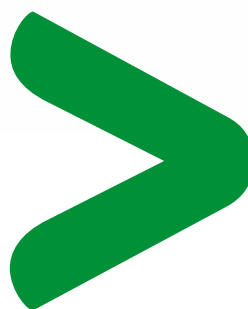


Low voltage

# Acti 9

the efficiency you deserve

Catalogue  
09/2013



**General****Principle of catalogue numbers, protection (Acti 9)**

CA901009E 1

**Circuit protection**

Choice of circuit protective devices

CA901011E 2

Circuit breaker panorama

CA901000E 4

**Neutral breaking circuit breakers**

i DPN, DT40, DT60, C40 (Clario, Libro, Prodis)

CA901012E 14

**Circuit breakers up to 63 A**

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CA901010E 26

iC60N

CA901002E 31

iC60N double terminals

CA901019E 40

iC60H

CA901003E 45

iC60H double terminals

CA901020E 54

iC60L

CA901004E 58

iK60 (B curve)

CA901006E 61

iK60 (C curve)

CA901007E 64

iK60 Biconnect

CA901027E 70

**Circuit breakers up to 125 A**

C 120a, N, H (RSA)

CA901017E 73

C 120N

CA901015E 78

C 120H

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**High performance circuit breakers**

NG125a

CM901027E 85

NG125N

CM901028E 89

NG125H

CM901029E 95

NG125L

CM901030E 99

**Direct current circuit breakers**

C60H-DC

CA901024E 105

C60PV-DC

CA901031E 108

C60NA-DC

CA901032E 112

SW60-DC

CA901030E 116

**Motor protection circuit breakers**

P25M

CM901026E 120

iC60LMA

CA901005E 125

NG125LMA

CM901031E 128

**Fuses**

STI

CM901033E 132

DO fuse disconnectors switches (projet Dido)

CA901035E 135

Fuse holder with indicator light SBI

CM901034E 137

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Choice of earth leakage protection devices

CA902000E 140

Overview of the earth leakage protection product range

CA902011E 142

**Residual current circuit breakers**

iID

CA902002E 145

iID double terminals

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iID K

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CM902001E 178

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Vigi iC60

CA902005E 182

Vigi iC60 double terminals

CA902019E 193

Vigi C120

CA902016E 199

Vigi NG125

CM902008E 204

Residual current devices

iDPN Vigi

CA902026E 214

i DPN Vigi, Vigi i DPN, Vigi TG40, Vigi TG60, DT40 Vigi, Vigi DT40, Vigi C40, C40 Vigi (Clario, Libro, Prodis)

CA902013E 217

DPNa Vigi, DPN N Vigi

CA902014E 227

DPN Vigi K

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TH4, TH7, THP1, THP2 thermostats	LSB02324EN	744

## iID, iC60, Vigi iC60, Reflex iC60, switches

A9 R 15 2 63

Range	Family	Code	Internal code	Poles	Code	Rating (A)	Code
Acti 9 (A9)	iID	R		0	0	0	00
	Vigi iC60	V		1P	1	0.5	70
	iC60	F		<b>2P</b>	<b>2</b>	0.75	71
	iK60	K		3P	3	1	01
	Auxiliaries and accessories	A		4P	4	1.6	72
	Switches	S		1N	5	2	02
	Reflex iC60	C		1P+N	6	2.5	73
				3P+N	7	3	03
						4	04
						6	06
						6.3	76
						8	08
						10	10
						12.5	82
						13	13
						16	16
						20	20
						25	25
						32	32
						40	40
						50	50
						<b>63</b>	<b>63</b>
						80	80
						100	91
						125	92

## Comb busbar and comb busbar accessories

A9 X P H 4 12

Range	Family	Code	Type	Type of installation	Number of poles	Dimensioning			
Acti 9 (A9)	Comb busbar	X	Comb busbar		1P	1	Comb busbar		
			Fork teeth	F	Horizontal			H	Number of 18 mm modules (approximately)
			Pin teeth	P			2P	2	Accessories
			Auxiliarisable	A			3P		
			Accessories				4P		
			End-piece	E	Double terminals	D	4P balanced, with neutral	5	Number of pieces per cat. no.
			Tooth cover	T	Single terminal	M	3P balanced for single-poles	6	
			Connector	C					



Protection of electrical connections against short circuits and overloads



Protection of loads against overloads



Protection of control devices



Protection for people against indirect contacts in IT and TN earthing systems

- Circuit breakers can:
  - break a faulty electrical circuit (short-circuit, overload, insulation fault), to prevent fires,
  - protect control devices,
  - increase the service life of the installation, thanks to its ability to limit the short-circuit current (see module CA908025),
  - in IT and TN systems, they ensure personal protection against electrocution in the event of indirect contacts.
- The choice of circuit breakers must be optimised to provide absolute protection while ensuring continuity of service.
- Although circuit breakers are sometimes used as control units, it is recommended to install separate control devices which are more suitable for frequent switching operations (switch, contactor, impulse relay).

## Choice of protective circuit breakers

This depends on several criteria:

- prospective short-circuit current
- max. voltage rating
- planned amperage for the circuit to be protected
- nature and cross section of cables
- ambient temperature (possible derating)
- the network and neutral system, which determine the number of poles of the protective circuit breaker installed on their power supply circuit and the tripping curve
- coordination with the other electrical devices (protection, discrimination, cascading).

## Choice of breaking capacity

- The breaking capacity must be greater than or equal to the prospective short-circuit current ( $I_{sc}$ ) upstream of the circuit-breaker ( $I_{sc}$  depends on the length, type of conductor and cross section of the cable and the power of the source).
- However, in the event of use in combination with an upstream circuit-breaker limiting the current, this breaking capacity can possibly be reduced (cascading, see module 557E4200).

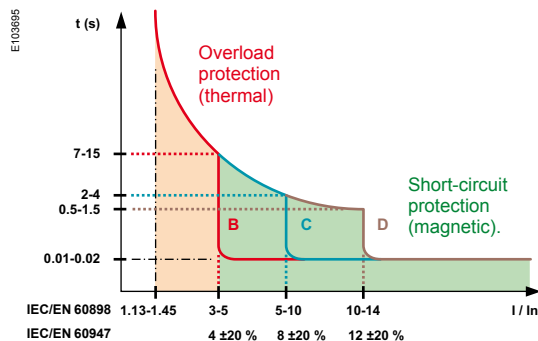
## Choice of rating

- The rating ( $I_n$ ) is chosen above all to protect the electrical connections:
  - for cables: it is chosen according to the cross section and type of conductor,
  - for Canalis prefabricated busbar trunking: it must be simply less than or equal to the rating of the busbar trunking.
- The rating should be greater than the nominal current of the loads.

## Choice of tripping curve

The tripping curve makes the protection more or less sensitive to:

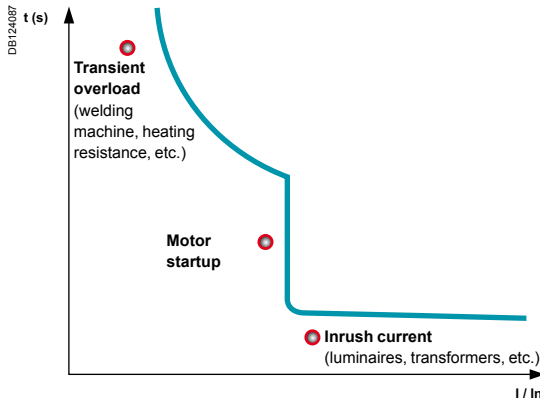
- the inrush current at power up
- the overload current.



### Tripping thresholds (x $I_n$ )

Curves	IEC /EN 60898	IEC/EN 60947-2
B	Between 3 $I_n$ and 5 $I_n$	4 ± 20 %
C	Between 5 $I_n$ and 10 $I_n$	8 ± 20 %
D or K	Between 10 $I_n$ and 14 $I_n$	12 ± 20 %
MA	-	12 ± 20 %
Z	-	3 ± 20 %

- To prevent nuisance tripping, it may be advisable to choose a less sensitive curve, e.g. change from B to C (tripping curves, see module CA908024).



## Continuity of service

- Nuisance tripping can be generated by:
  - the inrush current at circuit closure,
  - the overload current, and sometimes the harmonic current flowing through the neutral of three-phase circuits <sup>(1)</sup>,
  - motor startup currents.

## Solutions

- **Choose a circuit breaker with a less sensitive curve:** change from B curve to C curve or from C curve to D curve <sup>(2)</sup>.
- **Reduce the number of loads per circuit.**
- **Energize the circuits in succession,** using time delay auxiliaries on the control devices.
- **Under no circumstances may the circuit breaker rating be increased beyond the maximum constraints permitted by the cable as the electrical connections will no longer be protected.**
- **Ensure discrimination of the protective devices** (see modules **557E4300**).

Discrimination is the coordination of automatic breaking devices in such a way that a fault occurring at any point on the network is eliminated by the circuit breaker located immediately upstream of the fault, and by it alone.

### Total discrimination

For all values of the fault, from overload to non-resistive short circuit, distribution is fully discriminating if D2 opens and if D1 remains closed.

### Partial discrimination

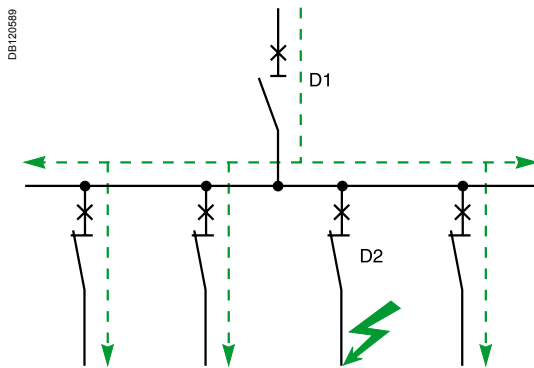
Discrimination is partial if the above condition is not complied with up to full short-circuit current, but only up to a lower value. This value is called the discrimination limit.

In the event of a fault exceeding this value, circuit breakers D1 and D2 open.

*(1) In the case of three-phase circuits, third-order harmonic currents and harmonic currents that are multiples of three are generated by loads (discharge lamps with electronic ballast, etc.).*

*The neutral cable must be sized to prevent it from overheating. The current flowing through the neutral conductor may become greater than the current of each phase and cause nuisance tripping.*

*(2) In the case of installations with very long cables in a TN or IT system, it may be necessary to add an earth leakage protection device to protect human life..*




## Circuit disconnection

## Disconnection

The purpose of disconnection is to separate and isolate a circuit or a device from the rest of the electrical installation in order to ensure the safety of personnel having to work on the electrical installation for maintenance or repair.

- The circuit breaking must be omnipolar, i.e. the live conductors, including neutral <sup>(3)</sup>, must be cut off (depending on country regulations).
- It must be lockable or padlockable in "open" position in order to prevent any unintentional reclosing, at least in industrial environments.
- It must be in compliance with a standard ensuring its suitability for isolation.

*(3) With the exception of the PEN conductor which should never be cut off.*

iC60H				iC60L							
											
IEC/EN 60947-2, 60898-1				IEC/EN 60947-2, 60898-1							
Country approval pictogram				Country approval pictogram							
1P, 1P+N		2, 3, 4P		1P		2, 3, 4P					
■				■							
■				■							
B, C, D				B, C, K, Z							
0.5 to 63 (1 to 63 in DC)				0.5 to 63 (1 to 63 in DC)							
AC (50/60 Hz) 240/415, 440				AC (50/60 Hz) 240/415, 440							
DC 250				DC 250							
AC (50/60 Hz) 12				AC (50/60 Hz) 12							
DC 12				DC 12							
500				500							
6				6							
3				3							
240/415 V - 230/400 V				15000							
10000		10000		15000		15000					
<b>1P, 1P+N</b>		<b>2, 3, 4P</b>		<b>1P</b>		<b>2, 3, 4P</b>					
0.5 to 4 A		6 to 63 A		0.5 to 4 A		6 to 25 A		32/40 A		50/63 A	
70		42		-		-		100		70	
-		-		70		42		-		-	
-		-		-		-		-		-	
100		30		-		-		100		70	
70		15		70		30		100		50	
-		-		70		15		-		-	
-		-		50		10		-		-	
-		-		-		-		-		-	
100 % of Icu		50 % of Icu		100 % of Icu		50 % of Icu		100 % of Icu		50 % of Icu	
100 % of Icu		50 % of Icu		100 % of Icu		50 % of Icu <sup>(1)</sup>		50 % of Icu		50 % of Icu	
12...60 V (1P)				20				25			
≤ 72 V (1P)				15				20			
≤ 125 V (2P)				15				20			
≤ 180 V (3P)				15				20			
≤ 250 V (4P)				15				20			
100 % of Icu				100 % of Icu				100 % of Icu			
■				■				■			
50°C				50°C				50°C			
Visi-trip window				Visi-trip window				Visi-trip window			
■				■				■			
■				■				■			
IP20				IP20				IP20			
IP40				IP40				IP40			
Insulation class II				Insulation class II				Insulation class II			
<b>CA901003</b>				<b>CA901004</b>				<b>CA901004</b>			
<b>CA907000 and CA907001</b>				<b>CA907000 and CA907001</b>				<b>CA907000 and CA907001</b>			
<b>CA907000 and CA907002</b>				<b>CA907000 and CA907002</b>				<b>CA907000 and CA907002</b>			
<b>CA902005</b>				<b>CA902005</b>				<b>CA902005</b>			

(1) 100 % of Icu for ratings 6 to 25 A under Ue 100 to 133 V AC Ph/Ph and Ue 12 to 60 V AC Ph/N.

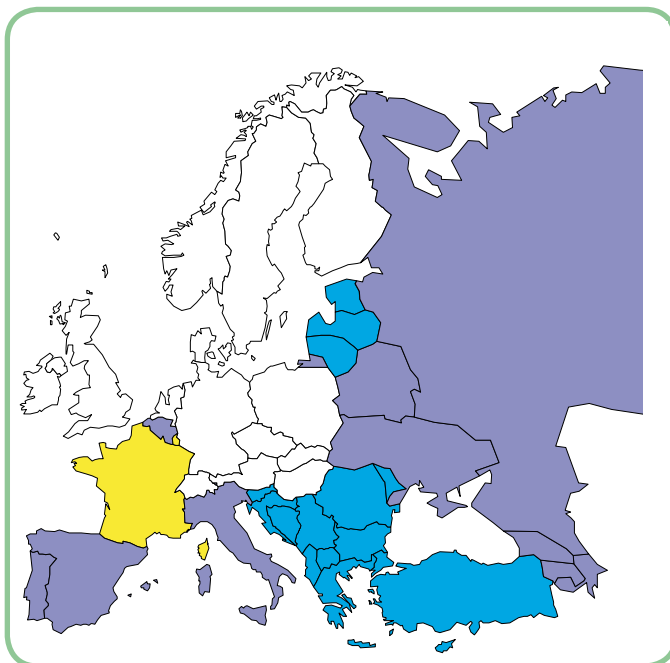


Schneider Electric's range of circuit breakers consists of different products (A, B, C) to enable it to be the most competitive range possible in each country, allowing for the special characteristics of each market:

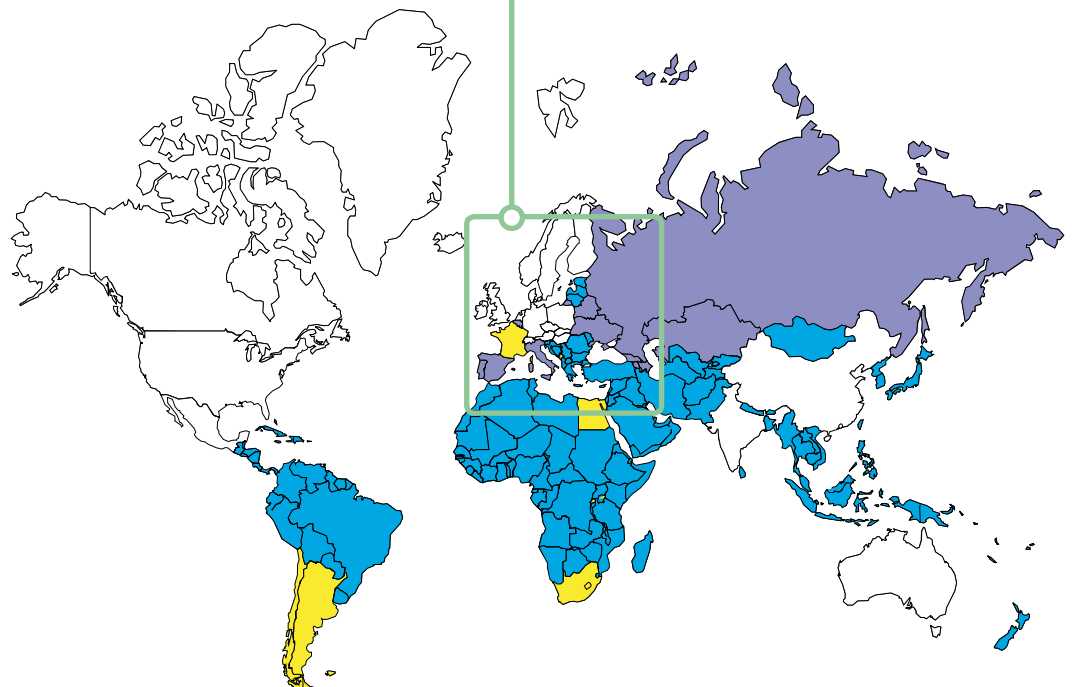
- usual installation procedure
- price
- accreditations by local bodies.

**Variants**

Offers		Pages
Offer A	Catalogue numbers	46
Offer B	Catalogue numbers	48
Offer C	Catalogue numbers	50
Common pages		52

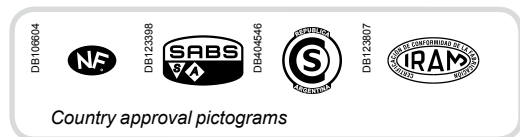


*Only the product range to be marketed in your country and validated by the local product manager, in agreement with his Final Distribution (FD) partner should be retained. The others will be removed before publication.*





# iC60H circuit breakers (curve B, C, D)



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

- iC60H 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						Service breaking capacity (Ics)
	Voltage (Ue)					
Ph/Ph (2P, 3P, 4P)	12 to 133 V	220 to 240 V	380 to 415 V	440 V		100 % of Icu
Ph/N (1P, 1P+N)	12 to 60 V	100 to 133 V	220 to 240 V	-		
Rating (In) 0.5 to 4 A	70 kA	70 kA	70 kA	50 kA	50 kA	50 % of Icu
6 to 63 A	42 kA	30 kA	15 kA	10 kA		
Breaking capacity (Icn) according to IEC/EN 60898-1						
	Voltage (Ue)					
Ph/Ph	400 V					
Ph/N	230 V					
Rating (In) 0.5 to 63 A	10000 A					

Direct current (DC)						
Breaking capacity (Icu) according to IEC/EN 60947-2						Service breaking capacity (Ics)
	Voltage (Ue)					
Between +/-	12 to 60 V	≤ 72 V	≤ 125 V	≤ 180 V	≤ 250 V	100 % of Icu
Number of poles	1P		2P	3P	4P	
Rating (In) 1 to 63 A	20 kA	15 kA	15 kA	15 kA	15 kA	

## Catalogue numbers

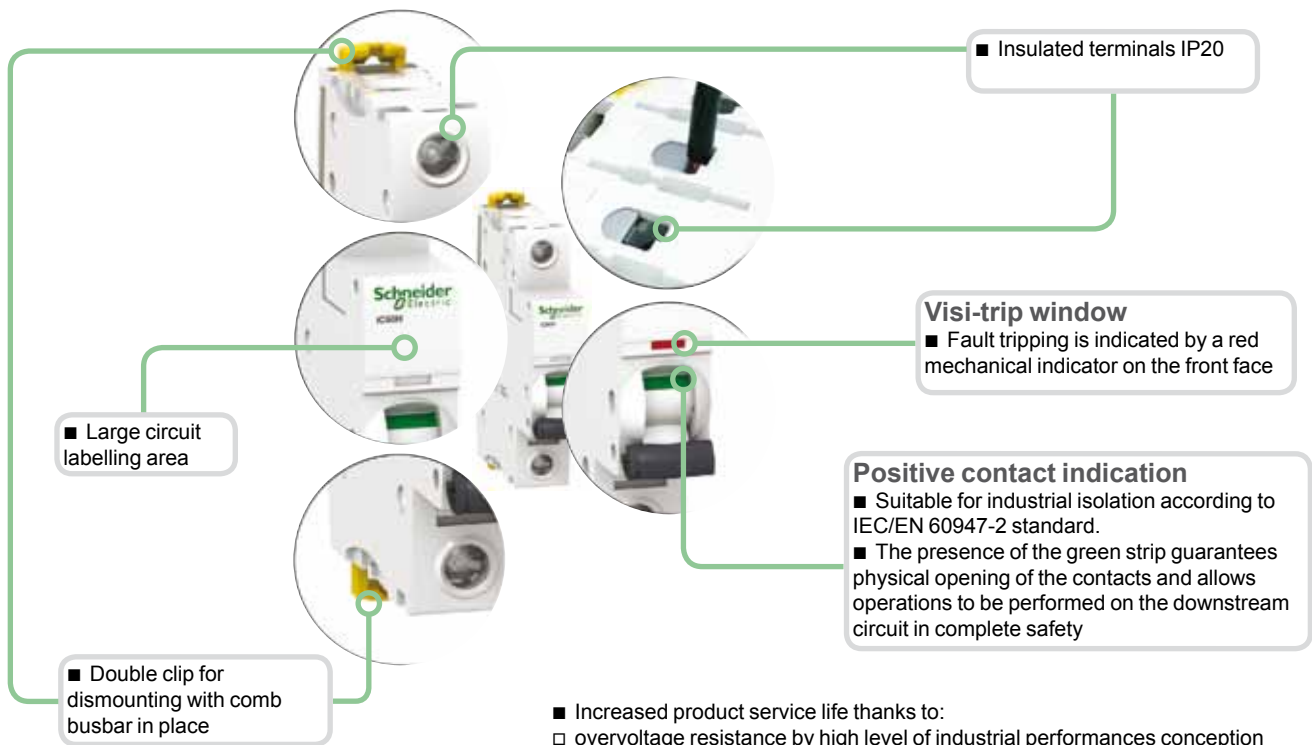
### iC60H circuit breaker

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 <sup>(1)</sup>	B	C	D <sup>(1)</sup>
0.5 A <sup>(1)</sup>	A9F83170	A9F84170	A9F85170	A9F83670	A9F84670	A9F85670
1 A <sup>(1)</sup>	A9F83101	A9F84101	A9F85101	A9F83601	A9F84601	A9F85601
2 A <sup>(1)</sup>	A9F83102	A9F84102	A9F85102	A9F83602	A9F84602	A9F85602
3 A <sup>(1)</sup>	A9F83103	A9F84103	A9F85103	A9F83603	A9F84603	A9F85603
4 A <sup>(1)</sup>	A9F83104	A9F84104	A9F85104	A9F83604	A9F84604	A9F85604
6 A	A9F86106	A9F87106	A9F85106	A9F86606	A9F87606	A9F85606
10 A	A9F86110	A9F87110	A9F85110	A9F86610	A9F87610	A9F85610
13 A <sup>(1)</sup>	A9F83113	A9F84113	A9F85113	A9F83613	A9F84613	A9F85613
16 A	A9F86116	A9F87116	A9F85116	A9F86616	A9F87616	A9F85616
20 A	A9F86120	A9F87120	A9F85120	A9F86620	A9F87620	A9F85620
25 A	A9F86125	A9F87125	A9F85125	A9F86625	A9F87625	A9F85625
32 A	A9F86132	A9F87132	A9F85132	A9F86632	A9F87632	A9F85632
40 A	A9F86140	A9F87140	A9F85140	A9F86640	A9F87640	A9F85640
50 A	A9F86150	A9F87150	A9F85150	A9F86650	A9F87650	A9F85650
63 A	A9F86163	A9F87163	A9F85163	A9F86663	A9F87663	A9F85663
Width in 9-mm modules	2			4		
Accessories	Module CA907000 and CA907001			Module CA907000 and CA907001		

(1) VDE approved only.

# iC60H circuit breakers (curve B, C, D) (cont.)

PB104495-40



- Increased product service life thanks to:
  - overvoltage resistance by high level of industrial performances conception (pollution degree, rated impulse withstand voltage and insulation voltage),
  - high performance limitation (see limitation curves),
  - fast closing independent of the speed of actuation of the toggle.
- Remote indication, open/closed/tripped, by optional auxiliary contacts.
- Top or bottom electrical feeding.

2P			3P			4P		
E-6094 			E-6095 			E-6097 		
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 <sup>(1)</sup>	B	C	D <sup>(1)</sup>	B	C	D <sup>(1)</sup>
A9F83270	A9F84270	A9F85270	A9F83370	A9F84370	A9F85370	A9F83470	A9F84470	A9F85470
A9F83201	A9F84201	A9F85201	A9F83301	A9F84301	A9F85301	A9F83401	A9F84401	A9F85401
A9F83202	A9F84202	A9F85202	A9F83302	A9F84302	A9F85302	A9F83402	A9F84402	A9F85402
A9F83203	A9F84203	A9F85203	A9F83303	A9F84303	A9F85303	A9F83403	A9F84403	A9F85403
A9F83204	A9F84204	A9F85204	A9F83304	A9F84304	A9F85304	A9F83404	A9F84404	A9F85404
A9F86206	A9F87206	A9F85206	A9F86306	A9F87306	A9F85306	A9F86406	A9F87406	A9F85406
A9F86210	A9F87210	A9F85210	A9F86310	A9F87310	A9F85310	A9F86410	A9F87410	A9F85410
A9F83213	A9F84213	A9F85213	A9F83313	A9F84313	A9F85313	A9F83413	A9F84413	A9F85413
A9F86216	A9F87216	A9F85216	A9F86316	A9F87316	A9F85316	A9F86416	A9F87416	A9F85416
A9F86220	A9F87220	A9F85220	A9F86320	A9F87320	A9F85320	A9F86420	A9F87420	A9F85420
A9F86225	A9F87225	A9F85225	A9F86325	A9F87325	A9F85325	A9F86425	A9F87425	A9F85425
A9F86232	A9F87232	A9F85232	A9F86332	A9F87332	A9F85332	A9F86432	A9F87432	A9F85432
A9F86240	A9F87240	A9F85240	A9F86340	A9F87340	A9F85340	A9F86440	A9F87440	A9F85440
A9F86250	A9F87250	A9F85250	A9F86350	A9F87350	A9F85350	A9F86450	A9F87450	A9F85450
A9F86263	A9F87263	A9F85263	A9F86363	A9F87363	A9F85363	A9F86463	A9F87463	A9F85463
4			6			8		
Module CA907000 and CA907001			Module CA907000 and CA907001			Module CA907000 and CA907001		

# iC60H circuit breakers (curve B, C, D)



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

- iC60H 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						Service breaking capacity (Ics)
	Voltage (Ue)					
Ph/Ph (2P, 3P, 4P)	12 to 133 V	220 to 240 V	380 to 415 V	440 V		100 % of Icu
Ph/N (1P, 1P+N)	12 to 60 V	100 to 133 V	220 to 240 V	-		
Rating (In) 0.5 to 4 A	70 kA	70 kA	70 kA	50 kA	50 kA	50 % of Icu
6 to 63 A	42 kA	30 kA	15 kA	10 kA		
Breaking capacity (Icn) according to IEC/EN 60898-1						
	Voltage (Ue)					
Ph/Ph	400 V					
Ph/N	230 V					
Rating (In) 0.5 to 63 A	10000 A					

Direct current (DC)						
Breaking capacity (Icu) according to IEC/EN 60947-2						Service breaking capacity (Ics)
	Voltage (Ue)					
Between +/-	12 to 60 V	≤ 72 V	≤ 125 V	≤ 180 V	≤ 250 V	100 % of Icu
Number of poles	1P		2P	3P	4P	
Rating (In) 1 to 63 A	20 kA	15 kA	15 kA	15 kA	15 kA	

## Catalogue numbers

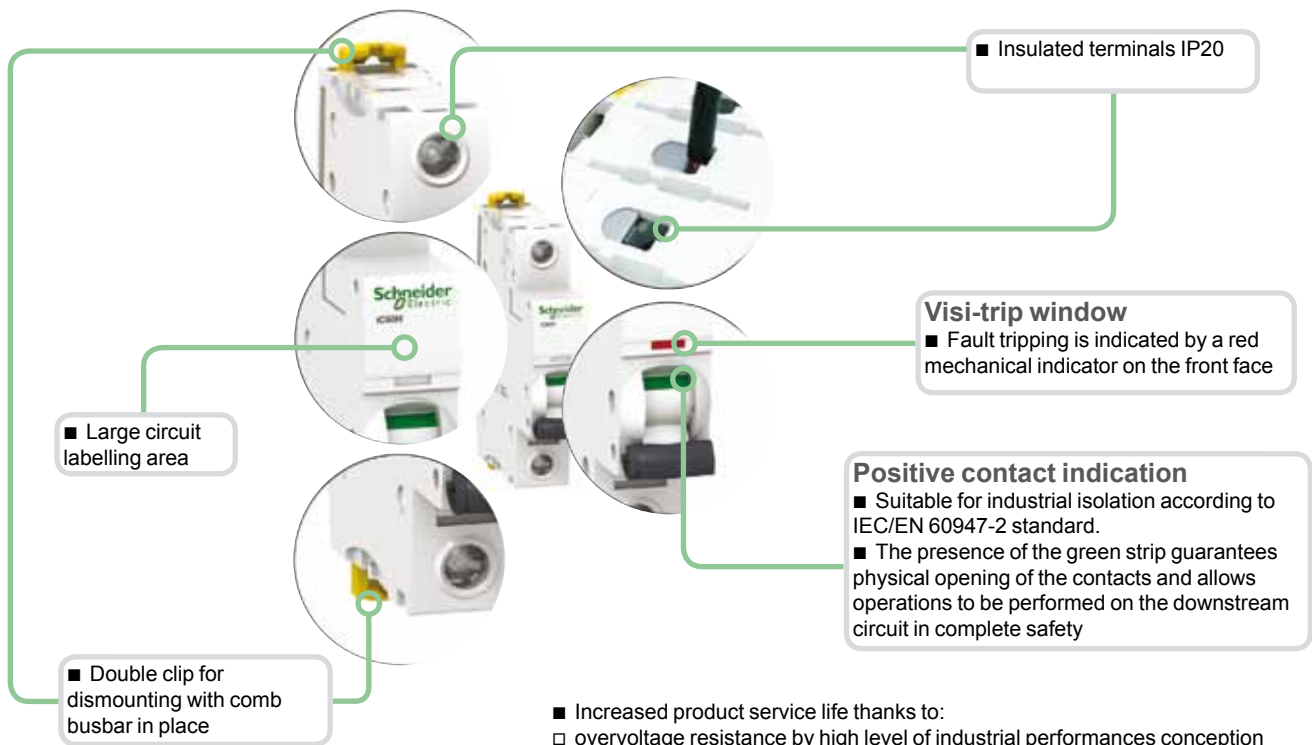
### iC60H circuit breaker

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)	<table border="1"> <thead> <tr> <th>Curve</th> <th>B</th> <th>C</th> <th>D<sup>(1)</sup></th> </tr> </thead> <tbody> <tr><td>0.5 A<sup>(1)</sup></td><td>A9F83170</td><td>A9F84170</td><td>A9F85170</td></tr> <tr><td>1 A<sup>(1)</sup></td><td>A9F83101</td><td>A9F84101</td><td>A9F85101</td></tr> <tr><td>2 A<sup>(1)</sup></td><td>A9F83102</td><td>A9F84102</td><td>A9F85102</td></tr> <tr><td>3 A<sup>(1)</sup></td><td>A9F83103</td><td>A9F84103</td><td>A9F85103</td></tr> <tr><td>4 A<sup>(1)</sup></td><td>A9F83104</td><td>A9F84104</td><td>A9F85104</td></tr> <tr><td>6 A</td><td>A9F88106</td><td>A9F89106</td><td>A9F85106</td></tr> <tr><td>10 A</td><td>A9F88110</td><td>A9F89110</td><td>A9F85110</td></tr> <tr><td>13 A<sup>(1)</sup></td><td>A9F83113</td><td>A9F84113</td><td>A9F85113</td></tr> <tr><td>16 A</td><td>A9F88116</td><td>A9F89116</td><td>A9F85116</td></tr> <tr><td>20 A</td><td>A9F88120</td><td>A9F89120</td><td>A9F85120</td></tr> <tr><td>25 A</td><td>A9F88125</td><td>A9F89125</td><td>A9F85125</td></tr> <tr><td>32 A</td><td>A9F88132</td><td>A9F89132</td><td>A9F85132</td></tr> <tr><td>40 A</td><td>A9F88140</td><td>A9F89140</td><td>A9F85140</td></tr> <tr><td>50 A</td><td>A9F88150</td><td>A9F89150</td><td>A9F85150</td></tr> <tr><td>63 A</td><td>A9F88163</td><td>A9F89163</td><td>A9F85163</td></tr> </tbody> </table>			Curve	B	C	D <sup>(1)</sup>	0.5 A <sup>(1)</sup>	A9F83170	A9F84170	A9F85170	1 A <sup>(1)</sup>	A9F83101	A9F84101	A9F85101	2 A <sup>(1)</sup>	A9F83102	A9F84102	A9F85102	3 A <sup>(1)</sup>	A9F83103	A9F84103	A9F85103	4 A <sup>(1)</sup>	A9F83104	A9F84104	A9F85104	6 A	A9F88106	A9F89106	A9F85106	10 A	A9F88110	A9F89110	A9F85110	13 A <sup>(1)</sup>	A9F83113	A9F84113	A9F85113	16 A	A9F88116	A9F89116	A9F85116	20 A	A9F88120	A9F89120	A9F85120	25 A	A9F88125	A9F89125	A9F85125	32 A	A9F88132	A9F89132	A9F85132	40 A	A9F88140	A9F89140	A9F85140	50 A	A9F88150	A9F89150	A9F85150	63 A	A9F88163	A9F89163	A9F85163	<table border="1"> <thead> <tr> <th>Curve</th> <th>B</th> <th>C</th> <th>D<sup>(1)</sup></th> </tr> </thead> <tbody> <tr><td>0.5 A<sup>(1)</sup></td><td>A9F83670</td><td>A9F84670</td><td>A9F85670</td></tr> <tr><td>1 A<sup>(1)</sup></td><td>A9F83601</td><td>A9F84601</td><td>A9F85601</td></tr> <tr><td>2 A<sup>(1)</sup></td><td>A9F83602</td><td>A9F84602</td><td>A9F85602</td></tr> <tr><td>3 A<sup>(1)</sup></td><td>A9F83603</td><td>A9F84603</td><td>A9F85603</td></tr> <tr><td>4 A<sup>(1)</sup></td><td>A9F83604</td><td>A9F84604</td><td>A9F85604</td></tr> <tr><td>6 A</td><td>A9F88606</td><td>A9F89606</td><td>A9F85606</td></tr> <tr><td>10 A</td><td>A9F88610</td><td>A9F89610</td><td>A9F85610</td></tr> <tr><td>13 A<sup>(1)</sup></td><td>A9F83613</td><td>A9F84613</td><td>A9F85613</td></tr> <tr><td>16 A</td><td>A9F88616</td><td>A9F89616</td><td>A9F85616</td></tr> <tr><td>20 A</td><td>A9F88620</td><td>A9F89620</td><td>A9F85620</td></tr> <tr><td>25 A</td><td>A9F88625</td><td>A9F89625</td><td>A9F85625</td></tr> <tr><td>32 A</td><td>A9F88632</td><td>A9F89632</td><td>A9F85632</td></tr> <tr><td>40 A</td><td>A9F88640</td><td>A9F89640</td><td>A9F85640</td></tr> <tr><td>50 A</td><td>A9F88650</td><td>A9F89650</td><td>A9F85650</td></tr> <tr><td>63 A</td><td>A9F88663</td><td>A9F89663</td><td>A9F85663</td></tr> </tbody> </table>			Curve	B	C	D <sup>(1)</sup>	0.5 A <sup>(1)</sup>	A9F83670	A9F84670	A9F85670	1 A <sup>(1)</sup>	A9F83601	A9F84601	A9F85601	2 A <sup>(1)</sup>	A9F83602	A9F84602	A9F85602	3 A <sup>(1)</sup>	A9F83603	A9F84603	A9F85603	4 A <sup>(1)</sup>	A9F83604	A9F84604	A9F85604	6 A	A9F88606	A9F89606	A9F85606	10 A	A9F88610	A9F89610	A9F85610	13 A <sup>(1)</sup>	A9F83613	A9F84613	A9F85613	16 A	A9F88616	A9F89616	A9F85616	20 A	A9F88620	A9F89620	A9F85620	25 A	A9F88625	A9F89625	A9F85625	32 A	A9F88632	A9F89632	A9F85632	40 A	A9F88640	A9F89640	A9F85640	50 A	A9F88650	A9F89650	A9F85650	63 A	A9F88663	A9F89663	A9F85663
Curve	B	C	D <sup>(1)</sup>																																																																																																																																			
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16 A	A9F88116	A9F89116	A9F85116																																																																																																																																			
20 A	A9F88120	A9F89120	A9F85120																																																																																																																																			
25 A	A9F88125	A9F89125	A9F85125																																																																																																																																			
32 A	A9F88132	A9F89132	A9F85132																																																																																																																																			
40 A	A9F88140	A9F89140	A9F85140																																																																																																																																			
50 A	A9F88150	A9F89150	A9F85150																																																																																																																																			
63 A	A9F88163	A9F89163	A9F85163																																																																																																																																			
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1 A <sup>(1)</sup>	A9F83601	A9F84601	A9F85601																																																																																																																																			
2 A <sup>(1)</sup>	A9F83602	A9F84602	A9F85602																																																																																																																																			
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63 A	A9F88663	A9F89663	A9F85663																																																																																																																																			
Width in 9-mm modules	2			4																																																																																																																																		
Accessories	Module CA907000 and CA907001			Module CA907000 and CA907001																																																																																																																																		

(1) VDE approved only.

# iC60H circuit breakers (curve B, C, D) (cont.)

PB104495-40



- Increased product service life thanks to:
  - overvoltage resistance by high level of industrial performances conception (pollution degree, rated impulse withstand voltage and insulation voltage),
  - high performance limitation (see limitation curves),
  - fast closing independent of the speed of actuation of the toggle.
- Remote indication, open/closed/tripped, by optional auxiliary contacts.
- Top or bottom electrical feeding.

2P			3P			4P		
E-46094			E-46095			E-46097		
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 <sup>(1)</sup>	B	C	D <sup>(1)</sup>	B	C	D <sup>(1)</sup>
A9F83270	A9F84270	A9F85270	A9F83370	A9F84370	A9F85370	A9F83470	A9F84470	A9F85470
A9F83201	A9F84201	A9F85201	A9F83301	A9F84301	A9F85301	A9F83401	A9F84401	A9F85401
A9F83202	A9F84202	A9F85202	A9F83302	A9F84302	A9F85302	A9F83402	A9F84402	A9F85402
A9F83203	A9F84203	A9F85203	A9F83303	A9F84303	A9F85303	A9F83403	A9F84403	A9F85403
A9F83204	A9F84204	A9F85204	A9F83304	A9F84304	A9F85304	A9F83404	A9F84404	A9F85404
A9F88206	A9F89206	A9F85206	A9F88306	A9F89306	A9F85306	A9F88406	A9F89406	A9F85406
A9F88210	A9F89210	A9F85210	A9F88310	A9F89310	A9F85310	A9F88410	A9F89410	A9F85410
A9F83213	A9F84213	A9F85213	A9F83313	A9F84313	A9F85313	A9F83413	A9F84413	A9F85413
A9F88216	A9F89216	A9F85216	A9F88316	A9F89316	A9F85316	A9F88416	A9F89416	A9F85416
A9F88220	A9F89220	A9F85220	A9F88320	A9F89320	A9F85320	A9F88420	A9F89420	A9F85420
A9F88225	A9F89225	A9F85225	A9F88325	A9F89325	A9F85325	A9F88425	A9F89425	A9F85425
A9F88232	A9F89232	A9F85232	A9F88332	A9F89332	A9F85332	A9F88432	A9F89432	A9F85432
A9F88240	A9F89240	A9F85240	A9F88340	A9F89340	A9F85340	A9F88440	A9F89440	A9F85440
A9F88250	A9F89250	A9F85250	A9F88350	A9F89350	A9F85350	A9F88450	A9F89450	A9F85450
A9F88263	A9F89263	A9F85263	A9F88363	A9F89363	A9F85363	A9F88463	A9F89463	A9F85463
4			6			8		
Module CA907000 and CA907001			Module CA907000 and CA907001			Module CA907000 and CA907001		

# iC60H circuit breakers (curve B, C, D)



Country approval pictograms

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

- iC60H 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

Ph/Ph (2P, 3P, 4P) Ph/N (1P, 1P+N)	Voltage (Ue)				Service breaking capacity (Ics)
	12 to 133 V	220 to 240 V	380 to 415 V	440 V	
Rating (In) 0.5 to 4 A	70 kA	70 kA	70 kA	50 kA	100 % of Icu
6 to 63 A	42 kA	30 kA	15 kA	10 kA	50 % of Icu

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

Ph/Ph Ph/N	Voltage (Ue)	
	400 V	230 V
Rating (In) 0.5 to 63 A	10000 A	

### Direct current (DC)

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

Between +/-	Voltage (Ue)					Service breaking capacity (Ics)
	12 to 60 V	≤ 72 V	≤ 125 V	≤ 180 V	≤ 250 V	
Number of poles	1P		2P	3P	4P	
Rating (In) 1 to 63 A	20 kA	15 kA	15 kA	15 kA	15 kA	100 % of Icu

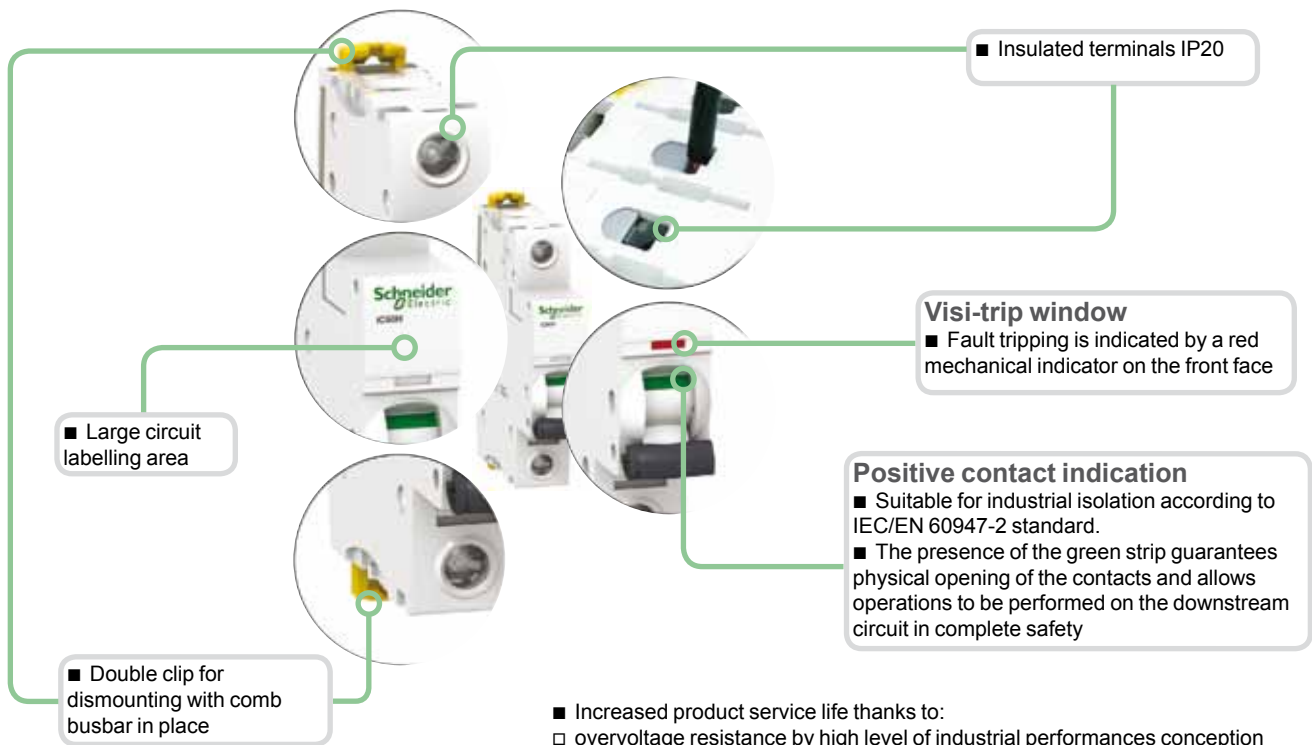
## Catalogue numbers

### iC60H 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	A9F83170	A9F84170	A9F85170	A9F83670	A9F84670	A9F85670
1 A	A9F83101	A9F84101	A9F85101	A9F83601	A9F84601	A9F85601
2 A	A9F83102	A9F84102	A9F85102	A9F83602	A9F84602	A9F85602
3 A	A9F83103	A9F84103	A9F85103	A9F83603	A9F84603	A9F85603
4 A	A9F83104	A9F84104	A9F85104	A9F83604	A9F84604	A9F85604
6 A	A9F83106	A9F84106	A9F85106	A9F83606	A9F84606	A9F85606
10 A	A9F83110	A9F84110	A9F85110	A9F83610	A9F84610	A9F85610
13 A	A9F83113	A9F84113	A9F85113	A9F83613	A9F84613	A9F85613
16 A	A9F83116	A9F84116	A9F85116	A9F83616	A9F84616	A9F85616
20 A	A9F83120	A9F84120	A9F85120	A9F83620	A9F84620	A9F85620
25 A	A9F83125	A9F84125	A9F85125	A9F83625	A9F84625	A9F85625
32 A	A9F83132	A9F84132	A9F85132	A9F83632	A9F84632	A9F85632
40 A	A9F83140	A9F84140	A9F85140	A9F83640	A9F84640	A9F85640
50 A	A9F83150	A9F84150	A9F85150	A9F83650	A9F84650	A9F85650
63 A	A9F83163	A9F84163	A9F85163	A9F83663	A9F84663	A9F85663
Width in 9-mm modules	2			4		
Accessories	Module CA907000 and CA907001			Module CA907000 and CA907001		

# iC60H circuit breakers (curve B, C, D) (cont.)

PB104495-40

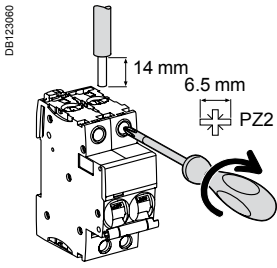


- Increased product service life thanks to:
  - overvoltage resistance by high level of industrial performances conception (pollution degree, rated impulse withstand voltage and insulation voltage),
  - high performance limitation (see limitation curves),
  - fast closing independent of the speed of actuation of the toggle.
- Remote indication, open/closed/tripped, by optional auxiliary contacts.
- Top or bottom electrical feeding.

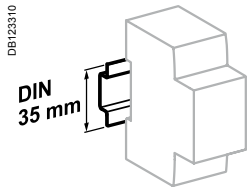
2P				3P			4P			
E46004				E46006			E46007			
Remote tripping and indication, module CA907000 and CA907002				Remote tripping and indication, module CA907000 and CA907002			Remote tripping and indication, module CA907000 and CA907002			
Vigi iC60 add-on residual current device, module CA902005				Vigi 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
A9F83270	A9F84270	A9F85270	A9F83370	A9F84370	A9F85370	A9F83470	A9F84470	A9F85470		
A9F83201	A9F84201	A9F85201	A9F83301	A9F84301	A9F85301	A9F83401	A9F84401	A9F85401		
A9F83202	A9F84202	A9F85202	A9F83302	A9F84302	A9F85302	A9F83402	A9F84402	A9F85402		
A9F83203	A9F84203	A9F85203	A9F83303	A9F84303	A9F85303	A9F83403	A9F84403	A9F85403		
A9F83204	A9F84204	A9F85204	A9F83304	A9F84304	A9F85304	A9F83404	A9F84404	A9F85404		
A9F83206	A9F84206	A9F85206	A9F83306	A9F84306	A9F85306	A9F83406	A9F84406	A9F85406		
A9F83210	A9F84210	A9F85210	A9F83310	A9F84310	A9F85310	A9F83410	A9F84410	A9F85410		
A9F83213	A9F84213	A9F85213	A9F83313	A9F84313	A9F85313	A9F83413	A9F84413	A9F85413		
A9F83216	A9F84216	A9F85216	A9F83316	A9F84316	A9F85316	A9F83416	A9F84416	A9F85416		
A9F83220	A9F84220	A9F85220	A9F83320	A9F84320	A9F85320	A9F83420	A9F84420	A9F85420		
A9F83225	A9F84225	A9F85225	A9F83325	A9F84325	A9F85325	A9F83425	A9F84425	A9F85425		
A9F83232	A9F84232	A9F85232	A9F83332	A9F84332	A9F85332	A9F83432	A9F84432	A9F85432		
A9F83240	A9F84240	A9F85240	A9F83340	A9F84340	A9F85340	A9F83440	A9F84440	A9F85440		
A9F83250	A9F84250	A9F85250	A9F83350	A9F84350	A9F85350	A9F83450	A9F84450	A9F85450		
A9F83263	A9F84263	A9F85263	A9F83363	A9F84363	A9F85363	A9F83463	A9F84463	A9F85463		
4				6			8			
Module CA907000 and CA907001				Module CA907000 and CA907001			Module CA907000 and CA907001			

# iC60H circuit breakers (curve B, C, D) (cont.)

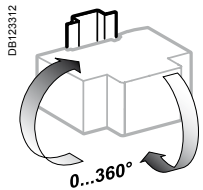
## Connection



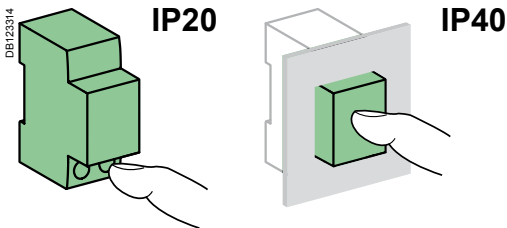
Rating	Tightening torque	Without accessory		With accessories		
		Rigid	Flexible or ferrule	50 mm <sup>2</sup> Al terminal	Screw-on connection for ring terminal	Multi-cables terminal
0.5 to 25 A	2 N.m	DB122945	DB122946	DB122945	DB118789	DB118787
32 to 63 A	3.5 N.m	1 to 25 mm <sup>2</sup>	1 to 16 mm <sup>2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



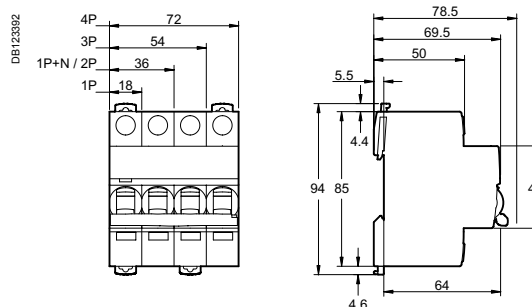
## Technical data

Main characteristics		
According to IEC/EN 60947-2		
Insulation voltage (U <sub>i</sub> )		500 V AC
Pollution degree		3
Rated impulse withstand voltage (U <sub>imp</sub> )		6 kV
Thermal tripping	Reference temperature	50 °C
	Temperature derating	See module CA908007
Magnetic tripping	B curve	4 I <sub>n</sub> ± 20 %
	C curve	8 I <sub>n</sub> ± 20 %
	D curve	12 I <sub>n</sub> ± 20 %
Utilization category		A
According to IEC/EN 60898-1		
Limitation class		3
Rated making and breaking capacity of an individual pole (I <sub>cn1</sub> )		I <sub>cn1</sub> = I <sub>cn</sub>
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)

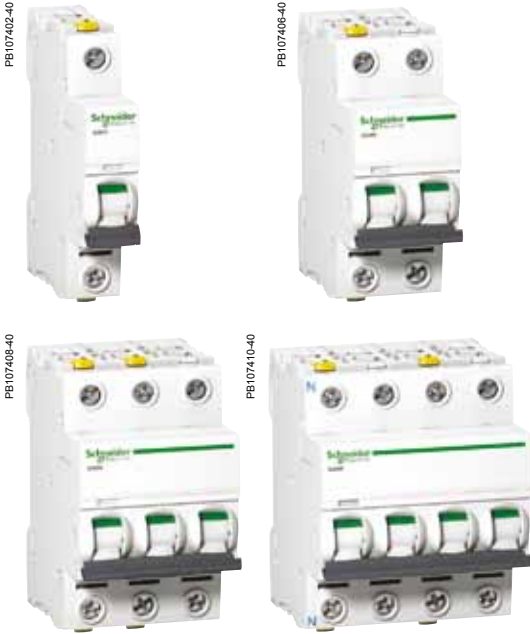
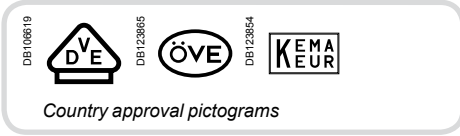
## Weight (g)

Circuit-breaker	
Type	iC60H
1P	125
2P	250
3P	375
4P	500

## Dimensions (mm)



# iC60H double terminals circuit breakers (curve B, C, D)



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

- iC60H double tunnel terminals 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)
	Ph/Ph (2P, 3P, 4P)	12 to 133 V	220 to 240 V	380 to 415 V 440 V	
Ph/N (1P, 1P+N)	12 to 60 V	100 to 133 V	220 to 240 V	-	
Rating (In)	0.5 to 4 A	70 kA	70 kA	70 kA	50 kA
	6 to 40 A	42 kA	30 kA	15 kA	10 kA
	50/63 A	42 kA	30 kA	15 kA	10 kA

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

Breaking capacity (Icn) according to IEC/EN 60898-1	Voltage (Ue)	
	Ph/Ph	400 V
Ph/N	230 V	
Rating (In)	0.5 to 63 A	
	10000 A	

### Direct current (DC)

Breaking capacity (Icu) according to IEC/EN 60947-2	Voltage (Ue)					Service breaking capacity (Ics)
	Between +/-	12 to 60 V	≤ 72 V	≤ 125 V	≤ 180 V ≤ 250 V	
Number of poles	1P			2P	3P	4P
Rating (In)	1 to 63 A	20 kA	15 kA	15 kA	15 kA	15 kA

## Catalogue numbers

### iC60H double terminals circuit breaker

Type	1P	1P+N	2P			
Auxiliaries	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	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			
Rating (In)	Curve		Curve			
	B	C	D	B	C	D
0.5 A	-	A9F07170	A9F08170	-	A9F07670	A9F08270
1 A	-	A9F07101	A9F08101	-	A9F07601	A9F08201
2 A	-	A9F07102	A9F08102	-	A9F07602	A9F08202
3 A	-	A9F07103	A9F08103	-	A9F07603	A9F08203
4 A	-	A9F07104	A9F08104	-	A9F07604	A9F08204
6 A	A9F06106	A9F07106	A9F08106	A9F06606	A9F07606	A9F06206
10 A	A9F06110	A9F07110	A9F08110	A9F06610	A9F07610	A9F06210
13 A	A9F06113	A9F07113	A9F08113	A9F06613	A9F07613	A9F06213
16 A	A9F06116	A9F07116	A9F08116	A9F06616	A9F07616	A9F06216
20 A	A9F06120	A9F07120	A9F08120	A9F06620	A9F07620	A9F06220
25 A	A9F06125	A9F07125	A9F08125	A9F06625	A9F07625	A9F06225
32 A	A9F06132	A9F07132	A9F08132	A9F06632	A9F07632	A9F06232
40 A	A9F06140	A9F07140	A9F08140	A9F06640	A9F07640	A9F06240
50 A	A9F06150	A9F07150	A9F08150	A9F06650	A9F07650	A9F06250
63 A	A9F06163	A9F07163	A9F08163	A9F06663	A9F07663	A9F06263
Width in 9-mm modules	2		4		4	
Accessories	Modules CA907000 and CA907001		Modules CA907000 and CA907001		Modules CA907000 and CA907001	



# iC60H double terminals circuit breakers (curve B, C, D) (cont.)

**Insulated terminals IP20**

**Double terminals**  
 ■ For top or bottom connections:  
 □ by cable,  
 □ by comb busbar

**Large circuit labelling area**

**Double clip locking** allowing tool-free removal, front panel side, with the comb busbar in position

**Visi-trip window**  
 ■ Fault tripping is indicated by a red mechanical indicator on the front face

**Positive contact indication**  
 ■ Suitable for industrial isolation according to IEC/EN 60947-2 standard  
 ■ The presence of the green strip guarantees physical opening of the contacts and allows operations to be performed on the downstream circuit in complete safety

1 Pull  
2 Pull  
3 Pull

- Increased product service life thanks to:
  - overvoltage resistance by high level of industrial performances conception (pollution degree, rated impulse withstand voltage and insulation voltage),
  - high performance limitation (see limitation curves),
  - fast closing independent of the speed of actuation of the toggle.
- Remote indication, open/closed/tripped, by optional auxiliary contacts.
- Top or bottom electrical feeding.

3P				4P			
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			
<b>Curve</b>				<b>Curve</b>			
<b>B</b>	<b>C</b>	<b>D</b>	<b>B</b>	<b>C</b>	<b>D</b>		
-	A9F07370	A9F08370	-	A9F07470	A9F08470		
-	A9F07301	A9F08301	-	A9F07401	A9F08401		
-	A9F07302	A9F08302	-	A9F07402	A9F08402		
-	A9F07303	A9F08303	-	A9F07403	A9F08403		
-	A9F07304	A9F08304	-	A9F07404	A9F08404		
A9F06306	A9F07306	A9F08306	A9F06406	A9F07406	A9F08406		
A9F06310	A9F07310	A9F08310	A9F06410	A9F07410	A9F08410		
A9F06313	A9F07313	A9F08313	A9F06413	A9F07413	A9F08413		
A9F06316	A9F07316	A9F08316	A9F06416	A9F07416	A9F08416		
A9F06320	A9F07320	A9F08320	A9F06420	A9F07420	A9F08420		
A9F06325	A9F07325	A9F08325	A9F06425	A9F07425	A9F08425		
A9F06332	A9F07332	A9F08332	A9F06432	A9F07432	A9F08432		
A9F06340	A9F07340	A9F08340	A9F06440	A9F07440	A9F08440		
A9F06350	A9F07350	A9F08350	A9F06450	A9F07450	A9F08450		
A9F06363	A9F07363	A9F08363	A9F06463	A9F07463	A9F08463		
6			8				
Modules CA907000 and CA907001				Modules CA907000 and CA907001			

# iC60H double terminals circuit breakers (curve B, C, D) (cont.)

## Connection between double terminal circuit breakers

With comb busbar at the back/cables at the front

Without comb busbar at the back/cables at the front

DB404815



		Back	Front	
Rating	Tightening torque	Comb busbar	Copper cables	
		Thickness of the teeth	Rigid	Flexible or ferrule
0.5 to 25 A	2 N.m	1.5 mm	1 to 25 mm <sup>2</sup>	1 to 16 mm <sup>2</sup>
32 to 63 A	3.5 N.m	1.5 mm	1 to 25 mm <sup>2</sup>	1 to 25 mm <sup>2</sup>

## Between double terminal circuit breakers and single-terminal circuit breakers

Cables at the back/comb busbar at the front

DB404817

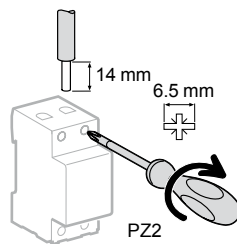


		Back	Front	
Rating	Tightening torque	Copper cables		Thickness of the teeth
		Rigid	Flexible or ferrule	
0.5 to 25 A	2 N.m	1 to 16 mm <sup>2</sup>	1 to 10 mm <sup>2</sup>	1.5 mm
32 to 63 A	3.5 N.m	1 to 16 mm <sup>2</sup>	1 to 10 mm <sup>2</sup>	1.5 mm

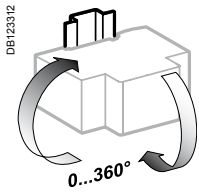
- Connection by comb busbar or by cable (according to EN 50027).

## Connection

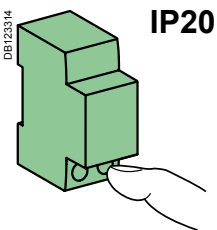
DB123847



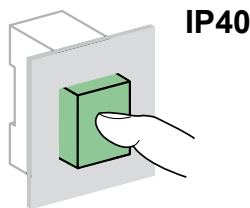
		With accessories		
Rating	50 mm <sup>2</sup> AI terminal	Screw-on connection for ring terminal	Multi-cables terminal	
			Rigid cables	Flexible cables
0.5 to 25 A	-	Ø 5 mm	-	-
32 to 63 A	50 mm <sup>2</sup>		3 x 16 mm <sup>2</sup>	3 x 10 mm <sup>2</sup>



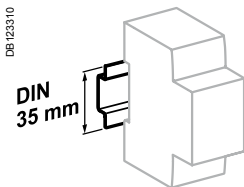
Indifferent position of installation.



IP20



IP40

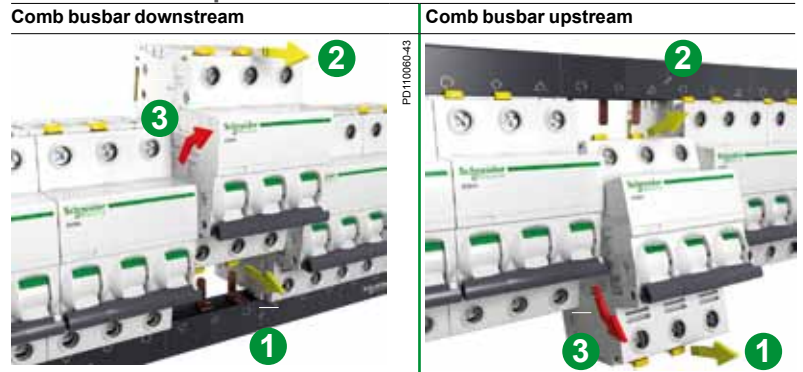


Clip on DIN rail 35 mm.

## Technical data

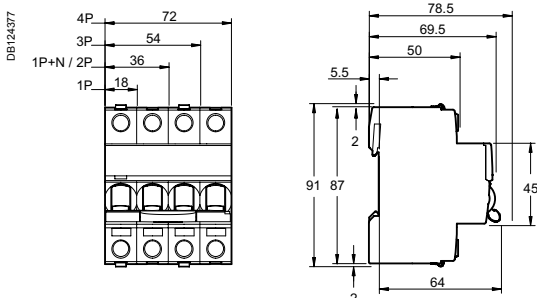
Main characteristics		
According to IEC/EN 60947-2		
Insulation voltage (Ui)		500 V AC
Pollution degree		3
Rated impulse withstand voltage (Uimp)		6 kV
Thermal tripping	Reference temperature	50°C
	Temperature derating	See module CA908007
Magnetic tripping	B curve	4 In ± 20 %
	C curve	8 In ± 20 %
	D curve	12 In ± 20 %
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		
Degree of protection (IEC 60529)	Device only	IP20
	Device in modular enclosure	IP40 Insulation classe II
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)

## Disassembly double terminals iC60 circuit breaker with the comb busbar in position



- 1- Pull lower "clip locking"
- 2- Pull upper "clip locking"
- 3- Remove the circuit breaker

## Dimensions (mm)



## Weight (g)

Circuit-breaker	
Type	iC60H
1P	125
2P (1P+N)	250
3P	375
4P	500

# iC60L circuit breakers (curve B, C, K, Z)



IEC/EN 60947-2  
IEC/EN 60898-1 up to 40 A

- iC60L 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						Service breaking capacity (Ics)
		Voltage (Ue)				
Ph/Ph (2P, 3P, 4P)		12 to 133 V	220 to 240 V	380 to 415 V	440 V	100 % of Icu
Ph/N (1P)		12 to 60 V	100 to 133 V	220 to 240 V	-	
Rating (In)	0.5 to 4 A	100 kA	100 kA	100 kA	70 kA	100 % of Icu
	6 to 25 A	70 kA	50 kA	25 kA	20 kA	50 % of Icu <sup>(1)</sup>
	32 / 40 A	70 kA	36 kA	20 kA	15 kA	50 % of Icu
	50 / 63 A	70 kA	30 kA	15 kA	10 kA	50 % of Icu

Breaking capacity (Icn) according to IEC/EN 60898-1	
Voltage (Ue)	
Ph/Ph	400 V
Ph/N	230 V
Rating (In)	0.5 to 40 A 15000 A

### Direct current (DC)

Breaking capacity (Icu) according to IEC/EN 60947-2						Service breaking capacity (Ics)	
		Voltage (Ue)					
Between +/-		12 to 60 V	≤ 72 V	≤ 125 V	≤ 180 V	≤ 250 V	100 % of Icu
Number of poles		1P	2P	3P	4P		
Rating (In)	1 to 63 A	25 kA	20 kA	20 kA	20 kA	20 kA	

## Catalogue numbers

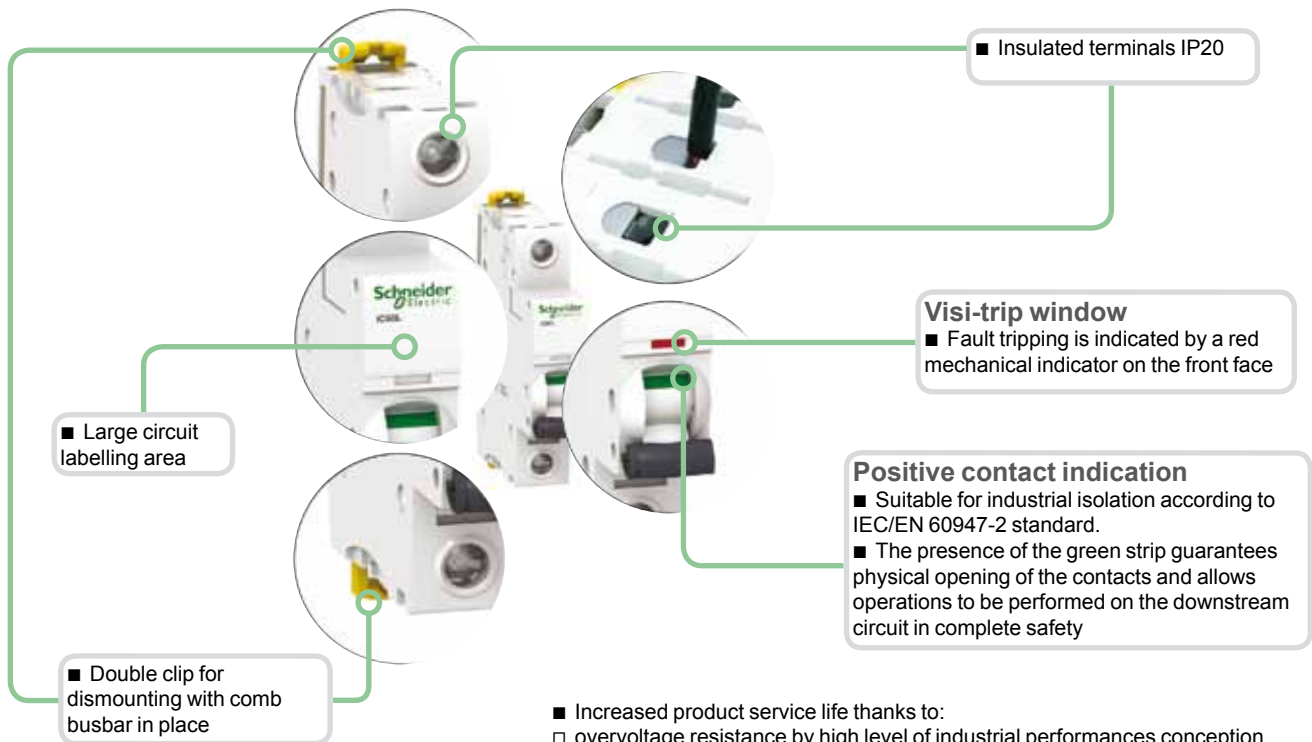
### iC60L circuit breaker

Type	1P	2P						
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			
Quality label (2)	B	C	K	Z	B	C	K	Z
0.5 A	A9F93170	A9F94170	A9F95170	A9F92170	A9F93270	A9F94270	A9F95270	A9F92270
1 A	A9F93101	A9F94101	A9F95101	A9F92101	A9F93201	A9F94201	A9F95201	A9F92201
1.6 A	-	-	A9F95172	A9F92172	-	-	A9F95272	A9F92272
2 A	A9F93102	A9F94102	A9F95102	A9F92102	A9F93202	A9F94202	A9F95202	A9F92202
3 A	A9F93103	A9F94103	A9F95103	A9F92103	A9F93203	A9F94203	A9F95203	A9F92203
4 A	A9F93104	A9F94104	A9F95104	A9F92104	A9F93204	A9F94204	A9F95204	A9F92204
6 A	A9F93106	A9F94106	A9F95106	A9F92106	A9F93206	A9F94206	A9F95206	A9F92206
10 A	A9F93110	A9F94110	A9F95110	A9F92110	A9F93210	A9F94210	A9F95210	A9F92210
16 A	A9F93116	A9F94116	A9F95116	A9F92116	A9F93216	A9F94216	A9F95216	A9F92216
20 A	A9F93120	A9F94120	A9F95120	A9F92120	A9F93220	A9F94220	A9F95220	A9F92220
25 A	A9F93125	A9F94125	A9F95125	A9F92125	A9F93225	A9F94225	A9F95225	A9F92225
32 A	A9F93132	A9F94132	A9F95132	A9F92132	A9F93232	A9F94232	A9F95232	A9F92232
40 A	A9F93140	A9F94140	A9F95140	A9F92140	A9F93240	A9F94240	A9F95240	A9F92240
50 A	A9F93150	A9F94150	A9F95150 <sup>(3)</sup>	A9F92150	A9F93250	A9F94250	A9F95250	A9F92250
63 A	A9F93163	A9F94163	A9F95163 <sup>(3)</sup>	A9F92163	A9F93263	A9F94263	A9F95263	A9F92263
Width in 9-mm modules	2				4			
Accessories	Module CA907000 and CA907001				Module CA907000 and CA907001			

(1) 100 % of Icu for ratings 6 to 25 A under Ue 100 to 133 V AC Ph/Ph and Ue 12 to 60 V AC Ph/N.  
 (2) Information to be provided by the country.  
 (3) Without approval.

# iC60L circuit breakers (curve B, C, K, Z) (cont.)

PB104496-40

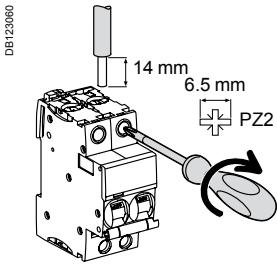


- Increased product service life thanks to:
  - overvoltage resistance by high level of industrial performances conception (pollution degree, rated impulse withstand voltage and insulation voltage),
  - high performance limitation (see limitation curves),
  - fast closing independent of the speed of actuation of the toggle.
- Remote indication, open/closed/tripped, by optional auxiliary contacts.
- Top or bottom electrical feeding.

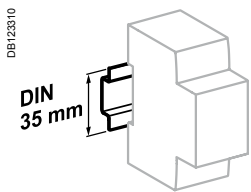
3P				4P			
E-6095				E-6097			
Remote tripping and indication, module CA907000 and CA907002				Remote tripping and indication, module CA907000 and CA907002			
Vigi iC60 add-on residual current device, module CA902005				Vigi iC60 add-on residual current device, module CA902005			
Curve		Curve		Curve		Curve	
B	C	K	Z	B	C	K	Z
A9F93370	A9F94370	A9F95370	A9F92370	A9F93470	A9F94470	A9F95470	A9F92470
A9F93301	A9F94301	A9F95301	A9F92301	A9F93401	A9F94401	A9F95401	A9F92401
-	-	A9F95372	A9F92372	-	-	A9F95472	A9F92472
A9F93302	A9F94302	A9F95302	A9F92302	A9F93402	A9F94402	A9F95402	A9F92402
A9F93303	A9F94303	A9F95303	A9F92303	A9F93403	A9F94403	A9F95403	A9F92403
A9F93304	A9F94304	A9F95304	A9F92304	A9F93404	A9F94404	A9F95404	A9F92404
A9F93306	A9F94306	A9F95306	A9F92306	A9F93406	A9F94406	A9F95406	A9F92406
A9F93310	A9F94310	A9F95310	A9F92310	A9F93410	A9F94410	A9F95410	A9F92410
A9F93316	A9F94316	A9F95316	A9F92316	A9F93416	A9F94416	A9F95416	A9F92416
A9F93320	A9F94320	A9F95320	A9F92320	A9F93420	A9F94420	A9F95420	A9F92420
A9F93325	A9F94325	A9F95325	A9F92325	A9F93425	A9F94425	A9F95425	A9F92425
A9F93332	A9F94332	A9F95332	A9F92332	A9F93432	A9F94432	A9F95432	A9F92432
A9F93340	A9F94340	A9F95340	A9F92340	A9F93440	A9F94440	A9F95440	A9F92440
A9F93350	A9F94350	A9F95350	A9F92350	A9F93450	A9F94450	A9F95450	A9F92450
A9F93363	A9F94363	A9F95363	A9F92363	A9F93463	A9F94463	A9F95463	A9F92463
4				6			
Module CA907000 and CA907001				Module CA907000 and CA907001			

# iC60L circuit breakers (curve B, C, K, Z) (cont.)

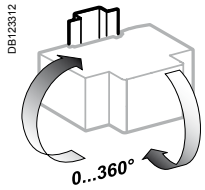
## Connection



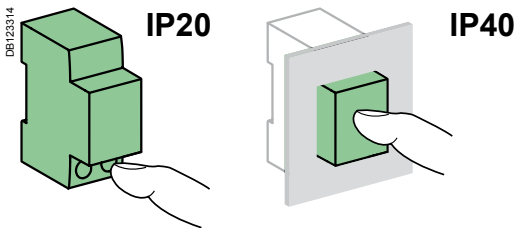
Rating	Tightening torque	Without accessory		With accessories		
		Rigid	Flexible or ferrule	50 mm <sup>2</sup> Al terminal	Screw-on connection for ring terminal	Multi-cables terminal
0.5 to 25 A	2 N.m	1 to 25 mm <sup>2</sup>	1 to 16 mm <sup>2</sup>	-	Ø 5 mm	-
32 to 63 A	3.5 N.m	1 to 35 mm <sup>2</sup>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



Clip on DIN rail 35 mm.



Indifferent position of installation.



## Technical data

### Main characteristics

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

Insulation voltage (U <sub>i</sub> )	500 V AC	
Pollution degree	3	
Rated impulse withstand voltage (U <sub>imp</sub> )	6 kV	
Thermal tripping	Reference temperature	50 °C
	Temperature derating	See module CA908007
Magnetic tripping	B curve	4 I <sub>n</sub> ± 20 %
	C curve	8 I <sub>n</sub> ± 20 %
	K curve	12 I <sub>n</sub> ± 20 %
	Z curve	3 I <sub>n</sub> ± 20 %
Utilization category	A	

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

Rated making and breaking capacity of an individual pole (I <sub>cn1</sub> )	I <sub>cn1</sub> = I <sub>cn</sub>	
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### 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
		Insulation classe II
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	iC60L
1P	125
2P	250
3P	375
4P	500

## Dimensions (mm)

