



29x12.7x16.1

RoHS compliant

NF75N



usE352915



40052397



10002042304

Features	Application Examples
<ul style="list-style-type: none"> 1 Pole, 16A or 20A, 1NO (1A) or 1CO (1C) Form, 5mm pinning DC Coil Power: 410 mW (standard/20A) or 250mW (sensitive/16A) 5kV/8mm coil-contact creepage Max. inrush current 120A for 20ms Ambient temperature 105°C Accordance with IEC60335-1 Ed.5 (optional) Accordance with IEC60079 	<ul style="list-style-type: none"> Household electrical appliances Building automation OA equipments Industrial machinery

Ordering Information							
NF75N	100	E	7	12	S	L	XXXX
1	2	3	4	5	6	7	8
1. Type:	NF75N			6. Protection:	Nil = Flux tight		
2. Contact configuration:	100 = 1NO (1 form A) 001 = 1CO (1 form C)			7. Coil power:	S = Sealed washable Nil = 410mW (20A)		
3. Contact material:	E = AgSnO ₂			8. Compliance:	L = 250mW (16A)		
4. Contact rating:	7 = 16A (250mW) 20A (410mW)				Nil = Standard		
5. Coil voltage :	5 = 5VDC; 9 = 9VDC; 12 = 12VDC; 24 = 24VDC; 48 = 48VDC				0335 = IEC60335-1 (GWT)		

Contact Data

Contact Arrangement	1 form C (CO) or 1 form A (NO)
Contact Material	AgSnO ₂
Contact Rating (Resistive Load)	Standard version (410mW): 1NO = 20A/250VAC, 1CO = 16A/250VAC Sensitive version (250mW): 1NO = 16A/250VAC, 1CO = 12A/250VAC
Max. Switching Voltage	440VAC
Max. Switching Current	20A (410mW) / 16A (250mW)
Min. Switching Capacity	100mA, 6VDC
Contact Resistance	≤ 100mΩ (by voltage drop 6VDC/1A)
Electrical endurance	Standard version (410mW): 20A/250VAC@105°C = 5x10 ⁴ 16A/250VAC@105°C = 10 ⁵ Sensitive version (250mW): 16A/250VAC@105°C = 10 ⁵
Mechanical endurance	7.5 x 10 ⁶

Coil Rating (at 23°C)

Rated Coil Voltage	Coil Resistance	Pull-in Voltage	Drop-out Voltage	Coil Power	Max. Applied Voltage
[VDC]	R[Ω] ± 10%	[VDC]	[VDC]	[mW]	[VDC]
5	61	Max. 70% rated coil voltage (Initial)	Min. 10% rated coil voltage (Initial)	410	Max. 120% rated coil voltage (Initial)
12	351				
24	1405				
48	5620				
5	100			250	
12	576				
24	2304				
48	9216				

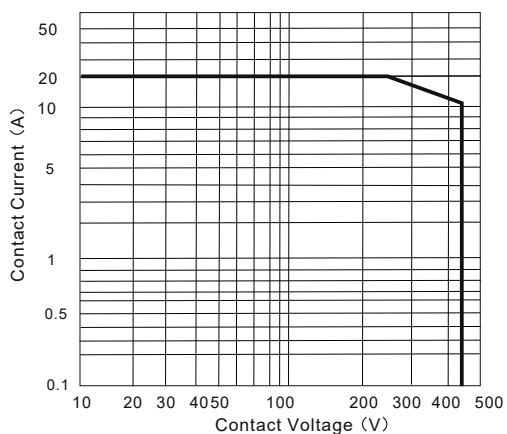
Specification

Creepage / Clearance Distance	Min. 8mm / Min. 8mm
Initial Dielectric Strength	between open contacts 1000 Vrms
	between contact and coil 5000Vrms
Impulse withstand voltage	10kV (1.2 / 50 μ s)
Material Group of Insulation Parts	IIIa
Over Voltage Category	III
Tracking Index of Relay Base	PTI 250V min.
Glow wire according to IEC60335-1	GWFI 850°C and GWIT 775°C
Envrionmental Protection	RTII (Flux tight) / RTIII (Sealed)
Operate Time / Release Time	Max. 15ms / Max. 8ms
Frequency of Operation	360 / hour (With load)
	72000 / hour (Without load)
Vibration Resistance (Malfunction)	10 to 55Hz, 1.5mm double amplitude
Shock Resistance (Malfunction)	Energized 100m/s ² , De-energized 100m/s ²
Ambient Operating Temperature*	-40 to +105°C
Ambient Operating Humidity*	5% to 85%
Weight	12g
Packing Unit	20 pcs / tube; 1000 pcs / box;

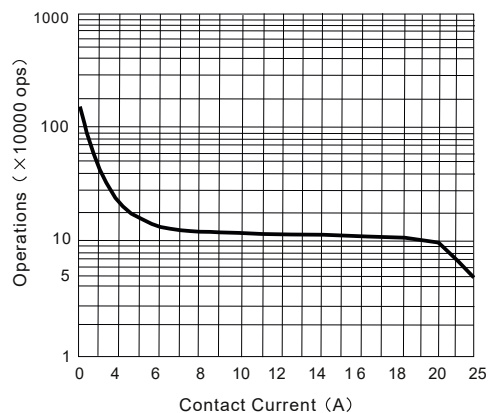
*1. Without icing or condensation

Engineering Data

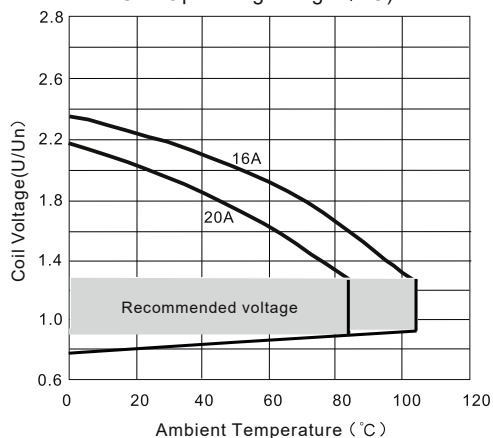
Contact Switching Capacity



Endurance Curve



Coil Operating Range (DC)



Notes: The use of a relay with an energising voltage other than the rated coil voltage may lead to reduced electrical life. An energising voltage over the above range may damage the insulation of relay coil.

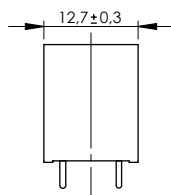
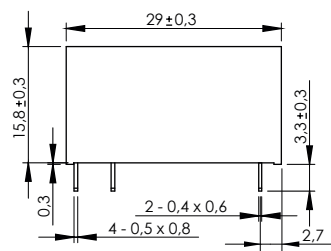
Safety approvals

Model	VDE File No. 40052397	UL File No. E352915	
Standard version (410mW)	20A, 250VAC, 85°C, 5x10 ⁴ 16A, 250VAC, 105°C, 9x10 ⁴	20A, 250VAC, 105°C, 5x10 ⁴ 16A, 250VAC, 105°C, 1x10 ⁵	
Sensitive version (250mW)		16A, 250VAC, 105°C, 1x10 ⁵	

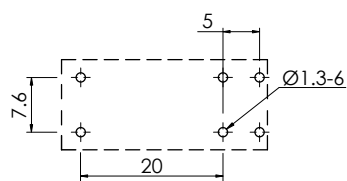
Dimensions

mm

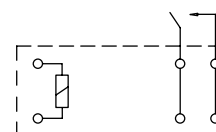
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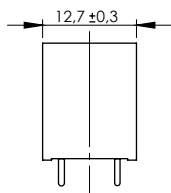
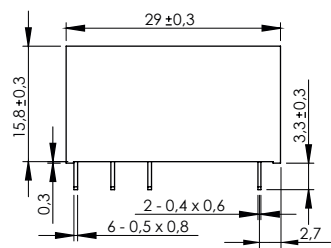
PCB Mounting Holes (Bottom View)



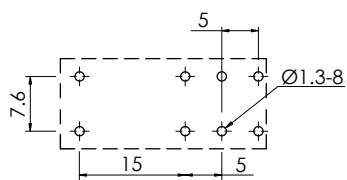
Wiring Diagram (Bottom View)



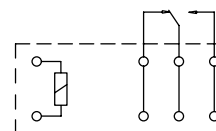
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PCB Mounting Holes (Bottom View)



Wiring Diagram (Bottom View)



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.