

# iC60N circuit breakers (curve B, C, D)



Country approval pictograms



## IEC/EN 60947-2 IEC/EN 60898-1

- iC60N circuit breakers are multi-standard circuit breakers which combine the following functions:
  - circuit protection against short-circuit currents,
  - circuit protection against overload currents,
  - suitable for industrial isolation according to IEC/EN 60947-2, standard.
  - fault tripping indication by a red mechanical indicator in circuit breaker front face.

### Alternating current (AC) 50/60 Hz

#### Breaking capacity (Icu) according to IEC/EN 60947-2

|                    | Voltage (Ue) |              |              |       |       | Service breaking capacity (Ics) |
|--------------------|--------------|--------------|--------------|-------|-------|---------------------------------|
|                    | 12 to 133 V  | 220 to 240 V | 380 to 415 V | 440 V |       |                                 |
| Ph/Ph (2P, 3P, 4P) |              |              |              |       |       |                                 |
| Ph/N (1P, 1P+N)    | 12 to 60 V   | 100 to 133 V | 220 to 240 V | -     |       |                                 |
| Rating (In)        | 0.5 to 4 A   | 50 kA        | 50 kA        | 50 kA | 25 kA | 100 % of Icu                    |
|                    | 6 to 63 A    | 36 kA        | 20 kA        | 10 kA | 6 kA  | 75 % of Icu                     |

#### Breaking capacity (Icn) according to IEC/EN 60898-1

|             | Voltage (Ue) |        |
|-------------|--------------|--------|
|             | 400 V        |        |
| Ph/Ph       |              |        |
| Ph/N        | 230 V        |        |
| Rating (In) | 0.5 to 63 A  | 6000 A |

### Direct current (DC)

#### Breaking capacity (Icu) according to IEC/EN 60947-2

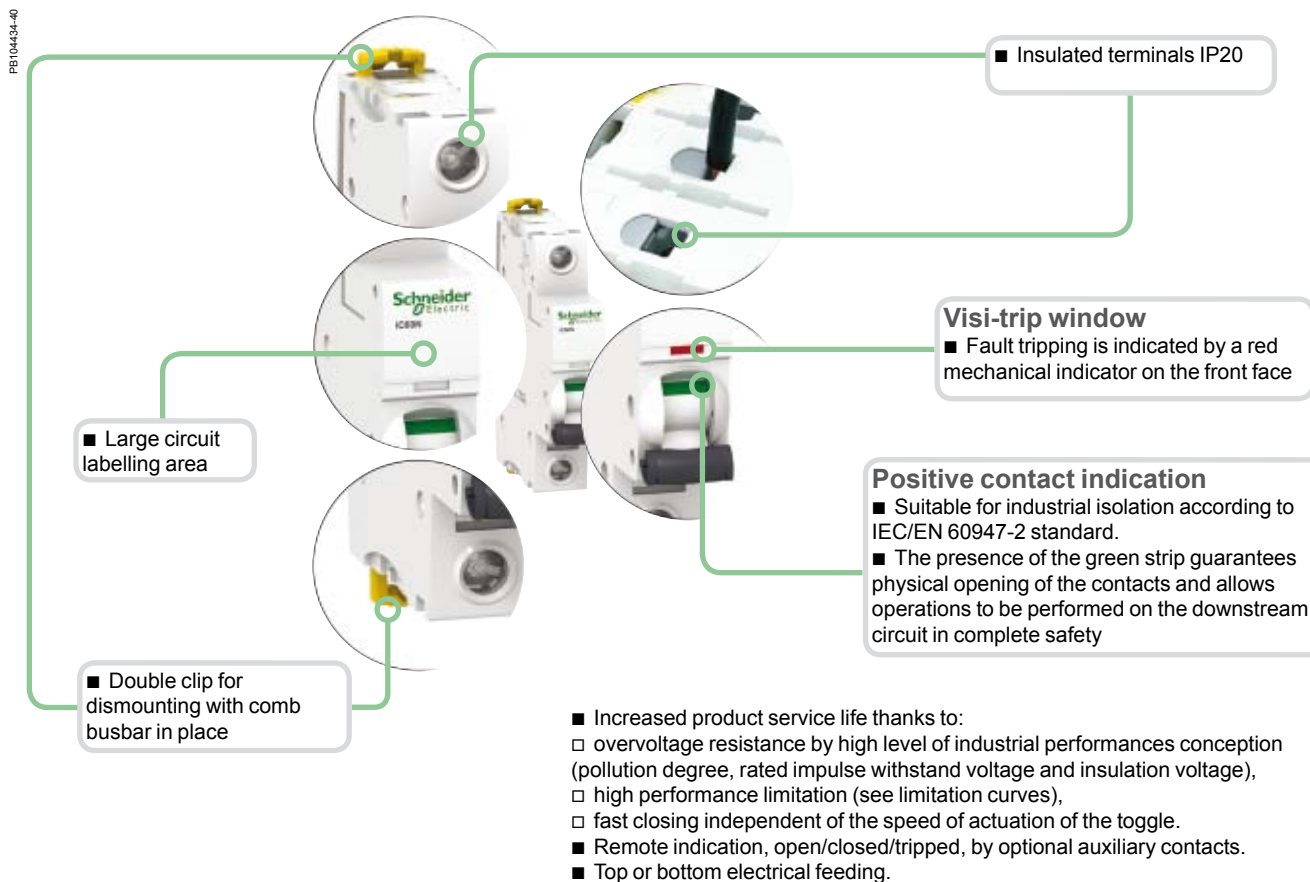
|                 | Voltage (Ue) |        |         |         |         | Service breaking capacity (Ics) |
|-----------------|--------------|--------|---------|---------|---------|---------------------------------|
|                 | 12 to 60 V   | ≤ 72 V | ≤ 125 V | ≤ 180 V | ≤ 250 V |                                 |
| Between +/-     |              |        |         |         |         |                                 |
| Number of poles | 1P           |        | 2P      | 3P      | 4P      |                                 |
| Rating (In)     | 1 to 63 A    | 15 kA  | 10 kA   | 10 kA   | 10 kA   | 100 % of Icu                    |

## Catalogue numbers

### iC60N circuit breaker

| Type                  | 1P                                                           |          |          | 1P+N                                                         |          |          |
|-----------------------|--------------------------------------------------------------|----------|----------|--------------------------------------------------------------|----------|----------|
|                       |                                                              |          |          |                                                              |          |          |
| Auxiliaries           | Remote tripping and indication, module CA907000 and CA907002 |          |          | Remote tripping and indication, module CA907000 and CA907002 |          |          |
| Vigi iC60             | Vigi iC60 add-on residual current device, module CA902005    |          |          | Vigi iC60 add-on residual current device, module CA902005    |          |          |
| Rating (In)           | Curve                                                        |          |          | Curve                                                        |          |          |
|                       | B                                                            | C        | D        | B                                                            | C        | D        |
| 0.5 A                 | A9F73170                                                     | A9F74170 | A9F75170 | A9F73670                                                     | A9F74670 | A9F75670 |
| 1 A                   | A9F73101                                                     | A9F74101 | A9F75101 | A9F73601                                                     | A9F74601 | A9F75601 |
| 2 A                   | A9F73102                                                     | A9F74102 | A9F75102 | A9F73602                                                     | A9F74602 | A9F75602 |
| 3 A                   | A9F73103                                                     | A9F74103 | A9F75103 | A9F73603                                                     | A9F74603 | A9F75603 |
| 4 A                   | A9F73104                                                     | A9F74104 | A9F75104 | A9F73604                                                     | A9F74604 | A9F75604 |
| 6 A                   | A9F73106                                                     | A9F74106 | A9F75106 | A9F73606                                                     | A9F74606 | A9F75606 |
| 10 A                  | A9F73110                                                     | A9F74110 | A9F75110 | A9F73610                                                     | A9F74610 | A9F75610 |
| 13 A                  | A9F73113                                                     | A9F74113 | A9F75113 | A9F73613                                                     | A9F74613 | A9F75613 |
| 16 A                  | A9F73116                                                     | A9F74116 | A9F75116 | A9F73616                                                     | A9F74616 | A9F75616 |
| 20 A                  | A9F73120                                                     | A9F74120 | A9F75120 | A9F73620                                                     | A9F74620 | A9F75620 |
| 25 A                  | A9F73125                                                     | A9F74125 | A9F75125 | A9F73625                                                     | A9F74625 | A9F75625 |
| 32 A                  | A9F73132                                                     | A9F74132 | A9F75132 | A9F73632                                                     | A9F74632 | A9F75632 |
| 40 A                  | A9F73140                                                     | A9F74140 | A9F75140 | A9F73640                                                     | A9F74640 | A9F75640 |
| 50 A                  | A9F73150                                                     | A9F74150 | A9F75150 | A9F73650                                                     | A9F74650 | A9F75650 |
| 63 A                  | A9F73163                                                     | A9F74163 | A9F75163 | A9F73663                                                     | A9F74663 | A9F75663 |
| Width in 9-mm modules | 2                                                            |          |          | 4                                                            |          |          |
| Accessories           | Module CA907000 and CA907001                                 |          |          | Module CA907000 and CA907001                                 |          |          |

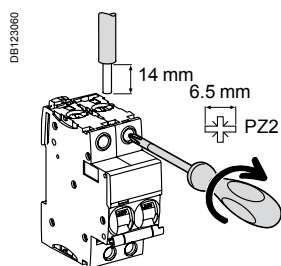
# iC60N circuit breakers (curve B, C, D) (cont.)



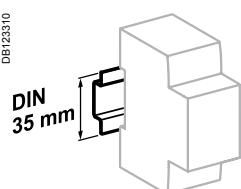
| 2P                                                           |          |          |  | 3P                                                           |          |          |  | 4P                                                           |          |          |  |
|--------------------------------------------------------------|----------|----------|--|--------------------------------------------------------------|----------|----------|--|--------------------------------------------------------------|----------|----------|--|
|                                                              |          |          |  |                                                              |          |          |  |                                                              |          |          |  |
| Remote tripping and indication, module CA907000 and CA907002 |          |          |  | Remote tripping and indication, module CA907000 and CA907002 |          |          |  | Remote tripping and indication, module CA907000 and CA907002 |          |          |  |
| Vigi iC60 add-on residual current device, module CA902005    |          |          |  | Vigi iC60 add-on residual current device, module CA902005    |          |          |  | Vigi iC60 add-on residual current device, module CA902005    |          |          |  |
| Curve                                                        |          |          |  | Curve                                                        |          |          |  | Curve                                                        |          |          |  |
| B                                                            | C        | D        |  | B                                                            | C        | D        |  | B                                                            | C        | D        |  |
| A9F73270                                                     | A9F74270 | A9F75270 |  | A9F73370                                                     | A9F74370 | A9F75370 |  | A9F73470                                                     | A9F74470 | A9F75470 |  |
| A9F73201                                                     | A9F74201 | A9F75201 |  | A9F73301                                                     | A9F74301 | A9F75301 |  | A9F73401                                                     | A9F74401 | A9F75401 |  |
| A9F73202                                                     | A9F74202 | A9F75202 |  | A9F73302                                                     | A9F74302 | A9F75302 |  | A9F73402                                                     | A9F74402 | A9F75402 |  |
| A9F73203                                                     | A9F74203 | A9F75203 |  | A9F73303                                                     | A9F74303 | A9F75303 |  | A9F73403                                                     | A9F74403 | A9F75403 |  |
| A9F73204                                                     | A9F74204 | A9F75204 |  | A9F73304                                                     | A9F74304 | A9F75304 |  | A9F73404                                                     | A9F74404 | A9F75404 |  |
| A9F73206                                                     | A9F74206 | A9F75206 |  | A9F73306                                                     | A9F74306 | A9F75306 |  | A9F73406                                                     | A9F74406 | A9F75406 |  |
| A9F73210                                                     | A9F74210 | A9F75210 |  | A9F73310                                                     | A9F74310 | A9F75310 |  | A9F73410                                                     | A9F74410 | A9F75410 |  |
| A9F73213                                                     | A9F74213 | A9F75213 |  | A9F73313                                                     | A9F74313 | A9F75313 |  | A9F73413                                                     | A9F74413 | A9F75413 |  |
| A9F73216                                                     | A9F74216 | A9F75216 |  | A9F73316                                                     | A9F74316 | A9F75316 |  | A9F73416                                                     | A9F74416 | A9F75416 |  |
| A9F73220                                                     | A9F74220 | A9F75220 |  | A9F73320                                                     | A9F74320 | A9F75320 |  | A9F73420                                                     | A9F74420 | A9F75420 |  |
| A9F73225                                                     | A9F74225 | A9F75225 |  | A9F73325                                                     | A9F74325 | A9F75325 |  | A9F73425                                                     | A9F74425 | A9F75425 |  |
| A9F73232                                                     | A9F74232 | A9F75232 |  | A9F73332                                                     | A9F74332 | A9F75332 |  | A9F73432                                                     | A9F74432 | A9F75432 |  |
| A9F73240                                                     | A9F74240 | A9F75240 |  | A9F73340                                                     | A9F74340 | A9F75340 |  | A9F73440                                                     | A9F74440 | A9F75440 |  |
| A9F73250                                                     | A9F74250 | A9F75250 |  | A9F73350                                                     | A9F74350 | A9F75350 |  | A9F73450                                                     | A9F74450 | A9F75450 |  |
| A9F73263                                                     | A9F74263 | A9F75263 |  | A9F73363                                                     | A9F74363 | A9F75363 |  | A9F73463                                                     | A9F74463 | A9F75463 |  |
| 4                                                            |          |          |  | 6                                                            |          |          |  | 8                                                            |          |          |  |
| Module CA907000 and CA907001                                 |          |          |  | Module CA907000 and CA907001                                 |          |          |  | Module CA907000 and CA907001                                 |          |          |  |

# iC60N circuit breakers (curve B, C, D) (cont.)

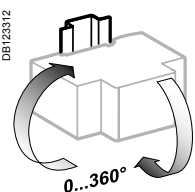
## Connection



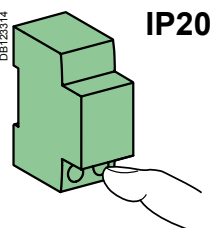
|             |                   | Without accessory                                                                             |                                                                                               | With accessories                                                                                 |                                                                                                 |                                                                                                 |                        |
|-------------|-------------------|-----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|------------------------|
| Rating      | Tightening torque | Copper cables                                                                                 |                                                                                               | 50 mm <sup>2</sup> Al terminal                                                                   | Screw-on connection for ring terminal                                                           | Multi-cables terminal                                                                           |                        |
|             |                   | Rigid                                                                                         | Flexible or ferrule                                                                           |                                                                                                  |                                                                                                 | Rigid cables                                                                                    | Flexible cables        |
|             |                   | DB122945<br> | DB122946<br> | DB122935<br> Al | DB118789<br> | DB118787<br> |                        |
| 0.5 to 25 A | 2 N.m             | 1 to 25 mm <sup>2</sup>                                                                       | 1 to 16 mm <sup>2</sup>                                                                       | -                                                                                                | Ø 5 mm                                                                                          | -                                                                                               | -                      |
| 32 to 63 A  | 3.5 N.m           | 1 to 35 mm <sup>2</sup>                                                                       | 1 to 25 mm <sup>2</sup>                                                                       | 50 mm <sup>2</sup>                                                                               |                                                                                                 | 3 x 16 mm <sup>2</sup>                                                                          | 3 x 10 mm <sup>2</sup> |



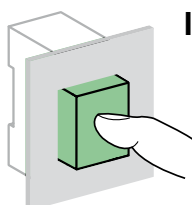
Clip on DIN rail 35 mm.



Indifferent position of installation.



IP20



IP40

## Technical data

### Main characteristics

#### According to IEC/EN 60947-2

|                                        |                       |
|----------------------------------------|-----------------------|
| Insulation voltage (Ui)                | 500 V AC              |
| Pollution degree                       | 3                     |
| Rated impulse withstand voltage (Uimp) | 6 kV                  |
| Thermal tripping                       | Reference temperature |
|                                        | Temperature derating  |
| Magnetic tripping                      | B curve               |
|                                        | C curve               |
|                                        | D curve               |

|                      |   |
|----------------------|---|
| Utilization category | A |
|----------------------|---|

#### According to IEC/EN 60898-1

|                                                                 |            |
|-----------------------------------------------------------------|------------|
| Limitation class                                                | 3          |
| Rated making and breaking capacity of an individual pole (Icn1) | Icn1 = Icn |

### Additional characteristics

|                                                                                                 |                             |                                              |
|-------------------------------------------------------------------------------------------------|-----------------------------|----------------------------------------------|
| Breaking capacity under 1 pole with IT 380-415 V isolated neutral system (case of double fault) | 40 A                        | 4 kA                                         |
|                                                                                                 | 50/63 A                     | 3 kA                                         |
| Degree of protection (IEC 60529)                                                                | Device only                 | IP20                                         |
|                                                                                                 | Device in modular enclosure | IP40                                         |
| Endurance (O-C)                                                                                 | Electrical                  | 10,000 cycles                                |
|                                                                                                 | Mechanical                  | 20,000 cycles                                |
| Overvoltage category (IEC 60364)                                                                |                             | IV                                           |
| Operating temperature                                                                           |                             | -35°C to +70°C                               |
| Storage temperature                                                                             |                             | -40°C to +85°C                               |
| Tropicalization (IEC 60068-1)                                                                   |                             | Treatment 2 (relative humidity 95 % to 55°C) |

## Weight (g)

| Circuit-breaker |       |
|-----------------|-------|
| Type            | iC60N |
| 1P              | 125   |
| 2P              | 250   |
| 3P              | 375   |
| 4P              | 500   |

## Dimensions (mm)

