

## SOLID STATE RELAYS

### Triac modules



#### MIRO 6.2

Compact format which snaps on to 35 mm DIN-rail acc. to EN 60715.

The potential plug bridge allows rapid potential connections to triac modules without the need for additional terminals.

from page 1.12.3



#### MIRO 6.2 pluggable

Compact format. DIN-rail mounting acc. to EN 60715 (TH35) resp. (G32).

Fast connection via potential bridging link in blue and black.

Pluggable opto-coupler modules replaceable.

Isolation plate for potential separation. With spring clamp terminals.

page 1.12.6



#### MIRO triac

Compact format which snaps on to 35 mm DIN-rail acc. to EN 60715.

MIRO triacs are zero voltage switching and available as 1-phase, 2- and 3-phase versions.

Compact MIRO triacs switch currents of 5, 10 A or up to 30 A.

from page 1.12.7



#### AMS triac

In the MCVO housing of 22.5 mm an opto-coupler range with a nominal current of up to 4 A is integrated. Snaps on to 35 mm DIN-rail acc. to EN 60715.

page 1.12.9



#### AMMS

Built to a compact 12 mm format. Galvanically separated inputs and outputs as well as maintenance free solid state circuits guarantee smooth operation.

Input signals from 3.5...230 V can be processed. Transistor or triac circuits are used on the output side.

LED-status indicator, a label plate and mounting on to DIN-rail acc. to EN 60715 (TH35) resp. (G32) are standard features.

from page 1.12.10



#### AMMDS triac

The ideal way to bring clarity to a control system.

The Murrelektronik advantages are:

- 12 mm compact format, galvanic separation between input and output, transistor or triac outputs.
- LED status indicator at the input, switching currents up to 2 A, label plate, plug-link on the input.
- DIN-rail mounting acc. to EN 60715 (TH35) resp. (G32).
- Potential rail with 12 mm spacing on the output.

from page 1.12.11

# SOLID STATE RELAYS

**Terminal triac**  
**– zero potential switch**

**MIRO 6.2**  
 Triac 0.5 A



**MIRO 6.2**  
 Triac 0.5 A  
 With integrated looping terminals



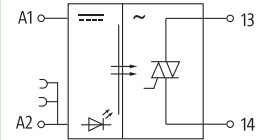
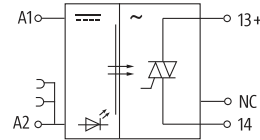
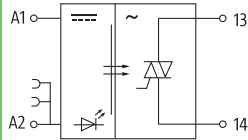
**MIRO 6.2**  
 Triac 1 A



**Approvals:**

**Circuit diagram**

Common connection up to max. 50 V AC/DC



**Ordering data**

	Art.-No.	Art.-No.	Art.-No.
Input voltage	Spring clamp/screw terminals	Spring clamp/screw terminals	Spring clamp/screw terminals
5 V DC	6652551		
24 V DC	6652550	6652560	6652571

**Accessories**

Bridging link	2-pole	max. 2 A	90961
Potential rail	10-pole	red	90976
Potential rail	10-pole	blue	90975
End caps	1 pair	red	90982
	1 pair	blue	90980
Wire chain			90977
Label plate			90901

**Input**

ON/OFF/Control current	5 V DC	4.0 ...5.5 V DC / 0...2 V DC / 6 mA	
	24 V DC	10 ...44 V DC / 0...3 V DC / 6 mA	10...53 V DC / 0...3 V DC / 9 mA
Status indicator		LED (yellow)	

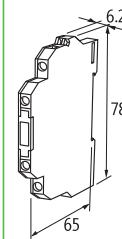
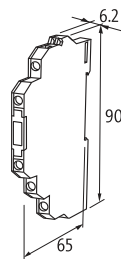
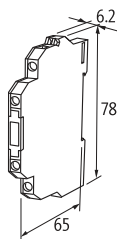
**Output**

Switching current min./max.	0.1 mA/0.5 A	0.01 mA/1.0 A
Switched voltage	24...250 V AC	12...250 V AC
Saturation voltage (across output)	≤ 1.5 V AC	≤ 1.5 V AC
Leakage current (when output is open)	< 0.3 mA	< 1 mA
Switching time ON/OFF	10/10 ms	10/10 ms
Switching frequency ohmic/inductive	20 Hz/dependent on load	2 Hz/dependent on load

**General data**

Test isolation voltage	2.5 kV AC
Temperature range	-20...+60 °C
Housing	black, flame retardant plastic
Mounting method	DIN-rail mounting 35 mm acc. to EN 60715

**Dimension drawing**



For Derating  
 see Murrelektronik online shop

[onlineshop.murrelektronik.com](http://onlineshop.murrelektronik.com)

**Notes**

For screw terminal connection, the article number changes from 6652... to 52... (i.e. the prefix 66 is dropped).

## SOLID STATE RELAYS

Terminal triac

– zero potential switch

**MIRO 6.2**

Triac 0.5 A

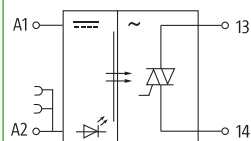


Approvals:



### Circuit diagram

Common connection up to max. 50 V AC/DC



### Ordering data

Input voltage	Spring clamp/screw terminals	Art.-No.
110 V AC/DC	UL	6652556
230 V AC	UL	6652557

### Accessories

Bridging link	2-pole	max. 2 A	<b>90961</b>
Potential rail	10-pole	red	<b>90976</b>
Potential rail	10-pole	blue	<b>90975</b>
End caps	1 pair	red	<b>90982</b>
	1 pair	blue	<b>90980</b>
Wire chain			<b>90977</b>
Label plate			<b>90901</b>

### Input

ON/OFF/Control current	110 V AC/DC	70 ... 130 V AC/DC / 0...35 V AC/DC / 4 mA
	230 V AC	140... 250 V AC / 0...80 V AC / 7 mA
Status indicator		LED (yellow)

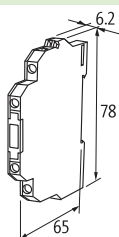
### Output

Switching current min./max.	0.1 mA/0.5 A
Switched voltage	24... 250 V AC
Saturation voltage (across output)	≤ 1.5 V AC
Leakage current (when output is open)	< 0.3 mA
Switching time ON/OFF	10/10 ms
Switching frequency ohmic/inductive	20 Hz/dependent on load

### General data

Test isolation voltage	2.5 kV AC
Temperature range	-20...+60 °C
Housing	black, flame retardant plastic
Mounting method	DIN-rail mounting 35 mm acc. to EN 60715

### Dimension drawing



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### Notes

For screw terminal connection, the article number changes from 6652... to 52... (i.e. the prefix 66 is dropped).

# SOLID STATE RELAYS

Terminal triac

– zero potential switch

## MIRO 6.2

Triac 0.5 A

With output isolation link

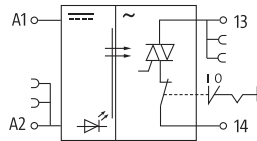


Approvals:



### Circuit diagram

Common connection up to max. 50 V DC



### Ordering data

Art.-No.

Input voltage	Spring clamp/screw terminals	
24 V DC		6652561

### Accessories

Bridging link	2-pole	max. 2 A	90961
Potential rail	10-pole	red	90976
Potential rail	10-pole	blue	90975
End caps	1 pair	red	90982
	1 pair	blue	90980
Wire chain			90977
Label plate			90901

### Input

ON/OFF/Control current	24 V DC	10...53 V DC / 0...5 V DC / 7 mA
Status indicator		LED (yellow)

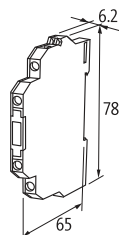
### Output

Switching current min./max.	0.1 mA/0.5 A
Switched voltage	24...250 V AC
Saturation voltage (across output)	≤ 15 V AC
Leakage current (when output is open)	< 0.3 mA
Switching time ON/OFF	10/10 ms
Switching frequency ohmic/inductive	20/1 Hz

### General data

Test isolation voltage	2.5 kV AC
Temperature range	-20...+60 °C
Housing	black, flame retardant plastic
Mounting method	DIN-rail mounting 35 mm acc. to EN 60715

### Dimension drawing



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### Notes

For screw terminal connection, the article number changes from 6652... to 52... (i.e. the prefix 66 is dropped).

## SOLID STATE RELAYS

### Terminal triac

– zero potential switch

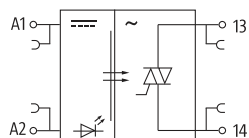
### MIRO 6.2 pluggable

Triac 0.5 A



### Circuit diagram

Common connection up to max. 50 V AC/DC



### Ordering data

		Art.-No.
Input voltage	Spring clamp terminals	
24 V DC		3000-34013-210 0010
<b>Accessories</b>		
Bridging link	blue	3000-90000-030 0010
	black	3000-90000-030 0020
Removable triac		3000-69011-210 0060
Isolation plate	16-pole	3000-90000-030 0030

### Input

ON/OFF/Control current	24 V DC	11...30 VDC/0...5 V DC/approx. 18 mA
Status indicator		LED (yellow)

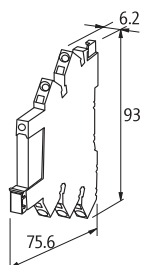
### Output

Switching current min./max.	10 mA/0.5 A
Switched voltage	12...250 V AC
Leakage current (when output is open)	< 1 mA
Switching time ON/OFF	10/10 ms
Switching frequency ohmic/inductive	20/1 Hz

### General data

Test isolation voltage	2.5 kV AC
Temperature range	-20...+60 °C
Housing	black, flame retardant plastic
Mounting method	DIN-rail mounting 35 mm acc. to EN 60715

### Dimension drawing



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### Notes

# SOLID STATE RELAYS

## Triac modules

– zero potential switch

### MIRO triac

Triac 5 A

### MIRO triac

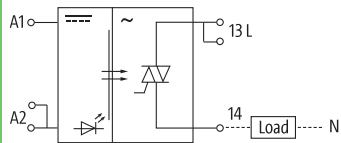
Triac 10 A



Approvals:



### Circuit diagram



### Ordering data

Control voltage input	Screw-plug terminals	Art.-No.	Screw-plug terminals	Art.-No.
24 V DC		3000-36001-200 0020		3000-36001-200 0025
115 V AC		3000-36001-200 0022		3000-36001-200 0027
230 V AC		3000-36001-300 0023		3000-36001-300 0028

### Input

ON/OFF/Control current	24 V DC	10... 53 VDC/0...3 V DC/approx. 7.8 mA
	115 V AC	70... 150 VAC/0...25 V AC/approx. 9 mA
	230 V AC	140... 253 VAC/0...50 V AC/approx. 10 mA

Status indicator

LED (green)

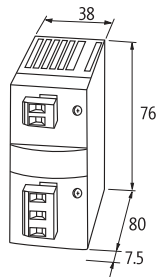
### Output

Switching current min./max.	100 mA/5 A	9 mA/10 A
Switched voltage	12...400 V AC	
Saturation voltage (across output)	≤ 0.15 V AC	
Leakage current (when output is open)	≤ 1 mA	
Switching time ON/OFF	10/10 ms	
Switching frequency ohmic/inductive	20/1 Hz	
Surge	70 A	

### General data

Temperature range	-20...+60 °C
Housing	black, flame retardant plastic
Mounting method	DIN-rail mounting 35 mm acc. to EN 60715

### Dimension drawing



### Notes

# SOLID STATE RELAYS

## Triac modules

– zero potential switch

Approvals:  

### MIRO triac

Triac 30 A



### MIRO triac

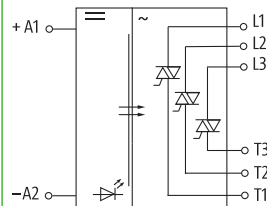
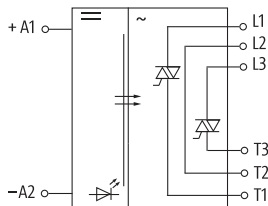
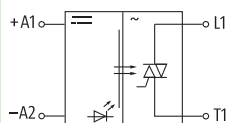
Triac 2 x 25 A



### MIRO triac

Triac 3 x 20 A

## Circuit diagram



## Ordering data

Control voltage input	Art.-No.	Art.-No.	Art.-No.
24 V DC	3000-36001-200 0040	3000-36001-200 0050	3000-36001-200 0060

## Input

ON/OFF/Control current	24 V DC	4... 32 VDC/0...2.5 V DC/max. 12 mA	5... 32 VDC/0...2.5 V DC/max. 24 mA
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Status indicator	LED (yellow)
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## Output

Switching current min./max.	150 mA/30 A	150 mA/2 x 25 A	150 mA/3 x 20 A
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Switched voltage	42...660 V AC	40...660 V AC
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Leakage current (when output is open)	≤ 3 mA
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Switching time ON/OFF	20/20 ms
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Switching frequency ohmic/inductive	20/1 Hz <sup>1)</sup>
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Surge	400 A	600 A
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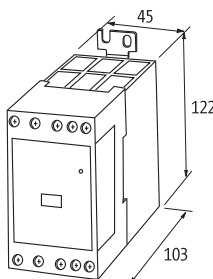
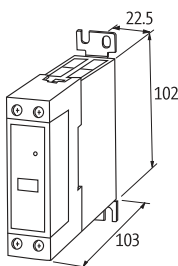
## General data

Temperature range	-30...+70 °C
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Housing	PBT
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Mounting method	DIN-rail mounting 35 mm acc. to EN 60715
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## Dimension drawing



## For Derating

see Murrelektronik online shop

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## Notes

<sup>1)</sup> Inductive loads have to be wired with a suitable suppressor component (preferably Murrelektronik suppression).

# SOLID STATE RELAYS

## Triac module

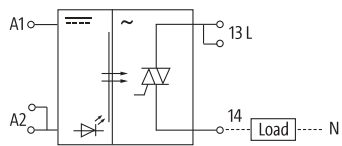
– zero potential switch

## AMS

Triac 4 A



### Circuit diagram



### Ordering data

Art.-No.

Control voltage input

24 V DC

50034

### Input

Voltage range „ON“	10...53 V DC <sup>1)</sup>
Voltage range „OFF“	0...3 V DC
Nominal current	6 mA
Status indicator	LED (red)

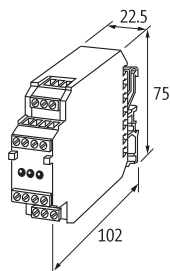
### Output

Switched voltage min./max.	24...253 V AC
Switching current min./max.	50 mA...4 A
Saturation voltage (across output)	< 1.4 V
Leakage current (when output is open)	< 10 mA
Switching time ON/OFF	10/10 ms
Switching frequency ohmic/inductive	30/5 Hz

### General data

Test isolation voltage	3.75 kV AC
Temperature range	-20...+60 °C
Housing	black, flame retardant plastic
Mounting method	DIN-rail mounting acc. to (TH35) or (G32) EN 60715

### Dimension drawing



For Derating  
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### Notes

Accessories can be found on page 1.12.12.

<sup>1)</sup> 230 V AC control voltage on request.



## SOLID STATE RELAYS

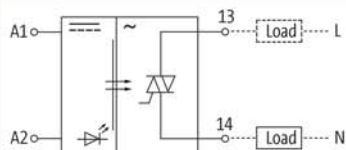
### Triac modules

– zero potential switch

**AMMS**  
Triac 1 A



### Circuit diagram



### Ordering data

	Art.-No.
Control voltage input	
24 V DC	50030

### Input

Voltage range „ON“	10...53 V DC
Voltage range „OFF“	0...3 V DC
Nominal current	10 mA
Status indicator	LED (red)

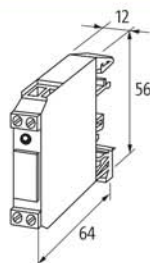
### Output

Switched voltage min./max.	24...253 V AC
Switching current min./max.	50 mA...1 A
Saturation voltage (across output)	≤ 1.3 V AC
Leakage current (when output is open)	< 5 mA
Switching time ON/OFF	10/10 ms
Switching frequency ohmic	25 Hz

### General data

Test isolation voltage	2.5 kV AC
Temperature range	-20...+60 °C
Housing	black, flame retardant plastic
Mounting method	DIN-rail mounting acc. to (TH35) or (G32) EN 60715

### Dimension drawing



### For Derating

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### Notes

Accessories can be found on page 1.12.12.

## SOLID STATE RELAYS

### Triac module

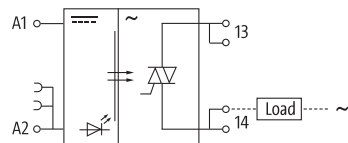
- zero potential switch
- with minus plug link

### AMMDS triac

Triac 2 A



### Circuit diagram



### Ordering data

Art.-No.

Control voltage input  
24 V DC

50092

### Input

Voltage range „ON“ 10...35 V DC  
Voltage range „OFF“ 0...3 V DC  
Nominal current 6 mA  
Status indicator LED (red)  
Plug link Art.-No. 90960 (included)

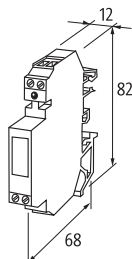
### Output

Switched voltage min./max. 24...280 V AC  
Switching current min./max. 50 mA...2 A  
Saturation voltage (across output)  $\leq 1$  V  
Leakage current (when output is open)  $\leq 2$  mA  
Switching time ON/OFF 10/10 ms  
Switching frequency ohmic/inductive 20/5 Hz

### General data

Test isolation voltage 2.5 kV AC  
Temperature range -20...+60 °C  
Housing black, flame retardant plastic  
Mounting method DIN-rail mounting acc. to (TH35) or (G32) EN 60715

### Dimension drawing



For Derating  
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### Notes

Accessories can be found on page 1.12.12.