iK60N circuit breakers (curve C)

DB406121

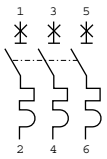
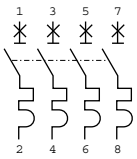
Country approval pictogram

IEC/EN 60898-1

iK60N circuit breakers are circuit breakers which combine the following functions:
- circuit protection against short-circuit currents,
- circuit protection against overload currents,
- disconnection, opening and closing.

iK60N circuit breaker 50/60 Hz		
Breaking capacity in short circuit (Icn) as per IEC/EN 60898-1		**Service breaking capacity (Ics)**
Ph/Ph	**400 V**	100 % of Icn
Ph/N	**230 V**	
Rating (In) 6 to 63 A	6000 A	

Catalogue numbers

iK60N circuit breakers				
Type	**1P**	**2P**	**3P**	**4P**
				
Auxiliaries	**Without auxiliaries**			
Vigi iC60	**Without Vigi iC60**			
Rating (In)	**Curve C**	**Curve C**	**Curve C**	**Curve C**
1 A	**A9K24101**	-	-	-
2 A	**A9K24102**	-	-	-
3 A	**A9K24103**	-	-	-
4 A	**A9K24104**	-	-	-
6 A	**A9K27106**	**A9K27206**	**A9K24306**	**A9K24406**
10 A	**A9K27110**	**A9K27210**	**A9K24310**	**A9K24410**
16 A	**A9K27116**	**A9K27216**	**A9K24316**	**A9K24416**
20 A	**A9K27120**	**A9K27220**	**A9K24320**	**A9K24420**
25 A	**A9K27125**	**A9K27225**	**A9K24325**	**A9K24425**
32 A	**A9K27132**	**A9K27232**	**A9K24332**	**A9K24432**
40 A	**A9K24140**	**A9K24240**	**A9K24340**	**A9K24440**
Operating frequency	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
Width in 9-mm modules	2	4	6	8
Accessories	**Padlocking device cat. no. A9A26970**			

iK60N circuit breakers (curve C) (cont.)

b Double clip for dismounting with comb busbar in place

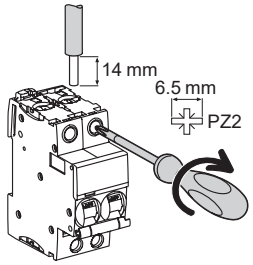
b Large circuit labelling area

b Padlocking device

b Top or bottom electrical feeding.

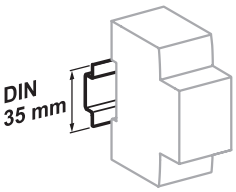
Connection

DB123060

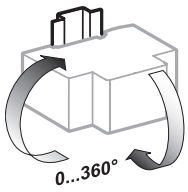


Type	Rating	Tightening torque	Copper cables	
			Rigid	Flexible or with ferrule
				
C curve	1 to 32 A	2 N.m	1 to 25 mm²	1 to 16 mm²
	40 to 63 A	3.5 N.m	1 to 35 mm²	1 to 25 mm²

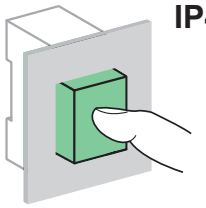
iK60N circuit breakers (curve C) (cont.)



Clip on DIN rail 35 mm.



Position d'installation indifférente.



IP40

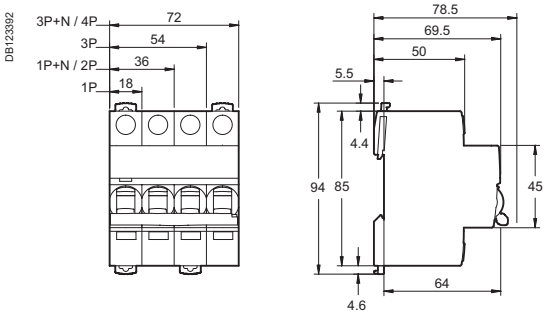
Technical data

Main characteristics		
According to IEC/EN 60898-1		
Insulation voltage (Ui)		440 V AC
Pollution degree		2
Rated impulse withstand voltage (Uimp)		4 kV
Thermal tripping	Reference temperature	30°C
	Temperature derating	See module CA908007
Magnetic tripping	C curve	5 to 10 In
Limitation class		3
Rated making and breaking capacity of an individual pole (Icn1)		Icn1 = Icn
Additional characteristics		
Degree of protection (IEC 60529)	Device in modular enclosure	IP40 Insulation class II
Endurance (O-C)	Electrical	10,000 cycles
	Mechanical	20,000 cycles
Overvoltage category (IEC 60364)		III
Operating temperature		-25°C to +60°C
Storage temperature		-40°C to +85°C

Weight (g)

Circuit-breaker	
Type	**iK60N**
1P	100
2P (1P+N)	200
3P	300
4P (3P+N)	400

Dimensions (mm)



iC60N circuit breakers (curve B, C, D)

DB116619

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						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	
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)				
Ph/Ph		400 V				
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							Service breaking capacity (Ics)
		Voltage (Ue)					
Between +/-		12 to 60 V	<= 72 V	<= 125 V	<= 180 V	<= 250 V	
Number of poles		1P		2P	3P	4P	
Rating (In)	0.5 to 63 A	15 kA	10 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.)

b Insulated terminals IP20

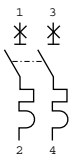
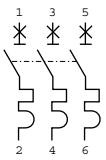
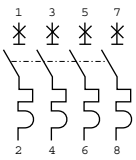
Visi-trip window
b Fault tripping is indicated by a red mechanical indicator on the front face

b Large circuit labelling area

Positive contact indication
b Suitable for industrial isolation according to IEC/EN 60947-2 standard.
b 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

b Double clip for dismounting with comb busbar in place

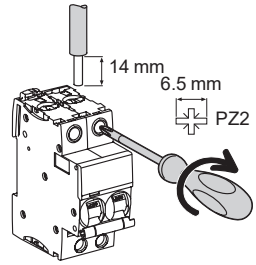
b Increased product service life thanks to:
v overvoltage resistance by high level of industrial performances conception (pollution degree, rated impulse withstand voltage and insulation voltage),
v high performance limitation (see limitation curves),
v fast closing independent of the speed of actuation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

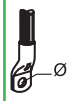
	2P			3P			4P		
									
	Remote tripping and indication, module CA907000 and CA907002			Remote tripping and indication, module CA907000 and CA907002			Remote tripping and indication, module CA907000 and CA907002		
	Vigi iC60 add-on residual current device, module CA902005			Vigi iC60 add-on residual 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		

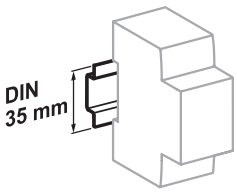
iC60N circuit breakers (curve B, C, D) (cont.)

Connection

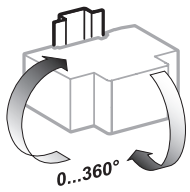
DB123060



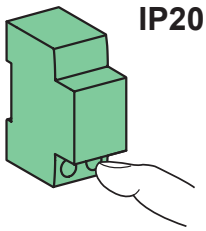
Rating	Tightening torque	Without accessory: Copper cables – Rigid	Without accessory: Copper cables – Flexible or with ferrule	With accessories: 50 mm² Al terminal	With accessories: Screw-on connection for ring terminal	With accessories: Multi-cables terminal – Rigid cables	With accessories: Multi-cables terminal – Flexible cables
							
0.5 to 25 A	2 N.m	1 to 25 mm²	1 to 16 mm²	-	Ø 5 mm	-	-
32 to 63 A	3.5 N.m	1 to 35 mm²	1 to 25 mm²	50 mm²		3 x 16 mm²	3 x 10 mm²

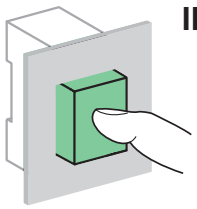


Clip on DIN rail 35 mm.



Indifferent position of installation.





Technical data

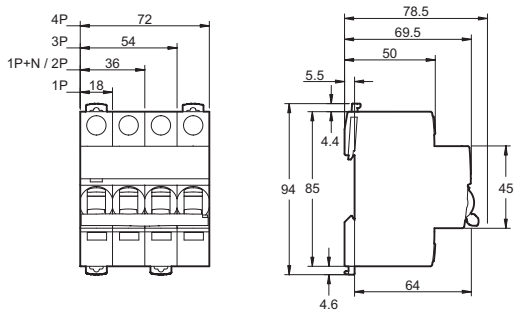
Main characteristics		
According to IEC/EN 60947-2		
Insulation voltage (Ui)		500 V AC
Pollution degree		3
Rated impulse withstand voltage (Uimp)		6 kV
Thermal tripping	Reference temperature	50 °C
	Temperature derating	See module CA908007
Magnetic tripping	B curve	4 In ± 20 %
	C curve	8 In ± 20 %
	D 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		
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 class 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	**iC60N**
1P	125
2P	250
3P	375
4P	500

Dimensions (mm)

DB123392



Low voltage

Acti 9

the efficiency you deserve

Catalogue
09/2013

Schneider Electric

Acti 9

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ARA automatic reclosers for iC60 and iID	CA904010E	370

Electrical circuit control

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iPB pushbuttons	CA904003E	375
iSSW linear switches	CA904004E	376
DIN rail selector switches iCMB, iCMD, iCME, iCMC, iCMV and iCMA	CA904024E	378
Button holders	CA907007E	381

Electrical control

Reflex iC60 integrated control circuit breakers	CA904012E	382
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iTL impulse relays	CA904008E	404
TL impulse relays (Clario, Librio, Prodis)	CA904020E	417
CT contactors (Clario, Librio, Prodis)	CA904021E	423
TL+ impulse relays	CA904018E	429
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Indicators

iIL indicator lights	CA904006E	433
iSO bells and iRO buzzers	CA904014E	434
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Lighting, time and energy management

Relays iRTA, iRTB, iRTC, iRTH, iRTL, iRTMF, iRBN, iRTBT, iRLI, iERL, iRCP, iRCI, iRCU, iRCC	CA904022E	438
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Motor circuit protection and contactor combination	CA908022E	653

Photovoltaic

Examples of installation architectures	CA908035E	654

Acti 9 Smartlink

Acti 9 Smartlink installation	CA908033E	660

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Response time of medium-sensitivity residual current devices	CA908018E	667
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Combination electrical auxiliaries for iC60, iID, iSW-NA, ARA and RCA	CA908030E	710

Twilight and time switches, timers, thermostats

IC twilight switches	LSB02323EN	712
IHP, ITM time switches	LSB02322EN	720
MIN timers	LSB02321EN	735
STD, STU dimmers	LSB02325EN	739
TH4, TH7, THP1, THP2 thermostats	LSB02324EN	744

Principle of catalogue numbers

iID, iC60, Vigi iC60, Reflex iC60, switches

Range	Family	Code
Acti 9 (A9)	**iID**	**R**
	Vigi iC60	**V**
	iC60	**F**
	iK60	**K**
	Auxiliaries and accessories	**A**
	Switches	**S**
	Reflex iC60	**C**

Internal code

Poles	Code
0	**0**
1P	**1**
2P	**2**
3P	**3**
4P	**4**
1N	**5**
1P+N	**6**
3P+N	**7**

Rating (A)	Code
0	**00**
0.5	**70**
0.75	**71**
1	**01**
1.6	**72**
2	**02**
2.5	**73**
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**
63	**63**
80	**80**
100	**91**
125	**92**

Comb busbar and comb busbar accessories

Range	Family	Code
Acti 9 (A9)	**Comb busbar**	**X**

Type		Type of installation	
Comb busbar			
Fork teeth	**F**	Horizontal	**H**
Pin teeth	**P**		
Auxiliarisable	**A**		
Accessories			
End-piece	**E**	Double terminals	**D**
Tooth cover	**T**	Single terminal	**M**
Connector	**C**		

Number of poles	
1P	**1**
2P	**2**
3P	**3**
4P	**4**
4P balanced, with neutral	**5**
3P balanced for single-poles	**6**

Dimensioning	
Comb busbar	**Number of 18 mm modules (approximately)**
Accessories	**Number of pieces per cat. no.**

Choice of circuit protective devices

■ 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).

DB123788

Protection of electrical connections against short circuits and overloads

DB123789

Protection of loads against overloads

DB123790

Protection of control devices

DB123792

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

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 (Isc) upstream of the circuit-breaker (Isc 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**).

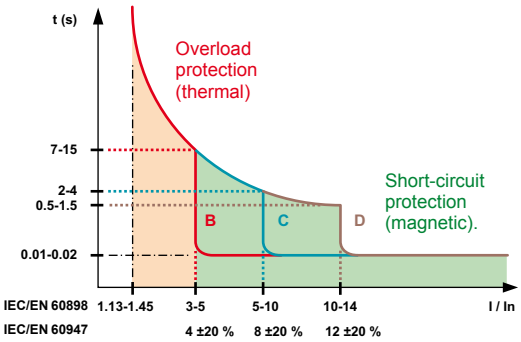
Choice of rating

■ The rating (In) 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.

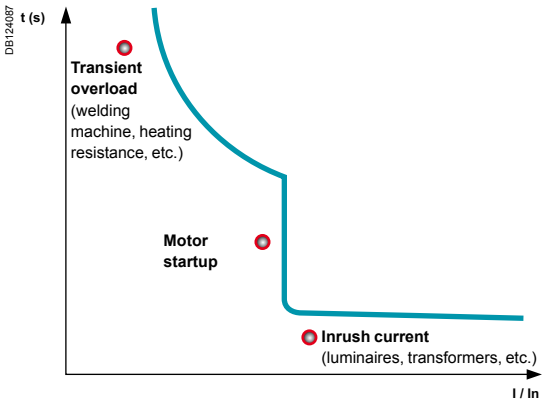
E103695

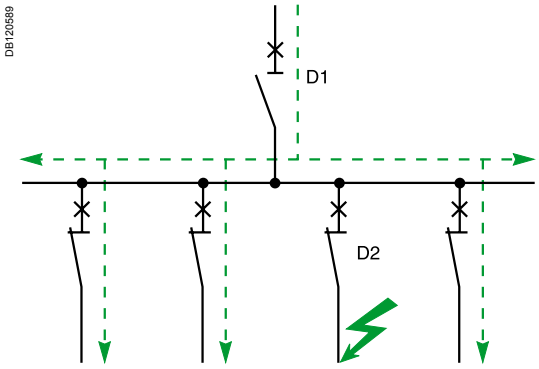


Tripping thresholds (x In)		
Curves	**IEC /EN 60898**	**IEC/EN 60947-2**
B	Between 3 In and 5 In	4 ±20 %
C	Between 5 In and 10 In	8 ±20 %
D or K	Between 10 In and 14 In	12 ±20 %
MA	-	12 ±20 %
Z	-	3 ±20 %

■ 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**).

Choice of circuit protective devices (cont.)





Circuit disconnection

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 (1),
□ 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 (2).
■ **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..

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 (3), 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.

Circuit breaker panorama (cont.)

	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				240/415, 440							
DC	250				250							
AC (50/60 Hz)	12				12							
DC	12				12							
	500				500							
	6				6							
	3				3							
240/415 V - 230/400 V	10000		10000		15000				15000			
	1P, 1P+N		**2, 3, 4P**		**1P**				**2, 3, 4P**			
	0.5 to 4 A	6 to 63 A	0.5 to 4 A	6 to 63 A	0.5 to 4 A	6 to 25 A	32/40 A	50/63 A	0.5 to 4 A	6 to 25 A	32/40 A	50/63 A
12...60 V	**70**	**42**	–	–	**100**	**70**	**70**	**70**	–	–	–	–
12...133 V	–	–	**70**	**42**	–	–	–	–	**100**	**70**	**70**	**70**
100...133 V	**70**	**30**	–	–	**100**	**50**	**36**	**30**	–	–	–	–
220...240 V	**70**	**15**	**70**	**30**	**100**	**25**	**20**	**15**	**100**	**50**	**36**	**30**
380...415 V	–	–	**70**	**15**	–	–	–	–	**100**	**25**	**20**	**15**
440 V	–	–	**50**	**10**	–	–	–	–	**70**	**20**	**15**	**10**
	100 % of Icu	50 % of Icu	100 % of Icu	50 % of Icu	100 % of Icu	50 % of Icu (1)	50 % of Icu	50 % of Icu	50 % of Icu	50 % of Icu (1)	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							
	■				■							
	50°C				50°C							
	Visi-trip window				Visi-trip window							
	■				■							
	■				■							
	IP20				IP20							
	IP40 Insulation class II				IP40 Insulation class II							
	CA901003				**CA901004**							
	CA907000 and CA907001				**CA907000 and CA907001**							
	CA907000 and CA907002				**CA907000 and CA907002**							
	CA902005				**CA902005**							

(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.

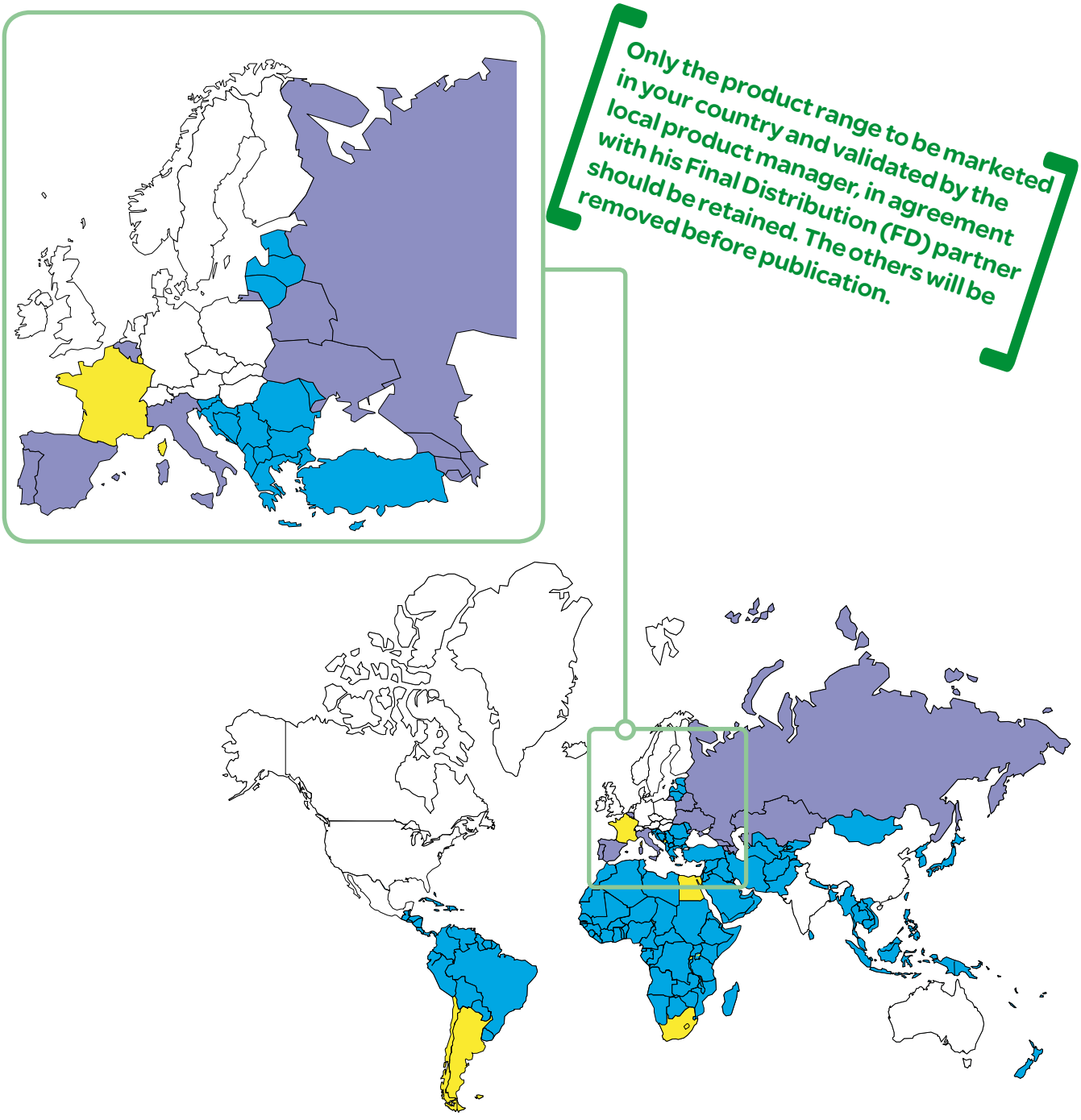
iC60H
Contents

Offers
This page must be removed before publishing

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)

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					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	
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	100 % of Icu
6 to 63 A	42 kA	30 kA	15 kA	10 kA	50 % of Icu

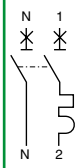
Breaking capacity (Icn) according to IEC/EN 60898-1		
	Voltage (Ue)	
Ph/Ph	400 V	
Ph/N	230 V	
Rating (In) 0.5 to 63 A	10000 A	

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	
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

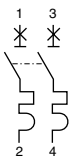
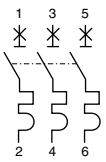
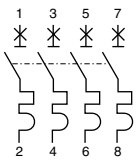
Type	1P			1P+N		
						
Auxiliaries	Remote tripping and indication, module CA907000 and CA907002			Remote tripping and indication, module CA907000 and CA907002		
Vigi iC60	Vigi iC60 add-on residual current device, module CA902005			Vigi iC60 add-on residual current device, module CA902005		
Rating (In)	Curve			Curve		
	B	C	D(1)	B	C	D(1)
0.5 A(1)	A9F83170	A9F84170	A9F85170	A9F83670	A9F84670	A9F85670
1 A(1)	A9F83101	A9F84101	A9F85101	A9F83601	A9F84601	A9F85601
2 A(1)	A9F83102	A9F84102	A9F85102	A9F83602	A9F84602	A9F85602
3 A(1)	A9F83103	A9F84103	A9F85103	A9F83603	A9F84603	A9F85603
4 A(1)	A9F83104	A9F84104	A9F85104	A9F83604	A9F84604	A9F85604
6 A	A9F86106	A9F87106	A9F85106	A9F86606	A9F87606	A9F85606
10 A	A9F86110	A9F87110	A9F85110	A9F86610	A9F87610	A9F85610
13 A(1)	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.

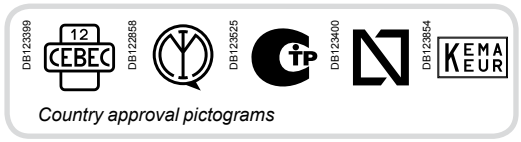
iC60H circuit breakers (curve B, C, D) (cont.)

PB104435-40

■ 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		
E45094				E45095 			E45097 		
	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**(1)	**B**	**C**	**D**(1)	**B**	**C**	**D**(1)
	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)



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					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	
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	100 % of Icu
6 to 63 A	42 kA	30 kA	15 kA	10 kA	50 % of Icu

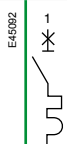
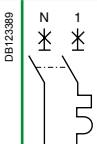
Breaking capacity (Icn) according to IEC/EN 60898-1		
	Voltage (Ue)	
Ph/Ph	400 V	
Ph/N	230 V	
Rating (In) 0.5 to 63 A	10000 A	

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	
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

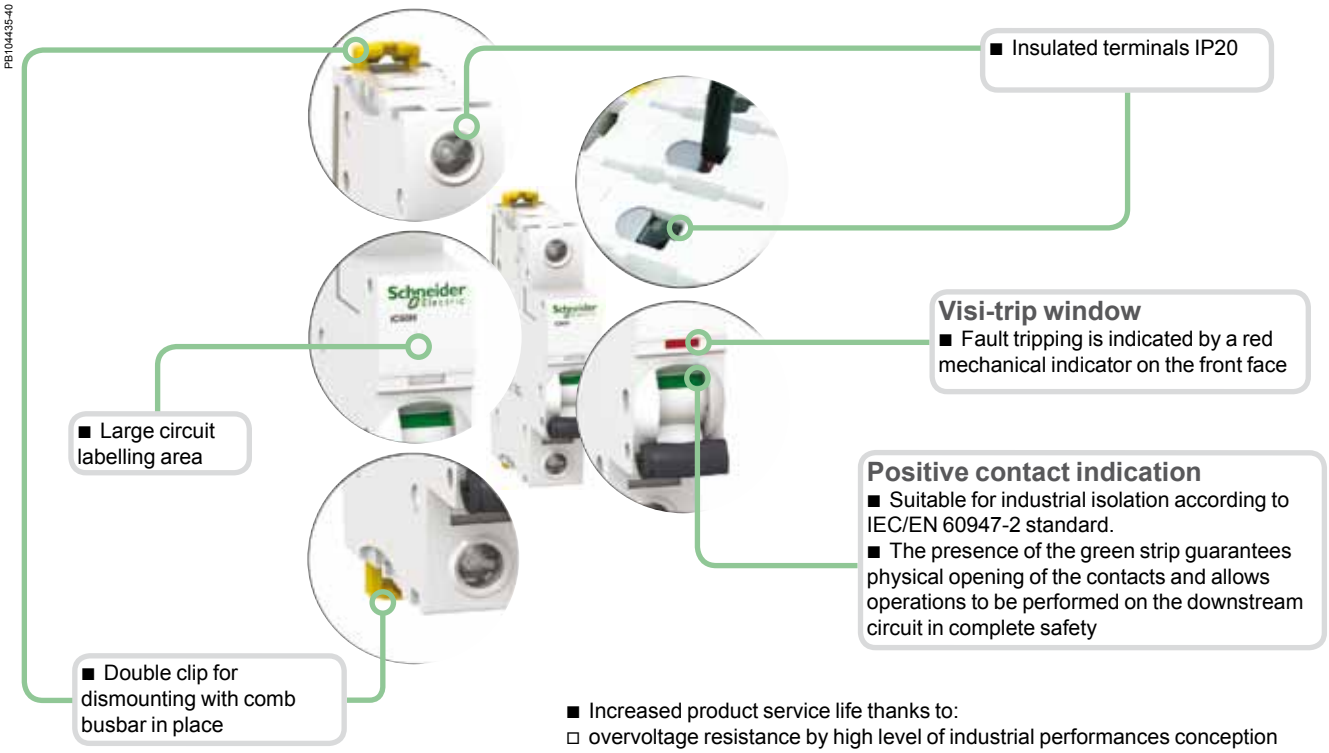
Catalogue numbers

iC60H circuit breaker

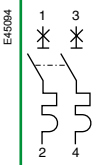
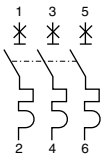
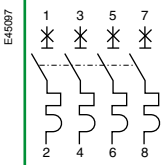
Type	1P			1P+N		
						
Auxiliaries	Remote tripping and indication, module CA907000 and CA907002			Remote tripping and indication, module CA907000 and CA907002		
Vigi iC60	Vigi iC60 add-on residual current device, module CA902005			Vigi iC60 add-on residual current device, module CA902005		
Rating (In)	Curve			Curve		
	B	C	D(1)	B	C	D(1)
0.5 A(1)	A9F83170	A9F84170	A9F85170	A9F83670	A9F84670	A9F85670
1 A(1)	A9F83101	A9F84101	A9F85101	A9F83601	A9F84601	A9F85601
2 A(1)	A9F83102	A9F84102	A9F85102	A9F83602	A9F84602	A9F85602
3 A(1)	A9F83103	A9F84103	A9F85103	A9F83603	A9F84603	A9F85603
4 A(1)	A9F83104	A9F84104	A9F85104	A9F83604	A9F84604	A9F85604
6 A	A9F88106	A9F89106	A9F85106	A9F88606	A9F89606	A9F85606
10 A	A9F88110	A9F89110	A9F85110	A9F88610	A9F89610	A9F85610
13 A(1)	A9F83113	A9F84113	A9F85113	A9F83613	A9F84613	A9F85613
16 A	A9F88116	A9F89116	A9F85116	A9F88616	A9F89616	A9F85616
20 A	A9F88120	A9F89120	A9F85120	A9F88620	A9F89620	A9F85620
25 A	A9F88125	A9F89125	A9F85125	A9F88625	A9F89625	A9F85625
32 A	A9F88132	A9F89132	A9F85132	A9F88632	A9F89632	A9F85632
40 A	A9F88140	A9F89140	A9F85140	A9F88640	A9F89640	A9F85640
50 A	A9F88150	A9F89150	A9F85150	A9F88650	A9F89650	A9F85650
63 A	A9F88163	A9F89163	A9F85163	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.)



■ 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		
									
	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(1)	B	C	D(1)	B	C	D(1)
	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)

DB116619

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		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	100 % of Icu
	6 to 63A	42 kA	30 kA	15 kA	10 kA	50 % of Icu

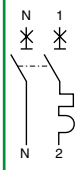
Breaking capacity (Icn) according to IEC/EN 60898-1		Voltage (Ue)
Ph/Ph		400 V
Ph/N		230 V
Rating (In)	0.5 to 63 A	10000 A

Direct current (DC)

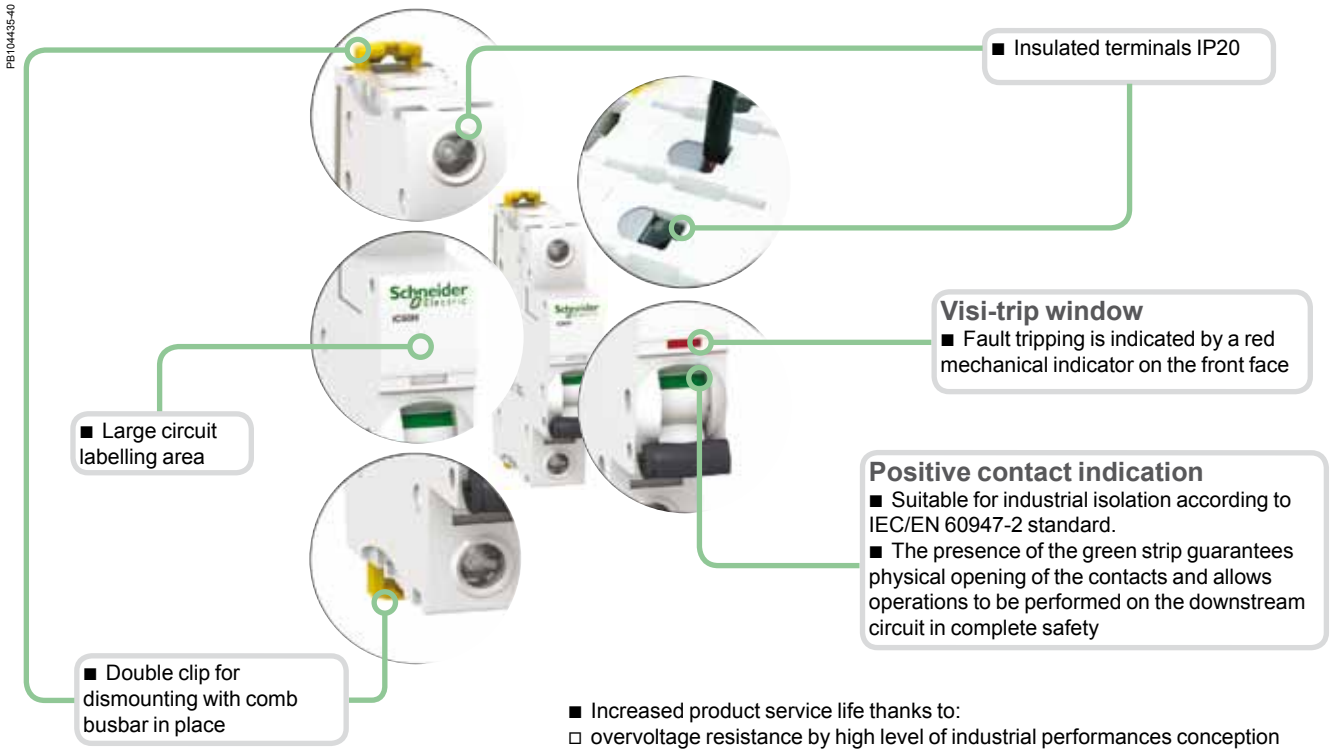
Breaking capacity (Icu) according to IEC/EN 60947-2		Voltage (Ue)					Service breaking capacity (Ics)
Between +/-		12 to 60 V	⩽ 72 V	⩽ 125 V	⩽ 180 V	⩽ 250 V	
Number of poles		1P		2P	3P	4P	
Rating (In)	1 to 63 A	20 kA	15 kA	15 kA	15 kA	15 kA	100 % of Icu

Catalogue numbers

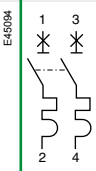
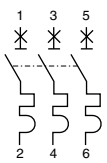
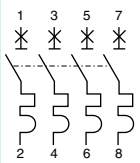
iC60H circuit breaker

Type	1P			1P+N		
	E45092 			DB123389 		
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.)

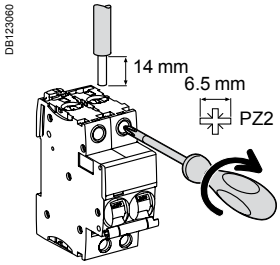


■ Increased product service life thanks to:
□ overvoltage resistance by high level of industrial performances conception (pollution degree, rated impulse withstand voltage and insulation voltage),
□ high performance limitation (see limitation curves),
□ fast closing independent of the speed of actuation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

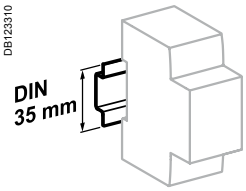
	2P			3P			4P		
									
	Remote tripping and indication, module CA907000 and CA907002			Remote tripping and indication, module CA907000 and CA907002			Remote tripping and indication, module CA907000 and CA907002		
	Vigi iC60 add-on residual current device, module CA902005			Vigi iC60 add-on residual 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
	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.)

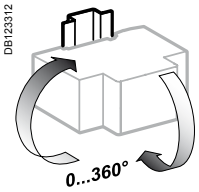
Connection



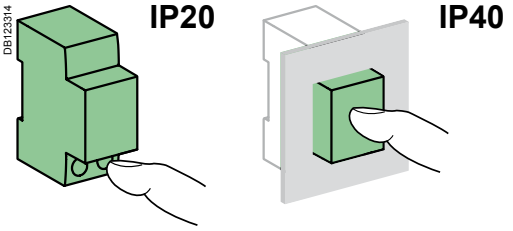
Rating	Tightening torque	Without accessory: Copper cables – Rigid	Without accessory: Copper cables – Flexible or ferrule	With accessories: 50 mm² Al terminal	With accessories: Screw-on connection for ring terminal	With accessories: Multi-cables terminal – Rigid cables	With accessories: Multi-cables terminal – Flexible cables
		DB122945	DB122946	DB122935 Al	DB118789 Ø	DB118787	
0.5 to 25 A	2 N.m	1 to 25 mm²	1 to 16 mm²	-	Ø 5 mm	-	-
32 to 63 A	3.5 N.m	1 to 35 mm²	1 to 25 mm²	50 mm²		3 x 16 mm²	3 x 10 mm²



Clip on DIN rail 35 mm.



Indifferent position of installation.



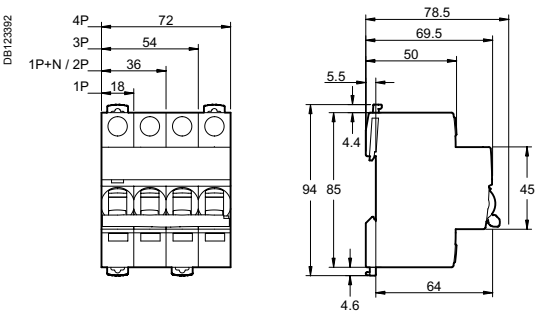
Technical data

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		
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	**iC60H**
1P	125
2P	250
3P	375
4P	500

Dimensions (mm)



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

DB106619 DB123865 DB123854

Country approval pictograms

PB107402-40 PB107406-40


PB107408-40 PB107410-40


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						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	
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	100 % of Icu
	6 to 40 A	42 kA	30 kA	15 kA	10 kA	50 % of Icu
	50/63 A	42 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 63 A	10000 A

Direct current (DC)

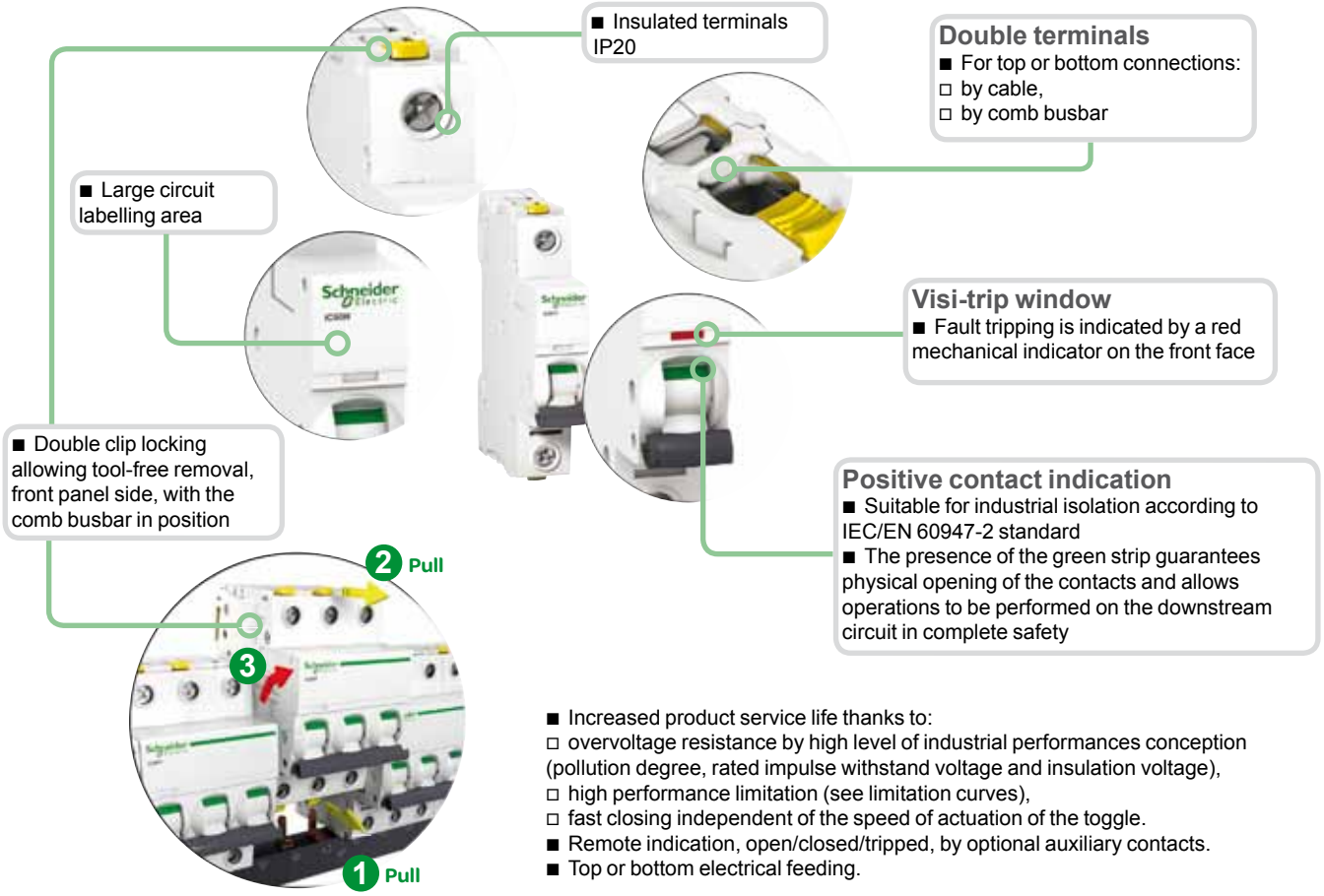
Breaking capacity (Icu) according to IEC/EN 60947-2						Service breaking capacity (Ics)
		Voltage (Ue)				
Between +/-		12 to 60 V	⩽ 72 V	⩽ 125 V	⩽ 180 V	⩽ 250 V
Number of poles		1P		2P	3P	4P
Rating (In)	1 to 63 A	20 kA	15 kA	15 kA	15 kA	15 kA	100 % of Icu

Catalogue numbers

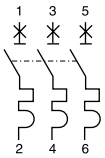
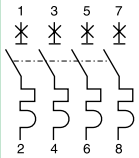
iC60H double terminals circuit breaker

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			Curve		
	B	C	D	B	C	D	B	C	D
0.5 A	-	A9F07170	A9F08170	-	A9F07670		-	A9F07270	A9F08270
1 A	-	A9F07101	A9F08101	-	A9F07601		-	A9F07201	A9F08201
2 A	-	A9F07102	A9F08102	-	A9F07602		-	A9F07202	A9F08202
3 A	-	A9F07103	A9F08103	-	A9F07603		-	A9F07203	A9F08203
4 A	-	A9F07104	A9F08104	-	A9F07604		-	A9F07204	A9F08204
6 A	A9F06106	A9F07106	A9F08106	A9F06606	A9F07606		A9F06206	A9F07206	A9F08206
10 A	A9F06110	A9F07110	A9F08110	A9F06610	A9F07610		A9F06210	A9F07210	A9F08210
13 A	A9F06113	A9F07113	A9F08113	A9F06613	A9F07613		A9F06213	A9F07213	A9F08213
16 A	A9F06116	A9F07116	A9F08116	A9F06616	A9F07616		A9F06216	A9F07216	A9F08216
20 A	A9F06120	A9F07120	A9F08120	A9F06620	A9F07620		A9F06220	A9F07220	A9F08220
25 A	A9F06125	A9F07125	A9F08125	A9F06625	A9F07625		A9F06225	A9F07225	A9F08225
32 A	A9F06132	A9F07132	A9F08132	A9F06632	A9F07632		A9F06232	A9F07232	A9F08232
40 A	A9F06140	A9F07140	A9F08140	A9F06640	A9F07640		A9F06240	A9F07240	A9F08240
50 A	A9F06150	A9F07150	A9F08150	A9F06650	A9F07650		A9F06250	A9F07250	A9F08250
63 A	A9F06163	A9F07163	A9F08163	A9F06663	A9F07663		A9F06263	A9F07263	A9F08263
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.)



■ 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**		
	Curve			**Curve**		
	B	**C**	**D**	**B**	**C**	**D**
	-	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 — Back

Without comb busbar at the back/cables at the front — Front

DB404815

Rating	Tightening torque	Comb busbar	Copper cables	
		Thickness of the teeth	Rigid	Flexible or ferrule
		DB122945	DB122946	
0.5 to 25 A	2 N.m	1.5 mm	1 to 25 mm²	1 to 16 mm²
32 to 63 A	3.5 N.m	1.5 mm	1 to 25 mm²	1 to 25 mm²

Between double terminal circuit breakers and single-terminal circuit breakers

Cables at the back/comb busbar at the front — Back — Front

DB404817

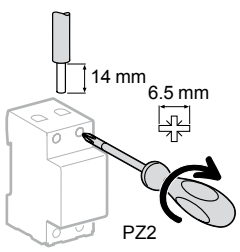
Rating	Tightening torque	Copper cables		Thickness of the teeth
		Rigid	Flexible or ferrule	
	DB122945	DB122946		
0.5 to 25 A	2 N.m	1 to 16 mm²	1 to 10 mm²	1.5 mm
32 to 63 A	3.5 N.m	1 to 16 mm²	1 to 10 mm²	1.5 mm

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

Connection

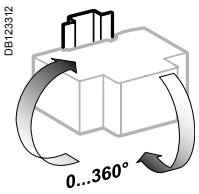
With accessories

DB123947

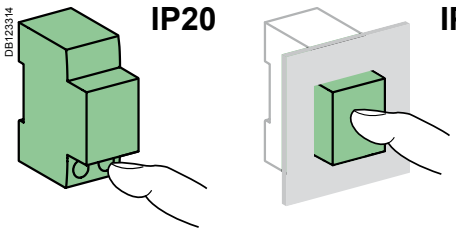


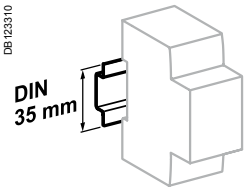
Rating	50 mm² Al terminal	Screw-on connection for ring terminal	Multi-cables terminal	
			Rigid cables	Flexible cables
	DB122935 Al DB118789	Ø DB118787		
0.5 to 25 A	-	Ø 5 mm	-	-
32 to 63 A	50 mm²		3 x 16 mm²	3 x 10 mm²

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



Indifferent position of installation.



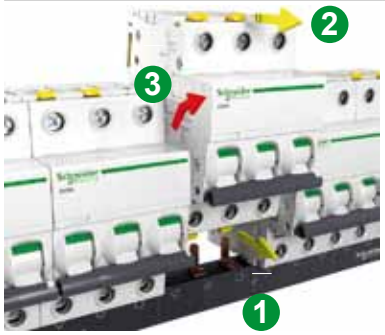
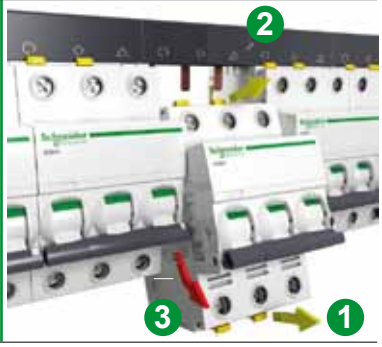


Clip on DIN rail 35 mm.

Technical data

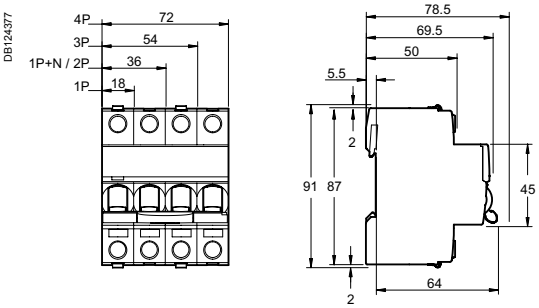
Main characteristics		
According to IEC/EN 60947-2		
Insulation voltage (Ui)		500 V AC
Pollution degree		3
Rated impulse withstand voltage (Uimp)		6 kV
Thermal tripping	Reference temperature	50°C
	Temperature derating	See module CA908007
Magnetic tripping	B curve	4 In ± 20 %
	C curve	8 In ± 20 %
	D curve	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

Comb busbar downstream	Comb busbar upstream
	

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)

DB116619 DB123525 DB122858

Country approval pictograms

PB104442-40

PB104452-40

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	
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 (1)
	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

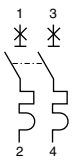
Breaking capacity (Icn) according to IEC/EN 60898-1		
		Voltage (Ue)
Ph/Ph		400 V
Ph/N		230 V
Rating (In)	0.5 to 40 A	15000 A

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
Number of poles		1P		2P	3P	4P
Rating (In)	1 to 63 A	25 kA	20 kA	20 kA	20 kA	20 kA	100 % of Icu

Catalogue numbers

iC60L circuit breaker

Type		1P				2P			
		E45092 				E45094 			
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)	Quality label (2)	Curve				Curve			
		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(3)	A9F92150	A9F93250	A9F94250	A9F95250	A9F92250
63 A		A9F93163	A9F94163	A9F95163(3)	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.)

PB104436-40

■ Insulated terminals IP20

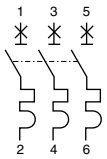
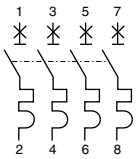
Visi-trip window
■ Fault tripping is indicated by a red mechanical indicator on the front face

■ Large circuit labelling area

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

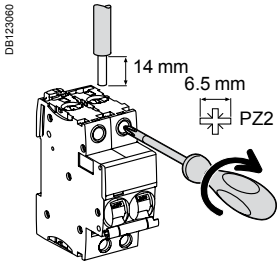
■ Double clip for dismounting with comb busbar in place

■ 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.

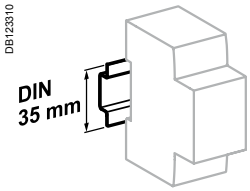
	3P				4P			
E45095					E45097 			
	Remote tripping and indication, module CA907000 and CA907002				**Remote tripping and indication, module CA907000 and CA907002**			
	Vigi iC60 add-on residual current device, module CA902005				**Vigi iC60 add-on residual current device, module CA902005**			
	Curve				**Curve**			
	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.)

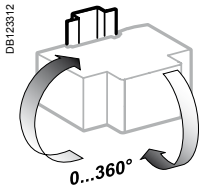
Connection



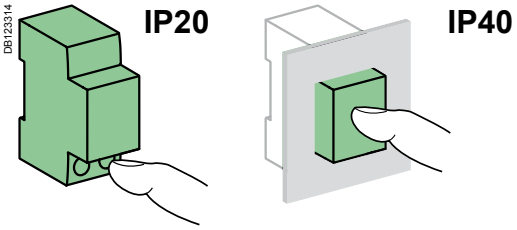
Rating	Tightening torque	Without accessory: Copper cables – Rigid	Without accessory: Copper cables – Flexible or ferrule	With accessories: 50 mm² Al terminal	With accessories: Screw-on connection for ring terminal	With accessories: Multi-cables terminal – Rigid cables	With accessories: Multi-cables terminal – Flexible cables
		DB122945	DB122946	DB122935 Al	DB118789 Ø	DB118787	
0.5 to 25 A	2 N.m	1 to 25 mm²	1 to 16 mm²	-	Ø 5 mm	-	-
32 to 63 A	3.5 N.m	1 to 35 mm²	1 to 25 mm²	50 mm²		3 x 16 mm²	3 x 10 mm²



Clip on DIN rail 35 mm.



Indifferent position of installation.



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 %
	K curve	12 In ± 20 %
	Z curve	3 In ± 20 %
Utilization category		A
According to IEC/EN 60898-1		
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 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)