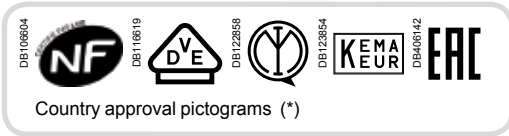


# Residual current device iC60 RCBO 6000 A



IEC/EN 61009-1  
IEC/EN 61009-2-1

(\*) Information to be supplied by the country.

- The iC60 RCBO residual current device provides:
- protection of final circuits against overcurrents and short-circuits.
  - protection for people against electric shocks by direct contacts.
  - earth fault indication by a red mechanical indicator in front face.

The A-SI type provides increased immunity from electrical interference.

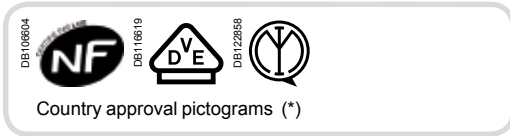


## Catalogue numbers

iC60 RCBO 6000 400 V AC			
Type	Curve	A	Width in 9-mm modules
3P 	Sensitivity (IΔn)	C	
			30 mA
	Rating (In)		A9D67310
			A9D67313
			A9D67316
			A9D67320
			A9D67325
		A9D67332	
Voltage rating (Ue)		400 V CA	
Operating frequency		50 Hz	
Auxiliaries		Module CA902045	

iC60 RCBO 6000 400 V AC										
Type	Curve	AC		A			A-SI		Width in 9-mm modules	
		C	300 mA	B	C	300 mA	B	C		
4P 	Sensitivity (IΔn)	30 mA		30 mA	30 mA	300 mA	30 mA	30 mA	8	
	Rating (In)z	10 A	A9D57410	A9D55410	A9D87410	A9D67410	A9D52410	A9D97410		A9D77410
		13 A	-	-	A9D87413	A9D67413	-	A9D97413		A9D77413
		16 A	A9D57416	A9D55416	A9D87416	A9D67416	A9D52416	A9D97416		A9D77416
		20 A	A9D57420	A9D55420	A9D87420	A9D67420	A9D52420	A9D97420		A9D77420
		25 A	A9D57425	A9D55425	A9D87425	A9D67425	A9D52425	A9D97425		A9D77425
		32 A	A9D57432	A9D55432	A9D87432	A9D67432	A9D52432	A9D97432		A9D77432
Voltage rating (Ue)		400 V CA								
Operating frequency		50 Hz								
Auxiliaries		Module CA902045								

# Residual current device iC60 RCBO 10000 A



IEC/EN 61009-1  
IEC/EN 61009-2-1

(\*) Information to be supplied by the country.



The iC60 RCBO residual current device provides:

- protection of final circuits against overcurrents and short-circuits.
- protection for people against electric shocks by direct contacts.
- earth fault indication by a red mechanical indicator in front face.

The A-SI type provides increased immunity from electrical interference.

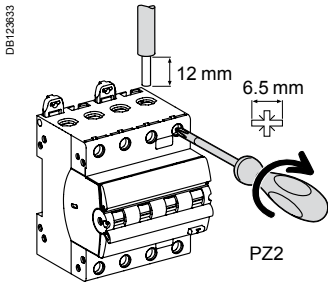
## Catalogue numbers

iC60 RCBO 10000 230 V AC										
Type	AC	A				A-SI		Width in 9-mm modules		
Curve	C	B		C		B	C			
2P	Sensitivity (IΔn)	30 mA	300 mA	30 mA	30 mA	300 mA	30 mA	30 mA		
	Rating (In)	10 A	A9D07210	A9D50210	A9D37210	A9D17210	A9D54210	A9D47210	A9D27210	4
	13 A	-	-	A9D37213	A9D17213	-	A9D47213	A9D27213		
	15 A, NEK 400	-	-	A9D34215	A9D14215	-	-	-		
	16 A	A9D07216	A9D50216	A9D37216	A9D17216	A9D54216	A9D47216	A9D27216		
	20 A	A9D07220	A9D50220	A9D37220	A9D17220	A9D54220	A9D47220	A9D27220		
	25 A	A9D07225	A9D50225	A9D37225	A9D17225	A9D54225	A9D47225	A9D27225		
	32 A	A9D07232	A9D50232	A9D37232	A9D17232	A9D54232	A9D47232	A9D27232		
Voltage rating (Ue)	230 V CA									
Operating frequency	50 Hz									
Auxiliaries	Module CA902045									

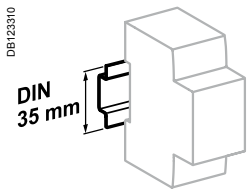
iC60 RCBO 10000 230 V AC				
Type	A	Width in 9-mm modules		
Curve	C			
3P	Sensitivity (IΔn)	30 mA		
	Rating (In)	10 A	A9D17310	6
	13 A	A9D17313		
	16 A	A9D17316		
	20 A	A9D17320		
	25 A	A9D17325		
	32 A	A9D17332		
Voltage rating (Ue)	230 V CA			
Operating frequency	50 Hz			
Auxiliaries	Module CA902045			

# Residual current device iC60 RCBO (cont.)

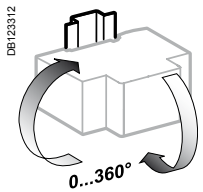
## Connection



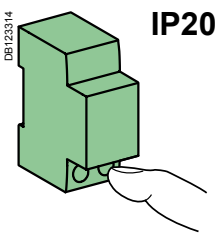
Rating	Tightening torque	Copper cables	
		Rigid	Flexible or with ferrule
10 to 32 A	2 N.m	1 to 35 mm <sup>2</sup>	1 to 25 mm <sup>2</sup>



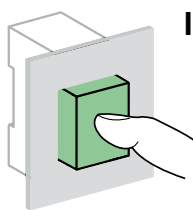
Clip on DIN rail 35 mm.



Indifferent position of installation.



IP20

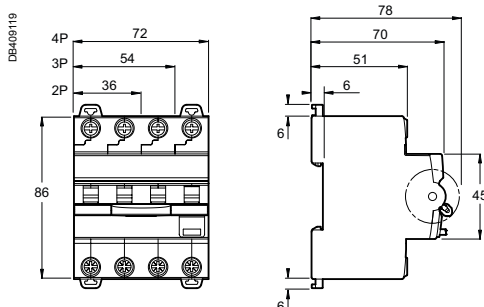


IP40

## Caractéristiques techniques

Main characteristics		6000 A	10000 A
Insulation voltage (U <sub>i</sub> )		500 V	
Rated impulse withstand voltage (U <sub>imp</sub> )		4 kV	
Rated residual operating current (I <sub>Δn</sub> )		30 mA, 300 mA	
Earth leakage protection type		AC, A, A-SI	
Thermal tripping	Reference temperature	30°C	
Magnetic tripping	Curve B	Between 3 and 5 I <sub>n</sub>	
	Curve C	Between 5 and 10 I <sub>n</sub>	
Limitation class	2P	3	
	3P, 4P	1	
Surge current withstand (8/20 μs) without tripping	AC Type	250 Å	
	A Type	250 Å	
	A-SI Type	3 kÅ	
<b>According to IEC/EN 61009-1 and IEC/EN 61009-2-1</b>			
Rated breaking capacity (I <sub>cn</sub> )		6000 A	10000 A
Service breaking capacity (I <sub>cs</sub> )		1 x I <sub>cn</sub>	0,75 x I <sub>cn</sub>
Rated residual breaking and making capacity phase/earth (I <sub>Δm</sub> )		6000 A	6000 A
Behaviour in case of voltage drop		Residual current protection down to 0 V according to IEC/EN 61008-1 § 3.3.4	
<b>According to IEC/EN 60947-2</b>			
Ultimate breaking capacity (I <sub>cu</sub> )		6 kA	15 kA
Service breaking capacity (I <sub>cs</sub> )		100 % of I <sub>cu</sub>	50 % of I <sub>cu</sub>
<b>Additional characteristics</b>			
Degree of protection	Device only	IP20	
	Device in modular enclosure	IP40	
Endurance (O-C)	Electrical	10,000 cycles	
	Mechanical	20,000 cycles	
Overvoltage category (IEC 60364)		III	
Operating temperature		-25°C to +40°C	
Storage temperature		-40°C to +70°C	
Range of test button operating voltage	2P	-	195.5...253 V AC
	3P	340...440 V AC	195.5...253 V AC
	4P	195.5...253 V AC	-
Tropicalization		Treatment 2 (relative humidity 95 % to 55°C)	

## Dimensions (mm)



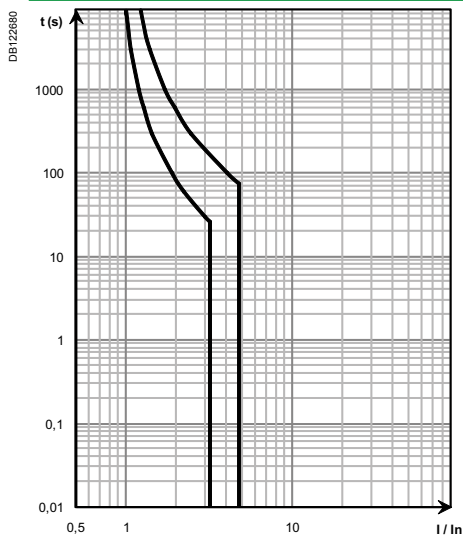
## Power loss per pole

Rating (I <sub>n</sub> )	10 A	13 A	16 A	20 A	25 A	32 A
R (mΩ)	20.6	14.5	8.9	6.8	4.6	3.6
P (W)	2.06	2.45	2.28	2.72	2.88	3.67

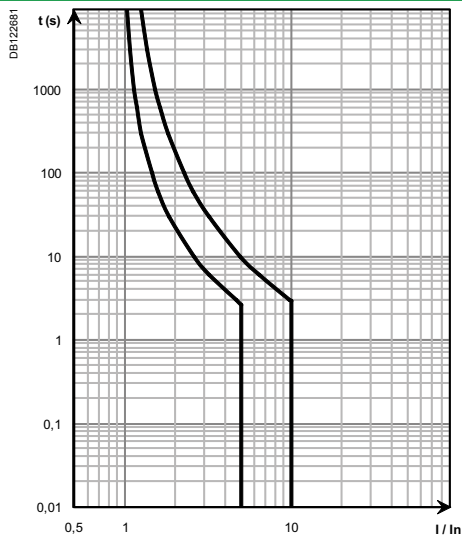
## Weight (g)

Residual current device	
Type	iC60 RCBO
2P	234
3P	334
4P	445

## Tripping curves

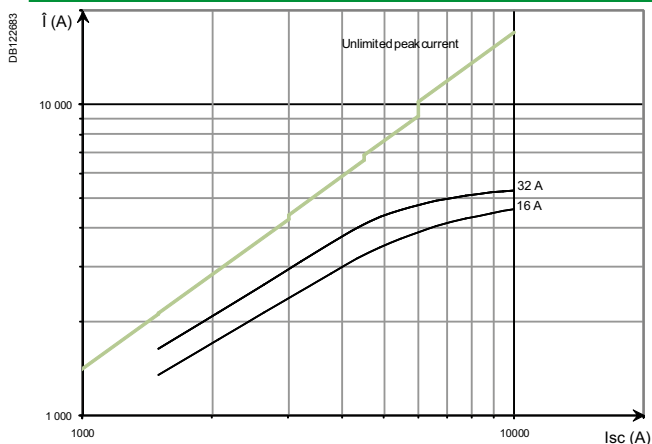


B curve

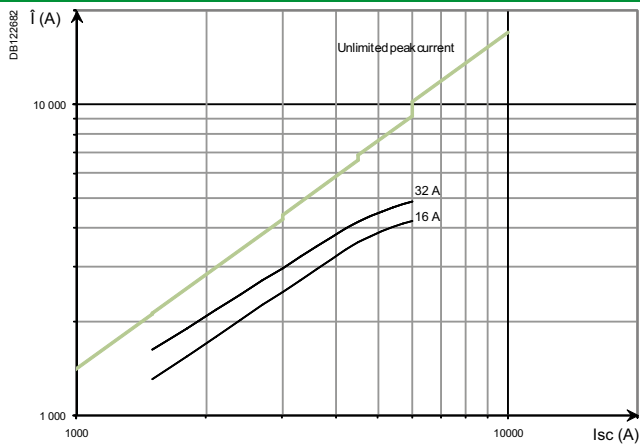


C curve

## Peak limitation curves

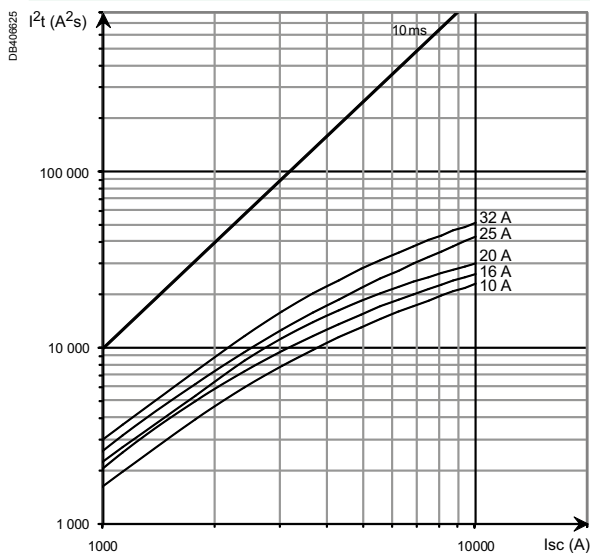


iC60 RCBO 10000 A - 2P/3P - 230 V

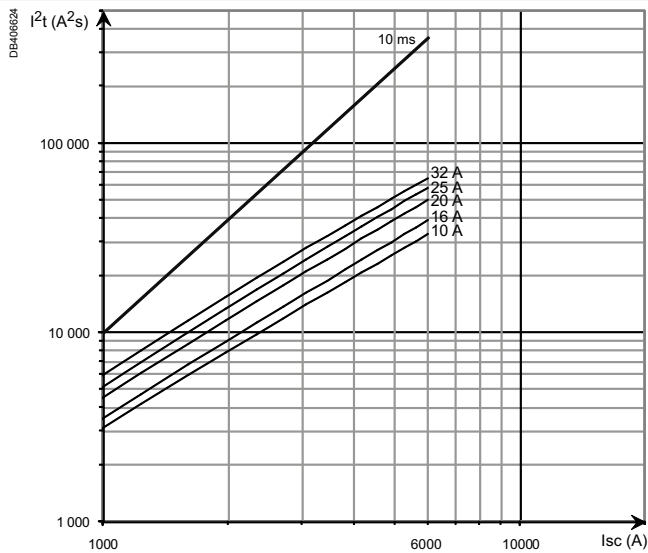


iC60 RCBO 6000 A - 3P/4P - 400 V

## Energy curves



iC60 RCBO 10000 A - 2P/3P - 230 V



iC60 RCBO 6000 A - 3P/4P - 400 V



Indice	Date	Modification	Name
1.6	31/01/2017	Deleted 20 A, NEK 400 products page 3	Sonovision
1.5	9/12/2016	Added 15 A and 20 A, NEK 400 products page 3. Changed Icu in table page 4	Sonovision
1.4	15/11/2016	Changed name of products iC60N RCBO and iC60H RCBO to iC60 RCBO	Sonovision
1.3	14/10/2016	New electrical diagrams	Sonovision
1.2	19/09/2016	Added Curves page 4 and Power loss page 5	Sonovision
1.1	3/08/2016	Added iC60H RCBO 4P - Replace cat. no. iC60H RCBO 2P 300 mA Type A, C curve	Sonovision
1.0	30/11/2015	Creation	Sonovision