

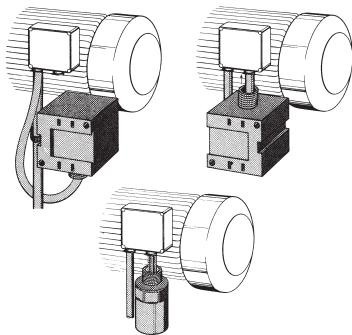
Standardized motor suppression from Murrelektronik

We offer a suitable motor suppressor for every application. The suppressor should, if at all possible be mounted very close to the source of interference (motor). The European norm (EN 50262) has been valid since 12/31/1999 for metric threads and replaces the DIN 46320 for PG threads. In this transitional period Murrelektronik offers both variants. There are also modules available which can be snapped onto DIN-rail. The use of motor suppression equipment protects the motor from high inductive

voltage spikes when switching off. At the same time, it increases the contact life span of the control unit. With the optimum suppression modules from Murrelektronik, you receive the highest level of operational safety. The machine or control panel will function within the EMC regulations, without affecting other electrical equipment in the surrounding area .

Murrelektronik offers the perfect mounting method for every application!

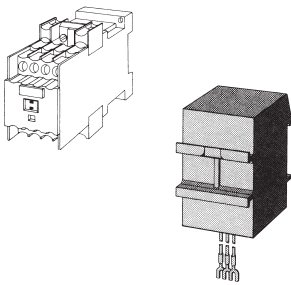
For connection to the motor terminal box



The Murrelektronik motor suppressor in the series RC3U, RC3R and RC3 RG have a M16 x 1,5, M20 x 1,5, PG 9 or PG 13,5 screw thread for direct mounting on to the terminal box of the motor.

Suppression, where the interference arises !

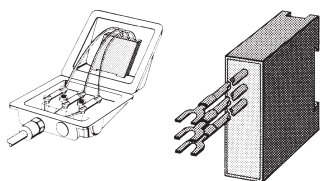
Under the contactor



The motor suppressor series HRC3/HRC3K snap on to 35 mm DIN-rail (EN 50022). The contactor can then be snapped piggy-back style on to the suppressor. HRC3S contains additional contactor suppression as well.

Space savings.

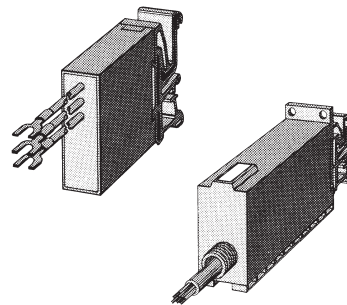
Direct mounting in the terminal box



Our smallest motor suppressor RC3BU fit snugly into the terminal box of the motor.

Direct suppression on the motor.

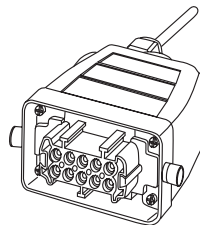
Snaps on to DIN and C-rails



Murrelektronik motor suppressors can be fitted with a snap foot to allow mounting on DIN-rail. The models are in a space saving 12 mm housing. RC3BU, RC3BUG

Snap on, connect, finished.

Mounts directly on the motor



With the RC 3 ST, the motor can be quickly connected and at the same time suppressed.

Suppression and connection in one.

Installation directly on the motor



RC 3 U

Suppression: RC for 50...60 Hz
VDR for 60...300 Hz
Mounted on the motor terminal box

Page 3.5.3



RC 3 R

Suppression: VDR for 60...300 Hz
Mounted on the motor terminal box

Page 3.5.4



RC 3 ST

Suppression: VDR for 60...300 Hz
Motor connection plug with integrated suppression and pre-wired cable

Page 3.5.5

Installation in the control panel



RC 3 BUR

Suppression: RC for 50...60 Hz
VDR for 60...300 Hz
Can be integrated in contactors up to 5 kW

Page 3.5.6



HRC 3 AS

Suppression: RC for 50...60 Hz
VDR for 60...300 Hz
Can be universally integrated in contactors up to 5 kW

Page 3.5.7



RC 3 RT

Suppression: RC for 50...60 Hz
VDR for 60...300 Hz
Can be integrated in contactors up to 5 kW for SIRIUS

Page 3.5.7

Mounting methods:

- on the motor terminal box
- inside the motor terminal box
- inside the distribution box
- on 35 mm DIN-rail to EN 50022

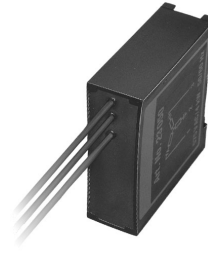
RC 3 U

with M16 x 1,5 screw



RC 3 U

with PG 9 screw



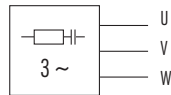
RC 3 BU

RC 3 BUG

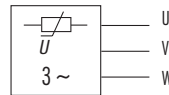


Circuit diagram

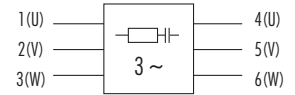
RC-suppression



Varistor-suppression (VDR)



6-wire

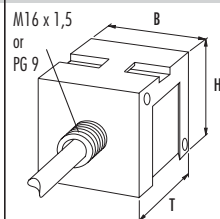


Ordering data		Art.-No.	Art.-No.	Art.-No.	Art.-No.
Voltage	Motor rating	suppression	suppression	suppression	suppression
3 x 400 V AC	4 kW	RC 23022	RC 23020	RC 23050	RC 23104
	4 kW			RC ²⁾231428	VDR 23100
	4 kW			VDR 23115	RC
	7,5 kW			VDR 23115	RC 23104
	10 kW	RC 23011	RC 23010	VDR 23118	RC 23106
	10 kW	RC/6-wire 23043	RC/6-wire 23040		
	20 kW			VDR 23118	VDR 23101
3 x 575 V AC	4 kW			RC 23050	
	7,5 kW	RC 23035	RC 23030		RC 23104
	20 kW				VDR 23102
	45 kW				RC/6-wire ¹⁾23103
3 x 690 V AC	4 kW			RC 23056	RC 23104
	7,5 kW				RC 23104
	20 kW				VDR 23105

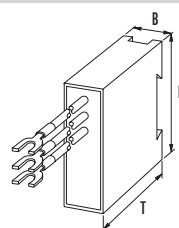
Technical data

Frequency	for RC: 50...60 Hz	for VDR: 10...400 Hz
Material	flame retardant plastic to UL 94	
Potting compound	2-component epoxy	
Temperature range	-20...+60 °C	
Connection method	approx. 500 mm PVC cable 3 x 0,75 mm ² resp. 6 x 0,75 mm ²	approx. 200 mm single core 0,5 mm ² self-securing M4 fork terminal ends
Dimensions H x B x T	41 x 41 x 41 mm	40 x 15 x 43 mm
		approx. 500 mm single core 1 mm ²
		61 x 25 x 92 mm

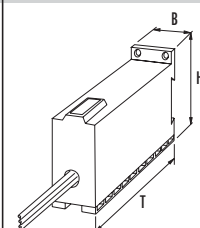
Dimension drawing



For DIN-rail mounting use
2 x Art.-No. 20900 adapter feet.



For DIN-rail mounting use
1 x Art.-No. 20900 adapter feet.



For DIN-rail mounting use
2 x Art.-No. 20900 adapter feet.

Notes

For other voltages, frequencies and motor ratings, please inquire. Do not use RC motor suppressors on variable frequency drives.
¹⁾1 x Art.-No. 23103 required per phase. ²⁾Art.-No. 231428 has ferrule ends.

Mounting methods:

- with M16 x 1,5 and M20 x 1,5 PG 9 and PG 13,5 screw connector on body
- on motor terminal box with plug connectors

RC 3 R

with M16 x 1,5 screw



RC 3 R

with PG 9 screw

RC 3 R

with M16 x 1,5 screw

RC 3 R

with PG 9 screw

RC 3 RG

with M20 x 1,5 screw

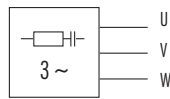


RC 3 RG

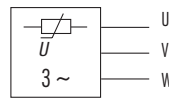
with PG 13,5 screw

Circuit diagram

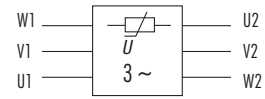
RC-suppression



Varistor-suppression (VDR)



6-wire

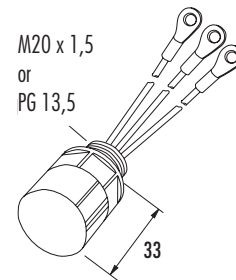
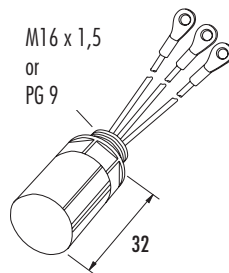


Ordering data		Art.-No.	Art.-No.	Art.-No.	Art.-No.	Art.-No.	Art.-No.		
Voltage	Motor rating	suppression	suppression	suppression	suppression	suppression	suppression		
		3 x 400 V AC	4 kW	VDR 23170	VDR 23110	VDR 23175	VDR 23119	RC 23141	RC 23140
			4 kW						
			4 kW						
			7,5 kW	VDR 23171	VDR 23111				
			10 kW					VDR 23142	VDR 23120
3 x 575 V AC	4 kW					VDR/6-wire 23143	VDR/6-wire 23125		
						VDR 23144	VDR 23121		
						RC 23141	RC 23140		
						VDR 23145	VDR 23122		
						VDR 23146	VDR 23123		
3 x 690 V AC	7,5 kW					VDR/6-wire 23147	VDR/6-wire 23126		
3 x 690 V AC	20 kW					VDR/6-wire ²⁾ 23148	VDR/6-wire ²⁾ 23127		
						VDR 23149	VDR 23124		

Technical data

Frequency	for RC: 50...60 Hz	for VDR: 10...400 Hz
Material	flame retardant plastic to UL 94	
Potting compound	2-component epoxy	
Temperature range	-20...+60 °C	
Connection method	approx. 100 mm single core 0,5 mm ²	approx. 150 mm single core 1 mm ²
Ring terminals	insulated M6	insulated M4
Dimensions	40 mm, Ø 24,5 mm	44 mm, Ø 39 mm

Dimension drawing



Notes

For other voltages, frequencies, motor ratings, resp. Cable/wire lengths please inquire.
Do not use RC motor suppressors on variable frequency drives. ¹⁾ wire diameter 1,5 mm² ²⁾ to max. 660 V AC.

Mounting methods:

– on motor terminal box with plug connectors

RC 3 ST

Connector with cable and integrated motor suppression cable outlet at the back



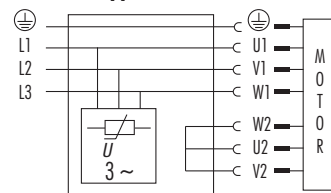
RC 3 ST

Connector with cable and integrated motor suppression cable outlet at the side

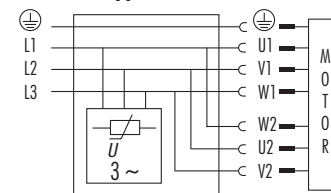


Circuit diagram

Varistor-suppression (star)



Varistor-suppression (delta)



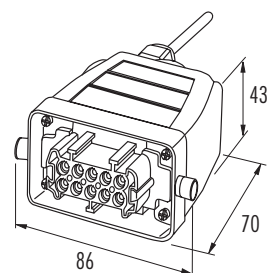
Ordering data

Voltage	Motor rating	Cable length		Art.-No.	Art.-No.
3 x 400 V AC	4 kW	5 m	VDR/star	23400	
	4 kW	5 m	VDR/delta	23410	
3 x 575 V AC	5,5 kW	4 m	VDR/star	236138	
	5,5 kW	5 m	VDR/star	¹⁾ 236139	VDR/star
	5,5 kW	6 m	VDR/star	236140	
	5,5 kW	8 m	VDR/star	236141	
	5,5 kW	10 m	VDR/star	²⁾ 236142	VDR/star
	5,5 kW	6 m	VDR/delta	236143	

Technical data

Frequency	10...400 Hz	
Plug connector	female, 10-pole + PE	
Housing	aluminium pressure diecasting	
Temperature range	-20...+60 °C	
Connection method	PUR cable black, 4 x 1,5 mm ² ; numbered wires, halogen free	PUR cable black, 4 x 1,5 mm ² ; numbered wires, DESINA® conform
Dimensions	see dimension drawing	

Dimension drawing



without compression gland

Notes

¹⁾ With DESINA® cable Art.-No. 236121

²⁾ With DESINA® cable Art.-No. 236124

Mounting methods:

- on 35 mm DIN-rail to EN 50022
- bolted together, stacked
- DIN-rail mounted under the control gear

HRC 3



HRC 3 K



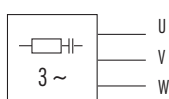
RC 3 BUR

Connects onto Siemens SIRIUS contactors 3 RT 10

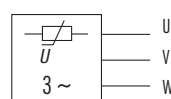


Circuit diagram

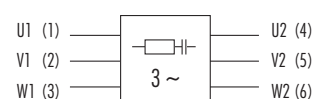
RC-suppression



Varistor-suppression (VDR)



6-wire

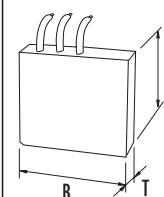
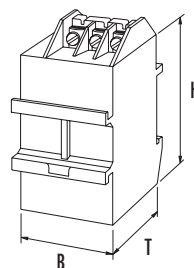
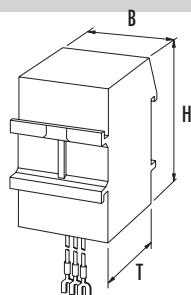


Ordering data		Art.-No.	Art.-No.	Art.-No.
Voltage	Motor rating	suppression	suppression	suppression
3 x 400 V AC	4 kW	RC	²⁾ 23000	RC
	4 kW	RC	23004	RC
	4 kW	RC	¹⁾ 233463	
	5,5 kW			RC
	7,5 kW			236082
	10 kW	RC	23002	RC
3 x 575 V AC	20 kW	RC/6-wire	23009	
	20 kW	VDR	23015	
	5,5 kW			RC
	7,5 kW	RC	23006	RC
	7,5 kW	RC	¹⁾ 230563	23007
	10 kW	VDR	23016	
3 x 660 V AC	20 kW			RC
	10 kW	RC	23017	23018

Technical data

Frequency	for RC: 50...60 Hz		for VDR: 10...400 Hz
Material	flame retardant plastic to UL 94		
Potting compound	2-component epoxy		
Temperature range	-20...+60 °C		
Connection method	250 mm single core (Art.-No. 23000; 300 mm) 0,5 mm ² (Art.-No. 23000; 1,5 mm ²) self-securing M4 fork terminal ends	3-pole terminal 2 x (0,75...2,5 mm ²) M4	wire (solid core) 1,5 mm ²
Dimensions H x B x T	75 x 45 x 42 mm	75 x 45 x 42 mm	40 x 15 x 43 mm

Dimension drawing



Notes

For other voltages, frequencies and motor ratings, please inquire. Do not use RC motor suppressors on variable frequency drives.
¹⁾ Has ferrule ends. ²⁾ Max. nominal voltage 3 x 450 V AC +10 %.

Mounting methods:

- DIN-rail mounted under the control gear
- fixes onto contactors
- available with integrated coil suppression

HRC 3 AS

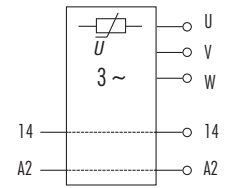
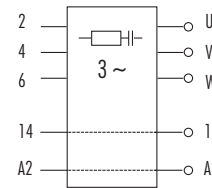
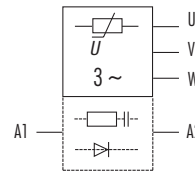
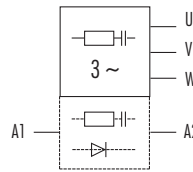


RC 3 RT

Connects onto Siemens SIRIUS contactors
3 RT 10



Circuit diagram



Appropriate contactors

Motor contactors up to 5,5 kW from Siemens, Moeller, Sprecher + Schuh etc.

Siemens 3 RT 10

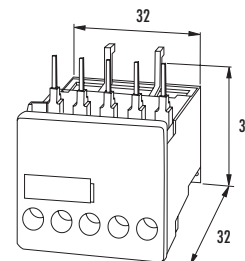
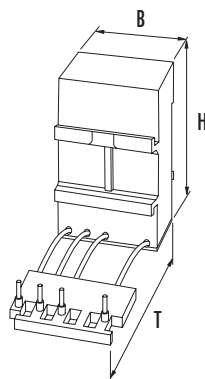
Ordering data

Voltage		Motor rating	suppression	Art.-No.	suppression	Art.-No.	suppression	Art.-No.	suppression	Art.-No.
3 x 400 V AC	5,5 kW	RC	23160	VDR	23163	RC	¹⁾ 23180	VDR	¹⁾ 23183	
		RC + Diode	23151	VDR + Diode	23155	RC + Diode	23191	VDR + Diode	23194	
		RC + RC	23150	VDR + RC	23154	RC + RC	23190	VDR + RC	23197	
3 x 575 V AC	5,5 kW	RC	23161	VDR	23164	RC	¹⁾ 23181	VDR	¹⁾ 23184	
		RC + Diode	23153	VDR + Diode	23157	RC + Diode	23193	VDR + Diode	23196	
		RC + RC	23152	VDR + RC	23156	RC + RC	23192	VDR + RC	23195	
3 x 690 V AC	5,5 kW					RC	¹⁾ 23182	VDR	¹⁾ 23185	

Technical data

Suppression Coil	for RC: 230 V AC/20 VA	for diode: 24...230 V DC/36 W
Frequency	for RC: 50...60 Hz, for VDR: 10...400 Hz	
Material	flame retardant plastic to UL 94	
Temperature range	-20...+60 °C	
Connection method	ferrules, load side securely fixed	fits directly into SIRIUS contactors, size 00
Dimensions H x B x T	75 x 45 x max. 100 mm (full stretch)	40 x 45 x 65,5 mm

Dimension drawing



Notes

For other voltages, frequencies and motor ratings, please inquire. Do not use RC motor suppressors on variable frequency drives.
¹⁾ With approval UL.