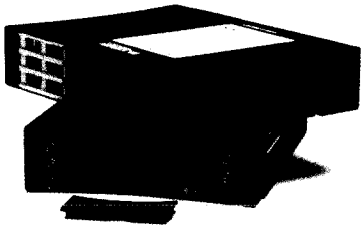
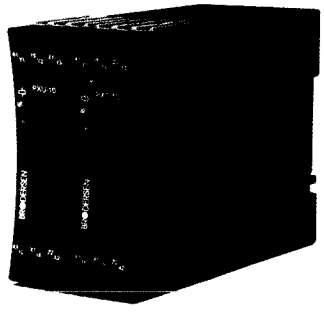
BRODERSEN

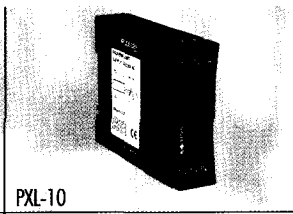
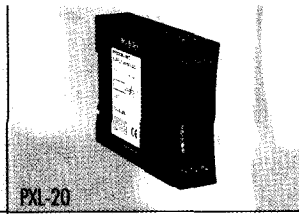
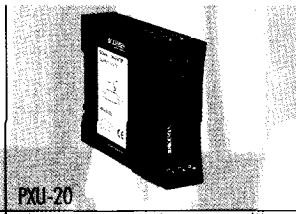
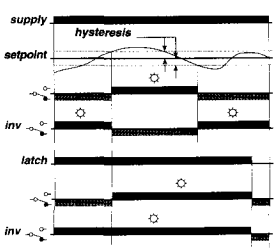
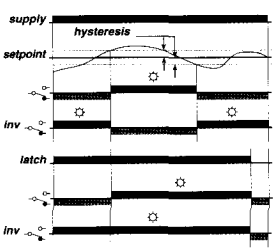
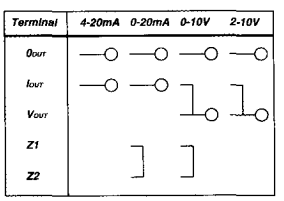
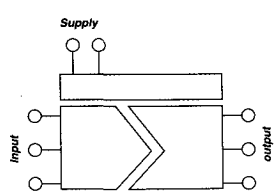
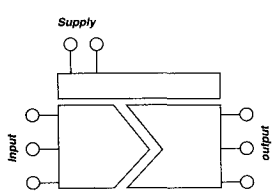
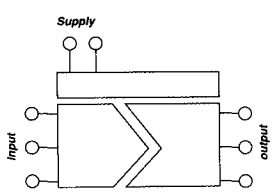
Brodersen PX Process Relays
Selection Guide

- 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	PXL-20	PXU-20
			
	Threshold relay for process signal. *Relay output.* *Adjustable setpoint and hysteresis on the front panel.* *Hysteresis adjustable: ± 0.5-20%.* *Inversion (inv) of relay function on connection of jumper.* *Automatic locking (latch) on connection of jumper.*	*Threshold relay for process signal.* *Solid state relay output.* *Adjustable setpoint and hysteresis on the front panel.* *Hysteresis adjustable: ± 0.5-20%.* *Inversion (inv) of relay function on connection of jumper.* *Automatic locking (latch) on connection of jumper.*	*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: ± 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/± 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.

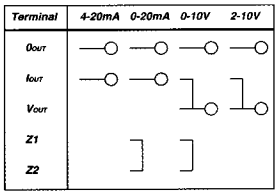
PXT-10.115

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

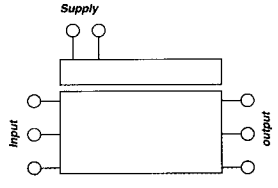
Pt-100	***10***
Pt-1000	***11***

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

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

PXF-10

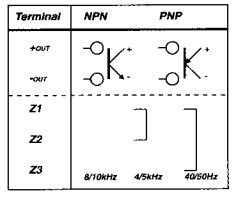
Conversion of analogue process signals to frequency. Can be used on PLC with digital pulse counting input for measuring analogue process signals.
Input selection via switch on the front panel.
Offset/gain (zero/span) adjustable on the front panel: ± 5%.
Two standard output ranges.
Output selection via choice of terminals.

PXF-10.230.1

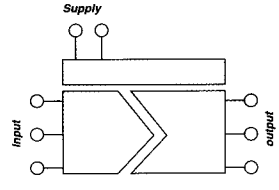
0-5V DC
0-10V DC
-10 - +10V DC
0-20mA DC
4-20mA DC
Selected via switch on the front panel.
Impedance (V): Approx. 1 MOhm
Impedance (I): 50 Ohm

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

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



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



3,75kV AC, 1 minute

PXF-20

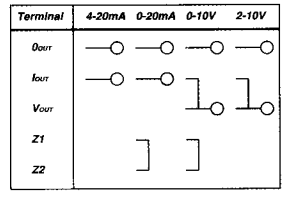
Conversion of frequency to analogue process signals from NPN, PNP or Namur switch.
Input selection via switch on the front panel.
Offset/gain (zero/span) adjustable on the front panel: ± 5%.
Output selection via choice of terminals.

PXF-20.230

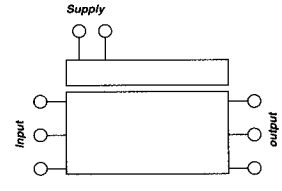
0-100Hz
0-500Hz
0-1000Hz
0-2000Hz
0-5000Hz
Selected via switch on the front panel.
Internal supply for sensors (max. 10mA).

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.



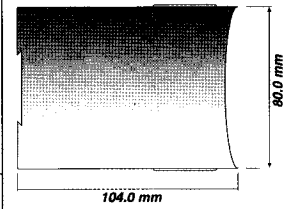
3,75kV AC (input/output and supply)



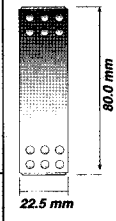
3,75kV AC, 1 minute

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).