iCT contactors

DB123399 DB116619 DB106604

Country approval pictograms

EN 61095, IEC 1095

iCT contactors are available in two versions:

- Contactors without manually-operated
- Contactors with manually-operated.

The breadth of the iCT contactor range satisfies most application cases.
iCT contactors can be combined with auxiliary control, protection and indication functions.

Contactors

iCT 2P

PB106115-35



manual control

iCT 4P

PB106105-35



- iCT contactors can be used to remote control applications in alternative networks:
  - ☐ lighting, heating, ventilation, roller blinds, sanitary hot water
  - ☐ mechanical ventilation systems, etc
  - ☐ load-shedding of non-priority circuits

PB106120-34



Indication iACTs

- This auxiliary allows indication or control of the "open" or "closed" position of the contactor power contacts

PB106124-34



Interference filtering iACTp

- This auxiliary is an interference suppressor which limits overvoltages on the control circuit

PB106123-34



Dual control iACTc

- Used to control a contactor in impulse-type mode or to combine latched or impulse-type control orders

PB106125-34



Time delay iATEt

- This auxiliary is used to time delay for iCT and iTL.

According to cabling, there are 5 possible time delay types:

- ☐ 1 for iTL
- ☐ 4 for iCT

Function type A:
late closing
Delay energizing of contactor

Function type B:
time delay
- Energize the contactor by closing a push button
- The time delay starts as soon as the control contacts are closed

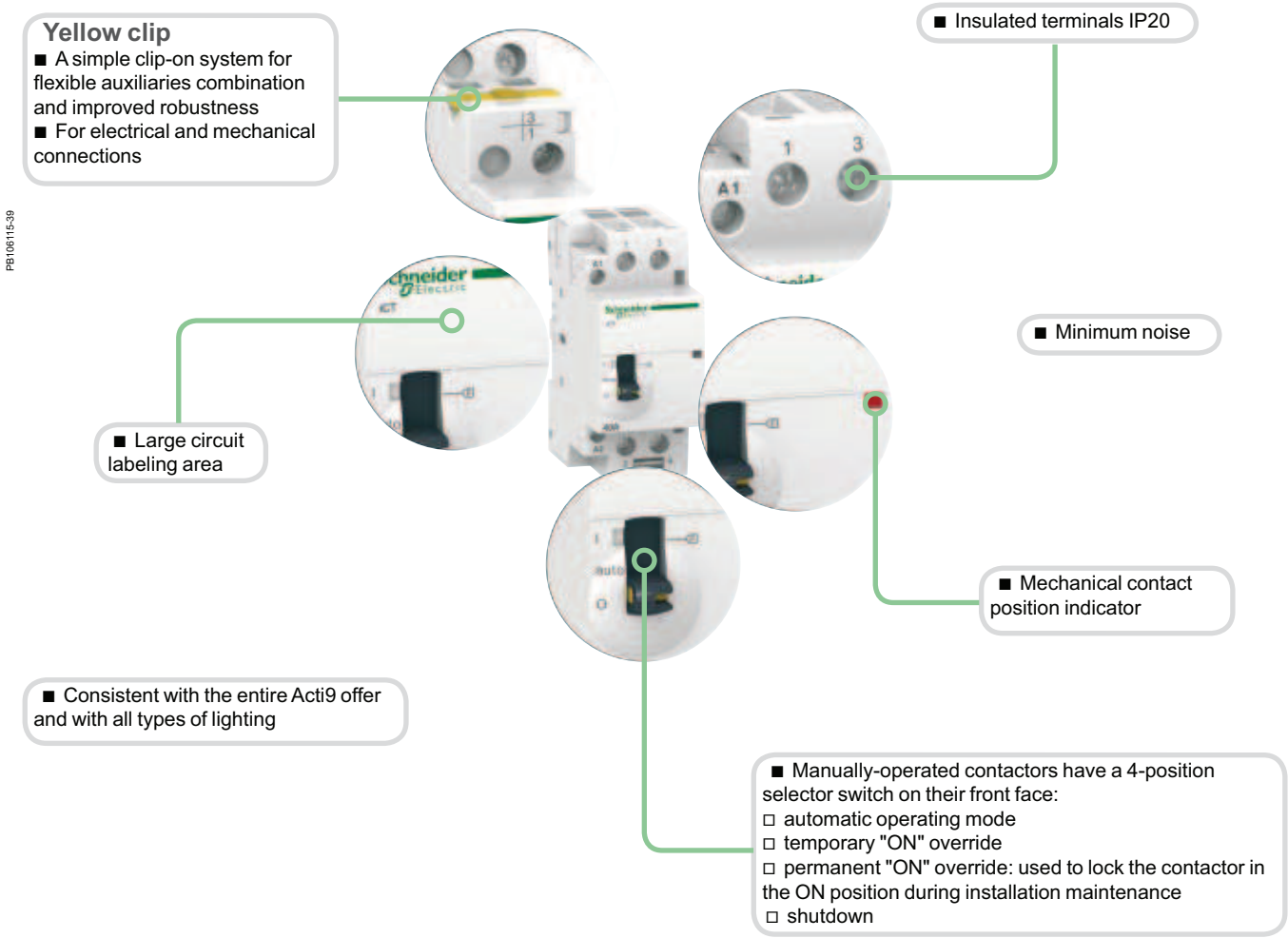
Function type C:
late opening
- Energize the contactor by closing a push button
- The time delay starts when the control contacts are opened

Function type H:
fixed time operation
- Operate the contactor for a pre-determined time from the moment of energizing

Contactors
Contactors auxiliaries

		Choice of 50 Hz contactors					
Type		**Contactor**					
Rating	A	16	20	25	40	63	100
Auxiliaries							
iACTs indication auxiliary		Yes	Yes	Yes			
iACTp protection auxiliary	By yellow clips	No	No	Yes			
iACTc, iATEt control auxiliary	By yellow clips	No	No	Yes			

iCT contactors (cont.)

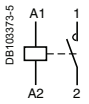
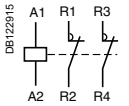
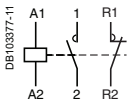
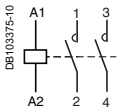
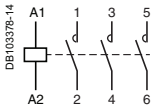
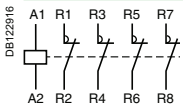
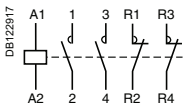
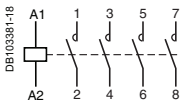
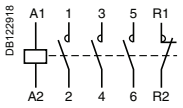


					Choice of 60 Hz contactors				
	Manually-operated contactors				Contactor				Manually-operated contactors
	16	25	40	63	16	25	40	63	40
	Contactors that can be equipped with auxiliaries				Contactors that can be equipped with auxiliaries				
	Yes				Yes				
	Yes	Yes			Yes	Yes			
	No	Yes			No	Yes			

iCT contactors (cont.)

Catalogue numbers

iCT contactors - 50 Hz

Type						Width in 9 mm modules
1P	Rating (In) AC7a	AC7b	Control voltage (V AC) (50 Hz)	Contact		
	16 A	6 A	12	1NO	**A9C22011**	2
			24	1NO	**A9C22111**	2
			48	1NO	**A9C22211**	2
			220	1NO	**A9C22511**	2
			230…240	1NO	**A9C22711**	2
	25 A	8.5 A	220	1NO	**A9C20531**	2
			230…240	1NO	**A9C20731**	2
2P						
	16 A	6 A	12	2NO	**A9C22012**	2
			24	2NO	**A9C22112**	2
			48	2NO	**A9C22212**	2
			220	2NO	**A9C22512**	2
			230...240	2NO	**A9C22712**	2
			12	1NO+1NC	**A9C22015**	2
			24	1NO+1NC	**A9C22115**	2
			220	1NO+1NC	**A9C22515**	2
			230...240	1NO+1NC	**A9C22715**	2
	20 A	6 A	230...240	2NO	**A9C22722**	2
	25 A	8.5 A	24	2NO	**A9C20132**	2
			48	2NO	**A9C20232**	2
			220	2NO	**A9C20532**	2
			230...240	2NO	**A9C20732**	2
			220	2NC	**A9C20536**	2
			230...240	2NC	**A9C20736**	2
	40 A	15 A	220...240	2NO	**A9C20842**	4
	63 A	20 A	24	2NO	**A9C20162**	4
			220...240	2NO	**A9C20862**	4
	100 A	-	220...240	2NO	**A9C20882**	6
3P						
	16 A	6 A	220…240	3NO	**A9C22813**	4
	25 A	8.5 A	220…240	3NO	**A9C20833**	4
	40 A	15 A	220…240	3NO	**A9C20843**	6
	63 A	20 A	220…240	3NO	**A9C20863**	6
4P						
	16 A	6 A	24	4NO	**A9C22114**	4
			220...240	4NO	**A9C22814**	4
			220...240	2NO+2NC	**A9C22818**	4
	20 A	6 A	220 ...240	4NO	**A9C22824**	4
	25 A	8.5 A	24	4NO	**A9C20134**	4
			220...240	4NO	**A9C20834**	4
			24	4NC	**A9C20137**	4
			220...240	4NC	**A9C20837**	4
			220...240	2NO+2NC	**A9C20838**	4
	40 A	15 A	220...240	4NO	**A9C20844**	6
			220...240	4NC	**A9C20847**	6
	63 A	20 A	24	4NO	**A9C20164**	6
			220...240	4NO	**A9C20864**	6
			24	4NC	**A9C20167**	6
			220...240	4NC	**A9C20867**	6
			220...240	2NO+2NC	**A9C20868**	6
			220...240	3NO+1NC	**A9C20869**	6
	100 A	-	220...240	4NO	**A9C20884**	12

iCT contactors (cont.)

Catalogue numbers

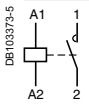
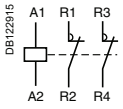
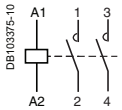
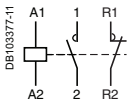
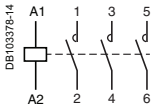
iCT manual control contactor 50 Hz

Type		Rating (In)		Control voltage (V AC) (50 Hz)	Contact		Width in 9 mm modules
2P		AC7a	AC7b				
DB106317-24	16 A	6 A	220	2NO	**A9C23512**	2
			230...240	2NO	**A9C23712**	2
			220	1NO+1NC	**A9C23515**	2
			230...240	1NO+1NC	**A9C23715**	2
DB106318-27	25 A	8.5 A	24	2NO	**A9C21132**	2
			24	2NC	**A9C21136**	2
			220	2NO	**A9C21532**	2
			230...240	2NO	**A9C21732**	2
	40 A	15 A	24	2NO	**A9C21142**	2
			220...240	2NO	**A9C21842**	4
DB106586-27	63 A	20 A	24	2NO	**A9C21162**	4
			220...240	2NO	**A9C21862**	4
3P						
DB106319-27	25 A	8.5 A	220...240	3NO	**A9C21833**	4
	40 A	15 A	220...240	3NO	**A9C21843**	6
4P						
DB106320-31	25 A	8.5 A	24	4NO	**A9C21134**	4
			24	4NC	**A9C21137**	4
			220...240	4NO	**A9C21834**	4
	40 A	15 A	24	4NO	**A9C21144**	6
			24	4NC	**A9C21147**	6
DB106587-36			220...240	4NO	**A9C21844**	6
	63 A	20 A	24	4NO	**A9C21164**	6
			220...240	4NO	**A9C21864**	6

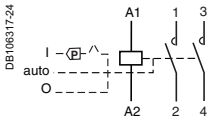
iCT contactors (cont.)

Catalogue numbers

iCT contactors - 60 Hz

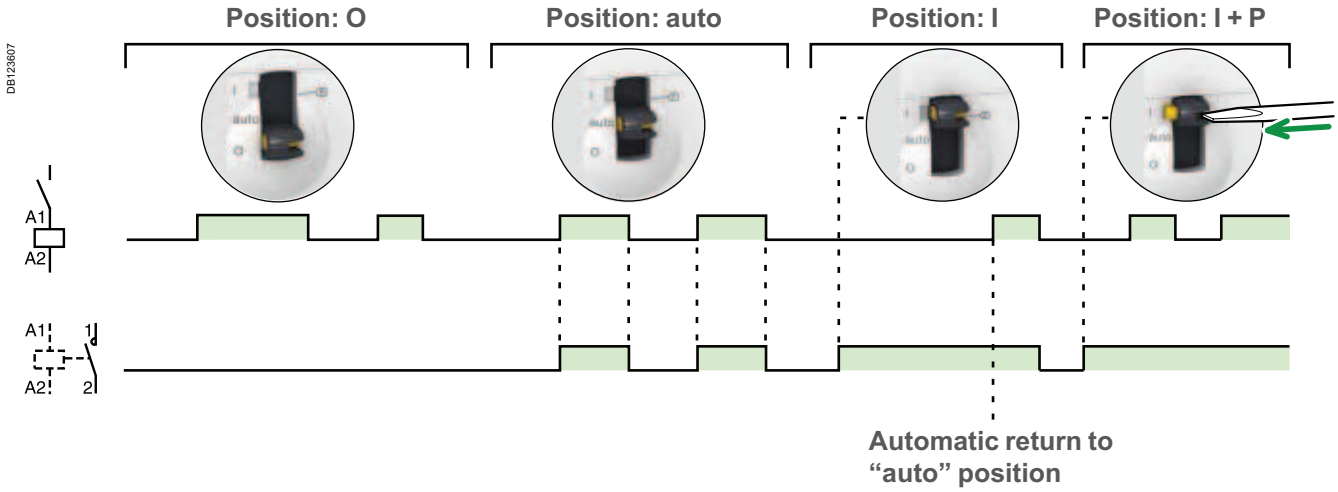
Type						Width in 9 mm modules
1P	Rating (In) AC7a	Rating (In) AC7b	Control voltage (V AC) (60 Hz)	Contact		
	25 A	8.5 A	127	1NO	**A9C20431**	2
			220 ...240	1NO	**A9C20631**	2
2P						
 	16 A	6 A	127	1NO+1NC	**A9C22415**	2
			220...240	1NO+1NC	**A9C22615**	2
	25 A	8.5 A	127	2NO	**A9C20432**	2
			220...240	2NO	**A9C20632**	2
			127	2NC	**A9C20436**	2
			220...240	2NC	**A9C20636**	2
	40 A	15 A	127	2NO	**A9C20442**	4
			220...240	2NO	**A9C20642**	4
3P						
	25 A	8.5 A	127	3NO	**A9C20433**	4
			220...240	3NO	**A9C20633**	4
	40 A	15 A	127	3NO	**A9C20443**	6
			220...240	3NO	**A9C20643**	6
	63 A	20 A	127	3NO	**A9C20463**	6
			220...240	3NO	**A9C20663**	6

iCT manual control contactor 60 Hz

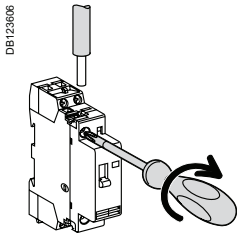
Type						Width in 9 mm modules
2P	Rating (In) AC7a	Rating (In) AC7b	Control voltage (V AC) (60 Hz)	Contact		
	40 A	15 A	127	2NO	**A9C21442**	4
			220...240	2NO	**A9C21642**	4

iCT contactors (cont.)

Operation (Manual control contactor)

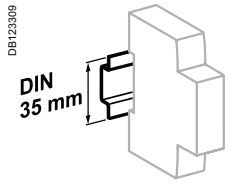


Connection

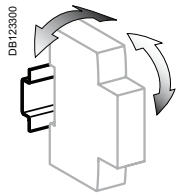


Type		Rating	Lenght tripping	Circuit	Tightening torque	Copper cables	
						Rigid	Flexible or ferrule
					DB122945	DB122946	
iCT	PZ1: 4 mm	16 - 100 A	9 mm	Control	0.8 N.m	1.5 to 2.5 mm: 2 x 1.5 mm²	1.5 to 2.5 mm: 2 x 2.5 mm²
		16 and 25 A		Power		1.5 to 6 mm²	1 to 4 mm²
	PZ2: 6 mm	40 A - 63 A	14 mm		3.5 N.m	6 to 25 mm²	6 to 16 mm²
		100 A				6 to 35 mm²	6 to 35 mm²
iACTs, iACTp, iACTc, iATEt	PZ1: 4 mm	-	9 mm	-	0.8 N.m	1.5 to 2.5 mm: 2 x 1.5 mm²	1.5 to 2.5 mm: 2 x 2.5 mm²

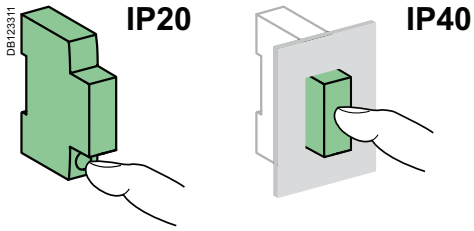
iCT contactors (cont.)

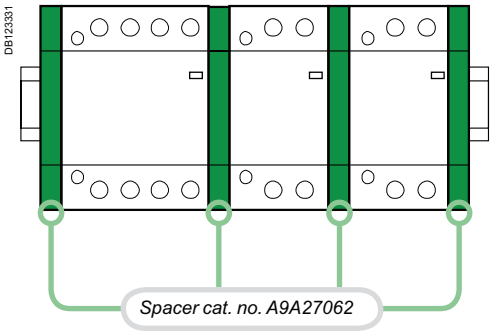


Clip on DIN rail 35 mm.



± 30° vertical.





Technical data

Power circuit		
Voltage rating (Ue)	1P, 2P	250 V AC
	3P, 4P	400 V AC
Frequency		50 Hz or 60 Hz
Type of load		See module CA908026
Endurance (O-C)		
Electrical		100,000 cycles
Maximum number of switching operation a day		100
Additional characteristics		
Insulation voltage (Ui)		500 V AC
Pollution degree		2
Rated impulse withstand voltage (Uimp)		2.5 kV (4 kV for 12/24/48 V AC)
Degree of protection (IEC 60529)	Device only	IP20
	Device in modular enclosure	IP40
Operating temperature		-5°C to +60°C (1)
Storage temperature		-40°C to +70°C
Tropicalization (IEC 60068-1)		Treatment 2 (relative humidity 95 % at 55°C)
ELSV compliance (Extra Low Safety Voltage) for 12/24/48 V AC versions		
The product control conforms to the SELV (safety extra low voltage) requirements		

(1) In the case of contactor mounting in a enclosure for which the interior temperature is in range between 50°C and 60°C, it is necessary to use a spacer, cat. no. A9A27062, between each contactor

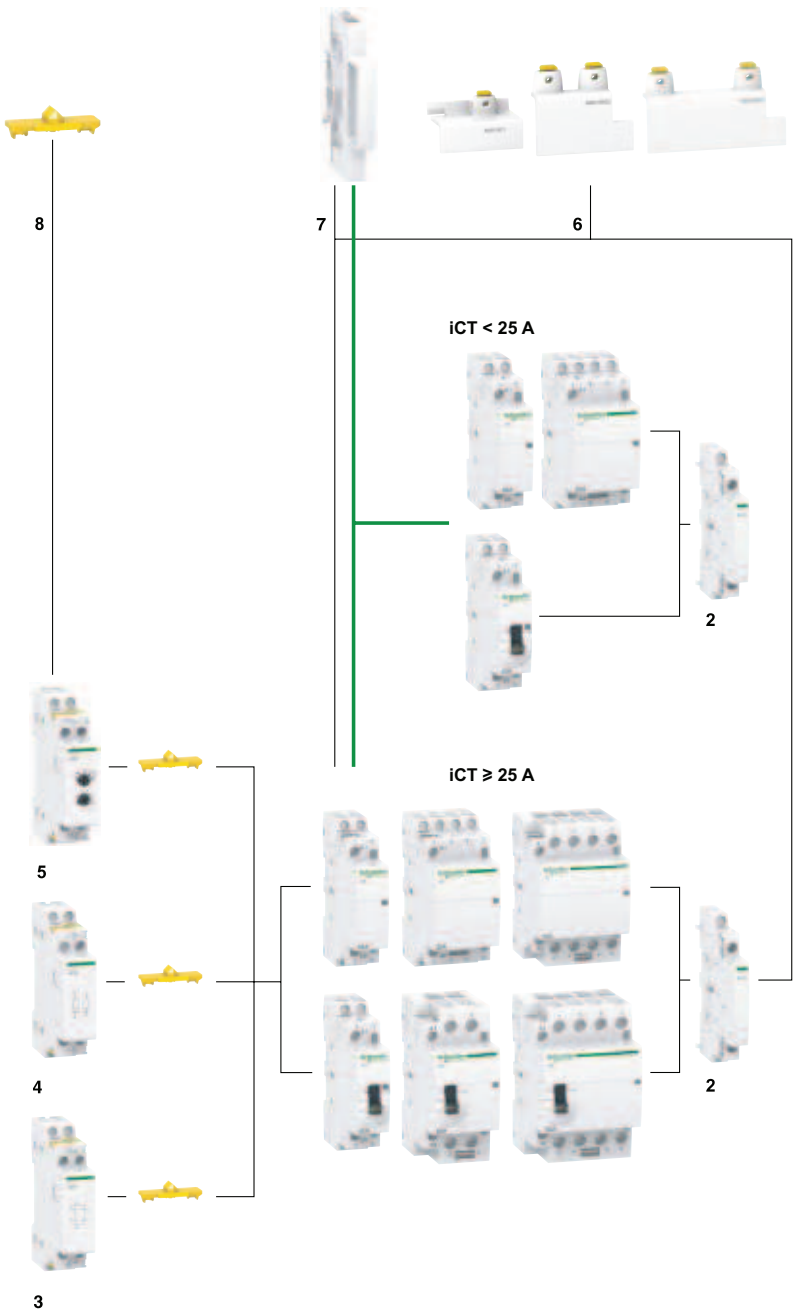
iCT contactors (cont.)

Mounting accessories

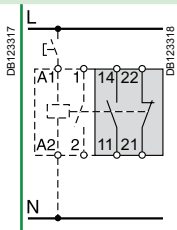
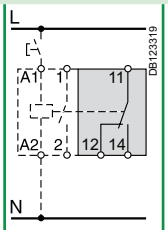
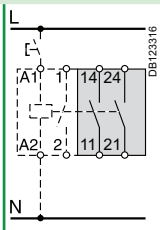
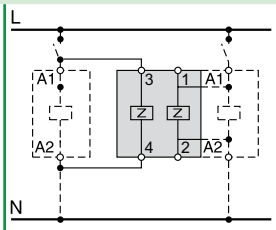
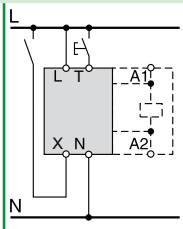
6	Sealable screw shields for top and bottom	3P, 4P 25 A	**A9A15921**
		2P 40/63 A	**A9A15922**
		3P, 4P 40/63 A	**A9A15923**
7	9 mm spacer		**A9A27062**
8	Yellow clips		**A9C15415**

Auxiliaries

Indication			
2	iACTs	1NO + 1NC	**A9C15914**
		1CO	**A9C15915**
		2NO	**A9C15916**
Double control inputs			
3	iACTc	230 V AC	**A9C18308**
		24 V AC	**A9C18309**
Coil suppression blocs			
4	iACTp	12...48 V AC	**A9C15919**
		48...127 V AC	**A9C15918**
		220...240 V AC	**A9C15920**
Time delay			
5	iATEt	24...240 V AC	**A9C15419**



iCT contactors
Electrical auxiliaries for iCT

	Indication			Protection			Control	
Auxiliaries	**iACTs**			**iACTp**			**iACTc**	
Type	**Indication**			**Interference filtering**			**Impulse/latched control**	
	With Open/Close auxiliary contact			2 protection circuits				
	PB106120-34 			PB106124-34 			PB106123-34 	
Function								
	■ This auxiliary allows indication of the "open" or "closed" position of the contactor power contacts			■ This auxiliary is an interference suppressor which limits overvoltages on the control circuit			■ This auxiliary, combined with contactors, enables them to be controlled by 2 order types: □ impulse order for local control (input T) □ latched order for centralised control (input X) □ the last order received takes priority	
Wiring diagrams								
								
Mounting								
	■ Mounted to the right of iCT			■ Mounted to the left of iCT by yellow clips (1) ■ By wires			■ Mounted to the left of iCT by yellow clips (1)	
Use								
	–			■ The iACTp has 2 separate and identical circuits, allowing it to be combined with 2 different one on the iCT the other by wires			■ Mains power outages: □ < 1 s: keeps its initial status □ ⩾ 5 s: reset □ put back into operation by manual operation on input X or T. ■ Minimum impulse duration: 250 ms	
Catalogue numbers	**A9C15914**	**A9C15915**	**A9C15916**	**A9C15918**	**A9C15919**	**A9C15920**	**A9C18308**	**A9C18309**

Technical specifications								
Control voltage (Ue)	V AC	24…240			48 …127	12 …48	220 …240	230…240	24…48
	V DC	24…130			–			–	
Operating frequency	Hz	50/60			50/60			50/60	
Width in 9 mm modules		1			2			2	
Auxiliary contact (breaking capacity)		■ Mininimum: 10 mA at 24 V DC/AC - cos φ = 1 ■ Maximum: □ 5 A at 240 V AC - cos φ = 1 □ 1 A at 130 V DC			–			–	
Number of contacts		1NO + 1NC	1CO	2NO	–			–	
Operating temperature	°C	-5°C to +50°C							
Storage temperature	°C	-40°C to +70°C							
Consumption		–			–			OFF load: 3 VA Inrush (2): 2 VA Holding (2): 0.2 VA	

(1) Electrical and mechanical link.
(2) Maximum consumption of all contactors controlled.

iCT contactors
Electrical auxiliaries for iCT (cont.)

Control (cont.)

iATEt

Time delay

PB106125-34



■ This auxiliary is used to time delay for iCT and iTL. According to cabling, there are 5 possible time delay types:
□ 1 for iTL
□ 4 for iCT.

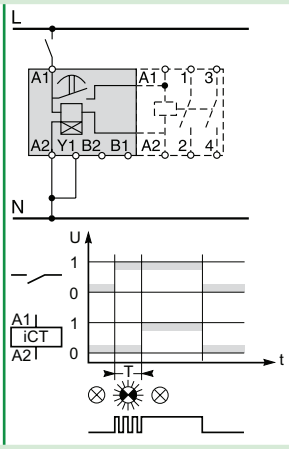
Function type A: late closing
■ Delay energizing of contactor.

Function type B: time delay
■ Energize the contactor by closing a push button.
■ The time delay starts as soon as the control contacts are closed.

Function type C: late opening
■ Energize the contactor by closing a push button.
■ The time delay starts when the control contacts are opened.

Function type H: fixed time operation
■ Operate the contactor for a pre-determined time from the moment of energizing.

DB123321



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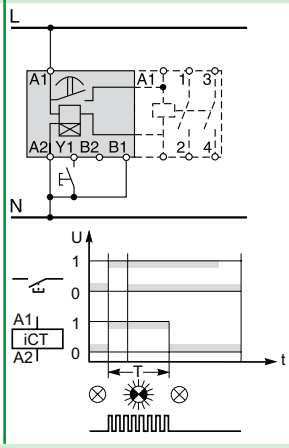

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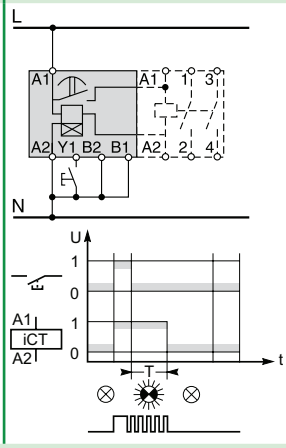

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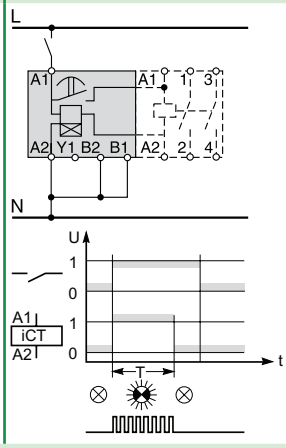


■ Mounted to the left of iCT by yellow clips (1)

–

A9C15419

24…240

24…110

50/60

2

–

–

-20°C to +50°C

-40°C to +80°C

Off-load: 5 VA
Inrush (2): 3 A
Holding (2): 0.2 A

iCT contactors
Accessories for iCT

	Security				
Accessories	**Sealable screw shields**			**Yellow clips**	**Spacer**
	PB104485-15	PB104486-15	PB104487-15	PB106143-10	PB104483-40
					
Function					
	■ Designed to cover terminals to avoid contact with device screws. ■ Allow sealing			■ Ensure the mechanical and/or electrical link between contactors and their auxiliaries.	■ Required to reduce temperature rise of modular devices installed side by side. ■ Recommended to separate electronic devices (thermostat, programmable clock, etc.) from electromechanical devices (relays, contactors).
	■ For iCT: 3P, 4P - 25 A	■ For iCT: 2P - 40/63 A	■ For iCT: 3P, 4P - 40/63 A		
Use					
	■ Bag of 10 upstream/10 downstream			■ Bag of 10	■ Bag of 5
Catalogue numbers	**A9A15921**	**A9A15922**	**A9A15923**	**A9C15415**	**A9A27062**
Technical specifications					
Width in 9 mm modules	4	4	6	–	1
Number of poles	3P, 4P	2P	3P	–	–

iCT contactors
Technical advice for iCT

Consumption

iCT contactors - 50 Hz

Type							
1P	Rating (In)		Control voltage (V AC) (50 Hz)	Consumption		Max. power	
	AC7a	AC7b		Holding	Inrush		
	16 A	5 A	12	3.8 VA	15 VA	1.3 W	**A9C22011**
			24	3.8 VA	15 VA	1.3 W	**A9C22111**
			48	3.8 VA	15 VA	1.3 W	**A9C22211**
			220	3.8 VA	15 VA	1.3 W	**A9C22511**
			230…240	2.7 VA	9.2 VA	1.2 W	**A9C22711**
	25 A	8.5 A	220	3.8 VA	15 VA	1.3 W	**A9C20531**
			230…240	2.7 VA	9.2 VA	1.2 W	**A9C20731**
2P							
	16 A	5 A	12	3.8 VA	15 VA	1.3 W	**A9C22012**
			24	3.8 VA	15 VA	1.3 W	**A9C22112**
			48	3.8 VA	15 VA	1.3 W	**A9C22212**
			220	3.8 VA	15 VA	1.3 W	**A9C22512**
			230...240	2.7 VA	9.2 VA	1.2 W	**A9C22712**
			12	3.8 VA	15 VA	1.3 W	**A9C22015**
			24	3.8 VA	15 VA	1.3 W	**A9C22115**
			220	3.8 VA	15 VA	1.3 W	**A9C22515**
			230...240	2.7 VA	9.2 VA	1.2 W	**A9C22715**
	20 A	6.4 A	230...240	2.7 VA	9.2 VA	1.2 W	**A9C22722**
	25 A	8.5 A	24	3.8 VA	15 VA	1.3 W	**A9C20132**
			48	3.8 VA	15 VA	1.3 W	**A9C20232**
			220	3.8 VA	15 VA	1.3 W	**A9C20532**
			230...240	2.7 VA	9.2 VA	1.2 W	**A9C20732**
			220	3.8 VA	15 VA	1.3 W	**A9C20536**
			230...240	2.7 VA	9.2 VA	1.2 W	**A9C20736**
	40 A	15 A	220...240	4.6 VA	34 VA	1.6 W	**A9C20842**
	63 A	20 A	24	4.6 VA	34 VA	1.6 W	**A9C20162**
			220...240	4.6 VA	34 VA	1.6 W	**A9C20862**
	100 A	-	220...240	6.5 VA	53 VA	2.1 W	**A9C20882**
3P							
	16 A	5 A	220…240	4.6 VA	34 VA	1.6 W	**A9C22813**
	25 A	8.5 A	220…240	4.6 VA	34 VA	1.6 W	**A9C20833**
	40 A	15 A	220…240	6.5 VA	53 VA	2.1 W	**A9C20843**
	63 A	20 A	220…240	6.5 VA	53 VA	2.1 W	**A9C20863**
4P							
	16 A	5 A	24	4.6 VA	34 VA	1.6 W	**A9C22114**
			220...240	4.6 VA	34 VA	1.6 W	**A9C22814**
			220...240	4.6 VA	34 VA	1.6 W	**A9C22818**
	20 A	6.4 A	220 ...240	4.6 VA	34 VA	1.6 W	**A9C22824**
	25 A	8.5 A	24	4.6 VA	34 VA	1.6 W	**A9C20134**
			220...240	4.6 VA	34 VA	1.6 W	**A9C20834**
			24	4.6 VA	34 VA	1.6 W	**A9C20137**
			220...240	4.6 VA	34 VA	1.6 W	**A9C20837**
			220...240	4.6 VA	34 VA	1.6 W	**A9C20838**
	40 A	15 A	220...240	6.5 VA	53 VA	2.1 W	**A9C20844**
			220...240	6.5 VA	53 VA	2.1 W	**A9C20847**
	63 A	20 A	24	6.5 VA	53 VA	2.1 W	**A9C20164**
			220...240	6.5 VA	53 VA	2.1 W	**A9C20864**
			24	6.5 VA	53 VA	2.1 W	**A9C20167**
			220...240	6.5 VA	53 VA	2.1 W	**A9C20867**
			220...240	6.5 VA	53 VA	2.1 W	**A9C20868**
			220...240	6.5 VA	53 VA	2.1 W	**A9C20869**
	100 A	-	220...240	13 VA	106 VA	4.2 W	**A9C20884**

iCT contactors
Technical advice for iCT (cont.)

Consumption (cont.)

iCT manual control contactor 50 Hz

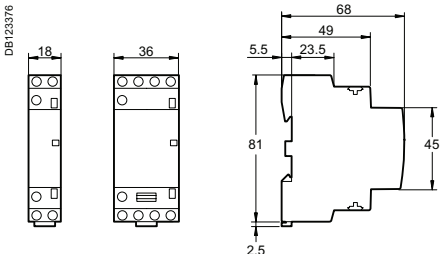
Type							
2P	Rating (In)		Control voltage (V AC) (50 Hz)	Consumption		Max. power	
	AC7a	AC7b		Holding	Inrush		
	16 A	5 A	220	2.7 VA	9.2 VA	1.2 W	A9C23512
			230...240	2.7 VA	9.2 VA	1.2 W	A9C23712
			220	3.8 VA	15 VA	1.3 W	A9C23515
			230...240	2.7 VA	9.2 VA	1.2 W	A9C23715
	25 A	8.5 A	24	3.8 VA	15 VA	1.3 W	A9C21132
			24	3.8 VA	15 VA	1.3 W	A9C21136
			220	2.7 VA	9.2 VA	1.2 W	A9C21532
			230...240	2.7 VA	9.2 VA	1.2 W	A9C21732
	40 A	15 A	24	4.6 VA	34 VA	1.6 W	A9C21142
			220...240	4.6 VA	34 VA	1.6 W	A9C21842
	63 A	20 A	24	4.6 VA	34 VA	1.6 W	A9C21162
			220...240	4.6 VA	34 VA	1.6 W	A9C21862
3P							
	25 A	8.5 A	220...240	4.6 VA	34 VA	1.6 W	A9C21833
	40 A	15 A	220...240	6.5 VA	53 VA	2.1 W	A9C21843
4P							
	25 A	8.5 A	24	4.6 VA	34 VA	1.6 W	A9C21134
			24	4.6 VA	34 VA	1.6 W	A9C21137
			220...240	4.6 VA	34 VA	1.6 W	A9C21834
	40 A	15 A	24	6.5 VA	53 VA	2.1 W	A9C21144
			24	6.5 VA	53 VA	2.1 W	A9C21147
			220...240	6.5 VA	53 VA	2.1 W	A9C21844
	63 A	20 A	24	6.5 VA	53 VA	2.1 W	A9C21164
			220...240	6.5 VA	53 VA	2.1 W	A9C21864

iCT contactors - 60 Hz

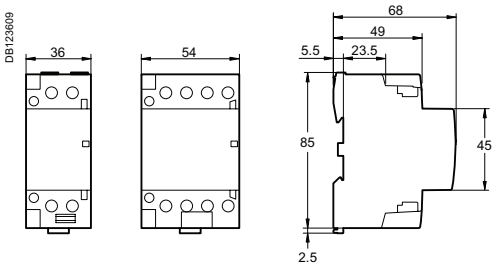
Type							
1P	Rating (In)		Control voltage (V AC) (60 Hz)	Consumption		Max. power	
	AC7a	AC7b		Holding	Inrush		
	25 A	8.5 A	127	3.8 VA	15 VA	1.3 W	A9C20431
			220 ...240	2.7 VA	9.2 VA	0.9 W	A9C20631
2P							
	16 A	5 A	127	3.8 VA	15 VA	1.3 W	A9C22415
			220...240	2.7 VA	9.2 VA	0.9 W	A9C22615
	25 A	8.5 A	127	3.8 VA	15 VA	1.3 W	A9C20432
			220...240	2.7 VA	9.2 VA	0.9 W	A9C20632
			127	3.8 VA	15 VA	1.3 W	A9C20436
			220...240	2.7 VA	9.2 VA	0.9 W	A9C20636
	40 A	15 A	127	4.6 VA	34 VA	1.6 W	A9C20442
			220...240	4.6 VA	34 VA	1.6 W	A9C20642
3P							
	25 A	8.5 A	127	4.6 VA	34 VA	1.6 W	A9C20433
			220...240	4.6 VA	34 VA	1.6 W	A9C20633
	40 A	15 A	127	6.5 VA	53 VA	2.1 W	A9C20443
			220...240	6.5 VA	53 VA	2.1 W	A9C20643
	63 A	20 A	127	6.5 VA	53 VA	2.1 W	A9C20463
			220...240	6.5 VA	53 VA	2.1 W	A9C20663

iCT contactors
Dimensions for iCT

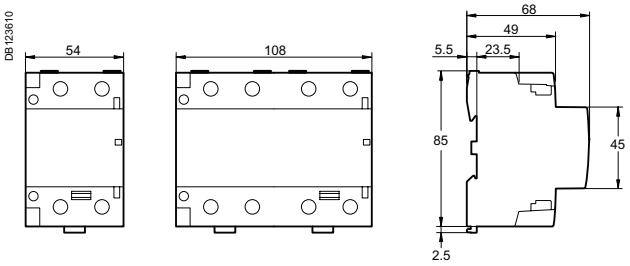
Dimensions (mm)



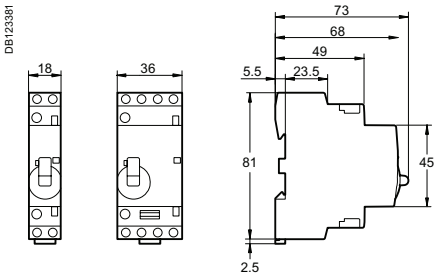
iCT 16/25 A



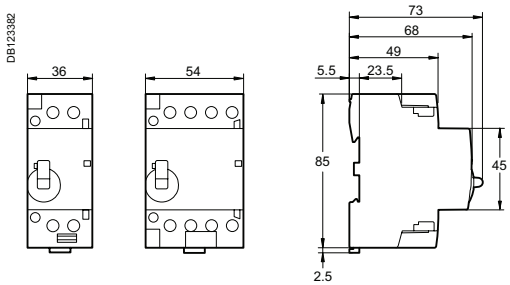
iCT 40/63 A



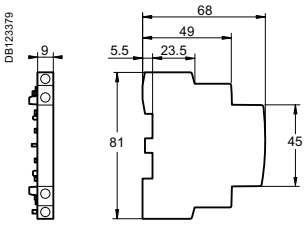
iCT 100 A



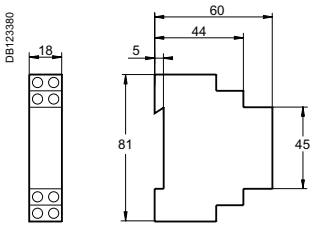
iCT manual control contactor 16/25 A



iCT manual control contactor 40/63 A



iACTs



iATEt
iACTp
iACTc