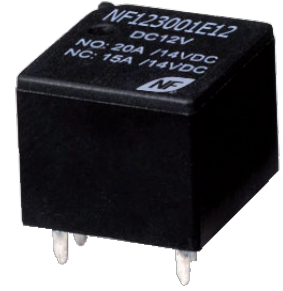


## Features

- Compact size miniature PCB relays.
- High rating 20A with maximum switching current up to 30A.
- Extended temperature range up to 105°C.
- For automotive system, e.g. Power windows, Auto door lock, Powersunroof, Memory seat, Wiper, Defogger, etc.



## Ordering Information

NF123H    100    E    12    S    XXXX

1            2    3    4    5    6

- |           |                              |          |                                                       |
|-----------|------------------------------|----------|-------------------------------------------------------|
| 1. NF123H | -- Relay Series, 30A Version | 5. Blank | -- Flux tight                                         |
|           |                              | S        | -- Sealed washable                                    |
| 2. 100    | -- 1A                        | 6. XXXX  | -- Letters and/or numbers for special customer design |
| 001       | -- 1C                        |          |                                                       |
| 3. E      | -- Contact Material Ag alloy |          |                                                       |
| 4. 12     | -- 12VDC                     |          |                                                       |
| 24        | -- 24VDC                     |          |                                                       |

## Contact Data

Type of contact		Single Contact
Configuration		1NO / 1CO
Contact rating	1A-Form	30A, 14VDC
	1C-Form	NO: 30A, 14VDC; NC 25A, 14VDC
Max. switching power		420W
Max. switching voltage		24VDC (max.30A)
Max. carrying current	NO	30A for 2min @20°C, 30A for 1h @20°C, 35A for 2min @85°C, 25A for 1h @85°C
Contact voltage drop		≤30mV (at 10A)
Contact material		Ag alloy

## Coil rating (DC @+23°C)

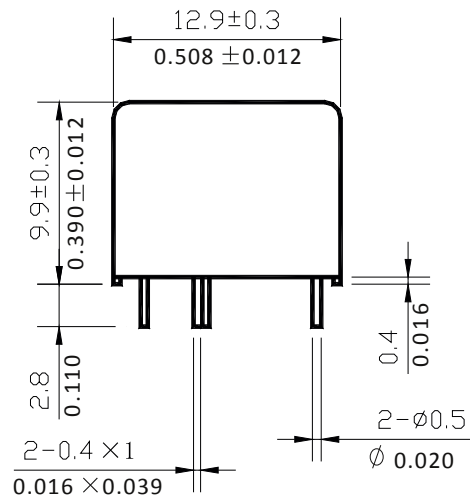
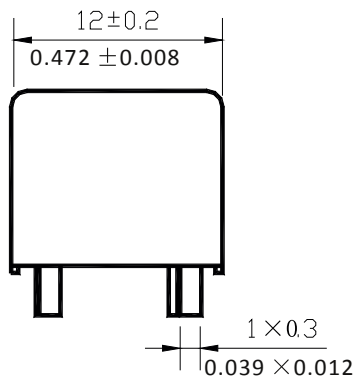
U <sub>N</sub> (VDC)		R (Ω) ± 10%	Pull-in Voltage U <sub>PI</sub> (VDC)	Drop-out voltage U <sub>DO</sub> (VDC)	Coil power P <sub>coil</sub> (W)
Rated	Max.				
12	14.4	254	6.9	1.5	0.57
24	28.8	1010	13.8	3	

- CAUTION: 1. The use of any coil voltage less than the rated coil voltage will compromise the operation of the relay.  
2. Pull-in and drop-out voltage are for test purposes only and not to be used as design criteria.

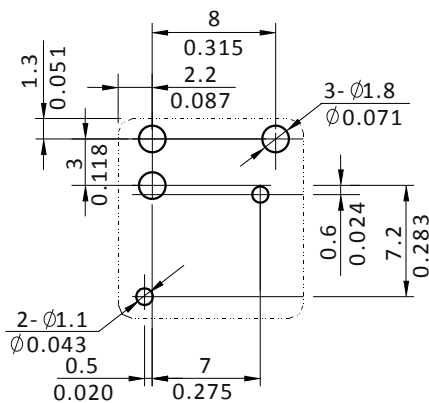
## Specification

Mechanical life (frequency 18000 oper. / h)	10 <sup>7</sup> Oper.
Electrical life (frequency 360 oper. / h)	10 <sup>5</sup> Oper.
Operating time / Release time	≤4ms / ≤1.5ms
Insulation Resistance	100MΩ Min (at 500VDC)
Dielectric strength contacts/ coil	500 VAC <sub>rms</sub>
Dielectric strength open contacts	500 VAC <sub>rms</sub>
Ambient temperature (nofreezing)	-40°C...+105°C
Vibration resistance	10 ~ 55Hz; double amplitude 1.27mm 60m/s <sup>2</sup>
Shock resistance	300m/s <sup>2</sup> 6ms
Dimensions	12x12.9x12.7
Weight	approx. 4g

## Dimension (Bottom view)

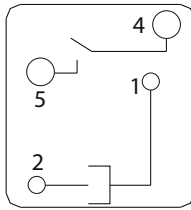


## Mounting (Bottom view)

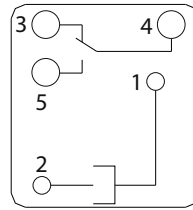


- Notes: 1) Dimensions are in millimeters.  
 2) Inch equivalents are given for general information only.

Wiring Diagram  
 Bottom View



1A



1C

**Disclaimer**

All technical performance data apply to the relay as such, specific conditions of the individual application are not considered. Please always check the suitability of the relay for your intended purpose. We do not assume any responsibility or liability for not complying herewith. We recommend to complete our questionnaire and to request our technical service. Any responsibility for the application of the product remains with the customer only. All specifications are subject to change without notification. All rights of NF Forward GmbH are reserved .