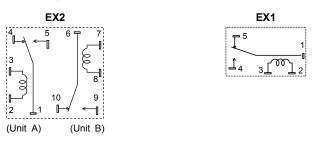
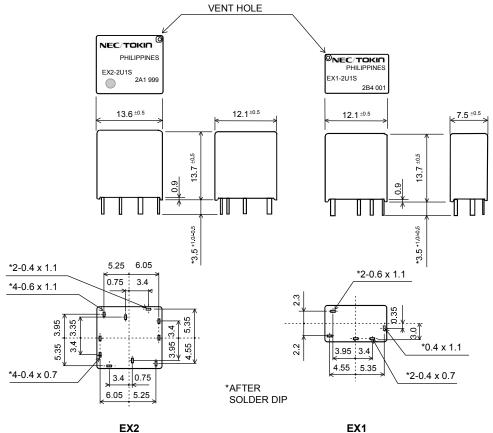
#### SCHEMATIC (BOTTOM VIEW)

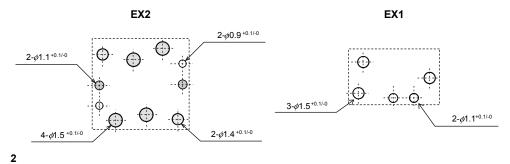


#### DIMENSIONS [mm]



EX2

PCB PAD LAYOUT [mm] (BOTTOM VIEW)



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(at 20 °C)

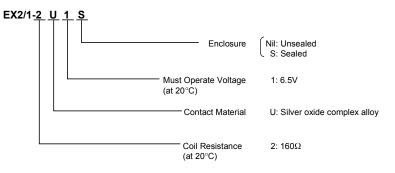
#### SPECIFICATION

Items			(at 20 °C) Specifications		
			EX2	EX1	
Contact Form		1c x 2 (Separate) 1c		1c	
	Ν	Max. Switching Voltage	16Vdc		
	Ν	Max. Switching Current	30A (at16Vdc)		
	Ν	Vin. Switching Current	1A (5Vdc)		
Contact Rating	g l	Max. Carrying Current	35A (2minutes max. 12Vdc at 25°C) 30A (2minutes max. 12Vdc at 85°C) 20A (2minutes max. 12Vdc at 125°C)		
	0	Contact Resistance	$4m\Omega$ typical (measured at 7A) initial		
Contact Material		Silver oxide complex alloy			
Operate Time (Excluding Bounce)			2.5ms typical (at nominal voltage)		
Release Time (Excluding Bounce)			3ms typical (at nominal voltage with diode)		
Nominal Operate Power			900mW		
Insulation Resistance			100MΩ at 500Vdc		
Withstand Voltage		Between Open Contact	500Vac min. (for 1minute)		
		Between Contact and Coil	500Vac min. (for 1minute)		
M		Misoperation	98m/s <sup>2</sup>		
Shock Resistance Destructive Fail		Destructive Failure	980	m/s <sup>2</sup>	
		Misoperation	10 to 300	Hz, 43m/s <sup>2</sup>	
Vibration Resi	ibration Resistance Destructive Failure		10 to 500Hz 4	10 to 500Hz 43m/s <sup>2</sup> , 200hour	
Ambient Temperature		-40 to +125 °C			
Coil Temperat	ure Rise		70°C / W (without contact carrying current)		
Life Expectancy	Mechanical		1 x 10 <sup>6</sup> c	1 x 10 <sup>6</sup> operations	
	Electrical	P/W motor lock (14Vdc, 25A)	100x10 <sup>3</sup> operations		
	Electrical	P/W motor free (14Vdc, 25A/7A)	100x10 <sup>3</sup> operations		
Weight		Approx. 6.4g	Approx. 3.5g		

#### **COIL RATING**

				(at 20 °C)
Part Numbers	Nominal Voltage (Vdc)	Coil Resistance (Ω)+/-10%	Must Operate Voltage (Vdc)	Must Release Voltage (Vdc)
EX2/1-2U1S (Sealed type)	12	160	6.5	0.9
EX2/1-2U1 (Unsealed type)	12	160	6.5	0.9

### NUMBERING SYSTEM

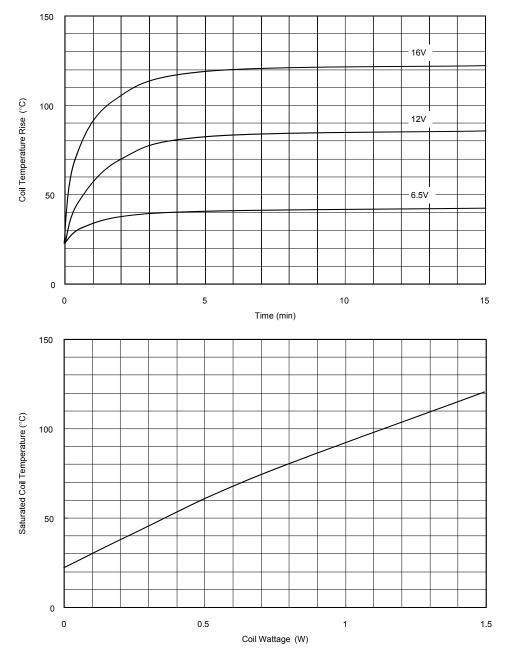


All specifications in this catalog and production status of products are subject to change without notice. Prior to the purchase, please contact NEC Tokin for updated product data.
Please request for a specification sheet for detailed product data prior to the purchase.
Before using the product in this catalog, please read "Precautions" and other safety precautions listed in the printed version catalog.

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#### **TECHNICAL DATA**

### **Coil Temperature Rise**

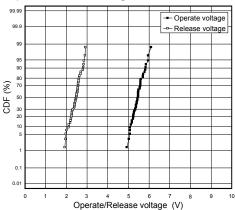


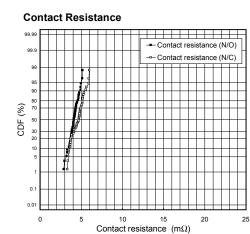
5

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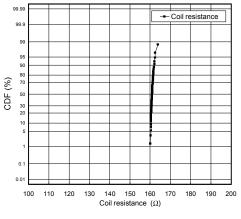
## RELAY CHARACTERISTICS DISTRIBUTION (INITIAL, n = 25 pcs., at 20°C)

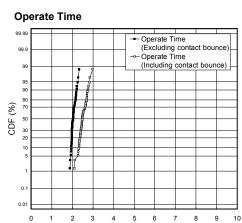






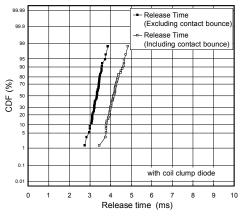






Operate time (ms)





#### 6

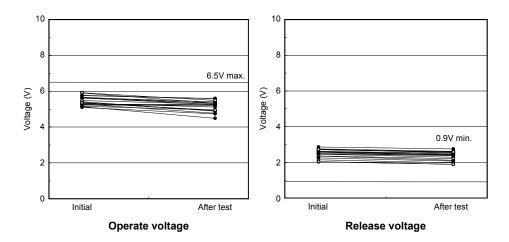
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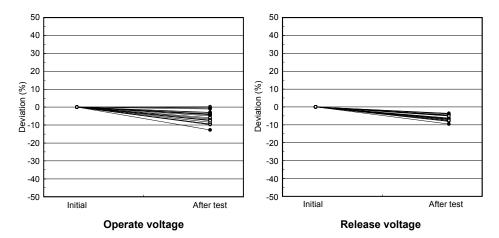
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#### ELECTRICAL LIFE TEST (14Vdc-25A, P/W motor, Lock)

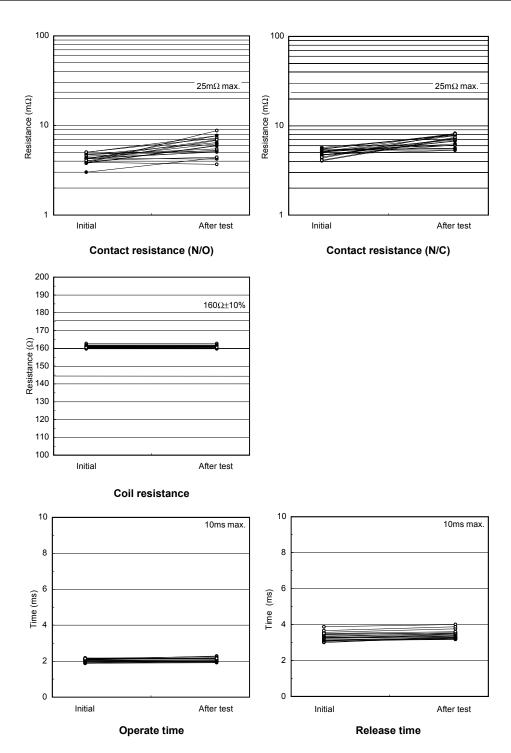
Test items		Samples	
1. Operate voltage 2. Release voltage 3. Contact resistance 4. Coil resistance 5. Operate time 6. Release time (with coil clump diode)	Temperature Frequency Contact load Number of operations	:20°C :0.2s ON, 9.8s OFF, 0.1Hz :14Vdc-25A, P/W motor, Lock :100 x 10 <sup>3</sup>	EX2-2U1S 10 pcs





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