Residual Current Devices

UL + IEC/EN

GFP - UL 1053 & IEC/EN 61008 - Ground Fault Protector







IEC/EN 61008-1

UL 1053

UL 1053 residual current circuit breakers already protected upstream by a short-circuit and overload protection device are used for:

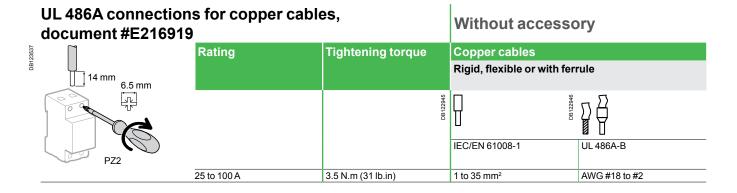
- control and disconnection of electric circuits
- protection of people against electric shock by direct and indirect contacts
- protection of installations against insulation faults
- enhanced continuity of supply, during a series of close lightning strokes, IT earthing system, equipment including interference suppression filters, variable speed controllers, frequency converters, electronic ballasts for lighting
- enhanced earth leakage protection: in presence of harmonics or high frequency rejections.

They comply with RCD standards UL 1053 and IEC/EN 61008.

A-SI type GFPs are ideal for operation in environments with a humid atmosphere and/or polluted by aggressive agents: swimming pools, marinas, agri-food industries, water treatment stations, industrial sites, etc.

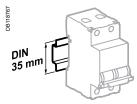
Catalogue numbers

GFP UL 1053 t	ype A-	SI 添]			
A-SI type	Rating (A)	Sensitiv (mA)	rity	Cat. no.		Width in mod.
		UL 1053	IEC/ EN 61008	120 or 240 V 230 or 240 V	240 V 480Y/277 V 230/400 or 240/415 V	of 9 mm (0.354 in.)
Auxiliaries	Without	auxiliari	ies			
2P						
N 1 3	25	26	30	M9R81225	M9R41225	4
Z		86	100	M9R12225	M9R44225	
" <u> </u>		260	300	M9R84225	-	
ገ (11)-ቤ	40	26	30	M9R81240	M9R41240	
		260	300	M9R84240	-	
NI2 I4	63	26	30	M9R81263	-	
4P						
ß	25	26	30	-	M9R81425	8
%		86	100	-	M9R12425	
° 'Z'		260	300	-	M9R84425	
╎ ()쑈	40	26	30	-	M9R81440	
<u> </u>		260	300	-	M9R84440	
Nl2 l4 l6 l8	63	26	30	-	M9R81463	
		86	100	-	M9R12463	
	100	86	100	-	M9R12491	
		260	300	-	M9R84491	
Accessories	See pag	je 48				
Voltage rating 2P	230 - 24	0 V				
(Ue) 4P	400 - 41	5 V				
Operating frequency	50/60 H	Z				

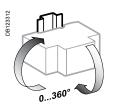


UL + IEC/EN

GFP - UL 1053 & IEC/EN 61008 - Ground Fault Protector (cont.)

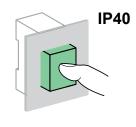


Clip on DIN rail 35 mm.



Indifferent position of installation.





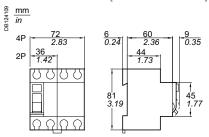
Technical data

nt wave 8/20 µs: 3 kÂ	
pened recurrent current wave 00 kHz: 200 A	
ith 100 A gG upstream fuse	
С	
С	
To avoid external bridging on use on three-phase network without neutral	
ocking facility (not supplied)	
neous release: 3 : ±15 % 61008 : +0 %, -50 %	
al current protection down to 0 V ng to IEC/EN 61008-1 § 3.3.4	
t face by red mechanical indicator	
cycles	
on class II	
o +60°C / -13°F to 140°F	
0 +70°C / -40°F to 158°F	
ent 2 humidity 95 % at 55°C / 131°F)	
ge 68	
је	

Weight (g / oz)

GFP UL 1053 type A-SI 🏡			
Туре	GFP		
2P	220 g / 7.76 oz		
4P	450 g / 15.87 oz		

Dimensions (mm / inches)

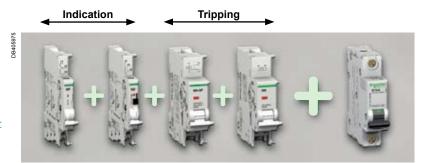


Auxiliaries and accessories Common electrical auxiliaries



Compliance with electrical auxiliaries standards

- For UL 489 Branch circuit protection File #E215117.
- For CSA C22.2 No. 5 Branch circuit protection File #179014.
- For UL 1077 Supplementary Protection File #E90509.
- For CSA C22.2 No. 235 Supplementary Protection File #179014.
- For IEC 60947-1 and IEC 60947-5-1 circuit-breakers.
- CE Marked.
- The electrical auxiliaries provide the remote tripping or position (open/closed/tripped) indication functions of these devices in the event of a fault.
- They clip on (no tool required) to the lefthand side of the associated device.
- The SD+OF auxiliary is a two-in-one product: a mechanical selector switch is used to select one of two contacts: SD or OF.



Combination table

Indication auxiliaries		Tripping auxiliaries	Devices
+	+	+	PB116665-18
1 SD+OF maxi	1 SD+OF maxi	1 maxi	26-19
1 OF maxi	1 (SD+OF or SD or OF) maxi	2 maxi	PB111749-19, PB111759-19
			C60, N40N, N40 Vigi
None	1 (SD+OF or OF) maxi	2 maxi	E-18
1 OF maxi	1 OF maxi	1 maxi	P100628_SE-18
			OF.S + RCCB-ID
None Broisgoriad	1 OFsp	None	RCCB-ID B type



Tripping devices must be installed first. If two tripping devices are used: the MN undervoltage release must be installed first Indication auxiliaries: install the SD auxiliary first

-25...+50°C/-13...122°F

-40...+85°C/-40...185°F

Auxiliaries and accessories Common electrical auxiliaries (cont.)

Tripping Auxiliaries MNS Undervoltage release Type Instantaneous Delayed PB100202_SE-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 No tripping in the event of transient voltage dips (up to 0.2 s) Wiring diagrams u < Utilization Emergency stop via a normally-closed pushbutton Ensures the safety of the power supply circuits of several machines by preventing accidental startups M9A27108 M9A27107 M9A26960 M9A26961 M9A26959 M9A26963 Catalogue numbers **Technical specifications** 120 Rated voltage (Ue) VAC 24 220...240 48 115 220...240 VDC 24 48 Operating 50/60 400 50/60 Hz frequency Pollution degree On front face On front face Mechanical state indicator light, Test function Width in 9 mm modules 2 2 Operating current

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Number of contacts Operating temperature

Storage temperature

IEC/EN 60947-5-1 EN 60947-2

Standards IEC/EN 60947-1

EN 62019-2



-25...+50°C / -13...122°F

-40...+85°C / -40...185°F

Auxiliaries and accessories Common electrical auxiliaries (cont.)

	MNx MX			MX+OF			
		Shunt releas	e				
	Independent of the supply voltage				With open/clos	sed auxiliary con	tact
PB100208_SE-30	06.38, 06100189			06-35, 99100184			
	■ Tripping of the associated device by opening of the control circuit (e.g. push-button, dry contact)	■ Trips the ass	ociated device v	vhen it is powered	d on		
	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				Includes ar to indicate the associated de	n open/closed co "open" or "close vice	ntact (OF contact) d" position of the
DB406647	E1 E2 N U	C2 C1 (L/+) (N/-)					
	■ 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)	■ Emergency stop via a normally-open pushbutton.		Emergency stop via a normally-open pushbutton Remote indication of the position of the associated device			
	M9A26969 M9A26971	M9A26476	M9A26477	M9A26478	M9A26946	M9A26947	M9A26948
	230	100415 110130 50/60	48	1224	100415 110130 50/60	48	1224 1224
	3	3			3		
	On front face	On front face			On front face		
	2	2			2		
	_	_			3 A / 415 V AC 6 A / \$ 240 V AC		
	-	-	10. 10005		1 NO/NC		
	-25+50°C / -13122°F -40+85°C / -40185°F	-25+50°C / -1 -40+85°C / -4				-13°F122°F -40°F185°F	
	-40103	-+0105 07	1 0105 1		1-40100 07	-40 1100 1	
	•						
	-				-		
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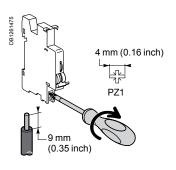
Auxiliaries and accessories

Common electrical auxiliaries (cont.)

	Signalisation				
Auxiliaries	OF.S	OFsp	OF	SD	SD+OF
Туре	Open/closed auxilia	ary contact	Open/closed auxiliary contact	Fault indicating contact	Double open/closed or fault indicating contact
06:35' 82900. Bd	PB1075I0-30	PB100626, SE-30	PB100627, SE-30	PB100625, SE-30	
Function					
	■ Changeover contact the "open" or "closed" p associated device ↑ Compulsory for the addition of tripping or indication auxiliaries on an ID RCCB		■ 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 compatible compatible with a RCCB-ID residual current circuit breaker, use a SD+OF in the SD position	■ The SD+OF auxiliary is a two-in-one product: choice of OF or SD contact via the selector switch
Wiring diagrams	- E	۰. 9	l	l ~~~~	lu 12 11 12 11 12 11
BOSELLE CO.	0	22 12 14 EBO	14 12 11	92 94 91	14 12 11 12
Utilization	Remote indication of 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
Catalogue numbers	26923	16940	M9A26924	M9A26927	M9A26929
Technical specifications					
Rated voltage (Ue) VAC	24415	230	240415	240415	240415
V DC	24130	110	24130	24130	24130
Operating Hz frequency	50/60	50	50/60	50/60	50/60
Pollution degree	3	3	3	3	3
Mechanical state indicator light, red	_	_	_	On front face	On front face
Test function	_		On front face	On front face	On front face
Width in 9 mm modules	1	1	1	1	1
Operating current	3 A /415 V AC 6 A / ≤ 240 V AC	1A/110 V DC 6A/≤230 V AC	3 A /415 V AC 6 A / ≤ 240 V AC		
Number of contacts	1 NO/NC	1 NC + NC/NO		1 NO/NC	1 NO/NC + 1 NO/NC
Operating temperature	-25+50°C / -13°F122°F	-25+50°C/	-25+50°C/ -13°F122°F	-25+50°C / -13°F122°F	-25+50°C / -13°F122°F
Storage temperature	-40+85°C / -40°F185°F	-40+85°C/	-40+85°C/ -40°F185°F	-40+85°C / -40°F185°F	-40+85°C / -40°F185°F
Standards					
IEC/EN 60947-1	_	_	_	_	_
IEC/EN 60947-5-1 EN 60947-2	_	_	_	_	_
EN 62019-2	-	_	-	<u>-</u>	-
(UL)	-	_	•	•	•
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Auxiliaries and accessories

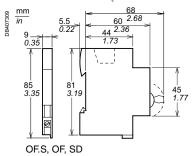
Common electrical auxiliaries (cont.)

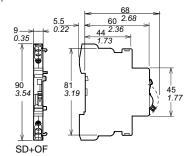


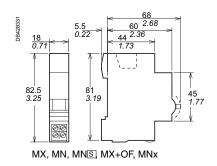
Connection

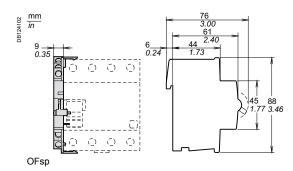
Туре	Tightening torque	Copper cables
		Rigid
	DB122946	
Indication and tripping auxiliaries	1 N.m (9 lb.in)	2 cables, 1.5 mm² / #16 AWG or 1 cable, 2.5 mm² / #14 AWG
OFsp	0.8 N.m (7 lb.in)	1 cable, 1.5 mm ² /#16 AWG

Dimensions (mm / inches)









Weight (g / oz)

Electrical auxiliaries	
Туре	
MN	66 g / 2.32 oz
MNS	66 g / 2.32 oz
MNx	73 g / 2.57 oz
MX	60 g / 2.32 oz
MX+OF	65 g / 2.12 oz
OF.S	33 g / 1.16 oz
OF	30 g / 1.06 oz
OFsp	40 g / 1.41 oz
SD	30 g / 1.06 oz
SD+OF	38 g / 1.34 oz





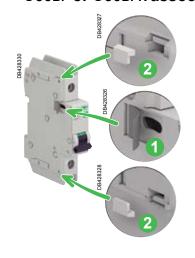


Clip on DIN rail 35 mm.



Indifferent position of installation.

C60BP or C60BPR association





Auxiliaries and accessories Common accessories

Installation

Accessories	Rotary handle			Plug-in base	
	PB100137_SE.24 PB100138_SE.24			Green Control of the	
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 mar (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)	
Cat. numbers	27047	27048	27046	26996	
	Removable extended handle	Fixed handle	Operating sub-assembly	(1 per pole)	
Set of	1	1	1	1	
Suitable for the fo	llowing devices:				
C60BP UL489, C60BPR UL489	■ 2P, 3P			-	
C60SP UL1077	■ 2P, 3P, 4P				
C60 H-DC	■ 2P				
GFP UL1053	-				
C60N, H, L, C60CTRL	■ 2P, 3P, 4P			•	
N40N	■ 3P+N			_	
RCCB-ID (AC, A-SI types)	-			-	
RCCB-ID B type	-			_	
N40 Vigi	-			_	
Operating température	-35°C to +70°C / -31°F to 158°F			-35°C to +70°C / -31°F to 158°F	

Auxiliaries and accessories Common accessories (cont.)

Accessories	Padlocking device			
	Front		Side	
0472891_\$E-20	\$2.99600HQJ	GP-08592VVV	Or-18582VBA	
Function				
	Used to padlock a circuit breaker in the "open" or "closed" position 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. Diameter of the padlock: 8 mm max.	Used to padlock a circuit breaker in the "open" position Isolation: in conformity with UL 489/CSA C22.2 No 5 Listed and UL 1077 Reconized. Diameter of the padlock: 8 mm max.	Can be used to padlock a c position Attached directly to the cir Padlock diameter: 6 mm	ircuit breaker in open cuit breaker, it cannot be lost
Cat. numbers	26970	M9PAF	MGN26380	MGN26381
			Left-hand mounting	Right-hand mounting
Set of	2	1	1	1
Suitable for the foll	owing devices:			
C60 _{BP} UL489, C60 _{BPR} UL489	•	•	•	•
C60 _{SP} UL1077	•	•		=
C60 H-DC	•	•	•	•
GFP UL1053		-	-	-
C60N, H, L, C60CTRL	•	•	•	•
N40N				•
RCCB-ID (AC, A-SI types)	•	-	_	-
RCCB-ID B type	_	_	-	-
N40 Vigi		-	-	-
Operating température	-35°C to +70°C / -31°F to 158°F	-35°C to +70°C / -31°F to 158°F	-35°C to +70°C / -31°F to 158°F	-35°C to +70°C / -31°F to 158°F

Auxiliaries and accessories Common accessories (cont.)

Installation (continued)

	installation (continued)								
Accessories	Front mounting kit	Pole filler		Front mounting bracket					
	Front mounting kit	DIN rail support							
BYSOVPLU	69800PBO	Teadorado	0.4560760						
Function									
	■ Consists of a transparent, hinged, weatherproof cover ■ Allows installation of up to twenty modules (10 poles of C60) of circuit breakers or supplementary protectors and accessories ■ A DIN rail with support is also available ■ Degree of protection a s per IEC 529: IP55 ■ Includes a 10-Module	DIN rail with support for front mounting kit cat. no. 14210 Allows installation of up to twenty modules (10 poles of C60) of circuit breakers or supplementary protectors and accessories	They clip into spaceThey may be snapped apart in		circuit breakers, supplementary protectors or accessories Allows the C60 devices to be clipped onto it in a standard manner In 480 V AC UL 1077 applications, cat. no. 26981 terminal screw shield should be used for increased isolation between the terminal screws of the device and the mounting bracket. These shields are included with the mounting bracket kits				
	divisible blanking plate and mounting template				■ 1P	■ 2P	■ 3P	■ 4P	
Cat. numbers	14210	14211	M9PF4	M9PF5	MG26983	MG26984	MG26985	MG26989	
			4 strips of 4 by 18 mm pole filler 4 strips of 5 by 18 mm pole filler						
Set of	1	1	4	4	1				
Suitable for the fo	, 	I=	I=						
C60BP UL489, C60BPR UL489	•	For multi-pole mounting kit cat. no.14210	For multi-pole mounting kit cat. no.14210		•				
C60SP UL1077	•				•				
C60H-DC					-				
GFP UL1053	_				-				
C60N, H, L, C60CTRL	•				•				
N40N	•				•				
RCCB-ID (AC, A-SI types)	•				•				
RCCB-ID B type	_								
N40 Vigi	05004 5000								
Operating température	-35°C to +70°C / -31°F to 158°F				-35°C to +70°C / -31°F to 158°F				

Auxiliaries and accessories Common accessories (cont.)

	Safety						
Accessories	Screw shield		Terminal sh	nield	Interpole barrier	Spacer	
	PB124114	(Az John da		08123888	\$E. C89POJ.84		
Function							
	Prevents all contact with th The degree of protection b Sealable, max. diameter 1.	ecomes IP40	Prevents all contact with the terminals Degree of protection becomes IP40 Sealable, max. diameter 1.2 mm 1P 2P 3P: 1 x 26975 + 1 x 26976 4P: 2 x 26976		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	26981	16939	26975	26976	27001	27062	
Set of	2 (4P dividable)	10	2 (for upstream/downstream terminal)		10	1	
Suitable for the following	ng devices:	•	•		•		
C60BP UL489, C60BPR UL489	-	-	-	-	-	•	
C60SP UL1077		_					
C60 H-DC		_					
GFP UL1053		_		_	•		
C60N, H, L, C60CTRL	•	-	•	•	-	•	
N40N		_		_	_	•	
RCCB-ID	-	-	-		•	•	
(AC, A-SI types)	1	 			-	<u> </u>	
RCCB-ID B type	_	•	-	_	-	•	
N40 Vigi	0500470007	050017000.	-	<u> -</u>	05001 70001	05004 70004	
Operating température	-35°C to +70°C / -31°F to 158°F	-35°C to +70°C / -31°F to 158°F	-35°C to +70°C -31°F to 158°F	/	-35°C to +70°C / -31°F to 158°F	-35°C to +70°C / -31°F to 158°F	

Auxiliaries and accessories Common accessories

	Connection					
Accessories	Multi-cable term	inal	50 mm² / #1 AWG Al terminal	Connection kit for ring terminals		
DB103334_SE-19	1	08122951	DB4098386	0		
Function	For 2 conner coblect		For 16 to 50 mm² aluminium cables	For terminal up to 62 A front or room access		
For 3 copper cables: Rigid up to 16 mm² Flexible up to 10 mm²		n²	For 16 to 50 mm aluminium cables	For terminal up to 63 A, front or rear access (screw Ø 5 mm) It incorporates a "conductive" part and an		
DB118787		DB122935	Al	"insulating" part which ensures the phase-to- phase clearance		
Cat. numbers	19091	19096	27060	M9A17400		
Set of	4	3	1	24		
Suitable for the follow	ing devices:					
C60BP UL489, C60BPR UL489	-	_	-			
C60SP UL1077 ≤ 25 A	_	_	_			
C60SP UL1077 > 25 A	•		_			
GFP UL1053	•	•	_	_		
C60N, H, L, ≤ 25 A C60CTRL	-	_	-	•		
C60N, H, L, > 25 A C60CTRL	•	•	•			
C60 H-DC ≤ 25 A	-	_	_	•		
C60H-DC > 25 A	•	•	•			
N40N	-	_	_	_		
RCCB-ID	•	•	•	-		
(AC, A-SI types)						
RCCB-ID B type	-	-	_	_		
N40 Vigi	-	-	_	_		
Tightening torque	2 N.m (18 lb.in)		10 N.m (89 lb.in)	2 N.m (18 lb.in)		
Stripping length	11 mm (0.43 in)		13 mm (0.51 in)	-		
Tools to be used	Diameter 5 mm (0.2 in) or PZ2		Hc 1/5" or 5 mm (0.2 in)	Diameter 5 mm (0.2 in) or PZ2		
Operating température	-35°C to +70°C / -31°F	to 158°F	-35°C to +70°C / -31°F to 158°F	-35°C to +70°C / -31°F to 158°F		

	Identification						
Accessories	Clip-on terminal marker strip						
0317040_SE-23							
Function	For connection identification						
Cat. numbers	0: AB1-R0	A: AB1-GA	K: AB1-GK	U: AB1-GU			
	1: AB1-R1	B: AB1-GB	L: AB1-GL	V: AB1-GV			
	2: AB1-R2	C: AB1-GC	M: AB1-GM	W: AB1-GW			
	3: AB1-R3	D: AB1-GD	N: AB1-GN	X: AB1-GX			
	4: AB1-R4	E: AB1-GE	O: AB1-GO	Y: AB1-GY			
	5: AB1-R5	F: AB1-GF	P: AB1-GP	Z: AB1-GZ			
	6: AB1-R6	G: AB1-GG	Q: AB1-GQ	+: AB1-R12			
	7: AB1-R7	H: AB1-GH	R: AB1-GR	-: AB1-R13			
	8: AB1-R8	l: AB1-GI	S: AB1-GS	Blank : AB1-RV			
	9: AB1-R9	J: AB1-GJ	T: AB1-GT				
Set of	250						
Suitable for the foll	owing devices:						
C60BP UL489	_						
C60BPR UL489	_						
C60SP UL1077	■ 4 repères maxi. par pôle						
C60H-DC	4 repères maxi. par pôle						
GFP UL1053	4 repères maxi. par pôle						
C60H-DC	4 repères maxi. par pôle						
C60N, H, L, C60CTRL	■ 4 markers max. per pole						
N40N	■ 4 markers max. per pole						
RCCB-ID (2P) (AC, A-SI types)	■ 4 markers max. per pole						
RCCB-ID B type	-						
N40 Vigi	■ 4 markers max. per device						