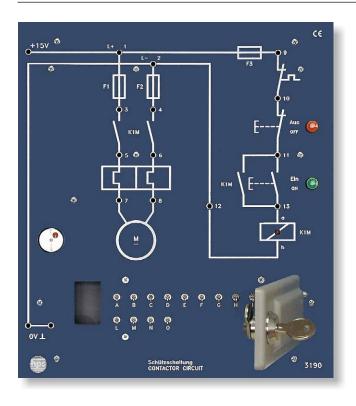
## **Contactor Control / Electric Machines**



- For troubleshooting and signal tracing in applied circuits in contactor control / electric machines
- Ideally suitable for test purposes
- Up to 14 errors can be set by toggle switches
- Short experiment setup times
- With detailed circuit descriptions



Fault Simulators Series 3100

With the Fault Simulators, hps SystemTechnik offers a comprehensive program for troubleshooting and signal tracing in applied circuits in the field of contactor control with electric machines.

Up to 14 possible practiceoriented errors such as breaks, short-circuits in lines, components and connections are simulated by toggle switches located behind a lockable panel.

The lockable panel over the toggle switches makes the fault simulators particularly suitable for conducting tests.

The respective circuit is illustrated in standard form on the Fault Simulators and enables optimum signal tracing and troubleshooting in connection with the external measuring points (4 mm jacks).

To conduct the experiments or for troubleshooting the Fault Simulators are placed on a table or suspended in an hps rack for demonstration purposes.

The rear of the Fault Simulators is protected with a grey plastic cover. Its shape allows the Fault Simulators to

be placed at an ergonomically favourable angle for example on a table.

A detailed technical description is delivered with every Fault Simulator. In addition to a short description and error list, this contains general information on troubleshooting in circuits which lead to recognizing the error simulated by the Fault Simulator.

### **Technical Data**

- Dimensions of the Fault Simulators:
   266 x 297 mm (w x h)
   The depths and weights differ, see the following pages.
- Material of the front panel:
   5 mm thick laminate,
   matt blue in coulor

Please see overleaf for other technical data of the individual Fault Simulators.





# Fault Simulators Series 3100

## **Contactor Control / Electric Machines**



Type 3190

Type 3191

Type 3190

Reversing Contactor Circuit
With direct switching, overcurrent protection and connected small motor;
operating voltage and current: +15 V / 300 mA;

settable errors: 12;

**Contactor Circuit** 

dimensions: 266 x 297 x 97 mm (w x h x d); weight: 1.6 kg

With overcurrent protection and connected small motor;

dimensions: 266 x 297 x 97 mm (w x h x d); weight: 1.7 kg

operating voltage and current: +15 V/320 mA; settable errors: 14;



Type 3191

Type 3192

### Star-Delta Circuit

Type 3192

With small motor and overcurrent protection; operating voltage and current: +15 V / 600 mA, -15 V / 5 mA,10 V AC; settable errors: 14;

dimensions: 266 x 297 x 97 mm (w x h x d); weight: 1.8 kg

### **Accessories Recommended for the Fault Simulators**

- 3 Connecting Leads (Type 9102.2), with 4 mm plugs, length 60 cm
- 2 Connecting Leads (Type 9102.3), with 4 mm plugs, length 100 cm
- DC SUPPLY BOARD (Type 1002.1), +15 V DC / +5 V DC / -15 V DC

Technical changes without prior notice!

