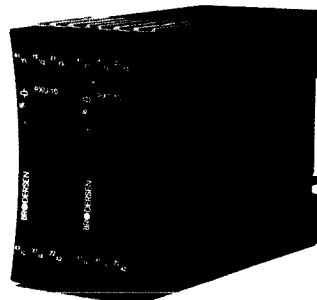
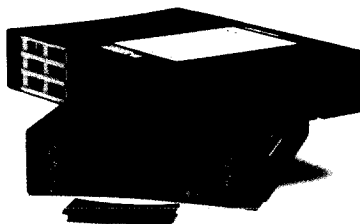



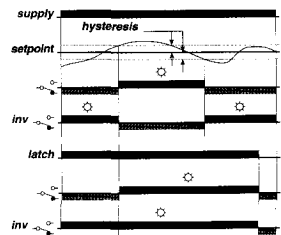
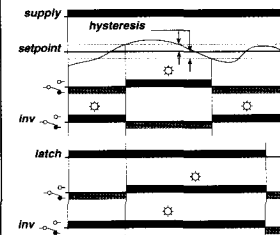
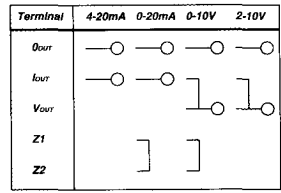
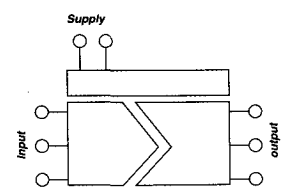
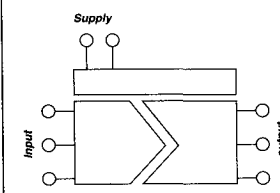
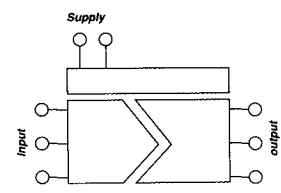


Brodersen PX Process Relays Selection Guide

- 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.  |
| 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: ± 5%.
 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: ± 5%.
 Two standard output ranges.
 Output selection via choice of terminals.

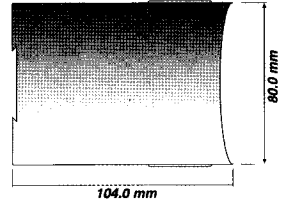


PXF-20

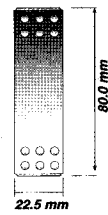
Conversion of frequency to analogue process signals from NPN, PNP or Namur switch.
 Input selection via switch on the front panel.
 Offset/gain (zero/span) adjustable on the front panel: ± 5%.
 Output selection via choice of terminals.

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

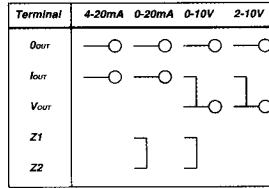
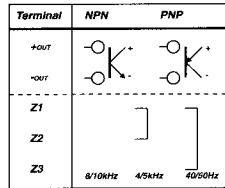
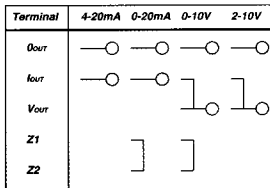
0-100Hz
 0-500Hz
 0-1000Hz
 0-2000Hz
 0-5000Hz
 Selected via switch on the front panel.
 Internal supply for sensors (max. 10mA).

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

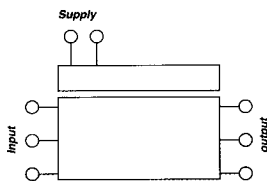
4-20mA DC (max. 500 Ohm)
 0-20mA DC (max. 500 Ohm)
 0-10V DC (via internal 500 Ohm shunt)
 2-10V DC (via internal 500 Ohm shunt)
 Selected via terminals.

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

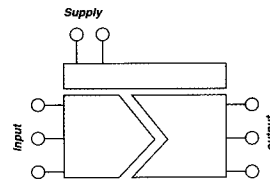


3,75kV AC (input/output and supply)



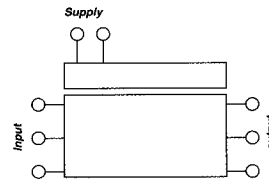
3,75kV AC, 1 minute

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



3,75kV AC, 1 minute

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



3,75kV AC, 1 minute