



ADA520D

### RCBO 1P+N 10kA B-20A 30mA A Class

#### Technical Features

##### Architecture

|              |      |
|--------------|------|
| Type of pole | 1P+N |
| Curve        | B    |

##### Electric current

|                                                                                               |               |
|-----------------------------------------------------------------------------------------------|---------------|
| Rated current                                                                                 | 20 A          |
| Rated residual operating current I <sub>dn</sub>                                              | 30 mA         |
| Rated current -25°C                                                                           | 22.70 A       |
| Rated current at -20°C                                                                        | 22.50 A       |
| Rated current -15°C                                                                           | 22.20 A       |
| Rated current -10°C                                                                           | 22 A          |
| Rated current -5°C                                                                            | 21.80 A       |
| Rated current at 0°C                                                                          | 21.50 A       |
| Rated current 5°C                                                                             | 21.30 A       |
| Rated current 10°C                                                                            | 21 A          |
| Rated current 15°C                                                                            | 20.80 A       |
| Rated current at 20°C                                                                         | 20.50 A       |
| Rated current 25°C                                                                            | 20.30 A       |
| Rated current 30°C                                                                            | 20 A          |
| Rated current 35°C                                                                            | 19.80 A       |
| Rated current at 40°C                                                                         | 19.60 A       |
| Rated current at 45°C                                                                         | 19.40 A       |
| Rated current at 50°C                                                                         | 19.20 A       |
| Rated current 55°C                                                                            | 19 A          |
| Rated current 60°C                                                                            | 18.80 A       |
| Correction factor of rating current for 2 devices placed side by side                         | 1             |
| Min./max. threshold value of the AC thermal operation                                         | 1.13 - 1.45 A |
| Correction factor of rating current for 3 devices placed side by side                         | 0.95          |
| Correction factor of rating current for 4 and 5 devices placed side by side                   | 0.90          |
| Correction factor of rating current for 6 devices placed side by side                         | 0.85          |
| Rated short-circuit breaking capacity I <sub>cn</sub> under 230 V AC according to IEC 60898-1 | 10 kA         |

##### Safety

|                               |      |
|-------------------------------|------|
| Residual current type         | A    |
| Ingress Protection (IP) class | IP20 |

##### Main electrical attributes

|                                                                                   |       |
|-----------------------------------------------------------------------------------|-------|
| Rated short-circuit breaking capacity I <sub>cn</sub> AC according to IEC 60898-1 | 10 kA |
|-----------------------------------------------------------------------------------|-------|

##### Connectivity

|                    |                |
|--------------------|----------------|
| Type of connection | Screw terminal |
|--------------------|----------------|

##### Voltage

|                                         |       |
|-----------------------------------------|-------|
| Rated insulation voltage U <sub>i</sub> | 500 V |
|-----------------------------------------|-------|

##### Electric current

|                                                                             |         |
|-----------------------------------------------------------------------------|---------|
| Rated service breaking capacity I <sub>cs</sub> AC according to IEC 60898-1 | 7.50 kA |
|-----------------------------------------------------------------------------|---------|

##### Voltage

|                                                  |             |
|--------------------------------------------------|-------------|
| Rated impulse withstand voltage U <sub>imp</sub> | 4000 V      |
| Max. operating voltage                           | 240 V       |
| Rated operational voltage U <sub>e</sub>         | 240 - 240 V |
| Overvoltage category according to IEC 60947-1    | 3           |
| Type voltage supply                              | AC          |

##### Power

|                                       |        |
|---------------------------------------|--------|
| Total power loss under I <sub>N</sub> | 6.60 W |
|---------------------------------------|--------|

# Product Datasheet

## ADA520D

### Frequency

|           |            |
|-----------|------------|
| Frequency | 50 - 50 Hz |
|-----------|------------|

### Use conditions

|               |        |
|---------------|--------|
| Max. Altitude | 2000 m |
|---------------|--------|

### Installation, mounting

|                                         |                |
|-----------------------------------------|----------------|
| Nominal tightening torque down terminal | 2.10 - 2.10 Nm |
| Nominal tightening torque top terminal  | 2.10 - 2.10 Nm |

### Use conditions

|                                             |   |
|---------------------------------------------|---|
| Class of energy limitation I <sup>2</sup> t | 3 |
|---------------------------------------------|---|

### Endurance

|                                        |      |
|----------------------------------------|------|
| Electric endurance in number of cycles | 2000 |
| Number of mechanical operations        | 2000 |

### Connection

|                                                             |                        |
|-------------------------------------------------------------|------------------------|
| Cross-section flexible conductor                            | 1 - 16 mm <sup>2</sup> |
| Cross-section rigid conductor                               | 1 - 25 mm <sup>2</sup> |
| Cross-section of input with screws, for flexible conductors | 1 - 16 mm <sup>2</sup> |
| Cross-section of input with screws, for massive conductors  | 1 - 25 mm <sup>2</sup> |

### Installation, mounting

|                           |                |
|---------------------------|----------------|
| Nominal tightening torque | 2.10 - 2.10 Nm |
|---------------------------|----------------|

### Capacity

|                   |   |
|-------------------|---|
| Number of modules | 2 |
|-------------------|---|

### Installation, mounting

|                                               |                |
|-----------------------------------------------|----------------|
| Type of top connection for modular devices    | Screw terminal |
| Type of bottom connection for modular devices | biconnect      |

### Dimensions

|        |       |
|--------|-------|
| Height | 83 mm |
| Width  | 35 mm |
| Depth  | 68 mm |

### Use conditions

|                               |             |
|-------------------------------|-------------|
| Operating temperature         | -25 - 40 °C |
| Storage/transport temperature | -25 - 70 °C |

### Connection

|                                                                        |                        |
|------------------------------------------------------------------------|------------------------|
| Cross-section of input and output with screws, for flexible conductors | 1 - 16 mm <sup>2</sup> |
| Cross-section of input and output with screws, for massive conductors  | 1 - 25 mm <sup>2</sup> |

### Use conditions

|                                                          |                  |
|----------------------------------------------------------|------------------|
| Degree of pollution according to IEC 60664 / IEC 60947-2 | 2                |
| Air humidity protection                                  | For all climates |

### Sustainability

|              |     |
|--------------|-----|
| RoHS conform | Yes |
|--------------|-----|