

## Low voltage moulded case circuit breakers and low voltage switch disconnectors

Low voltage moulded case circuit breakers are used for the switching and protection of power supply cables, motors and other electrical equipment against overloads and short circuit faults. They provide, beside protection function, other functions as remote ON/OFF operation, undervoltage protection, main switch etc. They are available in range from 16 A up to 1600 A in 3 and 4 pole versions.

**Advantages:**

- Small dimensions, modular sizes
- Possibility of field-instalable accessories – up to 630A frame size series 2 (EB2)
- High short circuit breaking capacity (up to 100 kA)
- Fast break mechanism (F.B.M.)
- Reduced energy let through  $I^2t$  – minimises thermal stresses
- Reduced tripping time – minimises damage after fault
- Reduced peak short current ampacity – minimised electrodynamic stresses on conductors and protected equipment
- Installation on mounting plate, 125 A frame size also on DIN-rail
- Wide range of accessories
- Compact design with high mechanical strenght
- High dielectric withstand voltages (8 kV a.c.)
- Voltage level up to 690 V a.c. and 250 V d.c. – only MCCB's with thermal-magnetic tripping unit
- Direct opening – recommendation according to standard IEC 60204-1 – up to 630 A frame size series 2 (EB2)
- Common internal accessories – up to 630 A frame size series 2 (EB2)
- Visual safety
- Unsurpassed flexibility

### Moulded case circuit breaker ETIBREAK EB

**Thermal magnetic**

Thermal magnetic MCCBs are available in frame sizes from 100A to 800A. MCCBs EB 100 have fixed thermal and magnetic protection elements. All other frame sizes have adjustable both thermal and magnetic trip settings. Overload protection is adjustable between 63 % and 100 % of  $I_n$ , meanwhile short-circuit between 6- 13x $I_n$  (more details in the technical part of catalogue).

Legend: EB -> series 1  
 EB2 -> series 2  
 L -> economic, lower short-circuit breaking capacity  
 S -> standard



ETIBREAK EB 100								
Type	$I_n$ [A]	code No.	poles	$I_{cu}/I_{cs}$ 400V(kA)	adjustment thermal/magnetic	weight [kg]	packaging [pcs]	
EB 100/3L 16A 3p	16	004620011	3	16/8	fixed/fixe	0,74	1	
EB 100/3L 20A 3p	20	004620012	3	16/8	fixed/fixe	0,74	1	
EB 100/3L 25A 3p	25	004620013	3	16/8	fixed/fixe	0,74	1	
EB 100/3L 32A 3p	32	004620014	3	16/8	fixed/fixe	0,74	1	
EB 100/3L 40A 3p	40	004620015	3	16/8	fixed/fixe	0,74	1	
EB 100/3L 50A 3p	50	004620016	3	16/8	fixed/fixe	0,74	1	
EB 100/3L 63A 3p	63	004620017	3	16/8	fixed/fixe	0,74	1	
EB 100/3L 80A 3p	80	004620018	3	16/8	fixed/fixe	0,74	1	
EB 100/3L 100 3p	100	004620019	3	16/8	fixed/fixe	0,74	1	

**ETIBREAK EB2 125**

Type	$I_n$ [A]	code No.	poles	Icu/lcs 400V(kA)	adjustment thermal/magnetic	weight [kg]	packaging [pcs]
EB2 125/3L 20A 3p	20	004671021	3	25/19	0,63-1/6-12	1,1	1
EB2 125/3L 32A 3p	32	004671022	3	25/19	0,63-1/6-12	1,1	1
EB2 125/3L 50A 3p	50	004671023	3	25/19	0,63-1/6-12	1,1	1
EB2 125/3L 63A 3p	63	004671024	3	25/19	0,63-1/6-12	1,1	1
EB2 125/3L 100A 3p	100	004671025	3	25/19	0,63-1/6-12	1,1	1
EB2 125/3L 125A 3p	125	004671026	3	25/19	0,63-1/6-12	1,1	1
EB2 125/4L 20A 4p	20	004671027	4	25/19	0,63-1/6-12	1,4	1
EB2 125/4L 32A 4p	32	004671028	4	25/19	0,63-1/6-12	1,4	1
EB2 125/4L 50A 4p	50	004671029	4	25/19	0,63-1/6-12	1,4	1
EB2 125/4L 63A 4p	63	004671030	4	25/19	0,63-1/6-12	1,4	1
EB2 125/4L 100A 4p	100	004671031	4	25/19	0,63-1/6-12	1,4	1
EB2 125/4L 125A 4p	125	004671032	4	25/19	0,63-1/6-12	1,4	1
EB2 125/3S 20A 3p	20	004671041	3	36/36	0,63-1/6-12	1,1	1
EB2 125/3S 32A 3p	32	004671042	3	36/36	0,63-1/6-12	1,1	1
EB2 125/3S 50A 3p	50	004671043	3	36/36	0,63-1/6-12	1,1	1
EB2 125/3S 63A 3p	63	004671044	3	36/36	0,63-1/6-12	1,1	1
EB2 125/3S 100A 3p	100	004671045	3	36/36	0,63-1/6-12	1,1	1
EB2 125/3S 125A 3p	125	004671046	3	36/36	0,63-1/6-12	1,1	1
EB2 125/4S 20A 4p	20	004671047	4	36/36	0,63-1/6-12	1,4	1
EB2 125/4S 32A 4p	32	004671048	4	36/36	0,63-1/6-12	1,4	1
EB2 125/4S 50A 4p	50	004671049	4	36/36	0,63-1/6-12	1,4	1
EB2 125/4S 63A 4p	63	004671050	4	36/36	0,63-1/6-12	1,4	1
EB2 125/4S 100A 4p	100	004671051	4	36/36	0,63-1/6-12	1,4	1
EB2 125/4S 125A 4p	125	004671052	4	36/36	0,63-1/6-12	1,4	1

**ETIBREAK EB2 160/250**

Type	$I_n$ [A]	code No.	poles	Icu/lcs 400V(kA)	adjustment thermal/magnetic	weight [kg]	packaging [pcs]
EB2 250/3L 200A 3p	200	004671072	3	25/19	0,63-1/6-13	1,5	1
EB2 250/3L 250A 3p	250	004671073	3	25/19	0,63-1/6-13	1,5	1
EB2 250/4L 200A 4p	200	004671075	4	25/19	0,63-1/6-13	1,9	1
EB2 250/4L 250A 4p	250	004671076	4	25/19	0,63-1/6-13	1,9	1
EB2 160/3S 160 3p	160	004671061	3	36/36	0,63-1/6-13	1,5	1
EB2 250/3S 200A 3p	200	004671082	3	36/36	0,63-1/6-13	1,5	1
EB2 250/3S 250A 3p	250	004671083	3	36/36	0,63-1/6-13	1,5	1
EB2 160/3S 160 4p	160	004671062	4	36/36	0,63-1/6-13	1,9	1
EB2 250/4S 200A 4p	200	004671085	4	36/36	0,63-1/6-13	1,9	1
EB2 250/4S 250A 4p	250	004671086	4	36/36	0,63-1/6-13	1,9	1

**ETIBREAK EB2 400**

Type	$I_n$ [A]	code No.	poles	Icu/lcs 400V(kA)	adjustment thermal/magnetic	weight [kg]	packaging [pcs]
EB2 400/3L 250A 3p	250	004671091	3	25/25	0,63-1/6-12	4,2	1
EB2 400/3L 400A 3p	400	004671092	3	25/25	0,63-1/6-12	4,2	1
EB2 400/4L 250A 4p	250	004671093	4	25/25	0,63-1/6-12	5,6	1
EB2 400/4L 400A 4p	400	004671094	4	25/25	0,63-1/6-12	5,6	1
EB2 400/3S 250A 3p	250	004671101	3	50/50	0,63-1/6-12	4,3	1
EB2 400/3S 400A 3p	400	004671102	3	50/50	0,63-1/6-12	4,3	1
EB2 400/4S 250A 4p	250	004671103	4	50/50	0,63-1/6-12	5,7	1
EB2 400/4S 400A 4p	400	004671104	4	50/50	0,63-1/6-12	5,7	1





**ETIBREAK EB 630/800**

Type	I <sub>n</sub> [A]	code No.	poles	Icu/Ics 400V(kA)	adjustment thermal/magnetic	weight [kg]	packaging [pcs]
EB630/3 630A 3p	630	004625102	3	65/33	(0.63-1) / (5-10)	9,0	1
EB800/3 800A 3p	800	004626101	3	65/33	(0.63-1) / (5-10)	9,4	1
EB630/4 630A 4p	630	004625202	4	65/33	(0.63-1) / (5-10)	11,5	1
EB800/4 800A 4p	800	004626201	4	65/33	(0.63-1) / (5-10)	12,2	1

**Microprocessor's MCCBs**

Microprocessor's MCCBs are available in frame sizes from 250 A up to 1600 A, with rated current from 40 A up to 1600 A. All frame sizes have adjustable thermal and magnetic protection.

Series 2: Protection against overload can be adjusted between 0,4 – 1 x I<sub>n</sub>, meanwhile short-circuit protection has already preset different curves, which can be easily selected according to the type of load (up to 630 A).

**LEGEND:**

EB - series 1

EB2 - series 2

LE - microprocessor based version, economic, lower short-circuit breaking capacity

E - microprocessor based version



**ETIBREAK EB2 250**

Type	I <sub>n</sub> [A]	code No.	poles	Icu/Ics 400V(kA)	adjustment thermal/magnetic	weight [kg]	packaging [pcs]
EB2 250/3E 40A 3p	40	004671301	3	70/70	0,4-1/adjust.	2,5	1
EB2 250/3E 125A 3p	125	004671302	3	70/70	0,4-1/adjust.	2,5	1
EB2 250/3E 250A 3p	250	004671304	3	70/70	0,4-1/adjust.	2,5	1
EB2 250/4E 40A 4p	40	004671305	4	70/70	0,4-1/adjust.	3,3	1
EB2 250/4E 125A 4p	125	004671306	4	70/70	0,4-1/adjust.	3,3	1
EB2 250/4E 250A 4p	250	004671308	4	70/70	0,4-1/adjust.	3,3	1

**ETIBREAK EB2 400**

Type	I <sub>n</sub> [A]	code No.	poles	Icu/Ics 400V(kA)	adjustment thermal/magnetic	weight [kg]	packaging [pcs]
EB2 400/3E 250A 3p	250	004671111	3	50/50	0,4-1/adjust.	4,3	1
EB2 400/3E 400A 3p	400	004671112	3	50/50	0,4-1/adjust.	4,3	1
EB2 400/4E 250A 4p	250	004671113	4	50/50	0,4-1/adjust.	5,7	1
EB2 400/4E 400A 4p	400	004671114	4	50/50	0,4-1/adjust.	5,7	1

**ETIBREAK EB2 630**

Type	I <sub>n</sub> [A]	code No.	poles	Icu/Ics 400V(kA)	adjustment thermal/magnetic	weight [kg]	packaging [pcs]
EB2 630/3LE 630A 3p	630	004671121	3	36/36	0,4-1/adjust.	3,75	1
EB2 630/4LE 630A 4p	630	004671122	4	36/36	0,4-1/adjust.	4,95	1
EB2 630/3E 630A 3p	630	004671127	3	50/50	0,4-1/adjust.	3,75	1
EB2 630/4E 630A 4p	630	004671128	4	50/50	0,4-1/adjust.	4,95	1

## Low voltage moulded case circuit breakers and low voltage switch disconnectors

### ETIBREAK EB 1250

Type	$I_n$ [A]	code No.	poles	$I_{cu}/I_{cs}$ 400V(kA)	adjustment thermal/magnetic	weight [kg]	packaging [pcs]
EB1250/3 1000A 3p E	1000	004627101	3	85/64	$(0,5-1) \cdot I_n / (2,5-10) \cdot I_n$	22	1
EB1250/3 1250A 3p E	1250	004627102	3	85/64	$(0,5-1) \cdot I_n / (2,5-10) \cdot I_n$	22	1
EB1250/4 1000A 4p E	1000	004627201	4	85/64	$(0,5-1) \cdot I_n / (2,5-10) \cdot I_n$	28	1
EB1250/4 1250A 4p E	1250	004627202	4	85/64	$(0,5-1) \cdot I_n / (2,5-10) \cdot I_n$	28	1

### ETIBREAK EB 1600

Type	$I_n$ [A]	code No.	poles	$I_{cu}/I_{cs}$ 400V(kA)	adjustment thermal/magnetic	weight [kg]	packaging [pcs]
EB1600/3 1600A 3p E	1600	004627103	3	100/75	$(0,5-1) \cdot I_n / (2,5-10) \cdot I_n$	27	1
EB1600/4 1600A 4p E	1600	004627203	4	100/75	$(0,5-1) \cdot I_n / (2,5-10) \cdot I_n$	35	1



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## Low voltage switch disconnector ETIBREAK ED

### ETIBREAK ED2 125-630

Type	$I_n$ [A]	code No.	poles	peak/kA	$U_i$ (AVC/DVC)	weight [kg]	packaging [pcs]
ED2 125/3	125	004671271	3	3,6	690/600	1	1
ED2 160/3	160	004671272	3	6	690/600	1,5	1
ED2 250/3	250	004671273	3	6	690/600	1,5	1
ED2 400/3	400	004671274	3	9	690/600	4,2	1
ED2 630/3	630	004671275	3	9	690/600	4,4	1
ED2 125/4	125	004671276	4	3,6	690/600	1,4	1
ED2 160/4	160	004671277	4	6	690/600	1,9	1
ED2 250/4	250	004671278	4	6	690/600	1,9	1
ED2 400/4	400	004671279	4	9	690/600	5,6	1
ED2 630/4	630	004671280	4	9	690/600	5,8	1

### ETIBREAK ED 800-1600

Type	$I_n$ [A]	code No.	poles	peak/kA	$U_i$ (AVC/DVC)	weight [kg]	packaging [pcs]
ED 800/3	800	004631200	3	15	690/250	9,4	1
ED 1250/3	1250	004631220	3	32	690/250	20,4	1
ED 1600/3	1600	004631225	3	45	690/250	24,9	1
ED 800/4	800	004631210	4	15	690/250	12,2	1
ED 1250/4	1250	004631230	4	32	690/250	26,4	1
ED 1600/4	1600	004631250	4	45	690/250	32,9	1

