



29x12.7x15.7

RoHS compliant

# NF75

UL E352915



40043368



10002042304

Features	Application Examples
<ul style="list-style-type: none"> <li>• Low Profile Power Relay with 15.7mm height</li> <li>• 1 pole 12/16A, 1 form C (CO) or 1 form A (NO) Contact</li> <li>• DC coil 410mW</li> <li>• 5kV/8mm coil-contact, reinforced insulation</li> <li>• Ambient temperature 85°C</li> <li>• Accordance with IEC60335-1 (optional)</li> <li>• Accordance with IEC60079-15</li> </ul>	<ul style="list-style-type: none"> <li>• Household electrical appliances</li> <li>• Building automation</li> <li>• OA equipments</li> <li>• Industrial machinery</li> </ul>

Ordering Information							
<u>NF75</u>	<u>100</u>	<u>E</u>	<u>7</u>	<u>12</u>	<u>L</u>	<u>S</u>	<u>XXXX</u>
1	2	3	4	5	6	7	8
1. Type:	NF75			6. Coil power:	Nil = 410mW L = 250mW (Pending)		
2. Contact configuration:	100 = 1NO (1 form A) 001 = 1CO (1 form C)			7. Protection:	Nil = Flux tight S = Sealed washable		
3. Contact material:	E = Ag alloy (Cd free)			8. Special:	XXXX = Special letters or numbers, e.g. 0335 stands for product in accordance to IEC60335-1 (GWT)		
4. Contact rating:	Nil = 12A, pinning 3.5mm 7 = 16A, pinning 5mm						
5. Coil code:	5 = 5VDC; 12 = 12VDC; 24 = 24VDC; 48 = 48VDC;						

## Contact Data

Contact Arrangement	1 form C (CO) or 1form A (NO)	
Contact Material	Ag alloy (Cd free)	
Contact Rating	NF75 100E... / NF75 001E...	NF75 100E7... / NF75 001E7...
	12A, 250VAC	16A, 277VAC
Max. Switching Voltage	440VAC, 300VDC	
Max. Switching Current	12A	16A
Min. Switching Capacity	100mA, 6VDC	
Contact Resistance	≤ 100mΩ (by voltage drop 6VDC/1A)	
Electrical endurance	10 <sup>5</sup>	
Mechanical endurance	7.5 x 10 <sup>6</sup>	

## Coil Rating (at 23°C)

Rated Coil Voltage [VDC]	Coil Resistance R[Ω] ± 10%	Pull-in Voltage [VDC]	Drop-out Voltage [VDC]	Coil Power [mW]	Max. Applied Voltage [VDC]
5	61	Max. 70% rated coil voltage (Initial)	Min. 10% rated coil voltage (Initial)	410	Max. 130% 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 x 50 μs)
Material Group of Insulation Parts	IIIa

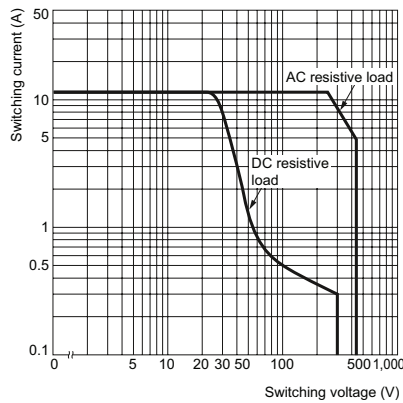
## Specification (continued)

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	
Environmental 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 <sup>2</sup> , De-energized 100m/s <sup>2</sup>	
Ambient Operating Temperature*	NF75 100E... / NF75 001E...	NF75 100E7... / NF75 001E7...
	-40 to +85°C	
Ambient Operating Humidity*	5% to 85%	
Weight	12g	
Packing Unit	20 pcs / tube; 1000 pcs / box;	

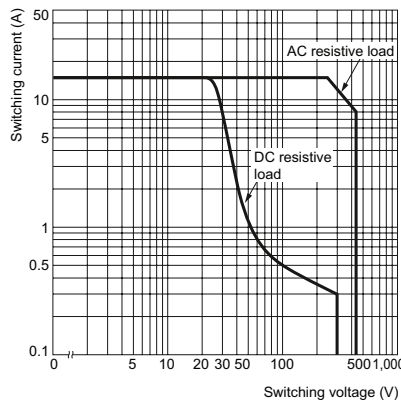
\*1. Without icing or condensation

## Engineering Data

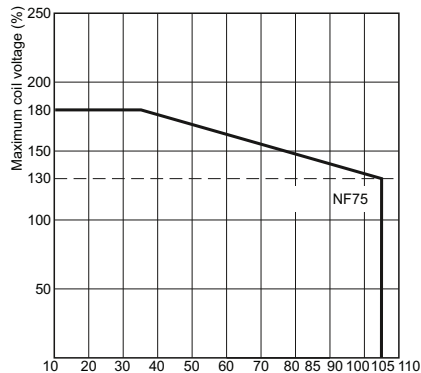
NF75 100E... / NF75 001E...



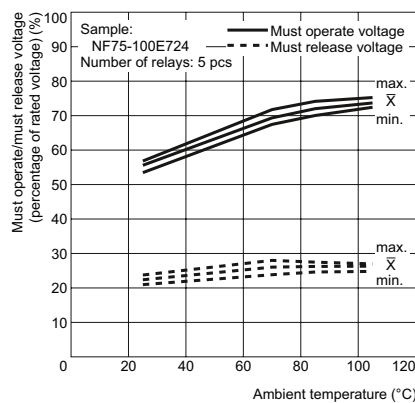
NF75 100E7... / NF75 001E7...



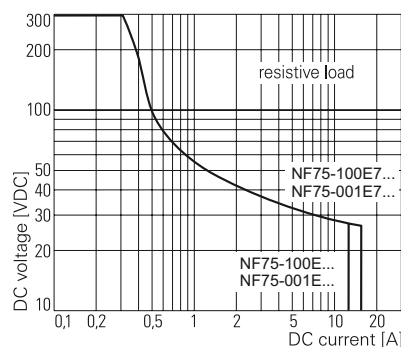
### • Ambient Temperature vs. Maximum Coil Voltage



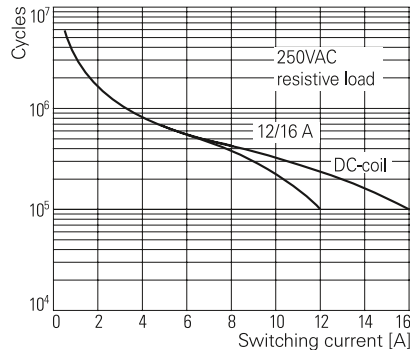
### • Ambient Temperature vs. Must Operate and Must Release Voltages



### • Max. DC Load Breaking Capacity

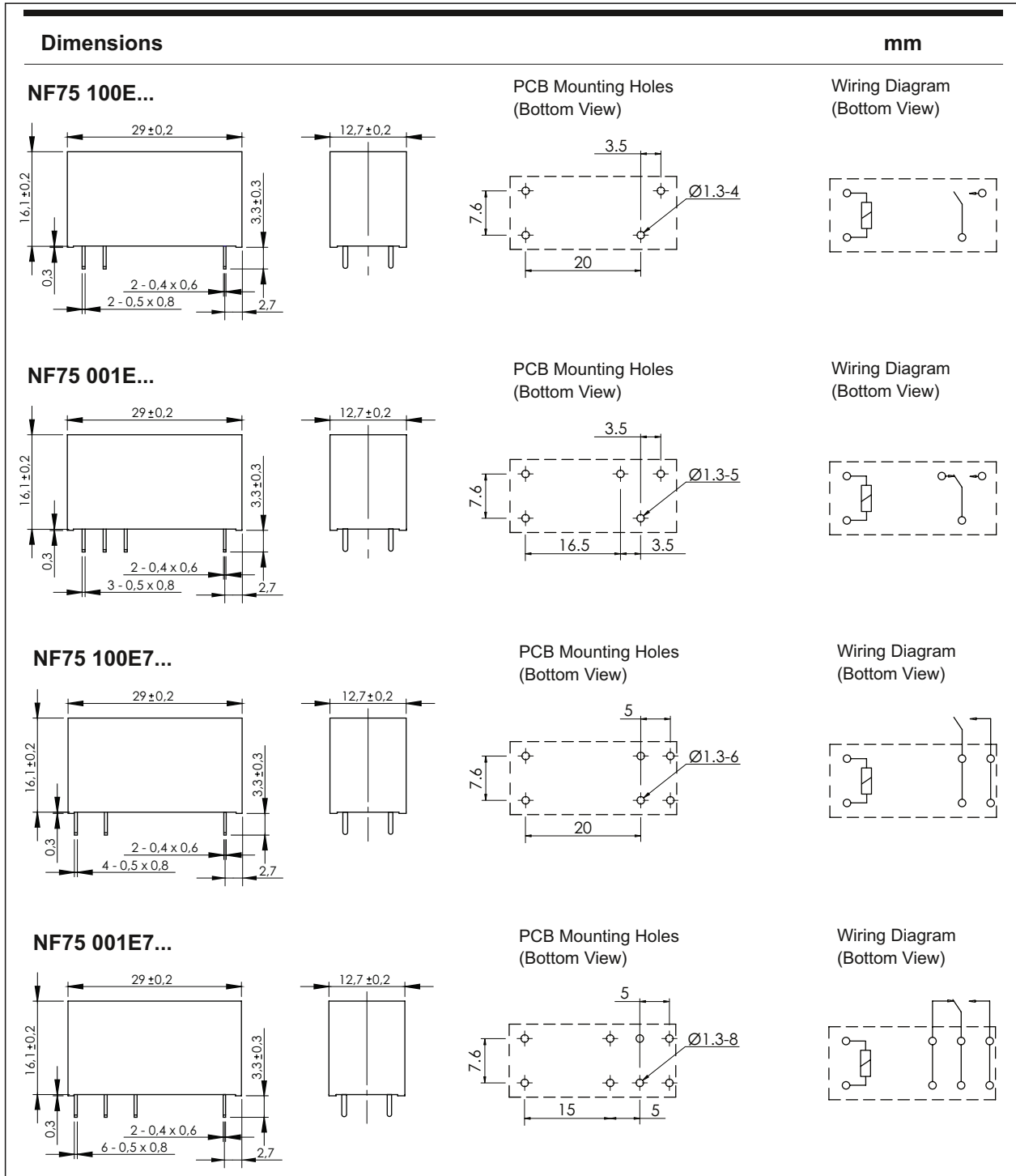


### • Electrical Endurance



## Safety approvals

Approvals	VDE File No. 40043368	UL File No. E352915	CQC File No. CQC10002042304
NF75 100E... / NF75 001E...	12A, 250VAC, 85°C	12A, 250VAC, 85°C	12A, 250VAC, 85°C
NF75 100E7... / NF75 001E7...	16A, 250VAC, 85°C	16A, 277VAC, 105°C	16A, 250VAC, 85°C



### 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.