




AC Load
10 A / 240 V

- Optically isolated • Input LED indicator
- High dV/dt capability
- Low input power consumption
- TTL and CMOS compatible
- Zero voltage turn-on, zero current turn-off
- Built-in snubber network
- Recognitions, certificates, directives: RoHS, 

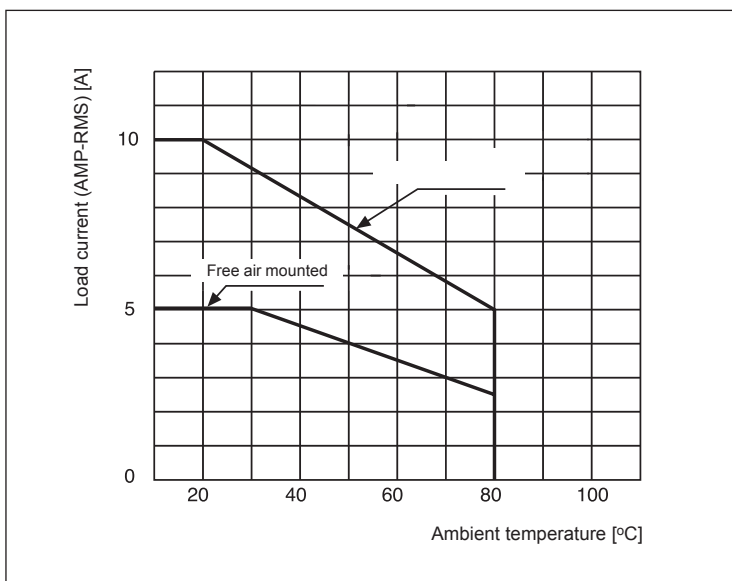
Type of relay	D32-A0-24-100-0	D32-A0-24-100-1	D32-A1-24-100-0	D32-A1-24-100-1
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Input circuit				
LED indicator		LED red		–
Control voltage range	4...32 V DC		3...32 V DC	
Max. control current	15 mA		15 mA	
Release voltage	1,5 V DC		1,0 V DC	
Input resistance	2,0 kΩ		2,0 kΩ	

Output circuit				
Max. load current	10 A AC			
Nominal load voltage	240 V AC			
Load voltage range	24...280 V AC			
Non-repetitive peak voltage	rest condition: 600 V AC			
Non-repetitive surge current	operating state: 125 A			
Max. off-state leakage current	rest condition: 1 mA			
Max. on-state voltage drop	operating state: 1,6 V			
Min. load current	operating state: 50 mA			
Off-state dV/dt	max. allowable rate of voltage rise: 250 V/μs			
Operating frequency range	47...63 Hz			

General data				
Output circuit switching moment	Z Ⓢ	R Ⓢ	Z Ⓢ	R Ⓢ
Max. turn-on time	8,3 ms	100 μs	8,3 ms	100 μs
Max. turn-off time	8,3 ms			
Min. insulation resistance	between input and output, input / output and cover: 1 000 MΩ 500 V DC			
Insulation dielectric strength	between input and output: 3 500 V AC			
Max. capacitance	between input and output: 15 pF			
Dimensions (L x W x H)	58 x 43 x 27,1 mm			
Weight	91,5 g			
Storage temperature	-40...+100 °C			
Operating temperature	-20...+80 °C			

Temperature derating chart - 10 AACrms, 240 V AC



Dimensions, ordering codes

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- Ⓢ Z - switching of the output circuit at zero voltage transition
- Ⓢ R - instantaneous switching of the output circuit



AC Load
25 A / 240 V

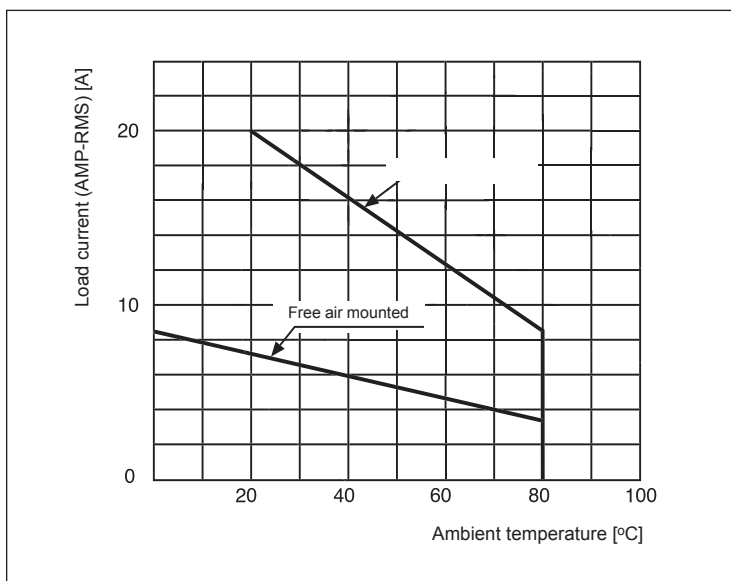
- **Applications:** lamp and motor load switching (high surge rating)
- **Mounting:** relays RSR50 are on panel mounting, using two M4 screws
- **Accessories:** protective covers

In case of selection accessories to RSR50,
please contact with Relpol S.A., e-mail: linia@relpol.com.pl



Type of relay ❶	D32-A0-24-250-0	D32-A0-24-250-1	D32-A1-24-250-0	D32-A1-24-250-1
Input circuit				
LED indicator	LED red		-	
Control voltage range	4...32 V DC		3...32 V DC	
Max. control current	15 mA		15 mA	
Release voltage	1,5 V DC		1,0 V DC	
Input resistance	2,0 kΩ		2,0 kΩ	
Output circuit				
Max. load current	25 A AC			
Nominal load voltage	240 V AC			
Load voltage range	24...280 V AC			
Non-repetitive peak voltage	rest condition: 600 V AC			
Non-repetitive surge current	operating state: 260 A			
Max. off-state leakage current	rest condition: 7 mA			
Max. on-state voltage drop	operating state: 1,6 V			
Min. load current	operating state: 100 mA			
Off-state dV/dt	max. allowable rate of voltage rise: 250 V/μs			
Operating frequency range	47...63 Hz			
General data				
Output circuit switching moment	Z ❷	R ❸	Z ❷	R ❸
Max. turn-on time	8,3 ms	100 μs	8,3 ms	100 μs
Max. turn-off time	8,3 ms			
Min. insulation resistance	between input and output, input / output and cover: 1 000 MΩ 500 V DC			
Insulation dielectric strength	between input and output: 3 500 V AC			
Max. capacitance	between input and output: 15 pF			
Dimensions (L x W x H)	58 x 43 x 27,1 mm			
Weight	91,5 g			
Storage temperature	-40...+100 °C			
Operating temperature	-20...+80 °C			

Temperature derating chart - 25 AACrms, 240 V AC



Dimensions, ordering codes
- see page 27

- ❶ The data in bold type pertain to the standard versions of the relays.
- ❷ Z - switching of the output circuit at zero voltage transition
- ❸ R - instantaneous switching of the output circuit



AC Load
40 A / 240 V

Type of relay ❶ **D32-A0-24-400-0** D32-A0-24-400-1 D32-A1-24-400-0 D32-A1-24-400-1

Input circuit

LED indicator	LED red	–
Control voltage range	4...32 V DC	3...32 V DC
Max. control current	15 mA	15 mA
Release voltage	1,5 V DC	1,0 V DC
Input resistance	2,0 kΩ	2,0 kΩ

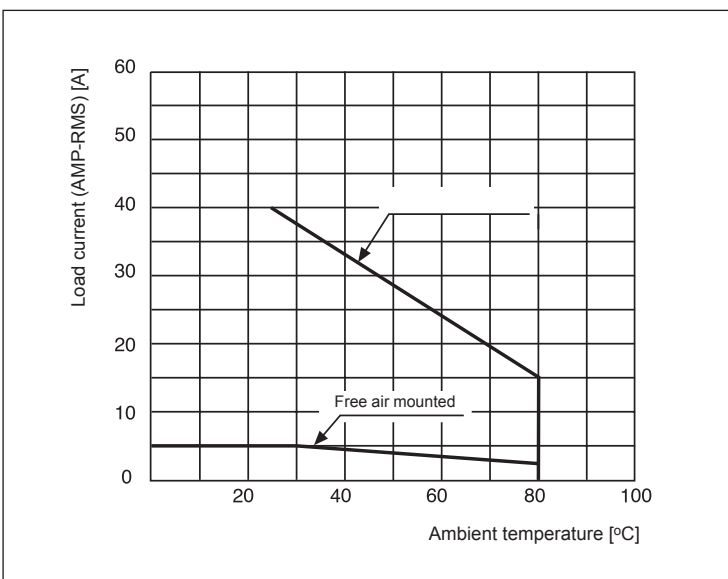
Output circuit

Max. load current	40 A AC		
Nominal load voltage	240 V AC		
Load voltage range	24...280 V AC		
Non-repetitive peak voltage	rest condition: 600 V AC		
Non-repetitive surge current	operating state: 315 A		
Max. off-state leakage current	rest condition: 7 mA		
Max. on-state voltage drop	operating state: 1,8 V		
Min. load current	operating state: 100 mA		
Off-state dV/dt	max. allowable rate of voltage rise: 250 V/μs		
Operating frequency range	47...63 Hz		

General data

Output circuit switching moment	Z ❷	R ❸	Z ❷	R ❸
Max. turn-on time	8,3 ms	100 μs	8,3 ms	100 μs
Max. turn-off time	8,3 ms			
Min. insulation resistance	between input and output, input / output and cover: 1 000 MΩ 500 V DC			
Insulation dielectric strength	between input and output: 3 500 V AC			
Max. capacitance	between input and output: 15 pF			
Dimensions (L x W x H)	58 x 43 x 27,1 mm			
Weight	91,5 g			
Storage temperature	-40...+100 °C			
Operating temperature	-20...+75 °C			

Temperature derating chart - 40 A ACrms, 240 V AC



Dimensions, ordering codes

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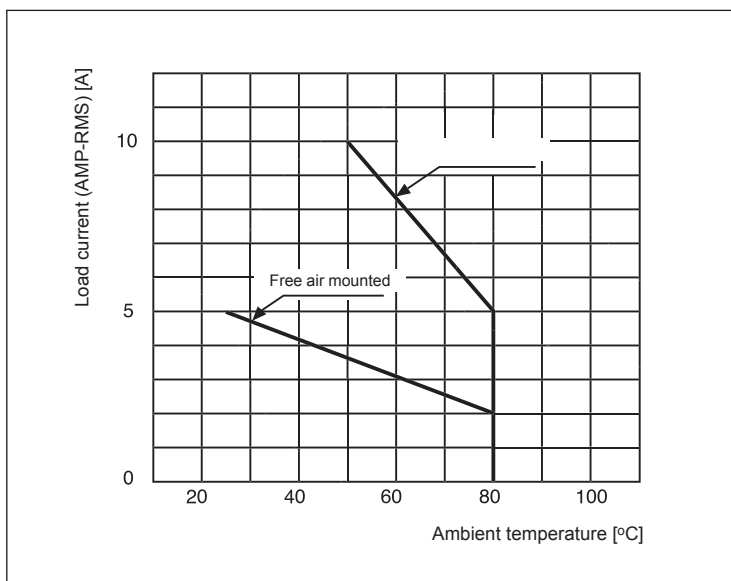
- ❶ The data in bold type pertain to the standard versions of the relays.
- ❷ Z - switching of the output circuit at zero voltage transition
- ❸ R - instantaneous switching of the output circuit



AC Load
15 A / 480 V

Type of relay ❶	D32-A0-48-150-0	D32-A0-48-150-1	D32-A1-48-150-0	D32-A1-48-150-1
Input circuit				
LED indicator	LED red		-	
Control voltage range	4...32 V DC		3...32 V DC	
Max. control current	120 mA		120 mA	
Release voltage	1,5 V DC		1,0 V DC	
Input resistance	270 Ω		270 Ω	
Output circuit				
Max. load current	15 A AC			
Nominal load voltage	480 V AC			
Load voltage range	48...480 V AC			
Non-repetitive peak voltage	rest condition: 800 V AC			
Non-repetitive surge current	operating state: 200 A			
Max. off-state leakage current	rest condition: 2 mA			
Max. on-state voltage drop	operating state: 1,6 V			
Min. load current	operating state: 70 mA			
Off-state dV/dt	max. allowable rate of voltage rise: 700 V/μs			
Operating frequency range	47...63 Hz			
General data				
Output circuit switching moment	Z ❷	R ❸	Z ❷	R ❸
Max. turn-on time	8,3 ms	100 μs	8,3 ms	100 μs
Max. turn-off time	8,3 ms			
Min. insulation resistance	between input and output, input / output and cover: 1 000 MΩ 500 V DC			
Insulation dielectric strength	between input and output: 3 500 V AC			
Max. capacitance	between input and output: 15 pF			
Dimensions (L x W x H)	58 x 43 x 27,1 mm			
Weight	91,5 g			
Storage temperature	-40...+100 °C			
Operating temperature	-20...+75 °C			

Temperature derating chart - 15 AACrms, 480 V AC



Dimensions, ordering codes

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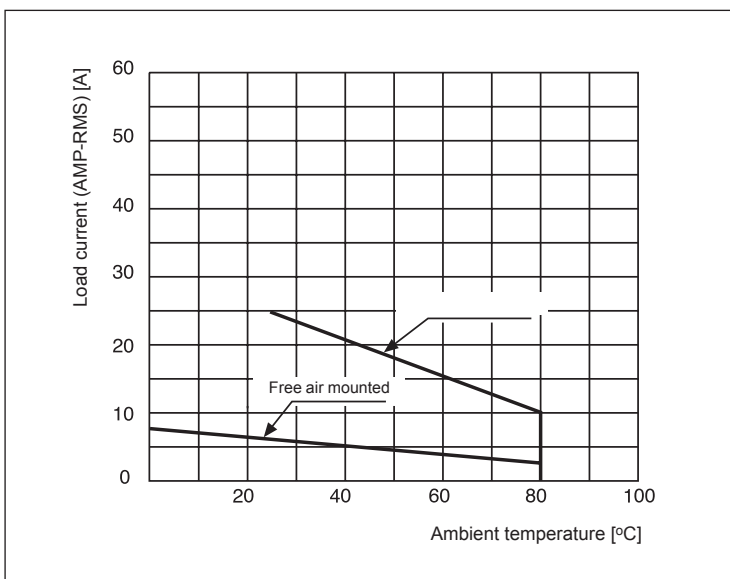
- ❷ Z - switching of the output circuit at zero voltage transition
- ❸ R - instantaneous switching of the output circuit



AC Load
25 A / 480 V

Type of relay ❶	D32-A0-48-250-0	D32-A0-48-250-1	D32-A1-48-250-0	D32-A1-48-250-1
Input circuit				
LED indicator	LED red			–
Control voltage range	4...32 V DC			3...32 V DC
Max. control current	120 mA			120 mA
Release voltage	1,5 V DC			1,0 V DC
Input resistance	270 Ω			270 Ω
Output circuit				
Max. load current	25 A AC			
Nominal load voltage	480 V AC			
Load voltage range	48...480 V AC			
Non-repetitive peak voltage	rest condition: 800 V AC			
Non-repetitive surge current	operating state: 250 A			
Max. off-state leakage current	rest condition: 1 mA			
Max. on-state voltage drop	operating state: 1,6 V			
Min. load current	operating state: 120 mA			
Off-state dV/dt	max. allowable rate of voltage rise: 700 V/μs			
Operating frequency range	47...63 Hz			
General data				
Output circuit switching moment	Z ❷	R ❸	Z ❷	R ❸
Max. turn-on time	8,3 ms	100 μs	8,3 ms	100 μs
Max. turn-off time	8,3 ms			
Min. insulation resistance	between input and output, input / output and cover: 1 000 MΩ 500 V DC			
Insulation dielectric strength	between input and output: 3 500 V AC			
Max. capacitance	between input and output: 15 pF			
Dimensions (L x W x H)	58 x 43 x 27,1 mm			
Weight	91,5 g			
Storage temperature	-40...+100 °C			
Operating temperature	-20...+75 °C			

Temperature derating chart - 25 A ACrms, 480 V AC



Dimensions, ordering codes

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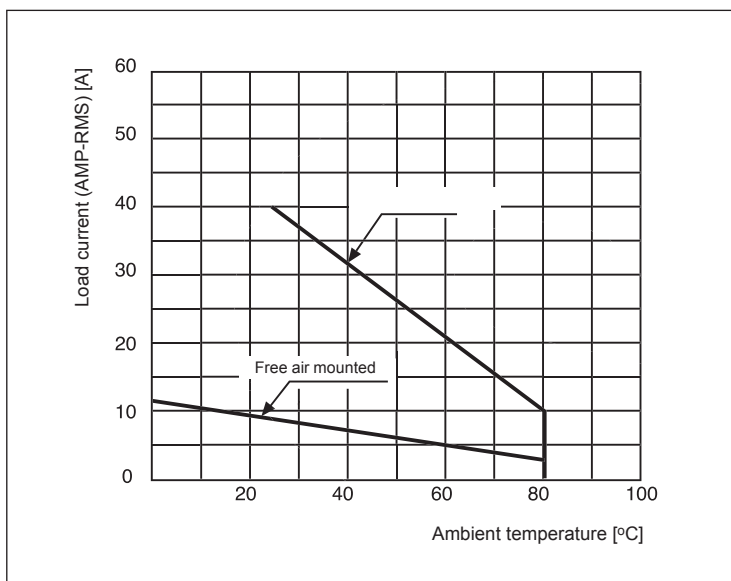
- ❶ The data in bold type pertain to the standard versions of the relays.
- ❷ Z - switching of the output circuit at zero voltage transition
- ❸ R - instantaneous switching of the output circuit



AC Load
40 A / 480 V

Type of relay ❶	D32-A0-48-400-0	D32-A0-48-400-1	D32-A1-48-400-0	D32-A1-48-400-1
Input circuit				
LED indicator	LED red			–
Control voltage range	4...32 V DC			3...32 V DC
Max. control current	120 mA			120 mA
Release voltage	1,5 V DC			1,5 V DC
Input resistance	270 Ω			270 Ω
Output circuit				
Max. load current	40 A AC			
Nominal load voltage	480 V AC			
Load voltage range	48...480 V AC			
Non-repetitive peak voltage	rest condition: 800 V AC			
Non-repetitive surge current	operating state: 400 A			
Max. off-state leakage current	rest condition: 1 mA			
Max. on-state voltage drop	operating state: 1,8 V			
Min. load current	operating state: 120 mA			
Off-state dV/dt	max. allowable rate of voltage rise: 900 V/μs			
Operating frequency range	47...63 Hz			
General data				
Output circuit switching moment	Z ❷	R ❸	Z ❷	R ❸
Max. turn-on time	8,3 ms	100 μs	8,3 ms	100 μs
Max. turn-off time	8,3 ms			
Min. insulation resistance	between input and output, input / output and cover: 1 000 MΩ 500 V DC			
Insulation dielectric strength	between input and output: 3 500 V AC			
Max. capacitance	between input and output: 15 pF			
Dimensions (L x W x H)	58 x 43 x 27,1 mm			
Weight	91,5 g			
Storage temperature	-40...+100 °C			
Operating temperature	-20...+75 °C			

Temperature derating chart - 40 AACrms, 480 V AC



Dimensions, ordering codes

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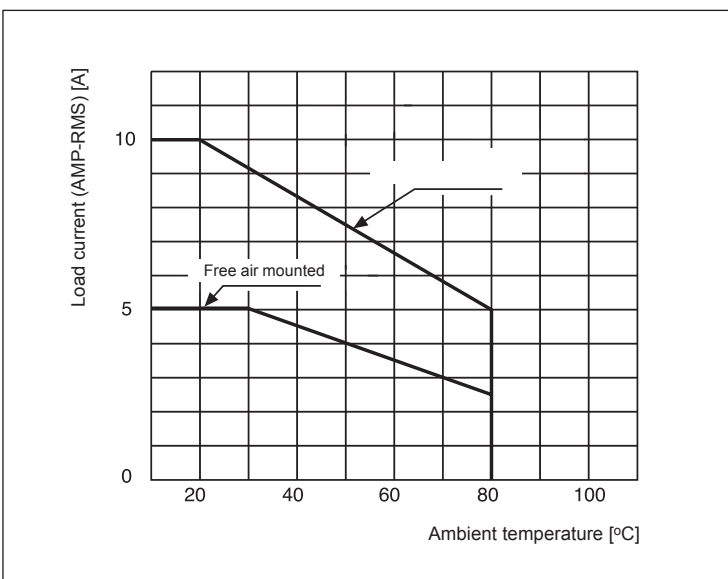
- ❶ The data in bold type pertain to the standard versions of the relays.
- ❷ Z - switching of the output circuit at zero voltage transition
- ❸ R - instantaneous switching of the output circuit



AC Load
10 A / 240 V

Type of relay ①	A28-A0-24-100-0	A28-A1-24-100-0
Input circuit		
LED indicator	LED red	–
Control voltage range	50...280 V AC	50...280 V AC
Max. control current	15 mA	15 mA
Release voltage	40 V AC	35 V AC
Input resistance	106 kΩ	106 kΩ
Output circuit		
Max. load current	10 A AC	
Nominal load voltage	240 V AC	
Load voltage range	24...280 V AC	
Non-repetitive peak voltage	rest condition: 600 V AC	
Non-repetitive surge current	operating state: 125 A	
Max. off-state leakage current	rest condition: 1 mA	
Max. on-state voltage drop	operating state: 1,6 V	
Min. load current	operating state: 50 mA	
Off-state dV/dt	max. allowable rate of voltage rise: 250 V/μs	
Operating frequency range	47...63 Hz	
General data		
Output circuit switching moment	Z ②	Z ②
Max. turn-on time	10 ms	10 ms
Max. turn-off time	20 ms	
Min. insulation resistance	between input and output, input / output and cover: 1 000 MΩ 500 V DC	
Insulation dielectric strength	between input and output: 3 500 V AC	
Max. capacitance	between input and output: 15 pF	
Dimensions (L x W x H)	58 x 43 x 27,1 mm	
Weight	91,5 g	
Storage temperature	-40...+100 °C	
Operating temperature	-20...+80 °C	

Temperature derating chart - 10 AACrms, 240 V AC



Dimensions, ordering codes

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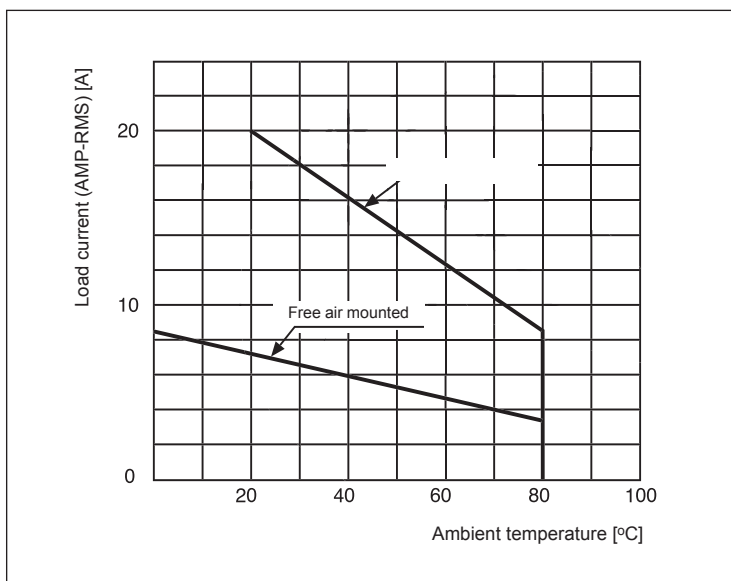
② Z - switching of the output circuit at zero voltage transition



AC Load
25 A / 240 V

Type of relay ❶	A28-A0-24-250-0	A28-A1-24-250-0
Input circuit		
LED indicator	LED red	–
Control voltage range	50...280 V AC	50...280 V AC
Max. control current	15 mA	15 mA
Release voltage	40 V AC	35 V AC
Input resistance	106 kΩ	106 kΩ
Output circuit		
Max. load current	25 A AC	
Nominal load voltage	240 V AC	
Load voltage range	24...280 V AC	
Non-repetitive peak voltage	rest condition: 600 V AC	
Non-repetitive surge current	operating state: 260 A	
Max. off-state leakage current	rest condition: 7 mA	
Max. on-state voltage drop	operating state: 1,6 V	
Min. load current	operating state: 100 mA	
Off-state dV/dt	max. allowable rate of voltage rise: 250 V/μs	
Operating frequency range	47...63 Hz	
General data		
Output circuit switching moment	Z ❷	Z ❷
Max. turn-on time	10 ms	10 ms
Max. turn-off time	20 ms	
Min. insulation resistance	between input and output, input / output and cover: 1 000 MΩ 500 V DC	
Insulation dielectric strength	between input and output: 3 500 V AC	
Max. capacitance	between input and output: 15 pF	
Dimensions (L x W x H)	58 x 43 x 27,1 mm	
Weight	91,5 g	
Storage temperature	-40...+100 °C	
Operating temperature	-20...+80 °C	

Temperature derating chart - 25 AACrms, 240 V AC



Dimensions, ordering codes

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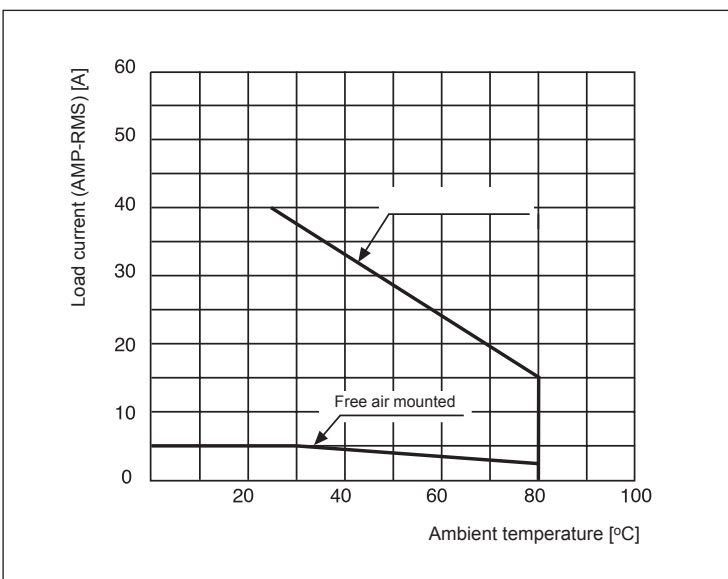
- ❶ The data in bold type pertain to the standard versions of the relays.
- ❷ Z - switching of the output circuit at zero voltage transition



AC Load
40 A / 240 V

Type of relay ❶	A28-A0-24-400-0	A28-A1-24-400-0
Input circuit		
LED indicator	LED red	–
Control voltage range	50...280 V AC	50...280 V AC
Max. control current	15 mA	15 mA
Release voltage	40 V AC	35 V AC
Input resistance	106 kΩ	106 kΩ
Output circuit		
Max. load current	40 A AC	
Nominal load voltage	240 V AC	
Load voltage range	24...280 V AC	
Non-repetitive peak voltage	rest condition: 600 V AC	
Non-repetitive surge current	operating state: 315 A	
Max. off-state leakage current	rest condition: 7 mA	
Max. on-state voltage drop	operating state: 1,8 V	
Min. load current	operating state: 100 mA	
Off-state dV/dt	max. allowable rate of voltage rise: 250 V/μs	
Operating frequency range	47...63 Hz	
General data		
Output circuit switching moment	Z ③	Z ③
Max. turn-on time	10 ms	10 ms
Max. turn-off time	20 ms	
Min. insulation resistance	between input and output, input / output and cover: 1 000 MΩ 500 V DC	
Insulation dielectric strength	between input and output: 3 500 V AC	
Max. capacitance	between input and output: 15 pF	
Dimensions (L x W x H)	58 x 43 x 27,1 mm	
Weight	91,5 g	
Storage temperature	-40...+100 °C	
Operating temperature	-20...+75 °C	

Temperature derating chart - 40 AACrms, 240 V AC

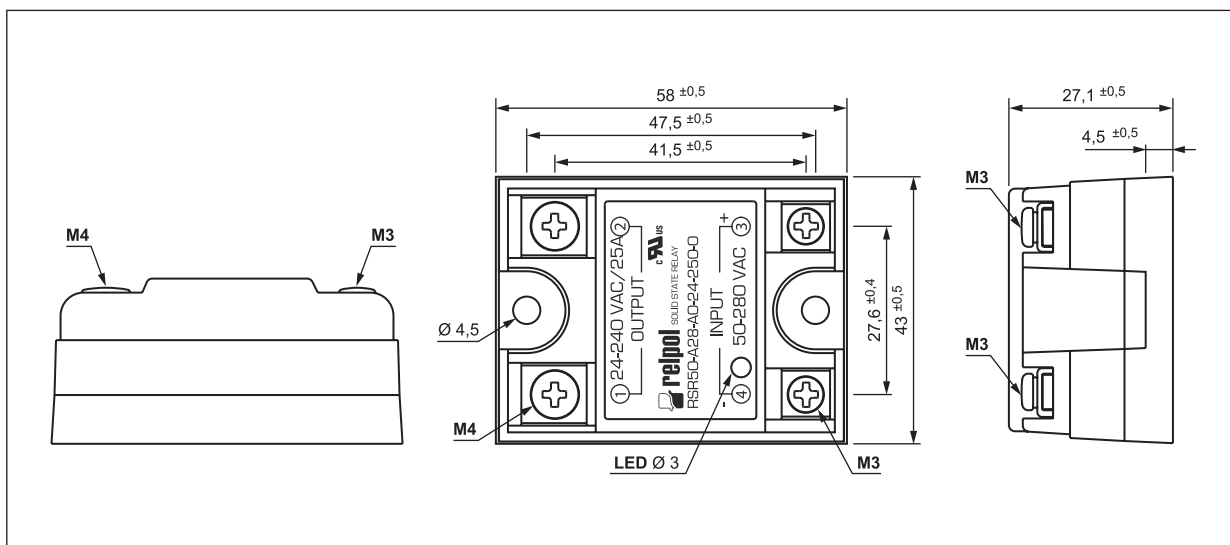


Dimensions, ordering codes

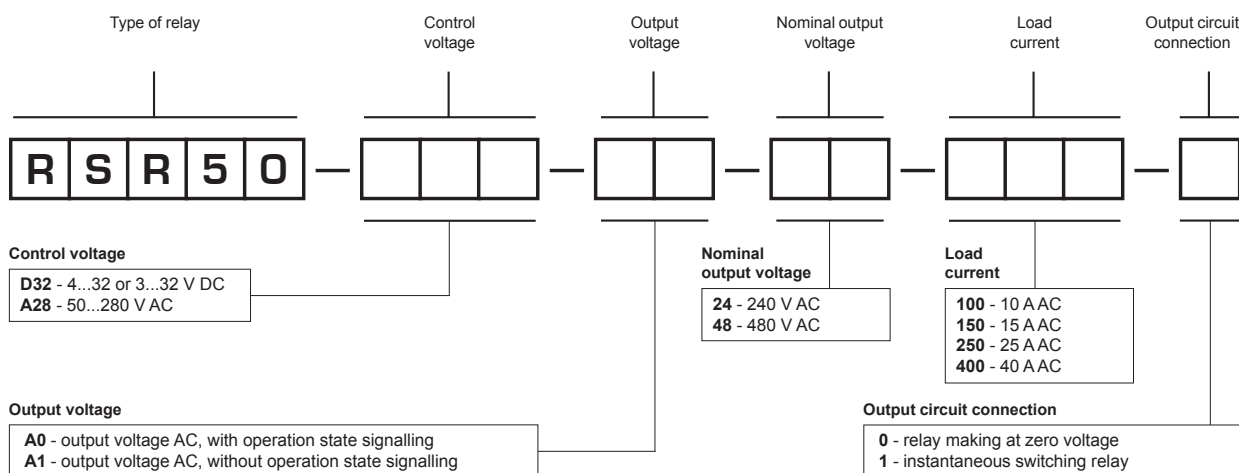
- see page 27

- ❶ The data in bold type pertain to the standard versions of the relays.
- ③ Z - switching of the output circuit at zero voltage transition

Dimensions



Ordering codes



Example of ordering code:

RSR50-A28-A0-24-250-0 solid state relay **RSR50**, control voltage range 50...280 V AC, rated voltage of output circuit - load 240 V AC, maximum output circuit current 25 A AC, with operation state signalling (LED red), making at zero voltage