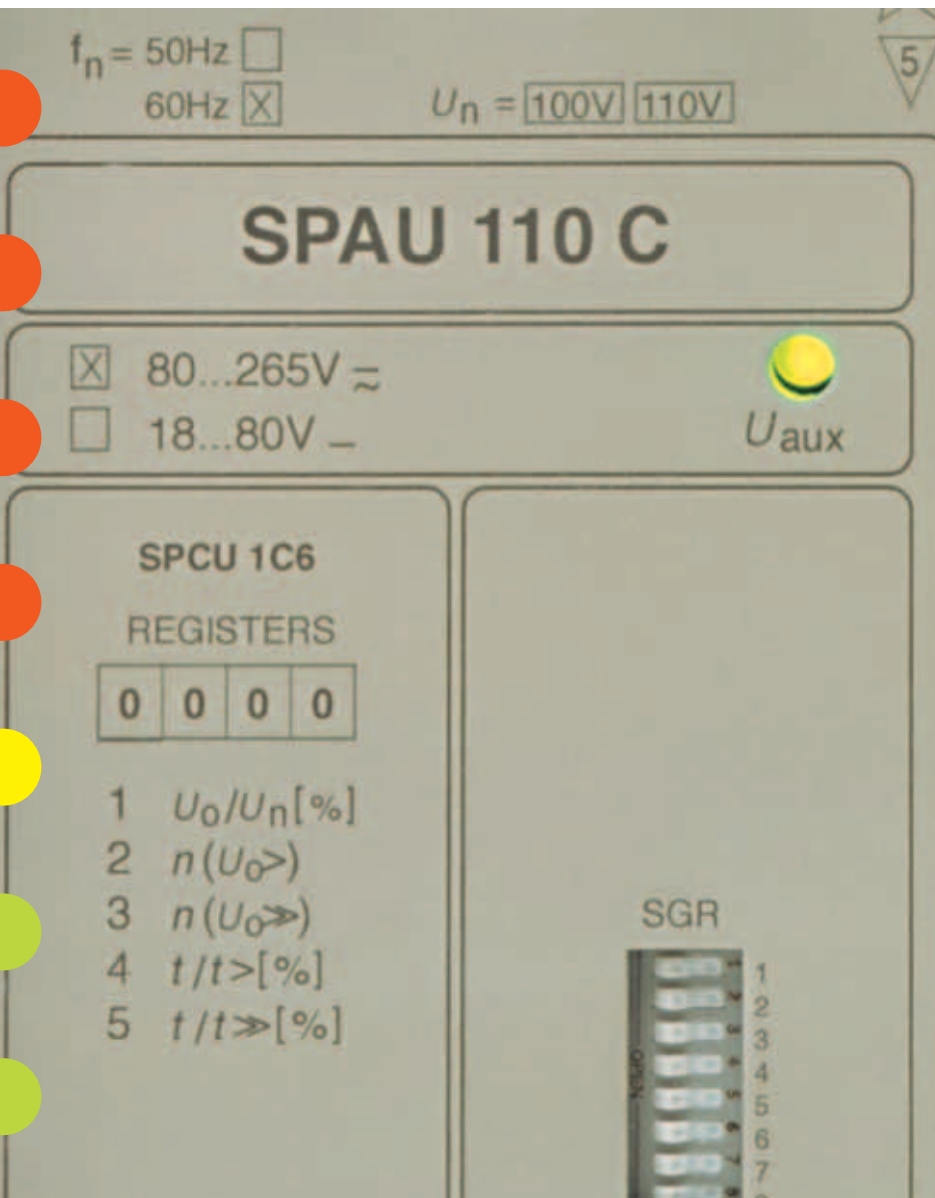


# SPA\_ 100 Series

## Voltage and Current Measuring Relays



### Flexible

#### ...relay solutions...

The SPA\_ 100 Series Voltage and Current Measuring Relays provide **power distribution systems** with a complete range of versatile and flexible protection relay solutions. These multi-function solutions are **used as main protection relays** in various distribution system applications, including substation feeders, busbar short-circuit, time overcurrent and earth-fault protection and busbar voltage supervision.

### Versatile

#### ...for any protection application...

Equally, they can be applied as **back-up devices in conjunction with other SPACOM product family relays**, for example, for the protection of low-voltage or high-voltage motors, small- and medium-sized power generators and large distribution and power transformers. Due to their extensive data communication capabilities, these relays can be used both as separate devices or connected to your substation control system.

### Reliable

#### ...through the years...

With numerous years of service in different applications world-wide, the SPA\_ 100 Series relays serve you with a proven track record of reliability.



# The complete collection of protection relay solutions

The SPA\_ 100 Series consists of a wide range of protection relays based on monitoring one or two energising currents and voltages. The external control input enables you to build busbar protection and other special applications based on blocked over-current relays. The SPA\_ 100 Series consists of the following relays:

- SPAJ 110 C
- SPAJ 111 C
- SPAJ 115 C
- SPAJ 131 C
- SPAJ 135 C
- SPAS 120 C
- SPAU 110 C
- SPAU 121 C
- SPAU 130 C

## The legendary SPACOM family: More than 300,000 relays in use world-wide

The SPA\_ 100 Series relays belong to the SPACOM product family – already a legend in its field. With these products ABB was the first in the world to introduce a substation automation concept based on a genuine communicating microprocessor controlled relay solution. Today, these products still keep pace with the same enduring protection power.

## SPA\_ 100 Series Technology summary

### Protection functions

- Non-directional phase overcurrent for short-circuit and overcurrent protection
- Directional and non-directional neutral overcurrent for system voltage supervision
- Overvoltage and undervoltage for system voltage supervision
- Residual overvoltage for earth-fault protection

### Configurable

output relays for tripping and signalling.

### 1 A and 5 A tapings

on current relays and 100 V and 110 V tapings on voltage relays.

### Direct numerical readout display

for a full set of measured and recorded values, indications and status information.

### Data communication capabilities

Serial interface to connect the relay with the data collection, recording and analysis functions of local or remote monitoring and control systems or other host.

### High immunity

to electrical and electromagnetic interface.

### Also for off-shore applications

IP54 class water- and dustproof aluminium case endures mechanical stress.

### All in one

No external auxiliary relays for tripping are needed.

### Wide auxiliary voltage ranges

18-80 V DC and 80-265 V AC/DC

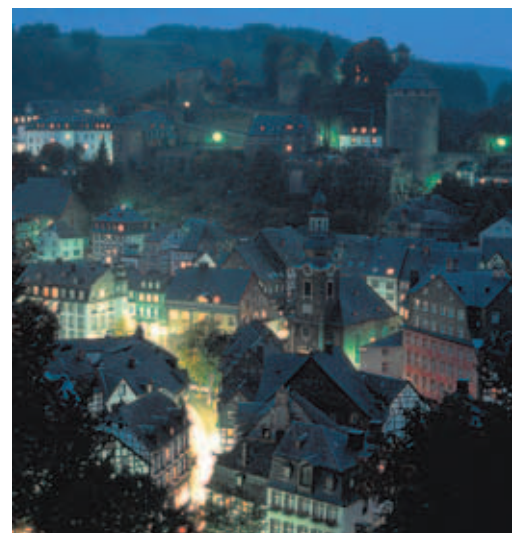
### Improved reliability and availability

supported by built-in self-supervision system with auto-diagnosis.

### Long life-time

MTBF higher than 200 years based on delivery and fault statistics.

CE marking according to the EC directive for EMC.



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