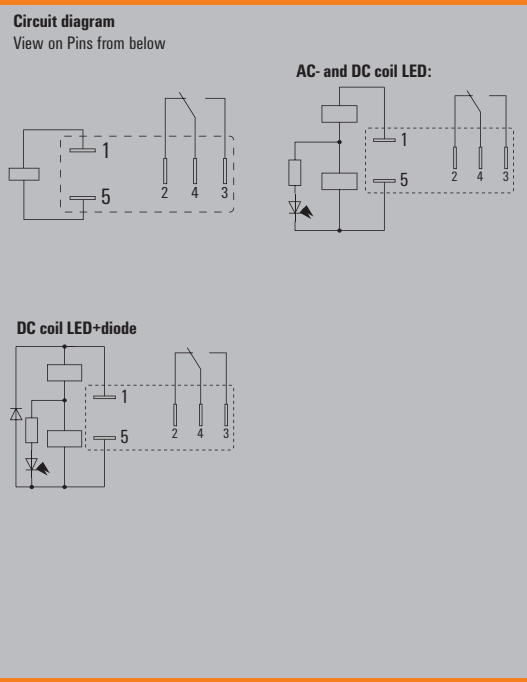


D-SERIES – relay modules

DRI relay
1 CO contact, AC/DC coil

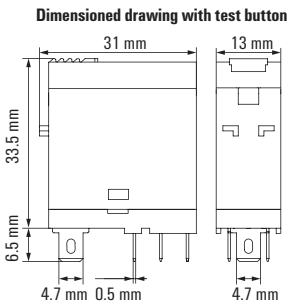
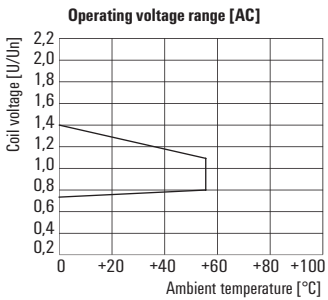
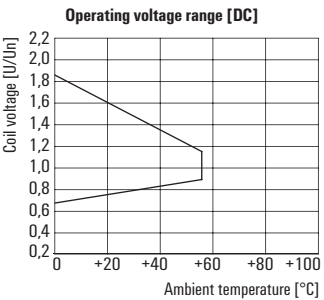
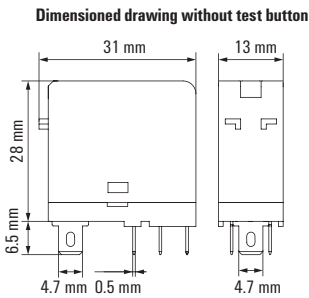
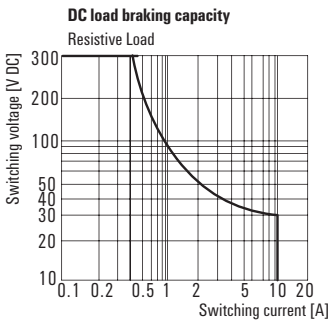
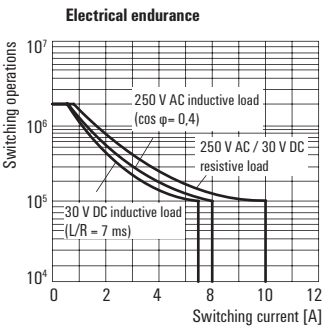
- Robust industrial plug-in connections
- Optional: latching / spring return operable test button with coloured control voltage identification (AC coil: red / DC coil: blue) and mechanical switch position indication (for version with test button)
- Optional: Bright status LED (AC coil: red / DC coil: green)
- Optional: free-wheeling diode



Technical data

Output	
Rated switching voltage / Continuous current	250 V AC / 10 A
Max. switching voltage, AC	250 V
Min. switching power	10 mA @ 12 V, 100 mA @ 5 V
DC / AC Switching capacity (resistive), max.	240 W @ 24 V / 2500 VA
Contact material	AgNi
Mechanical service life	10 x 10 ⁶ switching cycles
Max. switching frequency at rated load	0.1 Hz
Rated data	
Ambient temperature (operational)	-40 °C...55 °C
Storage temperature	-40 °C...85 °C
Humidity	35...85 % rel. humidity, no condensation
Approvals	CE; cURus
Insulation coordinates	
Rated voltage	300 V
Impulse withstand voltage	5 kV (1.2/50 µs)
Dielectric strength input - output	5 kV _{eff} / 1min
Dielectric strength of neighbouring contacts	
Dielectric strength to mounting rail	
Creepage and clearance distance input - output	≥ 4 mm
Overvoltage category	III
Pollution degree	2
Dimensions	
Flat blade connections (4.7 mm x 0.5 mm)	see dimensioned drawing
Depth x width x height	
Note	

Applications



DRI relay

1 CO contact, AC/DC coil

Type code						
Type	DRI					
Type of construction	314 424	1 CO contact 2 CO contacts				
Coil voltage	012 024 048 110	12 V DC 24 V DC 48 V DC 110 V DC	524 615 730	24 V AC 115 V AC 230 V AC		
LED	L (Red for AC coil; green for DC coil)					
Test lever including mechanical status indicator	T (Red lever for AC coil; blue lever for DC coil)					
Free wheeling diode	D (DC coil only)					

Ordering data

Input		12 V DC 1CO	24 V DC 1CO	48 V DC 1CO	110 V DC 1CO
Rated control voltage		12 V DC	24 V DC	48 V DC	110 V DC
Rated current AC / DC		/ 44,4 mA	/ 21,8 mA	/ 11,2 mA	/ 4,8 mA
Power rating		530 mW	530 mW	530 mW	530 mW
Pull-in/drop-out voltage, typ.		9 V / 1.8 V DC	18 V / 3.6 V DC	36 V / 7.2 V DC	82.5 V / 16.5 V DC
Output					
Switch-on delay		≤ 15 ms	≤ 15 ms	≤ 15 ms	≤ 15 ms
Switch-off delay		≤ 10 ms	≤ 10 ms	≤ 10 ms	≤ 10 ms
Ordering data					
Standard	Type	DRI314012	DRI314024	DRI314048	DRI314110
	Order No.	7760056296	7760056297	7760056298	7760056299
with LED	Type	DRI314012L	DRI314024L	DRI314048L	DRI314110L
	Order No.	7760056303	7760056304	7760056305	7760056306
with LED + freewheel diode	Type	DRI314012LD	DRI314024LD	DRI314048LD	DRI314110LD
	Order No.	7760056310	7760056311	7760056312	7760056313
with test button + LED	Type	DRI314012LTD	DRI314024LTD	DRI314048LTD	DRI314110LTD
+ Free-wheel diode	Order No.	7760056314	7760056315	7760056316	7760056317
Note					

Ordering data

Input		24 V AC 1CO	115 V AC 1CO	230 V AC 1 CO
Rated control voltage		24 V AC	115 V AC	230 V AC
Rated current AC / DC		50 mA /	9.3 mA /	4,9 mA /
Power rating		1.2 VA	1.1 VA	1.1 VA
Pull-in/drop-out voltage, typ.		19.2 V / 7.2 V AC	92 V / 34.5 V AC	184 V / 69 V AC
Output				
Switch-on delay		≤ 15 ms	≤ 15 ms	≤ 15 ms
Switch-off delay		≤ 10 ms	≤ 10 ms	≤ 10 ms
Ordering data				
Standard	Type	DRI314524	DRI314615	DRI314730
	Order No.	7760056300	7760056301	7760056302
with LED	Type	DRI314524L	DRI314615L	DRI314730L
	Order No.	7760056307	7760056308	7760056309
with test button + LED	Type	DRI314524LT	DRI314615LT	DRI314730LT
	Order No.	7760056318	7760056319	7760056320
	Type			
	Order No.			
Note				

D-SERIES – relay modules

DRI relay

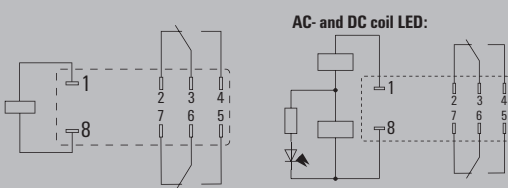
2 CO contacts, AC/DC coil

- Robust industrial plug-in connections
- Optional: latching / spring return operable test button with coloured control voltage identification (AC coil: red / DC coil: blue) and mechanical switch position indication (for version with test button)
- Optional: Bright status LED (AC coil: red / DC coil: green)
- Optional: free-wheeling diode



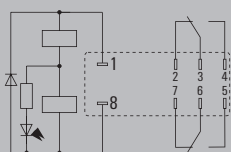
Circuit diagram

View on Pins from below



AC- and DC coil LED:

DC coil LED+diode



Technical data

Output	
Rated switching voltage / Continuous current	250 V AC / 5 A
Max. switching voltage, AC	250 V
Min. switching power	10 mA @ 12 V, 100 mA @ 5 V
DC / AC Switching capacity (resistive), max.	150 W @ 24 V / 1250 VA
Contact material	AgNi
Mechanical service life	10 x 10 ⁶ switching cycles
Max. switching frequency at rated load	0.1 Hz
Rated data	
Ambient temperature (operational)	-40 °C...55 °C
Storage temperature	-40 °C...85 °C
Humidity	35...85 % rel. humidity, no condensation
Approvals	CE; cURus
Insulation coordinates	
Rated voltage	300 V
Impulse withstand voltage	5 kV (1.2/50 µs)
Dielectric strength input - output	5 kV _{eff} / 1min
Dielectric strength of neighbouring contacts	1.5 kV _{eff} / 1 min.
Dielectric strength to mounting rail	
Creepage and clearance distance input - output	≥ 4 mm
Overvoltage category	III
Pollution degree	2

Dimensions

Depth x width x height

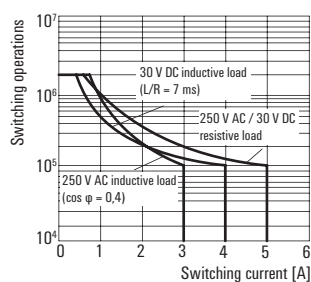
Flat blade connections (2.5 mm x 0.5 mm)

see dimensioned drawing

Note

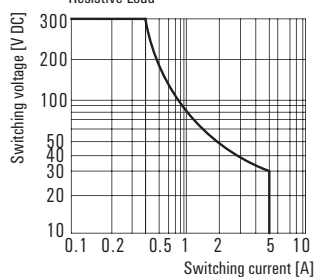
Applications

Electrical endurance

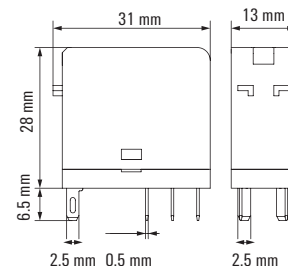


DC load braking capacity

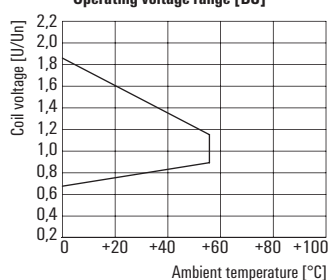
Resistive Load



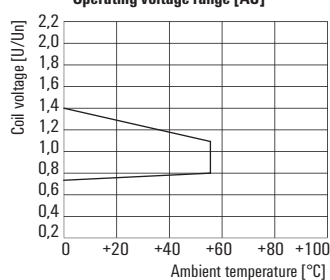
Dimensioned drawing without test button



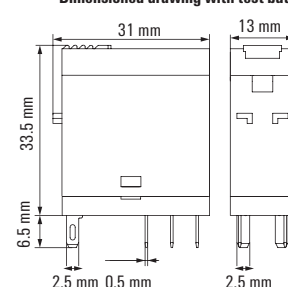
Operating voltage range [DC]



Operating voltage range [AC]



Dimensioned drawing with test button



DRI relay

2 CO contacts, AC/DC coil

Type code						
Type	DRI					
Type of construction	314 424	1 CO contact 2 CO contacts				
Coil voltage	012 024 048 110	12 V DC 24 V DC 48 V DC 110 V DC	524 615 730	24 V AC 115 V AC 230 V AC		
LED	L (Red for AC coil; green for DC coil)					
Test lever including mechanical status indicator	T (Red lever for AC coil; blue lever for DC coil)					
Free wheeling diode	D (DC coil only)					

Ordering data

Input		12 V DC 2CO	24 V DC 2CO	48 V DC 2CO	110 V DC 2CO
Rated control voltage		12 V DC	24 V DC	48 V DC	110 V DC
Rated current AC / DC		/ 44,4 mA	/ 21,8 mA	/ 11,2 mA	/ 4,8 mA
Power rating		530 mW	530 mW	530 mW	530 mW
Pull-in/drop-out voltage, typ.		9 V / 1.8 V DC	18 V / 3.6 V DC	36 V / 7.2 V DC	82.5 V / 16.5 V DC
Output					
Switch-on delay		≤ 15 ms	≤ 15 ms	≤ 15 ms	≤ 15 ms
Switch-off delay		≤ 10 ms	≤ 10 ms	≤ 10 ms	≤ 10 ms
Ordering data					
Standard	Type	DRI424012	DRI424024	DRI424048	DRI424110
	Order No.	7760056321	7760056322	7760056323	7760056324
with LED	Type	DRI424012L	DRI424024L	DRI424048L	DRI424110L
	Order No.	7760056328	7760056329	7760056330	7760056331
with LED + freewheel diode	Type	DRI424012LD	DRI424024LD	DRI424048LD	DRI424110LD
	Order No.	7760056335	7760056336	7760056337	7760056338
with test button + LED	Type	DRI424012LTD	DRI424024LTD	DRI424048LTD	DRI424110LTD
+ Free-wheel diode	Order No.	7760056339	7760056340	7760056341	7760056342
Note					

Ordering data

Input		24 V AC 2CO	115 V AC 2CO	230 V AC 2CO
Rated control voltage		24 V AC	115 V AC	230 V AC
Rated current AC / DC		50 mA /	9.3 mA /	4,9 mA /
Power rating		1.2 VA	1.1 VA	1.1 VA
Pull-in/drop-out voltage, typ.		19.2 V / 7.2 V AC	92 V / 34.5 V AC	184 V / 69 V AC
Output				
Switch-on delay		≤ 15 ms	≤ 15 ms	≤ 15 ms
Switch-off delay		≤ 10 ms	≤ 10 ms	≤ 10 ms
Ordering data				
Standard	Type	DRI424524	DRI424615	DRI424730
	Order No.	7760056325	7760056326	7760056327
with LED	Type	DRI424524L	DRI424615L	DRI424730L
	Order No.	7760056332	7760056333	7760056334
with test button + LED	Type	DRI424524LT	DRI424615LT	DRI424730LT
	Order No.	7760056343	7760056344	7760056345
	Type			
	Order No.			
Note				

D-SERIES – relay modules

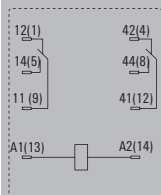
DRM 270 relay

2 CO, AC/DC coil

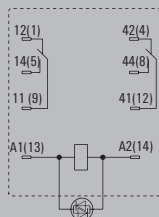
- Compact design combined with high switching capacity
- Wide range of coil voltages
- Optional test button (AC red, DC blue)
- Optional status LED (AC red, DC green)
- Optional free-wheel diode



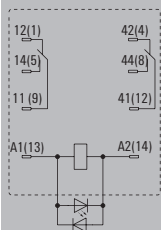
Circuit diagram



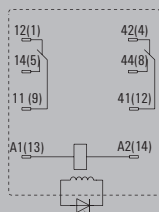
DC coil LED



DC coil LED+diode



AC coil LED



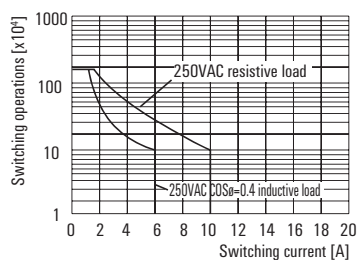
Technical data

Output	
Rated switching voltage / Continuous current	250 V AC / 10 A
Max. switching voltage, AC	250 V
Inrush current	20 A / 50 ms
Min. switching power	10 mA @ 12 V, 100 mA @ 5 V
DC / AC Switching capacity (resistive), max.	240 W @ 24 V / 2500 VA
Contact material	AgNi 0,15 µm Au
Mechanical service life	20 x 10 ⁶ switching cycles
Max. switching frequency at rated load	0.1 Hz
Rated data	
Ambient temperature (operational)	-40 °C...60 °C
Storage temperature	-40 °C...70 °C
Humidity	35...85 % rel. humidity, no condensation
Approvals	CE, cURus, EAC
Insulation coordinates	
Rated voltage	250 V
Impulse withstand voltage	6 kV (1.2/50 µs)
Dielectric strength input - output	1.8 kV _{eff} / 1 min.
Dielectric strength of neighbouring contacts	1 kV _{eff} / 1 min
Dielectric strength to mounting rail	
Creepage and clearance distance input - output	≥ 5.5 mm
Overvoltage category	III
Pollution degree	2
Dimensions	
Depth x width x height	mm 35.7 / 21 / 27.4
Plug-in connection	

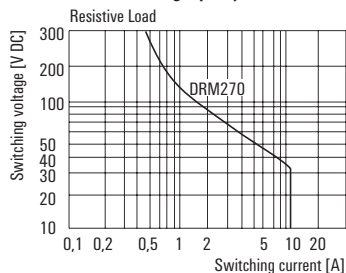
Note

Applications

Electrical endurance

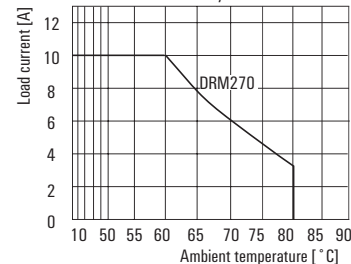


DC load breaking capacity

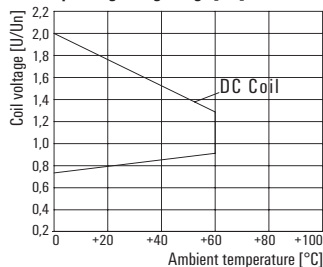


Derating curve

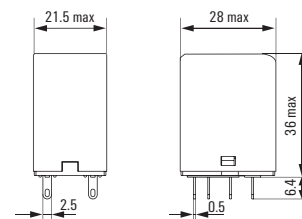
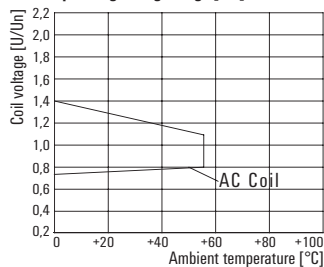
in combination with relay socket



Operating voltage range [DC]



Operating voltage range [AC]



DRM 270 relay 2 CO, AC/DC coil

Type code		DRM					
Type	DRM						
Type of construction	270 2 change over contact						
Coil voltage	006	6 V DC / 012	12 V DC				
	024	24 V DC / 048	48 V DC				
	110	110 V DC / 220	220 V DC				
	524	24 V AC / 548	48 V AC				
	615	115 V AC / 730	230 V AC				
LED	L (Red for AC coil; green for DC coil)						
Test lever	T (Red for AC coil; green for DC coil)						
Free-wheel diode	D						

Ordering data

Input		12 V DC 2C0	24 V DC 2C0	48 V DC 2C0	110 V DC 2C0	220 V DC 2C0
Rated control voltage		12 V DC	24 V DC	48 V DC	110 V DC	220 V DC
Rated current AC / DC		/ 75 mA	/ 36.9 mA	/ 18.5 mA	/ 10 mA	/ 5.2 mA
Power rating		0.9 W	0.9 W	0.9 W	1.2 W	1.2 W
Pull-in/drop-out voltage, typ.		9 V / 1.2 V DC	18 V / 2.4 V DC	36 V / 4.8 V DC	82.5 V / 11 V DC	154 V / 22 V DC
Pull-in/drop-out current, typ.						
Output						
Switch-on delay		< 20 ms	< 20 ms	< 20 ms	< 20 ms	< 20 ms
Switch-off delay		< 20 ms	< 20 ms	< 20 ms	< 20 ms	< 20 ms

Ordering data						
Standard	Type	DRM270012	DRM270024	DRM270048	DRM270110	DRM270220
	Order No.	7760056050	7760056051	7760056052	7760056053	7760056054
with LED	Type	DRM270012L	DRM270024L	DRM270048L	DRM270110L	DRM270220L
	Order No.	7760056059	7760056060	7760056061	7760056062	7760056063
with test button + LED	Type	DRM270012LT	DRM270024LT	DRM270048LT	DRM270110LT	DRM270220LT
	Order No.	7760056068	7760056069	7760056070	7760056071	7760056072
with LED	Type		DRM270024LD			
+ Free-wheel diode	Order No.		7760056077			

Note						

Ordering data

Input		24 V AC 2C0	48 V AC 2C0	115 V AC 2C0	230 V AC 2C0
Rated control voltage		24 V AC	48 V AC	115 V AC	230 V AC
Rated current AC / DC		62.4 mA (50 Hz), 52.2 mA (60 Hz) /	33.3 mA (50 Hz), 27.8 mA (60 Hz) /	12.6 mA (50 Hz), 10.8 mA (60 Hz) /	6.1 mA (50 Hz), 5.2 mA (60 Hz) /
Power rating		1.0...1.2VA (60HZ)	1.0...1.2VA (60HZ)	1.0...1.2VA (60HZ)	1.0...1.2VA (60HZ)
Pull-in/drop-out voltage, typ.		19.2 V / 7.2 V AC	38.4 V / 14.4 V AC	92 V / 34.5 V AC	184 V / 69 V AC
Pull-in/drop-out current, typ.					
Output					
Switch-on delay		< 20 ms	< 20 ms	< 20 ms	< 20 ms
Switch-off delay		< 20 ms	< 20 ms	< 20 ms	< 20 ms

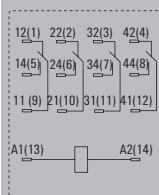
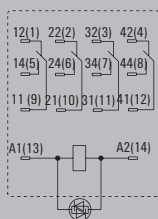
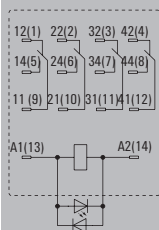
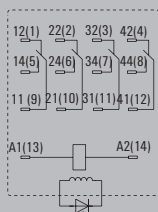
Ordering data					
Standard	Type	DRM270524	DRM270548	DRM270615	DRM270730
	Order No.	7760056055	7760056056	7760056057	7760056058
with LED	Type	DRM270524L	DRM270548L	DRM270615L	DRM270730L
	Order No.	7760056064	7760056065	7760056066	7760056067
with test button + LED	Type	DRM270524LT	DRM270548LT	DRM270615LT	DRM270730LT
	Order No.	7760056073	7760056074	7760056075	7760056076
	Type				
	Order No.				

Note					

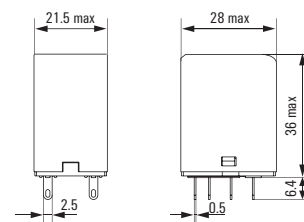
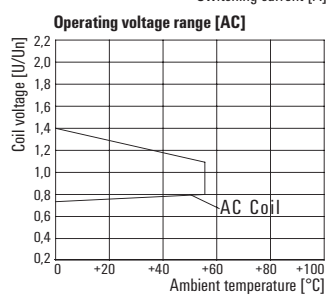
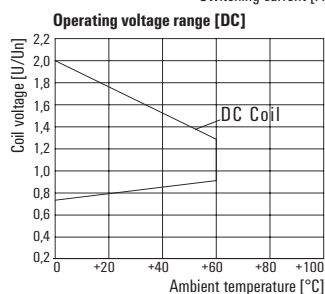
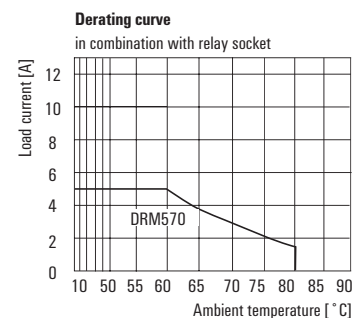
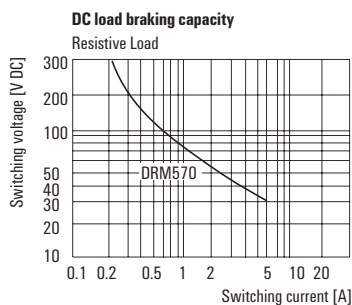
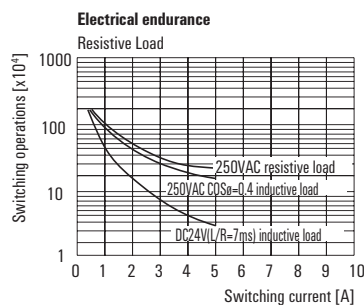
D-SERIES – relay modules

DRM 570 relay
4 CO AC/DC coil

- Compact design combined with high switching capacity
- Wide range of coil voltages
- Optional test button (AC red, DC blue)
- Optional status LED (AC red, DC green)
- Optional free-wheel diode


Circuit diagram

DC coil LED

DC coil LED+diode

AC coil LED

Technical data

Output	
Rated switching voltage / Continuous current	250 V AC / 5 A
Max. switching voltage, AC	250 V
Inrush current	10 A / 50 ms
Min. switching power	10 mA @ 12 V, 100 mA @ 5 V
DC / AC Switching capacity (resistive), max.	120 W @ 24 V / 1250 VA
Contact material	AgNi 0,15 µm Au
Mechanical service life	20 x 10 ⁶ switching cycles
Max. switching frequency at rated load	0.1 Hz
Rated data	
Ambient temperature (operational)	-40 °C...60 °C
Storage temperature	-40 °C...70 °C
Humidity	35...85 % rel. humidity, no condensation
Approvals	CE, cURus; EAC
Insulation coordinates	
Rated voltage	250 V
Impulse withstand voltage	6 kV (1.2/50 µs)
Dielectric strength input - output	1.8 kV _{eff} / 1 min.
Dielectric strength of neighbouring contacts	1 kV _{eff} / 1 min
Dielectric strength to mounting rail	
Creepage and clearance distance input - output	≥ 5.5 mm
Overvoltage category	III
Pollution degree	2
Dimensions	
Depth x width x height	mm 35.7 / 21 / 27.4
Plug-in connection	

Note
Applications


DRM 570 relay 4 CO AC/DC coil

Type code		DRM					
Type	DRM						
Type of construction	570 4 change over contact						
Coil voltage	006	6 V DC / 012	12 V DC				
	024	24 V DC / 048	48 V DC				
	110	110 V DC / 220	220 V DC				
	524	24 V AC / 548	48 V AC				
	615	115 V AC / 730	230 V AC				
LED	L (Red for AC coil; green for DC coil)						
Test lever	T (Red for AC coil; green for DC coil)						
Free-wheel diode	D						

Ordering data

Input	12 V DC 4CO	24 V DC 4CO	48 V DC 4CO	110 V DC 4CO	220 V DC 4CO
Rated control voltage	12 V DC	24 V DC	48 V DC	110 V DC	220 V DC
Rated current AC / DC	/ 75 mA	/ 36.9 mA	/ 18.5 mA	/ 10 mA	/ 5.2 mA
Power rating	0.9 W	0.9 W	0.9 W	1.2 W	1.2 W
Pull-in/drop-out voltage, typ.	9 V / 1.2 V DC	18 V / 2.4 V DC	36 V / 4.8 V DC	82.5 V / 11 V DC	154 V / 22 V DC
Pull-in/drop-out current, typ.					
Output					
Switch-on delay	< 20 ms	< 20 ms	< 20 ms	< 20 ms	< 20 ms
Switch-off delay	< 20 ms	< 20 ms	< 20 ms	< 20 ms	< 20 ms

Ordering data					
Standard	Type	DRM570012	DRM570024	DRM570048	DRM570110
	Order No.	7760056078	7760056079	7760056080	7760056081
with LED	Type	DRM570012L	DRM570024L	DRM570048L	DRM570110L
	Order No.	7760056087	7760056088	7760056089	7760056090
with test button + LED	Type	DRM570012LT	DRM570024LT	DRM570048LT	DRM570110LT
	Order No.	7760056096	7760056097	7760056098	7760056099
with LED	Type		DRM570024LD		
+ Free-wheel diode	Order No.		7760056105		

Note					

Ordering data

Input	24 V AC 4CO	48 V AC 4CO	115 V AC 4CO	230 V AC 4CO
Rated control voltage	24 V AC	48 V AC	115 V AC	230 V AC
Rated current AC / DC	62.4 mA (50 Hz), 52.2 mA (60 Hz) /	33.3 mA (50 Hz), 27.8 mA (60 Hz) /	12.6 mA (50 Hz), 10.8 mA (60 Hz) /	6.1 mA (50 Hz), 5.2 mA (60 Hz) /
Power rating	1.0...1.2VA (60HZ)	1.0...1.2VA (60HZ)	1.0...1.2VA (60HZ)	1.0...1.2VA (60HZ)
Pull-in/drop-out voltage, typ.	19.2 V / 7.2 V AC	38.4 V / 14.4 V AC	92 V / 34.5 V AC	184 V / 69 V AC
Pull-in/drop-out current, typ.				
Output				
Switch-on delay	< 20 ms	< 20 ms	< 20 ms	< 20 ms
Switch-off delay	< 20 ms	< 20 ms	< 20 ms	< 20 ms

Ordering data					
Standard	Type	DRM570524	DRM570548	DRM570615	DRM570730
	Order No.	7760056083	7760056084	7760056085	7760056086
with LED	Type	DRM570524L	DRM570548L	DRM570615L	DRM570730L
	Order No.	7760056092	7760056093	7760056094	7760056095
with test button + LED	Type	DRM570524LT	DRM570548LT	DRM570615LT	DRM570730LT
	Order No.	7760056101	7760056102	7760056103	7760056104
	Type				
	Order No.				

Note				