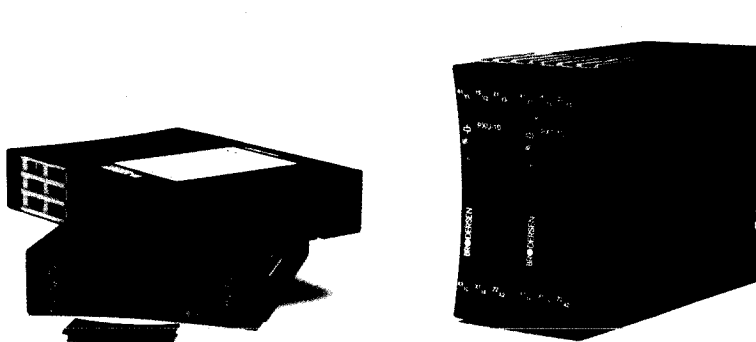
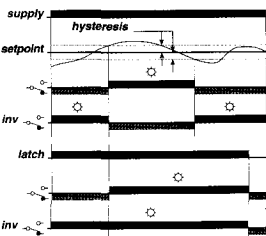
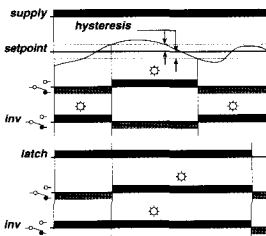
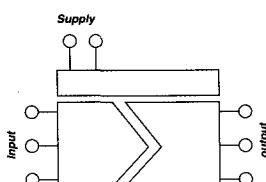
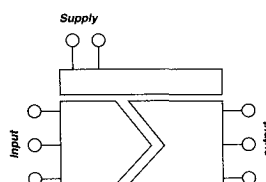
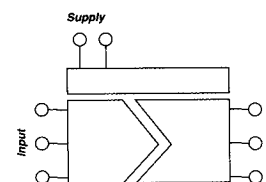


Brodersen PX Process Relays Selection Guide

- PXL-10 [threshold relay]
- PXL-20 [threshold relay]
- PXU-20 [process signal converter]
- PXT-10/11 [temperature converter]
- PXF-10 [process signal to pulse frequency converter]
- PXF-20 [Pulse frequency to process signal converter]



Selection Guide

																																	
Type	PXL-10 Threshold relay for process signal. Relay output. Adjustable setpoint and hysteresis on the front panel. Hysteresis adjustable: $\pm 0.5-20\%$. Inversion (inv) of relay function on connection of jumper. Automatic locking (latch) on connection of jumper.	PXL-20 Threshold relay for process signal. Solid state relay output. Adjustable setpoint and hysteresis on the front panel. Hysteresis adjustable: $\pm 0.5-20\%$. Inversion (inv) of relay function on connection of jumper. Automatic locking (latch) on connection of jumper.	PXU-20 Linear process signal converter with galvanic isolation between input and output signals. Input selection via switch on the front panel. Output selection via choice of terminals. Offset/gain (zero/span) adjustable on the front panel: $\pm 5\%$.																														
Ordering Code Example	PXL-10.230	PXL-20.230	PXU-20.924																														
Input Signal	0-5V DC 0-10V DC -10 - +10V DC 0-20mA DC 4-20mA DC Selected via switch on the front panel. Impedance (V): Approx. 100 kOhm Impedance (I): 50 Ohm Upper frequency limit: 30Hz	0-5V DC 0-10V DC -10 - +10V DC 0-20mA DC 4-20mA DC Selected via switch on the front panel. Impedance (V): Approx. 100 kOhm Impedance (I): 50 Ohm Upper frequency limit: 30Hz	0-5V DC 0-10V DC -10 - +10VDC 0-20mA DC 4-20mA DC Selected via switch on the front panel. Impedance (V): Approx. 100 kOhm Impedance (I): 50 Ohm Upper frequency limit: 30Hz																														
Supply Voltage	24V DC 924 115V AC/24V AC 115 230V AC/24V AC 230	24V DC 924 115V AC/24V AC 115 230V AC/24V AC 230	24V DC 924 48V DC 948 24V AC 024 115V AC 115 230V AC 230																														
Output Signal	Relay SPDT 8A/240V AC 	Solid state relay (NO/NC) 100mA/ $\pm 35V$ DC 	4-20mA DC (max. 500 Ohm) 0-20mA DC (max. 500 Ohm) 0-10V DC (via internal 500 Ohm shunt) 2-10V DC (via internal 500 Ohm shunt) Selected via terminals. <table><tr><th>Terminal</th><th>4-20mA</th><th>0-20mA</th><th>0-10V</th><th>2-10V</th></tr><tr><td>I_{out}</td><td></td><td></td><td></td><td></td></tr><tr><td>I_{out}</td><td></td><td></td><td></td><td></td></tr><tr><td>V_{out}</td><td></td><td></td><td></td><td></td></tr><tr><td>Z1</td><td></td><td></td><td></td><td></td></tr><tr><td>Z2</td><td></td><td></td><td></td><td></td></tr></table>	Terminal	4-20mA	0-20mA	0-10V	2-10V	I_{out}					I_{out}					V_{out}					Z1					Z2				
Terminal	4-20mA	0-20mA	0-10V	2-10V																													
I_{out}																																	
I_{out}																																	
V_{out}																																	
Z1																																	
Z2																																	
Isolation	3,75kV AC (input, supply and output)  3,75kV AC, 1 minute	3,75kV AC (input, supply and output)  3,75kV AC, 1 minute	3,75kV AC (input, supply and output)  3,75kV AC, 1 minute																														



PXT-10/11

Conversion of signal from 2/3-wire Pt-100 or Pt-1000 probe.
-50-300°C in two ranges.
Offset/gain (zero/span) adjustable on the front panel.
Input selection via switch on the front panel.
Output selection via choice of terminals.



PXF-10

Conversion of analogue process signals to frequency. Can be used on PLC with digital pulse counting input for measuring analogue process signals.
Input selection via switch on the front panel.
Offset/gain (zero/span) adjustable on the front panel.
Two standard output ranges.
Output selection via choice of terminals.

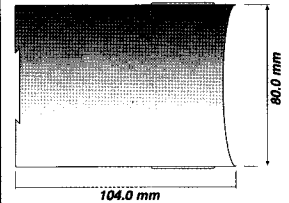


PXF-20

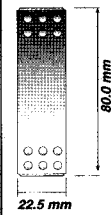
Conversion of frequency to analogue process signals from NPN, PNP or Namur switch.
Input selection via switch on the front panel.
Offset/gain (zero/span) adjustable on the front panel.
Output selection via choice of terminals.

Mechanical Dimensions

Side



Front



Terminals:

Combi notch-screw terminals:
Recommended torque moment:
0.5Nm (max. 0.7Nm).
Up to 2 x 2.5mm² (2 x 1.5mm² with casings).

PXT-10.115

-50-100°C
-50-300°C
Selected via terminals.
Temperature drift < 0.05%/°C

Pt-100	10
Pt-1000	11

24V DC	924
24V AC	024
115V AC	115
230V AC	230

PXF-10.230.1

0-5V DC
0-10V DC
-10 - +10V DC
0-20mA DC
4-20mA DC
Selected via switch on the front panel.
Impedance (V): Approx. 1 MOhm
Impedance (I): 50 Ohm

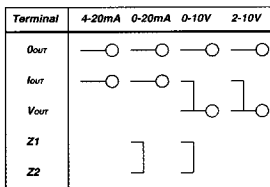
24V DC	924
24V AC	024
115V AC	115
230V AC	230

PXF-20.230

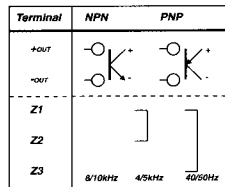
0-100Hz
0-500Hz
0-1000Hz
0-2000Hz
0-5000Hz
Selected via switch on the front panel.
Internal supply for sensors (max. 10mA).

24V DC	924
24V AC	024
115V AC	115
230V AC	230

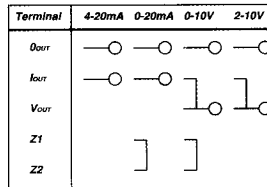
4-20mA DC (max. 500 Ohm)
0-20mA DC (max. 500 Ohm)
0-10V DC (via internal 500 Ohm shunt)
2-10V DC (via internal 500 Ohm shunt)
Selected via terminals.



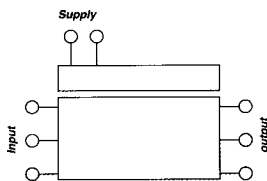
0-50Hz, 50% duty cycle } 1
0-5kHz, 50% duty cycle }
0-10kHz, 50% duty cycle }
0-40Hz, 50% duty cycle } 2
0-4kHz, 50% duty cycle }
0-8kHz, 50% duty cycle }



4-20mA DC (max. 500 Ohm)
0-20mA DC (max. 500 Ohm)
0-10V DC (via internal 500 Ohm shunt)
2-10V DC (via internal 500 Ohm shunt)
Selected via terminals.

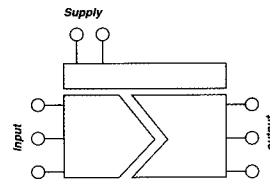


3,75kV AC (input/output and supply)



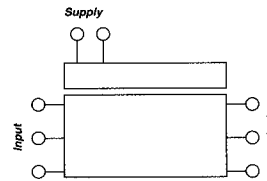
3,75kV AC, 1 minute

3,75kV AC (input, supply and output)



3,75kV AC, 1 minute

3,75kV AC (input/output and supply)



3,75kV AC, 1 minute