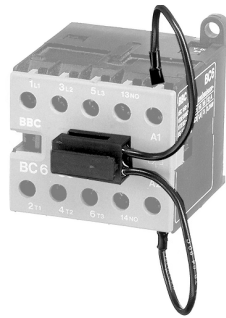


Suppressors for contactors

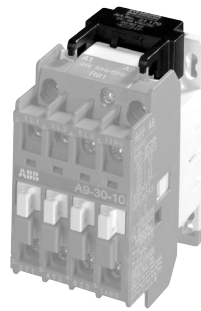


Product group BBC

BC



A 16



A 110

Circuit diagram

Diode combination
24...240V DC

Diode + LED
24V DC

Z-Diode combination
24...240V DC

Varistor (VDR)
0...60Hz

Varistor + LED
24V AC/DC

Varistor-RC-suppression
VDR-RC0...60Hz

RC-suppression (RC)
50...60Hz



Appropriate contactors

B 6, BC 6, VB 6, KC 6

A 9...A 16

A 26...A 110

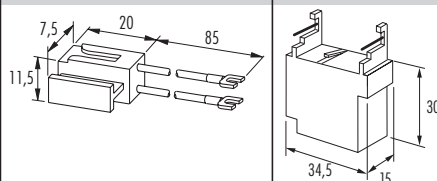
Ordering data

Voltage		Suppression	Art.-No.	Art.-No.	Art.-No.
24 ... 240 V DC	Suppression	approvals			
	Diode			UL + CSA	26440
	Diode + LED				
24 V DC	Diode/Z-Diode				
	VDR	UL + CSA	26277	UL + CSA	26442
	VDR + LED				
24 V AC/DC	RC			UL + CSA	21170
	Diode/Z-Diode				
48 V DC	VDR	UL + CSA	26278		
	RC				
48 V AC/DC	VDR			UL + CSA	26444
	VDR + LED				
	VDR-RC				
	RC			UL + CSA	21172
110 V AC/DC	VDR	UL + CSA	26079	UL + CSA	26446
	VDR + LED				
	VDR-RC				
	RC			UL + CSA	21172
230 V AC/DC	VDR				
	VDR + LED				
	VDR-RC				
400 V AC/DC	VDR-RC + LED				
	RC			UL + CSA	21172
	RC			UL + CSA	21173
415 V AC/DC	VDR				
	RC				

Technical data

Damping factor	$\sim 1.5 \times U_N$
Temperature range	-20...+70 °C
Material	flame retardant plastic to UL 94
Connection wires	self-securing fork terminal ends plug contact

Dimensions



Notes

For other types, please inquire.

Suppressors for contactors

AEG

AS



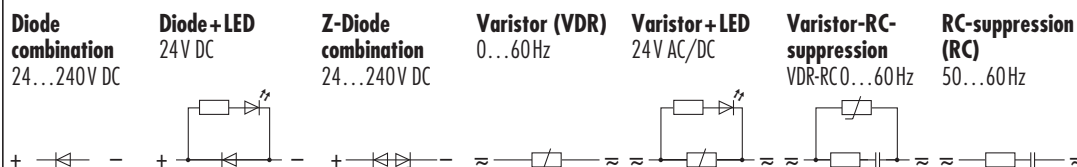
A0



AD



Circuit diagram



Appropriate contactors

LS 07, LS 4...LS 37, SH 04, SH 4, SH 08; SH 10	LS 02K, LS 05K LS 4K...LS 18K	LS 22K...LS 55K
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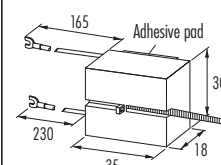
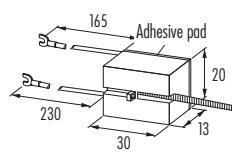
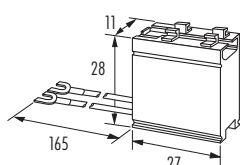
Ordering data

Ordering data		Art.-No.	Art.-No.	Art.-No.
Voltage	Suppression	approvals	approvals	approvals
24 ...240 V DC	Diode	UL + CSA	CSA	
24 V DC	Diode + LED			
	Diode/Z-Diode		CSA	
24 V AC/DC	VDR	UL + CSA	UL + CSA	CSA
	VDR + LED			
	RC			
48 V DC	Diode/Z-Diode			
48 V AC/DC	VDR	UL + CSA	UL + CSA	CSA
	RC			UL + CSA
110 V AC/DC	VDR	UL + CSA	UL + CSA	CSA
	VDR + LED			
	VDR-RC			
	RC			
230 V AC/DC	VDR	UL + CSA	UL + CSA	CSA
	VDR + LED			
	VDR-RC	UL + CSA		
	VDR-RC + LED			
	RC	UL + CSA	UL + CSA	UL + CSA
	RC			
400 V AC/DC	VDR			
	RC		UL + CSA	
	RC			

Technical data

Damping factor	~ 1.5 x U _N
Temperature range	-20...+70 °C
Material	flame retardant plastic to UL 94
Connection wires	self-securing fork terminal ends

Dimensions



Notes

For other types, please inquire.

Suppressors for contactors



DIL E

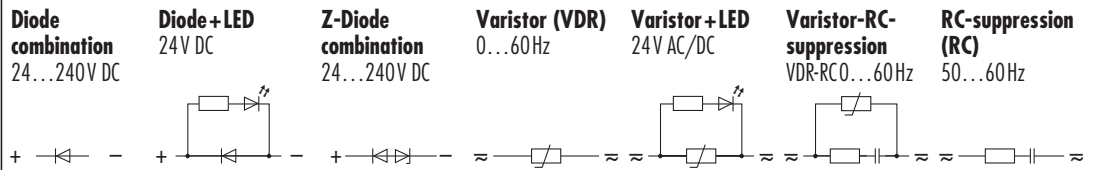


B DIL



K DIL

Circuit diagram



Appropriate contactors

DIL E...	DIL E...C	DIL 3-4...M DIL 3 H, DIL 4 H	DIL 0-2...M DIL R...
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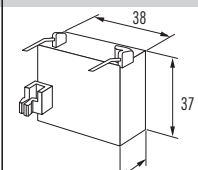
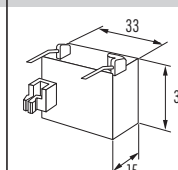
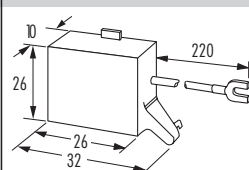
Ordering data

Voltage	Suppression	approvals	Art.-No.	approvals	Art.-No.	approvals	Art.-No.	approvals	Art.-No.
24 ... 240 V DC	Diode							UL + CSA	26080
24 V DC	Diode + LED							UL + CSA	26081
	Diode/Z-Diode							UL + CSA	26170
24 V AC/DC	VDR	UL + CSA	26116			UL + CSA	26082	UL + CSA	21026
	VDR + LED								
	RC								21026
48 V DC	Diode/Z-Diode								
48 V AC/DC	VDR							UL + CSA	26171
	RC								
110 V AC/DC	VDR								
	VDR + LED								
	VDR-RC								
	RC	CSA	21054	UL + CSA	21056	UL + CSA	21073	UL + CSA	21028
230 V AC/DC	VDR	UL + CSA	26086	UL + CSA	26119	UL + CSA	26022	UL + CSA	26173
	VDR + LED								
	VDR-RC								
	VDR-RC + LED								
	RC	CSA	21054	UL + CSA	21056			UL + CSA	21028
	RC					UL + CSA	21073		
400 V AC/DC	VDR								
	RC								
	RC								

Technical data

Damping factor	~ 1.5 x U _N
Temperature range	-20...+70 °C
Material	flame retardant plastic to UL 94
Connection wires	ferrule ends for spring clamp terminals

Dimensions



Notes

For other types, please inquire.

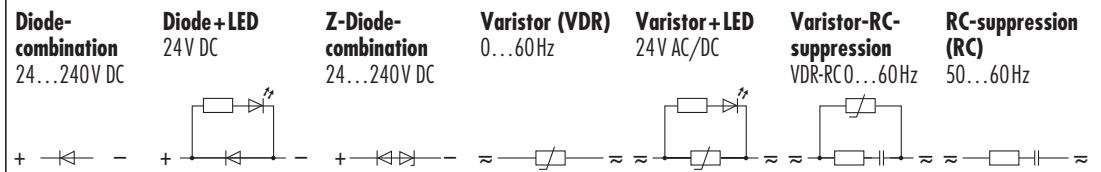
Suppressors for contactors



X-Start



Circuit diagram



Appropriate contactors

DIL M7...15 DIL MP20, DIL A	DIL M17...32	DIL M40...95
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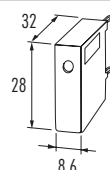
Ordering data

Voltage	Suppression	Art.-No.	Art.-No.	Art.-No.
24 ...240 V DC	Diode			
24 V DC	Diode + LED			
	Diode/Z-Diode			
24 V AC/DC	VDR			
	VDR + LED	UL + CSA	26013	UL + CSA
	RC			
48 V DC	Diode/Z-Diode			
48 V AC	VDR + LED	UL + CSA	26013	UL + CSA
	RC			
110 V AC/DC	VDR			
	VDR + LED	UL + CSA	26014	
	VDR-RC			
	RC	UL + CSA	20007	UL + CSA
230 V AC/DC	VDR			
	VDR + LED	UL + CSA	26014	
	VDR-RC			
	VDR-RC + LED			
	RC	UL + CSA	20007	UL + CSA
	RC			
400 V AC/DC	VDR			
	RC			
	RC			

Technical data

Damping factor	~ 1.5 x U _N
Temperature range	-20...+70 °C
Material	flame retardant plastic to UL 94
Connection wires	plug contact

Dimensions



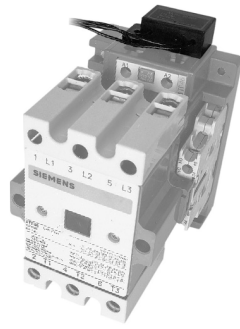
Notes

LED indicator for 24 V DC without suppression available on request.

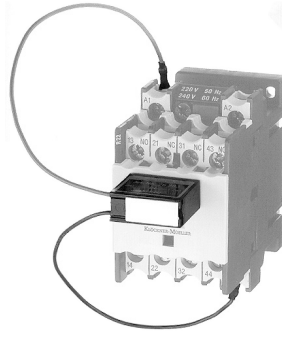
Suppressors for contactors



U3



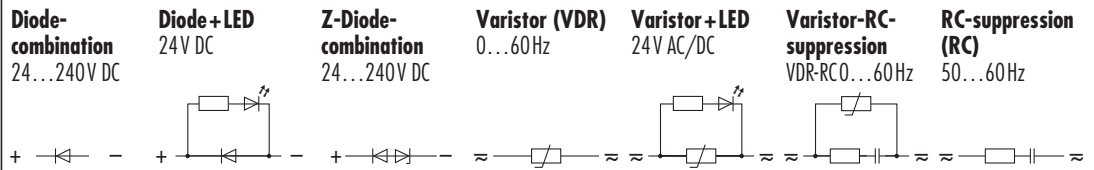
SO 1



RC-BUG 2



Circuit diagram



Appropriate contactors

DIL 6 (A) M, 6 H DIL 8 (A) M, 8 H, 10 M, 10 H	DIL R - G DIL R...	DIL 6 (A) M, 6 H DIL 8 (A) M, 8 H, 10 M, 10 H
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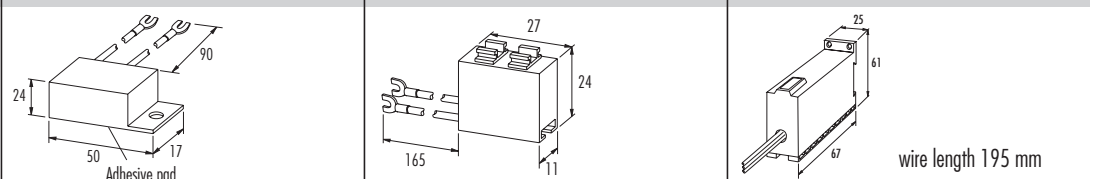
Ordering data

		Art.-No.		Art.-No.	Art.-No.
Voltage	Suppression	approvals	approvals	approvals	
24 ... 240 V DC	Diode		UL + CSA	26051	
24 V DC	Diode + LED				
	Diode/Z-Diode		UL + CSA	26284	
24 V AC/DC	VDR		UL + CSA	26315	
	VDR + LED				
	RC		UL + CSA	22050	CSA 26612
48 V DC	Diode/Z-Diode		UL + CSA	26051	
48 V AC/DC	VDR				
	RC		UL + CSA	22050	CSA 26612
110 V AC/DC	VDR				
	VDR + LED				
	VDR-RC				
	RC		UL + CSA	22051	CSA 26613
230 V AC/DC	VDR		UL + CSA	26317	
	VDR + LED				
	VDR-RC				
	VDR-RC + LED				
	RC	UL + CSA 20067	UL + CSA	22052	CSA 26614
	RC		UL + CSA	22054	
400 V AC/DC	VDR				
	RC		UL + CSA	22054	
	RC				

Technical data

Damping factor	~ 1.5 x U _N
Temperature range	-20...+70 °C
Material	flame retardant plastic to UL 94
Connection wires	self-securing fork terminal ends

Dimensions



Notes

For other types, please inquire.

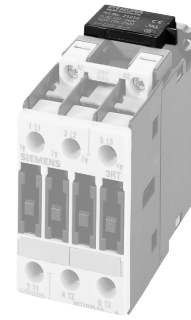
Suppressors for contactors

SIEMENS

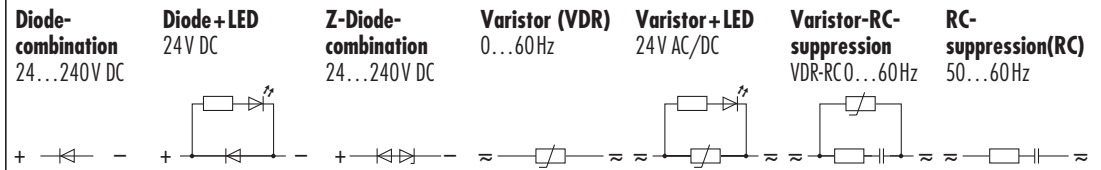
S 00



S 0



Circuit diagram



Appropriate contactors

3 RH 1/11, 3 RT 1/3 RH 1
3 RT 1/10.15...10.17

3 RT 10.24/25/26

Ordering data

Art.-No.

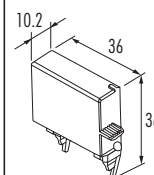
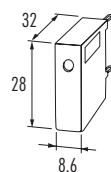
Art.-No.

Voltage	Suppression	approvals	Art.-No.	approvals	Art.-No.
24 ...240 V DC	Diode/Z-Diode	UL + CSA	26500	UL + CSA	26520
	Diode/Z-Diode			UL + CSA	¹⁾ 26528
24 V DC	Diode + LED	UL + CSA	26501		
	Diode + Z-Diode + LED				
24 V AC/DC	Diode/Z-Diode	UL + CSA	26502		
	VDR	UL + CSA	26503	UL + CSA	26524
	VDR + LED	UL + CSA	26504		
110 V AC/DC	RC	UL + CSA	21200	UL + CSA	21210
	VDR				
	VDR + LED				
	VDR-RC				
230 V AC/DC	RC	UL + CSA	21201		
	VDR	UL + CSA	26507	UL + CSA	26526
	VDR + LED	UL + CSA	26508		
	VDR-RC				
	VDR-RC + LED				
400 V AC/DC	RC	UL + CSA	21202	UL + CSA	21212
	VDR				

Technical data

Damping factor	~ 1.5 x U _N
Temperature range	-20...+70 °C
Material	flame retardant plastic to UL 94
Connection wires	plug contact

Dimensions



Notes

For other types, please inquire.
¹⁾ Mounts on the underside of the contactor.

Suppressors for contactors

SIEMENS

S 2



S 3



S 6 - S 12



Circuit diagram

Diode-combination
24...240 V DC

Diode + LED
24 V DC

Z-Diode-combination
24...240 V DC

Varistor (VDR)
0...60 Hz

Varistor + LED
24 V AC/DC

Varistor-RC-suppression
VDR-RC0...60 Hz

RC-suppression (RC)
50...60 Hz



Appropriate contactors

3 RT 1.3/1.4

3 RT 1.5/6/7

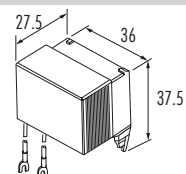
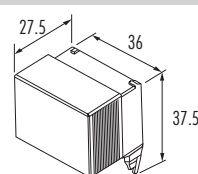
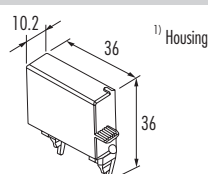
Ordering data

Voltage		Suppression	Art.-No.	Art.-No.	Art.-No.
24 ... 240 V DC	Suppression	approvals			
	Diode			UL + CSA	26521
24 V DC	Diode + LED				
	Diode + Z-Diode + LED				
24 V AC/DC	Diode/Z-Diode				
	VDR			UL + CSA	26524
	VDR + LED				
48 V DC	RC	UL + CSA	21215		21220
	Diode/Z-Diode				
48 V AC/DC	VDR				
	RC				21220
110 V AC/DC	VDR				
	VDR + LED				
	VDR-RC				
	RC				21221
230 V AC/DC	VDR			UL + CSA	26526
	VDR + LED				
	VDR-RC				
	VDR-RC + LED				
	RC	UL + CSA	21217		21222
400 V AC/DC	VDR				

Technical data

Damping factor	~ 1.5 x U _N
Temperature range	-20...+70 °C
Material	flame retardant plastic to UL 94
Connection wires	plug contact

Dimensions



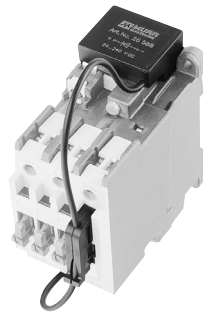
Notes

For other types, please inquire.

Suppressors for contactors

SIEMENS

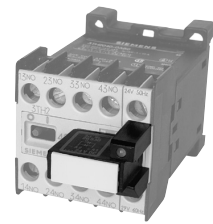
SO 4



SO 1



3 TF/L-3 TF



Circuit diagram

Diode-combination
24...240V DC

Diode+LED
24V DC

Z-Diode-combination
24...240V DC

Varistor (VDR)
0...60Hz

Varistor+LED
24V AC/DC

Varistor-RC-suppression
VDR-RC0...60Hz

RC-suppression (RC)
50...60Hz



Appropriate contactors

3 TH 3/4
3 TF 30...35, 3 TF 40...45

3 TH 3/4/8, 3 TF 30...45
3 TB 40...3 TB 44

3 TH 2, 3 TF 2
3 TH 20, 3 TF 20

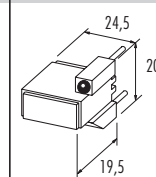
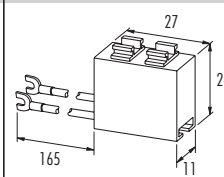
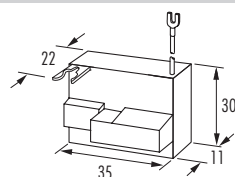
Ordering data

		Art.-No.		Art.-No.		Art.-No.	
Voltage	Suppression	approvals	approvals	approvals	approvals	approvals	approvals
24 ...240 V DC	Diode		UL + CSA	26283	UL + CSA	26036	
24 V DC	Diode + LED				UL + CSA	26530	
	Diode + Z-Diode + LED						
	Diode/Z-Diode		UL + CSA	26051	UL + CSA	26034	
24 V AC/DC	VDR	CSA	26576	UL + CSA	26315	UL + CSA	26037
	VDR + LED					UL + CSA	26531
	RC + VDR			UL + CSA	22050	UL + CSA	26328
48 V DC	Diode/Z-Diode						
48 V AC/DC	VDR	CSA	26576			UL + CSA	26038
	RC			UL + CSA	22051		
110 V AC/DC	VDR						
	VDR + LED						
	VDR-RC						
	RC	CSA	26571	UL + CSA	22051		
230 V AC/DC	VDR	CSA	26578	UL + CSA	26317	UL + CSA	26039
	VDR + LED						
	VDR-RC					UL + CSA	26331
	VDR-RC + LED						
	RC			UL + CSA	22052		
	RC			UL + CSA	22054		
400 V AC/DC	VDR						
	RC			UL + CSA	22054		

Technical data

Damping factor	$\sim 1.5 \times U_N$
Temperature range	-20...+70 °C
Material	flame retardant plastic to UL 94
Connection wires	self-securing fork terminal ends

Dimensions



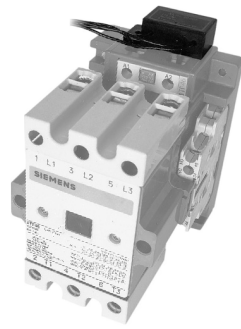
Notes

For other types, please inquire.

Suppressors for contactors

SIEMENS

U 3



H



A0



Circuit diagram

Diode-combination
24...240V DC

Diode + LED
24 V DC

Z-Diode-combination
24...240V DC

Varistor (VDR)
0...60Hz

Varistor + LED
24 V AC/DC

Varistor-RC-suppression
VDR-RC0...60Hz

RC-suppression (RC)
50...60Hz



Appropriate contactors

3 TF 46...50, 3 TB 48...56
3 TC 48...56

3 TF 2, 3 TK 2
3 TF 30...33, 3 TF 40...43

3 TF 46...56, 3 TB 40...56
3 TK 48...56, 3 TC 48...56

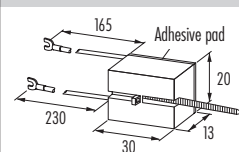
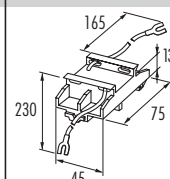
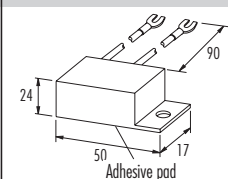
Ordering data

Voltage		Suppression	Art.-No.	Art.-No.	Art.-No.
24 ... 240 V DC	Suppression	approvals			
	Diode		26027	26097	
24 V DC	Diode + Z-Diode			26095	
	Diode/Z-Diode			26090	
24 V AC/DC	VDR				26663
	VDR + LED				
	RC				
48 V DC	Diode/Z-Diode				26663
	VDR				
48 V AC/DC	RC			20100	
	VDR			26092	
110 V AC/DC	VDR + LED				
	VDR-RC				
	RC	UL + CSA	20066		
	VDR		26673	UL + CSA	26093
230 V AC/DC	VDR + LED				
	VDR-RC				
	VDR-RC + LED				
	RC	UL + CSA	20067	CSA	20102
400 V AC/DC	RC				
	VDR				
	RC				

Technical data

Damping factor	~ 1.5 x U _N
Temperature range	-20...+70 °C
Material	flame retardant plastic to UL 94
Connection wires	self-securing fork terminal ends

Dimensions

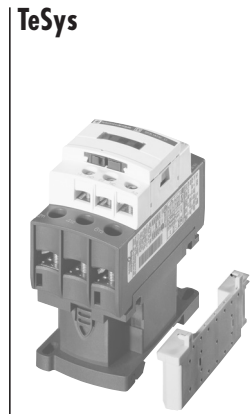
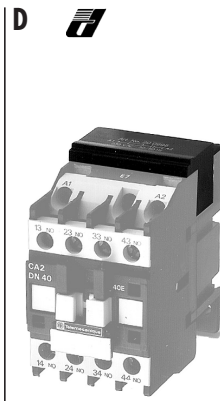
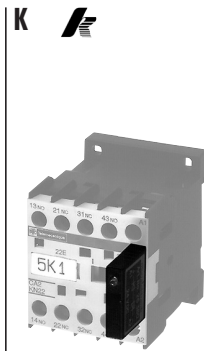


Notes

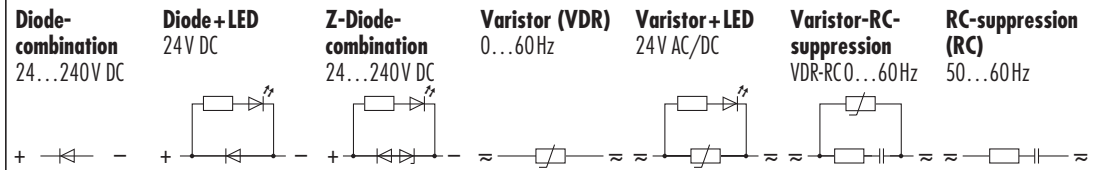
For other types. please inquire.

EMC suppressors

Suppressors for contactors



Circuit diagram



Appropriate contactors

CA 2-K...CA 4-K, LC...-K, LP...-K Series "k"	CA 2 DN, CA 3 DN Series "d" LC 1 D09...D32, LP 1 D0...D32	LC 1 D09...D38 LC 1 DT20, DT40, LC 2 D09...D38
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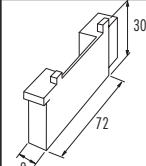
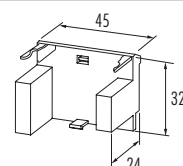
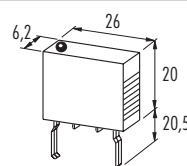
Ordering data

Voltage	Suppression	Art.-No.	Art.-No.	Art.-No.
24 ...240 V DC	Diode		26481	
24 V DC	Diode + LED			26476
	Z-Diode + LED	26380		26477
24 V AC/DC	VDR		26487	26477
	VDR + LED			
	RC		21070	21062
48 V DC	Z-Diode + LED			
48 V AC/DC	VDR			
	VDR + LED			
	RC		21070	
110 V AC/DC	VDR			26479
	VDR + LED	26384		
	RC		21071	21063
230 V AC/DC	VDR		26491	26478
	VDR + LED	26384		
	VDR-RC			
	VDR-RC + LED			
	RC		21060	21063
	RC + LED			
400 V AC/DC	VDR			
	RC			
	RC			

Technical data

Damping factor	~ 1.5 x U _N
Temperature range	-20...+70 °C
Material	flame retardant plastic to UL 94
Connection wires	plug contact

Dimensions



Notes

For other types, please inquire.

Suppressors

Universal

AO



AD

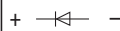


CF



Circuit diagram

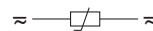
Diode-combination
24...240 V DC



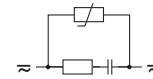
Z-Diode-combination



Varistor (VDR)
0...60 Hz



Varistor-RC-suppression
VDR-RC 0...60 Hz



RC-suppression (RC)
50...60 Hz



Appropriate contactors

universal

universal

universal

Ordering data

Ordering data		Art.-No.	Art.-No.	Art.-No.	sugg. coil valves		
Voltage	Suppression	approvals	approvals	approvals	AO	AD	CF
Max. 240 V DC	Diode	CSA 26001			15 W		
24 V DC	Z-Diode	CSA 26120	CSA 26073		25 W	75 W	
24 V AC/DC	VDR	UL + CSA 26180	CSA 26720		50 VA/W	200 VA/W	
	RC			CSA 20680			15 VA
48 V DC	Z-Diode						
48 V AC/DC	VDR	UL + CSA 26181	CSA 26721		70 VA/W	200 VA/W	
	RC	UL + CSA 20001	UL + CSA 20013		10 VA	15 VA	20 VA
110 V AC/DC	VDR	UL + CSA 26182	CSA 26722		100 VA/W	200 VA/W	
	VDR-RC						
	RC						
230 V AC/DC	VDR	UL + CSA 26183	CSA 26723		200 VA/W	200 VA/W	
	VDR	UL + CSA ¹⁾ 26184			200 VA/W		
	RC		CSA 20014	CSA 20682	10 VA	25 VA	15 VA
	RC	UL + CSA 20002	UL + CSA 20010	CSA 20683	20 VA	75 VA	20 VA
400 V AC/DC	RC		UL + CSA 20011	CSA ²⁾ 20687		100 VA	50 VA
	VDR		CSA 26724			200 VA/W	
	RC	UL + CSA 20004	UL + CSA 20012	CSA 20688	15 VA	20 VA	10 VA

Technical data

Damping factor ~ 1.5

Temperature range -20...+70 °C

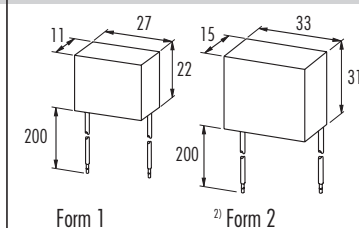
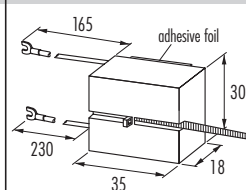
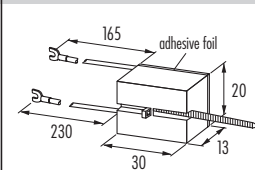
Material flame retardant plastic to UL 94

Connection wires self-securing fork terminal ends

self-securing fork terminal ends

flexible connection wires

Dimensions



Notes

For other types, please inquire.

¹⁾ up to 300 V AC/DC

Suppressors

Universal

H



RC-BUG 2

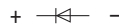


BU + UB

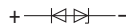


Circuit diagram

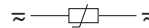
Diode-combination
24...240V DC



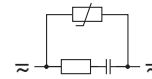
Z-Diode-combination



Varistor (VDR)
0...60Hz



Varistor-RC-suppression
VDR-RC0...60Hz



RC-suppression (RC)
50...60Hz



Appropriate contactors

universal

universal

universal

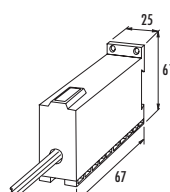
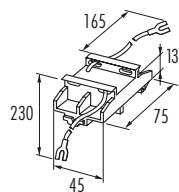
Ordering data

Voltage	Suppression	Art.-No.		sugg. coil valves					
		approvals		approvals	H	RC-BUG 2	BU + UB		
24 ...240 V DC	Diode	CSA	26097		CSA	26020	1000V/1A		1000V/1A
24 V DC	Z-Diode	CSA	26095		CSA	26130	25 W		25 W
24 V AC/DC	VDR	UL + CSA	26090		UL + CSA	26150	50 VA/W	100 VA/W	50 VA/W
	RC			CSA	26612			146 VA	
48 V AC/DC	VDR								
	RC	CSA	20100	CSA	26612		15 VA	146 VA	20 VA
110 V AC/DC	VDR	UL + CSA	26092	CSA	26618		100 VA/W	100 VA/W	100 VA/W
	RC			CSA	26613				
230 V AC/DC	VDR	UL + CSA	26093	CSA	26603		200 VA/W	10 VA/W	200 VA/W
	VDR	UL + CSA	26094	CSA	26619	UL + CSA	200 VA/W	100 VA/W	200 VA/W
	RC	CSA	20101	CSA	26614	CSA	15 VA	146 VA	20 VA
	RC	CSA	20102			CSA	25 VA		25 VA
	RC	CSA	20103				¹⁾ 20034	75 VA	25 VA
400 V AC/DC	VDR			CSA	26604			10 VA/W	
	RC			CSA	26615	CSA	15 VA	146 VA	15 VA
	RC			CSA	²⁾ 26616		20 VA	146 VA	

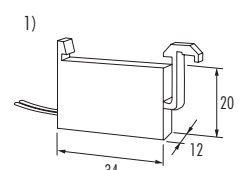
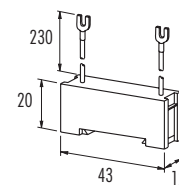
Technical data

Damping factor	~ 1.5		
Temperature range	-20...+70 °C		
Material	flame retardant plastic to UL 94		
Mounting method	DIN-rail mounting to EN 60715	with adapter ASA Art.-No. 20900 DIN-rail mounting to EN 60715	
Connection wires	self-securing fork terminal ends		

Dimensions



wire length 195 mm



wire length 230 mm

Notes

For other types, please inquire.

¹⁾ Without adapter, can be directly snapped onto DIN-rail. ²⁾ up to 600 V AC/DC