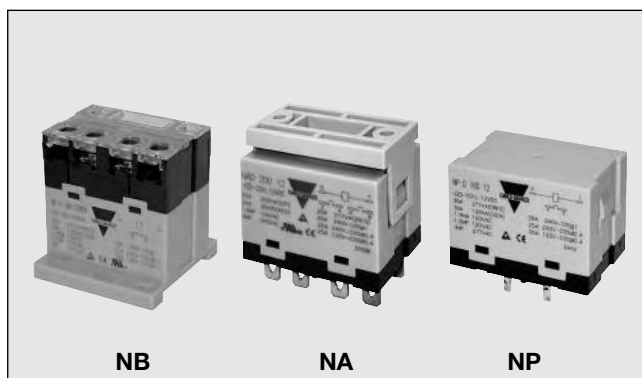


Power Relays Type NA/NF/NP/NB Monostable

CARLO GAVAZZI



- Power relay
- Switching capacity 30A
- DC coils 6 to 110VDC
- AC coils 12 to 240VAC
- 1 or 2 normally open contact
- Reinforced insulation 4kV / 8 mm (0.31")
- Heavy load up to 7500V
- PCB or Fast-on terminal
- General purpose, industrial power application
- CE, TÜV, UL approved

Product Description

Relay high power output. It is sealed designed for vending machines, copiers and control equipment. Power and compressors load.

Approvals



Ordering Key

N B D 100 12 SE

Type _____
 Terminal version _____
 A = Faston no flange
 B = Bolt terminals
 F = Flange and faston terminals
 P = PCB
 Coil version (A=AC - D=DC) _____
 Contact code _____
 Coil code _____
 Options _____

Box content: 1 relay
 Box size: (W 75 x D 40 x H 60) mm Weight: 100g
 (W 2.95 x D 1.57 x H 2.36) inches Weight: 3.53oz
 Box size: (W 60 x D 55 x H 60) mm Weight: 120g
 (DIN rail mounting types) (W 2.36 x D 2.17 x H 2.36) inches Weight: 4.23oz

Type Selection

Contact configuration

1 normally open contact	(SPST {1-form A})
2 normally open contacts	(DPST {2-form A})

Contact rating

30A	100
25A	200

Contact code

Coil Characteristics, DC @ +20°C (+68°F)

Coil Code	Rated voltage VDC	Pick-up voltage VDC	Drop-out voltage VDC	Max voltage VDC	Coil resistance Ω $\pm 10\%$
6	6	4.50	0.9	6.6	18.9
12	12	9.00	1.8	13.2	75.0
24	24	18.00	3.6	26.4	303.0
48	48	36.00	7.2	52.8	1220.0
100	100	75.00	15	110.0	5260.0
110	110	82.50	16.5	121.0	6360.0

Coil Characteristics, AC @ +20°C (+68°F)

Coil Code	Rated voltage VAC	Pick-up voltage VAC	Drop-out voltage VAC	Max voltage VAC	Coil resistance Ω $\pm 10\%$
12	12	9.6	1.8	13.2	65.0
24	24	19.2	3.6	26.4	275.0
48	48	38.4	7.2	52.8	1100.0
115	100-120	96.0	18.0	132.0	4730.0
230	200-240	176.0	33.0	264.0	21000.0

Options

For NA relays

- Nil** = Standard with mounting clip (i.e. fig.1)
T = Test button and mechanical indicator (i.e. fig.1)

For NF relays

- Nil** = Standard top flange mounting (i.e. fig.2)
D = With DIN rail mounting (i.e. fig.3)
T = Test button and mechanical indicator (i.e. fig.2)

For NP relays

- Nil** = Standard with mounting clip (i.e. fig.4)
SE = With mounting clip (i.e. fig.5)

For NB relays (Protection cover for terminals always included)

- DE** = With DIN rail mounting (i.e. fig.8)
FE = Top flange mounting (i.e. fig.7)
SE = With mounting clip (i.e. fig.6)
DL = With DIN rail mounting and LED indication (i.e. fig.8)
FL = Top flange mounting and LED indication (i.e. fig.7)
SL = With mounting clip and LED indication (i.e. fig.6)

Note: If not listed above option is not available.

Contact Characteristics

	100	200
Rating	30A	25A
UL rating	1.5HP / 120VAC 3HP / 240VAC 30A / 277VAC TV 10	
Contact rating with resistive load	30A/277VAC 30A/28VDC	25A/277VAC 25A/28VDC
Material	Silver alloy	

Initial contact resistance	100mΩ max. (1A-24VDC)	
Current		
Max. switching current	30A	25A
Max. switching power	8370VA/840W	6925VA/700W
Voltage		
Max. switching voltage	277VAC / 28VDC max.	
Life		
Electrical life	1 x 10 ⁵ ops (1800 ops/h)	
Mechanical life	1 x 10 ⁶ ops (1800 ops/h)	

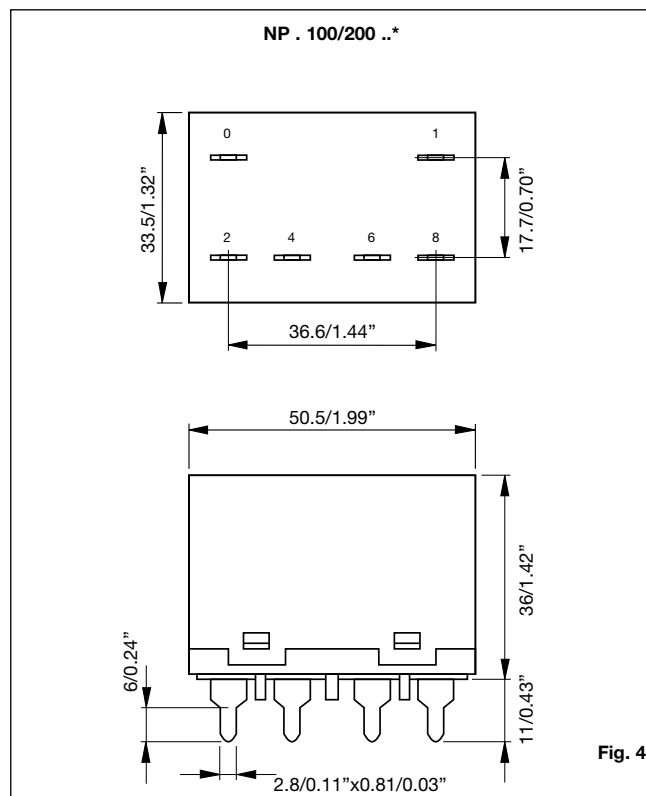
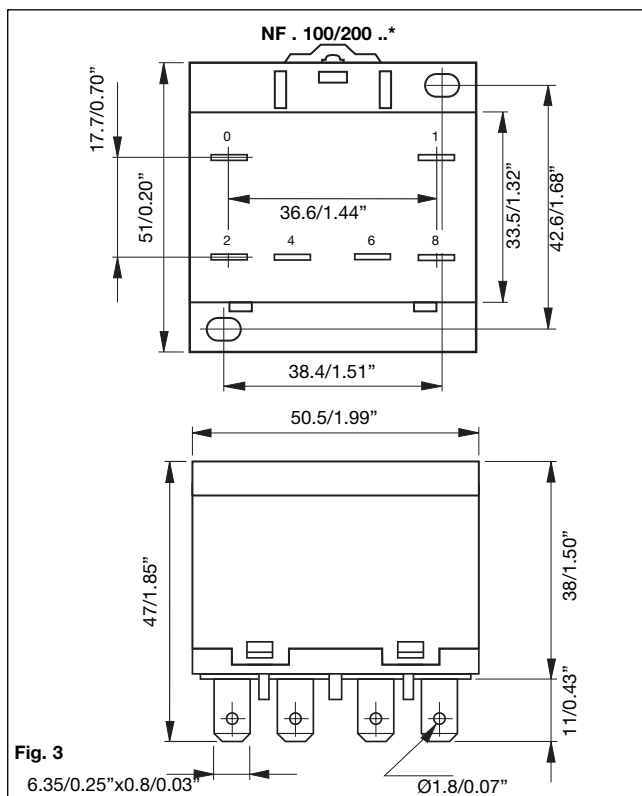
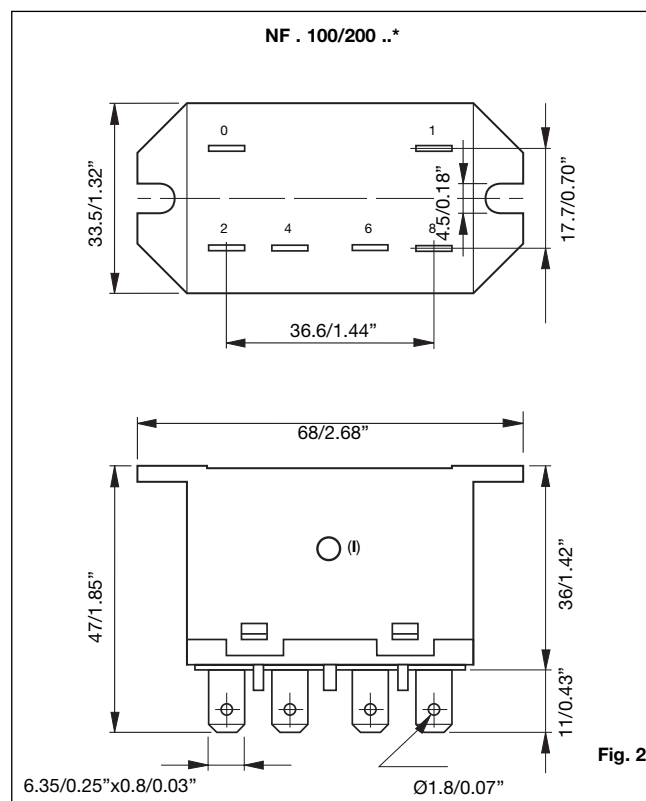
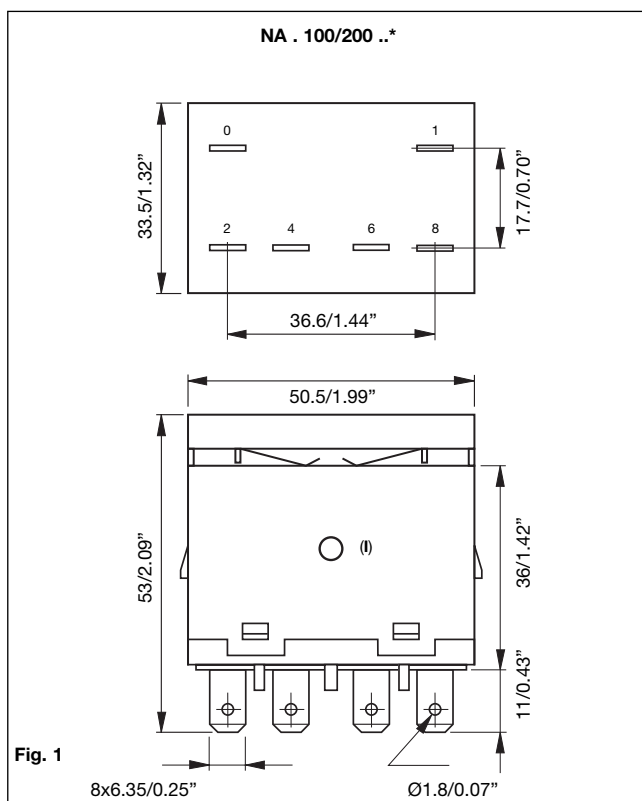
Insulation

Test voltage (1 min.)	
Open contacts	2000VAC
Contacts different polarity	2000VAC
Contacts/coil	4000VAC
Surge voltage	
Contacts/coil	10000VAC
Initial insulation resistance @ 500VDC	100MΩ

General Data

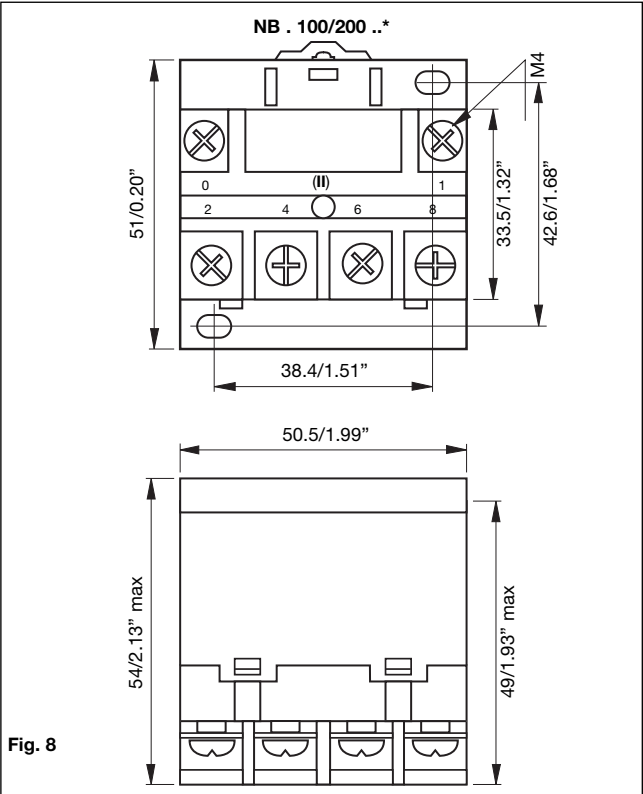
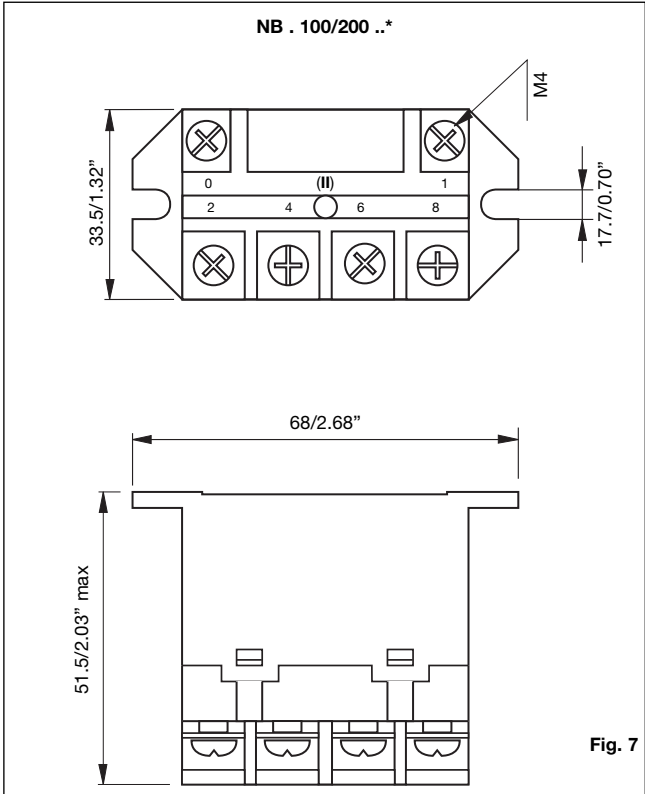
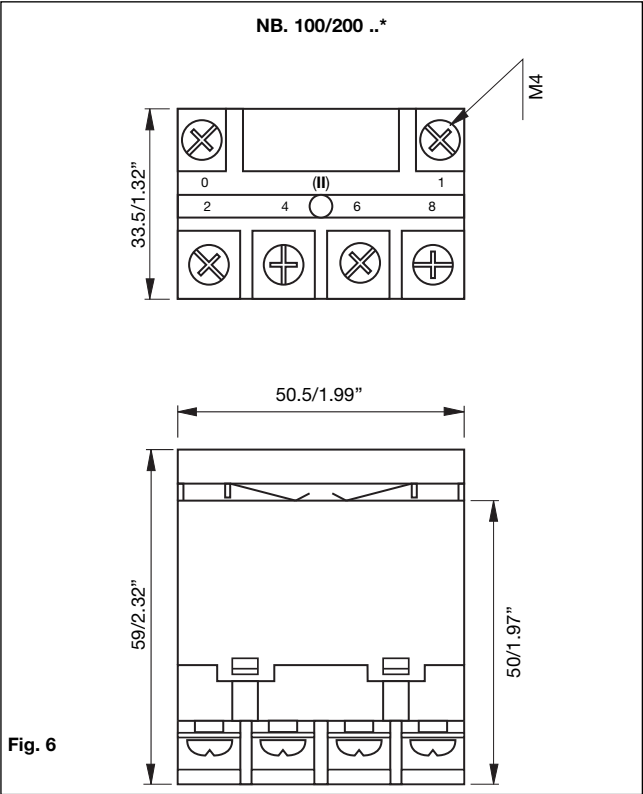
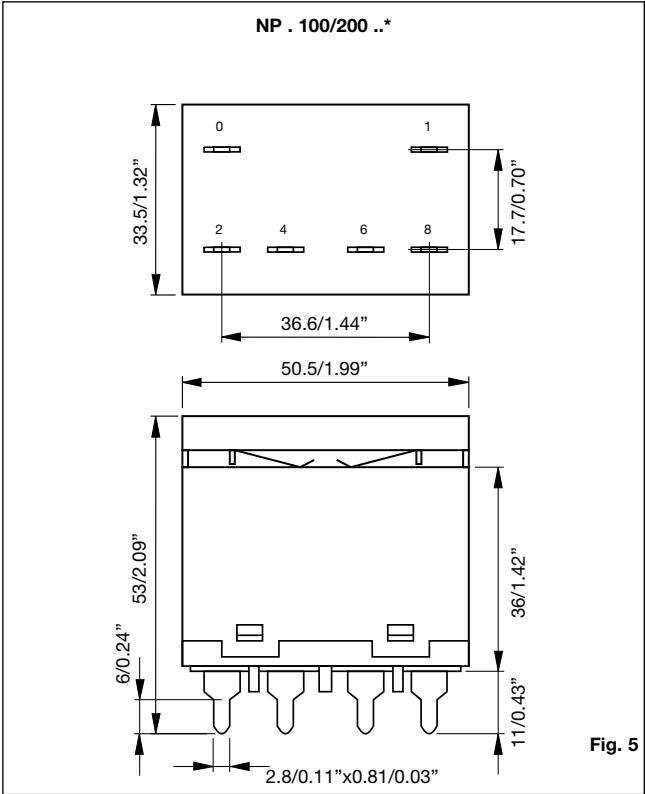
Vibration resistance	1.5mm p.p. 10 to 55Hz
Shock resist.	Functional Destructive
	98m/s ² (malfunction) 10G 980m/s ² (mechanical) 100G
Humidity	98% +40°C (+104°F)
Weight	90 to 120g (3.17 to 4.23oz)
Construction	Dust cover
Nominal coil power	AC version 2.5VA DC version 1.9W
Operate time at nom. voltage	30ms
Release time at nom. voltage	30ms
Ambient temperature	-55° to +70°C (-67° to +158°F)
Temperature rise	+50°C (+122°F) max.
Vibration resistance	1.5mm (0.06") p.p. 10 to 50Hz

Dimensions mm/inches



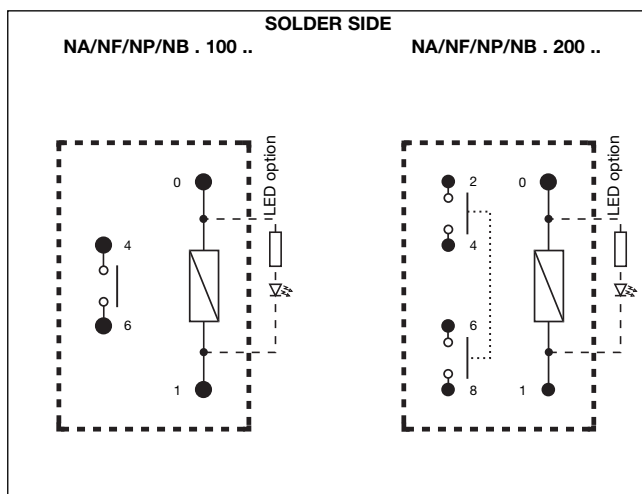
* = On version 100 terminals number 2 and 8 are not present

(I) = Mechanical push button

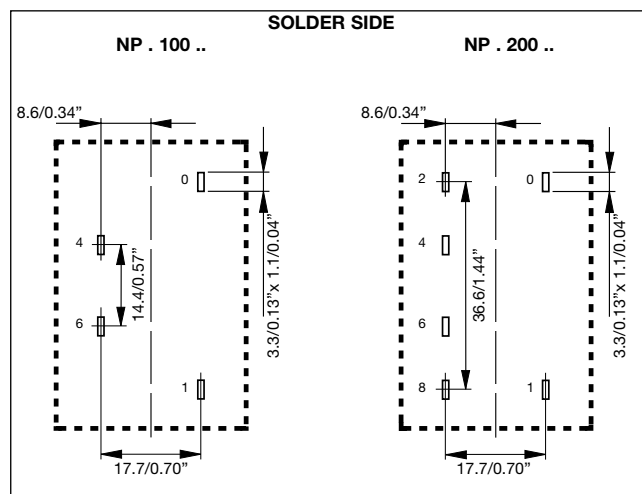


* = On version 100 terminals number 2 and 8 are not present
(I) = Mechanical push button
(II) = LED indication

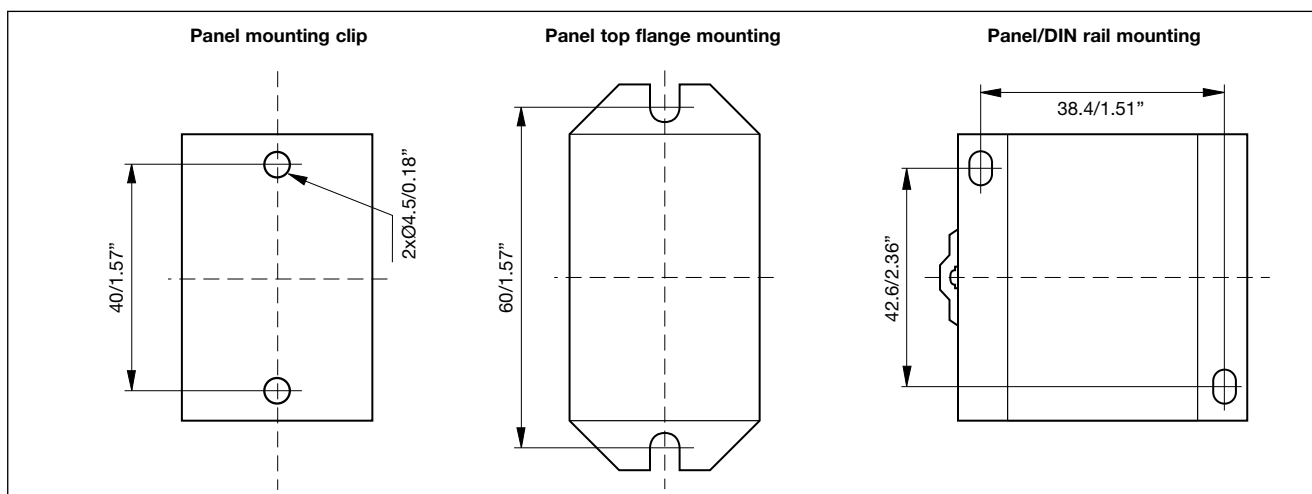
Wiring Diagram



Pin View mm/inches

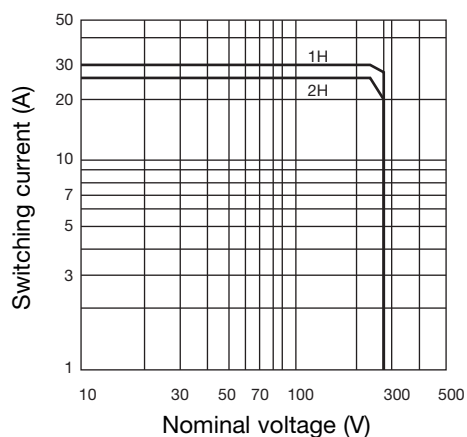


Drilling patterns mm/inches



Diagrams

1 Contact rating



2 Life endurance

