

### » Features

- 2 Form A (DPST); Gap > 3.5 mm (output); Gap > 0.7 mm (input)
- 40A switching capacity
- Low coil holding voltage to save power
- UL insulation class F
- Coil power consumption 1.88W



36 x 30 x 40 [mm]



### » Application Examples

- Industrial control
- Charging pile

### » Ordering Information

<b>NF63</b>	<b>200</b>	<b>A</b>	<b>35</b>	<b>Nil</b>	<b>12</b>	<b>V</b>	<b>Nil</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>7</b>	<b>9</b>	<b>10</b>
1. Type:	NF63			5. Pin layout:			Nil = Standard 7 = Auxiliary Contact
2. Contact configuration:	200 = 2NO (2 form A)			7. DC Coil voltage:			03 = 3V; 06 = 6V; 09 = 9V 12 = 12V; 24 = 24V; 48 = 48V
3. Contact material:	A = Ag Alloy			9. Protection:			V = Vented (flux-proof)
4. Contact rating:	35 = 35A 40 = 40A			10. Special Suffix:			Nil = Standard

### » Contact Data

Contact Arrangement	2 form A (2NO) + aux. Contact
Contact Material	Ag Alloy
Contact Rating (Resistive Load)	40A, 277VAC (output); 1A, 277VAC (input)
Max. Switching Voltage	480VAC
Max. Switching Current	40A
Max Switching Power	11.080VA(output); 277VA (input)
Contact Resistance	≤ 100mΩ (6VDC/1A),(output) ≤3mΩ (6VDC/20A),(output) ≤100mΩ (input)
Short-circuit tests	I <sub>p</sub> ≥ 1.85kA, I <sup>2</sup> t ≥ 2.5kA <sup>2</sup> s (based on requirements of IEC 62955) I <sub>p</sub> ≥ 1.5kA, I <sup>2</sup> t ≥ 6kA <sup>2</sup> s (based on requirements of IEC 62752)
Electrical endurance	40A, 277VAC, 10 x 10 <sup>3</sup> 35A, 277VAC, 50 x 10 <sup>3</sup>
Mechanical endurance	10 x 10 <sup>6</sup>

### » Coil Rating

Rated Coil Voltage [VDC]	Coil Resistance R[Ω] ± 10%	Pull-in Voltage [VDC]	Drop-out Voltage [VDC]	Coil Power [mW]	Nominal Current [mA]	Holding Voltage [VDC] -40 - 55°C	Holding Voltage [VDC] 55 - 85°C
3	4,8	2.25	0.15	1880	625	0.9-3.3	0.9-1.8
6	19,1	4.5	0.3		314	1.8-6.6	1.8-3.6
9	43,1	6.75	0.45		209	2.7-9.9	2.7-5.4
12	76,6	9	0.6		157	3.6-13.2	3.6-7.2
24	306,4	18	1.2		78	7.2-26.4	7.2-14.4
48	1225,5	36	2.4		39	14.4-52.8	14.4-28.8

## » Specification

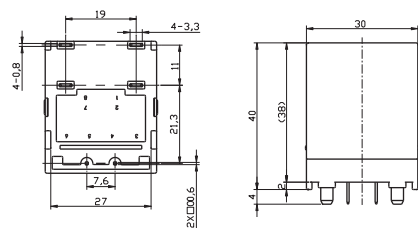
Insulation resistance	1000MΩ min. (at 500VDC)
Creepage / Clearance Distance	≥ 11.8mm / 10.2mm
Initial Dielectric Strength	between open main contacts 2000Vrms, 50/60Hz for 1 min
	between main and auxiliary contacts 5000Vrms, 50/60Hz for 1 min
	between main contact groups 2000Vrms, 50/60Hz for 1 min
	between any contact and coil 5000Vrms, 50/60Hz for 1 min
between open auxiliary contacts 1000Vrms, 50/60Hz for 1 min	
Environmental Protection	RTII (Flux tight) ,94V (0 Flammability Ratings)
Operate Time / Release Time	≤ 30ms / Max. 10ms
Vibration Resistance	Malfunction: 10 to 55Hz, 1.0mm double amplitude Destruction: 10 to 55Hz, 1.5mm double amplitude
Shock Resistance	Malfunction: 98m/s <sup>2</sup> Destruction: 980m/s <sup>2</sup>
Ambient Operating Temperature <sup>1)</sup>	-40 to +85°C
Ambient Operating Humidity <sup>1)</sup>	5% to 85%
Weight	Approx. 66g

1) Without icing or condensation

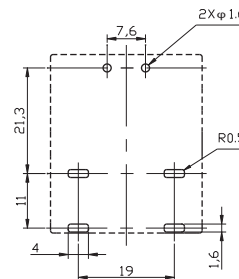
## » Dimensions

### Without Auxiliary Contact

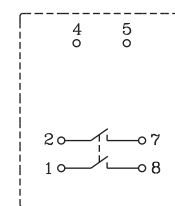
Outline Dimension



PC Board Layout (Bottom View)

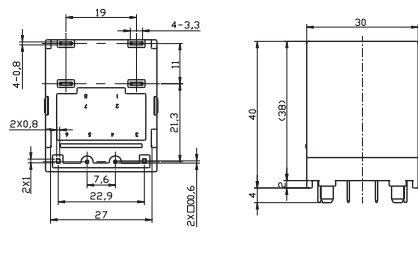


Wiring Diagrams (Bottom View)

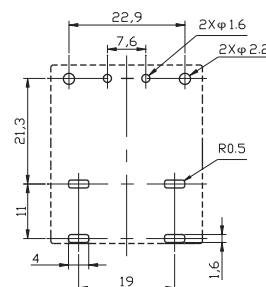


### Without Auxiliary Contact

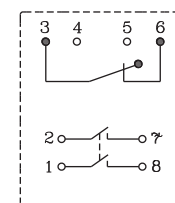
Outline Dimension



PC Board Layout (Bottom View)



Wiring Diagrams (Bottom View)



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.