

» Features

- 1 form A (NO) contact
- 35A switching capability
- 2,25W coil power
- Contact gap $\geq 1,8\text{mm}$
- Low coil holding voltage (40%) to save power
- In accordance with IEC60335-1 Ed.5 (optional)



H x W x D: 20,9 x 27,6 x 32,5 [mm]

» Application Examples

- PV inverter
- Power supply
- EV charger

» Ordering Information

NF90G - **100** **E** **35** **12** **V** **nil**
 1 2 3 4 5 6 7

- | | | | |
|---------------------------|------------------------|---------------------|--------------------------------------------------|
| 1. Type: | NF90G = 1,8mm wide gap | 5. DC Coil voltage: | 12 = 12V; 24 = 24V |
| 2. Contact configuration: | 100 = 1NO (1 form A) | 6. Protection: | V = Vented (flux-tight)
S = Sealed (washable) |
| 3. Contact material: | E = AgSnO ₂ | 7. Special Suffix: | nil = Standard
0335 = IEC60335-1 (GWT) |
| 4. Contact rating: | 35 = 35A | | |

» Contact Data

Contact Arrangement	1 form A (NO)
Contact Material	AgSnO ₂
Contact Rating (Resistive Load)	35A, 277VAC
Max. Switching Voltage	277VAC / 30VDC
Max. Switching Current	35A
Max. Switching Power	9695VA / 1050W
Initial Contact Resistance	$\leq 30\text{m}\Omega$
Electrical Endurance	30×10^3
Mechanical Endurance	1×10^6

» Coil Rating

Rated Coil Voltage [VDC]	Nominal Current [mA]	Coil Resistance [Ω] $\pm 10\%$	Max. Pull-in Voltage [VDC]	Min. Drop-out Voltage [VDC]	Coil Power [mW]	Holding Voltage [VDC] $> +23^\circ\text{C}$
12	187,5	64	9,00	1,20	2250	4,8 ~ 6,0
24	93,8	256	18,00	2,40	2250	9,6 ~ 12,0

*After energizing coil at rated voltage for $\geq 100\text{ms}$, holding voltage can be reduced to $\geq 40\%$ of rated voltage.

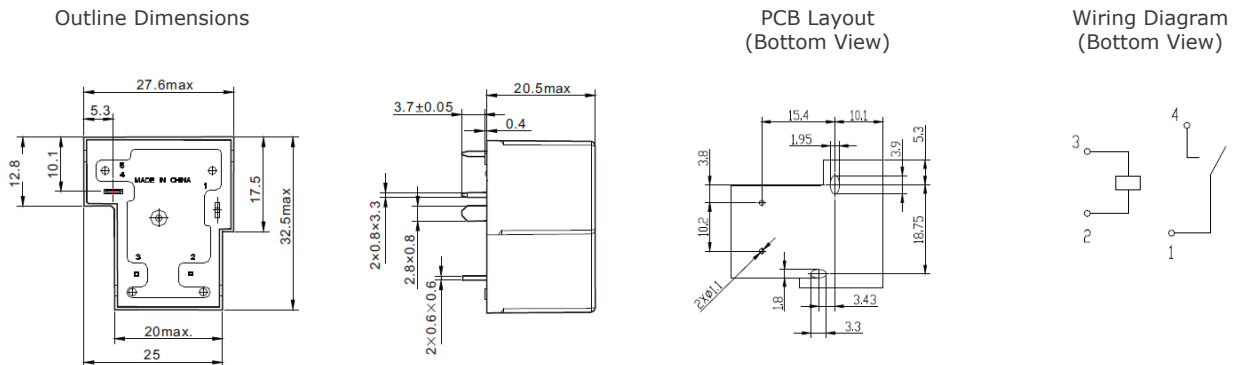
» Specification

Insulation resistance	≥1000MΩ (at 500VDC)
Initial Dielectric Strength	between open contact: 2500 Vrms, 50/60Hz for 1 min between contact & coil: 4000Vrms, 50/60Hz for 1 min
Surge voltage	between contact & coil: 6kV (1,2/50μs)
Operate Time / Release Time	≤15ms / ≤10ms (at nominal voltage)
Environmental Protection	RTII (flux-tight) or RTIII (washable)
Shock Resistance	Malfunction: 98m/s ² Destruction: 980m/s ²
Vibration Resistance	Destruction: 10 ~ 55Hz, 1,5mm double amplitude
Ambient Operating Temperature (without icing or condensation)	-40 ~ +85°C
Ambient Operating Humidity	5% ~ 85% RH
Weight	27g

» Safety Approvals

Approval	File No.	Rating(s)
UL	E352916	35A @ 277VAC @ 85°C

» Dimensions



Remark: 1) The reference tolerance in outline dimension: outline dimension ≤1mm, reference tolerance is ±0.2mm; outline dimension >1mm and ≤5mm, reference tolerance is ±0.3mm; outline dimension >5mm, reference tolerance is ±0.5mm.
2) The reference tolerance for PC Board layout is ±0.1mm.

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. Any responsibility for the application of the product remains with the customer only. All specified values apply at room temperature, unless otherwise stated. All specifications are subject to change without notification. All rights are reserved.