TYPE			BD		
					
Standards:			**EN 61009-1 App. G**		
Type			AC	A	A[S]
Rated operational voltage (Ue):		**(V)**	230/400	230/400	230/400
Rated insulation voltage (Ui):		**(V)**	500	500	500
Rated frequency:		**(Hz)**	50	50	50
Number of poles			2 | 3, 4	2, 3, 4	2, 3, 4
Rated residual operating current:		**(mA)**	**In**	**In**	**In**
	IΔn	**10 mA**	• ≤25		
		30 mA	• • ≤25, ≤63	• ≤25, ≤63	
		100 mA			
		300 mA	• • ≤25, ≤63	• ≤25, ≤63	• ≤63
		500 mA	• • ≤25, ≤63	• ≤25, ≤63	
		1000 mA			• ≤63
		adjustable			
Available settings					
	IΔn [mA]				
	t [ms]				
Residual making and breaking capacity (IΔm):		**(A)**	Icn of suitable circuit breaker	Icn of suitable circuit breaker	Icn of suitable circuit breaker
Range of test-button operating voltage:		**(V)**	170 ÷ 440	170 ÷ 440	170 ÷ 440
Wiring:	**cable section (mm^2)**	**rigid**	≤ 35	≤ 35	≤ 35
		flexible	≤ 25	≤ 25	≤ 25
Rated tightening torque:		**(Nm)**	2	2	2
Upline/downline power supply			yes	yes	yes
Degree of protection for	**terminals (with terminal covers)**		IP40	IP40	IP40
	other parts		IP40	IP40	IP40
Tropicalisation			55°C - RH 95%	55°C - RH 95%	55°C - RH 95%

BDHP			ADJUSTABLE BDHP
			
EN 61009-1 App. G			EN 60947-2 App. G
AC	A	A[S]	A
230/400	230/400	230/400	230/400
500	500	500	500
50	50	50	50
2, 3, 4	2, 3, 4	2, 3, 4	4
In	**In**	**In**	**In**
• ≤63, ≤125	• ≤63, ≤125		
• ≤63, ≤125	• ≤63, ≤125		
• ≤63, ≤125	• ≤63, ≤125	• ≤63, ≤125	
		• ≤63, ≤125	
			• ≤63, ≤125
			300, 500, 1000, 3000
			0, 60, 150
Icn of suitable circuit breaker	Icn of suitable circuit breaker	Icn of suitable circuit breaker	Icn of suitable circuit breaker
170 ÷ 440	170 ÷ 440	170 ÷ 440	170 ÷ 440
≤ 50	≤ 50	≤ 50	≤ 50
Cable terminal	Cable terminal	Cable terminal	Cable terminal
3.5 / 3 (cable terminal)	3.5 / 3 (cable terminal)	3.5 / 3 (cable terminal)	3.5 / 3 (cable terminal)
yes	yes	yes	yes
IP40	IP40	IP40	IP40
IP40	IP40	IP40	IP40
55°C - RH 95%	55°C - RH 95%	55°C - RH 95%	55°C - RH 95%

TYPE			SD							
										
Standards:			**EN 61008-1**							
Type			AC							
Rated current (In):		**(A)**	25		40		63		80	
Rated operational voltage (Ue):	**2P**	**(V)**	230		230		230		230	
	4P	**(V)**	400		400		400		400	
Rated insulation voltage (Ui):		**(V)**	500		500		500		500	
Rated frequency:		**(Hz)**	50		50		50		50	
Number of poles			2	4	2	4	2	4	2	4
Rated residual operating current (no. of modules in brackets):										
IΔn instantaneous	**10 mA**		• (2)							
	30 mA		• (2)	• (3,4)	• (2)	• (3,4)	• (2)	• (4)	• (2)	• (4)
	100 mA		• (2)	• (4)	• (2)	• (3,4)	• (2)	• (4)	• (2)	• (4)
	300 mA		• (2)	• (3,4)	• (2)	• (3,4)	• (2)	• (4)	• (2)	• (4)
	500 mA				• (2)	• (3)	• (2)	• (4)		
Level of immunity (8/20 µs):		**(A)**	250		250		250		250	
Residual making and breaking capacity IΔm:		**(A)**	630		630		630		800	
Range of test-button operating voltage:	**2P**	**(V)**	100 ÷ 253		100 ÷ 253		100 ÷ 253		100 ÷ 253	
	4P	**(V)**	170 ÷ 440		170 ÷ 440		170 ÷ 440		170 ÷ 440	
Wiring: **cable section(mm²)**	**rigid**		≤35 (≤25 4P 3m)		≤35 (≤25 4P 3m)		≤35		≤35	
	flexible		≤25 (≤16 4P 3m)		≤25 (≤16 4P 3m)		≤25		≤25	
Rated tightening torque:		**(Nm)**	2		2		2		2	
Upline/downline power supply			yes		yes		yes		yes	
Degree of protection			IP20		IP20		IP20		IP20	
Tropicalisation			55°C - RH 95%		55°C - RH 95%		55°C - RH 95%		55°C - RH 95%	
Operating temperature:		**(°C)**	-25 +40		-25 +40		-25 +40		-25 +40	
Rated conditional residual short-circuit current with MCB IΔc:		**(kA)**	2P	4P	2P	4P	2P	4P	2P	4P
	MTC45		4,5	4,5						
	MTC60		6	6						
	MT60		6	6	6	6	6	6		
	MT100		10	10	10	10	10	10		
	MT250		10	10	10	10	10	10		
	MTHP160		10	10	10	10	10	10	10	10
	MTHP250		10	10	10	10	10	10		
Rated conditional residual short-circuit current with fuse (IΔc):	**2P**	**(A)**	6000 (gL 63A)		6000 (gL 63A)		6000 (gL 63A)		6000 (gL 80A)	
	4P 3 mod.	**(A)**	6000 (gL 63A)		6000 (gL 63A)					
	4P 4 mod.	**(A)**	10000 (gL 80A)		10000 (gL 80A)		10000 (gL 80A)		10000 (gL 80A)	

SD

EN 61008-1															
AC			A												
100		125	25		40		63		80		100		125		
230		-	230		230		230		230		230		-		
400		400	400		400		400		400		400		400		
500		500	500		500		500		500		500		500		
50		50	50		50		50		50		50		50		
2	4	4	2	4	2	4	2	4	2	4	2	4	4		
			• (2)	• (3)											
• (2)	• (4)	• (4)	• (2)	• (3,4)	• (2)	• (3,4)	• (2)	• (4)	• (2)	• (4)	• (2)	• (4)	• (4)		
• (2)	• (4)		• (2)	• (4)	• (2)	• (3,4)	• (2)	• (4)	• (2)	• (4)		• (4)			
• (2)	• (4)	• (4)	• (2)	• (3,4)	• (2)	• (3,4)	• (2)	• (4)	• (2)	• (4)	• (2)	• (4)	• (4)		
	• (4)	• (4)			• (2)	• (3)	• (2)	• (4)				• (4)	• (4)		
250		250	250		250		250		250		250		250		
1000		1250	630		630		630		800		1000		1250		
100 ÷ 253			100 ÷ 253		100 ÷ 253		100 ÷ 253		100 ÷ 253		100 ÷ 253				
170 ÷ 440		220 ÷ 415	170 ÷ 440		170 ÷ 440		170 ÷ 440		170 ÷ 440		170 ÷ 440		220 ÷ 415		
≤35			≤35 (≤25 4P 3m)		≤35 (≤25 4P 3m)		≤35		≤35		≤35				
≤25		≤50	≤25 (≤16 4P 3m)		≤25 (≤16 4P 3m)		≤25		≤25		≤25		≤50		
2		2	2		2		2		2		2		2		
yes		yes	yes		yes		yes		yes		yes		yes		
IP20		IP20	IP20		IP20		IP20		IP20		IP20		IP20		
55°C - RH 95%		55°C - RH 95%	55°C - RH 95%		55°C - RH 95%		55°C - RH 95%		55°C - RH 95%		55°C - RH 95%		55°C - RH 95%		
-25 + 40		-25 + 40	-25 + 40		-25 + 40		-25 + 40		-25 + 40		-25 + 40		-25 + 40		
2P	4P	4P	2P	4P	2P	4P	2P	4P	2P	4P	2P	4P	4P		
			4,5	4,5											
			6	6											
			6	6	6	6	6	6							
			10	10	10	10	10	10							
			10	10	10	10	10	10							
10	10	10	10	10	10	10	10	10	10	10	10	10	10		
			10	10	10	10	10	10							
6000 (gL 100A)			6000 (gL 63A)		6000 (gL 63A)		6000 (gL 63A)		6000 (gL 80A)		6000 (gL 100A)				
			6000 (gL 63A)		6000 (gL 63A)										
10000 (gL 100A)		10000 (gL 125A)	10000 (gL 80A)		10000 (gL 80A)		10000 (gL 80A)		10000 (gL 80A)		10000 (gL 100A)		10000 (gL 125A)		

TYPE			SD							
										
Standard:			**EN 61008-1**							
Type			A [IR]							
Rated current (In):		**(A)**	25		40		63		100	
Rated operational voltage (Ue):	**2P**	**(V)**	230		230		230		230	
	4P	**(V)**	400		400		400		400	
Rated insulation voltage (Ui):		**(V)**	500		500		500		500	
Rated frequency:		**(Hz)**	50		50		50		50	
Number of poles			2	4	2	4	2	4	2	4
Rated residual operating current (no. of modules in brackets):										
IΔn instantaneous		**30 mA**								
		300 mA								
		500 mA								
impulse resistant [IR]		**30 mA**	• (2)	• (4)	• (2)	• (4)	• (2)	• (4)	• (2)	• (4)
		300 mA		• (4)		• (4)		• (4)		• (4)
selective [S]		**300 mA**								
Level of immunity (8/20 µs):		**(A)**	3000A		3000A		3000A		3000A	
Residual making and breaking capacity (IΔm):		**(A)**	630		630		630		1000	
Range of test-button operating voltage:	**2P**	**(V)**	100 ÷ 253		100 ÷ 253		100 ÷ 253		100 ÷ 253	
	4P	**(V)**	170 ÷ 440		170 ÷ 440		170 ÷ 440		170 ÷ 440	
Wiring: **cable section (mm^2)**		**flexible**	≤35 (≤25 4P 3m)		≤35 (≤25 4P 3m)		≤35		≤35	
		rigid	≤25 (≤16 4P 3m)		≤25 (≤16 4P 3m)		≤25		≤25	
Rated tightening torque:		**(Nm)**	2		2		2		2	
Upline/downline power supply			yes		yes		yes		yes	
Degree of protection			IP20		IP20		IP20		IP20	
Tropicalisation			55°C - RH 95%		55°C - RH 95%		55°C - RH 95%		55°C - RH 95%	
Operating temperature (°C)			-25 +40		-25 +40		-25 +40		-25 +40	
Rated conditional residual short-circuit current with MCB IΔc:		**(kA)**	2P	4P	2P	4P	2P	4P	2P	4P
	MTC45		4,5	4,5						
	MTC60		6	6						
	MT60		6	6	6	6	6	6		
	MT100		10	10	10	10	10	10		
	MT250		10	10	10	10	10	10		
	MTHP160		10	10	10	10	10	10	10	10
	MTHP250		10	10	10	10	10	10		
Rated conditional residual short-circuit current with fuse (IΔc):	**2P**	**(A)**	6000 (gL 63A)		6000 (gL 63A)		6000 (gL 63A)		6000 (gL 100A)	
	4P	**(A)**	10000 (gL 80A)		10000 (gL 80A)		10000 (gL 80A)		10000 (gL 100A)	

SD				SD- ROTARY TOGGLE RCCB	
					
EN 61008-1				EN 61008-1	
A[S]				A	
40	63	80	100	40	63
230	230	230	230		
400	400	400	400	400	400
500	500	500	500	500	500
50	50	50	50	50	50
2 4	2 4	2 4	2 4	4	4
				• (4)	• (4)
				• (4)	• (4)
				• (4)	• (4)
• (2) • (4)	• (2) • (4)	• (2) • (4)	• (2) • (4)		
3000	3000	3000	3000	250	250
630	630	1000 (2P) - 800 (4P)	1000	630	630
100 ÷ 253	100 ÷ 253	100 ÷ 253	100 ÷ 253		
170 ÷ 440	170 ÷ 440	170 ÷ 440	170 ÷ 440	170 ÷ 440	170 ÷ 440
≤35	≤35	≤35	≤35	≤16	≤16
≤25	≤25	≤25	≤25	≤25	≤25
2	2	2	2	2	2
yes	yes	yes	yes	yes	yes
IP20	IP20	IP20	IP20	IP20	IP20
55°C - RH 95%	55°C - RH 95%	55°C - RH 95%	55°C - RH 95%	55°C - RH 95%	55°C - RH 95%
-25 +40	-25 +40	-25 +40	-25 +40	-25 +40	-25 +40
2P 4P	2P 4P	2P 4P	2P 4P		
6 6	6 6				
10 10	10 10				
10 10	10 10				
10 10	10 10	10 10	10 10		
10 10	10 10				
6000 (gL 63A)	6000 (gL 80A)	6000 (gL 80A)	6000 (gL 100A)		
10000 (gL 80A)	10000 (gL 80A)	10000 (gL 80A)	10000 (gL 100A)	8000 (gL 80A)	8000 (gL 80A)

Technical data

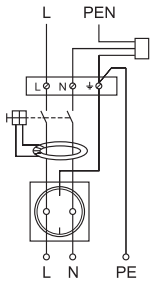
TYPE				MDC 45		MDC 60			MDC 100	
										
Standard:				EN 61009-1		EN 61009-1			EN 61009-1	
Rated current (In):			(A)	6-32		6-32			6-32	
Utilization category:				A		A			A	
Rated operational voltage (Ue):			(V)	230/400		230/400			230 (*)	
Rated insulation voltage (Ui):			(V)	500		500			500	
Rated frequency:			(Hz)	50		50			50	
Number of poles				1+N,	2, 3, 4	1+N	2	3, 4	1+N, 2	
Breaking capacity	AC - Alternating Current - IEC 61009 - EN 61009 (A)									
		Icn		4500		6000			10000	
		Ics		1 Icn		1 Icn			0.75 Icn	
	AC - Alternating Current - IEC 60947-2 - EN 60947-2 (kA)	Ue (V)								
		Icu	230	6	6	7.5	7.5	10	10	
			400		4, 5		6	6		
		Ics		100% Icu		75% Icu			75% Icu	
Rated residual operating current:			Type							
		IΔn (mA)	AC	30		30			30	
				300		300			300	
			A	30		30			30	
				300		300			300	
Residual making and breaking capacity (IΔm):			(A)	Icn circuit breaker		Icn circuit breaker			6000	
Range of test-button operating voltage			(V)	170 ÷ 440		170 ÷ 440			170 ÷ 440	
Wiring:	cable section (mm²)		rigid	≤ 35		≤ 35			≤ 35	
			flexible	≤ 25		≤ 25			≤ 25	
Electrical endurance (number of O-C cycles)				10000		10000			10000	
Max. No. of usable modular accessories				3		3			3	
Isolating displayed				yes		yes			yes	
Rated tightening torque:			(Nm)	2		2			2	
Degree of protection for	terminals (with terminal covers)			IP40		IP40			IP40	
	other parts			IP40		IP40			IP40	
Tropicalisation				55°C - RH 95%		55°C - RH 95%			55°C - RH 95%	
Reference temperature			(°C)	30		30			30	
Curves				C		C	B		C	B
Rated currents available (In)			(A)	6		6	6		6	6
				10		10	10		10	10
				13		13	13		13	13
				16		16	16		16	16
				20		20	20		20	20
				25		25	25		25	25
				32		32	32		32	32

(*) MDC 2P versions with rated operational voltage (Ue) at 110V are available on demand

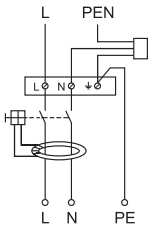
TYPE		RCD SAFETY SOCKET	RCD SAFETY UNIT
Versions		Flush-mounting	Flush-mounting
Type		A	A
Standards		**EN/IEC 61008-1; IEC 60884-1**	**EN/IEC 61008-1; IEC 60884-1**
Rated operational voltage (Ue):	**(V)**	230 AC	
Maximum operating voltage:	**(V)**	244 AC	
Rated frequency:	**(Hz)**	50/60	
RC trip at 20 °C		According to regulations 0.5 … 1 x $I_{\Delta n}$; factory setting (mean value): 0.75 x $I_{\Delta n}$;	
Rated conditional residual short-circuit current with fuse (IΔc):	**(A)**	3000 (gL 20A)	3000 (gL 20A)
Minimum value of rated making and breaking capacity (Im):	**(A)**	500	500
Specific let-through energy:	**(kA^2s)**	≥ 2.5	≥ 2.5
Peak current (Ip):	**(kA)**	≥ 1.7	≥ 1.7
Wiring cable section:	**(mm^2)**	1.5 ÷ 2.5 (single or multiple wires)	
Assembly		In switch distribution boxes with screws or claw attachment	
Degree of protection		IP 21 / IP 44	IP 41
Operating temperature:	**(°C)**	-25 +40	
Electrical endurance (number of O-C cycles)		4000	

WIRING DIAGRAMS

TN-C-SYSTEM

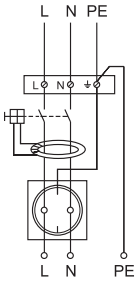


RCD SAFETY SOCKET

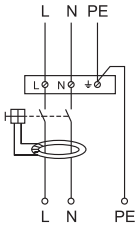


RCD SAFETY UNIT

TT AND TN-S SYSTEM



RCD SAFETY SOCKET



RCD SAFETY UNIT

Power loss and temperature performance

MDC 45 - 60 - 100 residual current circuit breaker with overcurrent protection

General characteristics

For the circuit overcurrent protection and for the residual current protection of devices and users, it is available the MDC compact RCBOs range.

The MDC range is made up of the same thermomagnetic release of MTC circuit breakers and the residual current release, pre-assembled in the same modular enclosure, is available in AC and A types with 30 and 300 mA rated residual operating current.

Some advice about selection and installation

One of the most common problems when installing residual circuit breakers is the untimely tripping caused by earth leakage which is not due to actual faults.

The most frequent causes are:

– services with electronic devices such as computers, Hi-Fi systems, household appliances in general, which are fitted with anti-interference capacity filters.

– capacity effects of the electrical lines of the electrical circuit which have a high capacity towards earth, especially if the circuit is widely extended.

In these cases, as a capacity effect, an earth leakage is generated such as to trip the circuit breaker. The intensity of this current increases above all when there are surges of voltage in the mains due to atmospheric disturbance or transitory interference caused by the services. When switching off, the fluorescent lamps equipped with ballast, are typical generators of such interference which can be removed by introducing small capacities in parallel. All residual current circuit breakers are equipped with anti-interference devices.

In instance of electronic equipment which can generate unidirectional fault currents, it is necessary to install A type residual current circuit breaker.

Temperature performance

MDC 45 - 60 - 100 COMPACT RESIDUAL CURRENT CIRCUIT BREAKER WITH OVERCURRENT PROTECTION

In (A)	Temperature					
	10°C	20°C	30°C	40°C	50°C	60°C
6	7.2	6.6	6	5.7	5.3	5
10	11.8	10.8	10	9.6	9.1	8.6
13	14.8	14	13	12.2	11.2	10.3
16	18.2	17.2	16	15.2	14.3	13.4
20	22.8	21.4	20	19.5	18.9	18.4
25	28.5	26.8	25	24	23	22
32	36.5	34.2	32	30.8	29.5	28.8

Power loss per single pole

MDC 45 - 60 - 100 COMPACT RESIDUAL CURRENT CIRCUIT BREAKER WITH OVERCURRENT PRO
MDC 45 - 60 - 100 COMPACT RESIDUAL CURRENT CIRCUIT BREAKER WITH OVERCURRENT PROTECTION

In (A)	6		10		13		16		20		25		32	
	Pole	N	Pole	N	Pole	N	Pole	N	Pole	N	Pole	N	Pole	N
R (m Ω)	29.4	2.6	20.6	2.6	14.5	2.6	8.9	2.6	6.8	2.6	4.6	2.6	3.6	2.6
P (W)	1.06	0.09	2.06	0.26	2.45	0.44	2.28	0.67	2.72	1.04	2.88	1.63	3.67	2.66

BD - BDHP add-on residual current devices

Add-on residual current devices for miniature circuit breakers MT (BD) and miniature high performance circuit breakers MTHP (BDHP), which must be connected by the installer once (according to the EN 61009 Standard, Appendix G). AC, A, A selective and A adjustable types are available.

BD AND BDHP POWER LOSS PER SINGLE POLE

In (A)		1	2	3	4	6	10	13	16	20	25	32	40	50	63	80	100	125
BD	2P	0.01	0.04	0.01	0.02	0.04	0.11	0.2	0.29	0.45	0.70	0.45	0.70	1.10	1.75	-	-	-
	3P-4P	0.002	0.008	0.02	0.03	0.07	0.21	0.37	0.53	0.83	1.30	0.65	1.00	1.60	2.50	-	-	-
BDHP	3P-4P	-	-	-	-	-	-	-	-	0.2	0.3	0.5	0.8	1.25	2	1.4	.2	3.4

SD Residual current circuit breakers

General characteristics

Two-poles and four-poles residual current circuit breakers with free tripping contact release.
AC type instantaneous residual current circuit breakers are available (for residual sinusoidal alternating currents only), whereas A type residual current circuit breakers, suitable for residual pulsating direct currents also, are available in instantaneous, impulse resistant and selective versions.

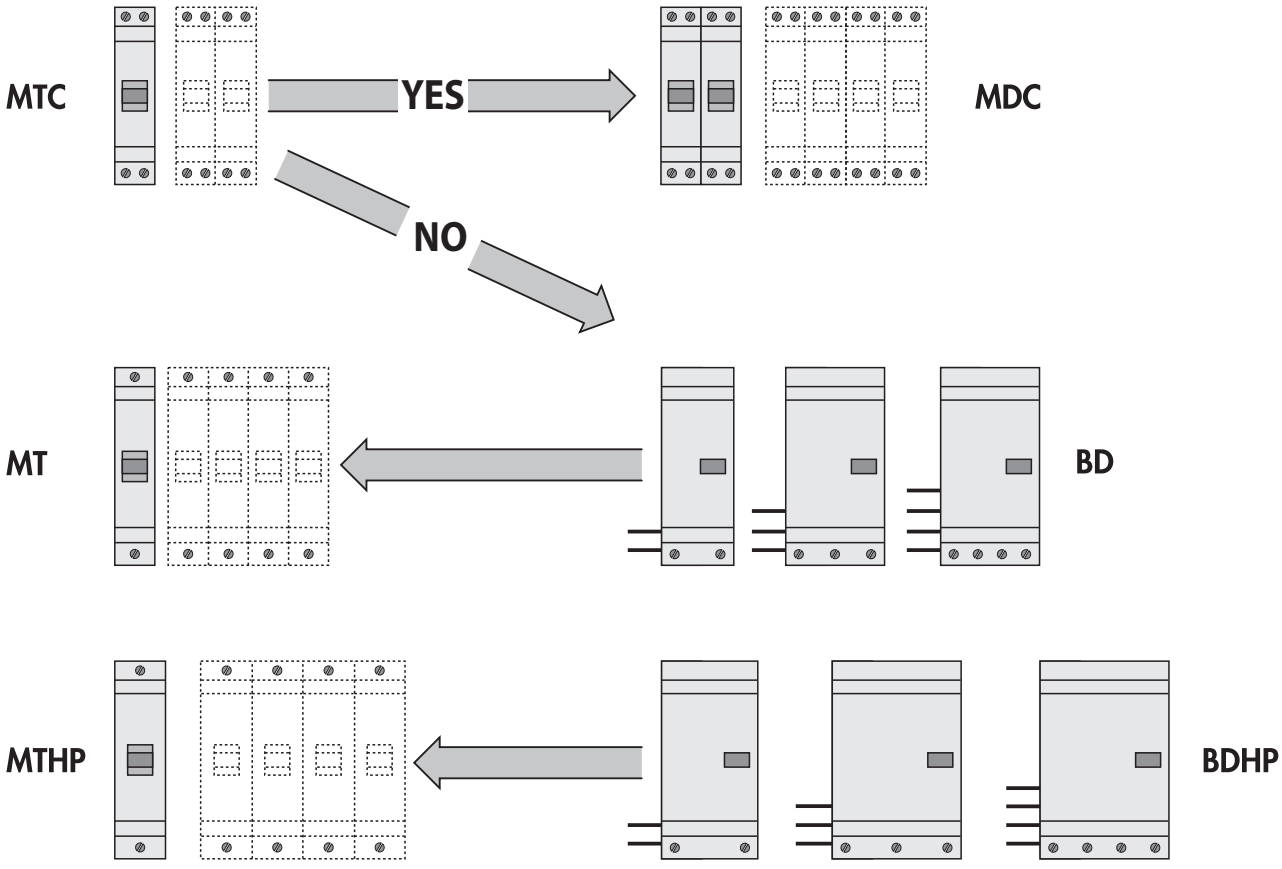
		POWER LOSS PER DEVICE (W)					
		RATED CURRENT In (A)					
Poles	No. modules	25	40	63	80	100	125
2	2	2.2	5.4	6.2	10.4	11	-
4	3	6	6	-	-	-	-
	4	3.5	6	12	16	18	25

Modular residual current circuit breakers composition rules

In order to get a residual current circuit breaker from a miniature circuit breaker, it is important to observe these following rules:

1 - an add-on residual current device for MTC, compact miniature circuit breaker, does not exist. There is the MDC range, compact residual current circuit breaker with overcurrent protection, in monobloc version.
2 - the BD add-on residual current device must be only connected with the MT miniature circuit breakers.
3 - the BDHP add-on residual current device must be only connected with the MTHP miniature circuit breakers.

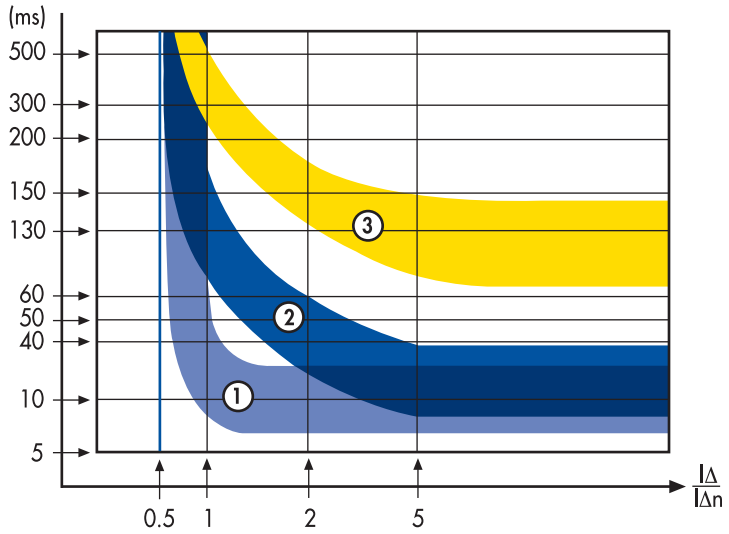
Miniature circuit breakers - MCB RANGE **Residual current devices - RCD RANGE**



Characteristic curves

Residual current tripping curves

MDC - BD - BDHP - SD



1 = instantaneous residual current circuit breakers

2 = impulse resistant residual current circuit breakers

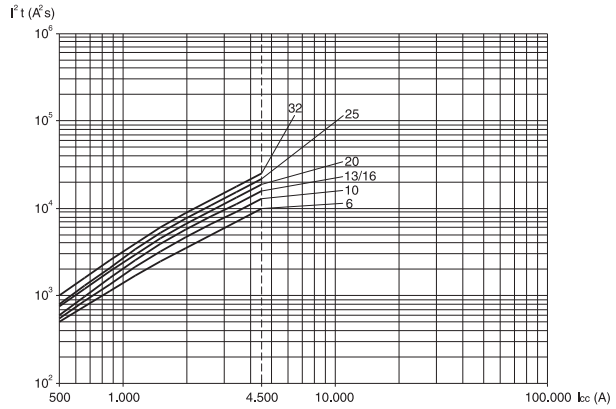
3 = selective residual current circuit breakers

New SD residual current circuit breakers

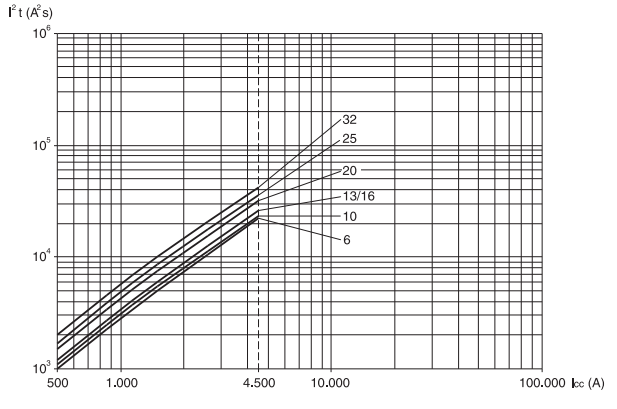
DELETED CODES AND RELEVANT SUBSTITUTIVE CODES				
TYPE	**DELETED CODES**	**SUBSTITUTIVE CODES**	**DESCRIPTION**	**NOTES**
AC	GW 94 601	GW 94 616	RES. CURR. CIRCUIT BREAKER 2P. 16A INSTANT. AC/0.01 2M.	Alternative code is 25A
	GW 94 611	GW 94 616	RES. CURR. CIRCUIT BREAKER 2P. 25A INSTANT. AC/0.01 2M.	
	GW 94 612	GW 94 617	RES. CURR. CIRCUIT BREAKER 2P. 25A INSTANT. AC/0.03 2M.	
	GW 94 613	GW 94 619	RES. CURR. CIRCUIT BREAKER 2P. 25A INSTANT. AC/0.3 2M.	
	GW 94 622	GW 94 627	RES. CURR. CIRCUIT BREAKER 2P. 40A INSTANT. AC/0.03 2M.	
	GW 94 623	GW 94 629	RES. CURR. CIRCUIT 2P. 40A INSTANT. AC/0.3 2M.	
	GW 94 624	GW 94 630	RES. CURR. CIRCUIT BREAKER 2P. 40A INSTANT. AC/0.5 2M.	
	GW 94 632	GW 94 790	RES. CURR. CIRCUIT BREAKER 2P. 63A INSTANT. AC/0.03 2M.	Cancelled codes was 3 modules version
	GW 94 633	GW 94 792	RES. CURR. CIRCUIT BREAKER 2P. 63A INSTANT. AC/0.3 2M.	
	GW 94 642	GW 94 793	RES. CURR. CIRCUIT BREAKER 2P. 80A INSTANT. AC/0.03 2M.	
	GW 94 643	GW 94 795	RES. CURR. CIRCUIT BREAKER 2P. 80A INSTANT. AC/0.3 2M.	
	GW 94 652	GW 94 656	RES. CURR. CIRCUIT BREAKER 2P. 100A INSTANT. AC/0.03 2M.	
	GW 94 653	GW 94 658	RES. CURR. CIRCUIT BREAKER 2P. 100A INSTANT. AC/0.3 2M.	
	GW 94 672	GW 94 662	RES. CURR. CIRCUIT BREAKER 4P. 25A INSTANT. AC/0.03 3M.	
	GW 94 673	GW 94 664	RES. CURR. CIRCUIT BREAKER 4P. 25A INSTANT. AC/0.3 3M.	
	GW 94 682	GW 94 667	RES. CURR. CIRCUIT BREAKER 4P. 40A INSTANT. AC/0.03 3M.	
	GW 94 683	GW 94 669	RES. CURR. CIRCUIT BREAKER 4P. 40A INSTANT. AC/0.3 3M.	
	GW 94 684	GW 94 670	RES. CURR. CIRCUIT BREAKER 4P. 40A INSTANT. AC/0.5 3M.	
	GW 94 692	GW 94 697	RES. CURR. CIRCUIT BREAKER 4P. 25A INSTANT. AC/0.03 4M.	
	GW 94 693	GW 94 699	RES. CURR. CIRCUIT BREAKER 4P. 25A INSTANT. AC/0.3 4M.	
	GW 94 694	GW 94 670	RES. CURR. CIRCUIT BREAKER 4P. 25A INSTANT. AC/0.5 4M.	Alternative code is 40A
	GW 94 702	GW 94 707	RES. CURR. CIRCUIT BREAKER 4P. 40A INSTANT. AC/0.03 4M.	
	GW 94 703	GW 94 709	RES. CURR. CIRCUIT BREAKER 4P. 40A INSTANT. AC/0.3 4M.	
	GW 94 704	GW 94 670	RES. CURR. CIRCUIT BREAKER 4P. 40A INSTANT. AC/0.5 3M.	Alternative code is 3 modules version
	GW 94 712	GW 94 757	RES. CURR. CIRCUIT BREAKER 4P. 63A INSTANT. AC/0.03 4M.	
	GW 94 713	GW 94 759	RES. CURR. CIRCUIT BREAKER 4P. 63A INSTANT. AC/0.3 4M.	
	GW 94 714	GW 94 760	RES. CURR. CIRCUIT BREAKER 4P. 63A INSTANT. AC/0.5 4M.	
	GW 94 722	GW 94 761	RES. CURR. CIRCUIT BREAKER 4P. 80A INSTANT. AC/0.03 4M.	
	GW 94 723	GW 94 766	RES. CURR. CIRCUIT BREAKER 4P. 80A INSTANT. AC/0.3 4M.	
	GW 94 724	GW 94 780	RES. CURR. CIRCUIT BREAKER 4P. 80A INSTANT. AC/0.5 4M.	Alternative code is 100A
	GW 94 732	GW 94 777	RES. CURR. CIRCUIT BREAKER 4P. 100A INSTANT. AC/0.03 4M.	
	GW 94 733	GW 94 779	RES. CURR. CIRCUIT BREAKER 4P. 100A INSTANT. AC/0.3 4M.	
	GW 94 734	GW 94 780	RES. CURR. CIRCUIT BREAKER 4P. 100A INSTANT. AC/0.5 4M.	
A	GW 94 801	GW 94 816	RES. CURR. CIRCUIT BREAKER 2P. 16A INSTANT. A/0.01 2M.	Alternative code is 25A
	GW 94 811	GW 94 816	RES. CURR. CIRCUIT BREAKER 2P. 25A INSTANT. A/0.01 2M.	
	GW 94 812	GW 94 817	RES. CURR. CIRCUIT BREAKER 2P. 25A INSTANT. A/0.03 2M.	
	GW 94 813	GW 94 819	RES. CURR. CIRCUIT BREAKER 2P. 25A INSTANT. A/0.3 2M.	
	GW 94 822	GW 94 827	RES. CURR. CIRCUIT BREAKER 2P. 40A INSTANT. A/0.03 2M.	
	GW 94 823	GW 94 829	RES. CURR. CIRCUIT BREAKER 2P. 40A INSTANT. A/0.3 2M.	
	GW 94 832	GW 94 837	RES. CURR. CIRCUIT BREAKER 2P. 63A INSTANT. A/0.03 2M.	Cancelled codes was 3 modules version
	GW 94 833	GW 94 839	RES. CURR. CIRCUIT BREAKER 2P. 63A INSTANT. A/0.3 2M.	
	GW 94 842	GW 94 847	RES. CURR. CIRCUIT BREAKER 2P. 80A INSTANT. A/0.03 2M.	
	GW 94 843	GW 94 849	RES. CURR. CIRCUIT BREAKER 2P. 80A INSTANT. A/0.3 2M.	
	GW 94 852	GW 94 856	RES. CURR. CIRCUIT BREAKER 2P. 100A INSTANT. A/0.03 2M.	
	GW 94 853	GW 94 858	RES. CURR. CIRCUIT BREAKER 2P. 100A INSTANT. A/0.3 2M.	
	GW 94 861	GW 94 866	RES. CURR. CIRCUIT BREAKER 4P. 16A INSTANT. A/0.01 3M.	Alternative code is 25A
	GW 94 872	GW 94 867	RES. CURR. CIRCUIT BREAKER 4P. 25A INSTANT. A/0.03 3M.	
	GW 94 873	GW 94 869	RES. CURR. CIRCUIT BREAKER 4P. 25A INSTANT. A/0.3 3M.	
	GW 94 882	GW 94 897	RES. CURR. CIRCUIT BREAKER 4P. 40A INSTANT. A/0.03 3M.	
	GW 94 883	GW 94 899	RES. CURR. CIRCUIT BREAKER 4P. 40A INSTANT. A/0.3 3M.	
	GW 94 892	GW 94 927	RES. CURR. CIRCUIT BREAKER 4P. 40A INSTANT. A/0.03 4M.	
	GW 94 893	GW 94 929	RES. CURR. CIRCUIT BREAKER 4P. 40A INSTANT. A/0.3 4M.	
	GW 94 902	GW 94 937	RES. CURR. CIRCUIT BREAKER 4P. 63A INSTANT. A/0.03 4M.	
	GW 94 903	GW 94 939	RES. CURR. CIRCUIT BREAKER 4P. 63A INSTANT. A/0.3 4M.	
	GW 94 912	GW 94 947	RES. CURR. CIRCUIT BREAKER 4P. 80A INSTANT. A/0.03 4M.	
	GW 94 913	GW 94 949	RES. CURR. CIRCUIT BREAKER 4P. 80A INSTANT. A/0.3 4M.	
	GW 94 916	GW 94 957	RES. CURR. CIRCUIT BREAKER 4P. 100A INSTANT. A/0.03 4M.	
	GW 94 917	GW 94 959	RES. CURR. CIRCUIT BREAKER 4P. 100A INSTANT. A/0.3 4M.	
A[S]	GW 94 923	GW 94 924	RES. CURR. CIRCUIT BREAKER 2P. 40A SELECT. A/0.3 2M.	Cancelled codes was 3 modules version
	GW 94 933	GW 94 934	RES. CURR. CIRCUIT BREAKER 2P. 63A SELECT. A/0.3 2M.	
	GW 94 943	GW 94 944	RES. CURR. CIRCUIT BREAKER 2P. 80A SELECT. A/0.3 2M.	
	GW 94 953	GW 94 954	RES. CURR. CIRCUIT BREAKER 2P. 100A SELECT. A/0.3 2M.	
	GW 94 963	GW 94 966	RES. CURR. CIRCUIT BREAKER 4P. 40A SELECT. A/0.3 4M.	
	GW 94 973	GW 94 976	RES. CURR. CIRCUIT BREAKER 4P. 63A SELECT. A/0.3 4M.	
	GW 94 983	GW 94 986	RES. CURR. CIRCUIT BREAKER 4P. 80A SELECT. A/0.3 4M.	
	GW 94 993	GW 94 996	RES. CURR. CIRCUIT BREAKER 4P. 100A SELECT. A/0.3 4M.	

MDC Specific let-through energy curves

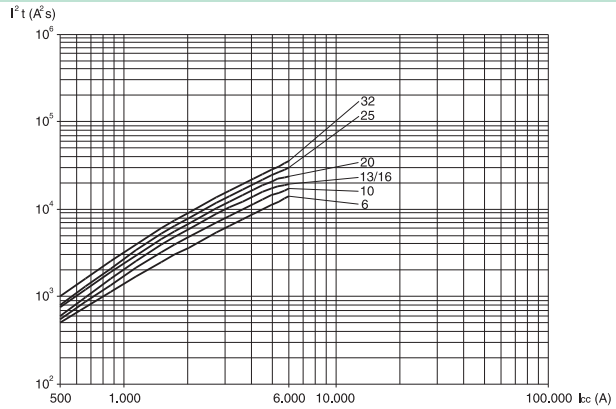
MDC 45 - 1P+N, 2P - 230V VERSIONS



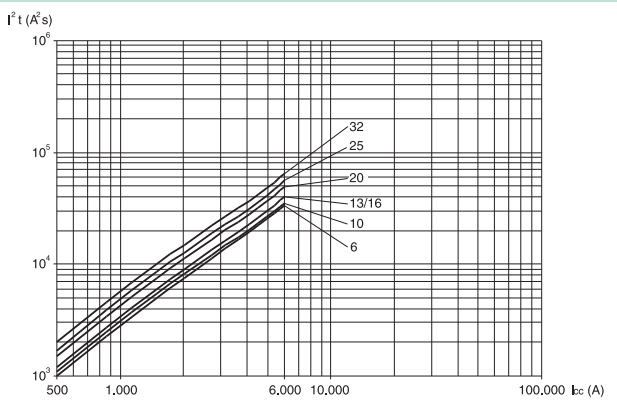
MDC 45 - 3P, 4P - 230/400V and, 2P - 400V VERSIONS



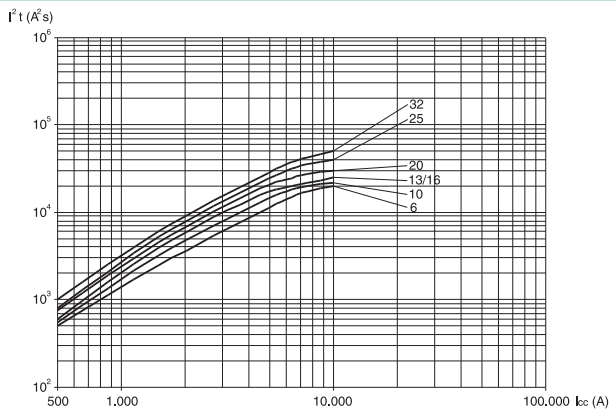
MDC 60 - 1P+N, 2P - 230V VERSIONS



MDC 60 - 3P, 4P - 230/400V and 2P - 400V VERSIONS



MDC 100 - 1P+N, 2P - 230V VERSIONS

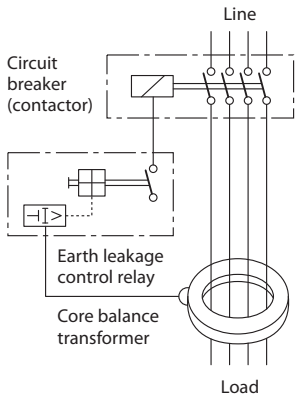


SD - EARTH LEAKAGE RELAY CONTROL SYSTEM		
Range operating voltage control circuit:	**(V)**	230 ÷ 415 AC
Rated frequency:	**(Hz)**	50
Type:		A
Rated residual operating current (IΔn):	**(mA)**	300
Level of immunity (8/20 µs):	**(A)**	250
Type of contacts for load circuit control:		1 normally open contact 40A and 1 normally closed contact 10A
Degree of protection:		IP 20
Operating temperature:	**(°C)**	-25 +40
Internal diameter of core balance transformers:	**(mm)**	35 - 70 - 105

NOTE: control relay and core balance transformer must have the same values for rated residual operating current (IΔn)

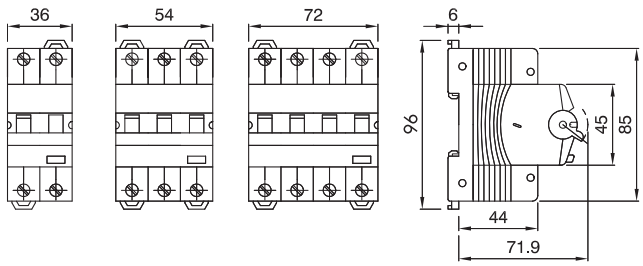
Circuit diagrams

EARTH LEAKAGE RELAY CONTROL SYSTEM

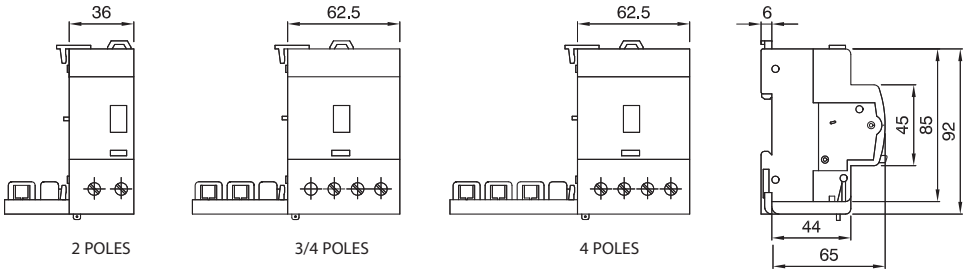


Dimension tables

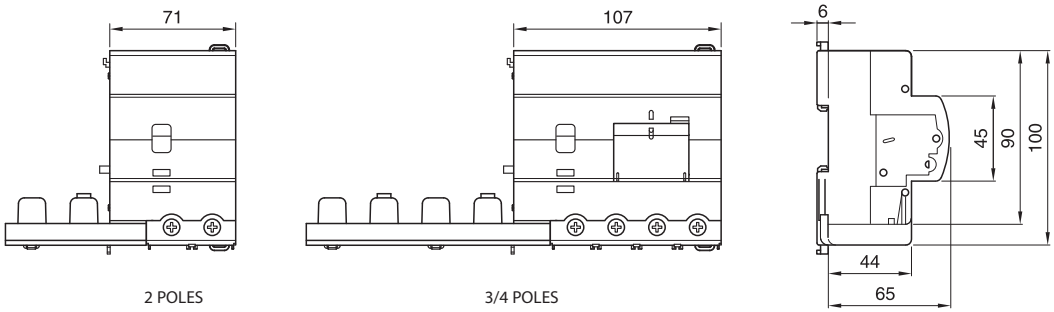
MDC 45 - MDC 60 - MDC 100 - RESIDUAL CURRENT CIRCUIT BREAKERS WITH OVERCURRENT PROTECTION



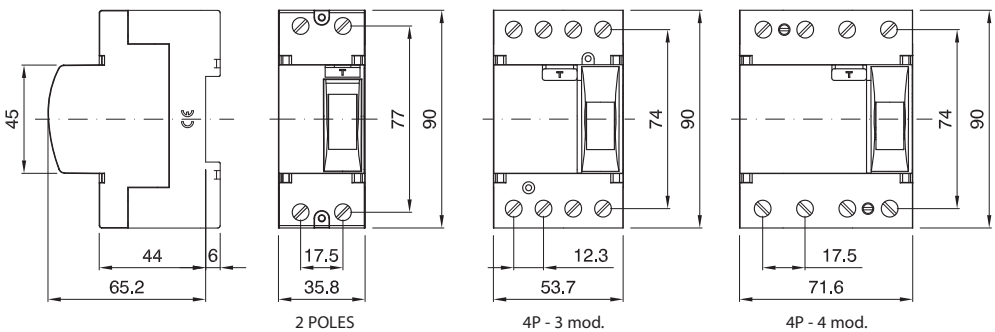
BD - ADD-ON RESIDUAL CURRENT DEVICES



BDHP - ADD-ON RESIDUAL CURRENT DEVICES

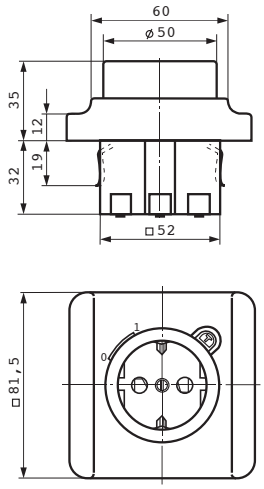


SD - RESIDUAL CURRENT CIRCUIT BREAKERS

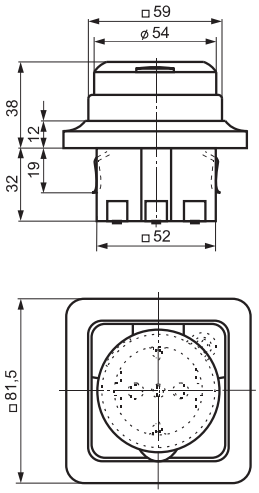


RCD SAFETY SOCKETS - RCD SAFETY UNITS

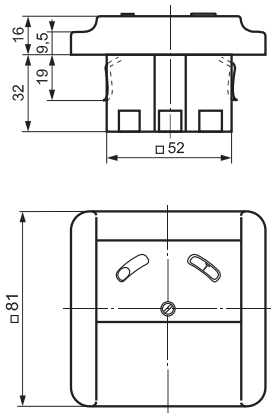
SAFETY SOCKET IP 21



SAFETY SOCKET IP 44

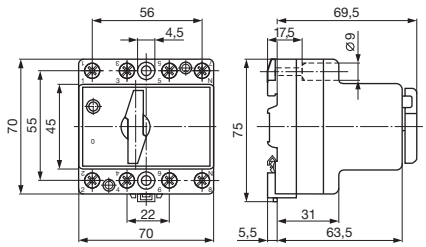


SAFETY UNIT IP 41

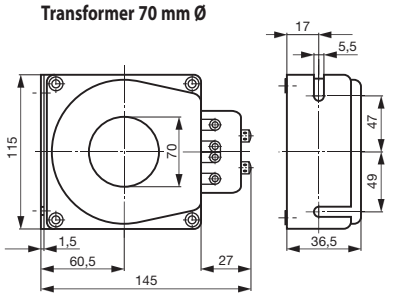


EARTH LEAKAGE RELAY CONTROL SYSTEMS

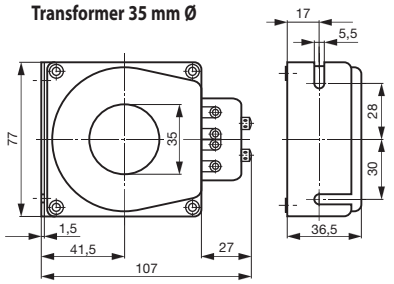
Control switch



Transformer 70 mm Ø



Transformer 35 mm Ø



Transformer 105 mm Ø