

Mechanical latch unit



Applying contactors	Type	Rebound coil voltage	
		Nominal volt.	Rated volt.
GM-9 to 40 type (9 to 40A frame)	AL-9	AC100V	100~127V 50/60Hz
		AC200V	200~240V 50/60Hz
GM-50 to 85 type (50 to 85A frame)	AL-50	AC300V	280~350V 50/60Hz
		AC400V	390~440V 50/60Hz
		AC500V	480~550V 50/60Hz
		DC12V	DC12V
		DC24V	DC24V
		DC48V	DC48V
		DC100V	DC100~110V
		DC125V	DC120~125V
		DC200V	DC200~220V

Surge absorber unit



Type of element	Applying contactors	Operation voltage	Element spec.	Type
Varistor ①	All types GM-9 to 800 (9 to 800A frame)	AC/DC 24~48V	Varistor 120V	AS-11
		AC/DC 100~125V	Varistor 270V	AS-12
		AC/DC 200~240V	Varistor 470V	AS-13
		AC380~440V	Varistor 1000V	AS-14
CR + Varistor ②	GMD-9 to 85 (9 to 85A frame with AC coil)	AC24~48V	Varistor 120V 0.1 μ F, 100 Ω	AS-1
		AC100~125V	Varistor 270V 0.1 μ F, 100 Ω	AS-2
		AC200~240V	Varistor 470V 0.1 μ F, 100 Ω	AS-3
		DC24~48V	Varistor 120V 0.47 μ F, 100 Ω	AS-4
	GMD-9 to 85 (9 to 85A frame with DC coil)	DC100~125V	Varistor 270V 0.47 μ F, 100 Ω	AS-5
		DC200~220V	Varistor 470V 0.47 μ F, 100 Ω	AS-6

Comparison

Without surge unit	① With Varistor unit	② With CR+Varistor unit
Surge voltage, arise when the coil is off, may provoke mis-operation and damage in the circuit.	Varistor has an effect to cut down the peak voltage	Varistor has an effect to cut down the peak voltage and high frequency wave



Pneumatic timer

Delay type	Setting range	Type	Remarks
ON delay	0.1 to 30 sec.	AT-1N	Applying contactors : GMC-9 to 85 (9 to 85A frame. 3 and 4 pole)
	10 to 180 sec.	AT-2N	
OFF delay	0.1 to 30 sec.	AT-1F	Auxiliary contact : 1NO+1NC
	10 to 180 sec.	AT-2F	



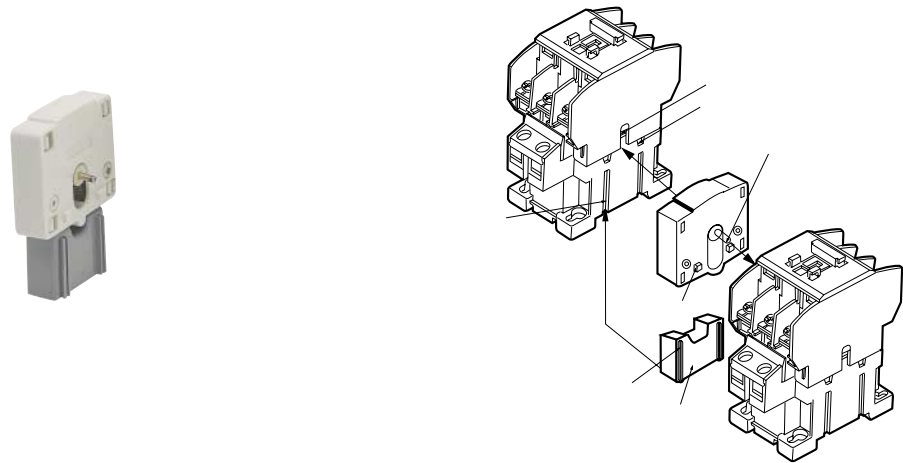
Separate mounting unit

In case of installing the overload relays independently, the separate mounting kits are available for screw or 35mm Din-rail mounting.

Type	Applied TOR
AZ-22H	GTH(K)-22
AZ-22H	GTH(K)-22
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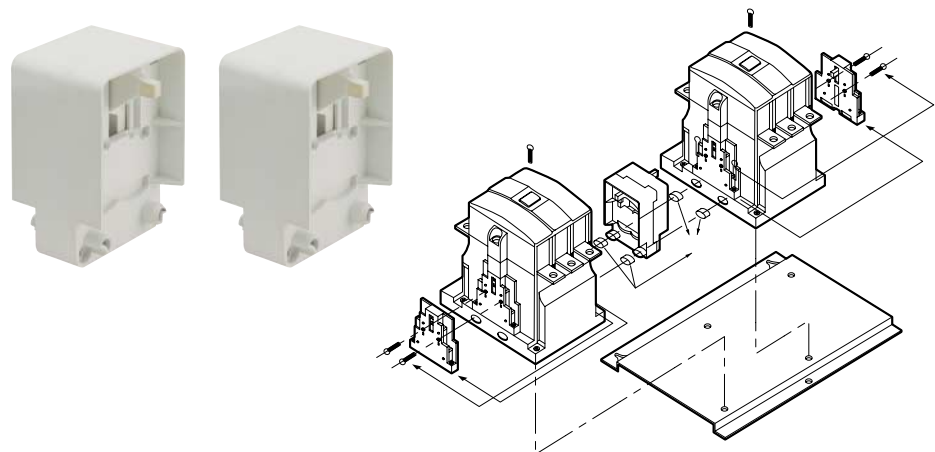
Mechanical interlock, AR9

- for contactor frames **9A** **12A** **18A** **22A** **32A** **40A** **50A** **65A** **75A** **85A**



Mechanical interlock, AR100 and AR180

AR100 : **100A** **125A** **150A** **AR180** : **180A** **220A** **300A** **400A**



Mechanical interlock, AR600

- for contactor frames **600A** **800A**

