Datasheet

DRM Relay Series
2 Changeover contacts
4 Changeover contacts



The new DRM miniature relays complement Weidmuller'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°C
- Extended de-rated operation up to +80°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

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

Weidmuller, Mexico
Blvd. 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

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

Weidmüller

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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					

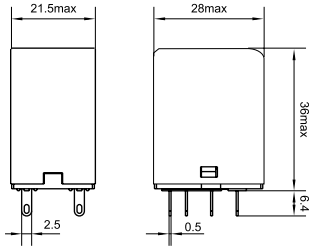
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DRM Relay
2CO changeover contact AC/DC coil

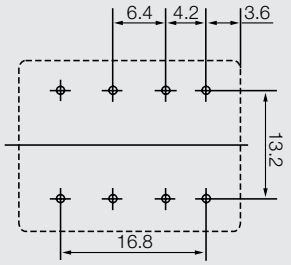
- Small size with high switching power
- Wide coil input voltage range
- Optional test lever (AC red, DC blue)
- Optional status indicator (AC red, DC green)



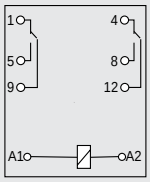




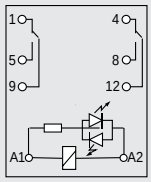
Circuit diagram
All dimensions are in mm



DRM270



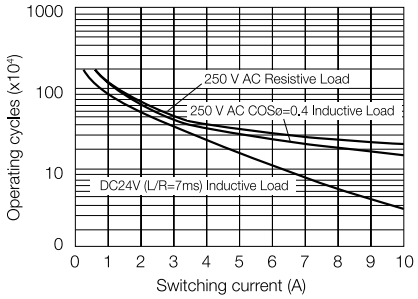
DRM270LT



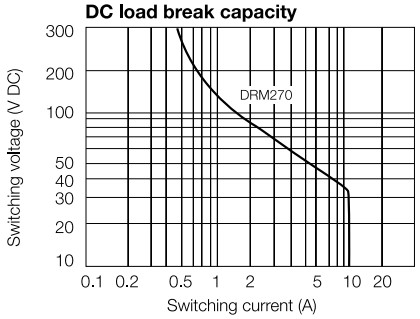
Technical data

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 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)		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

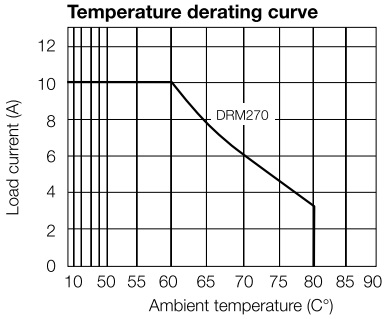
DRM270 Electrical life



DC load break capacity



Temperature derating curve



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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	DRM270220
	Order No.	**7760056050**	**7760056051**	**7760056053**	**7760056054**
With LED + test lever	Type	DRM270012LT	DRM270024LT	DRM270110LT	DRM270220LT
	Order No.	**7760056068**	**7760056069**	**7760056071**	**7760056072**
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	DRM270730
	Order No.	**7760056055**	**7760056056**	**7760056057**	**7760056058**
With LED + test lever	Type	DRM270524LT	DRM270548LT	DRM270615LT	DRM270730LT
	Order No.	**7760056073**	**7760056074**	**7760056075**	**7760056076**
Note					

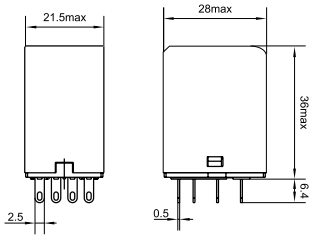
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DRM Relay
4CO changeover contact AC/DC coil

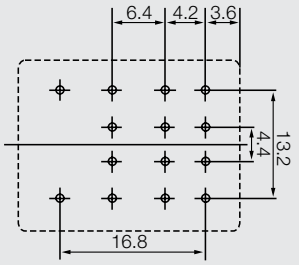
- Small size with high switching power
- Wide coil input voltage range
- Optional test lever (AC red, DC blue)
- Optional status indicator (AC red, DC green)



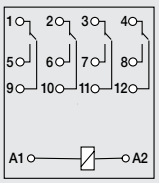




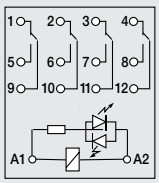
Circuit diagram
All dimensions are in mm



DRM570



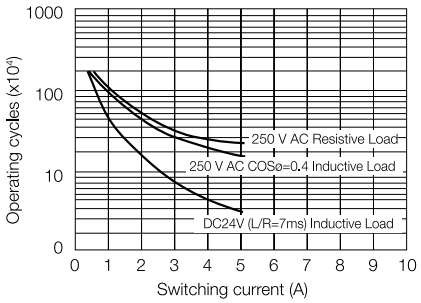
DRM570LT



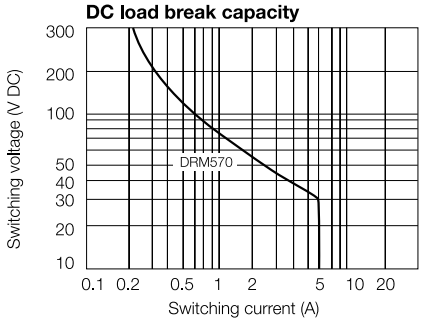
Technical data

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

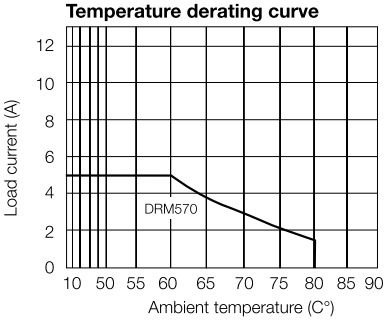
DRM570 Electrical life



DC load break capacity



Temperature derating curve



TRIM

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DRM Relay
Relay socket for 2CO and 4CO relay

Ordering data

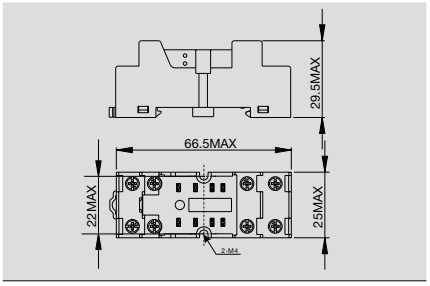
Description	Type	Qty.	Order No.
Relay socket plug in module with screw terminal Recommended for C-crimp, ferrule lug and bare wire connection	FS 2CO	20	**7760056106**





Technical data

Type	FS 2CO
Rated voltage	300 V
Rated voltage	12 A
Insulation between coil - contact	2500 V
Insulation between contact - contact	2500 V
Ambient temperature (operational)	-40 °C…+85 °C
Pollution severity	2
Surge category	III
Terminal torque	0.8 Nm
Connection cross-section	0.5…2.5 mm² / 20-14 AWG
Ingress protection class	IP20
Weight	35 g
Approvals	
	CE; cURus



Ordering data

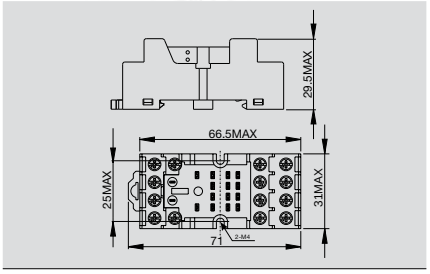
Description	Type	Qty.	Order No.
Relay socket plug in module with screw terminal Recommended for C-crimp, ferrule lug and bare wire connection	FS 4CO	20	**7760056107**





Technical data

Type	FS 4CO
Rated voltage	300 V
Rated voltage	10 A
Insulation between coil - contact	2000 V
Insulation between contact - contact	2000 V
Ambient temperature (operational)	-40 °C…+85 °C
Pollution severity	2
Surge category	III
Terminal torque	0.8 Nm
Connection cross-section	0.5…2.5 mm² / 20-14 AWG
Ingress protection class	IP20
Weight	43 g
Approvals	
	CE; cURus



Accessory Metal Clip

Ordering data

For all DRM sockets	Type	Order No.
Recommended for use in applications with strong vibration	metal clip	**7760056108**



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