

## Course description

# F680

## Line protection devices MCBs and RCDs

### Course Duration

The duration is 1 day.

### Course Type

This is a classroom course with activities led by an instructor.

### Course Goal

After this course, you will have a deep knowledge of the features and the technical data of the miniature circuit breakers (MCBs) and the residual current devices (RCDs) of the System pro M Compact range.

You will know how to read the Technical Catalogue and to select the right ordering codes.

### Student Profile

The course is intended for sales engineers and new hired product managers.

### Prerequisites and Recommendations

The student must have a basic electro technical knowledge.

The following courses should be completed as well:

- F500e - Line protection basics
- F501e - Miniature circuit breakers basics
- F550e - Residual current devices basics



### Main Topics

- Basic concepts
  - overload and short-circuit
  - overcurrent protection: circuit breakers and fuses
  - distribution systems and ground faults
  - people protection against direct and indirect contacts
- Standards
  - IEC 60898
  - IEC 60947
  - IEC 61008 and IEC 61009
  - IEC 62423
- Miniature circuit breakers
  - S200 and SH200 series
  - S800 series
  - SN201 series
- Residual current devices
  - F200 and FH200 series
  - RCDs classification: type A, AC, B
  - RCDs selectivity
  - nuisance trips
  - RCD-blocks DDA200 and DDA800
- RCBOs
  - DS200 series
  - DS9 series
  - DS271 electronic series
- Auxiliary elements for MCBs and RCDs
  - signal contacts
  - auxiliary contacts
  - shunt trips and undervoltage releases
  - motors and autoreclosing units
  - busbars

