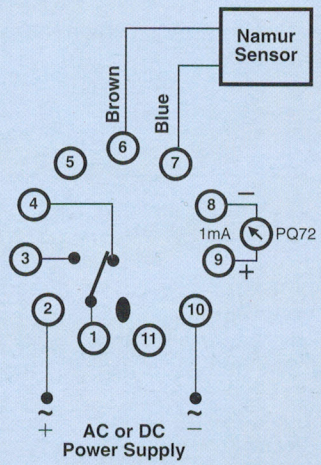
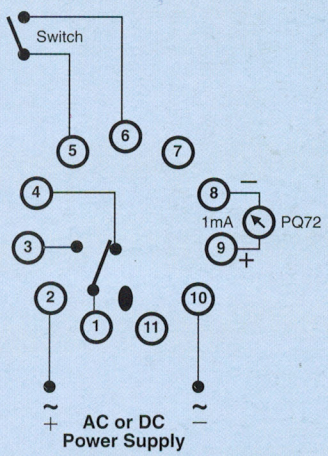
Wiring and Connection

Power Supply: to be connected to pin 2 (phase/positive) and pin 10 (neutral/negative).
Relay Contacts: to be connected:
1 + 3 normally open,
1 + 4 normally closed.

Sensing Input:
NAMUR sensor input: Connect brown wire to the pin 6.
Connect the blue wire to pin 7.
Limit switch input: Connect the switch between pin 5 and pin 6.
Analogue output: Connect the instrument PQ72 to pin 9 (+) and pin 8 (-), observing polarity.



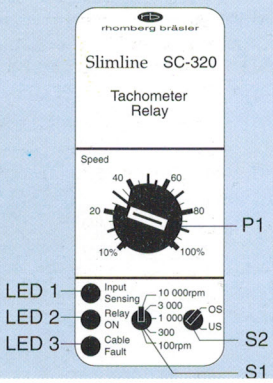
APPLICATION 1
NAMUR sensor input



APPLICATION 2
Limit switch input

Note: For further information on sensors refer to our Detechtor sensor catalogue.

Description of Controls



P1: **The Over-speed/Under-speed Threshold** is adjusted on P1. Maximum setting of 100% corresponds with the speed selected on S1.
S1: **The Speed Range** is set on S1.
S2: **The Mode of Operation** is set on S2. If set to "OS" the unit operates as an over-speed detector. If set to "US" the unit provides under-speed detection.
LED 1: The LED marked **"Input Sensing"** illuminates when the NAMUR sensor detects a target. It also illuminates if the sensor is disconnected or the sensor leads are severed (open circuit).
LED 2: The LED marked **"Relay ON"** illuminates when the relay is energised.
LED 3: The LED marked **"Cable Fault"** illuminates when:
- a short circuit occurs on the sensor leads, or,
- an open circuit occurs on the sensor leads or the sensor is disconnected.

Note: An open circuit condition will cause **both** LED 1 as well as LED 3 to illuminate.
A short circuit condition will cause only LED 3 to illuminate.

Technical Specification

Power Supply:
AC: Supply voltage: 12, 24,110, 230, 400, 415, 525V ±15%
Isolation (sensor input to power supply): 2kV
Power consumption: 3 VA (approx.)
6VA for 415, 525V (approx.)
DC: Supply voltage: 10-30V, 48, 60, 110V ± 15%
Isolation: no galvanic isolation.
Power consumption: 100mA (10-30V),
30mA for higher ranges.

Sensor Input:
Type: NAMUR (DIN 19234)
Short Circuit Current: 20mA DC
Open circuit voltage: 8,2 VDC
Hysteresis: 10% (fixed)

Speed Range	Approximate Response time
10- 100RPM	10 seconds
30- 300RPM	10 seconds
100- 1000RPM	1 second
300- 3000RPM	1 second
1000- 10000RPM	1 second

Repeatability: 1%
Start-up delay: approximately 10 seconds
(Available 0-15 seconds on special order)
Analog output: 0-1 mADC (proportional).
(0-20mA or 4-20mA available as an order option)
Maximum load: 7k Ohm
Accuracy: 5% of full scale

Additional Slimline technical information on page 69