



GE Power Controls

New *Modular DIN-rail devices
for all applications*



Elfa Plus



Elfa Plus

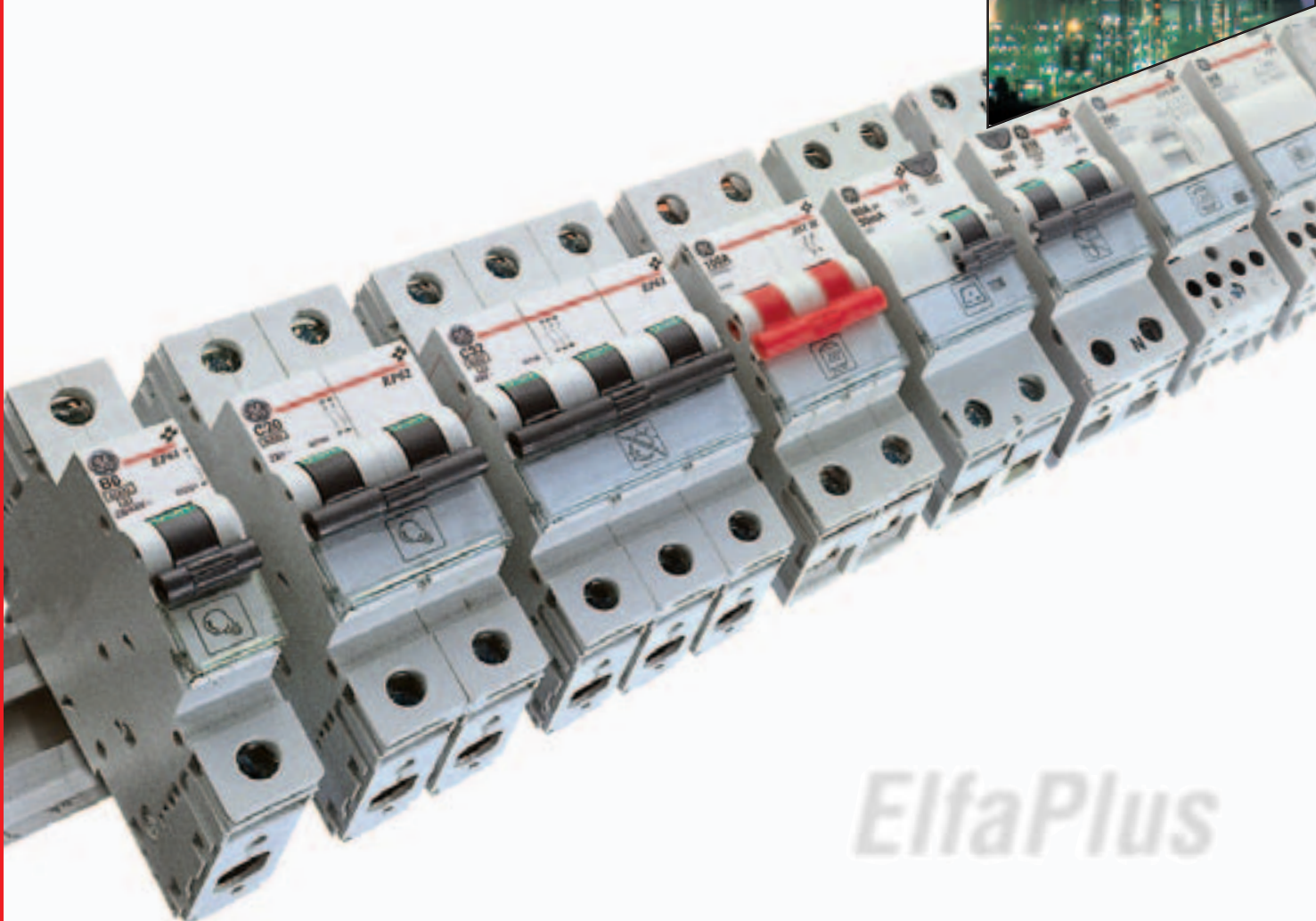
For 100 years Elfa MCB's have been leaders in technology. Today, ElfaPlus is a complete range for all applications; easy to install, safe, reliable and user friendly. ElfaPlus - the new range of modular devices from GE Power Controls.





For all applications


For all applications



ElfaPlus

 Residential




 Commercial

ElfaPlus



Circuit protection

MCB's up to 125A
up to 25 kA - BS EN 60898
up to 50 kA - BS EN 60947-2

 Industrial



People protection

RCCB's up to 100A
up to 500 mA
RCBO's up to 40A
up to 300 mA
Add-on RCD's up to 125A
up to 1000 mA



Add-on Devices

Auxiliaries
Shunt trip
Under voltage relay
Motor operator
Busbar systems



Comfort functions

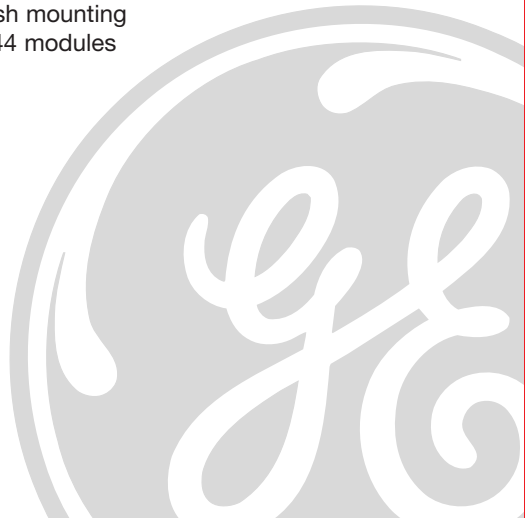
Switches
Remote control
Time switches and relays
Transformers
Measurement instruments
Surge arresters



Enclosures

Insulated and metal
Surface and flush mounting
From 2 up to 144 modules

The complete line



Safe and reliable

BS EN

 IP20

Benefits

6


NF

ElfaPlus



 Safety terminals

Safe

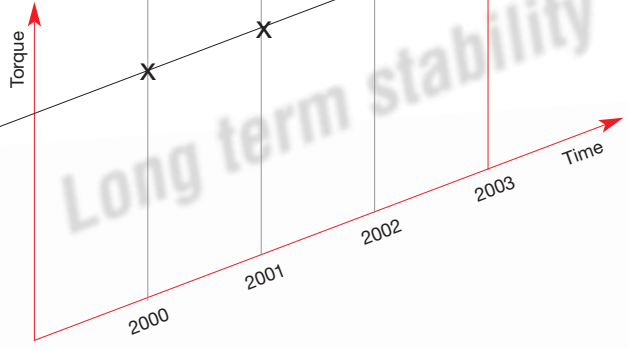
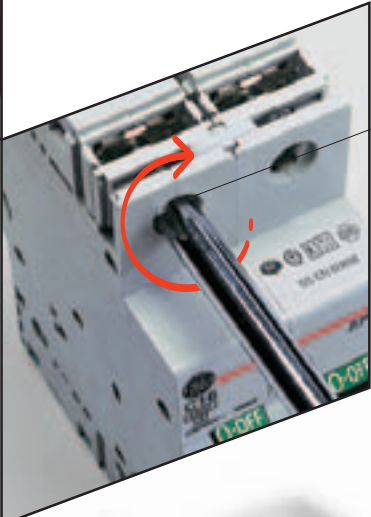
 Sealed terminals



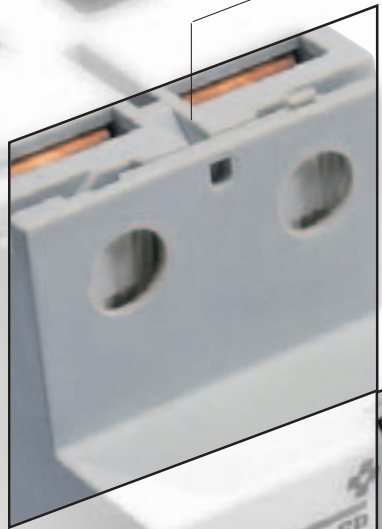
Top

reliable





Padlocking toggle



High degree of insulation



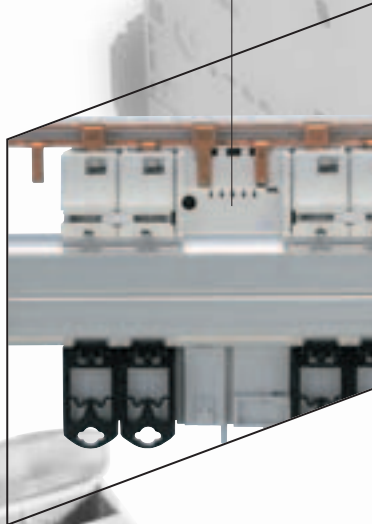
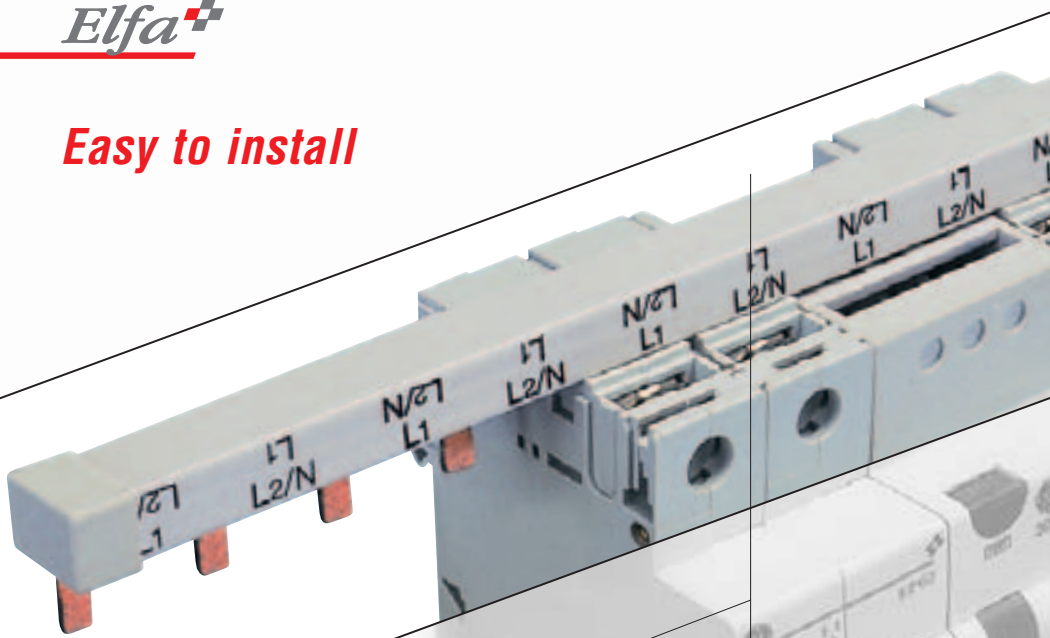
Real contact position indicator

selectivity

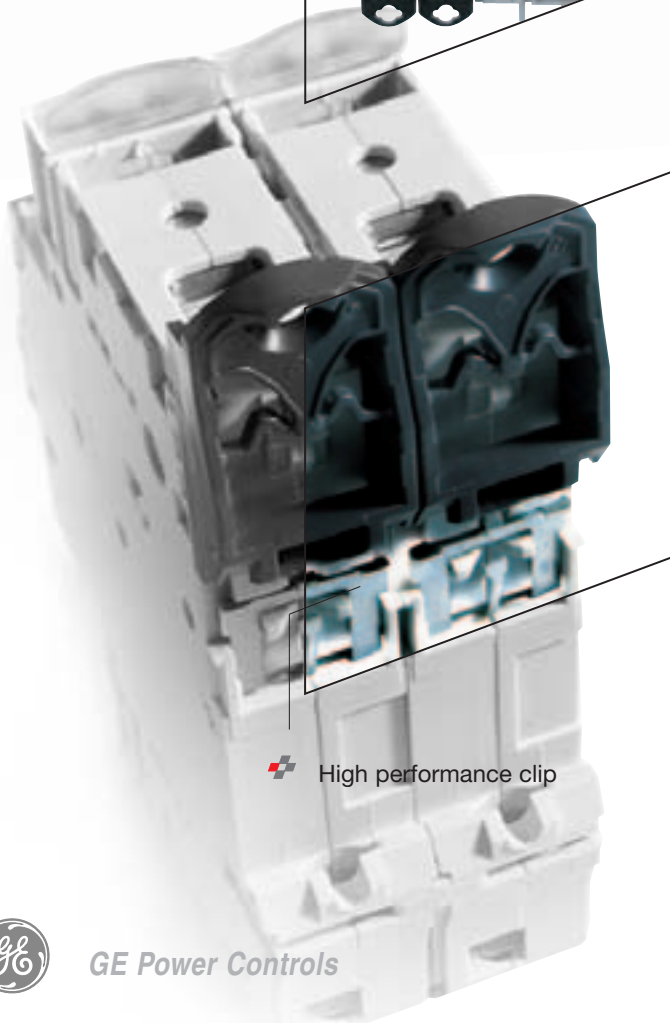
CE



Easy to install

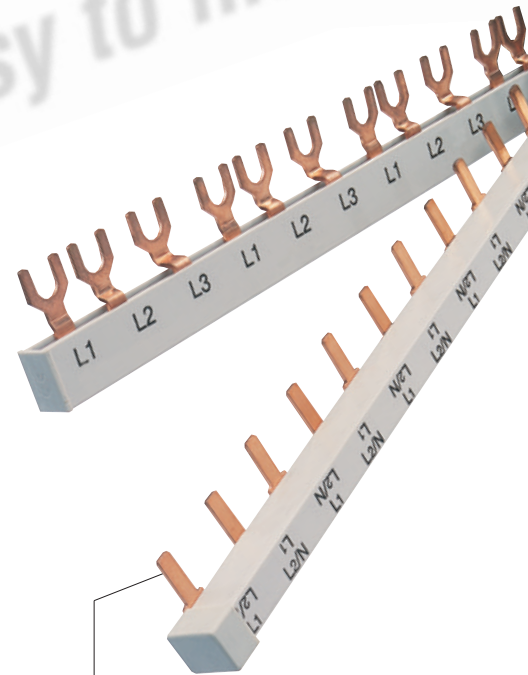


Busbar let-through at the top



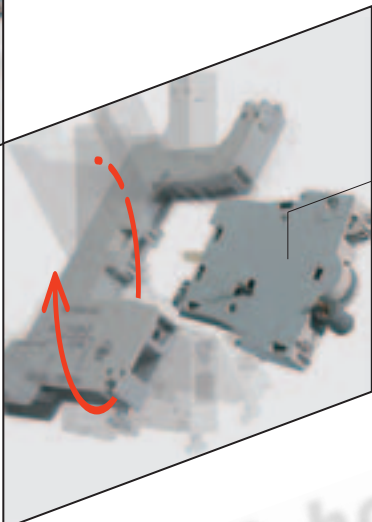
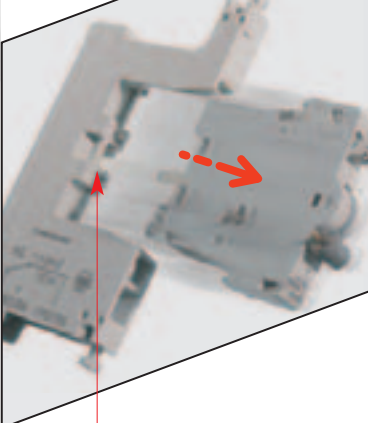
High performance clip

Easy to install



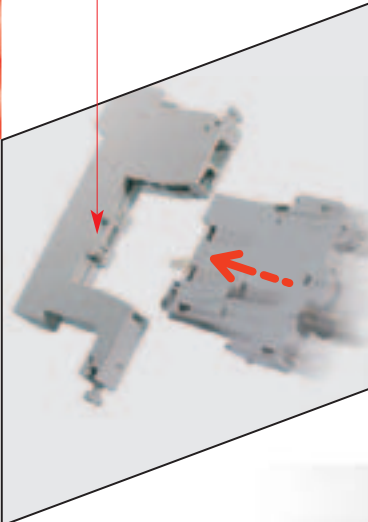
Different connection techniques. Same device





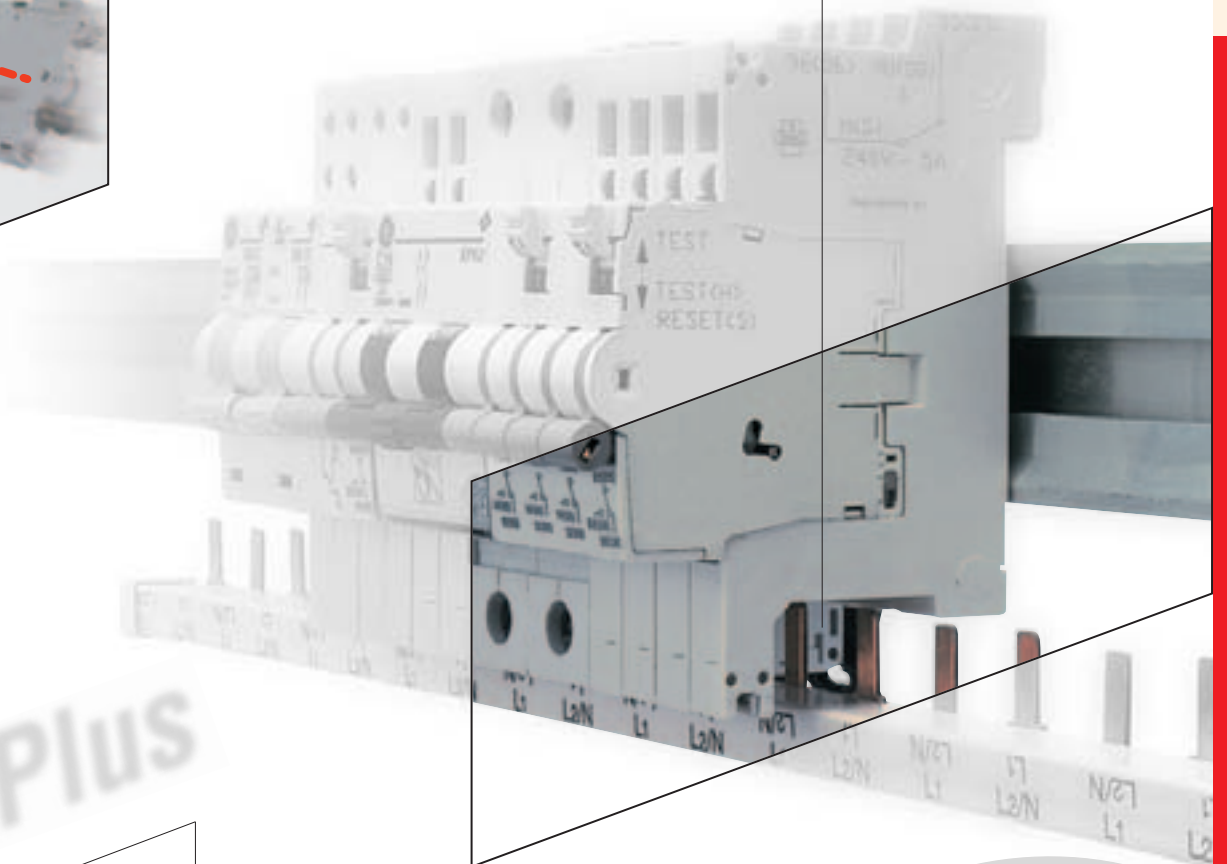
✚ Auxiliaries
Top & bottom
busbar let-through

Same devices



Top & bottom let-through

✚ Busbar let-through
at the bottom

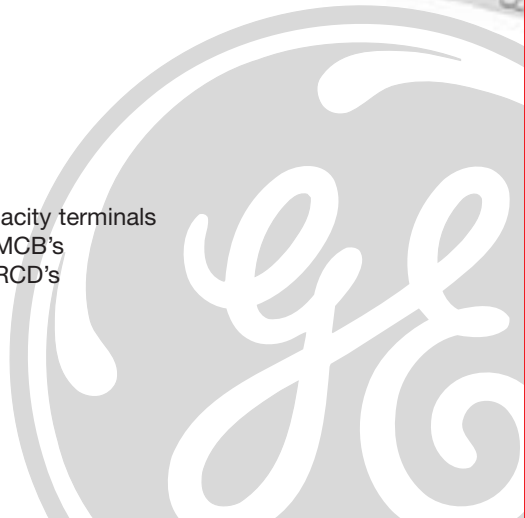


ElfaPlus

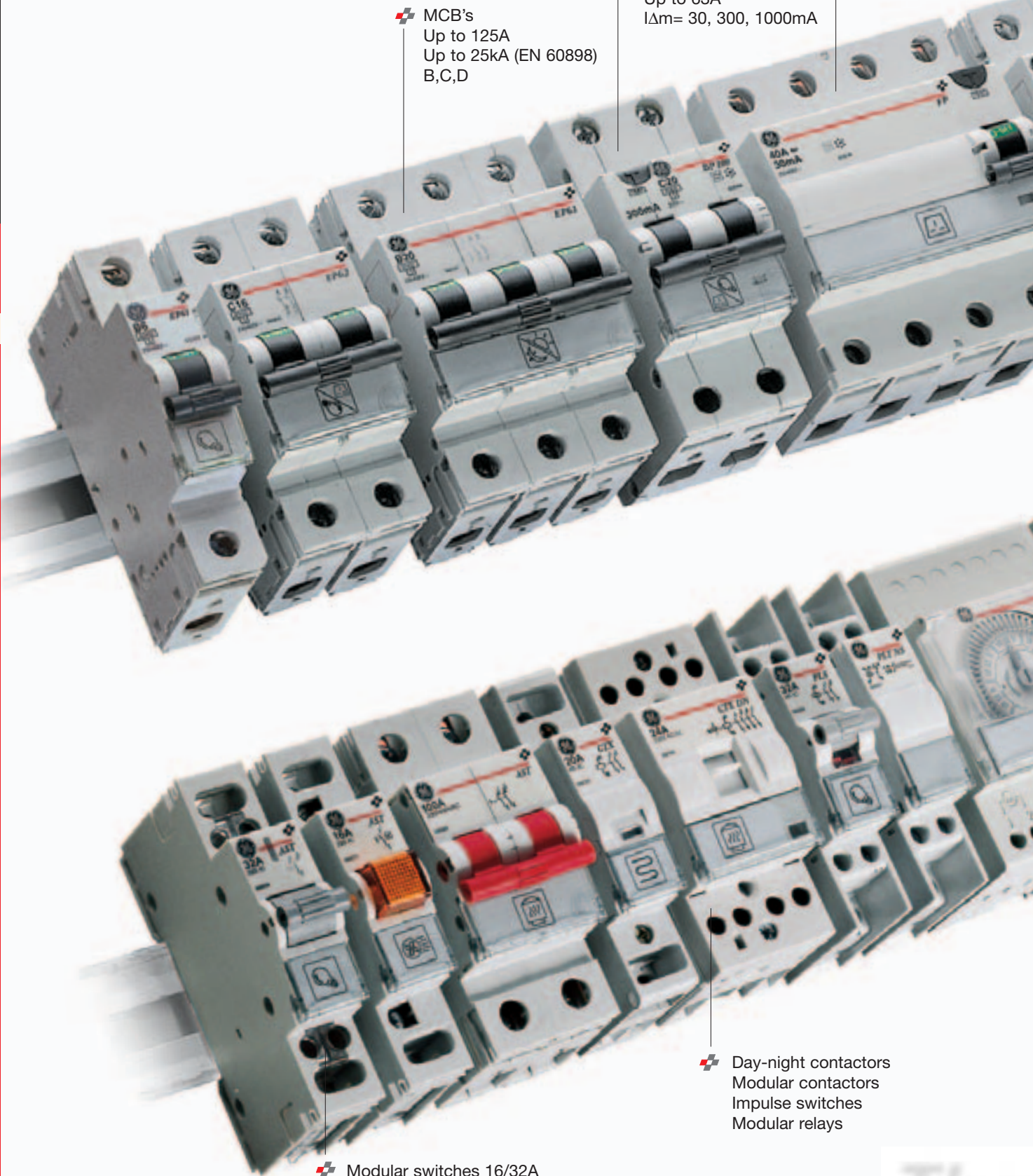
✚ High torque
performance: 4.5 Nm.





✚ High capacity terminals
35 mm² MCB's
50 mm² RCD's





The complete line




 MCB's
Up to 125A
Up to 25kA (EN 60898)
B,C,D

 RCBO's
Up to 10kA (EN 61009)
Up to 63A
I Δ m= 30, 300, 1000mA

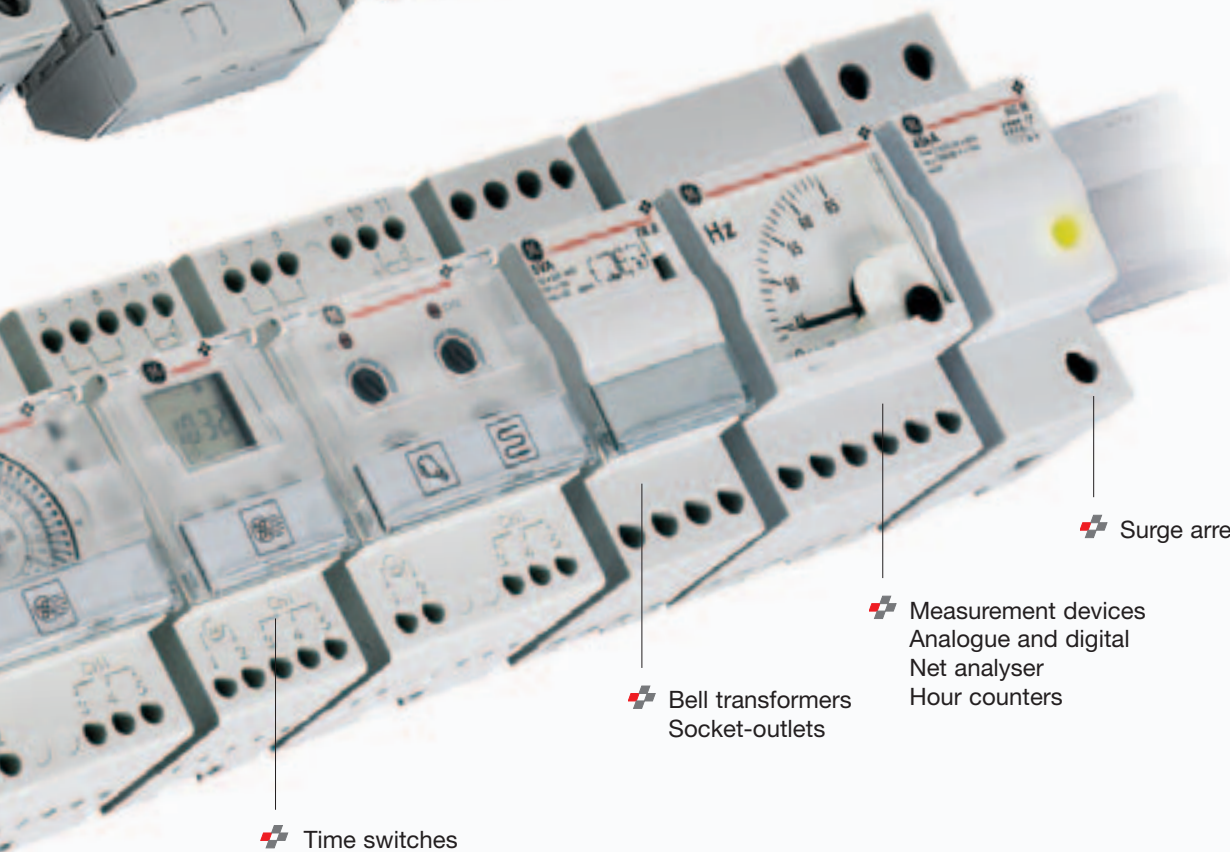
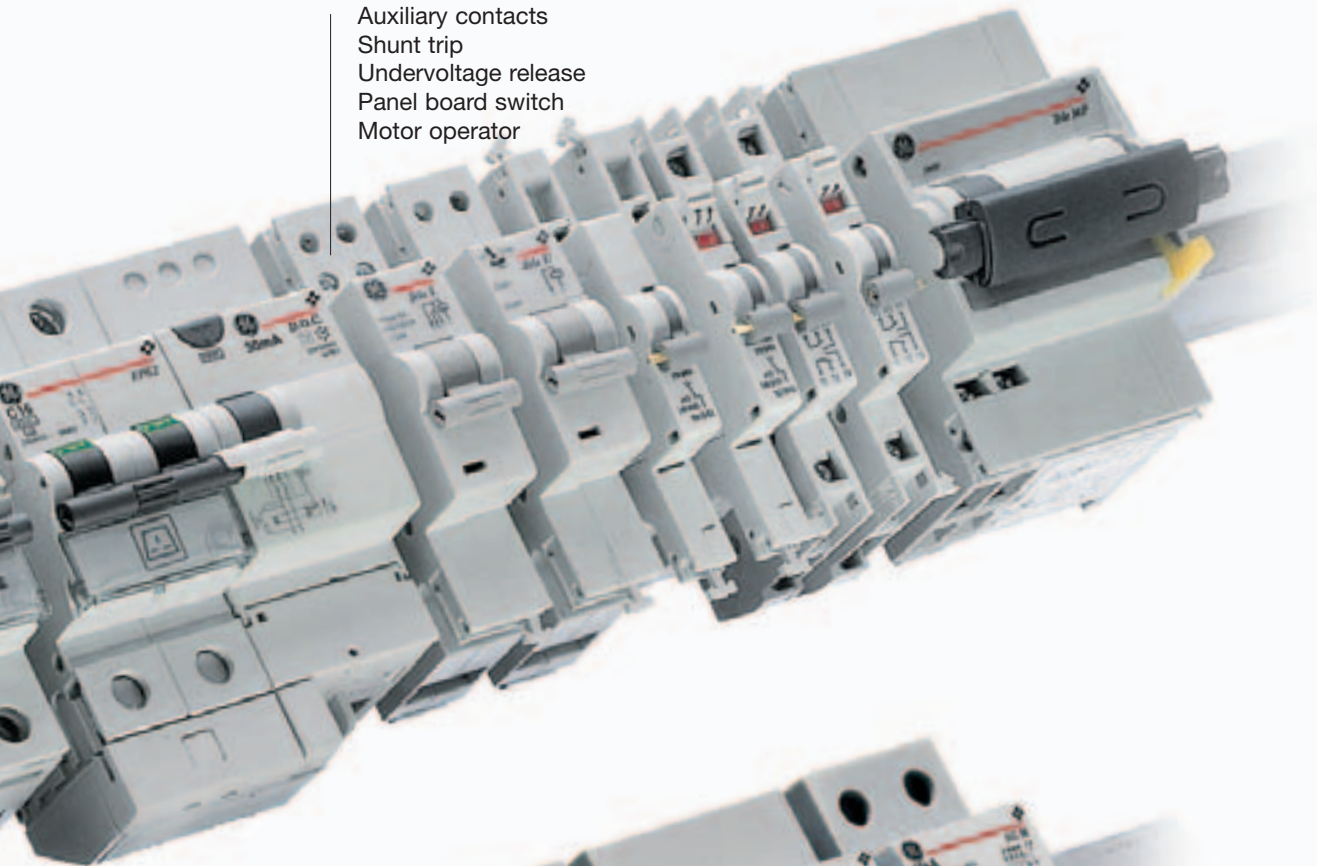
 RCCB's
Up to 125A
I Δ m=10 to 500mA
10kA with 100A fuse

 Day-night contactors
Modular contactors
Impulse switches
Modular relays

 Modular switches 16/32A
Push-buttons 16A
Mains disconnect switch 32-100A
Modular switches 63-80-100A



- ✚ Common add-on devices
 - Auxiliary contacts
 - Shunt trip
 - Undervoltage release
 - Panel board switch
 - Motor operator



- ✚ Time switches
 - Light sensitive switch
 - Staircase lighting time switch
 - Time relays

- ✚ Bell transformers
 - Socket-outlets

- ✚ Measurement devices
 - Analogue and digital
 - Net analyser
 - Hour counters

- ✚ Surge arresters


complete line



User friendly

User friendly




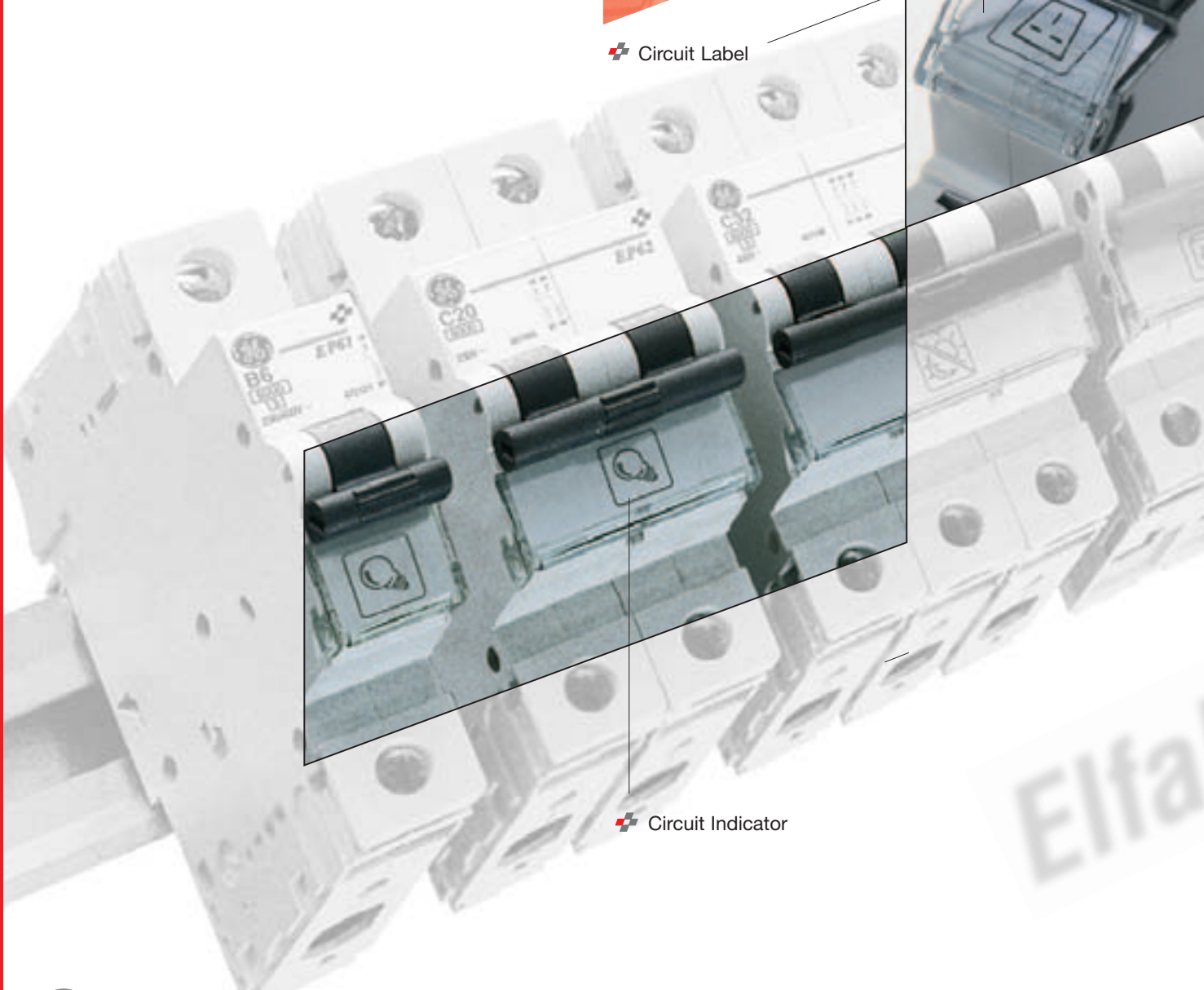
Surge arrester 
Tripping Indicator



 Circuit Label



 Circuit Indicator



Elfa

User friendly



✚ Contactor Status Indicator



✚ Plug-in surge arrester
Easy maintenance



✚ Tripping Indicator

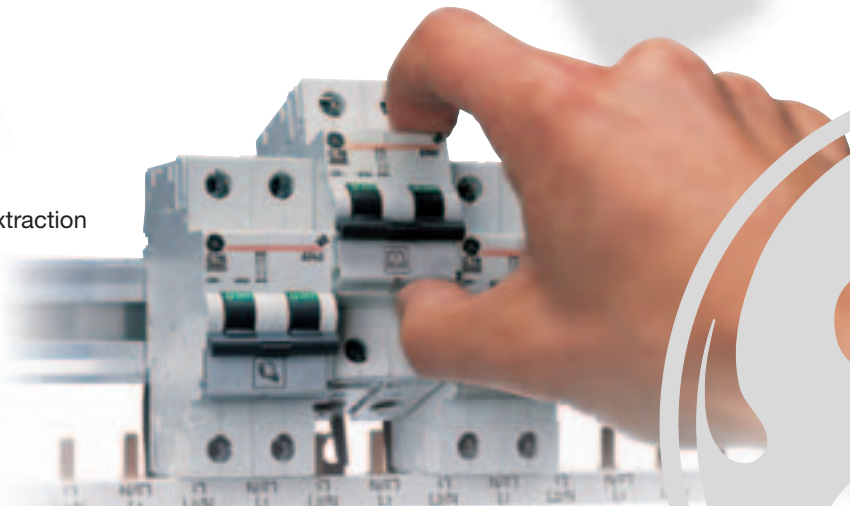


✚ Easy programming



Plus

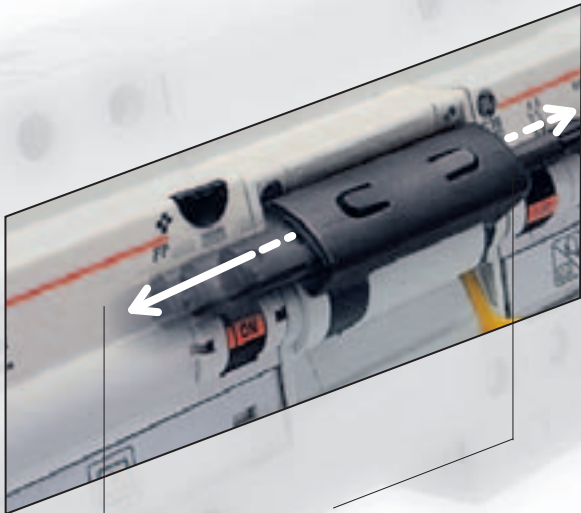
✚ Easy DIN rail extraction



Multifunctional

ElfaPlus


Same device
Left and right assembly



Motor operator
Same device
Left and right assembly

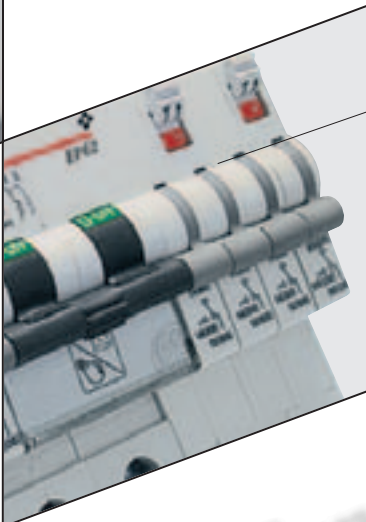
Common device
for all products




 Shunt trip
Under voltage relay



 Auxiliaries




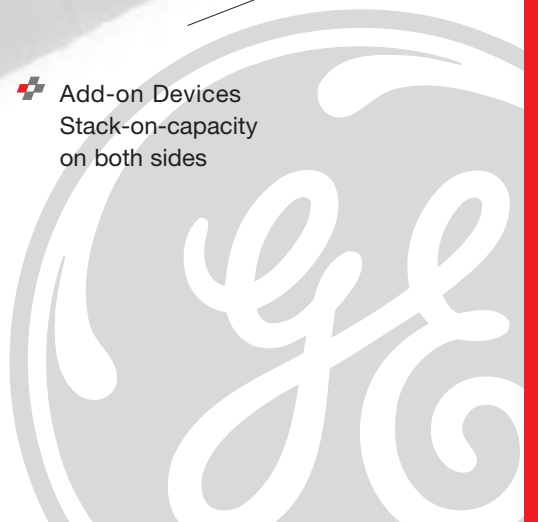
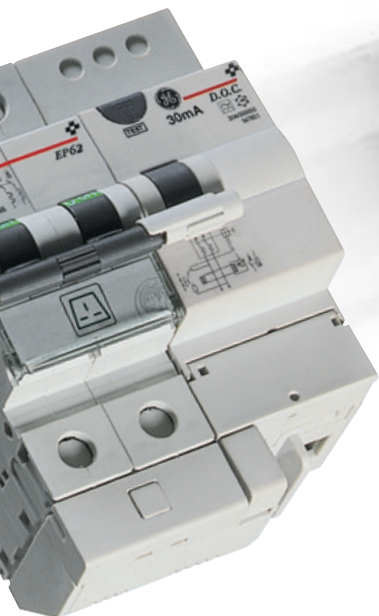
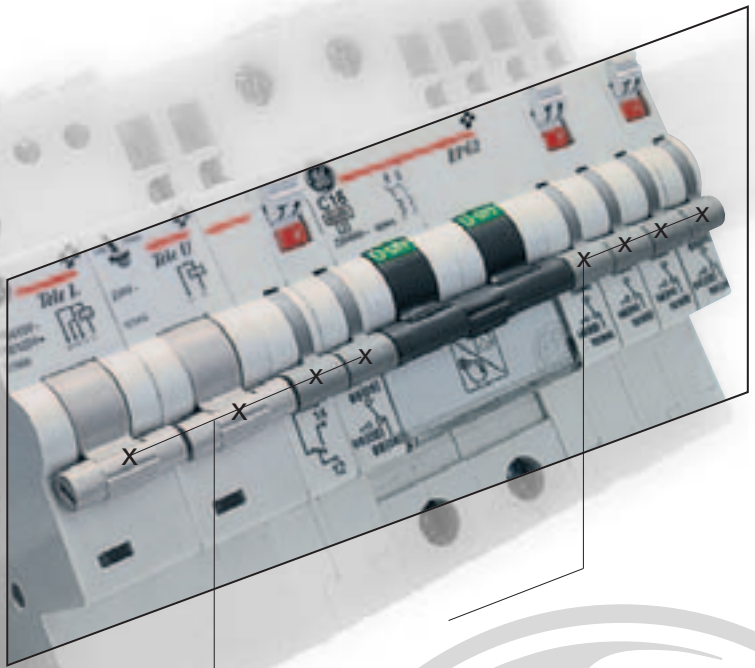
 Motor operator



Multifunctional

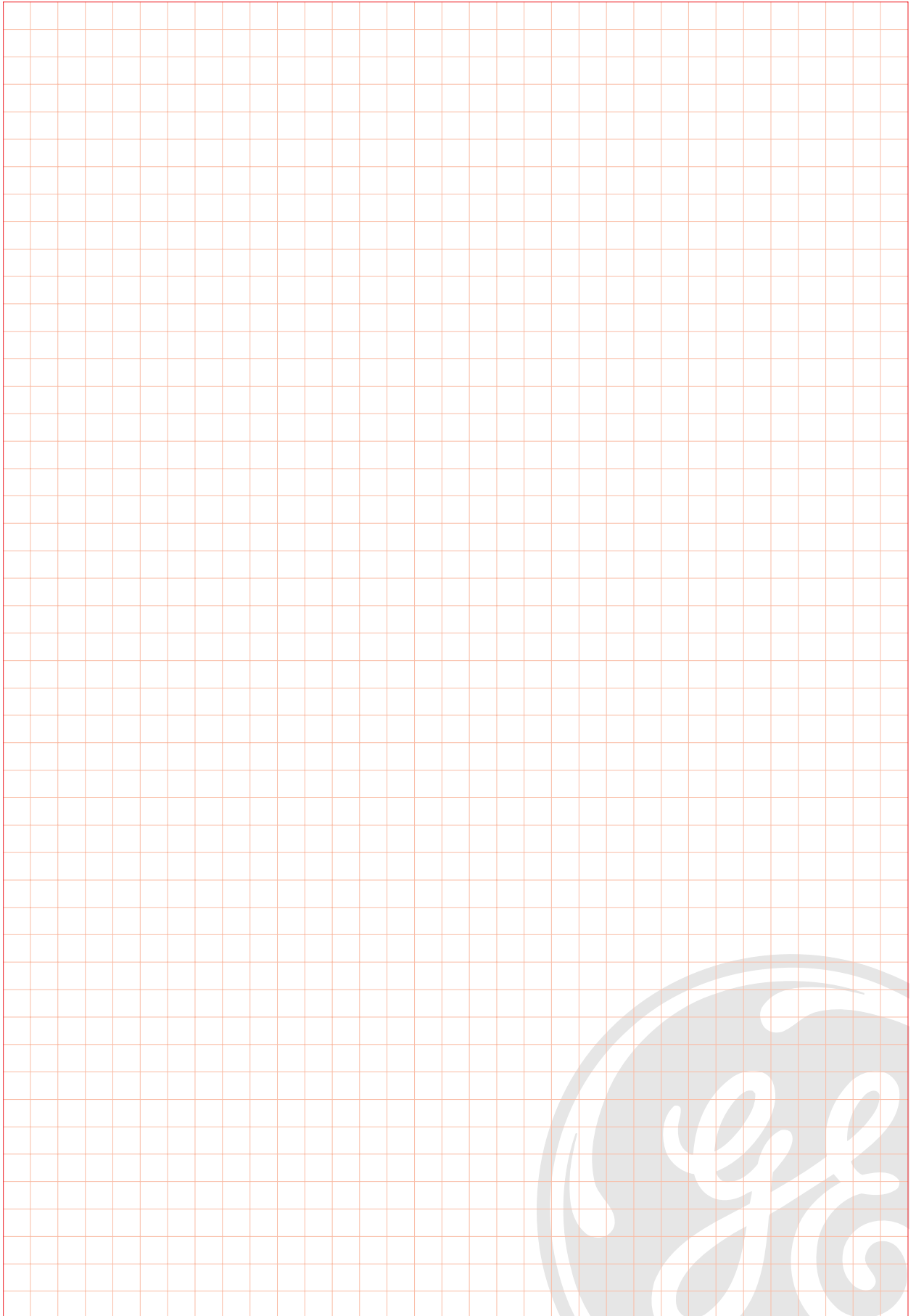
Both
sides
assembly

 Add-on Devices
Stack-on-capacity
on both sides



























Notes



Selection table MCB's

Page nr.	Series	Application	Poles	Add-on devices	Tripping characteristic	Rating current (A)	Short-circuit capacity (kA)
A.8	CP60		1+N	yes	B	6-32	
			1+N	yes	C	2-32	
A.10	EP60		1,2,3,4, 1+N	yes	B	6-63	
			1,2,3,4, 1+N	yes	C	0.5-63	
			1,2,3,4, 1+N	yes	D	0.5-63	
A.12	EP100		1,2,3,4, 1+N	yes	B	6-63	
			1,2,3,4, 1+N	yes	C	0.5-63	
			1,2,3,4, 1+N	yes	D	0.5-63	
A.14	EP250		1, 2, 3, 4	yes	B	6-63	
			1, 2, 3, 4	yes	C	0.5-63	
A.16	EP250 M		2, 3	yes	M	1.6-63	
A.18	EP100 UC		1,2	yes	C	0.5 -63	
A.20	Hti		1, 2, 3, 4	yes	B	80-125	
			1, 2, 3, 4	yes	C	80-125	
			1, 2, 3, 4	yes	D	80-25	

 domestic
 commercial
 industrial

BS EN 60898 
BS EN 60947-2 

Technical data MCB's

Series			CP60	EP60
Standards			EN 60898	BS EN 60898
Tripping characteristics			B, C	B,C,D
Nominal current		A	B: 6-32, C: 2-32	B 6-63, C/D 0.5 -63
Calibration temperature		°C	30	30
Number of poles (# mod)			1+N (1 mod.)	1/1+N/2/3/4
Neutral pole protected			-	yes
Clip-on (rapid closing)			-	yes
Nominal voltage Un				
	AC	1P	V	240/415
		1P+N	V	240
		2P	V	415
		3P/3P+N/4P	V	415
	DC	1P (1)	VDC	48
		2P (in series) (1)	VDC	110
Frequency			50 to 60	50 to 60
			Hz	DC: magn.trip +40%
			Hz	DC: magn.trip +40%
			400Hz: magn.trip +50%	400Hz: magn.trip+50%
Maximum service voltage U _{bmax} between two wires		V	250	250/440; 53/120 DC
Minimum service voltage U _{bmin}		V	12	12; 12 DC
Selectivity class (EN 60898)			3	3
Isolator application	EN 60947-2		-	yes
Rated insulation voltage	Pollution degree 2	V	500	500
	Pollution degree 3	V	440	440
Impulse withstand test voltage		kV	6	6
Insulation resistance		mOhm	1000	10000
Dielectric rigidity		kV	2.5	2.5
Vibrations resistance (in x, y, z direction)(IEC 77/16.3)			3	3g
Endurance	electrical at U _n , I _n		10000	10000
	mechanical		20000	20000
Utilisation category (EN 60947-2)			A	A
Protection degree (outside / inside enclosure)			IP20/IP40	IP20/IP40
Self-extinguish degree (according to UL94)			V2	V2
Tropicalisation (according to EN 60068-2 / DIN 40046)		°C/RH	+55°C/95% RH	+55°C / 95%RH
Operating temperature		°C	-25/+55	-25/+55
Storage temperature		°C	-55/+55	-55/+55
Terminal capacity	Rigid cable min/max (top)	mm ²	1/16	1/35
	Flexible cable min*/max (top)	mm ²	0.75/10	0.75/35
	Rigid cable min/max (bottom)	mm ²	1/16	1/35
	Flexible cable min*/max (bottom)	mm ²	0.75/10	0.75/35
	(* Flexible cable 0.75/1/1.5 mm ² with cable lug)			
	Torque	Nm	2.5	4.5
Add-on devices (side add-on)	Auxiliary contacts		yes	yes
	Tele U		-	yes
	Tele L		yes	yes
	Tele Mp		-	yes
	PBS		-	yes
Busbar systems	Pin		yes/yes	yes
	Fork		-	yes
Accessories			-	yes
Dimensions, weights, packaging				
	# Poles			1
	(HxDxW) 86x68xW	mm	18	18
	Weight/pole	g	125 g	125 g
	Package/unit		12	12
Approvals			IMQ	VDE-KEMA-CEBEC
CE-marking			yes	yes
Page			A.8	A.10

(1) Preferred values of rated control supply voltage (BS EN 60947-2): 24V, 48V, 110V, 125V, 220V, 250V

EP100	EP250	EP250 M	EP100 UC	Hti
BS EN 60898	BS EN 60947-2	BS EN 60898	VDE 0641 Teil2/3	BS EN 60947-2
B,C,D	3-5ln(B)/5-10ln(C)	M	B,C	3-5ln/5-10ln/10-20ln
B 6-63, C/D 0.5 -63	B6-63/C0.5 -63	1.6 to 63	B 6-63, C 0.5 -63	80 to 125
30	30	30	30	40
1/1+N/2/3/4	1,2,3,4	2,3	1,2	1,2,3,4 (1½, 3, 4½, 6)
yes	-	-	-	-
yes	yes	-	yes	-
240/415	240/415	-	230/400	240/415
240	-	-	-	-
415	415	240	400	415
415	415	415	-	415
48	48	-	220	48
110	110	-	440	110
50 to 60	50 to 60	50 to 60	50 to 60 and DC	50 to 60
DC: magn.trip +40%	DC: magn. trip +40%	DC: magn. trip +40%	DC: magn.trip +40%	DC: magn.trip +40%
400Hz: magn.trip+50%	400Hz: magn.trip+50%	400Hz: magn.trip.+50%	400Hz: magn.trip+50%	400Hz: magn.trip+50%
250/440; 53/120 DC	250/440; 53/120 DC	250/440; 53/120 DC	250/440; 250/440 DC	250/440; 53/120 DC
12; 12 DC	12; 12 DC	12; 12 DC	12; 12 DC	12; 12 DC
3	3	3	3	-
yes	yes	yes	yes	-
500	500	500	500	500
440	440	440	440	440
6	6	6	6	6
10000	10000	10000	10000	10000
2.5	2.5	2.5	2.5	2.5
3g	3g	3g	5g	3g
10000	10000	10000	1000	4000
20000	20000	20000	20000	10000
A	A	A	A	A
IP20/IP40	IP20/IP40	IP20/IP40	IP20/IP40	IP20/IP40
V2	V2	V2	V2	V2
+55°C / 95%RH	+55°C / 95%RH	+55°C / 95%RH	+55°C / 95%RH	+55°C / 95%RH
-25/+55	-25/+55	-25/+55	-25/+55	-25/+55
-55/+55	-55/+55	-55/+55	-55/+55	-55/+55
1/35	1/35	1/35	1/35	70
0.75/35	0.75/35	0.75/35	0.75/35	-
1/35	1/35	1/35	1/35	70
0.75/35	0.75/35	0.75/35	0.75/35	-
4.5	4.5	4.5	4.5	5
yes	yes	yes	yes	yes
yes	yes	yes	yes	-
yes	yes	yes	yes	yes
yes	yes	yes	yes	-
yes	yes	yes	yes	-
yes	yes	yes	yes	yes
yes	yes	yes	yes	-
yes	yes	yes	yes	-
1	1	1	1	1
18	18	18	18	27
125 g	125 g	125 g	125 g	-
12	12	12	12	8
VDE-KEMA-CEBEC	-	VDE in process	VDE in process	-
yes	yes	yes	yes	yes
A.12	A.14	A.16	A.18	A.20



Short-circuit capacity of MCB's

Series				CP60	EP60
Short-circuit capacity AC					
BS EN 60898	Icn (rated)	1P	240/415 V		6
		1P+N	240 V	-	6
		2P	240/415 V	6	6
		3P/3P+N/4P	240/415 V	-	6
		Ics (service)		-	100% Icu
BS EN 60947-2	Icu (ultimate)	1 P	127 V	100% Icu	20
			240 V	-	10
			415 V	-	3
		1+N /2 P	127 V	-	30
			240 V	-	20
		2 P	415 V	10	10
		3, 4 P	240 V	-	20
			415 V	-	10
			440 V	-	6
		Ics (service)		-	75% Icu
Short-circuit capacity DC					
EN 60947-2	Icu (ultimate)	1 P	≤ 60 VDC		20
			≤ 220 VDC	-	-
		2 P	≤ 125 VDC	-	25
			≤ 440 VDC	-	-
Ics (service)			-	100% Icu	
Page			-	A.10	
			A.8		

EP100	EP250	EP250M	EP100 UC	Hti
10	25	-	6	-
10	-	-	-	-
10	-	-	6	-
10	-	-	-	-
75% lcu	50% lcn	-	-	-
30	50	-	-	-
15	50/25/20/15 ⁽¹⁾	-	10	B/C10, D 7.5
4	-	-	-	4.5
40	-	-	-	-
30	50/50/40/30 ⁽¹⁾	50/40/30 ⁽²⁾	-	20
15	50/25/20/15 ⁽¹⁾	25/20/15 ⁽²⁾	10	B/C10, D 7.5
30	50/50/40/30 ⁽¹⁾	50/40/30 ⁽²⁾	-	20
15	50/25/20/15 ⁽¹⁾	25/20/15 ⁽²⁾	-	B/C10, D 7.5
10	50/20/15/10 ⁽¹⁾	20/15/10 ⁽²⁾	-	-
50%lcu	50% lcu	50% lcu	-	100%
25	25	25	-	10
-	-	-	6	-
30	-	-	-	15
-	-	-	6	-
100%lcu	-	-	-	100%lcu
A.12	A.14	A.16	A.18	A.20

(1) 0.5 -4A/6-25A/32-40A/50-63A
(2) ≤25A/40A/63A



Miniature Circuit Breakers

CP60



EN 60898	6000
	3
EN 60947-2	10 kA

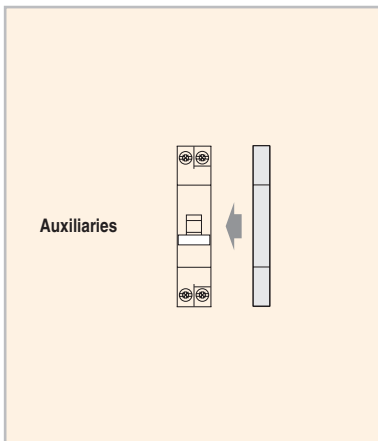
Applications



Approvals / Marking



Add-on devices



Add-on devices
 Auxiliary contacts ● pg A.9
 Shunt trip ● pg A.9

Busbars ● pg E.1
 Dimensions ● pg A.26

Performance

Thermal setting I_n	(A) 2-32
Rated voltage AC U_n	(V) 230
Minimum operating voltage U_{B min}	(V) 12
Tripping characteristics	B-C
Selectivity class	3
Mechanical/electrical endurance	20000/10000
Tropicalisation acc.to EN 60068-2	95%RH at 55°C
Terminal capacity flexible/rigid cable(mm²)	10-16
Poles	1+N (1mod)
Weight	(g/pole) 125

Short-circuit capacity

Acc. to BS EN 60898

Poles	V	I _{cn} (kA)
1+N	230	6

Acc. to BS EN 60947-2

Poles	V	I _{cu} (kA)
1+N	230	10

Series CP60 - 6kA - characteristics B-C



1P+N
1 mod.



In (A)	B		C		Pack.
	Cat. nr.	Ref. nr.	Cat. nr.	Ref. nr.	
2			CP60 C2	672198	12
4			CP60 C4	672200	12
6	CP60 B6	672920	CP60 C6	672201	12
10	CP60 B10	672922	CP60 C10	672203	12
16	CP60 B16	672924	CP60 C16	672205	12
20	CP60 B20	672925	CP60 C20	672206	12
25	CP60 B25	672926	CP60 C25	672207	12
32	CP60 B32	672927	CP60 C32	672208	12

Auxiliary contacts

1/2 mod.

Functions	Cat. nr.	Ref. nr.	Pack.
H/S	CAD	625021	1
H+S+RESET	CA+CDR	625023	1

Shunt trip - Tele L

1 mod.

Rated voltage (V)	Cat. nr.	Ref. nr.	Pack.
24-60	TELE L24	624946	1
24-48 DC			
110-415	TELE L110	624945	1
110-125 DC			



Miniature Circuit Breakers

EP60



BS EN 60898 6000
3
BS EN 60947 10 kA

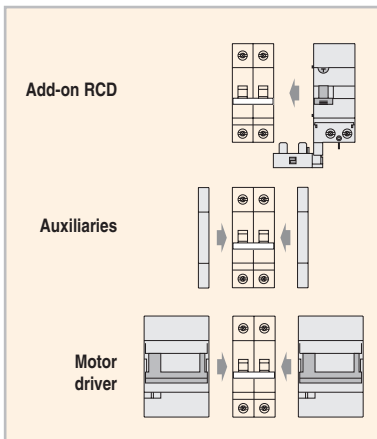
Applications



Approvals / Marking



Add-on devices



- Add-on devices**
- Auxiliary contacts ● pg C.4
 - Shunt trip ● pg C.6
 - Undervoltage release ● pg C.6
 - Panel board switch ● pg C.6
 - Motor operator ● pg C.8

- Accessories ● pg A.24
- Busbars ● pg E.1
- Dimensions ● pg A.26

Performance

Thermal setting I_n	(A) 0.5 -63
Rated voltage AC U_n	(V) 240/415
Minimum operating voltage U_{B min}	(V) 12
Tripping characteristics	B-C-D
Selectivity class	3
Mechanical/electrical endurance	20000/10000
Tropicalisation acc. to EN 60068-2	95%RH at 55°C
Terminal capacity flexible/rigid cable (mm²)	25-35
Poles	1, 1+N, 2, 3, 4
Weight	(g/pole) 125

Short-circuit capacity

AC acc. to BS EN 60898

Poles	V	I _{cn} /I _{cs} (kA)
1-4	240/415	6

AC acc. to BS EN 60947-2

Poles	V	I _{cu} (kA) ⁽¹⁾
1	240	10
1+N, 2	127	30
	240	20
2	415	10
3, 4	240	20
	415	10

DC acc. to BS EN 60947-2

Poles	VDC	I _{cu} (kA)/I _{cs} (kA)
1	60	20
2	125	25

(1) I_{cs} = 75% I_{cu}

Series EP60 - 6kA - characteristics B-C-D



1P
1 mod.



In (A)	B		C		D		Pack.
	Cat. nr.	Ref. nr.	Cat. nr.	Ref. nr.	Cat. nr.	Ref. nr.	
0.5			EP61 C0.5	672036	EP61 D0.5	566526	1/12
1			EP61 C01	672037	EP61 D01	566527	1/12
2			EP61 C02	672038	EP61 D02	566528	1/12
3			EP61 C03	672039	EP61 D03	566529	1/12
4			EP61 C04	672040	EP61 D04	566530	1/12
6	EP61 B06	674265 ⁽¹⁾	EP61 C06	672041	EP61 D06	566531	1/12
10	EP61 B10	674266 ⁽¹⁾	EP61 C10	672043	EP61 D10	566532	1/12
16	EP61 B16	674267 ⁽¹⁾	EP61 C16	672045	EP61 D16	566534	1/12
20	EP61 B20	674268 ⁽¹⁾	EP61 C20	672046	EP61 D20	566535	1/12
25	EP61 B25	674269 ⁽¹⁾	EP61 C25	672047	EP61 D25	566536	1/12
32	EP61 B32	674270 ⁽¹⁾	EP61 C32	672048	EP61 D32	566537	1/12
40	EP61 B40	674271 ⁽¹⁾	EP61 C40	672049	EP61 D40	566538	1/12
50	EP61 B50	674272 ⁽¹⁾	EP61 C50	672050	EP61 D50	566539	1/12
63	EP61 B63	674273 ⁽¹⁾	EP61 C63	672051	EP61 D63	566540	1/12



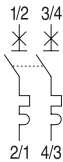
1P+N
2 mod.



0.5			EP61N C0.5	672052	EP61N D0.5	566686	1/6
1			EP61N C01	672053	EP61N D01	566687	1/6
2			EP61N C02	672054	EP61N D02	566688	1/6
3			EP61N C03	672055	EP61N D03	566689	1/6
4			EP61N C04	672056	EP61N D04	566690	1/6
6	EP61N B06	672137	EP61N C06	672057	EP61N D06	566691	1/6
10	EP61N B10	672139	EP61N C10	672059	EP61N D10	566693	1/6
16	EP61N B16	672141	EP61N C16	672061	EP61N D16	566694	1/6
20	EP61N B20	672142	EP61N C20	672062	EP61N D20	566695	1/6
25	EP61N B25	672143	EP61N C25	672063	EP61N D25	566696	1/6
32	EP61N B32	672144	EP61N C32	672064	EP61N D32	566697	1/6
40	EP61N B40	672145	EP61N C40	672065	EP61N D40	566698	1/6
50	EP61N B50	672146	EP61N C50	672066	EP61N D50	566699	1/6
63	EP61N B63	672147	EP61N C63	672067	EP61N D63	566700	1/6



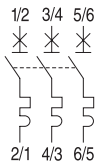
2P
2 mod.



0.5			EP62 C0.5	672068	EP62 D0.5	566566	1/6
1			EP62 C01	672069	EP62 D01	566567	1/6
2			EP62 C02	672070	EP62 D02	566568	1/6
3			EP62 C03	672071	EP62 D03	566569	1/6
4			EP62 C04	672072	EP62 D04	566570	1/6
6	EP62 B06	672153	EP62 C06	672073	EP62 D06	566571	1/6
10	EP62 B10	672155	EP62 C10	672075	EP62 D10	566572	1/6
16	EP62 B16	672157	EP62 C16	672077	EP62 D16	566574	1/6
20	EP62 B20	672158	EP62 C20	672078	EP62 D20	566575	1/6
25	EP62 B25	672159	EP62 C25	672079	EP62 D25	566576	1/6
32	EP62 B32	672160	EP62 C32	672080	EP62 D32	566577	1/6
40	EP62 B40	672161	EP62 C40	672081	EP62 D40	566578	1/6
50	EP62 B50	672162	EP62 C50	672082	EP62 D50	566579	1/6
63	EP62 B63	672163	EP62 C63	672083	EP62 D63	566580	1/6



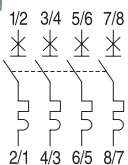
3P
3 mod.



0.5			EP63 C0.5	672084	EP63 D0.5	566606	1/4
1			EP63 C01	672085	EP63 D01	566607	1/4
2			EP63 C02	672086	EP63 D02	566608	1/4
3			EP63 C03	672087	EP63 D03	566609	1/4
4			EP63 C04	672088	EP63 D04	566610	1/4
6	EP63 B06	674274 ⁽²⁾	EP63 C06	672089	EP63 D06	566611	1/4
10	EP63 B10	674275 ⁽²⁾	EP63 C10	672091	EP63 D10	566612	1/4
16	EP63 B16	674276 ⁽²⁾	EP63 C16	672093	EP63 D16	566614	1/4
20	EP63 B20	674277 ⁽²⁾	EP63 C20	672094	EP63 D20	566615	1/4
25	EP63 B25	674278 ⁽²⁾	EP63 C25	672095	EP63 D25	566616	1/4
32	EP63 B32	674279 ⁽²⁾	EP63 C32	672096	EP63 D32	566617	1/4
40	EP63 B40	674280 ⁽²⁾	EP63 C40	672097	EP63 D40	566618	1/4
50	EP63 B50	674281 ⁽²⁾	EP63 C50	672098	EP63 D50	566619	1/4
63	EP63 B63	674282 ⁽²⁾	EP63 C63	672099	EP63 D63	566620	1/4



4P
4 mod.



0.5			EP64 C0.5	672100	EP64 D0.5	566646	1/3
1			EP64 C01	672101	EP64 D01	566647	1/3
2			EP64 C02	672102	EP64 D02	566648	1/3
3			EP64 C03	672103	EP64 D03	566649	1/3
4			EP64 C04	672104	EP64 D04	566650	1/3
6	EP64 B06	672185	EP64 C06	672105	EP64 D06	566651	1/3
10	EP64 B10	672187	EP64 C10	672107	EP64 D10	566652	1/3
16	EP64 B16	672189	EP64 C16	672109	EP64 D16	566654	1/3
20	EP64 B20	672190	EP64 C20	672110	EP64 D20	566655	1/3
25	EP64 B25	672191	EP64 C25	672111	EP64 D25	566656	1/3
32	EP64 B32	672192	EP64 C32	672112	EP64 D32	566657	1/3
40	EP64 B40	672193	EP64 C40	672113	EP64 D40	566658	1/3
50	EP64 B50	672194	EP64 C50	672114	EP64 D50	566659	1/3
63	EP64 B63	672195	EP64 C63	672115	EP64 D63	566660	1/3

Remark: 3P+N (4 modules) on request.

(1) Pack.: 12
(2) Pack.: 4



Miniature Circuit Breakers

EP100



BS EN 60898 10000

3

BS EN 60947-2 15 kA

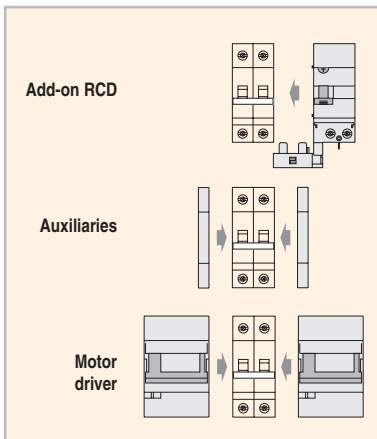
Applications



Approvals / Marking



Add-on devices



Add-on devices

- Auxiliary contacts ● pg C.4
- Shunt trip ● pg C.6
- Undervoltage release ● pg C.6
- Panel board switch ● pg C.6
- Motor operator ● pg C.8

- Accessories ● pg A.24
- Busbars ● pg E.1
- Dimensions ● pg A.32

Performance

Thermal setting I_n	(A) 0.5 -63
Rated voltage AC U_n	(V) 240/415
Minimum operating voltage U_{B min}	(V) 12
Tripping characteristics	B-C-D
Selectivity class	3
Mechanical/electrical endurance	20000/10000
Tropicalisation acc. to EN 60068-2	95%RH at 55°C
Terminal capacity flexible/rigid cable (mm²)	25-35
Poles	1, 1+N, 2, 3, 4
Weight	(g/pole) 125

Short-circuit capacity

AC acc. to BS EN 60898

Poles	V	I _{cn} /I _{cs} (kA) ⁽¹⁾
1-4	240/415	10

AC acc. to BS EN 60947-2

Poles	V	I _{cu} (kA) ⁽²⁾
1	240	15
1+N, 2	127	40
	240	30
2	415	15
3, 4	240	30
	415	15

DC acc. to BS EN 60947-2

Poles	VDC	I _{cu} (kA)/I _{cs} (kA)
1	60	25
2	125	30

(1) I_{cs} = 75% I_{cu}

(2) I_{cs} = 50% I_{cu}

Series EP100 - 10kA - characteristics B-C-D



1P
1 mod.



In (A)	B		C		D		Pack.
	Cat. nr.	Ref. nr.	Cat. nr.	Ref. nr.	Cat. nr.	Ref. nr.	
0.5			EP101 C0.5	672242	EP101 D0.5	566766	1/12
1			EP101 C01	672243	EP101 D01	566767	1/12
2			EP101 C02	672244	EP101 D02	566768	1/12
3			EP101 C03	672245	EP101 D03	566769	1/12
4			EP101 C04	672246	EP101 D04	566770	1/12
6	EP101 B06	672327	EP101 C06	674283	EP101 D06	566771	1/12
10	EP101 B10	672329	EP101 C10	674284	EP101 D10	566772	1/12
16	EP101 B16	672331	EP101 C16	674285	EP101 D16	566774	1/12
20	EP101 B20	672332	EP101 C20	674286	EP101 D20	566775	1/12
25	EP101 B25	672333	EP101 C25	674287	EP101 D25	566776	1/12
32	EP101 B32	672334	EP101 C32	674288	EP101 D32	566777	1/12
40	EP101 B40	672335	EP101 C40	674289	EP101 D40	566778	1/12
50	EP101 B50	672336	EP101 C50	674290	EP101 D50	566779	1/12
63	EP101 B63	672337	EP101 C63	674291	EP101 D63	566780	1/12



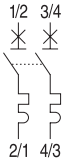
1P+N
2 mod.



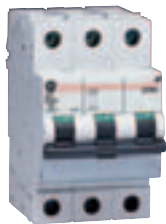
0.5			EP101N C0.5	672258			1/6
1			EP101N C01	672259			1/6
2			EP101N C02	672260			1/6
3			EP101N C03	672261			1/6
4			EP101N C04	672262			1/6
6			EP101N C06	672263			1/6
10			EP101N C10	672265			1/6
16			EP101N C16	672267			1/6
20			EP101N C20	672268			1/6
25			EP101N C25	672269			1/6
32			EP101N C32	672270			1/6
40			EP101N C40	672271			1/6
50			EP101N C50	672272			1/6
63			EP101N C63	672273			1/6



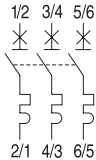
2P
2 mod.



0.5			EP102 C0.5	672274	EP102 D0.5	566806	1/6
1			EP102 C01	672275	EP102 D01	566807	1/6
2			EP102 C02	672276	EP102 D02	566808	1/6
3			EP102 C03	672277	EP102 D03	566809	1/6
4			EP102 C04	672278	EP102 D04	566810	1/6
6	EP102 B06	672359	EP102 C06	672279	EP102 D06	566811	1/6
10	EP102 B10	672361	EP102 C10	672281	EP102 D10	566812	1/6
16	EP102 B16	672363	EP102 C16	672283	EP102 D16	566814	1/6
20	EP102 B20	672364	EP102 C20	672284	EP102 D20	566815	1/6
25	EP102 B25	672365	EP102 C25	672285	EP102 D25	566816	1/6
32	EP102 B32	672366	EP102 C32	672286	EP102 D32	566817	1/6
40	EP102 B40	672367	EP102 C40	672287	EP102 D40	566818	1/6
50	EP102 B50	672368	EP102 C50	672288	EP102 D50	566819	1/6
63	EP102 B63	672369	EP102 C63	672289	EP102 D63	566820	1/6



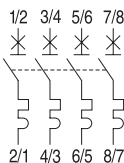
3P
3 mod.



0.5			EP103 C0.5	672290	EP103 D0.5	566846	1/4
1			EP103 C01	672291	EP103 D01	566847	1/4
2			EP103 C02	672292	EP103 D02	566848	1/4
3			EP103 C03	672293	EP103 D03	566849	1/4
4			EP103 C04	672294	EP103 D04	566850	1/4
6	EP103 B06	672375	EP103 C06	674292	EP103 D06	566851	1/4
10	EP103 B10	672377	EP103 C10	674293	EP103 D10	566852	1/4
16	EP103 B16	672379	EP103 C16	674294	EP103 D16	566854	1/4
20	EP103 B20	672380	EP103 C20	674295	EP103 D20	566855	1/4
25	EP103 B25	672381	EP103 C25	674296	EP103 D25	566856	1/4
32	EP103 B32	672382	EP103 C32	674297	EP103 D32	566857	1/4
40	EP103 B40	672383	EP103 C40	674298	EP103 D40	566858	1/4
50	EP103 B50	672384	EP103 C50	674299	EP103 D50	566859	1/4
63	EP103 B63	672385	EP103 C63	674300	EP103 D63	566860	1/4



4P
4 mod.



0.5			EP104 C0.5	672306	EP104 D0.5	566886	1/3
1			EP104 C01	672307	EP104 D01	566887	1/3
2			EP104 C02	672308	EP104 D02	566888	1/3
3			EP104 C03	672309	EP104 D03	566889	1/3
4			EP104 C04	672310	EP104 D04	566890	1/3
6	EP104 B06	672391	EP104 C06	672311	EP104 D06	566891	1/3
10	EP104 B10	672393	EP104 C10	672313	EP104 D10	566892	1/3
16	EP104 B16	672395	EP104 C16	672315	EP104 D16	566894	1/3
20	EP104 B20	672396	EP104 C20	672316	EP104 D20	566895	1/3
25	EP104 B25	672397	EP104 C25	672317	EP104 D25	566896	1/3
32	EP104 B32	672398	EP104 C32	672318	EP104 D32	566897	1/3
40	EP104 B40	672399	EP104 C40	672319	EP104 D40	566898	1/3
50	EP104 B50	672400	EP104 C50	672320	EP104 D50	566899	1/3
63	EP104 B63	672401	EP104 C63	672321	EP104 D63	566900	1/3

Remark: 3P+N (4 modules) on request.



Miniature Circuit Breakers

EP250



BS EN 60947-2 50 kA
25 kA
20 kA
15 kA

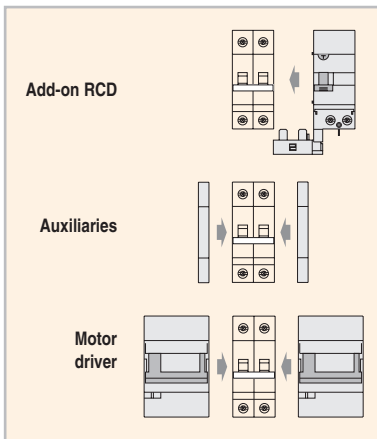
Applications



Marking



Add-on devices



- Add-on devices**
- Auxiliary contacts ● pg C.4
 - Shunt trip ● pg C.6
 - Undervoltage release ● pg C.6
 - Panel board switch ● pg C.6
 - Motor operator ● pg C.8

- Busbars ● chap. E
- Dimensions ● pg A.26

Performance

Thermal setting I_n	(A) 0.5 -63
Rated voltage AC U_n	(V) 240/415
Minimum operating voltage U_{Bmin}	(V) 12
Tripping characteristics	B-C
Mechanical/electrical endurance	20000/10000
Tropicalisation acc. to EN 60068-2	95%RH at 55°C
Terminal capacity flexible/rigid cable (mm²)	25-35
Poles	1, 2, 3, 4
Weight	(g/pole) 125

Short-circuit capacity

Acc. to BS EN 60947-2

$I_n(A)$	Poles	V	$I_{cu} (kA)^{(1)}$
0.5 to 4	1	240	50
	2-4	240	50
		415	50
6 to 25	1	240	25
	2-4	240	50
		415	25
32 to 40	1	240	20
	2-4	240	40
		415	20
50 to 63	1	240	15
	2-4	240	30
		415	15

(1) $I_{cs} = 50\% I_{cu}$

Series EP250 - 25kA - characteristics B-C



1P
1 mod.



In (A)	3-5 In (B)		5-10 In (C)		Pack.
	Cat. nr.	Ref. nr.	Cat. nr.	Ref. nr.	
0.5			EP251 C0.5	667641	1/12
1			EP251 C01	667642	1/12
2			EP251 C02	667643	1/12
4			EP251 C04	667645	1/12
6	EP251 B06	667710	EP251 C06	667646	1/12
10	EP251 B10	667712	EP251 C10	667648	1/12
16	EP251 B16	667714	EP251 C16	667650	1/12
20	EP251 B20	667715	EP251 C20	667651	1/12
25	EP251 B25	667716	EP251 C25	667652	1/12
32	EP251 B32	667717	EP251 C32	667653	1/12
40	EP251 B40	667718	EP251 C40	667654	1/12
50	EP251 B50	667719	EP251 C50	667655	1/12
63	EP251 B63	667720	EP251 C63	667656	1/12



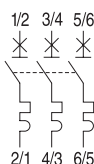
2P
2 mod.



0.5			EP252 C0.5	667657	1/6
1			EP252 C01	667658	1/6
2			EP252 C02	667659	1/6
4			EP252 C04	667661	1/6
6	EP252 B06	667726	EP252 C06	667662	1/6
10	EP252 B10	667728	EP252 C10	667664	1/6
16	EP252 B16	667730	EP252 C16	667666	1/6
20	EP252 B20	667731	EP252 C20	667667	1/6
25	EP252 B25	667732	EP252 C25	667668	1/6
32	EP252 B32	667733	EP252 C32	667669	1/6
40	EP252 B40	667734	EP252 C40	667670	1/6
50	EP252 B50	667735	EP252 C50	667671	1/6
63	EP252 B63	667736	EP252 C63	667672	1/6



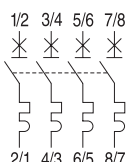
3P
3 mod.



0.5			EP253 C0.5	667673	1/4
1			EP253 C01	667674	1/4
2			EP253 C02	667675	1/4
4			EP253 C04	667677	1/4
6	EP253 B06	667742	EP253 C06	667678	1/4
10	EP253 B10	667744	EP253 C10	667680	1/4
16	EP253 B16	667746	EP253 C16	667682	1/4
20	EP253 B20	667747	EP253 C20	667683	1/4
25	EP253 B25	667748	EP253 C25	667684	1/4
32	EP253 B32	667749	EP253 C32	667685	1/4
40	EP253 B40	667750	EP253 C40	667686	1/4
50	EP253 B50	667751	EP253 C50	667687	1/4
63	EP253 B63	667752	EP253 C63	667688	1/4



4P
4 mod.

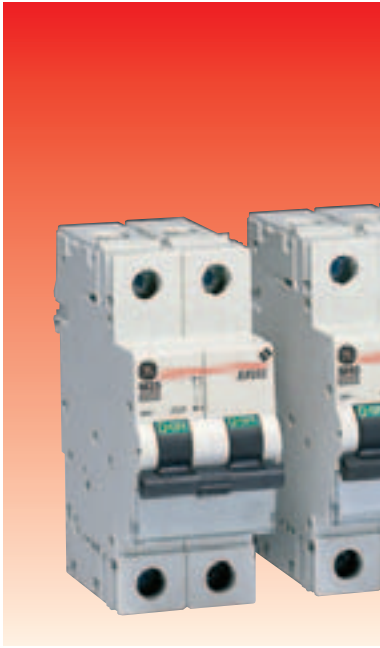


0.5			EP254 C0.5	667689	1/3
1			EP254 C01	667690	1/3
2			EP254 C02	667691	1/3
4			EP254 C04	667693	1/3
6	EP254 B06	667758	EP254 C06	667694	1/3
10	EP254 B10	667760	EP254 C10	667696	1/3
16	EP254 B16	667762	EP254 C16	667698	1/3
20	EP254 B20	667763	EP254 C20	667699	1/3
25	EP254 B25	667764	EP254 C25	667700	1/3
32	EP254 B32	667765	EP254 C32	667701	1/3
40	EP254 B40	667766	EP254 C40	667702	1/3
50	EP254 B50	667767	EP254 C50	667703	1/3
63	EP254 B63	667768	EP254 C63	667704	1/3



Miniature Circuit Breakers

EP250 M



BS EN 60947-2 50 kA
25 kA
20 kA
15 kA

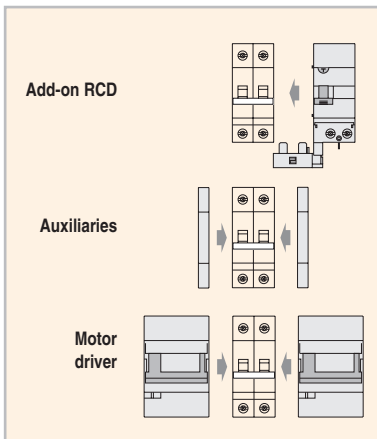
Applications



Marking



Add-on devices



- Add-on devices**
- Auxiliary contacts ● pg C.4
 - Shunt trip ● pg C.6
 - Undervoltage release ● pg C.6
 - Panel board switch ● pg C.6
 - Motor operator ● pg C.8

- Busbars ● chap. E.1
- Dimensions ● pg A.26

Performance

Thermal setting I_n	(A) 1.6-63
Rated voltage AC U_n	(V) 240/415
Minimum operating voltage U_{Bmin}	(V) 12
Tripping characteristics	M ($12.5 I_n$)
Mechanical/electrical endurance	20000/10000
Tropicalisation acc.to EN 60068-2	95%RH at 55°C
Terminal capacity flexible/rigid cable (mm²)	25-35
Poles	2, 3
Weight	(g/pole) 125

Short-circuit capacity

Acc. to EN 60947-2

I_n (A)	Poles	V	I_{cu} (kA) ⁽¹⁾
≤25	2, 3	240	50
		415	25
		440	20
40	2, 3	240	40
		415	20
		440	15
63	2, 3	240	30
		415	15
		440	10

(1) $I_{cs} = 50\% I_{cu}$

Series EP250 M - 25kA - characteristic M (12.5xI_n)



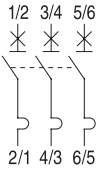
2P
2 mod.



In (A)	M		Pack.
	Cat. nr.	Ref. nr.	
1.6	EP252 M01.6	672211	1/6
2.5	EP252 M02.5	672212	1/6
4	EP252 M04	672214	1/6
6.3	EP252 M06.3	672215	1/6
10	EP252 M10	672217	1/6
12.5	EP252 M12.5	672218	1/6
16	EP252 M16	672219	1/6
25	EP252 M25	672221	1/6
40	EP252 M40	672223	1/6
63	EP252 M63	672225	1/6



3P
3 mod.



1.6	EP253 M01.6	672227	1/4
2.5	EP253 M02.5	672228	1/4
4	EP253 M04	672230	1/4
6.3	EP253 M06.3	672231	1/4
10	EP253 M10	672233	1/4
12.5	EP253 M12.5	672234	1/4
16	EP253 M16	672235	1/4
25	EP253 M25	672237	1/4
40	EP253 M40	672239	1/4
63	EP253 M63	672241	1/4



Miniature Circuit Breakers

EP100 UC



DIN VDE 0641	6000	T15
BS EN 60898	6000	
BS EN 60947-2	10 kA	

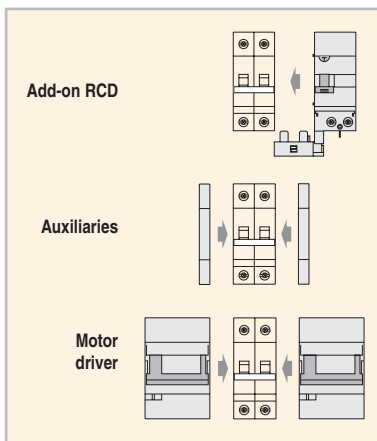
Applications



Standard / Marking

DIN VDE 0641

Add-on devices



Add-on devices

- Auxiliary contacts ● pg C.4
- Shunt trip ● pg C.6
- Undervoltage release ● pg C.6
- Panel Board Switch ● pg C.6
- Motor operator ● pg C.8

- Busbars ● chap. E
- Dimensions ● pg A.26

Performance

Thermal setting I_n	(A) 0.5 -63
Rated voltage AC U_n	(V) 230/400 220/440 ≐
Minimum operating voltage U_{Bmin}	(V) 12 12 ≐
Tripping characteristics	C
Mechanical/electrical endurance	20000/10000
Tropicalisation acc. to EN 60068-2	95%RH at 55°C
Terminal capacity flexible/rigid cable (mm²)	25-35
Poles	1, 2
Weight	(g/pole) 125

Short-circuit capacity ⁽¹⁾

AC/DC acc. to BS EN 60898

Poles	V	I _{cn} (kA)
1, 2	230	6
	220 DC	6
2	440 DC	6

AC acc. to BS EN 60947-2 ⁽²⁾

Poles	V	I _{cu} (kA)
1	240	10
2	415	10

(1) Test in process.

(2) After AC short-circuit ≥6 kA, the DC performances could be decreased.

Series EP100 UC - 10kA - characteristic C



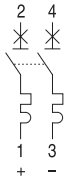
1P
1 mod.



In (A)	C		Pack.
	Cat. nr.	Ref. nr.	
0.5	EP101UC C0.5	673301	1/12
1	EP101UC C01	673302	1/12
2	EP101UC C02	673303	1/12
4	EP101UC C04	673305	1/12
6	EP101UC C06	673306	1/12
10	EP101UC C10	673308	1/12
16	EP101UC C16	673310	1/12
20	EP101UC C20	673311	1/12
25	EP101UC C25	673312	1/12
32	EP101UC C32	673313	1/12
40	EP101UC C40	673314	1/12
50	EP101UC C50	673315	1/12
63	EP101UC C63	673316	1/12



2P
2 mod.



0.5	EP102UC C0.5	673317	1/6
1	EP102UC C01	673318	1/6
2	EP102UC C02	673319	1/6
4	EP102UC C04	673321	1/6
6	EP102UC C06	673322	1/6
10	EP102UC C10	673324	1/6
16	EP102UC C16	673326	1/6
20	EP102UC C20	673327	1/6
25	EP102UC C25	673328	1/6
32	EP102UC C32	673329	1/6
40	EP102UC C40	673330	1/6
50	EP102UC C50	673331	1/6
63	EP102UC C63	673332	1/6

EP100 UC

A



Miniature Circuit Breakers

Series Hti

BS EN 60947-2 10 kA



Performance

Thermal setting I_n	(A) 80-100-125
Rated voltage AC U_n	(V) 240/415
Tripping characteristics	3-5 I_n (B) 5-10 I_n (C) 10-20 I_n (D)
Mechanical/electrical endurance	10000/4000
Operating temperature	(°C) -25°C up to 55°C
Terminal capacity flexible/rigid cable (mm²)	70
Poles	1, 2, 3, 4
Weight	(g/pole) 210

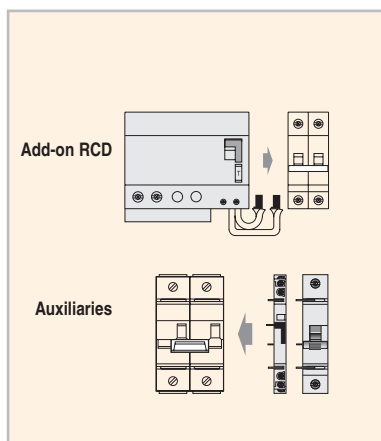
Applications



Standard / Marking

IEC 947-2 **CE**

Add-on devices



- Add-on devices**
- Add-on RCD ● pg A.22
 - Auxiliary contacts ● pg A.23
 - Shunt trip ● pg A.23

Dimensions ● pg A.27

Short-circuit capacity

AC acc. to EN 60947-2 (B, C)

Poles	V	I_{cu} (kA)
1	240/415	10
2	240	15
3, 4	240	15
3, 4	415	10

Add-on RCD - technical performances

Standard	BS EN 61009
Nominal current I_n	(A) 80-125
Residual current $I_{\Delta n}$	(mA) 30, 300
Rated voltage AC U_n	(V) 2P: 230/400 3P-4P: 400
Resistance against unwanted tripping	Type A, AC: 250A 8/20 μ s Type S: 3000A 8/20 μ s
Terminal capacity flexible/rigid cable (mm²)	70
Poles	2, 3, 4

Series Hti - 10kA - characteristics B-C-D



1P
1.5 mod.



In (A)	3-5 In (B)		5-10 In (C)		10-20 In (D)		Pack.
	Cat. nr.	Ref. nr.	Cat. nr.	Ref. nr.	Cat. nr.	Ref. nr.	
80	Hti 101 B080	671504	Hti 101 C080	671528	Hti 101 D080	671552	1
100	Hti 101 B100	671505	Hti 101 C100	671529	Hti 101 D100	671553	1
125	Hti 101 B125	671506	Hti 101 C125	671530	Hti 101 D125	671554	1



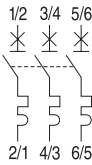
2P
3 mod.



80	Hti 102 B080	671510	Hti 102 C080	671534	Hti 102 D080	671558	1
100	Hti 102 B100	671511	Hti 102 C100	671535	Hti 102 D100	671559	1
125	Hti 102 B125	671512	Hti 102 C125	671536	Hti 102 D125	671560	1



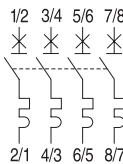
3P
4.5 mod.



80	Hti 103 B080	671516	Hti 103 C080	671540	Hti 103 D080	671564	1
100	Hti 103 B100	671517	Hti 103 C100	671541	Hti 103 D100	671565	1
125	Hti 103 B125	671518	Hti 103 C125	671542	Hti 103 D125	671566	1



4P
6 mod.



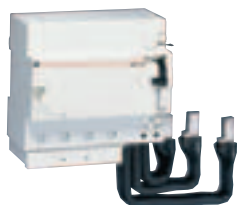
80	Hti 104 B80	671522	Hti 104 C080	671546	Hti 104 D080	671570	1
100	Hti 104 B100	671523	Hti 104 C100	671547	Hti 104 D100	671571	1
125	Hti 104 B125	671524	Hti 104 C125	671548	Hti 104 D125	671572	1

Series Hti - Add-on RCD - Type AC 



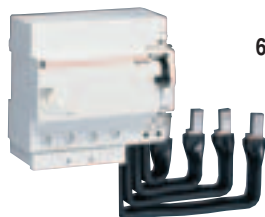
2P
6 mod.

In (A)	30 mA		300 mA		Pack.
	Cat. nr.	Ref. nr.	Cat. nr.	Ref. nr.	
80-125	DOC 2125/030	671574	DOC 2125/300	671576	1



3P
6 mod.

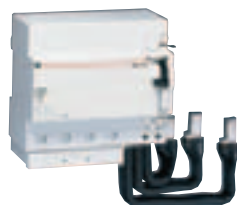
80-125	DOC 3125/030	671582	DOC 3125/300	671584	1
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4P
6 mod.

80-125	DOC 4125/030	671590	DOC 4125/300	671592	1
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Series Hti - Add-on RCD - Type A 



3P
6 mod.

In (A)	30 mA		300 mA		Pack.
	Cat. nr.	Ref. nr.	Cat. nr.	Ref. nr.	
80-125	DOCA 3125/030	671581	DOCA 3125/300	671583	1



4P
6 mod.

80-125	DOCA 4125/030	671589	DOCA 4125/300	671591	1
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Series Hti - Add-on RCD - Type  



3P
6 mod.

In (A)	30 mA		300 mA		Pack.
	Cat. nr.	Ref. nr.	Cat. nr.	Ref. nr.	
80-125			DOCS 3125/300	671585	1



4P
6 mod.

80-125			DOCS 4125/300	671593	1
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Series Hti - Auxiliary contacts

Mod.	Functions	Description	Cat. nr.	Ref. nr.	Pack.
1/2	H	Auxiliary contact	Hti H	671597	1
1/2	S	Signal contact S + test + reset	Hti S	671598	1
1/2	H/S	Changeable auxiliary/signal contact	Hti H/S	671599	1
1/2	H+H/S	Auxiliary contact and changeable auxiliary/signal contact	Hti HH/S	671600	1
1/2	H+S	Auxiliary contact and signal contact H + S + test + reset	Hti HSR	671602	1

Series Hti - Shunt trip

	Rated voltage	Closing current	Operating time	Coil impedance at 50Hz	Cat. nr.	Ref. nr.	Pack.
1 mod.	110 to 415V	0.3A at 110V	10 ms	ca. 29 Ohm	Tele L 110	624945	1/8
	110 to 125VDC	0.6A at 230V	4ms	ca. 29 Ohm			
		1A at 400V	2ms	ca. 29 Ohm			
1 mod.	24 to 48VDC	1A at 24VDC	10ms	ca. 24 Ohm	Tele L 24	624946	1/8
	24 to 60V	2A at 48VDC	4ms	ca. 24 Ohm			



Label printer

Description

- Standard software from Dymo
 Added software from GE Power Controls:
- to print the circuit indicator labels of Elfa+ devices
 - to print the circuit label in the enclosures
- Content:
- Label printer
 - Cable to connect with the computer
 - Standard included: black ink tape 32 mm, 50 meter
white tape 32 mm, 10 meter.
 - Extra 2 tapes white 12 mm, 10 meter.
 - Power supply
 - User instructions

Recommended label heights

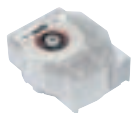
	Type of product	Max. height label mm
Modular devices	Elfa+	12
Enclosures	FIX-O-RAIL Standard	19
	FIX-O-RAIL Design and consumer units	24
	FIX-O-RAIL Classic	32
	FIX-O-RAIL 150	32
	FIX-O-RAIL 150 F1	32
	FIX-O-RAIL 150 F4	32
	FIX-O-RAIL Series 55	32
	FIX-O-RAIL Junior	32

Label printer



	Cat. nr.	Ref. nr.	Pack.
	LM	600226	1

Accessories



Carrier tape





Description	Cat. nr.	Ref. nr.	Pack.
Tape white height 12mm, length 10m	T12	600230	1
Tape white height 19mm, length 10m	T19	600229	1
Tape white height 24mm, length 10m	T24	600228	1
Tape white height 32mm, length 10m	T32	600227	1



Ink tape black

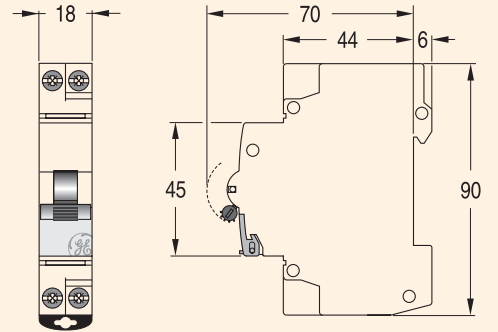
Tape black height 32mm, length 50m	T1B	600231	1
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Accessories for MCB's - Series EP

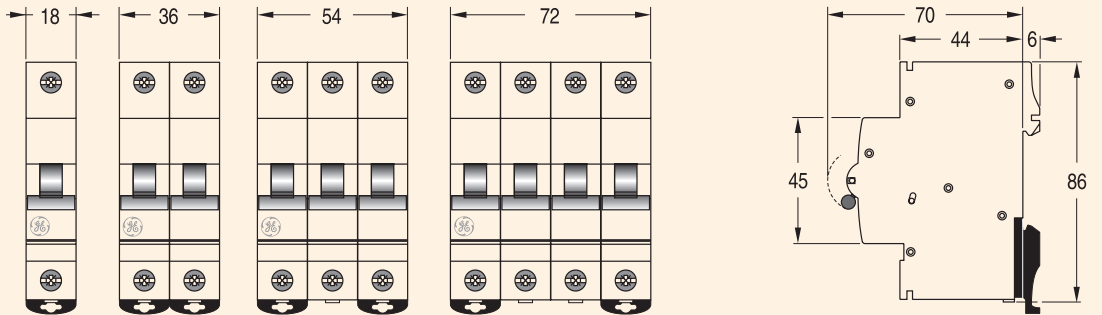
		Cat. nr.	Ref. nr.	Pack.
 <p>Sealing plate for 4P</p>	Cut off the number of poles needed	EPP	669486	10
 <p>Padlocking bracket</p>	Allows padlocking in ON position and OFF position	KS	624929	2
 <p>Spacer</p>	1/2 module	PLS-SP	666206	10
 <p>Easy DIN rail extraction piece</p>	Easy DIN-rail extraction of a MCB using busbars on the top	EDRE	600232	10

Dimensional drawings

Miniature Circuit Breakers - Series CP60

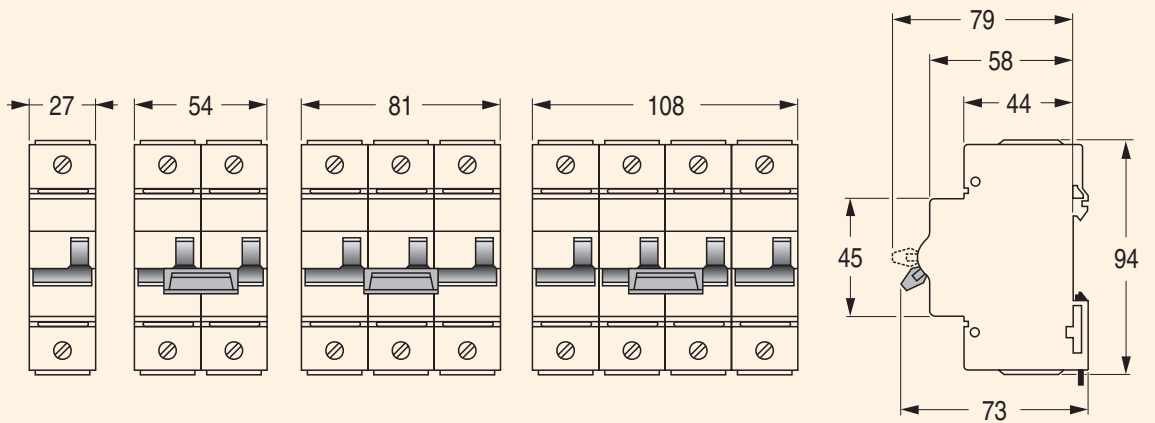


Miniature Circuit Breakers - Series EP



A

Miniature Circuit Breakers - Series Hti



Add-on RCD's for Series Hti

