Protection
Circuit protection / Earth leakage protection
Electrical auxiliaries for iC60, iID, iC40, iCV40, iID40, iDPN Vigi, iSW-NA

■ The electrical auxiliaries are combined with iC60, iC40, iCV40, iDPN Vigi circuit breakers, iID, iID40 residual current circuit breakers, remote tripping switch disconnector iSW-NA; they enable tripping or remote indication of their position (open/closed/tripped) upon a fault.
■ They are fastened by clips (without tools) to the left side of the breaker.
■ The iOF/SD+OF auxiliary is a 2-in-1 product: via a mechanical selector switch, it provides two contacts, OF+SD or OF+OF.
■ The iOF+SD24 auxiliary can report open/closed (OF) status information and intentional or fault tripping of the associated device (SD) to the Acti9 Smartlink or a programmable logic controller via the TI24 interface (24 V DC).

Tripping auxiliaries:

IEC/EN 60947-1
■ iMN: undervoltage release
■ iMNs: delayed undervoltage release
■ iMNx: undervoltage release, independant from supply voltage
■ iMX: shunt release
■ iMX+OF: shunt release with open/close contact.

EN 50550
■ iMSU: overvoltage release.

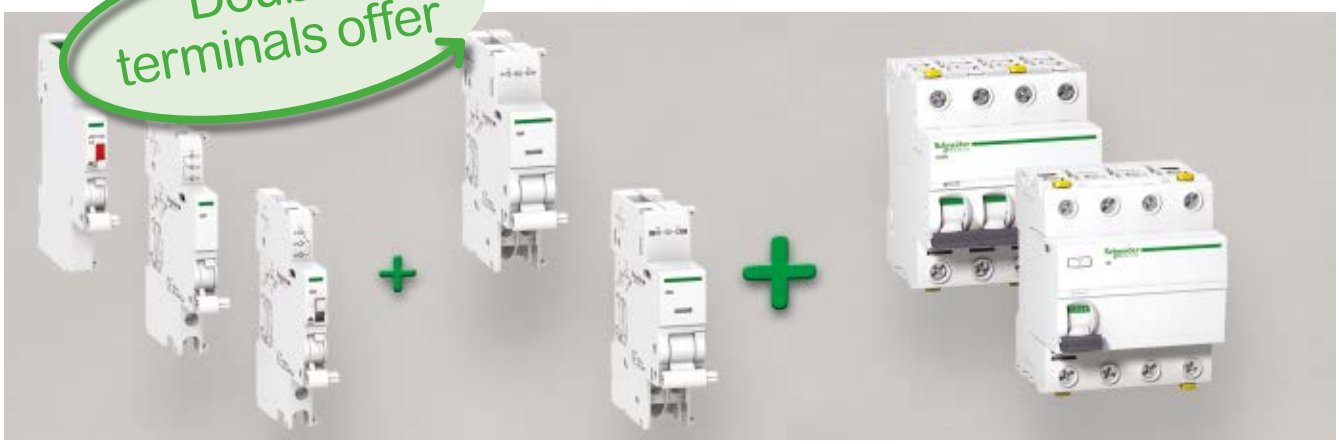
Indication auxiliaries:

IEC/EN 60947-5-1
■ iOF: open/close contact
■ iSD: fault indicating contact
■ iOF/SD+OF: open/close contact and switchable OF or SD contact
■ iOF+SD24: open/close contact OF and default indicating contact SD with Ti24 interface.

IEC/EN 60947-5-4
■ iOF+SD24: open/close contact OF and default indicating contact SD with Ti24 interface.

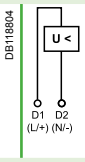
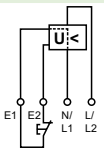
DB404939

DB404940



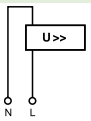
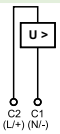
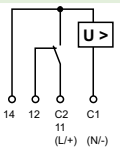
Electrical auxiliaries for iC60, iID, iC40, iCV40, iID40, iDPN Vigi, iSW-NA (cont.)

Tripping

Auxiliaries	iMN				iMNs	iMNx	
Type	**Undervoltage release**						
	Instantaneous				Delayed	Independent of the supply voltage	
	PB104477-35 				PB104478-35 	PB104480-35 	
Function							
	■ Trips the device with which it is combined when its input voltage decreases (between 70 % and 35 % Un). ■ Prevents device closing again until its input voltage is restored					■ Tripping of the associated device by opening of the control circuit (e.g. push-button, dry contact)	
					■ Not tripping on transient voltage dip (up to 0.2 s)	■ A drop in the supply voltage does not trip the associated device ■ A locking push-button control allows the circuit protected (e.g. machine control) to be placed in safety configuration	
Wiring diagrams							
	DB118804 					DB406947 	
Use							
	■ Emergency stoppage by normally closed push button ■ Improve the safety of power supply circuits for several machines by preventing "uncontrolled" restarting					■ Emergency stoppage with fail-safe principle ■ Insensitive to control circuit voltage variation to increase service continuity **Important: Before any servicing operation switch off the mains power supply (voltage presence at terminals E1/E2)**	
Catalogue numbers	**A9A26960**	**A9A27108**	**A9A26961**	**A9A26959**	**A9A26963**	**A9A26969**	**A9A26971**
iC60, iID, iC40, iCV40, iID40, iDPN Vigi, iSW-NA	■	■	■	■	■	■	■
iC60, iID double terminals	■	■	■	■	■	■	■
iC60 RCBO, iKQE RCBO	■	■	■	■	■	■	■
Technical specifications							
Rated voltage (Ue)	220…240 V AC	24 V AC	48 V AC	115 V AC	220…240 V AC	220…240 V AC	380…415 V AC
	–	24 V DC	48 V CC		–	–	
Standardised operating and non-response to voltage times (Ua)*	–	–	–	–	–	–	–
Maximum operating time	–	–	–	–	–	–	–
Minimum non-response time	–	–	–	–	–	–	–
Operating frequency	50/60 Hz			400 Hz	50/60 Hz	50/60 Hz	
Red mechanical indicator	On front face				On front face	On front face	
Test function	–				–	–	
Width in 9 mm modules	2				2	2	
Operating current	–				–	–	
Number of contacts	–				–	–	
Operating temperature	-35…+70°C				-35…+70°C	-35…+70°C	
Storage temperature	-40…+85°C				-40…+85°C	-40…+85°C	

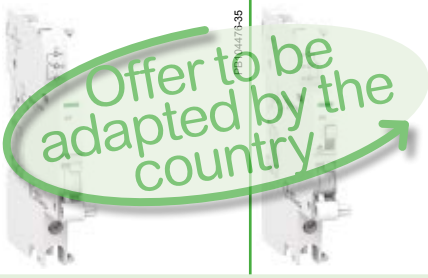
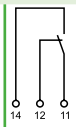
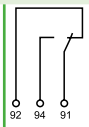
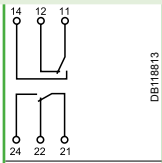
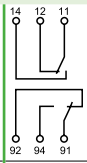
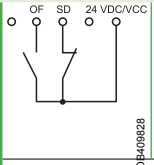
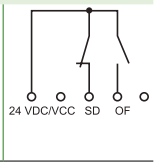
*(Ua)
Voltages measured between the phase and the neutral conductor, at which the iMSU device must control the associated protective device.

Electrical auxiliaries for iC60, iID, iC40, iCV40, iID40, iDPN Vigi, iSW-NA (cont.)

	iMSU	iMX	iMX+OF
	Overvoltage release	**Shunt release**	
			With Open/Close auxiliary contact
	PB104479-35 	PB104496-35 	PB104481-35 
	■ Switches off the power supply by opening the breaker with which it is combined, in the event that the phase/neutral voltage is exceeded (loss of neutral). For a four-phase network, use three iMSU tripping auxiliaries.	■ Trips the associated device when it is powered on	
			■ Includes an open/close contact (OF) to indicate the "open" or "closed" position of the device
	DB118806 	DB123012 	DB406929 
	■ Protection of equipment against overvoltages on the electrical network (neutral conductor break) ■ Voltage monitoring between phase and neutral conductors	■ Emergency stoppage by normally open push button	■ Emergency stoppage by normally open push button ■ Remote indication of the position of the associated device
	A9A26500	**A9A26476** / **A9A26477** / **A9A26478**	**A9A26946** / **A9A26947** / **A9A26948**
	■	■ / ■ / ■	■ / ■ / ■
	■	■ / ■ / ■	■ / ■ / ■
	■	■ / ■ / ■	■ / ■ / ■
	230 V AC	100…415 V AC / 48 V AC / 12…24 V AC	100…415 V AC / 48 V AC / 12…24 V AC
	–	110…130 V DC / 48 V DC / 12…24 V DC	110…130 V DC / 48 V DC / 12…24 V DC
	255 V AC / 275 V AC / 300 V AC / 350 V AC / 400 V AC	– / – / –	– / – / –
	No tripping / 15 s / 5 s / 0.75 s / 0.20 s	– / – / –	– / – / –
	3 s / 1 s / 0.25 s / 0.07 s	– / – / –	– / – / –
	50/60 Hz	50/60 Hz	50/60 Hz
	On front face	On front face	On front face
	–	–	–
	2	2	2
	–	–	10 mA mini, 6 A maxi ≤ 24 V DC: 6 A 48 V DC: 2 A ≤ 130 V DC: 1 A ≤ 240 V AC: 6 A 415 V AC: 3 A
	–	–	1 NO/NC
	-35…+70°C	-35…+70°C	-35…+70°C
	-40…+85°C	-40…+85°C	-40…+85°C

Electrical auxiliaries for iC60, iID, iC40, iCV40, iID40, iDPN Vigi, iSW-NA (cont.)

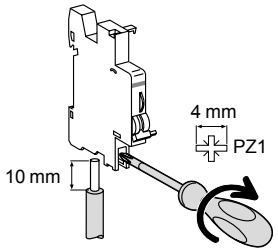
Indication

Auxiliaries	iOF		iSD		iOF/SD+OF	iOF+SD24	
Type	**Open/close auxiliary contact**		**Fault indicating contact**		**Double open/close or fault indicating contact**	**Double open/close and fault indicating contact**	
						Compatible with **downstream** comb busbar	Compatible with **upstream** comb busbar
	PB104474-35  PB104473-35				PB104475-35 	PB107750-35  A9A26898-35	
Function							
	■ Changeover contact indicates "open" or "closed" position of the device		■ Changeover contact indicates position of the device; upon: □ electrical fault □ action on tripping auxiliary ■ Same indication as VISI-TRIP		■ The iOF/SD+OF auxiliary is a 2-in-1 product: via a mechanical selector switch, it provides two contacts, OF+SD or OF+OF	■ 2 contacts (1 NO + 1 NC) can report the signalling information of the associated device to the Acti9 Smartlink or a programmable logic controller: □ electrical fault □ actuation of the tripping auxiliary □ "Open" or "Closed" position of the associated device	
Wiring diagrams							
	DB118810 		DB118811 		DB118812  OF position DB118813  SD position	DB124318  DB409828 	
Use							
	■ Remote indication of the position of the associated device		■ Remote indication of tripping upon a fault of the associated device		■ Remote indication of position and/or tripping upon a fault of the associated device	■ Remote indication of position and tripping upon a fault of the associated device	
Catalogue numbers	**A9A26924**	**A9A26869**	**A9A26927**	**A9A26855**	**A9A26929**	**A9A26897**	**A9A26898**
iC60, iID, iID40, iDPN Vigi, iSW-NA	■	–	■	–	■	■	■
iC40, iCV40	■	–	■	–	■ if no comb busbar	■	■
iC60, iID double terminals	–	■	–	■	■	■	–
iC60 RCBO, iKQE RCBO	■	–	■	–	–	–	–
Technical specifications							
Rated voltage (Ue)	24…415 V AC		24…415 V AC		24…415 V AC	-	
	24…130 V DC		24…130 V DC		24…130 V DC	24 V DC	
Operating frequency	50/60 Hz		50/60 Hz		50/60 Hz	-	
Red mechanical indicator	–		On front face		On front face	On front face	
Test function	On toggle		On toggle		On toggle	On toggle	
Width in 9 mm modules	1		1		1	1	
Operating current	10 mA mini, 6 A maxi					2 mA mini, 100 mA maxi	
	24 V DC	6 A					
	48 V DC	2 A				-	
	60 V DC	1,5 A				-	
	130 V DC	1 A				-	
	24...240 V AC	6 A				-	
	415 V AC	3 A				-	
Number of contacts	1 NO/NC		1 NO/NC		1 NO/NC + 1 NO/NC	1 NO/NC	
Operating temperature	-35…+70°C		-35…+70°C		-35…+70°C	-25…+70°C	
Storage temperature	-40…+85°C		-40…+85°C		-40…+85°C	-40…+85°C	

Electrical auxiliaries for iC60, iID, iC40, iCV40, iID40, iDPN Vigi, iSW-NA (cont.)

Connection

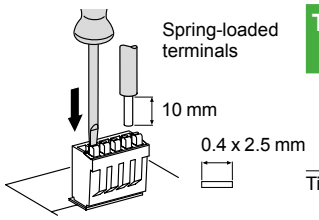
DB123061



Type	Tightening torque	Copper cables		Multi-cables	
		Rigid	Flexible	Rigid	Cables with ferrule
		DB122945 DB123007	DB123011	DB123008	
Indication auxiliaries	1 N.m	1 to 4 mm²	0.5 to 2,5 mm²	2 x 2.5 mm²	2 x 1.5 mm²
Tripping auxiliaries	1 N.m	1 to 6 mm²	0.5 to 4 mm²	2 x .2.5 mm²	2 x 2.5 mm²

Ti24 connector connection

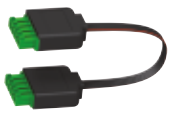
DB123580



Type	Catalogue numbers	Copper cables	
		Rigid	Flexible
		DB122945	DB123553
Ti24 interface	**A9XC2412**	1 x 0.5 to 1.5 mm²	1 x 0.5 to 1.5 mm²

Ti24 prefabricated cables connection

PB107754-10

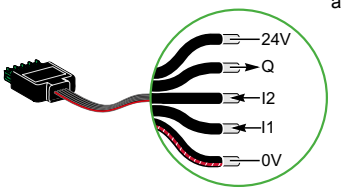


Type	Catalogue numbers	Length
Connection for Acti9 Smartlink		
6 prefabricated	**A9XCAS06**	100 mm
	A9XCAM06	160 mm
	A9XCAH06	450 mm
	A9XCAL06	870 mm

PB107755-14

Connection for PLC type terminals		
6 long prefabricated on a single side	**A9XCAU06**	870 mm
1 long prefabricated on a single side	**A9XCAC01**	4000 mm

DB404941

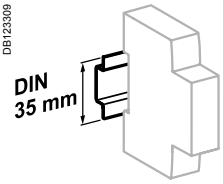


PB107756-7

12 connectors, 5-pins (Ti24)	**A9XC2412**	-

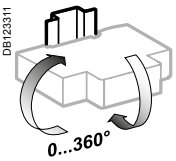
Electrical auxiliaries for iC60, iID, iC40, iCV40, iID40, iDPN Vigi, iSW-NA (cont.)

DB123309



Clip on DIN rail 35 mm.

DB123311



Indifferent position of installation.

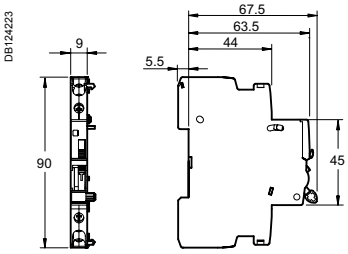
Technical data

Weight (g)

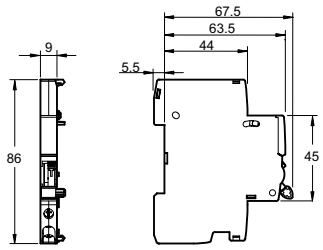
Electrical auxiliaries	
Type	
iMN	69
iMNs	72
iMNx	79
iMSU	68
iMX	64
iMX+OF	68
iOF	32
iSD	33
iOF/SD+OF	43
iOF+SD24	25

Dimensions (mm)

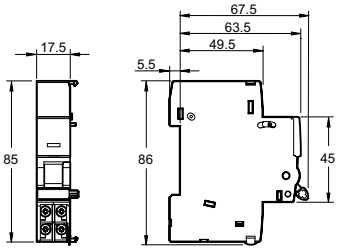
DB124223



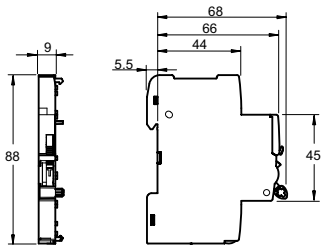
iOF/SD+OF



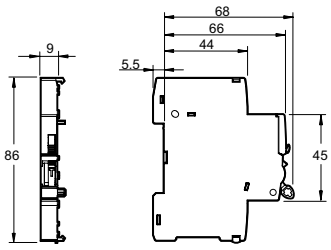
iOF, iSD



iMN, iMNs, iMNx, iMSU, iMX, iMX+OF



iOF+SD24 (A9A26897)



iOF+SD24 (A9A26898)

iMDU electrical auxiliary for Reflex iC60 or RCA iC60

A9C18195

The voltage matching module allows safety voltages of 24 and 48 V AC/DC to be used on the control inputs.

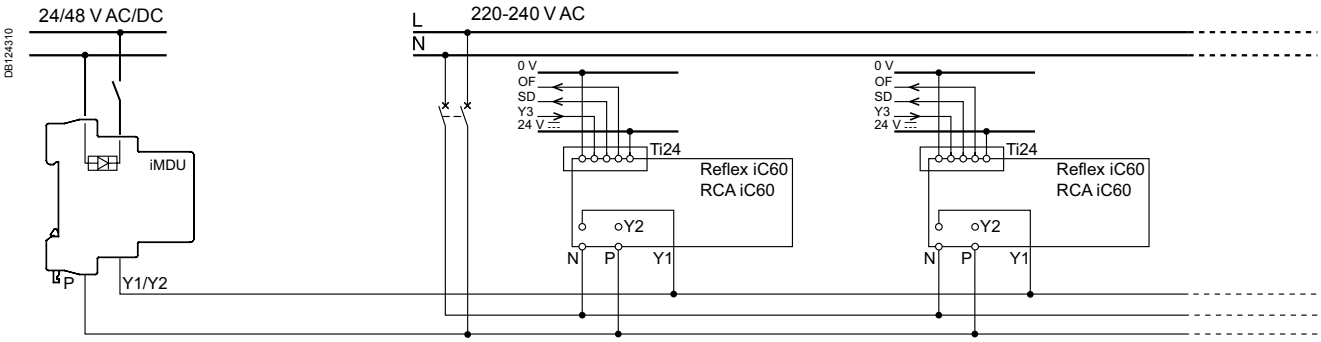
- Only connects to the Reflex iC60 circuit breakers remote controlled by a 220-240 V control voltage
- Galvanic isolation 6000 V
- Maximum combined power between terminals P and Y1/Y2: 100 mA at 230 V and 25°C.

Catalogue numbers

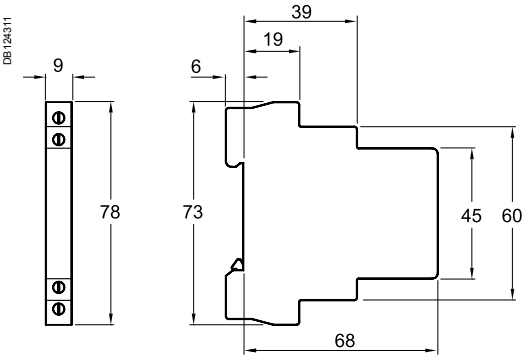
Auxiliary iMDU		
Type		**Width in 9 mm modules**
iMDU	**A9C18195**	1

Diagram

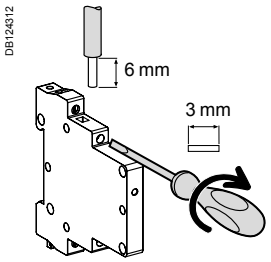
An iMDU electrical auxiliary allows up to a maximum of five Reflex iC60 to be controlled simultaneously at the same input Y1 or Y2.



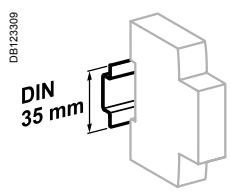
Dimensions (mm)



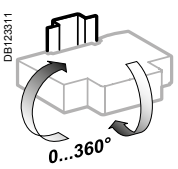
Connection



Type	Tightening torque	Copper cables	
		Rigid	Flexible or with ferrule
		DB122945	DB122946
iMDU	1 N.m	1.5 mm²	1.5 mm²



Clip on DIN rail 35 mm.



Indifferent position of installation.

Technical data

Main characteristics		
Control circuit voltage		24…48 V AC/DC
Insulation voltage (Ui)		500 V
Additional characteristics		
Degree of protection (IEC 60529)	Device only	IP20
	Device in modular enclosure	IP40 Insulation class II
Operating temperature		-20°C to +60°C
Storage temperature		-40°C to +80°C
Tropicalization		Treatment 2 (relative humidity 95 % at 55°C)
Weight		53 g

Electrical auxiliaries for iC60, iID, iC40, iCV40, iID40, iDPN Vigi, iSW-NA (cont.)

5.4	3/04/2018	Translate title of page 3 in english	Sonovision
5.3	26/03/2018	Add iC40, iCV40, iID40 compatibility and delete pictograms page 7	Sonovision
5.2	31/08/2017	Added iC60 RCBO, iKQE RCBO compatibility	Sonovision
5.1	1/06/2017	Changed compatibility of A9A26898 page 4 (not compatibility for Double treminals)	Sonovision
5.0	29/03/2017	New charte	Sonovision
4.4	6/02/2017	Added A9A26898 product page 4	Sonovision
4.3	16/03/2016	Added Installation diagrams pages 6-7	Sonovision
4.2	11/01/2016	Changed Rated voltage (Ue) 24...415 V AC and Opening current contact values Changed "Ti24 prefabricated cables connection" table	Sonovision
4.1	10/04/2015	Added A9A27108 iMN product	Sonovision
4.0	1/10/2014	Changed iMNX and iMX+OF electrical diagrams	Sedoc
3.2	10/01/2014	Changed A9XCAU06 drawing	Sedoc
3.1	28/06/2013	Changed iOF+SD24 technical data page 6: 50 mA maxi to 100 mA maxi. Changed standards page 1. Deleted association table.	Sedoc
3.0	30/10/2012	Changed iOF+SD24 text page 6 and iMDU electrical diagram page 9	Sedoc
2.9	23/08/2012	Changed association table page 2	Sedoc
2.8	6/07/2012	Changed I mini 24 V DC for iMX+OF, iOF, iSD, iOF/SD+OF	Sedoc
2.7	4/04/2012	Inversion of cat. no A9A26855 and A9A26869	Sedoc
2.6	28/02/2012	Changed iOF+SD24 technical data page 6 and photos page 2	Sedoc
2.5	16/02/2012	Changed photo prefabricated cable and deleted Ti 24 ferrule connection and iMDU diagram	Sedoc
2.4	06/01/2012	Change iMNx and iMX+OF diagrams and characteristics	Sedoc
2.3	7/12/2011	Deleted iMSU cat. no. A9A26479, change A9A26979 by A9A26500- Add iMDU product	Sedoc
2.2	13/10/2011	Change iOF+SD24 photo	Sedoc
2.1	09/06/2011	Add iC60 and iID double terminals and iOF+SD24 and iDPN Vigi products	Sedoc
2.0	06/06/2011	InDesign CS5	Sedoc
1.4	07/02/2011	Changed (iMNx ou iMN ou iMSU) by (iMN, iMNs, iMNx ou iMX, iMX+OF ou iMSU)	Sedoc
1.3	21/09/2010	Add iSW-NA product	Sedoc
Indice	**Date**	**Modification**	**Name**