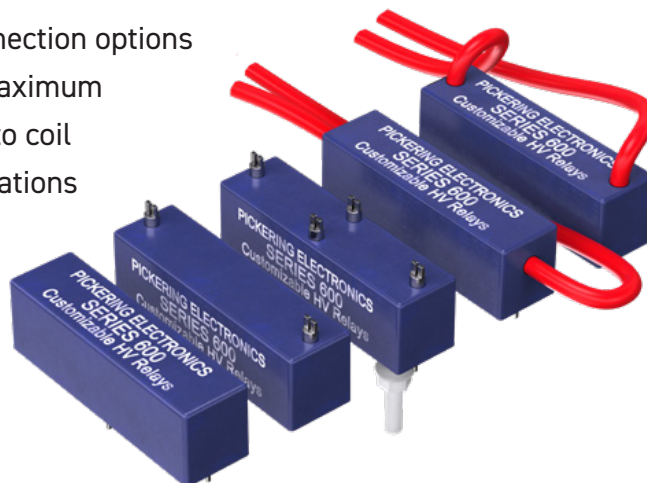


- **Modular design** with wide range of rating and connection options
- Up to **12.5 kV** Switching, **50 W**, **100 W** or **200 W** maximum
- Up to **20 kV** stand-off across switch, **25 kV** switch to coil
- **1 Form A**, **1 Form B** and **1 Form C** contact configurations
- **5**, **12** and **24 V** coils (custom options available)
- Optional coaxial or electrostatic screen
- Internal mu-metal magnetic screen
- Tungsten plated contacts
- Insulation resistance > **10¹³ Ω**
- Custom potting materials
- Optional internal diode or Zener + diode for coil back EMF clamping
- Dedicated in-house performance testing
- Many benefits compared to industry standard relays (see last page)



Utilizing over 55 years of experience in the field, Pickering has developed the 600 series in response to increasing demand for custom high voltage reed relays. It employs a modular design allowing customers to precisely specify the parameters and connection options they require, without compromising performance.

Manufactured with tungsten plated contacts for superior reliability and operating life, they also feature internal mu-metal magnetic screens which minimize magnetic interference and promote relay stability, allowing Form A (energize to make) versions to be mounted side by side. Insulation resistance is over 10¹³ Ω for applications requiring high reliability.

Customization options include a coaxial or electrostatic screen for improved signal integrity and noise reduction, and an optional diode or Zener diode for clamping coil back EMF. A broad range of switching capabilities, contact forms and connection types are available, in addition to dedicated performance testing. Custom potting materials can also be used where specific environmental or performance requirements must be met. Please contact our technical sales office for more information and advice.

Form B types are magnetically biased and should not be mounted directly onto ferrous metal chassis or less than 1 inch (25 mm) away from other relay as the coil operating voltage characteristics will be altered due to magnetic interaction. The coils of Form B relays are polarity sensitive and the coil positive voltage must be connected to the coil positive connection shown in the connection options. Please see the diagrams on pages 7-10.

Switch Ratings

1 Form A (energize to make)	1 Form B (energize to break)	1 Form C (changeover)
Stand-off 5 kV, switching up to 3.5 kV Standoff 8 kV, switching up to 5 kV Standoff 8 kV, switching up to 6 kV Standoff 10 kV, switching up to 7.5 kV Standoff 15 kV, switching up to 10 kV Standoff 15 kV, switching up to 12.5 kV Standoff 20 kV, switching up to 12.5 kV	Stand-off 5 kV, switching up to 3.5 kV Standoff 8 kV, switching up to 5 kV Standoff 8 kV, switching up to 6 kV Standoff 10 kV, switching up to 7.5 kV Standoff 15 kV, switching up to 10 kV Standoff 15 kV, switching up to 12.5 kV Standoff 20 kV, switching up to 12.5 kV	Standoff 5 kV, switching up to 2.5 kV

Series 600 switch ratings - contact ratings for each switch type

Switch No	Switch form	Power rating (see Note ¹)	Max. switch current	Max. carry current	Max. switching volts (see Note ²)	Max. stand-off volts	Life expectancy ops typical (see Note ³)	Operate time inc bounce (max)	Release time (see Note ⁴)
1	A or B	100 W	3.0 A	3.5 A	3500 V	5000 V	10 ⁸	3 ms	2 ms
2	A or B	100 W	3.0 A	3.5 A	5000 V	8000 V	10 ⁸	3 ms	2 ms
3	A or B	100 W	3.0 A	3.5 A	7500 V	10000 V	10 ⁸	3 ms	2 ms
4	A or B	50 W	3.0 A	3.5 A	10000 V	15000 V	10 ⁸	3 ms	2 ms
5	A or B	50 W	3.0 A	3.5 A	12500 V	15000 V	10 ⁸	3 ms	2 ms
6	A or B	50 W	3.0 A	3.5 A	12500 V	20000 V	10 ⁸	3 ms	2 ms
7	A or B	200 W	3.0 A	5.0 A	6000 V	8000 V	10 ⁸	3 ms	2 ms
8	C	100 W	3.0 A	3.2 A	2500 V	5000 V	10 ⁸	3 ms	2 ms

Note¹: Power Rating

Power rating is for **RESISTIVE** loads only. At higher voltages stray capacitance can generate large current pulses, potentially damaging the contact plating and causing switch welding. Capacitive circuits require provision to limit the surge to within the current and power ratings of the relay. Contact Pickering for more information.

Note²: Switching Voltage

Switching voltage ratings are for D.C. or A.C. peak. Where the requirement is for A.C. RMS voltage, multiply the value by 1.414 for the A.C. peak value.

Note³: Life Expectancy

Relay life depends upon switch load and end of life criteria, which is usually when the switch fails to open (sticking), fails to close or the closed contact resistance exceeds an acceptable value. In cold switching applications, typical life is expected to be greater than 1×10^9 ops. When switching high voltages, contact erosion will take place. At very low power levels, typical life is expected to be greater than 1×10^9 ops. At low to medium resistive loads, typical life is expected to be greater than 1×10^8 ops, and at higher voltages, at resistive load up to the maximum ratings, typical life is 1×10^6 ops. In abusive conditions (e.g. high capacitive inrush current) this figure reduces considerably. Pickering has a large database for a range of loads and can perform life testing with any load conditions.

Note⁴: Release Times

The type of back EMF clamping across the coil will affect the release times. With no suppression, the release times can be less than 0.1 ms and with a standard flyback diode less than 2 ms. Using a flyback diode and Zener diode in series can result in release times less than 1ms. Contact Pickering for more information.

Operating Voltages

Coil voltage - nominal	Must operate voltage - maximum at 25 °C	Must release voltage - minimum at 25 °C
5 V	3.75 V	0.5 V
12 V	9 V	1.2 V
24 V	18 V	2.4 V

Environmental Specification/Mechanical Characteristics

Operating Temperature Range	-20 °C to +85 °C
Storage Temperature Range	-35 °C to +100 °C
Shock Resistance	50 g
Vibration Resistance (10 - 2000 Hz)	20 g
Soldering Temperature (max) (10 s max)	270 °C
Washability (Proper drying process is recommended)	Fully Sealed

Washing Guidelines

Pickering do not make any specific recommendations on washing reed relays, due to the large number of factors in cleaning processes, however we do have suggestions on best practices. Click [here](#) for more information.

Part Number Description

Series		Electrostatic Screen		No of reeds		Switch Form		Coil Voltage		Switch No		Coil Suppression		Connection		Layout		Wire Length (FT/FE)	
600		E		1		A		05		1		D		PC		1		1	
Code	Type	Code	Type	Code	Type	Code		Code		Code		Code		Code		Code		Code	
600	Standard Case	N	No Electrostatic Screen	1	1 Reed														
620	Larger Case	E	Electrostatic Screen	Code		Type		Code		Type		Code		Type		Code		Length	
				A	Form A			05	5 V	1	3.5 kV / 5 kV	N	No Diode	PC	All PCB pins	1	See part drawings on page 7-10	1	100 mm
				B	Form B			12	12 V	2	5 kV / 8 kV	D	Diode	TL	All turret lugs	2		2	200 mm
				C	Form C			24	24 V	3	7.5 kV / 10 kV	Z	Diode + Zener	TB	Switch turret lugs, coil PCB	3		3	300 mm
										4	10 kV / 15 kV			FT	Flying leads - top	4			
										5	12.5 kV / 15 kV			FE	Flying leads - side	5			
										6	12.5 kV / 20 kV								
										7	6 kV / 8 kV								
										8	2.5 kV / 5 kV								

(Omit code for non FT/FE connections)

Series: Pickering offers 2 case sizes to increase the configuration options to allow users to select the most suitable part. Our Series 600 High Voltage Reed Relays use our standard size case similar to our Series 60/65 range requiring approximately 58mm x 16mm board area.

Our Series 620 High Voltage Reed Relays use a larger case allowing for increased spacing between connections, along with larger clearances, both internal and external, which can be crucial at higher voltages.

ES Screen: In some applications, the inclusion of an electrostatic screen between the coil and the switch can improve signal integrity and noise reduction. However, there are factors that need to be considered compared to unscreened parts.

For example, reduced internal clearances and increased capacitance which may compromise the overall performance in specific applications.

Switch No: With a wide range of switch specifications available as listed in the table on page 2, when selecting the most suitable for an application ensure all the requirements are within the published ratings.

Coil Suppression: With any wound component, the back EMF induced when the part is turned off can interfere with or damage the driver's circuitry.

Pickering recommends having suppression fitted across the reed relay coil, either externally or internally within the package.

A standard free wheeling diode will clamp the back EMF to around 0.7 V, but clamping this value higher with the use of a Zener diode can reduce the release time. For higher voltage parts, this can help with breaking the arc that occurs as the switch begins to open. For further information, [contact technical sales.](#)

Connection & Layout: With the modular and customizable design of the Series 600, there are a large array of connection options available. Where PCB mounting for all the pins is required, the pin positioning can be whatever the customer requires, or a combination of PCB pins for the coil and turret lugs or flying leads for the switch connection.

Panel mounting is another option using turret lugs or flying leads. Flying lead versions can help to greatly reduce the possibility of surface tracking at very high voltages, for more information and advice, [contact technical sales.](#)

Examples of Form A (Normally Open) configurations, with a wide range of custom options available, contact techsales@pickeringrelay.com for more information.

Device Type	Series	Configuration Code (see Note ⁵)	Coil Voltage (V)	Wire Length	Initial contact resistance	Insulation resistance (see Note ⁶)		Capacitance (see Note ⁷)	
						Switch to coil	Across switch	Closed switch to coil	Across open switch
1 Form A Switch No. 1 (100 W, 5 kV)	600N 600E 620N 620E	-1A**-1DPC1	** = 05, 12 or 24 V	* = 1 (100 mm), 2 (200 mm) or 3 (300 mm)	0.12 Ω	10 ¹³ Ω	10 ¹³ Ω	3 pF	0.15 pF
		-1A**-1DTB1							
		-1A**-1DTL1							
		-1A**-1DFT1*							
		-1A**-1DFE1*							
1 Form A Switch No. 2 (100 W, 8 kV)	600N 600E 620N 620E	-1A**-2DPC1	** = 05, 12 or 24 V	* = 1 (100 mm), 2 (200 mm) or 3 (300 mm)	0.12 Ω	10 ¹³ Ω	10 ¹³ Ω	3 pF	0.15 pF
		-1A**-2DTB1							
		-1A**-2DTL1							
		-1A**-2DFT1*							
		-1A**-2DFE1*							
1 Form A Switch No. 3 (100 W, 10 kV)	600N 600E 620N 620E	-1A**-3DPC1	** = 05, 12 or 24 V	* = 1 (100 mm), 2 (200 mm) or 3 (300 mm)	0.12 Ω	10 ¹³ Ω	10 ¹³ Ω	3 pF	0.15 pF
		-1A**-3DTB1							
		-1A**-3DTL1							
		-1A**-3DFT1*							
		-1A**-3DFE1*							
1 Form A Switch No. 4 (50 W, 15 kV)	600N 600E 620N 620E	-1A**-4DPC1	** = 05, 12 or 24 V	* = 1 (100 mm), 2 (200 mm) or 3 (300 mm)	0.12 Ω	10 ¹³ Ω	10 ¹³ Ω	3 pF	0.15 pF
		-1A**-4DTB1							
		-1A**-4DTL1							
		-1A**-4DFT1*							
		-1A**-4DFE1*							
1 Form A Switch No. 5 (50 W, 15 kV)	620N	-1A**-5DTB1	** = 05, 12 or 24 V	* = 1 (100 mm), 2 (200 mm) or 3 (300 mm)	0.12 Ω	10 ¹³ Ω	10 ¹³ Ω	3 pF	0.15 pF
		-1A**-5DFT1*							
		-1A**-5DFE1*							
1 Form A Switch No. 6 (50 W, 20 kV)	620N	-1A**-6DTB1	** = 12 or 24 V	* = 1 (100 mm), 2 (200 mm) or 3 (300 mm)	0.12 Ω	10 ¹³ Ω	10 ¹³ Ω	3 pF	0.15 pF
		-1A**-6DFT1*							
		-1A**-6DFE1*							
1 Form A Switch No. 7 (200 W, 8 kV)	600N 600E 620N 620E	-1A**-7DPC1	** = 05, 12 or 24 V	* = 1 (100 mm), 2 (200 mm) or 3 (300 mm)	0.5 Ω	10 ¹³ Ω	10 ¹³ Ω	3 pF	0.15 pF
		-1A**-7DTB1							
		-1A**-7DTL1							
		-1A**-7DFT1*							
		-1A**-7DFE1*							

Examples of Form B (Normally Closed) configurations, with a wide range of custom options available, contact techsales@pickeringrelay.com for more information.

Device Type	Series	Configuration Code (see Note ⁵)	Coil Voltage (V)	Wire Length	Initial contact resistance	Insulation resistance (see Note ⁶)		Capacitance (see Note ⁷)	
						Switch to coil	Across switch	Closed switch to coil	Across open switch
1 Form B Switch No. 2 (100 W, 5 kV)	600N 600E 620N 620E	-1B**-1DPC1	** = 05, 12 or 24 V	* = 1 (100 mm), 2 (200 mm) or 3 (300 mm)	0.12 Ω	10 ¹³ Ω	10 ¹³ Ω	3 pF	0.15 pF
		-1B**-1DTB1							
		-1B**-1DTL1							
		-1B**-1DFT1*							
		-1B**-1DFE1*							
1 Form B Switch No. 2 (100 W, 8 kV)	600N 600E 620N 620E	-1B**-2DPC1	** = 05, 12 or 24 V	* = 1 (100 mm), 2 (200 mm) or 3 (300 mm)	0.12 Ω	10 ¹³ Ω	10 ¹³ Ω	3 pF	0.15 pF
		-1B**-2DTB1							
		-1B**-2DTL1							
		-1B**-2DFT1*							
		-1B**-2DFE1*							
1 Form B Switch No. 3 (100 W, 10 kV)	600N 600E 620N 620E	-1B**-3DPC1	** = 05, 12 or 24 V	* = 1 (100 mm), 2 (200 mm) or 3 (300 mm)	0.12 Ω	10 ¹³ Ω	10 ¹³ Ω	3 pF	0.15 pF
		-1B**-3DTB1							
		-1B**-3DTL1							
		-1B**-3DFT1*							
		-1B**-3DFE1*							
1 Form B Switch No. 4 (50 W, 15 kV)	600N 600E 620N 620E	-1B**-4DPC1	** = 05, 12 or 24 V	* = 1 (100 mm), 2 (200 mm) or 3 (300 mm)	0.12 Ω	10 ¹³ Ω	10 ¹³ Ω	3 pF	0.15 pF
		-1B**-4DTB1							
		-1B**-4DTL1							
		-1B**-4DFT1*							
		-1B**-4DFE1*							
1 Form B Switch No. 5 (50 W, 15 kV)	620N	-1B**-5DTB1	** = 05, 12 or 24 V	* = 1 (100 mm), 2 (200 mm) or 3 (300 mm)	0.12 Ω	10 ¹³ Ω	10 ¹³ Ω	3 pF	0.15 pF
		-1B**-5DFT1*							
		-1B**-5DFE1*							
1 Form B Switch No. 6 (50 W, 20 kV)	620N	-1B**-6DTB1	** = 12 or 24 V	* = 1 (100 mm), 2 (200 mm) or 3 (300 mm)	0.12 Ω	10 ¹³ Ω	10 ¹³ Ω	3 pF	0.15 pF
		-1B**-6DFT1*							
		-1B**-6DFE1*							
1 Form B Switch No. 7 (200 W, 8 kV)	600N 600E 620N 620E	-1B**-7DPC1	** = 05, 12 or 24 V	* = 1 (100 mm), 2 (200 mm) or 3 (300 mm)	0.5 Ω	10 ¹³ Ω	10 ¹³ Ω	3 pF	0.15 pF
		-1B**-7DTB1							
		-1B**-7DTL1							
		-1B**-7DFT1*							
		-1B**-7DFE1*							

Examples of Form C (Changeover) configurations, with a wide range of custom options available, contact techsales@pickeringrelay.com for more information.

Device Type	Series	Configuration Code (see Note ⁵)	Coil Voltage (V)	Wire Length	Initial contact resistance	Insulation resistance (see Note ⁶)		Capacitance (see Note ⁷)	
						Switch to coil	Across switch	Closed switch to coil	Across open switch
1 Form C Switch No. 8 (100 W, 5 kV)	600N 600E 620N 620E	-1C**-8DPC8	** = 05, 12 or 24 V	* = 1 (100 mm), 2 (200 mm) or 3 (300 mm)	0.12 Ω	$10^{13} \Omega$	$10^{13} \Omega$	See Note ⁸	See Note ⁸
		-1C**-8DTB8							
		-1C**-8DTL8							
		-1C**-8DFT8							
		-1C**-8DFE8							

Note 5: Configuration Code

The configuration code includes the switch form, the coil voltage, the switch specification code and the connection configuration. For connection options, please see table on page 3.

Note 6: Insulation Resistance

Pickering test for insulation resistance at 25°C up to 15kV, insulation resistance can reduce at higher temperatures depending on the materials used, for more information [click here](#) for our in depth guide.

Note 7: Capacitance (form A and B)

Capacitance is measured with all unused component leads connected to the guard terminal.

Note 8: Capacitance (ES and form C)

These values will depend upon on the mode of connection/guarding of unused terminals. Please contact technical sales for details.

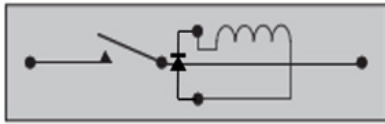
Potting Materials.

The modular design of the Series 600 allows for different potting materials to be used in a single device. With high performance silicon rubbers and polyurethanes providing unique characteristics, the combination best suited to the application can be used. For more information [click here](#) or contact techsales@pickeringrelay.com

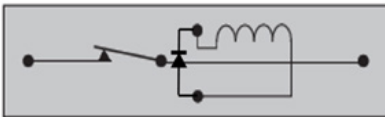
Series 600: Pin Configuration and Dimensional Data (dimensions in inches, millimeters in brackets)

600N 1A or B PC1

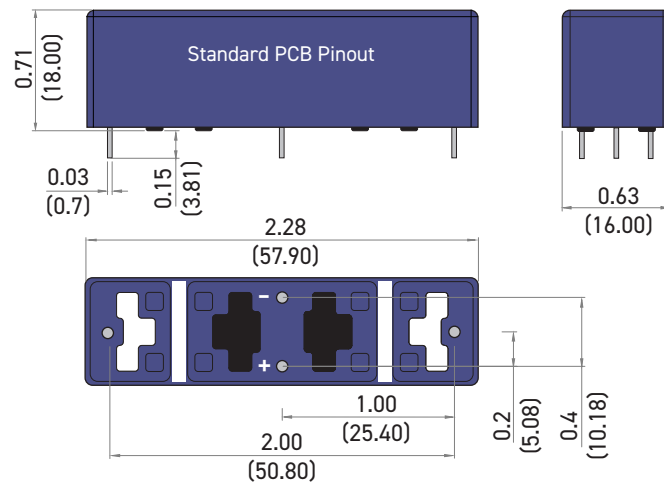
Form A (NO)



Form B (NC)

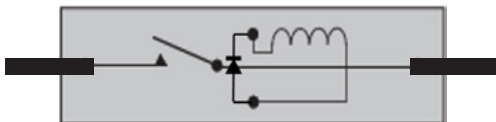


Schematics Shown from top of Relay

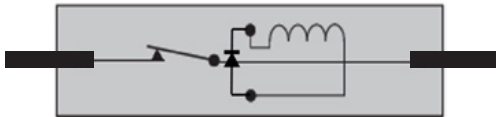


600N 1A or B FE1

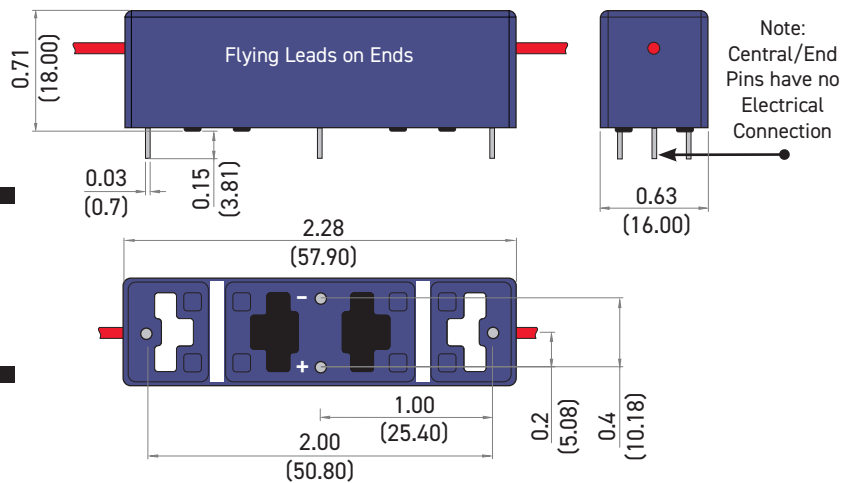
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Form B (NC)

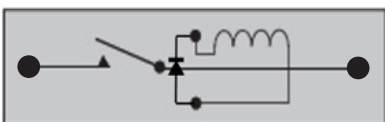


Schematics Shown from top of Relay

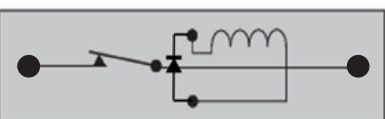


600N 1A or B FT1

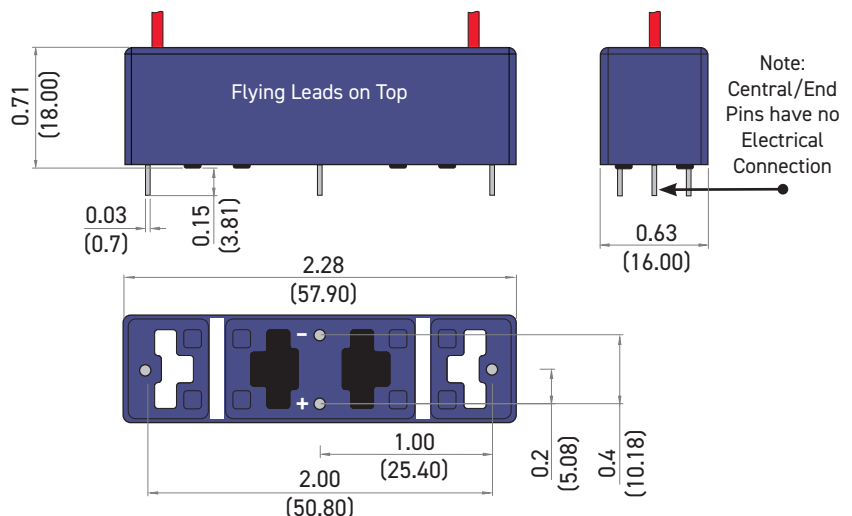
Form A (NO)



Form B (NC)



Schematics Shown from top of Relay

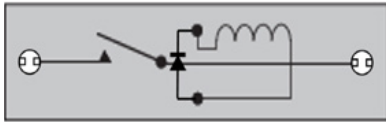


Important: For all Form B types, the correct coil polarity must be observed.

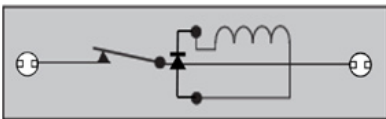
Series 600: Pin Configuration and Dimensional Data (dimensions in inches, millimeters in brackets)

600N 1A or B TB1

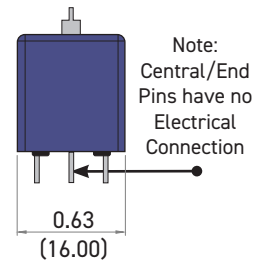
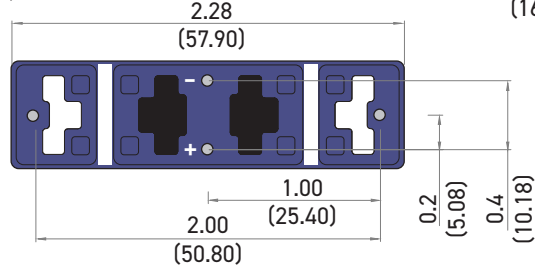
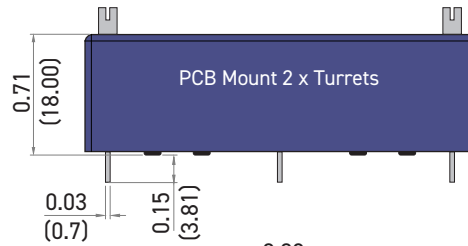
Form A (NO)



Form B (NC)

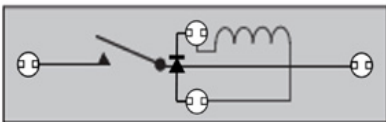


Schematics Shown from top of Relay

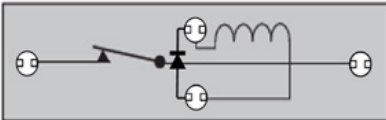


600N 1A or B TL1

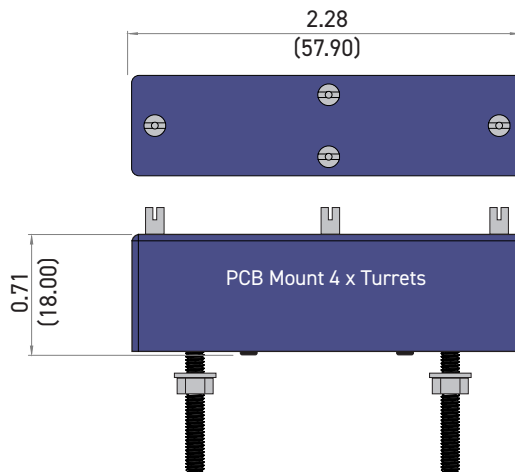
Form A (NO)



Form B (NC)

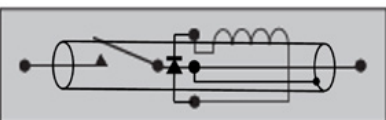


Schematics Shown from top of Relay

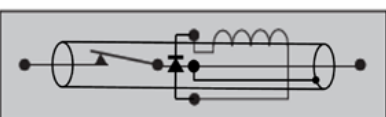


600E 1A or B PC1

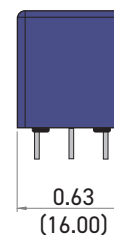
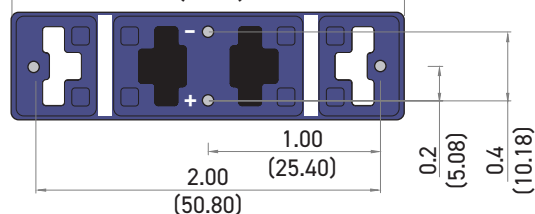
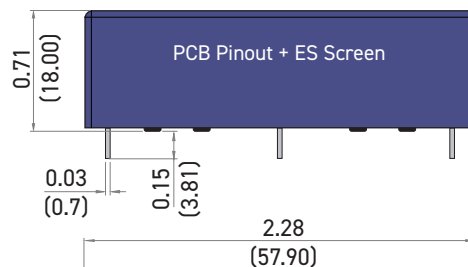
Form A (NO)



Form B (NC)



Schematics Shown from top of Relay

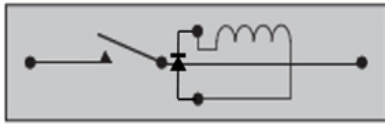


Important: For all Form B types, the correct coil polarity must be observed.

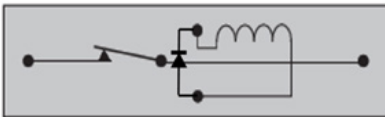
Series 620: Pin Configuration and Dimensional Data (dimensions in inches, millimeters in brackets)

620N 1A or B PC1

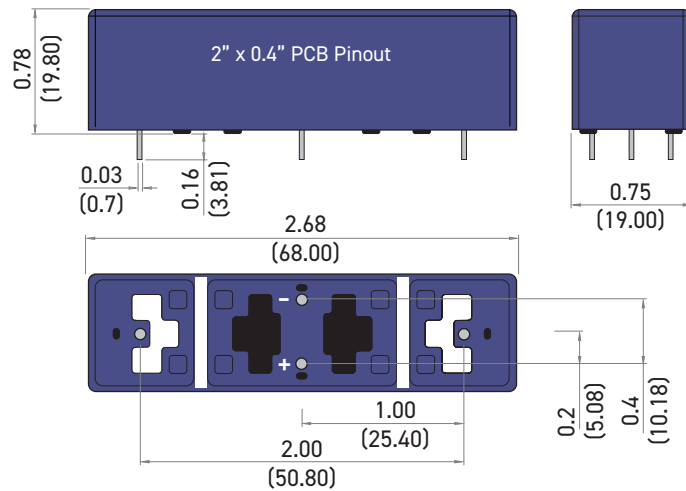
Form A (NO)



Form B (NC)

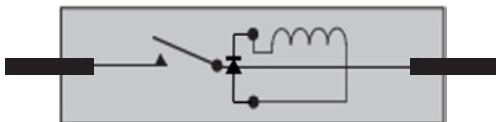


Schematics Shown from top of Relay

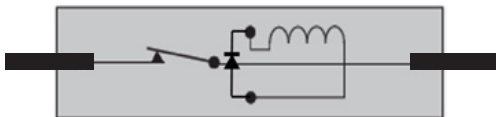


620N 1A or B FE1

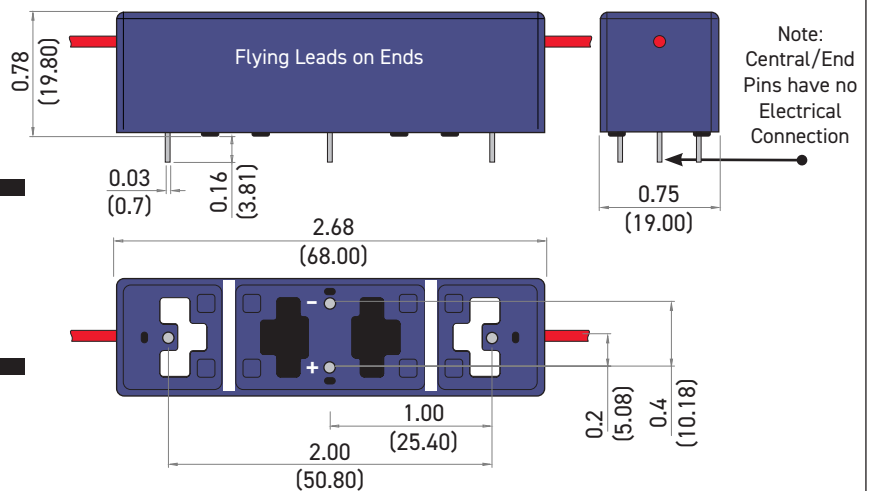
Form A (NO)



Form B (NC)

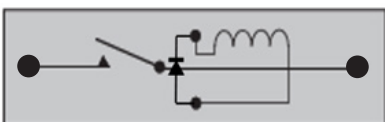


Schematics Shown from top of Relay

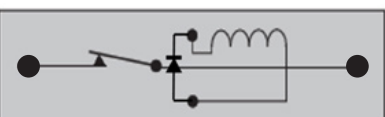


620N 1A or B FT1

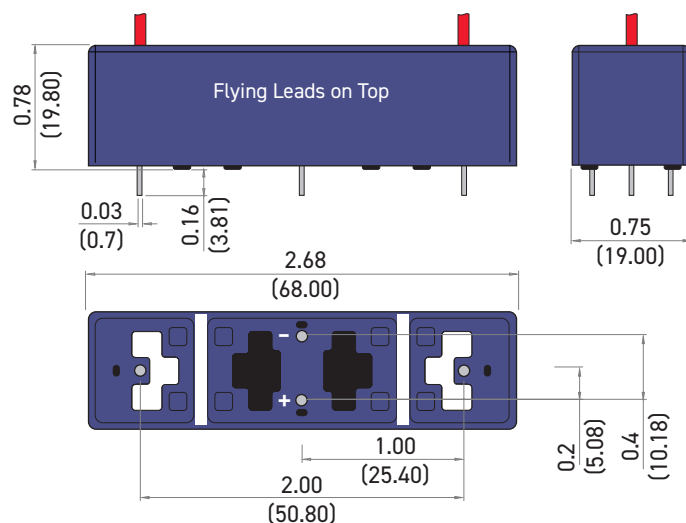
Form A (NO)



Form B (NC)



Schematics Shown from top of Relay

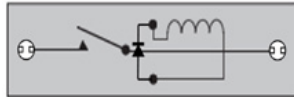


Important: For all Form B types, the correct coil polarity must be observed.

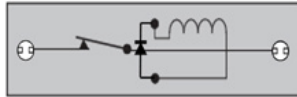
Series 600: Pin Configuration and Dimensional Data (dimensions in inches, millimeters in brackets)

620N 1A or B TB1

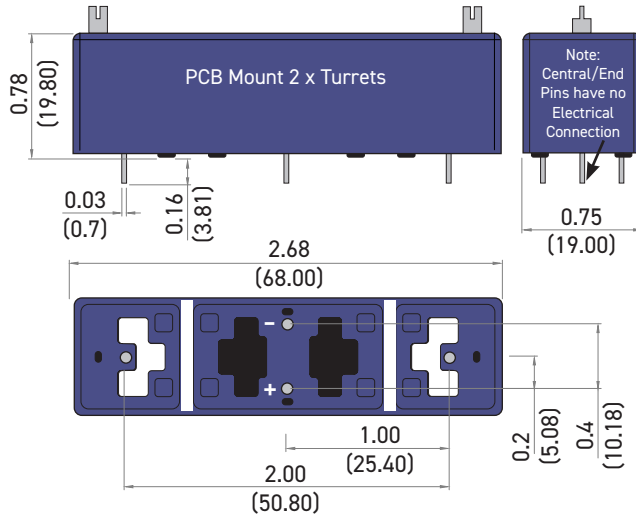
Form A (NO)



Form B (NC)

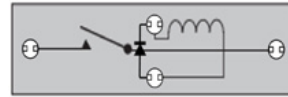


Schematics Shown from top of Relay

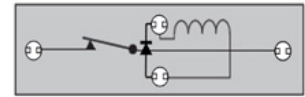


620N 1A or B TL1

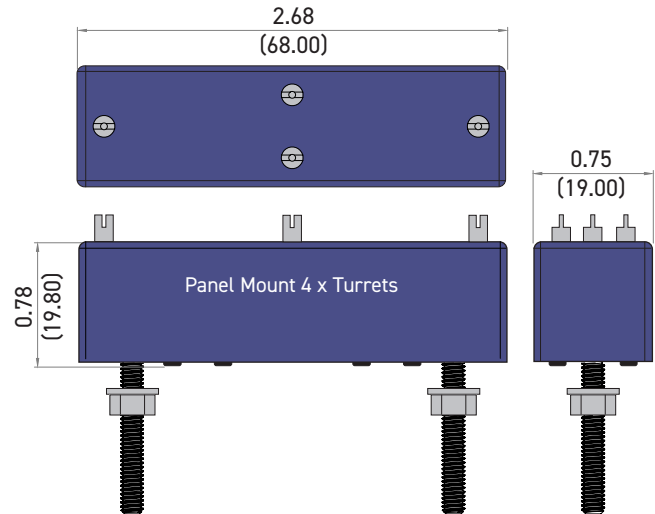
Form A (NO)



Form B (NC)



Schematics Shown from top of Relay

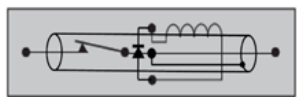


620E 1A or B PC1

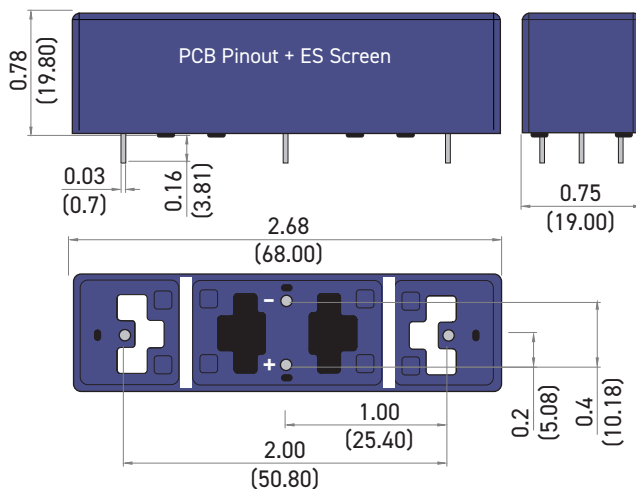
Form A (NO)



Form B (NC)

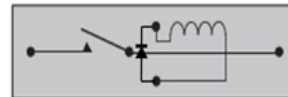


Schematics Shown from top of Relay

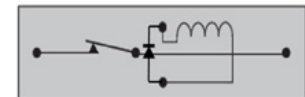


620N 1A or B PC3

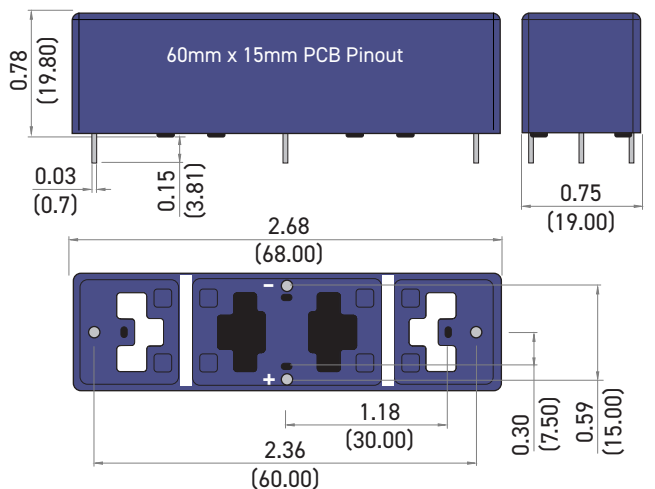
Form A (NO)



Form B (NC)

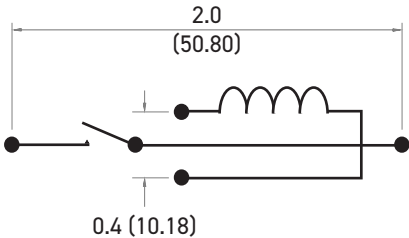
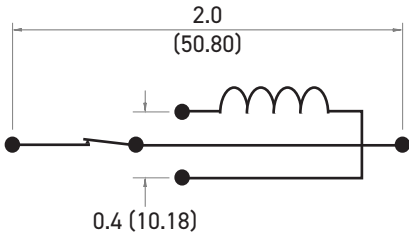
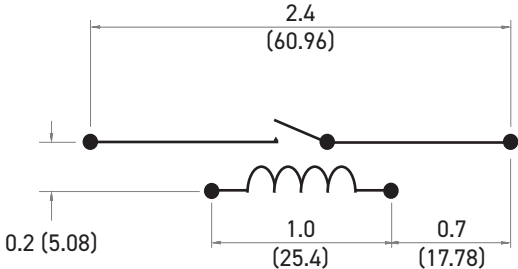
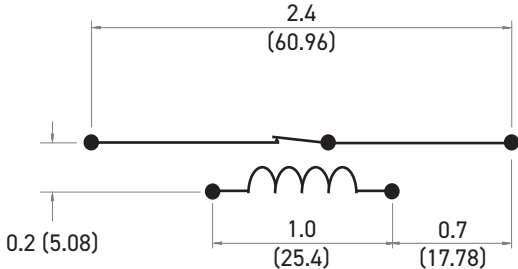
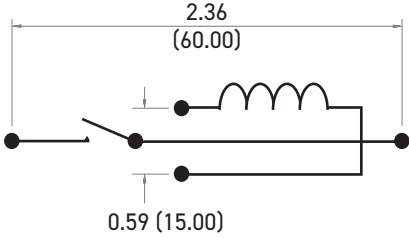
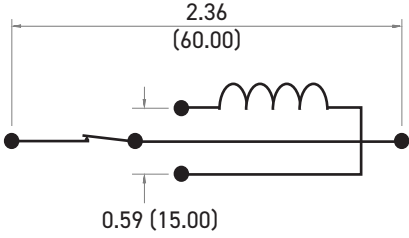


Schematics Shown from top of Relay



Important: For all Form B types, the correct coil polarity must be observed.

Series 600: Examples of PCB Pinouts (dimensions in inches, millimeters in brackets)

Form A (NO)	Form B (NC)
PC1 	PC1 
PC2 	PC2 
PC3 	PC3 
With our modular design, many more pinout options are available. Please contact technicalsales@pickeringrelay.com to discuss your requirements.	

Similar Relays Comparison

If the Series 600 are unsuitable for your application, Pickering also manufactures four other series of reed relays with similar characteristics, but in different package sizes.

Series Name		60-1-A			60-1-B		65-1-A		65-1-B		67-1-A			67-1-C		68-1-A	
Physical Outline																	
Depth	mm (inches)	16.0 (0.63)					16.0 (0.63)				12.6 (0.495)						
Width		57.9 (2.28)					57.9 (2.28)				58.4 (2.3)						
Height		18.0 (0.71)					18.0 (0.71)				14.5 (0.57)						
Package Volume (mm³)		16676					16676				9543						
Typical Weights (g)		28.43			31.83		23.99		31.65		14.53			13.58		16.47	
Contact Configuration		1-A (SPST)			1-B (SPNC)		1-A (SPST)		1-B (SPNC)		1-A (SPST)			1-C (SPDT)		1-A (SPST)	
Reed Switch Type		Dry			Dry		Dry		Dry		Dry			Dry		Dry	
Stand-off Voltage (V)		5000	10000	15000	5000	10000	5000	10000	5000	10000	5000	8000	10000	5000	5000	10000	
Switching Voltage (V)		3500	7500	12500	3500	7500	3500	7500	3500	7500	3500	6000	7500	2500	3500	7500	
Switching Current (A)		3					3				3			3		3	
Carry Current (A)		3.5					3.5				3.5			5	3.5	3.2	
Switch Power (W)		50					50				50			200	50	100	

Series Name		62-1-A		62-1-B		63-1-A				63-1-B		
Physical Outline												
Depth	mm (inches)	19.05 (0.75)				19.05 (0.75)						
Width		63.5 (2.5)				63.5 (2.5)						
Height		21.3 (0.84)				21.3 (0.84)						
Package Volume (mm ³)		① 25767				② 25767						
Typical Weights (g)		44.16		44.69		45.47				44.69		
Contact Configuration		1-A (SPST)		1-B (SPNC)		1-A (SPST)				1-B (SPNC)		
Reed Switch Type		Dry		Dry		Dry				Dry		
Stand-off Voltage (V)		5000	10000	5000	10000	5000	10000	15000	20000	5000	10000	20000
Switching Voltage (V)		3500	7500	3500	7500	3500	7500	12500	12500	3500	7500	12500
Switching Current (A)		3				3						
Carry Current (A)		3.5				3.5						
Switch Power (W)		50				50						

Reed Relay Selection Tool

Pickering has created the Reed Relay Selector to assist you in selecting the correct high quality reed relay for your application from our extensive range. To try the tool today go to: pickeringrelay.com/reed-relay-selector-tool

Built-In Customization

The Series 600 Reed Relays are highly customizable as standard, with a wide range of mechanical and electrical options available to suit your specific application. These are not special-order modifications, they're part of our flexible, application-focused design approach. Selecting one or more options may result in a unique part number suffix.

Mechanical Options	Electrical Options
Special pin configurations or pin lengths	Custom coil resistance
Customer-specific print (logo or part number)	Alternative stand-off or switching voltages
Custom packaging	Modified operate or release times
Equivalents to competitors discontinued parts	Pulse capability
Enhanced or application-specific specifications	Non-standard coil voltages/resistance
Life testing under customer load conditions	
Specific environmental requirements	

Need Something Else?

If your requirements aren't covered by the options above, please contact us. Our engineering team will work with you to develop a solution: pickeringrelay.com/contact

3D Models

Interactive 3D models of the complete range of Pickering relay products in STEP, IGS and SLDPRT formats can be downloaded from the website: pickeringrelay.com/3d-models

Part Number Description:
600 E - 1 A 05 - 1 D PC 1 2

Series _____
ES Screen _____
No of reeds _____
Switch Form _____
Coil Voltage _____
Switch No _____
Coil Suppression _____
Connection _____
Layout _____
Wire Length (omitted for non FE/FT connections) _____

Help

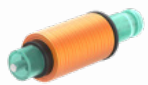
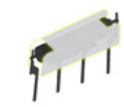
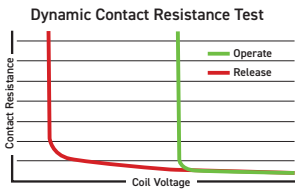
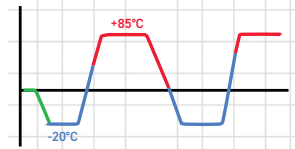
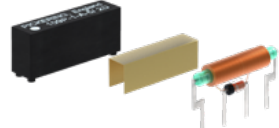
If you need any technical advice or other help, please do not hesitate to contact our Technical Sales Department. We are happy to discuss any enquires with you. email: techsales@pickeringrelay.com

Contact Us

UK Headquarters - email: sales@pickeringrelay.com | Tel. +44 1255 428141
USA - email: ussales@pickeringrelay.com | Tel. +1 781 897 1710
Germany - email: desales@pickeringtest.com | Tel. +49 89 125 953 160
France - email: frsales@pickeringtest.com | Tel. +33 9 72 58 77 00
Nordic - email: ndsales@pickeringtest.com | Tel. +46 340 69 06 69
Czech Republic: czsales@pickeringtest.com | Tel. +420 558-987-613
China - email: chinasales@pickeringtest.com | Tel. +86 4008 799 765

Malaysia - email: aseansales@pickeringrelay.com | Tel.+60 12 833 7980
For a full list of agents, distributors and representatives visit:
pickeringrelay.com/agents



Key Benefit	Pickering Reed Relays	Typical Industry Reed Relays	
1 Instrumentation Grade Reed Switches	Instrumentation Grade Reed Switches with vacuum sputtered Ruthenium plating to ensure stable, long life up to 5x10E9 operations.	Often low grade Reed Switches with electroplated Rhodium plating resulting in higher, less stable contact resistance.	
2 Formerless Coil Construction	Formerless coil construction increases the coil winding volume, maximizing magnetic efficiency, allowing the use of less sensitive reed switches resulting in optimal switching action and extended lifetime at operational extremes.	Use of bobbins decreases the coil winding volume, resulting in having less magnetic drive and a need to use more sensitive reed switches which are inherently less stable with greatly reduced restoring forces.	  Pickering former-less coil Typical industry coil wound on bobbin
3 Magnetic Screening	Mu-metal magnetic screening (either external or internal), enables ultra-high PCB side-by-side packing densities with minimal magnetic interaction, saving significant cost and space. Pickering Mu-Metal magnetic screen - interaction approx. 5%	Lower cost reed relays have minimal or no magnetic screening, resulting in magnetic interaction issues causing changes in operating and release voltages, timing and contact resistance, causing switches to not operate at their nominal voltages. Typical industry screen - interaction approx. 30%	  X-Ray of Pickering mu-metal magnetic screen X-Ray of typical industry magnetic screen
4 SoftCenter™ Technology	SoftCenter™ technology, provides maximum cushioned protection of the reed switch, minimising internal lifetime stresses and extending the working life and contact stability.	Transfer moulded reed relays (produced using high temperature/pressure), result in significant stresses to the glass reed switch which can cause the switch blades to deflect or misalign leading to changes in the operating characteristics, contact resistance stability and operating lifetime.	  Pickering soft center protection of the reed switch Typical industry thermo-setting hard moulded protection of the reed switch
5 100% Dynamic Testing	100% testing for all operating parameters including dynamic contact wave-shape analysis with full data scrutiny to maintain consistency.	Simple DC testing or just batch testing which may result in non-operational devices being supplied.	 Dynamic Contact Resistance Test
6 100% Inspection at Every Stage of Manufacturing	Inspection at every stage of manufacturing maintaining high levels of quality.	Often limited batch inspection.	
7 100% Thermal Cycling	Stress testing of the manufacturing processes, from -20 °C to +85 °C to -20 °C, repeated 3 times.	Rarely included resulting in field failures.	
8 Flexible Manufacturing Process	Flexible manufacturing processes allow quick-turn manufacturing of small batches.	Mass production: Usually large batch sizes and with no quick-turn manufacturing.	
9 Custom Reed Relays	Our reed relays can be customized easily, e.g. special pin configurations, enhanced specifications, non-standard coil or resistance figures, special life testing, low capacitance, and more.	Limited ability to customize.	
10 Product Longevity	Pickering are committed to product longevity; our reed relays are manufactured and supported for more than 25 years from introduction, typically much longer.	Most other manufacturers discontinue parts when they reach a low sales threshold; costing purchasing and R&D a great deal of unnecessary time and money to redesign and maintain supply.	

For more information go to: pickeringrelay.com/10-key-benefits