696/AZ6961/AZ6962
G6S	AZ8462
G7L	AZ2700
G8H	AZ988
G8J	AZ974/AZ9741
G8JN	AZ973/AZ9731
G8JR	AZ979/AZ980
G8N	AZ989/AZ9891J
G8P	AZ2110/AZ21101/AZ2111/AZ2270/ AZ2280/AZ22801/AZ2150/AZ21501/
G8PE	AZ2150W
G8PT	AZ987/AZ9871
G8QN	AZ2151/AZ21501
G8SN	AZ9471
G8W	AZ9421A
G8V	AZ986
G9E	AZ984/AZ9841
LY/MY	AZHVDC
MHQ	AZ164/AZ1641/AZ165/AZ1651/AZ1661 AZ2429

OEG	ZETTLER
OJ/OJE	AZ770/AZ7705/AZ7709
OMI/OMIH	AZ755/AZ7555 AZ761/AZ762/AZ576
OMIT	AZ697/AZ6975
ORW	AZ942/AZ943/AZ942H
ORWH/PCE	AZ932
ORZ	AZ828/AZ8222 AZ830/AZ832
OSA	AZ673
OUA/OUAT	AZ951/AZ954X/AZ952
OUAZ	AZ951/AZ954X/AZ952
OUDT/OUDTM	AZ8/AZ8A
OUDE	AZ8/AZ8A
OZ	AZ755/AZ7555 AZ762/AZ576
OZF	AZ756
PCD	AZ9481
SRET	AZ164/AZ1641/AZ165/AZ1651/AZ1661
SRW	AZ942/AZ943/AZ942H
SRU/SRUT	AZ942/AZ943

Schrack	ZETTLER
RP	AZ697/AZ6975/AZ733/AZ743/AZ7335/ AZ761/AZ762/AZ576/AZ763/AZ76
RS	AZ822/AZ8222 AZ830/AZ832 AZ830P/ AZ832P
RT1	AZ762/AZ762P/AZ576
RT2/RTD/RTE	AZ742/AZ743/AZ761/AZ762
RY	AZ696/AZ6961/AZ6962
SNR	AZ6991
TD	AZ2110/AZ21101/AZ2111/AZ2150/ AZ21501/AZ2151
TE	AZ2100/AZ21001/AZ2280/AZ22801
TF	AZ942/AZ943/AZ942H
TN	AZ942/AZ943
TP	AZ8/AZ8A
ZD	AZ2110/AZ21101/AZ2111/AZ2150/ AZ21501/AZ2151
ZF	AZ942/AZ94

Sanyou	ZETTLER
DSY2Y	AZ822/AZ8222
SARL	AZ973/AZ9731
SARS	AZ988
SFK	AZ769/AZ7695
SJ	AZ770/AZ7705/AZ7709
SLA	AZ2150/AZ21501
SLC	AZ2100/AZ21001
SMA	AZ673
SME/SMET	AZ164/AZ1641/AZ165/AZ1651/AZ1661
SRB	AZ9375
SRD/SRDH	AZ942/AZ943
SYS1K	AZ954X/AZ952
SYS1	AZ954X/AZ952

Suggested Equivalent

Song Chuan	ZETTLER
109	AZ989/AZ9891J
110	AZSR126
202/202HT	AZ9375
207/875	GP10
301	AZ984/AZ9841
303	AZ992
307/899	AZ943
507/888H	AZ761/AZ762/AZ576/AZ742/AZ743
731/	AZKUP
792	AZ973/AZ9731
792H	AZ973/AZ9731
793	AZ697/AZ6975/AZ755/AZ7555/AZ733/ AZ7335
801H/A	AZ942/AZ943
812H	AZ932/AZ943/AZ942H
812HM	AZ9421A
821	AZ769/AZ7695
822	AZ970/AZ9701/AZ971/AZ9711
832A	AZ2150/AZ21501
833H	AZ942/AZ942H/AZ943
834	AZ766
835	AZ770/AZ7705/AZ7709
841	AZ2702
842	AZ954X/AZ952
842A	AZ954X/AZ952
845	AZ742/AZ743/AZ761/AZ762/AZ576
855AWP	AZ2270/AZ2280
861	AZ975/AZ9751/AZ976/AZ9761
871	AZ988
882	AZ6991
892/892H	AZ940/AZ9405
895	AZ2100/AZ21001
896	AZ9731
897	AZ979/AZ980
898	AZ986
SCL/SCL-1	AZ164/AZ1641/AZ165/AZ1651
SCLA	AZ164/AZ1641/AZ165/AZ1651
SCLB/SCLD	AZ164/AZ1641/AZ165/AZ1651

Tyco (P&B)	ZETTLER
3100	XMC0
K10	AZ164/AZ1641/AZ165/AZ1651/AZ1661
KUP	AZKUP
PCJ	AZ9375
PRD	AZPRD
PCFN	AZSR126
RKA/RKS	AZ697/AZ6975/AZ742/AZ743/AZ761/ AZ762/AZ576/AZ763/AZ764/AZ755/ AZ7555
R10R	AZ2429
RT	AZ742/AZ743/AZ576/AZ761/AZ762
SSRT	SGX-1505FB
TB1	AZ989/AZ9891J
T70	AZ942/AZ943
T7C	AZ942/AZ943/AZ942H
T7N	AZ942/AZ943
T72	AZ942/AZ943
T72J/K/M	AZ9421A/AZ947/AZ9471
T73	AZ8/AZ8A
T75	AZ696/AZ6962
T77	AZ770/AZ7705/AZ7709
T81	AZ951/AZ954X/AZ952
T82	AZ822/AZ8222
T83	AZ830/AZ832
T85	AZ822/AZ8222
T90	AZ2110/AZ21101/AZ2111/AZ2150/
T91	AZ21501/AZ2151
T9A	AZ2100/AZ21001/AZ2101/AZ2200 AZ2100/AZ21001/AZ2150/AZ21501/ AZ2270/AZ2280/AZ22801
T92	AZ2800/AZ2850
V23026	AZ956/AZ956P
V23042	AZ830/AZ832
V23084	AZ921/AZ9891J
V23086	AZ987/AZ9871
V23079	AZ8462
V23105	AZ822/AZ8222
V23106	AZ850/AZ851/AZ8512
VF4/23134A	AZ973/AZ9731/AZ974/AZ9741
VF7/23134J	AZ979/980
VF28	AZ986
VJ28	AZ984/AZ9841
VFM	AZ988
VKM/23072	AZ975/AZ9751/AZ976/AZ9761
VKP	AZ9701/AZ9711
VM	AZ984/AZ9841

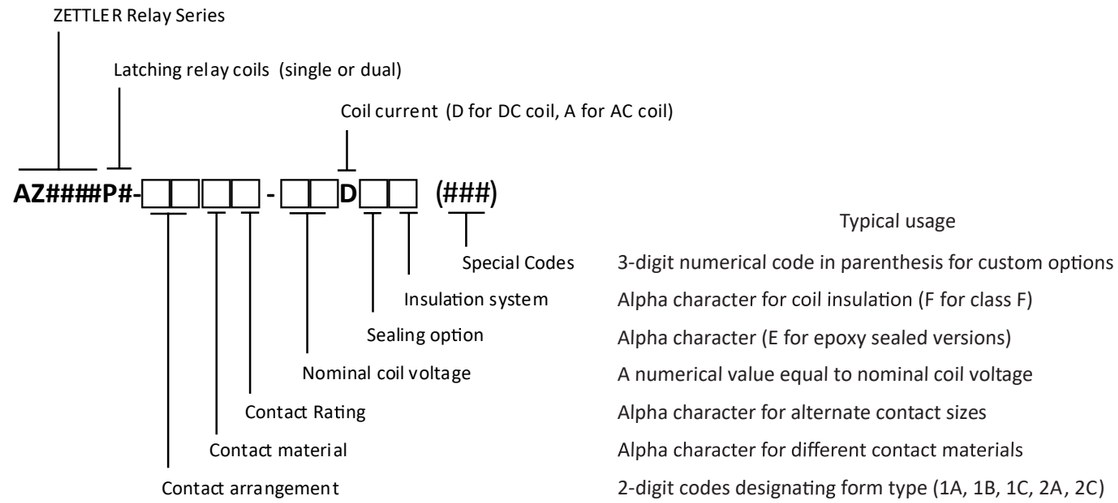
Additional Information

Find a Data Sheet

Find a relay you want more information on? Visit www.azettler.com/data-sheets/ to download a data sheet or scan the code below.

Understanding Ordering Numbers

Suffix options for each relay series can be unique and often impact pricing. The suffixes below are common examples, but not always available with each series. Consult the data sheet to confirm details or contact ZETTLER support for clarification.



EXAMPLE ORDERING DATA

AZ576P2-1B-5DE	AZ576P (latching) relay with 2 coils, 1 Form B contact, 5 VDC coil voltage, epoxy sealed
AZEV132-1A1BG-12D	AZEV132 relay with 1 Form A contact and 1 Form B (gold-plated) contact, 24 VDC coil voltage
AZ2800-2C-120A	AZ2800 relay with 2 Form C contacts and a 120 VAC coil voltage

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Notes

Notes

ZETTLER GROUP

ZETTLER GROUP's diversified product lines are designed to provide complete solutions for component applications across a broad spectrum of industries.

ZETTLER RELAYS

ZETTLER Relays are used in a wide spectrum of applications, including Power, HVAC/R, Energy Management, Lighting, Metering, Automotive, Industrial, Tele-Communications, Security, Home Appliances, Medical, Solar, Electric Vehicle Charging and many other types of electric and electronic equipment. For decades, customers in these industries have embraced ZETTLER Relays for their quality and agree that "It's a better Relay".

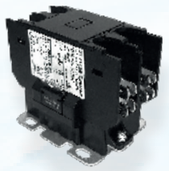
ZETTLER MAGNETICS

A diversified range of MAGNETICS products has long been an integral part of ZETTLER Group's engineering and production competence. ZETTLER Magnetics offers a complete line of PCB and chassis-mounted Transformers, Toroids and Chokes as well as current sensors.

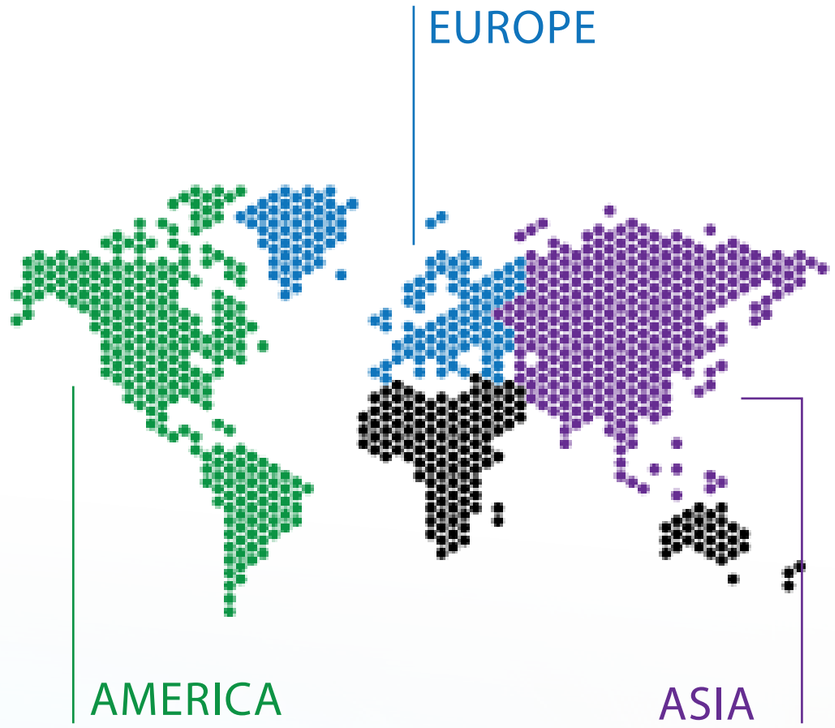
ZETTLER DISPLAYS

ZETTLER Displays manufactures and markets a broad line of TFT panels and LCD modules under the AZ Displays and *ZETTLER Displays* brands, and has established an industry leading reputation as a provider of top quality display solutions in a wide range of industry applications.

ZETTLER CONTROLS



Within ZETTLER Group's portfolio, ZETTLER Controls is a prime example of our capacity to not only develop and market high quality electronic components, but also to provide focused industry specific engineering solutions. ZETTLER Controls offers industry leading and highly specialized support services to the HVAC/R market with a comprehensive product line of contactors, relays, transformers, heat sequencers, temperature sensors, and fan centers.



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