Contents

Protection

iDPN circuit breakers

DB123400 DB123854 DB123865 DB123430 DB123525 DB405571

The protection of property and people against direct or indirect contacts, insulation faults and fire hazards is implemented by residual current devices obtained by the combination of a circuit breaker and an earth leakage module.

PB107141-32

IEC/EN 60898-1

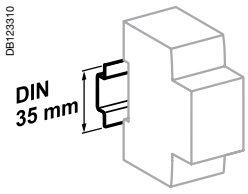
The circuit breakers are designed for protection against short-circuit and overload currents, for the control and disconnection of final distribution circuits in service sector, agricultural and industrial applications, in TT earthing system or with multiple earthed neutral (TN-S) requiring neutral cutoff without its protective device.

Catalogue numbers

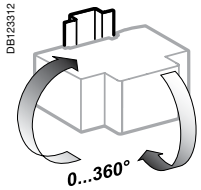
i DPN N circuit breakers	6000	
Type	**1P+N**	
	DB123389 	
Auxiliaries	**Modules CA907008 and CA907010**	
Vigi	**Module CA902013**	
Rating (In)	**B curve**	**C curve**
1 A	-	**A9N21552**
2 A	-	**A9N21553**
3 A	-	**A9N21554**
4 A	**A9N17515**	**A9N21722**
6 A	**A9N17516**	**A9N21555**
10 A	**A9N17517**	**A9N21556**
13 A	**A9N17518**	**A9N21725**
16 A	**A9N17519**	**A9N21557**
20 A	**A9N17520**	**A9N21558**
25 A	**A9N17521**	**A9N21559**
32 A	**A9N17522**	**A9N21560**
40 A	**A9N17523**	**A9N21561**
Width in 9-mm modules	2	
Accessories	**Module LIN001 and CA907010**	

(*) Librio catalogue number, IMQ approval

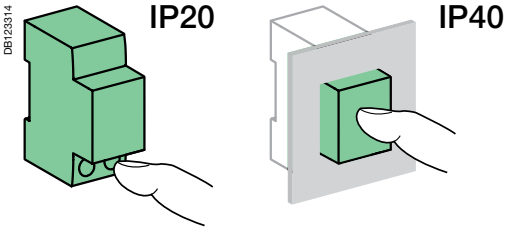
*i*DPN circuit breakers (cont.)



Clip on DIN rail 35 mm.



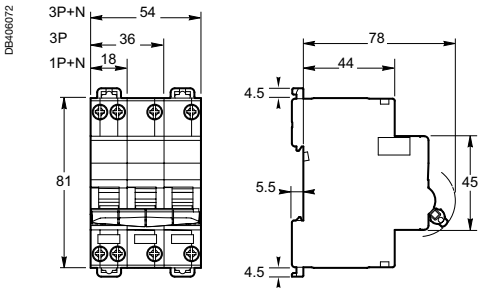
Indifferent position of installation.



Technical data

Main characteristics			*i* DPN N
Insulation voltage (Ui)	Phase-to-neutral		400 V
	Phase-to-phase		440 V
Voltage rating (Ue)	Phase-to-neutral		230 V
	Phase-to-phase		400 V
Magnetic tripping	B curve	3 to 5 In	■
	C curve	5 to 10 In	■
	D curve	10 to 14 In	■
According to IEC/EN 60898-1			
Limitation class			3
Rated breaking capacity (Icn)			6000 A
Service breaking capacity (Ics)			100 % Icn
Rated breaking and making capacity on a single pole (Icn1)			Icn1 = Icn
According to IEC 60947-2			
Rated impulse withstand voltage (Uimp)			4 kV
Breaking capacity (Icu)			10 kA
Service breaking capacity (Ics)			75 % Icu
Pollution degree			3
Additional characteristics			
Degree of protection (IEC 60529)	Device only		
	Device in modular enclosure		
Endurance (O-C)	Electrical	≤ 20 A	20000 cycles
		≥ 25 A	10000 cycles
	Mechanical		20000 cycles
Operating temperature			-25°C to +70°C
Storage temperature			-40°C to +70°C
Tropicalization (IEC 60068-1)			Treatment 2 (relative humidity of 95 % at 55°C)
Neutral opening and closing shifted relative to phases			No surge upon operation of the device

Dimensions (mm)



Weight (g)

Circuit breaker	
Type	***i*DPN**
1P+N	115

*i*DPN circuit breakers (cont.)

■ Reinforced cable pull-out strength: serrated terminals

■ Automatic cable guiding in the correct position: terminals with guard

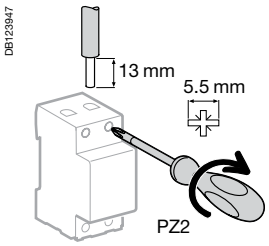
■ Assembly and disassembly with comb busbar in place by operating toggle latches at the top and bottom of the products

■ Where there is a comb tooth, the connection of cables of cross section 16 mm² remains possible

Markings
■ Area for 4 marking clips alongside the downstream terminal
■ Area for marking by 12 mm high label on the front panel

Positive contact indication
■ A green strip on the toggle guarantees opening of all the poles in safety conditions (padlocking possible) for work to be carried out on live parts

Connection



Rating	Tightening torque	Copper cables	
		Rigid	Flexible or with ferrule
		DB122945	DB122946
DT40, *i* DPN, C40	2 N.m	0.75 to 16 mm²	0.33 to 10 mm²
DT60	3.5 N.m	0.5 to 35 mm²	0.5 to 25 mm²

■ Connection by comb busbar or cables (as per EN 50027).

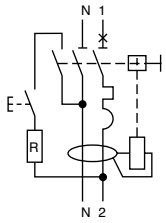
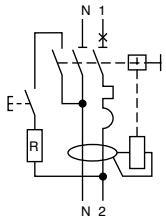
Residual current devices
iDPN Vigi

IEC/EN 61009

- The iDPN Vigi residual current device provide complete protection for final circuits (against overcurrents and insulation faults):
  - protection for users against electric shocks by direct contacts (⩽ 30 mA),
  - protection for users against electric shocks by indirect contacts (300 mA),
  - protection of the installations against fire risks (300 mA).

PB110001-40

iDPN H Vigi

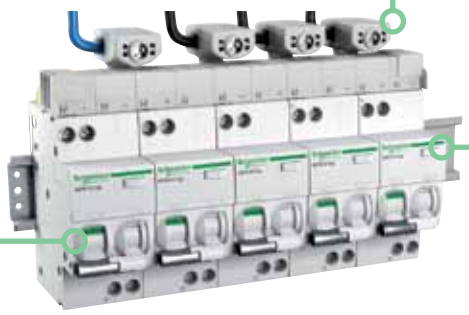
iDPN N Vigi 6000				
Type			**AC** ~	**Width in 9 mm modules**
Auxiliaries				
1P+N Curve B		**Sensitivity**	**30 mA**	
DB123871 	Rating (In)	4 A	**A9D55604**	4
		6 A	**A9D55606**	
		10 A	**A9D55610**	
		16 A	**A9D55616**	
		20 A	**A9D55620**	
		25 A	**A9D55625**	
		32 A	**A9D55632**	
		40 A	**A9D55640**	
1P+N Curve C		**Sensitivity**	**30 mA**	
DB123871 	Rating (In)	6 A	**A9D31606**	4
		10 A	**A9D31610**	
		16 A	**A9D31616**	
		20 A	**A9D31620**	
		25 A	**A9D31625**	
		32 A	**A9D31632**	
		40 A	**A9D31640**	
Voltage rating (Ue)			230 V AC	
Operating frequency			50 Hz	

Residual current devices
iDPN Vigi (cont.)

DB405958-40

■ Fast contact closure

■ Insulated terminals IP20



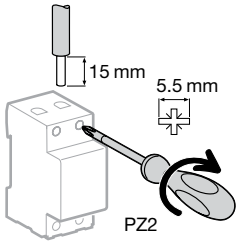
Visi-trip double window
■ Fault tripping circuit breaker is indicated by a red mechanical indicator on the front face.
■ Earth fault is indicated by a red mechanical indicator on the front face

■ Test button

Positive contact indication
■ A green strip on the toggle guarantees opening of all the poles in safety conditions (padlocking possible) for work to be carried out on live parts

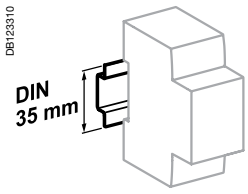
Connection

DB123947

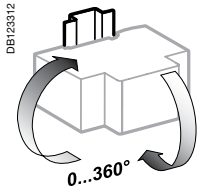


Rating	Tightening torque	Copper cables	
		Rigid	Flexible or ferrule
		DB122945	DB122946
4 to 40 A	2 N.m	1 to 16 mm²	1 to 10 mm²

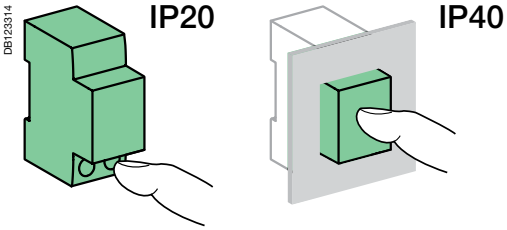
Residual current devices
iDPN Vigi (cont.)



Clip on DIN rail 35 mm.



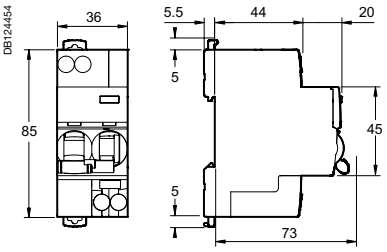
Indifferent position of installation.



Technical data

Main characteristics			
Insulation voltage (Ui)			400 V AC
Pollution degree			3
Rated impulse withstand voltage (Uimp)			4 kV
Setting temperature for ratings			30°C
Magnetic tripping	Curve B		Between 3 and 5 In
	Curve C		Between 5 and 10 In
According to EN 61009			
Limitation class			
Rated breaking capacity (Icn)			6000 A
Rated residual breaking and making capacity (IΔm)			6000 A
8/20 µs impulse withstand		Type AC	250 Â
		Type A	250 Â
Additional characteristics			
Earth leakage protection with instantaneous tripping			30 mA
Degree of protection (IEC 60529)	Device only		IP20
	Device in modular enclosure		IP40 Insulation classe II
Endurance (O-C)	Electrical	≤ 20 A	20,000 cycles
		≥ 25 A	10,000 cycles
	Mechanical		20,000 cycles
Overvoltage category (IEC 60364)			III
Operating temperature		Type AC	-5°C to +60°C
		Type A, *SI*	-25°C to +60°C
Storage temperature			-40°C to +85°C
Tropicalization (IEC 60068-1)			Treatment 2 (relative humidity 95 % to 55°C)

Dimensions (mm)



Weight (g)

Residual current device	
Type	***i*DPN Vigi**
1P+N	125

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iC120H circuit breakers (curves B, C, D)

IEC/EN 60898-1, IEC 60947-2

iC120H circuit breakers are multistandard circuit breakers that combine the following functions:
- circuit protection against short-circuit currents
- circuit protection against overload currents
- suitability for isolation in the industrial sector to IEC/EN 60947-2
- fault tripping and indication by adding auxiliaries.

Alternating current (AC) 50/60 Hz						
Breaking capacity (Icu) to IEC/EN 60947-2						**Service breaking capacity (Ics)**
Type		**Voltage (V)**				
1P		**12 to 130 V**	**220 to 240 V**	**380 to 415 V**	**440 V**	
Rating (In)	63 to 125 A	30 kA	15 kA	4,5 kA (1)	-	50 % of Icu
2P, 3P, 4P		**12 to 130 V**	**220 to 240 V**	**380 to 415 V**	**440 V**	
	63 to 125 A	-	30 kA	15 kA	10 kA	50 % of Icu
Breaking capacity (Icn) to IEC/EN 60898-1						
Type		**Voltage (V)**				
1P, 2P, 3P, 4P		**230 to 400 V**				
Rating (In)	63 to 125 A	15000 A				50 % of Icn

(1) One-pole breaking capacity in IT isolated neutral system (double fault).

Direct current (DC)						
Breaking capacity (Icu) according to IEC/EN 60947-2						**Service breaking capacity (Ics)**
		Voltage (Ue)				
Between +/-		**12 to 125 V**	**≤ 144 V**	**≤ 250 V**	**≤ 375 V**	**≤ 500 V**
Number of poles		**1P**		**2P**	**3P**	**4P**
Rating (In)	63 to 125 A	20 kA	15 kA	15 kA	15 kA	15 kA	100 % of Icu

Catalogue numbers

iC120H circuit breaker						
Type	**1P**			**2P**		
						
Vigi iC120	**Vigi iC120 add-on residual current device, module CA902016**			**Vigi iC120 add-on residual current device, module CA902016**		
Rating (In)	**Curve**			**Curve**		
	B	**C**	**D**	**B**	**C**	**D**
63 A	**A9N18401**	**A9N18445**	**A9N18489**	**A9N18412**	**A9N18456**	**A9N18500**
80 A	**A9N18402**	**A9N18446**	**A9N18490**	**A9N18413**	**A9N18457**	**A9N18501**
100 A	**A9N18403**	**A9N18447**	**A9N18491**	**A9N18414**	**A9N18458**	**A9N18502**
125 A	**A9N18404**	**A9N18448**	**A9N18492**	**A9N18415**	**A9N18459**	**A9N18503**
Width in 9 mm modules	3			6		

Note: For current ratings below 63 amp use IC60H

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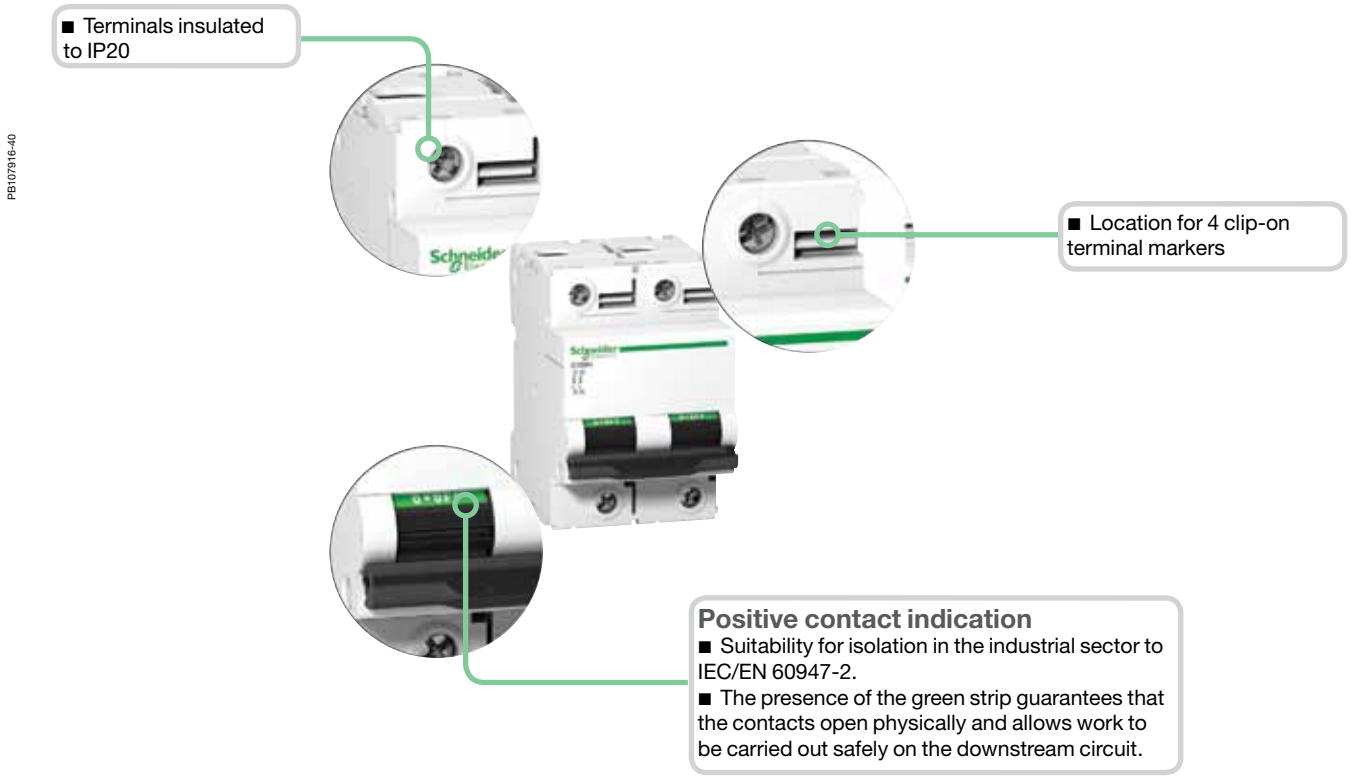
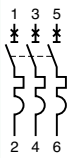
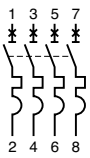
iC120H circuit breakers (curves B, C, D) (cont.)



PB107916-40

- Longer product service life thanks to:
  - good overvoltage withstand capacity: products designed to provide a high industrial performance level (degree of pollution, rated impulse withstand voltage and insulation voltage).
  - high limitation performances (see limitation curves).
  - fast closure independent of toggle operating speed.
- Remote indication of the open/closed/tripped state by auxiliary contacts (optional).
- Power supply from above or below.

	3P			4P		
						
	Vigi iC120 add-on residual current device, module CA902016			Vigi iC120 add-on residual current device, module CA902016		
	Curve			Curve		
	B	C	D	B	C	D
	A9N18423	A9N18467	A9N18511	A9N18434	A9N18478	A9N18522
	A9N18424	A9N18468	A9N18512	A9N18435	A9N18479	A9N18523
	A9N18425	A9N18469	A9N18513	A9N18436	A9N18480	A9N18524
	A9N18426	A9N18470	A9N18514	A9N18437	A9N18481	A9N18525
	9			12		

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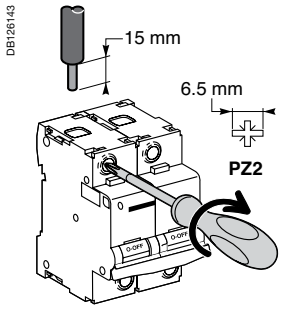
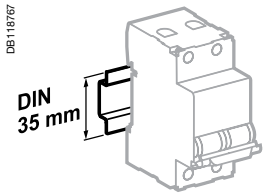
iC120H circuit breakers (curves B, C, D) (cont.)

Connection

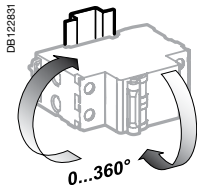


Rating	Tightening torque	Without access. Copper cables Rigid	Without access. Copper cables Flexible or with ferrule	With accessories 50 mm² Al term.	With accessories Screw-on connection for ring terminal (1)	With accessories Multi-cable terminal Rigid cables	With accessories Multi-cable terminal Flexible cables
		DB122945	DB122946 DB122935	Al DB118789	DB118787		
63 to 125 A	3.5 N.m	1 to 50 mm²	1.5 to 35 mm²	16 to 50 mm²	Ø 5 mm	3 x 16 mm²	3 x 10 mm²

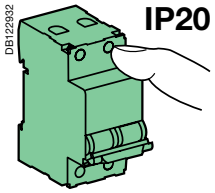
(1) For lugs up to 63 A, front or rear accessories.

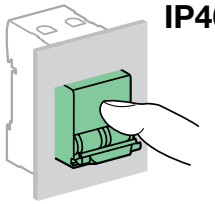


Clips onto 35 mm DIN rail.



Any installation position.





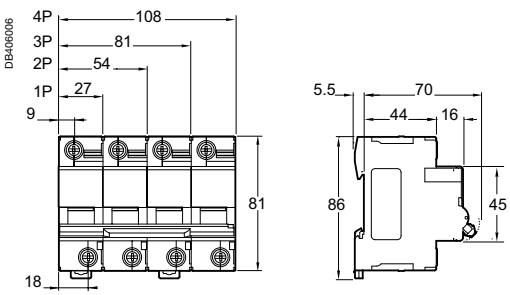
Technical data

Main characteristics			
To IEC/EN 60947-2			
Insulation voltage (Ui)			500 V AC
Degree of pollution			3
Rated impulse withstand voltage (Uimp)			6 kV
Thermal tripping	Reference temperature		50°C
To IEC/EN 60898-1			
Magnetic tripping	Curve B		3 and 5 In
	Curve C		5 and 10 In
	Curve D		10 and 14 In
Limitation class			3
Additional characteristics			
Degree of protection (IEC 60529)	Device only		IP20
	Device in a modular enclosure		IP40 (IPXXD)
Endurance (O-C)	Electrical	63 A	10000 cycles (O-C)
		80...125 A	5000 cycles (O-C)
	Mechanical		20000 cycles
Operating temperature			-30°C to +70°C
Storage temperature			-40°C to +80°C
Tropicalisation (IEC 60068-1)			Treatment 2 (relative humidity 95% at 55°C)

Weight (g)

Circuit breaker	
Type	**iC120H**
1P	205
2P	410
3P	615
4P	820

Dimensions (mm)



Vigi iC120 add-on residual current devices (type AC)

PB107924-30

2P

PB107925-30

3P

PB107926-30

4P

EN 61009

When a Vigi iC120 device is combined with a iC120 circuit breaker, it provides the following functions:

- protection of persons against electric shock by direct contact (30 mA),
- protection of persons against electric shock by indirect contact (≥ 300 mA),
- protection of installations against fire hazards (300 mA to 1000 mA).

Catalogue numbers

Vigi iC120 add-on residual current devices

Type Product		AC ~ Vigi iC120					Width in 9 mm modules
2P	Sensitivity	30 mA	300 mA	500 mA	300 mA S	1000 mA S	
dess. 077		A9N18563	A9N18564	A9N18565	A9N18544	A9N18545	7
3P	Sensitivity	30 mA	300 mA	500 mA	300 mA S	1000 mA S	
dess. 079		A9N18566	A9N18567	A9N18568	A9N18546	A9N18547	10
4P	Sensitivity	30 mA	300 mA	500 mA	300 mA S	1000 mA S	
dess. 078B		A9N18569	A9N18570	A9N18571	A9N18548	A9N18549	10
Operating voltage (Ue)		230...415 V					
Operating frequency		50/60 Hz					

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Vigi iC120 add-on residual current devices (type A)

EN 61009

When a Vigi iC120 device is combined with a iC120 circuit breaker, it provides the following functions:
- protection of persons against electric shock by direct contact (30 mA),
- protection of persons against electric shock by indirect contact (≥ 300 mA),
- protection of installations against fire hazards (300 mA to 1000 mA).

PB107924-30

2P

PB107925-30

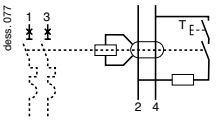
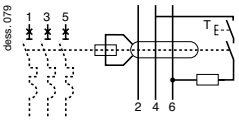
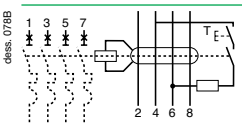
3P

PB107926-30

4P

Catalogue numbers

Vigi iC120 add-on residual current devices

Type Product		A Vigi iC120						Width in 9 mm modules
2P	Sensitivity	30 mA	300 mA	500 mA	300 mA S	500 mA S	1000 mA S	
dess. 077 		A9N18572	A9N18573	A9N18574	-	-	-	7
3P	Sensitivity	30 mA	300 mA	500 mA	300 mA S	500 mA S	1000 mA S	
dess. 079 		A9N18575	A9N18576	A9N18577	-	-	-	10
4P	Sensitivity	30 mA	300 mA	500 mA	300 mA S	500 mA S	1000 mA S	
dess. 078B 		A9N18578	A9N18579	A9N18580	A9N18587	A9N18588	A9N18589	10
Operating voltage (Ue)		230...415 V						
Operating frequency		50/60 Hz						

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Vigi iC120 add-on residual current devices (type *SI*)

EN 61009

When a Vigi iC120 device is combined with a iC120 circuit breaker, it provides the following functions:
- protection of persons against electric shock by direct contact (30 mA),
- protection of persons against electric shock by indirect contact (≥ 300 mA),
- protection of installations against fire hazards (300 mA to 1000 mA).

Special feature of type *SI* :
They are appropriate for operating in environments with:
- high risk of unwanted tripping: frequent lightning strikes, IT system, presence of electronic ballasts, frequency converters, presence of switchgear incorporating lighting type interference filters, computer system, etc.
- blind sources:
  - presence of harmonics or high frequency rejections
  - presence of DC components: diodes, diode bridges, switch-mode power supplies, etc.
- protected against unwanted tripping caused by transient voltage surges (lightning strike, operation of switchgear on the network, etc.)

PB107924-30

2P

PB107925-30

3P

PB107926-30

4P

Catalogue numbers

Vigi iC120 add-on residual current devices

Type	*SI*					Width in 9 mm modules
Product	Vigi iC120					
2P Sensitivity	30 mA	300 mA	500 mA	300 mA Ⓢ	1000 mA Ⓢ	
dess. 077	A9N18591	A9N18592	-	A9N18556	A9N18557	7
3P Sensitivity	30 mA	300 mA	500 mA	300 mA Ⓢ	1000 mA Ⓢ	
dess. 079	A9N18594	A9N18595	-	A9N18558	A9N18559	10
4P Sensitivity	30 mA	300 mA	500 mA	300 mA Ⓢ	1000 mA Ⓢ	
dess. 078B	A9N18597	A9N18598	A9N18599	A9N18560	A9N18561	10
Operating voltage (Ue)	230...415 V					
Operating frequency	50/60 Hz					

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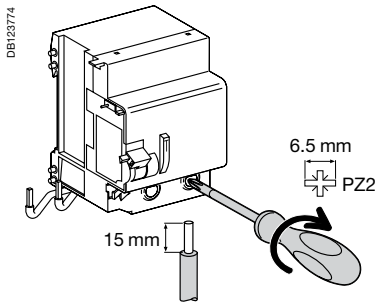
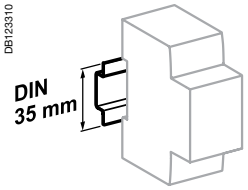
Vigi iC120 add-on residual current devices (types AC, A and *SI*)

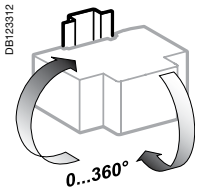
Connection



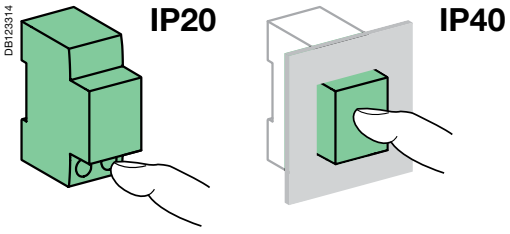
Type	Sensitivity	Tightening torque	Copper cables	
			Rigid	Flexible or with ferrule
		DB122945	DB122946	
Vigi iC120	30...1000 mA	3.5 N.m	1 to 50 mm²	1 to 35 mm²



Clips onto 35 mm DIN rail.



Any installation position.



Technical data

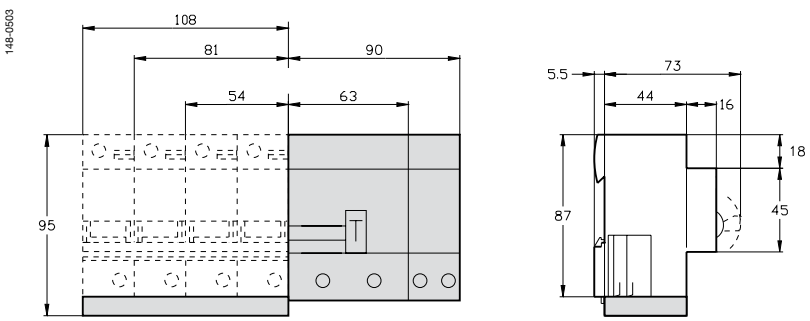
Main characteristics		
To IEC 60947-2		
Insulation voltage (Ui)		500 V AC
Degree of pollution		3
Rated impulse withstand voltage (Uimp)		6 kV
To EN 61009		
Impulse current withstand (8/20 µs) without tripping	Types AC and A (non-selective Ⓢ)	250 Â
	Types AC and A (selective Ⓢ)	3 kÂ
	Types *SI* (non-selective Ⓢ)	3 kÂ
	Types *SI* (selective Ⓢ)	5 kÂ
Additional characteristics		
Degree of protection	Device only	IP20
	Device in a modular enclosure	IP40 Insulation class II
Operating temperature	Type AC	-5°C to +60°C
	Types A and *SI*	-25°C to +60°C
Storage temperature		-40°C to +85°C

Weight (g)

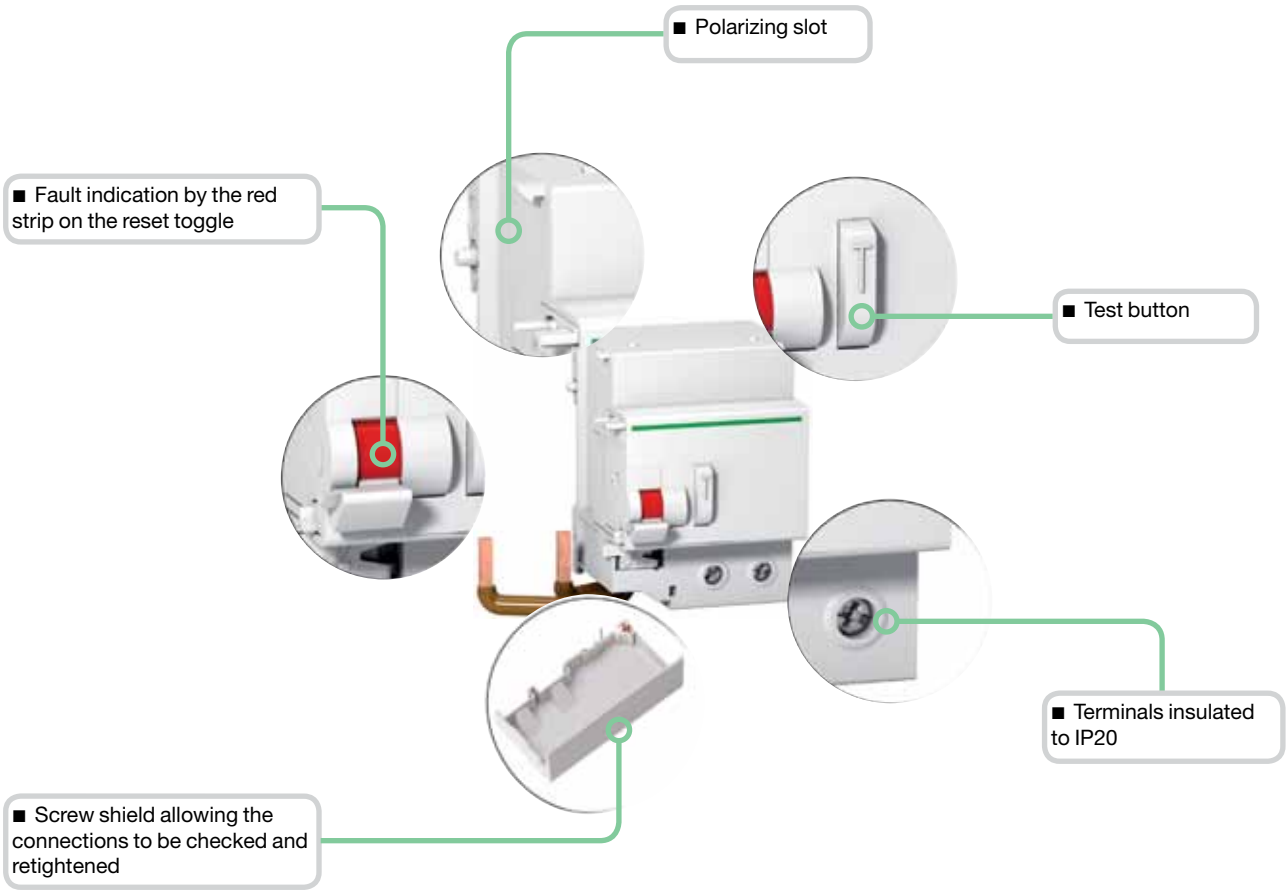
Add-on residual current devices	
Type	**Vigi iC120**
2P	325
3P	500
4P	580

Dimensions (mm)

iC120 + Vigi iC120



Vigi iC120 add-on residual current devices (types AC, A and *SI*) (cont.)



Type *SI*
The ***SI*** type provides increased immunity from electrical interference and polluted or corrosive environments.

Accessories for iC120, DPN, DPN Vigi, C60H-DC, SW60-DC, C60NA-DC, C60PV-DC, iSW devices

Installation

Accessories	Rotary handle			Plug-in base		Padlocking device	
	PB100137_SE-24 PB100138_SE-24 			PB111764-40 		056886_SE  057209J_SE-20 	
Function							
	Front or side control of 2, 3 and 4-pole circuit breakers ■ Degree of protection: IP40 ■ A complete rotary handle consists of: □ a circuit-breaker operating sub-assembly, cat. no. **27046**, □ a handle cat. no. **27047** or a handle cat. no. **27048** ■ Installation: □ the circuit-breaker operating sub-assembly cat. no. **27046** is fixed to the circuit breaker □ the removable handle cat. no. **27047** is mounted on the removable front panel or on the enclosure door □ the fixed handle cat. no. **27048** is fixed to the front or side panel of the enclosure			**Allows a circuit breaker to be quickly removed or replaced, without touching the connections** ■ Degree of protection: IP20 ■ It consists of: □ a base to be fixed to a rail (or panel) □ 2 “blades” to be fixed in the device terminals ■ Connection: tunnel terminals for cables up to 50 mm² (rigid) or 35 mm² (flexible) ■ Installation: □ on backplate □ on a horizontal rail ■ Centreline between two rows: 200 mm ■ Only on the circuit breaker, without a Vigi device or auxiliary ■ Padlocking option (8 mm dia. padlock not supplied)		**Used to padlock a circuit breaker in the "open" or "closed" position** ■ Diameter of the padlock: 8 mm max. ■ Locking in the ON position does not prevent the circuit breaker from tripping in the event of a fault ■ Isolation: in conformity with IEC/EN 60947-2.	
Cat. numbers	**27047** Removable extended handle	**27048** Fixed handle	**27046** Operating sub-assembly	**26996** (1 per pole)	**26997** (1 per pole)	**27145**	**26970**
Set of	**1**	**1**	**1**	**1**	**1**	**4**	**2**
Suitable for the following devices:							
iC120	■ 2P, 3P, 4P			–	■ ⩽ 63 A	■	–
iC120 + Vigi iC120	■ 2P, 3P, 4P			–	–	■	–
DPN, DPN Vigi	■ 3P, 4P			–	–	–	■
C60H-DC	■ 2P			■	–	–	■
SW60-DC, C60NA-DC, C60PV-DC	–			–	–	–	■
iSW	■ iSW ⩾ at 4 modules of 9 mm			■ iSW 40 to 63 A	–	–	■

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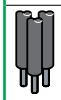
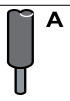
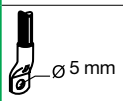
Accessories for iC120, DPN, DPN Vigi, C60H-DC, SW60-DC, C60NA-DC, C60PV-DC, iSW devices (cont.)

Safety

Accessories	Screw shield		Terminal shield			Interpole barrier	Spacer
	056870_SE-33 	PB124114 	056869_SE-38 		DB123898	 PB104483-35	
Function							
	Prevents all contact with the fixing screws ■ The degree of protection becomes IP40 ■ Sealable, max. diameter 1.2 mm ■ Dividable		**Prevents all contact with the terminals** ■ Degree of protection becomes IP40 ■ Sealable, max. diameter 1.2 mm ■ 1P	■ 1P ■ 3P: 1 x 26975 + 1 x 26976 ■ 4P: 2 x 26976	■ 2P	**Improves the insulation between the connections: cables, terminals, lugs, etc.**	■ Used to: □ complete the rows □ separate the devices ■ Width: 1 x 9 mm module ■ Allows that 2 cables are routed from one row to another (above and below), up to 6 mm²
Cat. numbers	**18527**	**26981**	**18526**	**26975**	**26976**	**27001**	**A9N27062**
Set of	**2 (4P dividable)**		**2 (for upstream/downstream terminal)**			**10**	**1**
Suitable for the following devices:							
iC120	■	–	■	–	–	■	■
Vigi iC120	–	–	–	–	–	–	■
DPN, DPN Vigi	–	–	–	–	–	–	■
C60H-DC	–	■	–	■	■	■	■
SW60-DC, C60NA-DC, C60PV-DC	–	■	–	–	–	■	■
iSW	–	■ iSW 40 to 125 A	–	■ iSW 40 to 125 A		■ iSW 40 to 125 A	■

Accessories for iC120, DPN, DPN Vigi, C60H-DC, SW60-DC, C60NA-DC, C60PV-DC, iSW devices (cont.)

Connection

Accessories	Multi-cable terminal		50 mm² Al terminal	Screw-on connection for ring terminal	Connection kit for ring terminals	Terminal for rear connector
	DB118780 		DB118782 	DB123897 	058967N-23 	DB118784 
Function						
	For 3 copper cables: ■ Rigid up to 16 mm² ■ Flexible up to 10 mm²		**For 16 to 50 mm² aluminium cables**	**For lug tipped cables, front or rear mounting**	**For terminal up to 63 A, front or rear access (screw Ø 5 mm)** ■ It incorporates a "conductive" part and an "insulating" part which ensures the phase-to-phase clearance	**For cable up to 50 mm² or by terminal** ■ Supplied with a 1P terminal shield
	DB118787 		DB122935 	DB118789 		
Cat. numbers	**19091**	**19096**	**27060**	**27053**	**17400**	**18528**
Set of	**4**	**3**	**1**	**8**	**2**	**2**
iC120	■	■	■	■	–	■
Vigi iC120	■	■	■	–	–	–
DPN, DPN Vigi	–	–	–	■	–	–
C60H-DC, iSW 40 to 125 A	■	■	■	■	■	–
SW60-DC, C60NA-DC	■	■	■	■	–	–
C60PV-DC	–	–	–	■	–	–
Tightening torque	2 N.m		10 N.m	2 N.m	–	–
Stripping length	11 mm		13 mm	–	–	–
Tools to be used	Diameter 5 mm or PZ2		Hc 1/5" or 5 mm	Diameter 5 mm	Diameter 5 mm	–

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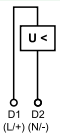
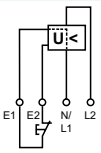
Accessories for iC120, DPN, DPN Vigi, C60H-DC, SW60-DC, C60NA-DC, C60PV-DC, iSW devices (cont.)

Identification

Accessories	Clip-on terminal marker strip			
	03120ᵃD_SE-23 			
Function	**For connection identification**			
Cat. numbers	0: **AB1-R0** 1: **AB1-R1** 2: **AB1-R2** 3: **AB1-R3** 4: **AB1-R4** 5: **AB1-R5** 6: **AB1-R6** 7: **AB1-R7** 8: **AB1-R8** 9: **AB1-R9**	A: **AB1-GA** B: **AB1-GB** C: **AB1-GC** D: **AB1-GD** E: **AB1-GE** F: **AB1-GF** G: **AB1-GG** H: **AB1-GH** I: **AB1-GI** J: **AB1-GJ**	K: **AB1-GK** L: **AB1-GL** M: **AB1-GM** N: **AB1-GN** O: **AB1-GO** P: **AB1-GP** Q: **AB1-GQ** R: **AB1-GR** S: **AB1-GS** T: **AB1-GT**	U: **AB1-GU** V: **AB1-GV** W: **AB1-GW** X: **AB1-GX** Y: **AB1-GY** Z: **AB1-GZ** +: **AB1-R12** -: **AB1-R13** Blank : **AB1-RV**
Set of	**250**			
iC120	■ 4 markers max. per pole			
Vigi iC120	■ 4 markers max. per device			
DPN, DPN Vigi	■ 4 markers max. per pole			
C60H-DC, SW60-DC, C60NA-DC, C60PV-DC	■ 4 markers max. per pole			

Electrical auxiliaries for iC120, DPN, DPN Vigi, ID, C60H-DC, SW60-DC, C60PV-DC, C60NA-DC devices

	Tripping		
Auxiliaries	**MN**	**MNs**	**MNx**
Type	**Undervoltage release**		
	Instantaneous	Delayed	Independent of the supply voltage
	PB107151-30 	PB107152-30 	PB107149-30 
Function			
	■ Causes the device with which it is associated to trip when its input voltage decreases (between 70 % and 35 % of Un). Prevents the device from closing until its input voltage has been restored		■ Tripping of the associated device by opening of the control circuit (e.g. push-button, dry contact)
		■ No tripping in the event of transient voltage dips (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 		DB118805 
Utilization			
	■ Emergency stop via a normally-closed pushbutton ■ Ensures the safety of the power supply circuits of several machines by preventing accidental startups		■ Fail-safe emergency stop ■ Insensitive to the variation in the control circuit voltage to improve continuity of service **Important: Before any servicing operation switch off the mains power supply (voltage presence at terminals E1/E2)**

Catalogue numbers	**A9N26960**	**A9N26961**	**A9N26959**	**A9N26963**	**A9N26969**	**A9N26971**
iC120, DPN, DPN Vigi, ID	■	■	■	■	■	■
C60H-DC, SW60-DC, C60PV-DC, C60NA-DC	■	■	■	■	■	■

Technical specifications							
Rated voltage (Ue)	V AC	220…240	48	115	220…240	230	400
	V DC	–	48	–	–	–	
Standardised operating and non-response to voltage times (Ua)*		–	–	–	–	–	–
Maximum operating time		–	–	–	–	–	–
Minimum non-response time		–	–	–	–	–	–
Operating frequency	Hz	50/60		400	50/60	50/60	
Mechanical state indicator light, red		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	°C	-25…+50			-25…+50	-25…+50	
Storage temperature	°C	-40…+85			-40…+85	-40…+85	
Standards							
IEC/EN 60947-1		■			■	■	
IEC/EN 60947-5-1		–			–	–	
EN 60947-2		■			■	–	
EN 62019-2(1)		–			–	–	

(1) For iC120, DPN.
**(Ua): Voltages measured between the phase and the neutral conductor, at which the MSU device must control the associated protective device.*

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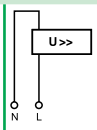
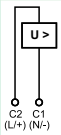
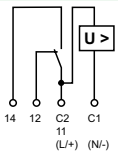
Electrical auxiliaries for iC120, DPN, DPN Vigi, ID, C60H-DC, SW60-DC, C60PV-DC, C60NA-DC devices (cont.)

	MSU	MX			MX+OF		
	Voltage threshold release	**Shunt release**					
					With Open/Close auxiliary contact		
	PB107153-30 	PB107150-30 			PB107148-30 		
	■ Cuts off the power supply by opening the device with which it is associated when the phase/neutral voltage is exceeded (loss of neutral). For a four-phase network, use three MSU 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 breaker		
	DB118806 	DB123012 			DB118808 		
	■ Protection of the devices against overvoltages on the electrical network (break in the neutral conductor) ■ Monitoring the voltage between the phase conductor and the neutral conductor	■ Emergency stop via a normally-open pushbutton.			■ Emergency stop via a normally-open pushbutton ■ Remote indication of the position of the associated device		
	A9N26500	**A9N26476**	**A9N26477**	**A9N26478**	**A9N26946**	**A9N26947**	**A9N26948**
	■	■	■	■	■	■	■
	–	■	■	■	■	■	■
	230	100…415	48	12…24	100…415	48	12…24
	–	110…130	48	12…24	110…130	48	12…24
	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	50/60			50/60		
	On front face	On front face			On front face		
	–	–			–		
	2	2			2		
	–	–			3 A / 415 V AC 6 A / ≤ 240 V AC		
	–	–			1 NO/NC		
	-25…+50	-25…+50			-25…+50		
	-40…+85	-40…+85			-40…+85		
	■	■			■		
	–	–			–		
	–	–			–		
	–	–			–		

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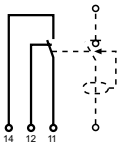
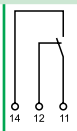
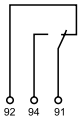
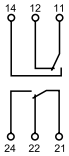
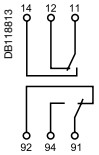
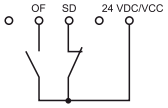
Electrical auxiliaries for iC120, DPN, DPN Vigi, ID, C60H-DC, SW60-DC, C60PV-DC, C60NA-DC devices (cont.)

	Indication				
Auxiliaries	**OF.S**	**OF**	**SD**	**OF+SD/OF**	**OF+SD24**
Type	**Open/closed auxiliary contact**	**Open/closed auxiliary contact**	**Fault indicating contact**	**Double open/closed or fault indicating contact**	**Double open/close and fault indicating contact**
	PB100628_SE-30-b 	PB107145-30 	PB107146-30 	PB100625_SE-30-b 	PB107760-35 
Function					
	■ Changeover contact indicating the "open" or "closed" position of the associated device ⚠ **Compulsory for the addition of tripping or indication auxiliaries on a residual current circuit breaker ID**	■ Changeover contact indicating the "open" or "closed" position of the associated device	■ Changeover contact indicating the position of the associated device in the event of: □ electrical fault □ action on the tripping auxiliary ⚠ **Not compatible with a ID residual current circuit breaker, use an OF+SD/OF in the SD position**	■ The OF+SD/OF auxiliary is a two-in-one product: choice of OF + SD or OF + OF contact via the selector switch	■ 2 contacts (1 NO + 1 NC) can report the signalling information of the associated device to the Acti 9 Smartlink or a programmable logic controller: □ electrical fault □ actuation of the tripping auxiliary □ "Open" or "Closed" position of the associated device
Wiring diagrams					
	DB118809 	DB118810 	DB118811 	DB118812  OF position DB118813  SD position	DB124318 
Utilization					
	■ Remote indication of the position of the associated device	■ Remote indication of the position of the associated device	■ Remote fault tripping indication of the associated device	■ Remote position and/or fault tripping indication of the associated device	■ Remote indication of position and tripping upon a fault of the associated breaker
Catalogue numbers	**A9N26923**	**A9N26924**	**A9N26927**	**A9N26929**	**A9N26899**
ID	■	■	■	■	■
iC120, DPN, DPN Vigi, C60H-DC, C60H-DC, SW60-DC, C60PV-DC, C60NA-DC	–	■	■	■	■

Technical specifications						
Rated voltage (Ue)	V AC	24…415	24…415	24…415	24…415	–
	V DC	24…130	24…130	24…130	24…130	24
Operating frequency	Hz	50/60	50/60	50/60	50/60	–
Mechanical state indicator		–	–	On front face	On front face	On front face
Test function		–	On front face	On front face	On front face	On toggle
Width in 9 mm modules		1	1	1	1	1
Operating current		3 A /415 V AC 6 A / ⩽ 240 V AC				2 mA mini, 100 mA maxi
Number of contacts		1 NO/NC	1 NO/NC	1 NO/NC	1 NO/NC + 1 NO/NC	1 NO + 1 NC
Operating temperature	°C	-25…+50	-25…+50	-25…+50	-25…+50	-25…+70
Storage temperature	°C	-40…+85	-40…+85	-40…+85	-40…+85	-40…+85
Standards						
IEC/EN 60947-1		–	–	–	–	–
IEC/EN 60947-5-1		■	■	■	■	■ IEC 60947-5-4
EN 60947-2		–	–	–	–	–
EN 62019-2(1)		■	■	■	■	–

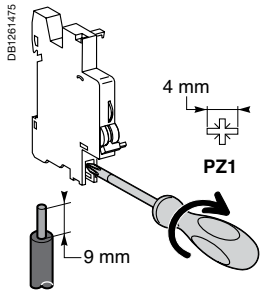
(1) For iC120, DPN.

Technical
Section 11

Dimensions
Section 12

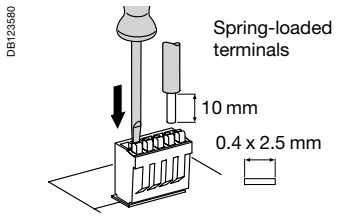
Electrical auxiliaries for iC120, DPN, DPN Vigi, ID, C60H-DC, SW60-DC, C60PV-DC, C60NA-DC devices (cont.)

Connection



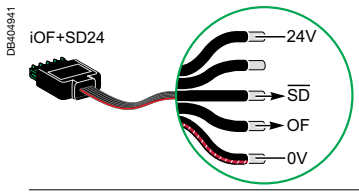
Type	Tightening torque	Copper cables	
		Rigid	Flexible or with ferrule
		DB122945	DB122946
Indication and tripping auxiliaries	1 N.m	0.5 to 2.5 mm²	2 x 1.5 mm²

Ti24 connector connection



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

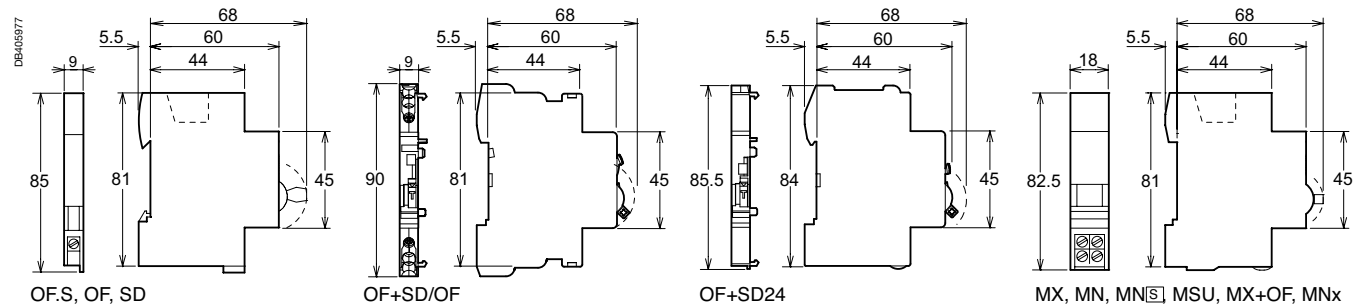


Type	Cat. no.	Length
Connection for Acti 9 Smartlink		
6 short prefabricated	**A9XCAS06**	100 mm
6 medium-sized prefabricated	**A9XCAM06**	160 mm
6 long prefabricated	**A9XCAL06**	870 mm
Connection for PLC type terminals		
6 long prefabricated on a single side	**A9XCAU06**	870 mm

Weight (g)

Electrical auxiliaries	
Type	
MN	66
MNs	66
MNx	73
MSU	66
MX	60
MX+OF	65
OF.S	33
OF	30
SD	30
OF+SD/OF	38
OF+SD24	28

Dimensions (mm)



P25M

045666_SE

IEC 60947-2 and IEC 60947-4-1 (in combination)

They protect single-phase or three-phase motors with manual local control.
This protection includes:

- isolation
- manual or remote control
- short-circuit protection (magnetic)
- overload protection (thermal).

Breaking capacity to IEC 60947-2

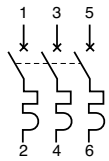
Rating (A)	Voltage (V) 230...240 Icu kA	230...240 Ics %	400...415 Icu kA	400...415 Ics %	440 Icu kA	440 Ics %	500 Icu kA	500 Ics %	690 Icu kA	690 Ics %
0.16 to 1.6	Unlimited									
2.5									3	75
4									3	75
6.3					50	100	50	100	3	75
10					15	100	10	100	3	75
14			15	50	8	50	6	75	3	75
18			15	50	8	50	6	75	3	75
23	50	100	15	40	6	50	4	75	3	75
25	50	100	15	40	6	50	4	75	3	75

The limiting unit increases the breaking capacity up to 100 kA at 415 V.

Catalogue numbers

Motor characteristics: Type	Standardised power (kW) of three-phase 50/60 Hz motors in category AC3 Voltage (V AC) 230	400	415	440	500	690	P25M circuit breaker: Rating In (A)	Setting	Cat. no.	Width in 9 mm modules
3P										
	-	-	-	-	-	-	0.16	0.1-0.16	**21100**	5
	-	-	-	-	-	-	0.25	0.16-0.25	**21101**	5
	-	-	-	-	-	-	0.40	0.25-0.40	**21102**	5
	-	-	-	-	-	0.37	0.63	0.40-0.63	**21103**	5
	-	-	-	0.37	0.37	0.55	1.0	0.63-1	**21104**	5
	-	0.37	-	0.55	0.75	1.1	1.6	1-1.6	**21105**	5
	0.37	0.75	1.1	1.1	1.1	1.5	2.5	1.6-2.5	**21106**	5
	0.75	1.5	1.5	1.5	2.2	3	4.0	2.5-4	**21107**	5
	1.1	2.2	2.2	3	3.7	4	6.3	4-6.3	**21108**	5
	2.2	4	4	4	5;5	7.5	10	6-10	**21109**	5
	3	5.5	5.5	7.5	9	11	14	9-14	**21110**	5
	4	7.5	9	9	10	15	18	13-18	**21111**	5
	5.5	9	11	11	11	18.5	23	17-23	**21112**	5
	5.5	11	11	11	15	22	25	20-25	**21113**	5

E12648C



PG131075_SE

Limiting unit

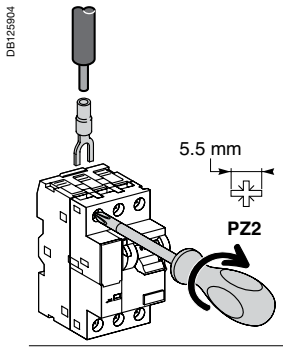
Type	Rating In (A)	Cat. no.	Width in 9 mm modules
3P			
	63	**21115**	5

(1) The neutral pole comes equipped with a locked tube.

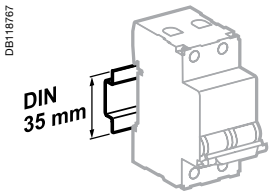
Technical Section 11
Dimensions Section 12

P25M (cont.)

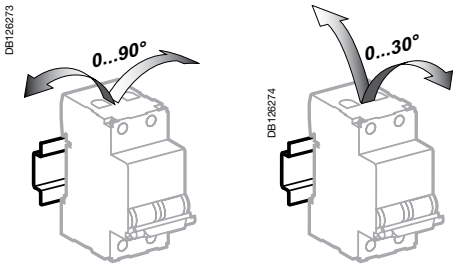
Connection

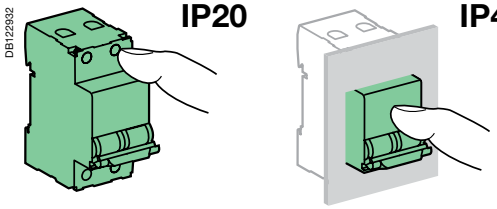


P25M			Limiting unit
Tightening torque	Terminal clamps	With insulated connector	Tunnel terminals
	Rigid Cu / Flexible Cu	Flexible Cu	Flexible or rigid Cu
1.7 N.m.	2 x 1 ... 6 mm²	2 x 1.5 ... 6 mm²	1 x 25 mm² or 2 x 10 mm²



Mounted on 35 mm DIN rail.





Weight (g)

P25M	260
Limiting unit	130

Technical data

Electrical characteristics

Operating voltage (Ue)		690 V AC
Insulation voltage (Ui)		690 V
Rated impulse withstand voltage (Uimp)		6 kV
Endurance (O-C)	Electrical AC3	100,000 cycles
Thermal trip unit		Sensitive to missing phase
	Settings	Factory < settings range
		Simultaneously on the front face
		On current drawn in nominal operation
	Ratings (In)	0.16 to 25 A adjustable
	Temperature compensation	-20°C to +40 °C in an enclosure
Magnetic trip unit		12 x the In rating (±20 %)

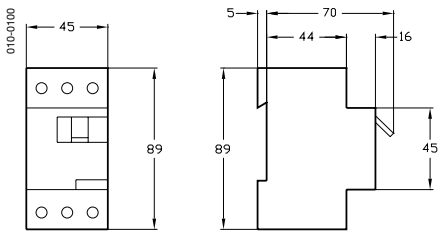
Other characteristics

Padlocking device on the front face	
Tropicalisation	Treatment 2 (relative humidity 95 % at 55°C)
Operating temperature	-20 ...+60°C
Storage temperature	-40 ...+80°C

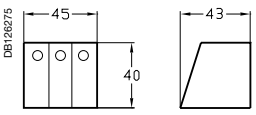
Rated operating current (Ie) of auxiliary contacts under the rated operating voltage (Ue)

Operating voltage (Ue)		Operating current			
		Position contact		fault tripping contact	
(V AC)	(V DC)	AC 15 (A AC)	DC 13 (A DC)	AC 14 (A AC)	DC 13 (A DC)
415	220	2.2	0.5	-	-
240	110	3.3	1.3	-	-
130	60	4.5	3	0.5	0.15
48	48	6	5	1	0.3
24	24	-	6	1.5	1

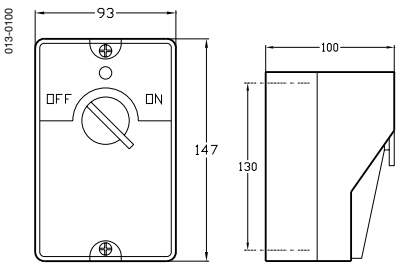
Dimensions (mm)



Circuit breaker



Limiting unit only



Insulating enclosure

Technical Section 11
Dimensions Section 12

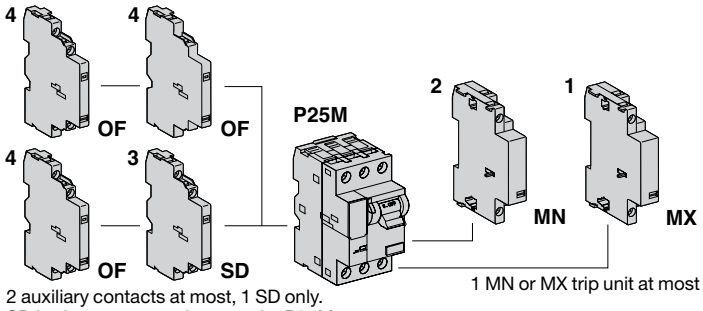
P25M
Electrical auxiliaries

Connection

Cables

	Rigid	Flexible	Flexible with ferrule
			
Mini	1 x 1 to 2.5 mm²	1 x 0.75 to 2.5 mm²	1 x 0.75 to 1.5 mm²
Maxi	2 x 1 to 2.5 mm²	2 x 0.75 to 2.5 mm²	2 x 0.75 to 1.5 mm²
Tightening torque		1.4 N.m	

The electrical auxiliaries allow remote tripping or position or fault indication of the PM25 circuit breakers.

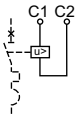
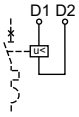


2 auxiliary contacts at most, 1 SD only.
SD is always mounted next to the P25M.

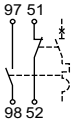
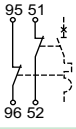
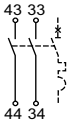
1 MN or MX trip unit at most

Catalogue numbers

Trip units

	Type	Control voltage (V AC)	Width in 9 mm modules	Cat. no.
1 MX shunt release				
■ Emergency stoppage by normally open push button ■ Causes tripping of the associated device when powered		220...240	2	**21127**
		380...415	2	**21128**
2 MN undervoltage release				
■ Emergency stoppage by normally closed push button ■ Ensures the safety of power supply circuits for several machines by preventing untimely restarting ■ Causes tripping of the circuit breaker with which it is associated when its input voltage decreases (between 70% and 35% of Un) ■ Prevents closing of the device until its input voltage has been restored		220...240	2	**21129**
		380...415	2	**21130**

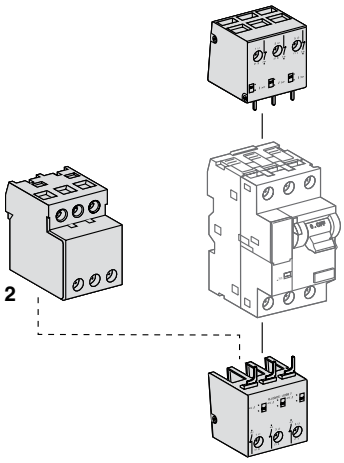
Auxiliary contacts

	Type	Width in 9 mm modules	Cat. no.
3 Position and fault tripping indication contacts			
F + SD.F		1	**21118**
O + SD.F		1	**21119**
F + SD.O		1	**21120**
O + SD.O		1	**21121**
4 Position contacts			
O + F		1	**21117**
F + F		1	**21116**

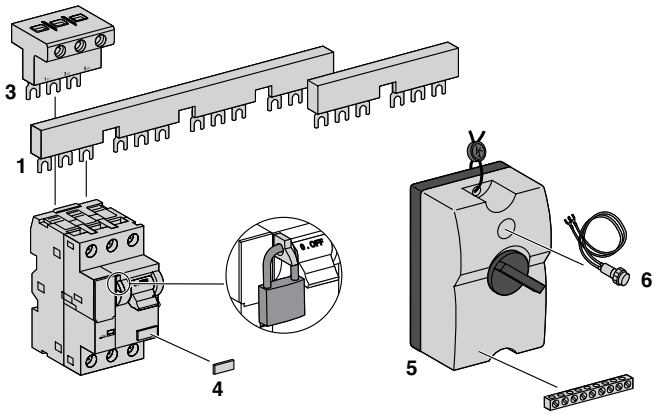
"O ": normally closed contact
" F ": normally open contact
SD: contact indicating the position of the associated device in the event of an electrical fault
SD.F: to indicate a closed contact fault
SD.O: to indicate an open contact fault

Technical Section 11
Dimensions Section 12

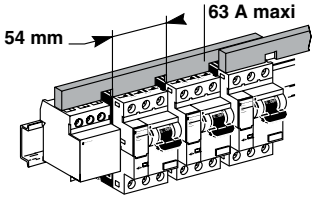
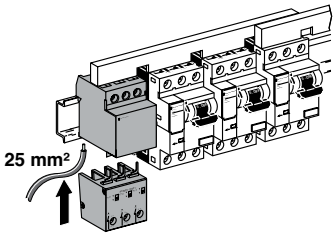
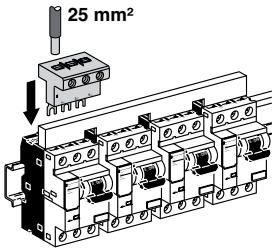
P25M
Accessories



Accessories make it easier to integrate the circuit breakers and extend their use.



Catalogue numbers

	Type	Cat. no.
1 Comb busbars		
	2 P25M feeders	**GV2G254**
	4 P25M feeders	**GV2G454**
	Protection end-piece	**GV2G10**
2 Downstream terminal block		
		**GV2G05+LA9E07**
	GV2G05: Downstream terminal block LA9E07: Cover for downstream terminal block	
3 Insulated connector		
		**GV2G09**
4 Clip-on terminal markers		
	see module CM907003E	
5 Insulating enclosure		
Individual installation of a P25M circuit breaker with an auxiliary contact block and trip unit. Double insulation ⧈ and sealed to IP55. L = 93, H = 147, P = 100 (mm)		**21133**
6 Neon indicator light		
230-240 V AC	Green	**GV2SN23**
	Red	**GV2SN24**
400-415 V AC	Green	**GV2SN33**
	Red	**GV2SN34**

Technical
Section 11

Dimensions
Section 12