Accessories
Surge suppressors for A/AE/AL/EK contactors

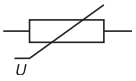
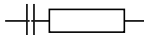
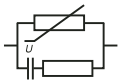

RV 5/50


RC 5-1/150

Surge suppression device

Mounting on	Voltage range	Catalog number
AE9 to AE110 AL9 to AL40	12 – 32 VDC 25 – 65 VDC 50 – 90 VDC 77 – 150 VDC 150 – 264 VDC	RT5/32 RT5/65 RT5/90 RT5/150 RT5/264
A9 to A110; AE9 to AE110 AL9 to AL40	24 – 50 VAC/VDC 50 – 133 VAC/VDC 110 – 250 VAC/VDC 250 – 440 VAC/VDC	RV5/50 RV5/133 RV5/250 RV5/440
A9 to A40	24 – 50 VAC 50 – 133 VAC 110 – 250 VAC 250 – 440 VAC	RC5-1/50 RC5-1/133 RC5-1/250 RC5-1/440
A45 to A300	24 – 50 VAC 50 – 133 VAC 110 – 250 VAC 250 – 440 VAC	RC5-2/50 RC5-2/133 RC5-2/250 RC5-2/440
EK110 to EK210	24 – 48 VAC 110 – 415 VAC	RC-EH250/48 RC-EH250/415
EK370 to EK550	48 – 110VAC	RC-EH800/110
EK110 to EK550	24 – 125VAC	RC-EH800/110
EK370 to EK550	220 – 600VAC	RC-EH800/600

Technical data

Type		Control circuit	Opening time growth factor	Residual overvoltage or clipping voltage	Remarks	
RT 5 /... transil diode					Advantages	• Good energy absorption
	32	DC		50 V		• Unpolarized system
	65	DC		100 V		• Simple, reliable system
	90	DC	2.5 to 3	150 V	Drawback	• A certain delay on drop out which does not however reduce contactor breaking capacity.
	150	DC		210 V		
	264	DC		390 V		
Varistor	**RV 5/...**				Advantages	• High energy absorption; good damping
	50	AC/DC		132 V		• Unpolarized system
	133	AC/DC	1.1 to 1.5	270 V		
	250	AC/DC		480 V	Drawback	• Clipping as from U_{vdr}, thus voltage front up to this point
	440	AC/DC		825 V		
RC 5-1/... or RC 5-2/... **RC-EH 300/...**	see table above	AC	1.2 to 3	2 to 3 x Uc	Advantages	• Very fast clipping • Attenuation of steep fronts and thus of high frequencies • No operating delays
						
Varistor + RC	**RC-EH ...**				Advantages	• High energy absorption: good damping
	800/110	AC/DC	1.1 to 1.5	205 V		• Unpolarized system
	800/600	AC		1100 V		• The RC system damps the voltage front under the Uvdr* threshold.

*Uvdr = Varistor operating voltage (voltage dependent resistor), tolerance ± 10%