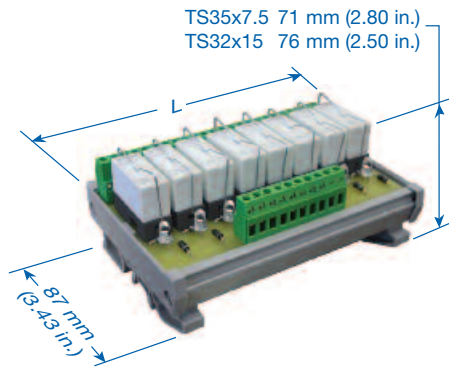


Interfaces, Relay Modules and Carriers

Bussed SPDT, 35 or 32 DIN Rail

RC1 / RM1 (Single Pole Double Throw)



Altech Bussed Relay Modules provide high density packaging of miniature general purpose relays with minimal hook-up wiring. Select from bussed DC Positive (DC Negative switching), bussed DC Negative (DC Positive switching), or bussed AC neutral.

Ideal for traditional mechanical relay input/output array between a single logic system and peripheral devices, or between logic systems in a network as well as their peripheral and field devices.

Load your own relays in our RCB Relay Carrier, or order the RMB Relay Module complete with 8 or 16 relays.

Call us with your custom module requirements!

- Screw-Cage Clamp Connections
- Spring Clamp Terminals
- LED Coil Voltage Indicator
- Reverse DC Polarity LED Protection
- Surge Suppression With DC Coil
- DIN Rail Mount, Panel Mount Available

Technical Information

Current12 A
 Voltage (max)250V AC / 24V DC
 Wire Range0.5-4 mm² / 30-14 AWG
 Torque0.5-4 Nm / 4 lbs-in.
 Stripping Length ...8 mm

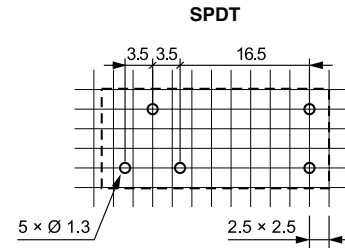
SPDT

Number of Channels	Coil Voltage	Screw terminal		Spring terminal		Module Length (L) in mm (in)
		Carrier Only Part Number	Module with Relays Part Number	Carrier Only Part Number	Module with Relays Part Number	
8 Channel, Bussed DC+	12V DC (E)	8912.5	8912.2	8912.5/S	8912.2/S	125 (4.92)
	24V DC (G)	5494.5	5494.2	5494.5/S	5494.2/S	125 (4.92)
8 Channel, Bussed DC-	12V DC (E)	8912.6	8912.3	8912.6/S	8912.3/S	125 (4.92)
	24V DC (G)	5492.5	5492.2	5492.5/S	5492.2/S	125 (4.92)
8 Channel, Bussed AC (N)	110V AC (U)	5502.5	5502.2	5502.5/S	5502.2/S	125 (4.92)
	220V AC (X)	8913.6	8913.3	8913.6/S	8913.3/S	125 (4.92)
16 Channel, Bussed DC+	12V DC (E)	8914.5	8914.2	8914.5/S	8914.2/S	248 (9.76)
	24V DC (G)	5508.5	5508.2	5508.5/S	5508.2/S	248 (9.76)
16 Channel, Bussed DC-	12V DC (E)	8921.5	8921.2	8921.5/S	8921.2/S	248 (9.76)
	24V DC (G)	5506.5	5506.2	5506.5/S	5506.2/S	248 (9.76)
16 Channel, Bussed AC(N)	110V AC (U)	5514.5	5514.2	5514.5/S	5514.2/S	248 (9.76)
	220V AC (X)	5514.6	5514.3	5514.6/S	5514.3/S	248 (9.76)

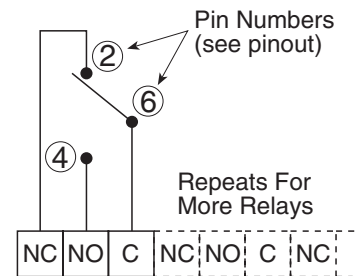
CONTACT SPECIFICATIONS*

SPDT Composite Rating	12A
Relay Socket.....	12A
Terminal Block.....	15A
PCB Trace for Contact Circuit	
at 30°C (86°F) temperature rise NC.....	12A
PCB Trace for Coil Circuit	
at 30°C (86°F) temperature rise	4A
PCB Trace for Bus	
at 30°C (86°F) temperature rise	16A
Relay Contact Material	AgNi
Rated load (capacity)	12A at 250VAC / 24VDC
Min. switching voltage	5 V
Min. switching current	5mA
Min. breaking capacity.....	0.3W

RELAY PINOUT*



CONTACT CIRCUITS*

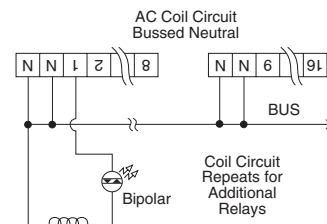
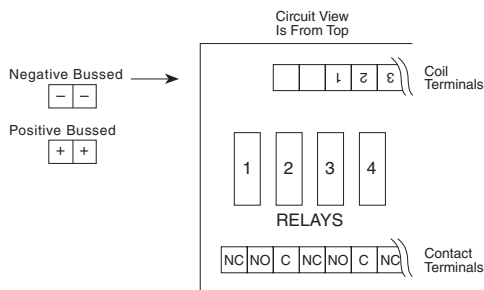
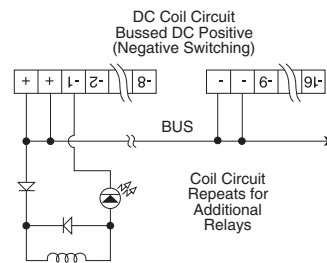
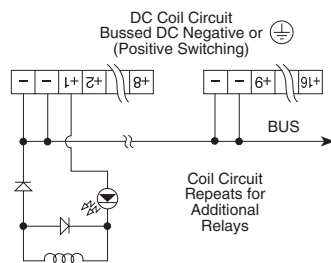


COIL SPECIFICATIONS*

Ambient Temperature..... -40°C+85°C (-40°F+185°F)

Coil Voltage AC / DC	Coil operating range V AC / DC		Coil Current in mA	Coil resistance at 20°C in Ω	Acceptable resistance
	Min.	Max.			
12 VDC	8.4	30.6	40	360	± 10 %
24 VDC	16.8	61.2	20	1440	± 10 %
110 VAC	88	132	4.4	8900	± 10 %
220 VAC	176	264	2.2	35500	± 10 %

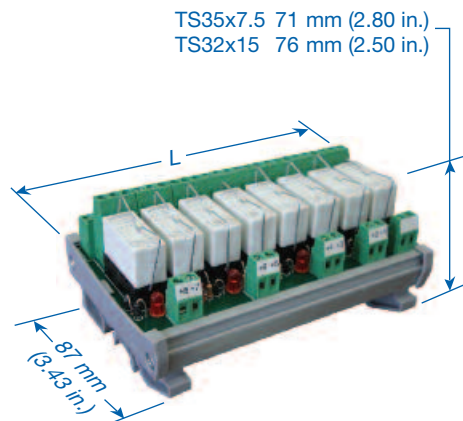
COIL CIRCUITS



* For more information please see page 76 (Relay RM87)

Interfaces, Relay Modules and Carriers

Bussed DPDT, 35 or 32 DIN Rail



RC2 / RM2 (Double Pole Double Throw)

Altech Bussed Relay Modules provide high density packaging of miniature general purpose relays with minimal hook-up wiring. Select from bussed DC Positive (DC Negative switching), bussed DC Negative (DC Positive switching), or bussed AC neutral.

Ideal for traditional mechanical relay input/output array between a single logic system and peripheral devices, or between logic systems in a network as well as their peripheral and field devices.

Load your own relays in our RCB Relay Carrier, or order the RMB Relay Module complete with 8 or 16 relays.

Call us with your custom module requirements!

- Screw-Cage Clamp Connections
- Spring Clamp Terminals
- LED Coil Voltage Indicator
- Reverse DC Polarity LED Protection
- Surge Suppression With DC Coil
- DIN Rail Mount, Panel Mount Available

Technical Information

Current8 A
 Voltage (max)250V AC / 24V DC
 Wire Range0.5-4 mm² / 30-14 AWG
 Torque0.5-4 Nm / 4 lbs-in.
 Stripping Length ...8 mm

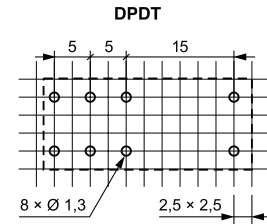
DPDT

Number of Channels	Coil Voltage	Screw terminal		Spring terminal		Module Length (L) in mm (in)
		Carrier Only Part Number	Module with Relays Part Number	Carrier Only Part Number	Module with Relays Part Number	
8 Channel, Bussed DC+	12V DC (E)	8923.5	8923.2	8923.5/S	8923.2/S	125 (4.92)
	24V DC (G)	8924.5	8924.2	8924.5/S	8924.2/S	125 (4.92)
8 Channel, Bussed DC-	12V DC (E)	8923.6	8923.3	8923.6/S	8923.3/S	125 (4.92)
	24V DC (G)	8924.6	8924.4	8924.6/S	8924.4/S	125 (4.92)
8 Channel, Bussed AC (N)	110V AC (U)	8925.5	8925.2	8925.5/S	8925.2/S	125 (4.92)
	220V AC (X)	8925.6	8925.3	8925.6/S	8925.3/S	125 (4.92)
16 Channel, Bussed DC+	12V DC (E)	8926.5	8926.2	8926.5/S	8926.2/S	248 (9.76)
	24V DC (G)	8926.6	8926.3	8926.6/S	8926.3/S	248 (9.76)
16 Channel, Bussed DC-	12V DC (E)	8927.5	8927.2	8927.5/S	8927.2/S	248 (9.76)
	24V DC (G)	8927.6	8927.3	8927.6/S	8927.3/S	248 (9.76)
16 Channel, Bussed AC(N)	110V AC (U)	8928.5	8928.2	8928.5/S	8928.2/S	248 (9.76)
	220V AC (X)	8928.6	8928.3	8928.6/S	8928.3/S	248 (9.76)

CONTACT SPECIFICATIONS*

DPDT Rating8A
 Relay Socket.....8A
 Terminal Block.....15A
 PCB Trace for Contact Circuit
 at 30°C (86°F) temperature rise NC.....8A
 PCB Trace for Coil Circuit
 at 30°C (86°F) temperature rise2A
 PCB Trace for Bus
 at 30°C (86°F) temperature rise16A
 Relay Contact Material.....AgNi
 Rated load (capacity)8A at 250VAC / 24VDC
 Min. switching voltage5 V
 Min. switching current5mA
 Min. breaking capacity.....0.3W

RELAY PINOUT*

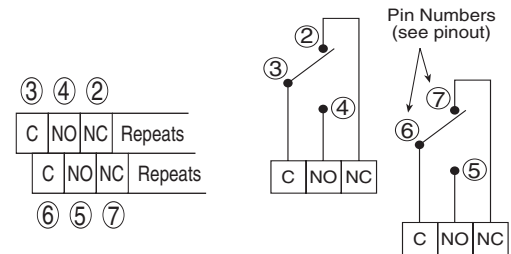


COIL SPECIFICATIONS*

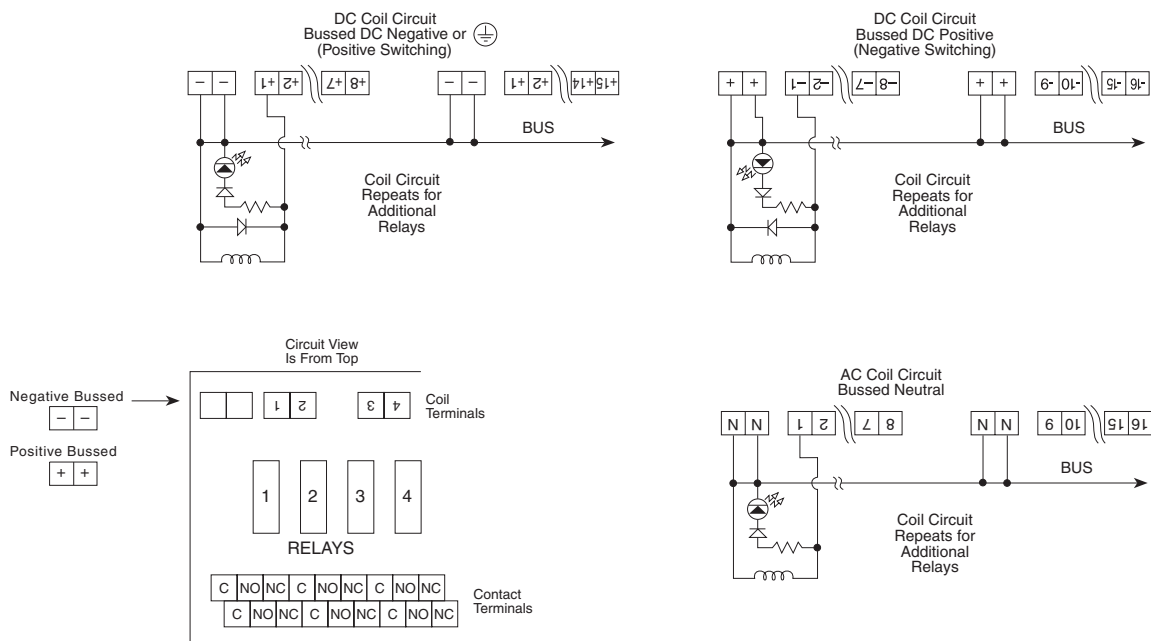
Ambient Temperature..... -40°C+85°C (-40°F+185°F)

Coil Voltage AC / DC	Coil operating range V AC / DC		Coil Current in mA	Coil resistance at 20°C in Ω	Acceptable resistance
	Min.	Max.			
12 VDC	8.4	30.6	40	360	± 10 %
24 VDC	16.8	61.2	20	1440	± 10 %
110 VAC	88	132	4.4	8900	± 10 %
220 VAC	176	264	2.2	35500	± 10 %

CONTACT CIRCUITS*



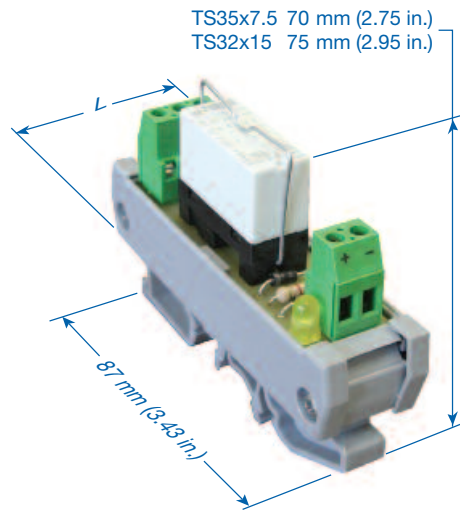
COIL CIRCUITS



* For more information please see page 76 (Relay RM84)

Interfaces, High Current Isolated

Isolated Channels - 16 Amp, 35 or 32 DIN Rail



RMH1 - 1 Channel (Single Pole Double Throw)

A true high-current rating in a DIN Rail mount miniature relay module. The miniature relays used in the Altech RMH have a SPDT (Form C) 16 Amp continuous current rating, developed from dual 8 Amp contacts that are internally connected in parallel. The relay socket is rated dual 8 Amp. Printed circuit traces are balanced, rated 16 Amp and connect to Altech terminal blocks UL rated 15A/300V.

Typical relay specifications combined with other module component ratings give module ratings suitable for many control applications.

- Screw-Cage Clamp Connection
- Spring Clamp Terminals
- LED Coil Voltage Indicator
- Reverse DC Polarity LED Protection
- Surge Suppression With DC Coils
- Industry Standard Relays*
- DIN Rail Mount, Panel Mount Available

Technical Information

Current16 A
 Voltage (max)250V AC / 24V DC
 Wire Range0.5-4 mm² / 30-14 AWG
 Torque0.5-4 Nm / 4 lbs-in.
 Stripping Length ...8 mm

SPDT DC	Coil Voltage	Screw terminal Part Number	Spring terminal Part Number	LED (2mA)	Module Length (L) in mm (in)
1 Channel	5V DC	8905.2	8905.2/S	Yellow	21 (0.83)
1 Channel	6V DC	8906.2	8906.2/S	Green	21 (0.83)
1 Channel	12V DC	8907.2	8907.2/S	Red	21 (0.83)
1 Channel	24V DC	5800.2	5800.2/S	Yellow	21 (0.83)
1 Channel	48V DC	5802.2	5802.2/S	Green	21 (0.83)
1 Channel	60V DC	8908.2	8908.2/S	Red	21 (0.83)
1 Channel	110V DC	5803.2	5803.2/S	Red	21 (0.83)

SPDT AC	Coil Voltage	Screw terminal Part Number	Spring terminal Part Number	LED (2mA)	Module Length (L) in mm (in)
1 Channel	6V AC	8909.2	8909.2/S	Green	21 (0.83)
1 Channel	12V AC	8910.2	8910.2/S	Red	21 (0.83)
1 Channel	24V AC	5801.2	5801.2/S	Red	21 (0.83)
1 Channel	50V AC	8911.2	8911.2/S	Red	21 (0.83)
1 Channel	110V AC	5804.2	5804.2/S	Yellow	21 (0.83)
1 Channel	220V AC	5805.2	5805.2/S	Green	21 (0.83)
1 Channel	240V AC	5806.2	5806.2/S	Red	21 (0.83)

GENERAL RELAY SPECIFICATIONS*

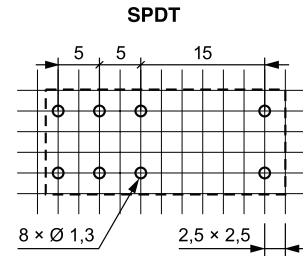
Mechanical Life (cycles).....> 3×10^7
 Max operating frequency
 • at rated load.....600 cycles/hour
 • no load.....72000 cycles/hour
 Operating / release time7 ms/ 3 ms

COIL SPECIFICATIONS*

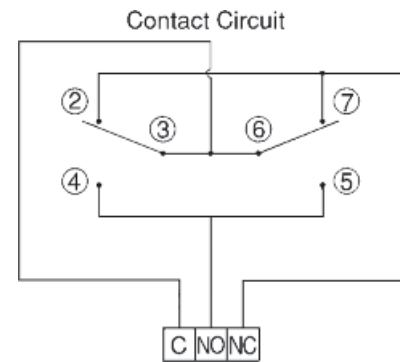
Contact materialAgNi
 Rated load (capacity)16A at 250V AC / 24 V DC
 Max. breaking capacity.....4000 VA
 Min. breaking capacity.....0.3 W
 Electrical life (resistive AC1).....> 0.7×10^5

Coil Voltage AC / DC	Coil operating range V AC / DC		Coil Current in mA	Coil resistance at 20°C in Ω	Acceptable resistance
	Min.	Max.			
5.0	3.5	12.7	96.0	60.0	$\pm 10 \%$
6.0	4.2	15.3	80.0	90.0	$\pm 10 \%$
12.0	8.4	30.6	40.0	360.0	$\pm 10 \%$
24.0	16.8	61.2	20.0	1,440.0	$\pm 10 \%$
48.0	33.6	122.4	10.0	5,700.0	$\pm 10 \%$
60.0	42.0	153.0	8.0	7,500.0	$\pm 10 \%$
110.0	77.0	280.0	4.4	25,200.0	$\pm 10 \%$

RELAY PINOUT*

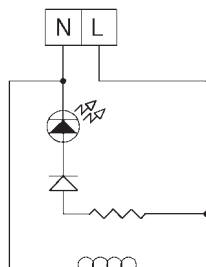


CONTACT CIRCUITS*

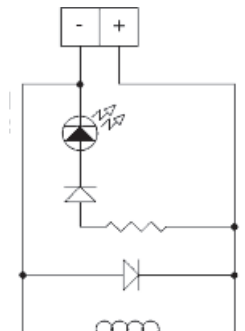


COIL CIRCUITS

AC COIL CIRCUIT



DC COIL CIRCUIT

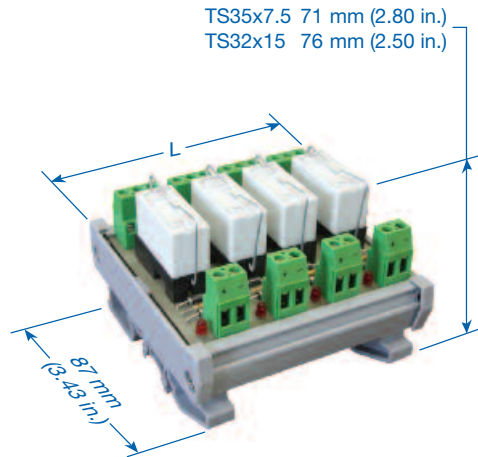


* For more information please see page 76 (Relay RM85)

Interfaces, High Current Isolated

Isolated Channels - 16 Amp, 35 or 32 DIN Rail

RMH4 - 4 Channel (Single Pole Double Throw)



A true high-current rating in a DIN Rail mount miniature relay module. The miniature relays used in the Altech RMH have a SPDT (Form C) 16 Amp continuous current rating, developed from dual 8 Amp contacts that are internally connected in parallel. The relay socket is rated dual 8 Amp. Printed circuit traces are balanced, rated 16 Amp and connect to Altech terminal blocks UL rated 15A/300V.

Typical relay specifications combined with other module component ratings give module ratings suitable for many control applications.

- Screw-Cage Clamp Connection
- Spring Clamp Terminals
- LED Coil Voltage Indicator
- Reverse DC Polarity LED Protection
- Surge Suppression With DC Coils
- Industry Standard Relays*
- DIN Rail Mount, Panel Mount Available

Technical Information

Current16 A
 Voltage (max)250V AC / 24V DC
 Wire Range0.5-4 mm² / 30-14 AWG
 Torque0.5-4 Nm / 4 lbs-in.
 Stripping Length ...8 mm

SPDT DC	Coil Voltage	Screw terminal Part Number	Spring terminal Part Number	LED (2mA)	Module Length (L) in mm (in)
4 Channel	5V DC	8905.3	8905.3/S	Yellow	79 (3.11)
4 Channel	6V DC	8906.3	8906.3/S	Green	79 (3.11)
4 Channel	12V DC	8907.3	8907.3/S	Red	79 (3.11)
4 Channel	24V DC	5800.3	5800.3/S	Yellow	79 (3.11)
4 Channel	48V DC	5802.3	5802.3/S	Green	79 (3.11)
4 Channel	60V DC	8908.3	8908.3/S	Red	79 (3.11)
4 Channel	110V DC	5803.3	5803.3/S	Red	79 (3.11)

SPDT AC	Coil Voltage	Screw terminal Part Number	Spring terminal Part Number	LED (2mA)	Module Length (L) in mm (in)
4 Channel	6V AC	8909.3	8909.3/S	Green	79 (3.11)
4 Channel	12V AC	8910.3	8910.3/S	Red	79 (3.11)
4 Channel	24V AC	5801.3	5801.3/S	Red	79 (3.11)
4 Channel	50V AC	8911.3	8911.3/S	Red	79 (3.11)
4 Channel	110V AC	5804.3	5804.3/S	Yellow	79 (3.11)
4 Channel	220V AC	5805.3	5805.3/S	Green	79 (3.11)
4 Channel	240V AC	5806.3	5806.3/S	Red	79 (3.11)

GENERAL RELAY SPECIFICATIONS*

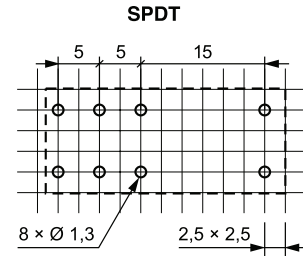
Mechanical Life (cycles).....> 3×10^7
 Max operating frequency
 • at rated load.....600 cycles/hour
 • no load.....72000 cycles/hour
 Operating / release time7 ms/ 3 ms

COIL SPECIFICATIONS*

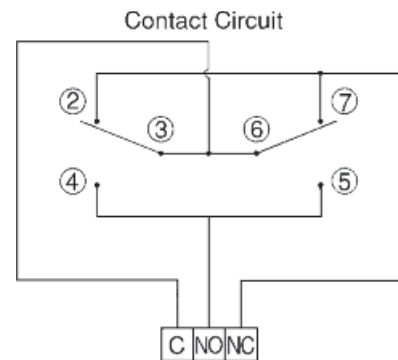
Contact materialAgNi
 Rated load (capacity)16A at 250V AC / 24 V DC
 Max. breaking capacity.....4000 VA
 Min. breaking capacity.....0.3 W
 Electrical life (resistive AC1).....> 0.7×10^5

Coil Voltage AC / DC	Coil operating range V AC / DC		Coil Current in mA	Coil resistance at 20°C in Ω	Acceptable resistance
	Min.	Max.			
5.0	3.5	12.7	96.0	60.0	$\pm 10 \%$
6.0	4.2	15.3	80.0	90.0	$\pm 10 \%$
12.0	8.4	30.6	40.0	360.0	$\pm 10 \%$
24.0	16.8	61.2	20.0	1,440.0	$\pm 10 \%$
48.0	33.6	122.4	10.0	5,700.0	$\pm 10 \%$
60.0	42.0	153.0	8.0	7,500.0	$\pm 10 \%$
110.0	77.0	280.0	4.4	25,200.0	$\pm 10 \%$

RELAY PINOUT*

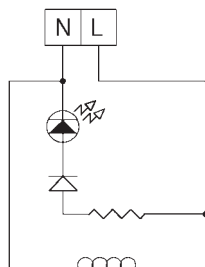


CONTACT CIRCUITS*

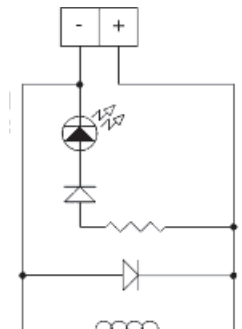


COIL CIRCUITS

AC COIL CIRCUIT



DC COIL CIRCUIT



* For more information please see page 76 (Relay RM85)