

OPTOCOUPERS / SEMICONDUCTORS SWITCHING WITHOUT WEAR

- Shortest possible switching times
- High switching frequencies
- Resistant to EMC interference

MILLIONS OF SWITCHING CYCLES – EVEN WITH HIGH FREQUENCIES

Optocouplers and semiconductors are used to combine different signal levels or to isolate one signal from another. They are similar to a relay interface because they provide an optoelectronic signal transfer between input and output.

Optocouplers and semiconductors have a long life span because they don't have any mechanical components that could wear out. They are suitable for applications with high switching frequencies, even over a long time.

Some benefits of optocouplers and semiconductors:

- Silent operation
- No contact bounce
- Galvanic separation between input and output
- High resistance to shock and vibration
- High switching currents
- Low input power

Optocouplers / Semiconductors



Optocouplers

- Pluggable
- DC applications

Page 1.10.1



Optocouplers

- DC applications

Page 1.10.2



Semiconductors

- AC applications

Page 1.10.18

Terminal optocoupler

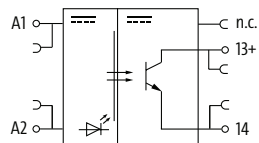
- pluggable
- with bridge system
- Complete module

MIRO 6.2

Transistor 6 A
Spring clamp terminals



Circuit diagram



Order Data

24 V DC (18...30 V DC) - 9 mA

Art-No.

3000-32512-2100040

Accessories

Removable plug-in module

Art-No.

3000-32522-2100040

Input

Connection voltage - current 24 V DC (18...30 V DC) - 9 mA

LED display LED (yellow)

Output

Switching time ON/OFF 15/31 μ s

Switching voltage 3...30 V DC

Switching current per output 10 mA...6 A

Saturation voltage (across output) max. 240 mV

Switching frequency max. 500/50 Hz (ohm./ind.)

General data

Test isolation voltage 50 V

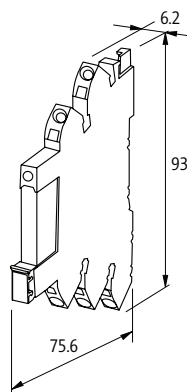
Surge voltage resistance 2.5 kV

Protection IP20

Mounting method pluggable

Temperature range -25...+50 °C

Dimension drawing



Notes

OPTOCOUPLEDERS / SEMICONDUCTORS

Terminal optocoupler – with bridge system

MIRO 6.2

Transistor 1 A
Screw terminals



MIRO 6.2

Transistor 1 A
Spring clamp terminals



MIRO 6.2

Transistor 2 A
Screw terminals

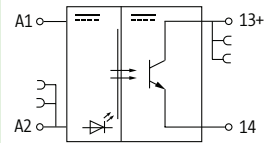
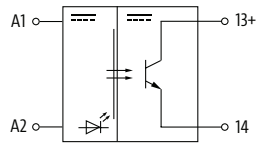


MIRO 6.2

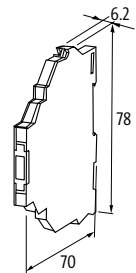
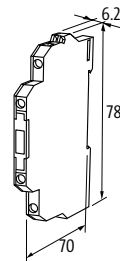
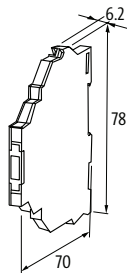
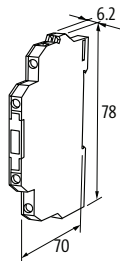
Transistor 2 A
Spring clamp terminals



Circuit diagram



Order Data	Art-No.	Art-No.	Art-No.	Art-No.
24 V DC/6 mA	52515	6652515		
5 V DC/6 mA			cURus, cCSAus	6652502
Input				
Voltage range ON	11...30 V DC		4...5.5 V DC	
Voltage range OFF	0...5 V DC		0...2 V DC	
Control current	6 mA			
LED display	LED (yellow)			
Output				
Switching voltage	3...48 V DC		5...48 V DC	
Switching current per output	500 µA...1 A		1 mA...2 A	
Saturation voltage (across output)	max. 0.12 V DC		max. 0.3 V DC	
Leakage current (output is open)	max. 25 µA		max. 10 µA	
Switching time ON/OFF	1.5/1 ms (100 mA load)		1/5 ms	
Switching frequency	max. 40/4 Hz (resist./ind.)		max. 10/1 Hz (resist./ind.)	
General data				
Test isolation voltage	500 V		2.5 kV	
Mounting method	DIN-rail mountable (EN 60715)			
Housing	Black plastic, flame retardant			
Temperature range	-20...+60 °C			
Dimension drawing				



Notes

Terminal optocoupler

– with bridge system

MIRO 6.2

Transistor 2 A
Screw terminals



MIRO 6.2

Transistor 2 A
Spring clamp terminals



MIRO 6.2

Transistor 0.5 A
Screw terminals



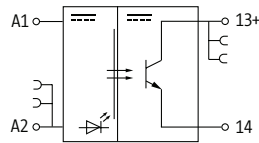
MIRO 6.2

Transistor 0.5 A
Spring clamp terminals

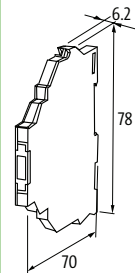
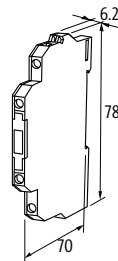
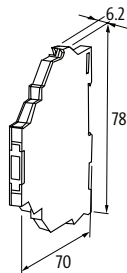
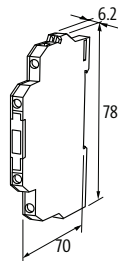


Approvals:

Circuit diagram



Order Data	Art-No.	Art-No.	Art-No.	Art-No.
24 V DC/6 mA	52501	6652501		
48 V DC/6 mA			52505	6652505
Input				
Voltage range ON	10...48 V DC		18...56 V DC	
Voltage range OFF	0...5 V DC		0...12 V DC	
Control current	6 mA			
LED display	LED (yellow)			
Output				
Switching voltage	5...48 V DC			
Switching current per output	1 mA...2 A		0.1 mA...0.5 A	
Saturation voltage (across output)	max. 0.3 V DC		max. 1.2 V DC	
Leakage current (output is open)	max. 10 µA			
Switching time ON/OFF	1/5 ms		20/100 µs	
Switching frequency	max. 10/1 Hz (resist./ind.)		max. 1 kHz/10 Hz (resist./ind.)	
General data				
Test isolation voltage	2.5 kV		3.75 kV	
Mounting method	DIN-rail mountable (EN 60715)			
Housing	Black plastic, flame retardant			
Temperature range	-20...+60 °C			
Dimension drawing				



Notes

OPTOCOUPLEDERS / SEMICONDUCTORS

Terminal optocoupler
– with bridge system

MIRO 6.2
Transistor 6 A
Screw terminals



MIRO 6.2
Transistor 6 A
Spring clamp terminals



MIRO 6.2
Transistor 10 A
Screw terminals

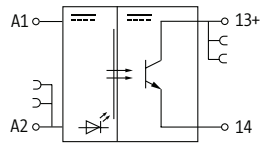


MIRO 6.2
Transistor 10 A
Spring clamp terminals



Approvals: 

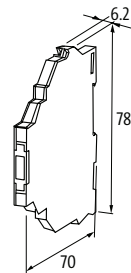
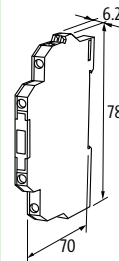
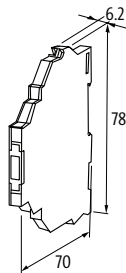
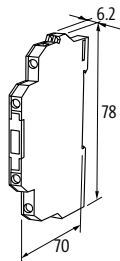
Circuit diagram



Order Data	Art-No.	Art-No.	Art-No.	Art-No.
24 V DC/6 mA	cURus	52519	6652519	
24 V DC/10 mA			cURus	52520
				6652520

Input		
Voltage range ON	10...53 V DC	
Voltage range OFF	0...5 V DC	
Control current	approx. 10 mA	10 mA
LED display	LED (yellow)	
Output		
Switching voltage	5...48 V DC	
Switching current per output	1 mA...6 A (without derating)	1 mA...10 A
Saturation voltage (across output)	max. 0.1 V DC	max. 0.12 V DC
Leakage current (output is open)	max. 25 μ A	
Switching time ON/OFF	2/5 ms	2/5 ms (10 A load)
Switching frequency	max. 1/0.1 Hz (resist./ind.)	
General data		
Test isolation voltage	2.75 kV	
Mounting method	DIN-rail mountable (EN 60715)	
Housing	Black plastic, flame retardant	
Temperature range	-20...+60 °C	

Dimension drawing



Notes

Terminal optocoupler

– with bridge system

Approvals:

MIRO 6.2

Transistor 10 A
Screw terminals



MIRO 6.2

Transistor 10 A
Spring clamp terminals



MIRO 6.2

Transistor 0.5 A
Screw terminals

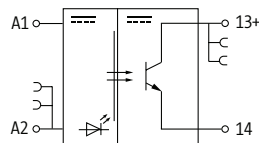


MIRO 6.2

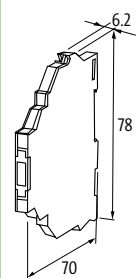
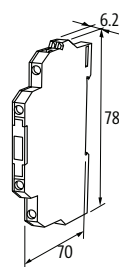
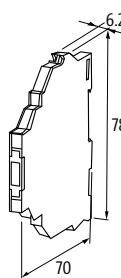
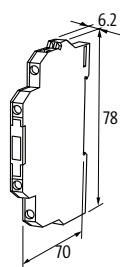
Transistor 0.5 A
Spring clamp terminals



Circuit diagram



Order Data	Art-No.	Art-No.	Art-No.	Art-No.
24 V DC/10 mA (pulse control operation)	52521	6652521		
24 V DC/6 mA			52500	6652500
Input				
Voltage range ON	10...53 V DC			
Voltage range OFF	0...5 V DC			
Control current	10 mA	6 mA		
LED display	LED (yellow)			
Output				
Switching voltage	5...48 V DC			
Switching current per output	1 mA...10 A, short-circuit and overload protected (pulse switching)		0.1 mA...0.5 A	
Saturation voltage (across output)	max. 0.12 V DC		max. 1.2 V DC	
Leakage current (output is open)	max. 25 µA		max. 10 µA	
Switching time ON/OFF	2/5 ms (10 A load)		35/400 µs	
Switching frequency	max. 1/0.1 Hz (resist./ind.)		max. 1000/100 Hz (resist./ind.)	
General data				
Test isolation voltage	2.75 kV		3.75 kV	
Mounting method	DIN-rail mountable (EN 60715)			
Housing	Black plastic, flame retardant			
Temperature range	-20...+60 °C			
Dimension drawing				



Notes

OPTOCOUPLEDERS / SEMICONDUCTORS

Terminal optocoupler

– with bridge system

MIRO 6.2

Transistor 0.5 A
Screw terminals



MIRO 6.2

Transistor 0.5 A
Spring clamp terminals



MIRO 6.2

Transistor 0.5 A
Screw terminals



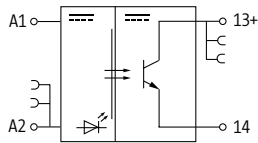
MIRO 6.2

Transistor 0.5 A
Spring clamp terminals



Approvals:

Circuit diagram



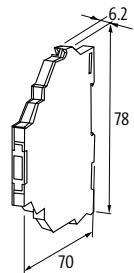
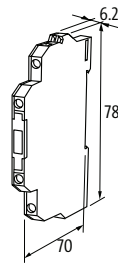
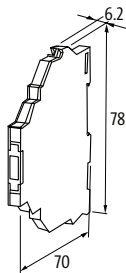
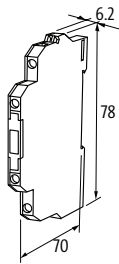
Order Data	Art-No.	Art-No.	Art-No.	Art-No.
110 V AC/DC - 6 mA	52506	6652506		
230 V AC - 6 mA			52507	6652507

Input		
Voltage range ON	70...130 V AC/DC	90...250 V AC
Voltage range OFF	0...30 V AC/DC	0...40 V AC
Control current	6 mA	7 mA
LED display	LED (yellow)	

Output		
Switching voltage	5...48 V DC	
Switching current per output	0.1 mA...0.5 A	
Saturation voltage (across output)	max. 1.2 V DC	
Leakage current (output is open)	max. 0.3 mA	
Switching time ON/OFF	100/700 µs	55/15 ms
Switching frequency	max. 500/30 Hz (resist./ind.)	

General data	
Test isolation voltage	3.75 kV
Mounting method	DIN-rail mountable (EN 60715)
Housing	Black plastic, flame retardant
Temperature range	-20...+60 °C

Dimension drawing



Notes

Terminal optocoupler

– with bridge system

MIRO 6.2

Transistor 2 A
Screw terminals



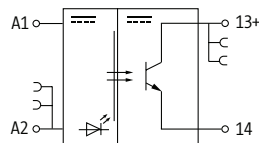
MIRO 6.2

Transistor 2 A
Spring clamp terminals



Approvals:

Circuit diagram



Order Data

230 V AC - 6 mA

Art-No.

52508

Art-No.

6652508

Input

Voltage range ON 90...250 V AC

Voltage range OFF 0...30 V AC

Control current 15 mA

LED display LED (yellow)

Output

Switching time ON/OFF 3/10 ms

Switching voltage 5...48 V DC

Switching current per output 1 mA...2 A (without derating)

Saturation voltage (across output) max. 0.3 V DC

Leakage current (output is open) max. 0.3 mA

Switching frequency max. 10/1 Hz (resist./ind.)

General data

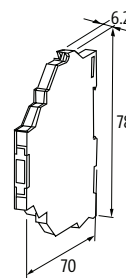
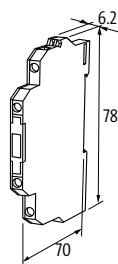
Test isolation voltage 2.5 kV

Mounting method DIN-rail mountable (EN 60715)

Housing Black plastic, flame retardant

Temperature range -20...+60 °C

Dimension drawing



Notes

OPTOCOUPLEDERS / SEMICONDUCTORS

Terminal optocoupler

– with bridge system

Approvals:  

MIRO 6.2

Transistor 2 A
Inrush current limiting
Screw terminals



MIRO 6.2

Transistor 2 A
Inrush current limiting
Spring clamp terminals



MIRO 6.2

Transistor 0.5 A
electr. NO/NC contact
Screw terminals

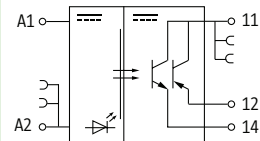
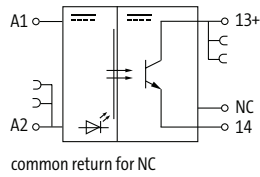


MIRO 6.2

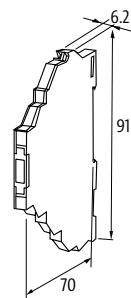
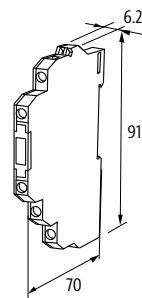
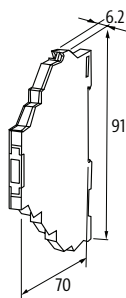
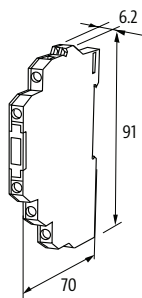
Transistor 0.5 A
electr. NO/NC contact
Spring clamp terminals



Circuit diagram



Order Data	Art-No.	Art-No.	Art-No.	Art-No.
24 V DC/6 mA	52512	6652512	52510	6652510
Input				
Voltage range ON	10...53 V DC			
Voltage range OFF	0...5 V DC			
Control current	6 mA			
LED display	LED (yellow)			
Output				
Switching voltage	5...48 V DC			
Switching current per output	1 mA...2 A (overload protected)		0.1 mA...0.5 A	
Saturation voltage (across output)	max. 0.35 V DC		max. 1.2 V DC	
Leakage current (output is open)	max. 0.1 mA			
Switching time ON/OFF	5/10 ms		40/150 µs	
Switching frequency	max. 10 Hz			
General data				
Test isolation voltage	2.5 kV		3.75 kV	
Housing	Black plastic, flame retardant			
Mounting method	DIN-rail mountable (EN 60715)			
Temperature range	-20...+60 °C			
Dimension drawing				



Notes

Terminal optocoupler

– with bridge system

MIRO 6.2

Transistor 0.2 A
Control current 0.1 mA (5 V DC)
Screw terminals



MIRO 6.2

Transistor 0.2 A
Control current 0.1 mA (5 V DC)
Spring clamp terminals



MIRO 6.2

Transistor 2 A
short-circuit protected
Screw terminals



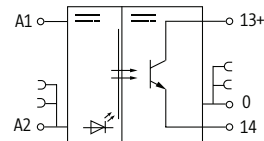
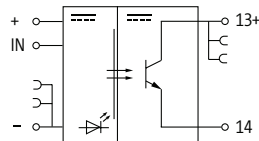
MIRO 6.2

Transistor 2 A
short-circuit protected
Spring clamp terminals



Approvals: us

Circuit diagram



Order Data

24 V DC/0.1 mA (5 V DC)

cCSAus

Art-No.

52511

cCSAus

Art-No.

6652511

Art-No.

52503

Art-No.

6652503

24 V DC/6 mA

Input

Voltage range ON

15...30 V DC

Voltage range OFF

0...2 V DC

Control current

0.1 mA (5 V)

LED display

LED (yellow)

Output

Switching voltage

5...48 V DC

Switching current per output

0.1 mA...0.2 A

Saturation voltage (across output)

max. 1.2 V DC

Leakage current (output is open)

max. 0.1 mA

Switching frequency

max. 20 kHz

Switching time ON/OFF

10/18 µs

General data

Test isolation voltage

3.75 kV

Mounting method

DIN-rail mountable (EN 60715)

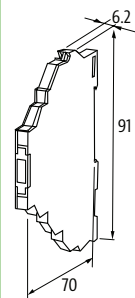
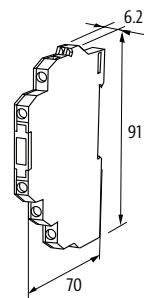
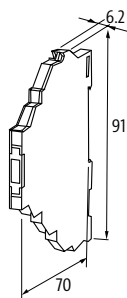
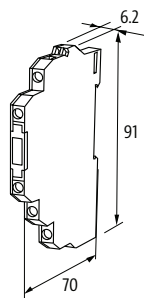
Housing

Black plastic, flame retardant

Temperature range

-20...+60 °C

Dimension drawing



Notes

OPTOCOUPLEDERS / SEMICONDUCTORS

Terminal optocoupler

– with bridge system

MIRO 6.2

Transistor 1 A
Multi voltage output
Screw terminals



MIRO 6.2

Transistor 1 A
Multi voltage output
Spring clamp terminals



MIRO 6.2

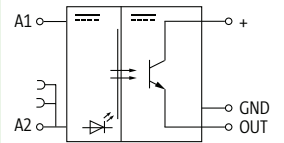
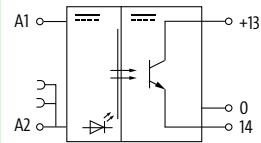
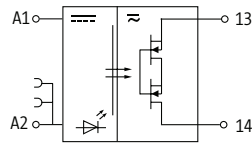
Transistor 0.2 A
Spring clamp terminals



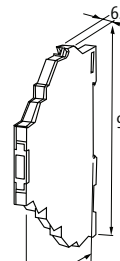
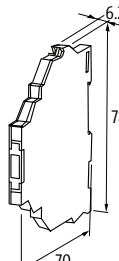
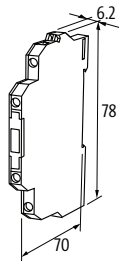
MIRO 6.2

Transistor 0.1 A
Spring clamp terminals

Circuit diagram



Order Data	Art-No.	Art-No.	Art-No.	Art-No.
24 V DC/10 mA	52572	6652572	UR, cCSAus	526071
Input				
Voltage range ON	10...53 V DC		10...35 V DC	10...30 V DC
Voltage range OFF	0...5 V DC			0...7 V DC
Control current	10 mA		6 mA	5.5 mA
LED display	LED (yellow)		LED (green)	LED (yellow)
Output				
Switching time ON/OFF	3/6 ms		5/7 μ s	0.4/0.1 μ s
Switching voltage	5...250 V AC/5...350 V DC		10...30 V DC	5...48 V DC
Switching current per output	1 mA...1 A		1 mA...0.2 A	0...0.1 A
Saturation voltage (across output)	max. 0.7 V AC/DC		max. 0.3 V AC/DC	max. 1.2 V AC/DC
Leakage current (output is open)	max. 25 μ A			max. 250 μ A
Switching frequency	max. 10 Hz		max. 20 kHz/200 Hz (resist./ind.)	500 kHz (ohmic)
General data				
Test isolation voltage	2.75 kV		2.5 kV	2.75 kV
Mounting method	DIN-rail mountable (EN 60715)			
Housing	Black plastic, flame retardant			
Temperature range	-20...+60 °C			
Dimension drawing				



Notes

OPTOCOUPLEDERS / SEMICONDUCTORS

Terminal optocoupler

– Isolation function in output circuit

MIRO 6.2

Transistor 2 A
Screw terminals



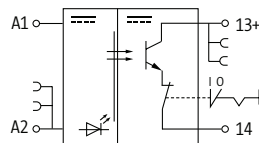
MIRO 6.2

Transistor 2 A
Spring clamp terminals



Approvals:  

Circuit diagram



Order Data

24 V DC/7 mA

Art-No.

52513

Art-No.

6652513

Input

Voltage range ON

10...48 V DC

Voltage range OFF

0...5 V DC

Control current

7 mA

LED display

LED (yellow)

Output

Switching time ON/OFF

1/5 ms

Switching voltage

5...48 V DC

Switching current per output

1 mA...2 A

Saturation voltage (across output)

max. 0.3 V DC

Leakage current (output is open)

max. 0.3 mA

Switching frequency

max. 10/1 Hz (resist./ind.)

General data

Housing

Black plastic, flame retardant

Test isolation voltage

2.5 kV

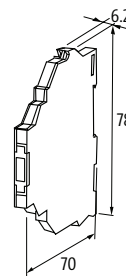
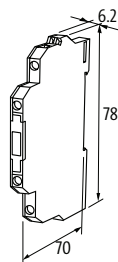
Mounting method

DIN-rail mountable (EN 60715)

Temperature range

-20...+60 °C

Dimension drawing



Notes

OPTOCOUPLEDERS / SEMICONDUCTORS

Optocouplers

- Inrush current limiting
- Screw terminals

AMMS

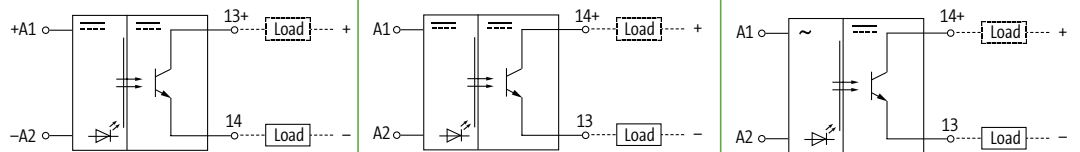
Transistor 1.2 A



EMMS

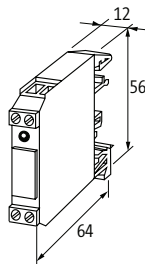
Transistor 1.2 A

Circuit diagram



Order Data	Art-No.	Art-No.	Art-No.
3.5...5.5 V DC/6 mA	50041		
24 V DC/6 mA		50040	
110/230 V AC/2.7 mA			50105
Input			
Voltage range ON	3.5...5.5 V DC	10...53 V DC	100...253 V AC
Voltage range OFF	0...0.8 V DC	0...3 V DC	0...40 V AC
Input current	6 mA		2.7 mA
LED display	LED (red)		
Output			
Leakage current (output is open)	max. 0.3 mA		
Switching current per output	1 mA...1.2 A		
Switching voltage	4.5...53 V DC		
Saturation voltage (across output)	max. 1.2 V DC		
Switching time ON/OFF	100/700 μ s		20/50 ms
Switching frequency	max. 500 Hz (resist.) at max. 0.2 A/max. 30 Hz (ind.)		max. 5 Hz
General data			
Test isolation voltage	3.75 kV		
Mounting method	DIN-rail mountable TH35 or G32 (EN 60715)		
Housing	Black plastic, flame retardant		
Temperature range	-20...+60 °C		

Dimension drawing



Notes

OPTOCOUPLEDERS / SEMICONDUCTORS

Optocouplers

- Inrush current limiting
- Screw terminals

AMMS

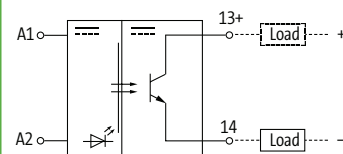
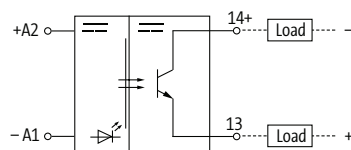
Transistor 0.5 A



AMMS

Transistor 2 A

Circuit diagram



Order Data

4...30 V DC/10 mA

24 V DC/6 mA

Input

Voltage range ON

Voltage range OFF

Input current

LED display

Output

Switching voltage

Switching current per output

Saturation voltage (across output)

Leakage current (output is open)

Switching time ON/OFF

Switching frequency

General data

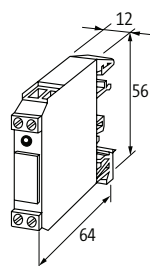
Test isolation voltage

Mounting method

Housing

Temperature range

Dimension drawing



Notes

Art-No.

50010

Art-No.

50070

OPTOCOUPLEDERS / SEMICONDUCTORS

Optocouplers

– Double terminals on the output side

– Screw terminals

AMMDS

Transistor 0.1 A
with minus plug link



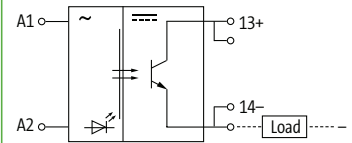
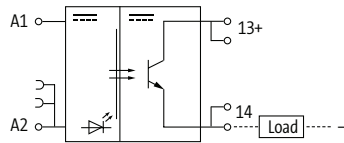
AMMDS

Transistor 2 A
with minus plug link

AMMDS

Transistor 0.1 A

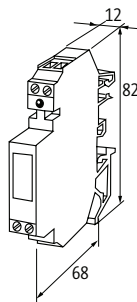
Circuit diagram



Order Data	Art-No.	Art-No.	Art-No.
24 V DC/6 mA	50081	50080	
230 V AC - 10 mA			50110

Input			
LED display	LED (red)		
Input current	6 mA		7.5 mA
Plug link (supplied)	Art.-No. 90960		–
Voltage range ON	10...53 V DC		195...253 V AC
Voltage range OFF	0...3 V DC		0...110 V AC
Output			
Switching voltage	4...40 V DC	4...35 V DC	4...40 V DC
Switching current per output	1 mA...0.1 A	10 mA...2 A (short-circuit protected)	1 mA...0.1 A
Saturation voltage (across output)	max. 1.2 V DC	max. 0.5 V DC	max. 1.2 V DC
Leakage current (output is open)	max. 0.3 mA		
Switching time ON/OFF	1.5/2 ms	5/15 ms	50/120 ms
Switching frequency	max. 300/40 Hz (resist./ind.)	max. 10/1 Hz (resist./ind.)	
General data			
Mounting method	DIN-rail mountable TH35 or G32 (EN 60715)		
Housing	Black plastic, flame retardant		
Temperature range	-20...+60 °C		
Test isolation voltage	3.75 kV	2.5 kV	3.75 kV

Dimension drawing



Notes

OPTOCOUPLEDERS / SEMICONDUCTORS

Optocouplers

– with minus plug link

– Screw terminals

AMMDS

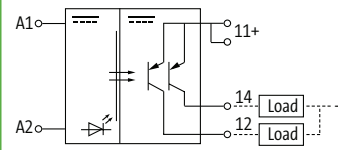
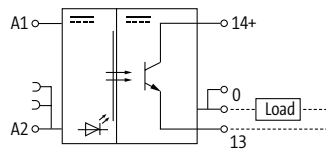
Transistor 0.2 A
Double terminals on the output side
for rapid switching



AMMDS

Transistor 1 A

Circuit diagram



Order Data

24 V DC/15 mA

Art-No.

50082

Art-No.

24 V AC/DC - 10 mA

50085

Input

Voltage range ON

10...35 V DC

Voltage range OFF

0...5 V DC

Input current

10 mA

LED display

LED (red)

Plug link (supplied)

Art.-No. 90960

Output

Switching voltage

5...35 V DC

Switching current per output

1 mA...0.2 A

Saturation voltage (across output)

max. 0.5 V DC

Leakage current (output is open)

max. 0.3 mA

Switching time ON/OFF

20/14 μ s

Switching frequency

max. 20 kHz/200 Hz (resist./ind.)

General data

Test isolation voltage

2.5 kV

Mounting method

DIN-rail mountable TH35 or G32 (EN 60715)

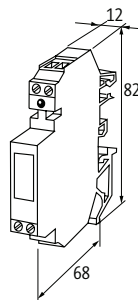
Housing

Black plastic, flame retardant

Temperature range

-20...+60 °C

Dimension drawing



Notes

OPTOCOUPLEDERS / SEMICONDUCTORS

Power opto-coupler modules

– Screw terminals

AMS

Transistor 4 A



AMS

Transistor 2 A (3-way)
3 NO contacts

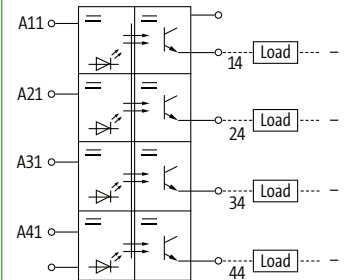
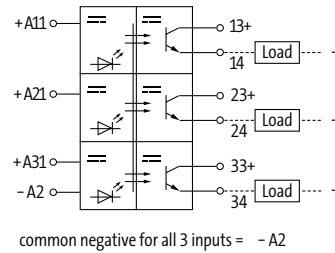
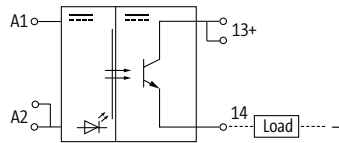


AMS

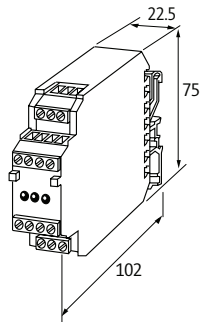
Transistor 2 A (4-way)
4 NO contacts



Circuit diagram



Order Data	Art-No.	Art-No.	Art-No.
24 V DC/10 mA	50044	50043	
24 V DC/3 mA			cCSAus 50015
Input			
Voltage range ON	10...53 V DC		20...30 V DC
Voltage range OFF	0...3 V DC		0...6 V DC
Input current	14.5 mA	10 mA	27 mA
LED display	LED (red)		LED (yellow)
Output			
Switching voltage	4.5...53 V DC	4.5...35 V DC	5...30 V DC
Switching current per output	10 mA...4 A	10 mA...2 A (short-circuit protected)	1 mA...2 A
Saturation voltage (across output)	max. 1.5 V DC	max. 0.5 V DC	max. 0.05 V DC
Switching time ON/OFF	4/7 μs	2/15 ms	1/5 ms
Leakage current (output is open)	–	max. 0.3 mA	max. 0.01 mA
Switching frequency	max. 2 kHz/4 Hz (resist./ind.)	max. 10/1 Hz (resist./ind.)	
General data			
Test isolation voltage	3.75 kV	2.5 kV	
Mounting method	DIN-rail mountable TH35 or G32 (EN 60715)		
Housing	Black plastic, flame retardant		
Temperature range	-20...+60 °C		-25...+50 °C
Dimension drawing			



Notes

OPTOCOUPLEDERS / SEMICONDUCTORS

Optocouplers

– DC Motor control

– Over current / temperature monitoring

MIRO 12.4

Transistor 3 A
Screw terminals

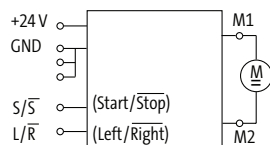


MIRO 12.4

Transistor 3 A
Spring clamp terminals



Circuit diagram



Order Data

24 V DC/10 mA

Art-No.

50140

Art-No.

6650140

Input

Voltage range ON

15...30 V DC

Voltage range OFF

0...5 V DC

Input current

10 mA

LED display

LED (yellow): right running; LED (green): left running

Output

Switching voltage

19.2...30 V DC

Switching current per output

max. 3 A

Highest current

approx. 6 A for 100 ms

Saturation voltage (across output)

max. 1.4 V DC

Leakage current (output is open)

max. 10 mA

Switching time ON/OFF

1.2/10 ms

Switching frequency

max. 1 Hz (motor dependant)

Changing time

max. 50 ms

LED display

LED (red): error (over current/over heated)

General data

Test isolation voltage

no galvanic separation

Mounting method

DIN-rail mountable TH35 or G32 (EN 60715)

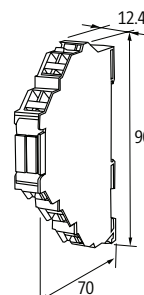
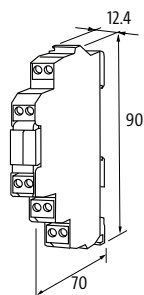
Housing

Black plastic, flame retardant

Temperature range

0...+50 °C

Dimension drawing



Notes

OPTOCOUPLEDERS / SEMICONDUCTORS

Terminal triac

– Zero potential switch

Approvals:  

MIRO 6.2

Triac 0.5 A
Screw terminals



MIRO 6.2

Triac 0.5 A
Spring clamp terminals



MIRO 6.2

Triac 0.5 A
Screw terminals

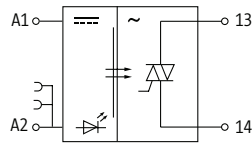


MIRO 6.2

Triac 0.5 A
Spring clamp terminals



Circuit diagram



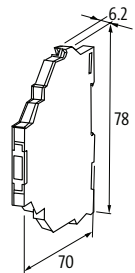
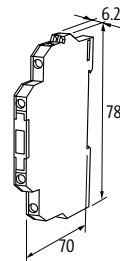
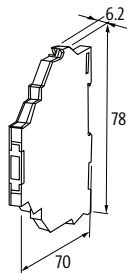
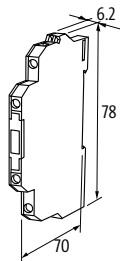
Order Data	Art-No.	Art-No.	Art-No.	Art-No.
5 V DC/6 mA	52551	6652551		
24 V DC/6 mA			52550	6652550

Input		
Voltage range ON	4...5.5 V DC	10...53 V DC
Voltage range OFF	0...2 V DC	0...5 V DC
Control current	6 mA	
LED display	LED (yellow)	

Output		
Switching voltage	24...250 V AC	
Switching current per output	2 mA...0.5 A	1.5 mA...0.5 A
Saturation voltage (across output)	max. 1.5 V AC	
Leakage current (output is open)	max. 0.3 mA	
Switching time ON/OFF	10/10 ms	
Switching frequency	max. 20 Hz, depending on suppression	

General data	
Test isolation voltage	2.5 kV
Mounting method	DIN-rail mountable (EN 60715)
Housing	Black plastic, flame retardant
Temperature range	-20...+60 °C

Dimension drawing



Notes

Terminal triac

– Zero potential switch

MIRO 6.2

Triac 1 A
Screw terminals

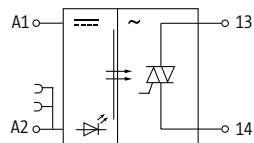


MIRO 6.2

Triac 1 A
Spring clamp terminals



Circuit diagram



Order Data

24 V DC/9 mA

Art-No.

52571

Art-No.

6652571

Input

Voltage range ON

12...53 V DC

Voltage range OFF

0...3 V DC

Control current

12 mA (24 V DC)

LED display

LED (yellow)

Output

Switching voltage

12...250 V AC

Switching current per output

10 mA...1 A

Saturation voltage (across output)

max. 1.5 V AC

Leakage current (output is open)

max. 1 mA

Switching time ON/OFF

10/10 ms

Switching frequency

max. 2 Hz, depending on suppression

General data

Test isolation voltage

2.5 kV

Mounting method

DIN-rail mountable (EN 60715)

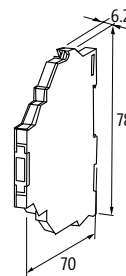
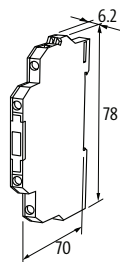
Housing

Black plastic, flame retardant

Temperature range

0...+60 °C

Dimension drawing



Notes

OPTOCOUPLEDERS / SEMICONDUCTORS

Terminal triac

– Zero potential switch

Approvals:  

MIRO 6.2

Triac 0.5 A
Screw terminals



MIRO 6.2

Triac 0.5 A
Spring clamp terminals



MIRO 6.2

Triac 0.5 A
Screw terminals

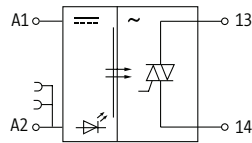


MIRO 6.2

Triac 0.5 A
Spring clamp terminals



Circuit diagram



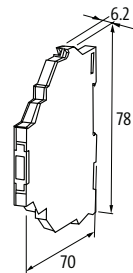
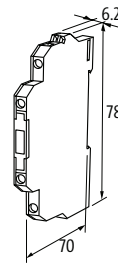
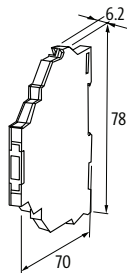
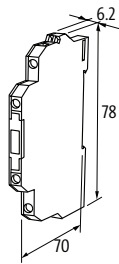
Order Data	Art-No.	Art-No.	Art-No.	Art-No.
110 V AC/DC (95...121 V AC/DC) - 3.5 mA	52556	6652556		
230 V AC - 7 mA			52557	6652557

Input		
Voltage range ON	70...130 V AC/DC	140...250 V AC
Voltage range OFF	0...35 V AC/DC	0...80 V AC
Control current	3.5 mA	7 mA
LED display	LED (yellow)	

Output		
Switching voltage	12...250 V AC	
Switching current per output	2 mA...0.5 A	
Saturation voltage (across output)	max. 1.5 V AC	
Leakage current (output is open)	max. 0.3 A	max. 0.3 mA
Switching time ON/OFF	10/10 ms	
Switching frequency	max. 20 Hz, depending on suppression	

General data	
Test isolation voltage	2.5 kV
Mounting method	DIN-rail mountable (EN 60715)
Housing	Black plastic, flame retardant
Temperature range	-20...+60 °C

Dimension drawing



Notes

OPTOCOUPLEDERS / SEMICONDUCTORS

Terminal triac

– Zero potential switch

MIRO 6.2

Triac 0.5 A
Screw terminals

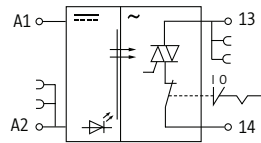


MIRO 6.2

Triac 0.5 A
Spring clamp terminals



Circuit diagram



Order Data

24 V DC/7 mA

Art-No.

52561

Art-No.

6652561

Input

Voltage range ON 10...53 V DC

Voltage range OFF 0...5 V DC

Control current 7 mA

LED display LED (yellow)

Output

Switching voltage 24...250 V AC

Switching current per output 2 mA...0.5 A

Saturation voltage (across output) max. 1.5 V AC

Leakage current (output is open) max. 0.3 mA

Switching time ON/OFF 10/10 ms

Switching frequency max. 20/1 Hz (resist./ind.)

General data

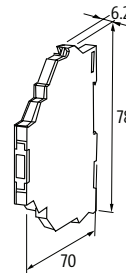
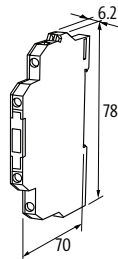
Test isolation voltage 2.5 kV

Mounting method DIN-rail mountable (EN 60715)

Housing Black plastic, flame retardant

Temperature range -20...+60 °C

Dimension drawing



Notes

OPTOCOUPLEDERS / SEMICONDUCTORS

Triac modules

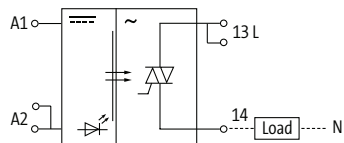
- Zero potential switch
- Screw terminals

AMS

Triac 4 A

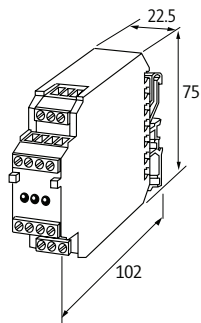


Circuit diagram



Order Data	Art-No.
24 V DC/10 mA	50034

Input	
Voltage range ON	10...53 V DC
Voltage range OFF	0...3 V DC
Input current	10 mA
LED display	LED (red)
Output	
Switching voltage	24...250 V AC
Switching current per output	10 mA...4 A
Saturation voltage (across output)	max. 1.4 V AC
Leakage current (output is open)	max. 10 mA
Switching time ON/OFF	10/10 ms
Switching frequency	max. 30/5 Hz (resist./ind.)
General data	
Test isolation voltage	6 kV
Mounting method	DIN-rail mountable TH35 or G32 (EN 60715)
Housing	Black plastic, flame retardant
Temperature range	-20...+60 °C
Dimension drawing	



Notes

OPTOCOUPLEDERS / SEMICONDUCTORS

Triac modules

– Zero potential switch

– Screw terminals

AMMS

Triac 1 A

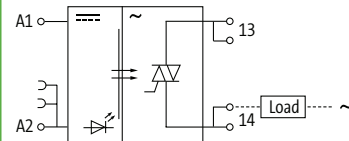
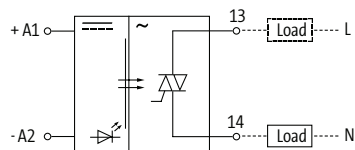


AMMDS

Triac 2 A
with minus plug link



Circuit diagram



Order Data

24 V DC/6.6 mA

Art-No.

50030

Art-No.

24 V DC/6 mA

50092

Input

Voltage range ON

10...53 V DC

10...35 V DC

Voltage range OFF

0...3 V DC

Input current

6.6 mA

6 mA

LED display

LED (red)

Plug link (supplied)

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Art-No. 90960

Output

Switching voltage

24...253 V AC

24...280 V AC

Switching current per output

50 mA...1 A

50 mA...2 A

Saturation voltage (across output)

max. 1.3 V AC

max. 1 V AC

Leakage current (output is open)

max. 5 mA

max. 2 mA

Switching time ON/OFF

10/10 ms

Switching frequency

max. 20 Hz

max. 20/5 Hz (resist./ind.)

General data

Test isolation voltage

2.5 kV

Mounting method

DIN-rail mountable TH35 or G32 (EN 60715)

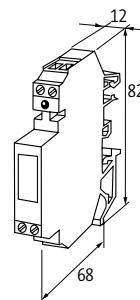
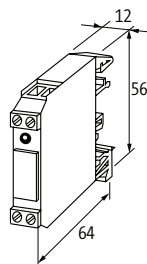
Housing

Black plastic, flame retardant

Temperature range

-20...+60 °C

Dimension drawing



Notes

OPTOCOUPERS / SEMICONDUCTORS

Labeling accessories			Art-No.
	ACS label plate (KM 5) for self marking (9 × 20 mm)		7000-99001-000000
	Label plate (KM 4) 5 × 10 mm		90931
	ACS label plate (KM 6/18) for self marking with ADEMARK markers		7000-99003-000000
	Label plate (KWI 5/15) (88 pieces per plate)		90901
Wiring accessories			Art-No.
	Potential plug link max. 50 V/2 A	MIRO	90961
	Potential plug link max. 48 V/2 A	RMM..., RMMD...	90960
	Potential rail blue 40-pole, spacing 12 mm	RMM..., RMMD...	90970
	10-pole, spacing 6.2 mm	MIRO 6.2 (screw terminals)	90975
	Potential rail red 40-pole, spacing 12 mm	RMM..., RMMD...	90971
	10-pole, spacing 6.2 mm	MIRO 6.2 (screw terminals)	90976
	End caps for potential rail blue	MIRO 6.2 RMM..., RMMD...	90980
	red	MIRO 6.2 RMM..., RMMD...	90982

Wiring accessories			Art-No.
	<p>Wire chain 16-pole Connection cable left and right approx. 50 cm; bk; 1 mm²</p>	<p>MIRO (spring clamp terminals)</p>	<p>90977</p>