3B SCIENTIFIC® PHYSICS



Relay 1000566

Instruction sheet

10/15 Hh



1. Safety instructions

 Do not exceed the maximal values specified for the switching voltage, switching current and the power rating specified in the technical data section.

This constitutes a fire hazard.

 Do not connect this relay to high voltage since this might break down the potential isolation.

2. Scope of delivery

1 Relay

1 Mini DIN connecting lead 8-pin, 60 cm length

3. Description

The relay is an event-triggered switch for switching on or off components that are electrically isolated from the experiment set-up. Examples of such components include light bulbs, small to medium-sized electrical motors, holding magnets and electromagnetically operated valves.

The power relay box is equipped with a set of contacts (1 N/C contact, 1 N/O contact, 1 change-over contact) with printed labels so that can be used as an N/C or an N/O switch.

When the relay coil is inactive (when no current is flowing), the N/C contact is closed.

The switch contacts consist of high-grade silver alloy and are connected to 4-mm safety sockets.

The relay is equipped with safe potential isolation between the coil and the contacts in conformance with the VDE 160 standard.

4. Technical data

Switching voltage: 250 V AC

220V DC max.

Switching current: 6A AC

0.12 A DC max.

Power rating: 1500 VA max.

1 mW min.

5. Operation

- Connect the relay to the "Digital Outputs" socket of the 3B NETlogTM equipment using the supplied mini DIN lead. It responds to digital output A.
- Preferably use 4-mm safety leads for the remaining electrical connections to the experiment set-up.

- tions between the relay and the experiment.
- Select one of the analog inputs (A or B) on the 3B NET/logTM module and follow the instructions for the board regarding the experiment on capacitor discharge. All necessary output value settings are specified here.
- Conduct and analyse the experiment.

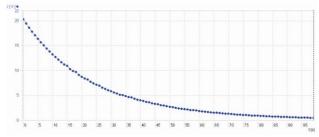


Fig. 2: Discharge curve of a capacitor

6. Sample experiment

Measuring the discharge of a capacitor with the basic experiment board

| 1 3B NET <i>log</i> ™ @ 230 V | 1000540 |
|--|---------|
| ou | |
| 1 3B NET <i>log</i> ™ @ 115 V | 1000539 |
| 1 3B NET <i>lab</i> ™ | 1000544 |
| 1 Relay | 1000566 |
| 1 Basic experiment board @ 230 V | 1000573 |
| or | |
| 1 Basic experiment board @ 115 V | 1000572 |
| 1 Set of 15 Safety Experiment Leads, 75 cm | |
| | 1002843 |



Fig. 1: Measuring the discharge of a capacitor

 Consult the instructions for the basic experiment board for the electrical connec-