

DRM Relay Series 2 Changeover contacts 4 Changeover contacts



The new DRM miniature relays complement Weidmüller's wide range of proven electromechanical and solid-state devices.

DRM relays offer functionality to meet industrial standards, at an economical price point.

The DRM is available in 2 and 4 changeover contact versions for AC and DC voltages to suit most industrial and commercial applications.

DRM relays are available with LED status indication, as well as a test lever for quick and easy commissioning and troubleshooting. The relay bases are DIN-rail mountable and feature high quality screw terminals.

Features and Benefits:

- 2CO and 4CO versions for greater flexibility
- Wide coil input voltage range
- Sturdy plug-in connection
- High quality contacts for reliability and longevity
- Full load switching capability over -40°C to $+60^{\circ}\text{C}$
- Extended de-rated operation up to $+80^{\circ}\text{C}$
- Optional integrated LED status indication
- Optional test lever with lock function and window
- Accepts stripped wire, ferruled wire and fork lug connections
- CE and cURus approvals for use in applications worldwide
- ROHS compliant

Weidmüller, Canada

10 Spy Court
Markham, Ontario L3R 5H6
Telephone: (800) 268-4080
Facsimile: (877) 300-5635
Email: info1@weidmuller.ca
Website: www.weidmuller.ca

Weidmüller, Mexico

Bldv. Hermanos Serdán 698
Col. San Rafael Oriente
Puebla, Puebla, Mexico
C.P. 72029
Telephone: 01 222 2686267
Facsimile: 01 222 2686219
Email: clientes@weidmuller.com.mx
Website: www.weidmuller.com.mx

Weidmüller, United States

821 Southlake Blvd.
Richmond, Virginia 23236
Telephone: (800) 849-9343
Facsimile: (804) 379-2593
Email: info@weidmuller.com
Website: www.weidmuller.com

DRM Relay 4CO changeover contact AC/DC coil

Type code	RCL				
Type	DRM				
Type of construction	2 = 2 changeover contact 4 = 4 changeover contact				
Coil voltage	006 = 6 V DC / 012 = 12 V DC 024 = 24 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; Blue for DC coil)				

Ordering data

Input	12 V DC 4CO	24 V DC 4CO	110 V DC 4CO	220 V DC 4CO
Rated voltage	12 V DC	24 V DC	110 V DC	220 V DC
Rated current	75 mA	36.9 mA	10 mA	5.2 mA
DC Response / dropout Volt	9 V / 1.2 V	18 V / 2.4 V	82.5 V / 11 V	165 V / 22 V
Max. Voltage	13.2 V	26.4 V	121 V	242 V
Coil resistance	160 Ω	650 Ω	11 KΩ	44 KΩ

Ordering data relay

DC coil 4CO					
Standard	Type	DRM570012	DRM570024	DRM570110	DRM570220
	Order No.	7760056078	7760056079	7760056081	7760056082
With LED + test lever	Type	DRM570012LT	DRM570024LT	DRM570110LT	DRM570220LT
	Order No.	7760056096	7760056097	7760056099	7760056100
Note					

Ordering data

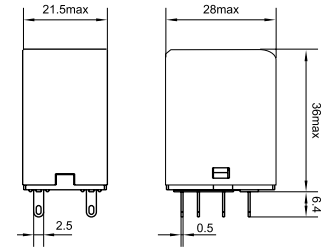
Input	24 V AC 4CO	48 V AC 4CO	115 V AC 4CO	230 V AC 4CO
Rated Voltage	24 V AC	48 V AC	115 V AC	230 V AC
Rated current (50 Hz / 60 Hz)	62.4 / 52.2 mA	33.3 / 27.8 mA	12.6 / 10.8 mA	6.1 / 5.2 mA
AC Response / dropout Volt	19.2 V / 7.2 V	38.4 V / 14.4 V	92 V / 34.5 V	184 V / 69 V
Max. Voltage	26.4 V	52.8 V	126.5 V	253 V
Coil resistance	160 Ω	600 Ω	3.75 KΩ	16 KΩ

Ordering data relay

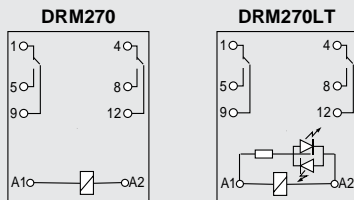
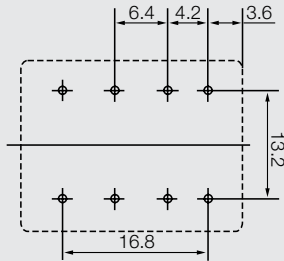
AC coil 4CO					
Standard	Type	DRM570524	DRM570548	DRM570615	DRM570730
	Order No.	7760056083	7760056084	7760056085	7760056086
With LED + test lever	Type	DRM570524LT	DRM570548LT	DRM570615LT	DRM570730LT
	Order No.	7760056101	7760056102	7760056103	7760056104
Note					

DRM Relay 2CO changeover contact AC/DC coil

- Small size with high switching power
- Wide coil input voltage range
- Optional test lever (AC red, DC blue)
- Optional status indicator (AC red, DC green)

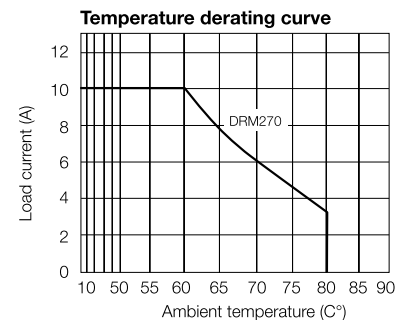
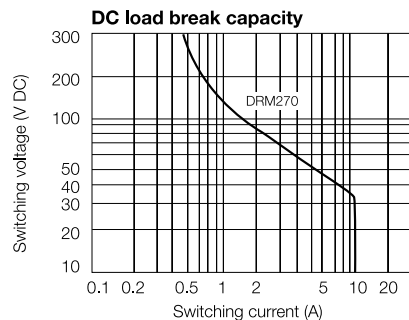
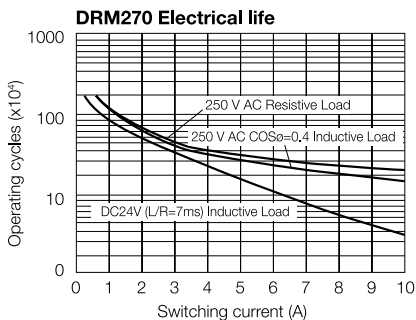


Circuit diagram All dimensions are in mm



Technical data

Output		
Rated voltage	250 V AC	
Rated current	10 A	
Rated load (resistive)	AC: 2500 VA / DC: 300 W	
DC breaking capacity (resistive)	10 A @ 30 V / 1.2 A @ 110 V / 0.5 A @ 220 V	
Contact resistance	≤ 50 mΩ	
Contact base material	Silver Alloy	
Electrical endurance	> 25x10 ⁴ cycles (18000 Ops/h)	
Mechanical endurance	> 20x10 ⁶ cycles (18000 Ops/h)	
Input		
Rated voltage DC	DC: 12 V / 24 V / 110 V / 220 V	
Rated voltage AC	AC: 24 V / 48 V / 115 V / 230 V	
Response voltage @ 25	DC: ≥ 75 % of rated voltage AC: ≥ 80 % of rated voltage	
Dropout voltage @ 25	DC: ≤ 10 % of rated voltage AC: ≤ 30 % of rated voltage	
Max. Voltage	110 % of rated voltage	
Insulation resistance	1000 MΩ	
Coil power consumption	AC 1.2 VA / DC 0.9 W	
Response time / drop-out time	≤ 20 ms / ≤ 20 ms	
General		
Dielectric strength	Between contacts	1000 V AC / 1 min (Leakage current 1 mA)
	Between contacts and coil	1800 V AC / 1 min (Leakage current 1 mA)
Ambient temperature (operational)	DC: -40 °C...+60 °C AC: -40 °C...+55 °C	
Storage temperature	-40 °C...+70 °C	
Humidity	35 %...85 % RH, no condensation	
Atmospheric pressure	86...106 KPa	
Shock resistance	10 G (Half wave of sine pulse: 11 ms)	
Vibration resistance	10...55 Hz Dual amplitude 1.0 mm	
Weight	35 g	
Approvals		
	CE; cURus; TÜV	



DRM Relay
2CO changeover contact AC/DC coil

Type code	RCL				
Type	DRM				
Type of construction	2 = 2 changeover contact 4 = 4 changeover contact				
Coil voltage	006 = 6 V DC / 012 = 12 V DC 024 = 24 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; Blue for DC coil)				

Ordering data

Input	12 V DC 2CO	24 V DC 2CO	110 V DC 2CO	220 V DC 2CO
Rated voltage	12 V DC	24 V DC	110 V DC	220 V DC
Rated current	75 mA	36.9 mA	10 mA	5.2 mA
DC Response / dropout Volt	9 V / 1.2 V	18 V / 2.4 V	82.5 V / 11 V	165 V / 22 V
Max. Voltage	13.2 V	26.4 V	121 V	242 V
Coil resistance	160 Ω	650 Ω	11 KΩ	44 KΩ

Ordering data relay

DC coil 2CO				
Standard	Type	DRM270012	DRM270024	DRM270110
	Order No.	7760056050	7760056051	7760056053
With LED + test lever	Type	DRM270012LT	DRM270024LT	DRM270110LT
	Order No.	7760056068	7760056069	7760056071
Note				

Ordering data

Input	24 V AC 2CO	48 V AC 2CO	115 V AC 2CO	230 V AC 2CO
Rated Voltage	24 V AC	48 V AC	115 V AC	230 V AC
Rated current (50 Hz / 60 Hz)	62.4 / 52.2 mA	33.3 / 27.8 mA	12.6 / 10.8 mA	6.1 / 5.2 mA
AC Response / dropout Volt	19.2 V / 7.2 V	38.4 V / 14.4 V	92 V / 34.5 V	184 V / 69 V
Max. Voltage	26.4 V	52.8 V	126.5 V	253 V
Coil resistance	160 Ω	600 Ω	3.75 KΩ	16 KΩ

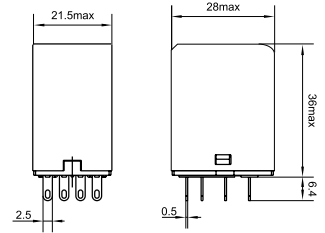
Ordering data relay

AC coil 2CO				
Standard	Type	DRM270524	DRM270548	DRM270615
	Order No.	7760056055	7760056056	7760056057
With LED + test lever	Type	DRM270524LT	DRM270548LT	DRM270615LT
	Order No.	7760056073	7760056074	7760056075
Note				

DRM Relay

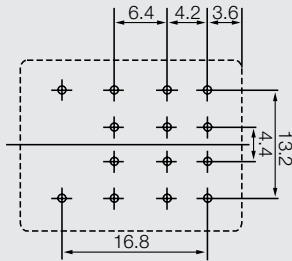
4CO changeover contact AC/DC coil

- Small size with high switching power
- Wide coil input voltage range
- Optional test lever (AC red, DC blue)
- Optional status indicator (AC red, DC green)

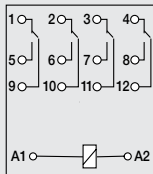


Circuit diagram

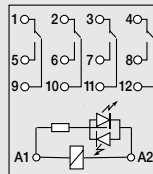
All dimensions are in mm



DRM570



DRM570LT



Technical data

Output

Rated voltage	250 V AC
Rated current	5 A
Rated load (resistive)	AC: 1250 VA / DC: 150 W
DC breaking capacity (resistive)	5 A @ 30 V / 0.6 A @ 110 V / 0.25 A @ 220 V
Contact resistance	≤ 50 m
Contact base material	Silver Alloy
Electrical endurance	> 25x10 ⁴ cycles (18000 Ops/h)
Mechanical endurance	> 20x10 ⁶ cycles (18000 Ops/h)

Input

Rated voltage DC	DC: 12 V / 24 V / 110 V / 220 V
Rated voltage AC	AC: 24 V / 48 V / 115 V / 230 V
Response voltage @ 25	DC: ≥ 75 % of rated voltage AC: ≥ 80 % of rated voltage
Dropout voltage @ 25	DC: ≤ 10 % of rated voltage AC: ≤ 30 % of rated voltage
Max. Voltage	110 % of rated voltage
Insulation resistance	1000 M
Coil power consumption	AC 1.2 VA / DC 0.9 W
Response time / drop-out time	≤ 20 ms / ≤ 20 ms

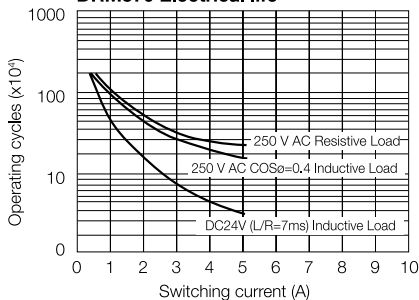
General

Dielectric strength	Between contacts	1000 V AC / 1 min (Leakage current 1 mA)
	Between contacts and coil	1800 V AC / 1 min (Leakage current 1 mA)
Ambient temperature (operational)		-40 °C...+55 °C
Storage temperature		-40 °C...+70 °C
Humidity		35 %...85 % RH
Atmospheric pressure		86...106 KPa
Shock resistance		10 G (Half wave of sine pulse: 11 ms)
Vibration resistance		10...55 Hz Dual amplitude 1.0 mm
Weight		35 g

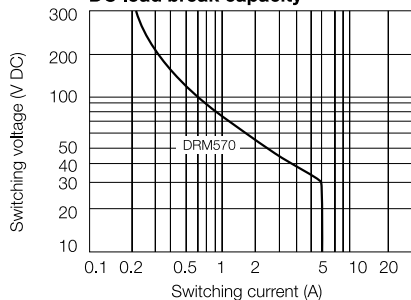
Approvals

CE; cURus; TÜV

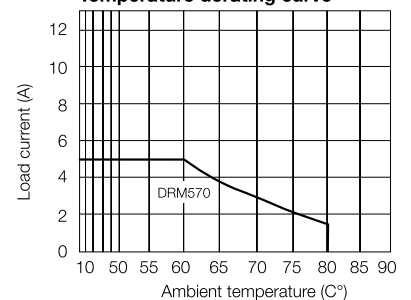
DRM570 Electrical life



DC load break capacity



Temperature derating curve



DRM Relay
Relay socket for 2CO and 4CO relay

Ordering data

Description
Relay socket plug in module with screw terminal
Recommended for C-crimp, ferrule lug and bare wire connection

Type	Qty.	Order No.
FS 2CO	20	7760056106



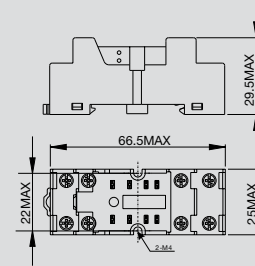
Technical data

Type
Rated voltage
Rated voltage
Insulation between coil - contact
Insulation between contact - contact
Ambient temperature (operational)
Pollution severity
Surge category
Terminal torque
Connection cross-section
Ingress protection class
Weight

FS 2CO
300 V
12 A
2500 V
2500 V
-40 °C...+85 °C
2
III
0.8 Nm
0.5...2.5 mm² / 20-14 AWG
IP20
35 g

Approvals

CE; cURus



Ordering data

Description
Relay socket plug in module with screw terminal
Recommended for C-crimp, ferrule lug and bare wire connection

Type	Qty.	Order No.
FS 4CO	20	7760056107



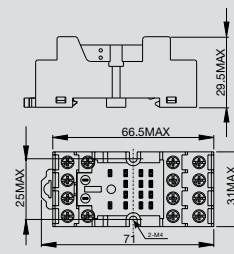
Technical data

Type
Rated voltage
Rated voltage
Insulation between coil - contact
Insulation between contact - contact
Ambient temperature (operational)
Pollution severity
Surge category
Terminal torque
Connection cross-section
Ingress protection class
Weight

FS 4CO
300 V
10 A
2000 V
2000 V
-40 °C...+85 °C
2
III
0.8 Nm
0.5...2.5 mm² / 20-14 AWG
IP20
43 g

Approvals

CE; cURus



Accessory Metal Clip

Ordering data

For all DRM sockets
Recommended for use in applications with strong vibration

Type	Order No.
metal clip	7760056108

