

bticino

BTPPLUG 2



CATALOGUE 2009

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BTPLUG2 Catalogue 2009

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BTPLUG2 safety and innovation

BTicino always pays attention to the evolution of the market, and it is capable of adapting to the new need by carrying some more advantages for its clients. The great experience throughout the world in miniature circuit breakers is present in this new offer BTPLUG2.

Continuing the success and the tradition of BTPLUG, BTicino transfers all its know-how and innovation in the new product without forgetting customer's requirements. In fact, the new range of

MCBs assures the traditional installing habit and at the same time improves new technology in the product. BTPLUG2 is a new MCB which conforms to IEC 60898-1 and can be used in residential and tertiary sectors.

- Low specific passing energy
- Downstream cable protection
- Fast closing contacts
- Curve C: tripping always between 5 and 10 In
- Long useful life



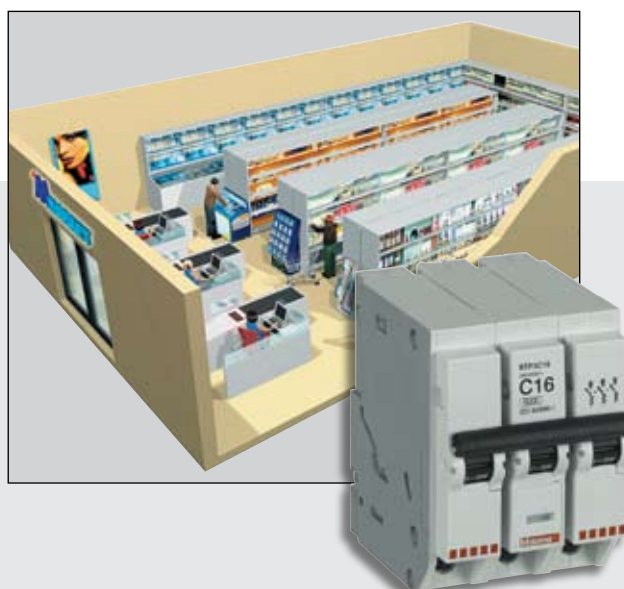
Protection in residential and tertiary application

BTPLUG2 is a 3/4 breaker with plug-in connection which is designed according to IEC standards that can offer protection and control of circuits against overloads and short circuits.

Domestic and residential environment



Tertiary sector



BTPLUG2 offers three different pole configurations as 1, 2, 3 poles with:

- Currents from 10A to 63A
- 2 breaking capacities (6kA and 10kA)

Materials and components assure an operating temperature of 40°C. The new BTPLUG2 is also integrated in the BTicino offer of Consumer Unit and Load Center. The color of BTPLUG2 is grey RAL7035 according to BTicino offer.

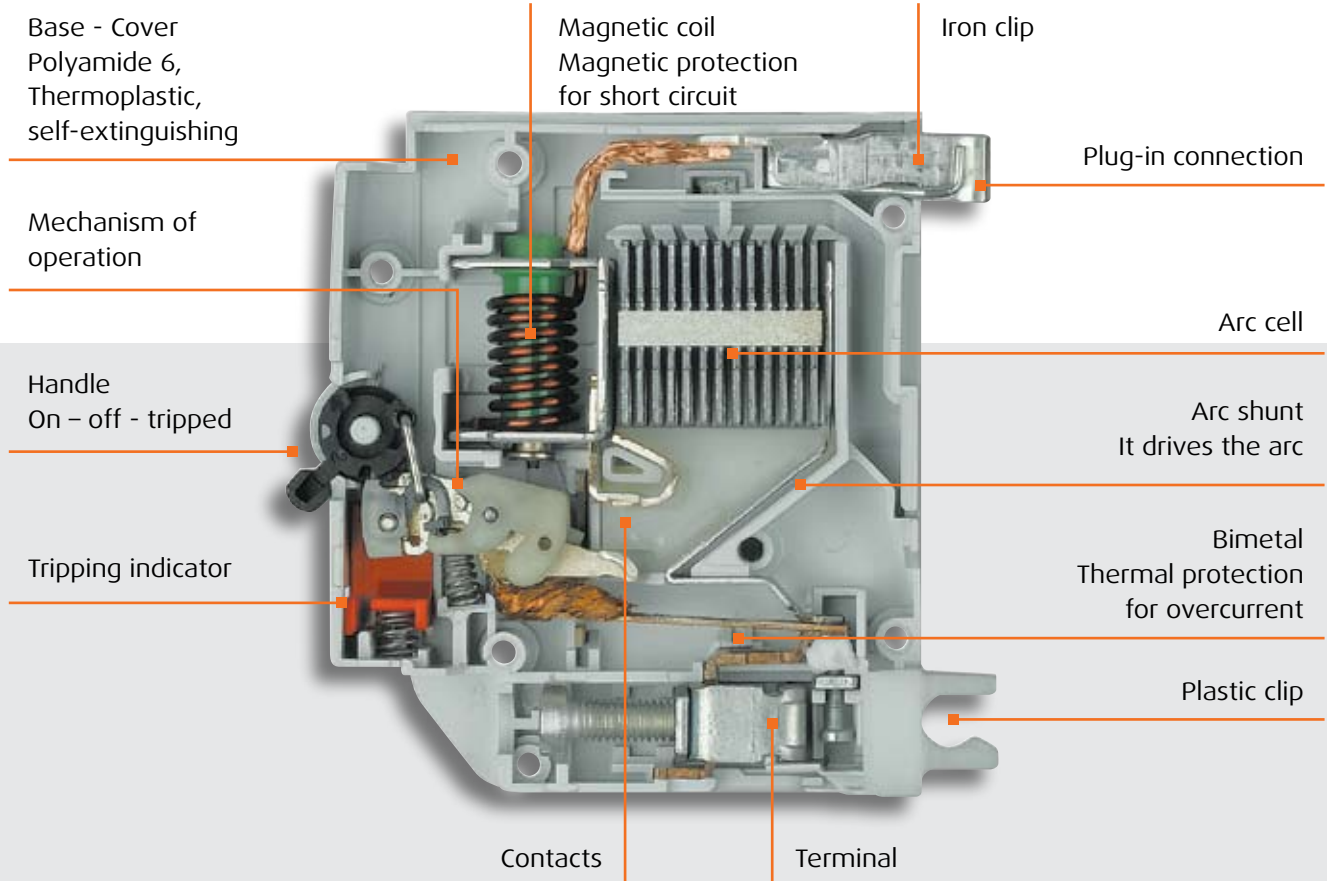


Example of BTPLUG2 in Load Center



BTPLUG2 in the new Consumer Unit

BTPLUG2 internal structure



BTPLUG2 provides all the performances of an IEC breaker giving the comfort of plug-in connection and the safety of the tripping indication. All the MCBs are the result of BTicino's knowledge and tradition. These facts assure the perfect quality of each component chosen and the best service.



A traditional BT DIN breaker inside

BTPLUG2 feature

Handle 3 positions

On

Tripped

Off



Reference

Operating voltage 240/415 Va.c.

Curve - nominal current

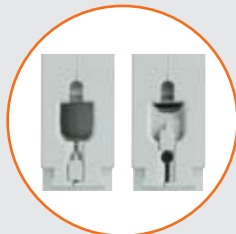
Breaking capacity

Normative

Possibility to lock the handle with a steel wire

Terminal

- IP 20 (The same of BTDIN)
- Maximum cable section: 35mm² /AWG2 great cabling capacity, both in low and high ratings



Very long pliers

- Flexibility
- Constant elasticity throughout time
- Great number of operations
- Made of tin plated copper

Iron clip

- Present on every reference
- Galvanic treatment, without oxidation



CE (Conformité Européene) marking

- Mandatory in Europe by the low voltage directive
- It assures the safety of the product



REF. AMBIENT TEMP. 40°C
FREQ. 50/50Hz
MAX. SECTION 35mm²/
2AWG
MIN TORQUE 2,5 Nm

BTPLUG2 advantage

The new breaker BTPLUG2 has been studied to reach the maximum safety for the user. The handle has 3 different positions, giving the following advantages for the customer:

- More safety: to restore the MCB it is necessary to turn the handle in the "Off" position before switching it in the "On" position.
- Indication of contacts position (state): the position of the handle in the centre position indicates the MCB has tripped and a red flag is shown.



Tripped position



Handle with 3 positions complies with the standard IEC 60898-1

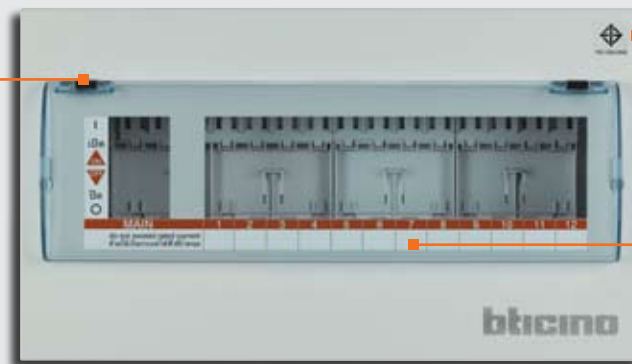
Consumer unit new feature

BTPLUG2 has been developed to be perfectly integrated with all BTicino offer in residential/tertiary segment. In the process of continuous innovation, the consumer unit has been improved with important details creating a real system in energy distribution.

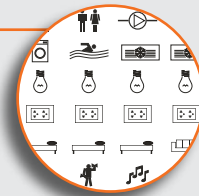
- Plug-in connection
- Protection degree IP40
- Protection against accidental contacts with live parts
- Maintenance under voltage without risk
- In compliance with IEC 61439, BS 5486, and TIS certification
- Epoxy paint RAL7035
- Image of industrial product



New window in polycarbonate, more resistance near the hinge



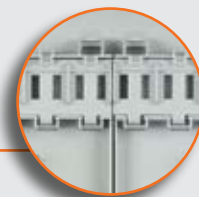
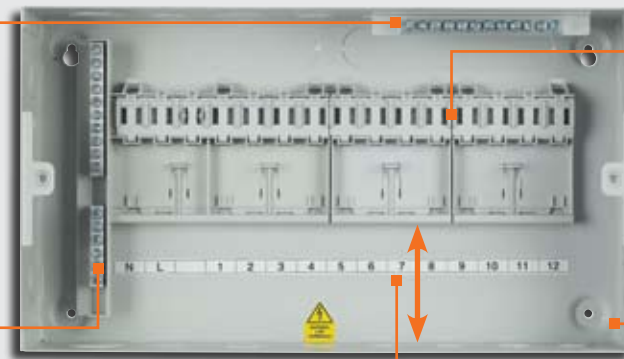
TIS certified



Symbol sticker for circuit description



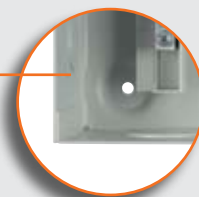
Neutral and ground bar in tin-plated aluminium



New insulated bus bar IP20 tin-plated copper



Ample wire space to make connection easier

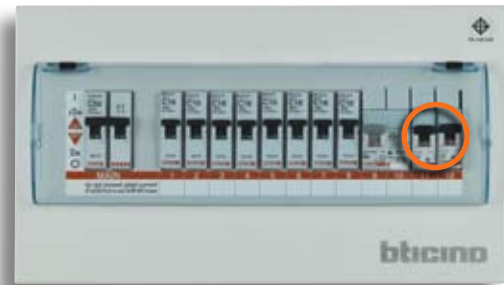


Thickness 1.2 mm.

Consumer unit integration with BTicino offer

Perfect integration with BTicino range of MCBs

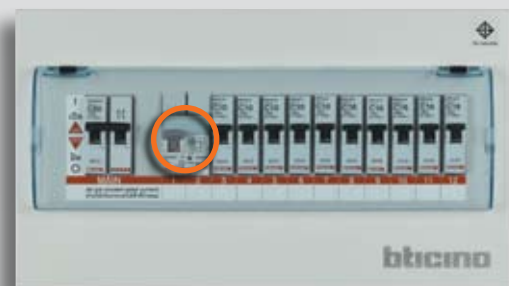
■ INTEGRATION WITH MCBs DIN



■ INTEGRATION WITH RCBO DIN



■ INTEGRATION WITH RCD DIN



■ ADAPTER

All DIN devices can be fitted
using the appropriate adapter



Load center integration with BTicino offer

BTPLUG2 fits perfectly in BTicino load center, creating a complete system from residential to tertiary market. The BTicino plug-in load centers are available in different sizes and technical/aesthetic options that are allowed to satisfy the different needs in the installation.

- Plug-in bus bar, 12 -42 poles
- Tin plated copper bus bar, 125A and 250A ratings
- Glass or metal door
- Incomer: main incomer or main lugs version
- Neutral and ground bars already installed
- In compliance with IEC 61439 and BS 5486
- Protection degree IP43
- Reversible door

Glass door:
possibility to see the status
of breakers without opening
the door

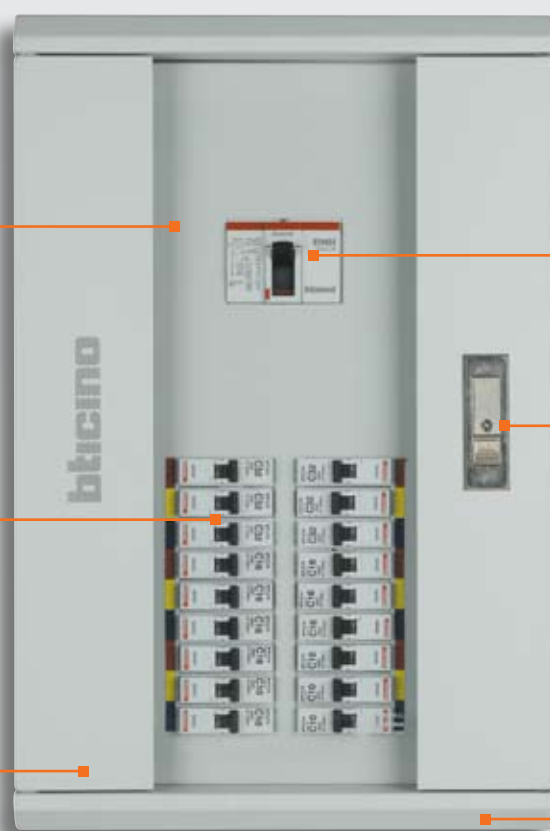
Main breaker:
Easytiker 100 and 250

Possibility to install 1, 2 and
3 pole breakers (3 phase -
4 wire system)

Door with lock

Great space for wiring

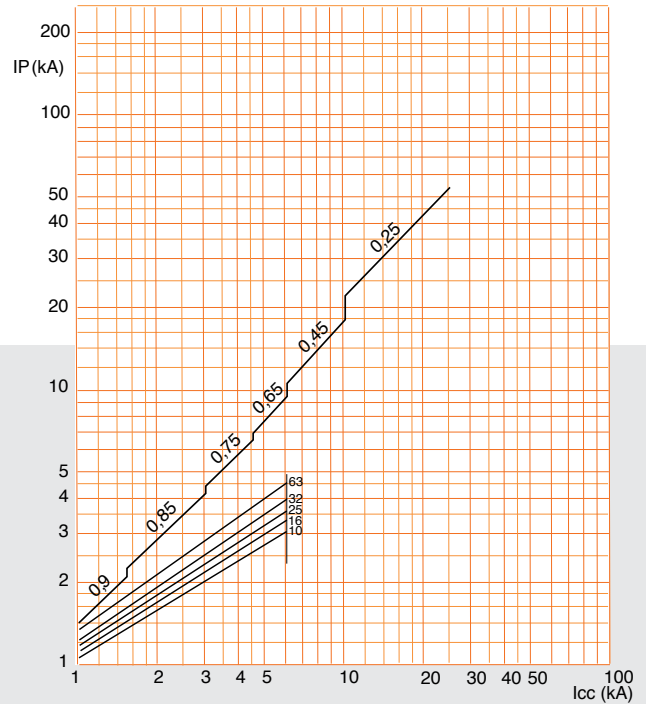
Surface mounting



Normative 60898-1

The main characteristic of an IEC breaker is its capacity of limiting the passing energy. This particular performance is due to many factors, such as the presence of a magnetic mechanism, an arc runner, an arc cell: all these features assure an high level of protection of the downstream cables and the rest of the plant. In case of short circuit the time of tripping is very short and the limiting capacity minimizes the heating of cables, the risk of fire and the deformation of materials.

- Low specific passing energy
- Downstream cable protection
- Fast closing contacts
- Curve C: intervention always between 5 and 10 In
- Long useful life



Limiting capacity of an IEC breaker: comparison between theoretical and effective kA passing





BTPLUG2 breakers have been subjected to the electrical tests requested by the market.

BTicino makes use of the most advanced technologies with regard to tests and certifications. Materials, components and finished products are accurately tested until they pass the tests established by the regulations.

- IEC 60898-1 certification
- Quality
- Performances
- advanced technologies

BTPLUG2

technical data

BTPLUG2	6kA		10kA		
					
Standard	IEC 60898-1		IEC 60898-1		
Version	1P	3P	1P	2P	3P
No. of modules	1	3	1	2	3
Max. operating voltage (V a.c.)	440	440	440	440	440
Impulse rated voltage (kA)	4	4	4	4	4
Rated voltage Ue (V a.c.)	240/415	240/415	240/415	240/415	240/415
Thermal-magnetic characteristic	C	C	C	C	C
Rated current	10	10	10	16	10
	16	16	16	20	16
	20	20	20	32	20
	25	25	25	40	25
	32	32		50	
	40	40		63	
	50	50			
	63	63			
Rated insulation voltage Ui (V a.c.)	500	500	500	500	500
Rated frequency (Hz)	50-60	50-60	50-60	50-60	50-60
Rated short circuit breaking capacity (kA)	6	6	10	10	10
Operating temperature (°C)					
Max. number of electric/ mechanical operations	10000/20000	10000/20000	10000/20000	10000/20000	10000/20000
Protection degree (terminal area/elsewhere)	IP20/IP40	IP20/IP40	IP20/IP40	IP20/IP40	IP20/IP40
Energy Limiting Class	3	3	3	3	3
Vibration strength (IEC 68.8.35)	3g - 10-55Hz for 30 min		3g - 10-55Hz for 30 min		
Corrosion strength constant weather IEC 68-2 (°C/RH)	23/83 - 40/93 - 55/20		23/83 - 40/93 - 55/20		
Corrosion strength variable weather IEC 68-2 (°C/RH)	25/95 - 55/95		25/95 - 55/95		
Resistance to abnormal heat and to fire (°C)	650-960		650-960		
Sectioning capacity	●	●	●	●	●
Common accessoriability	●	●	●	●	●
Rail with adaptor	●	●	●	●	●
Max. cross section of connectable cable					
Flexible cable (mm ² /AWG)	25/3	25/3	25/3	25/3	25/3
Rigid cable (mm ² /AWG)	35/2	35/2	35/2	35/2	35/2

Catalogue BTPLUG2



1 POLE 6KA

Item code	In (A)	Pole	Curve	Rated voltage (V a.c.)
BTP1C10	10	1	C	240/415V
BTP1C16	16	1	C	240/415V
BTP1C20	20	1	C	240/415V
BTP1C25	25	1	C	240/415V
BTP1C32	32	1	C	240/415V
BTP1C40	40	1	C	240/415V
BTP1C50	50	1	C	240/415V
BTP1C63	63	1	C	240/415V



3 POLES 6KA

Item code	In (A)	Pole	Curve	Rated voltage (V a.c.)
BTP3C10	10	3	C	240/415V
BTP3C16	16	3	C	240/415V
BTP3C20	20	3	C	240/415V
BTP3C25	25	3	C	240/415V
BTP3C32	32	3	C	240/415V
BTP3C40	40	3	C	240/415V
BTP3C50	50	3	C	240/415V
BTP3C63	63	3	C	240/415V



1 POLES 10KA

Item code	In (A)	Pole	Curve	Rated voltage (V a.c.)
BTP1C10H	10	1	C	240/415V
BTP1C16H	16	1	C	240/415V
BTP1C20H	20	1	C	240/415V
BTP1C25H	25	1	C	240/415V



2 POLES 10KA

Item code	In (A)	Pole	Curve	Rated voltage (V a.c.)
BTP2C16H	16	2	C	240/415V
BTP2C20H	20	2	C	240/415V
BTP2C32H	32	2	C	240/415V
BTP2C40H	40	2	C	240/415V
BTP2C50H	50	2	C	240/415V
BTP2C63H	63	2	C	240/415V



3 POLES 10KA

Item code	In (A)	Pole	Curve	Rated voltage (V a.c.)
BTP3C10H	10	3	C	240/415V
BTP3C16H	16	3	C	240/415V
BTP3C20H	20	3	C	240/415V
BTP3C25H	25	3	C	240/415V

Catalogue consumer unit and load center



CONSUMER UNIT

Item code	No. of way	Dimension (mm)
BTCN4	4	252 x 205 x 72
BTCN6	6	252 x 205 x 72
BTCN8	8	290 x 205 x 72
BTCN12	12	366 x 205 x 72
BTCN16	16	442 x 205 x 72



BTCNFP

BTCNDIN

04906

ACCESSORY

Item code	Description
BTCNFP	Blank insert for Plug-in type consumer unit
BTCNDIN	DIN-rail adapter for Plug-in type consumer unit
04906	Entry terminal for all bus bar



BTL/...ME...G

BTL/...ML...G

LOAD CENTER - GLASS DOOR

Item code	No. of way	Dimension (mm)
BTL/12ME125G	12	500x330x126
BTL/18ME125G	18	500x330x126
BTL/24ME125G	24	660x330x126
BTL/30ME125G	30	660x330x126
BTL/36ME250G	36	915x330x126
BTL/42ME250G	42	915x330x126
BTL/12ML125G	12	350x330x126
BTL/18ML125G	18	350x330x126
BTL/24ML125G	24	500x330x126
BTL/30ML125G	30	500x330x126
BTL/24ML250G	24	500x330x126
BTL/30ML250G	30	500x330x126



BTL/...MBE...



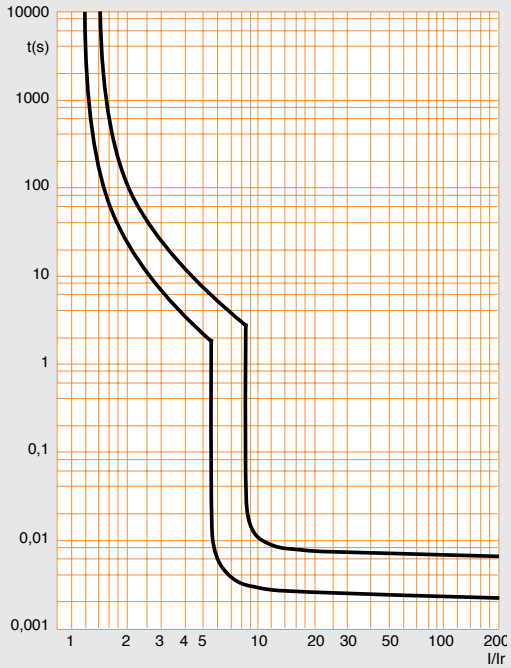
BTL/...ML...

LOAD CENTER - METAL DOOR

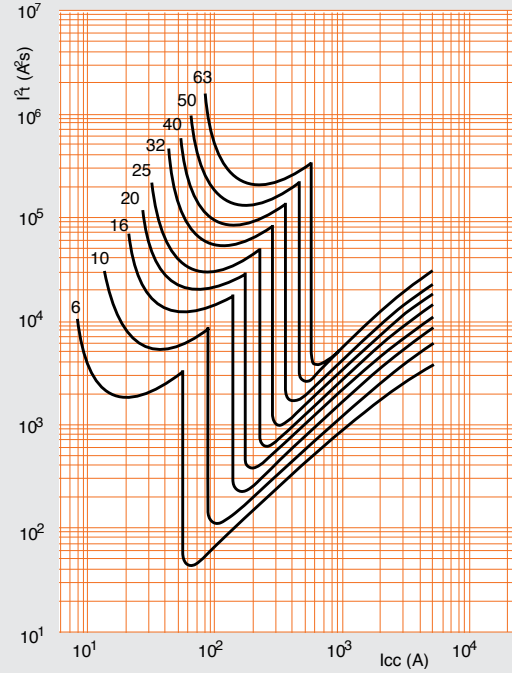
Item code	No. of way	Dimension (mm)
BTL/12MBE125	12	500x330x126
BTL/18MBE125	18	500x330x126
BTL/24MBE125	24	660x330x126
BTL/30MBE125	30	660x330x126
BTL/36MBE250	36	915x330x126
BTL/42MBE250	42	915x330x126
BTL/12ML125	12	350x330x126
BTL/18ML125	18	350x330x126
BTL/24ML125	24	500x330x126
BTL/30ML125	30	500x330x126
BTL/24ML250	24	500x330x126
BTL/30ML250	30	500x330x126

Electrical characteristic

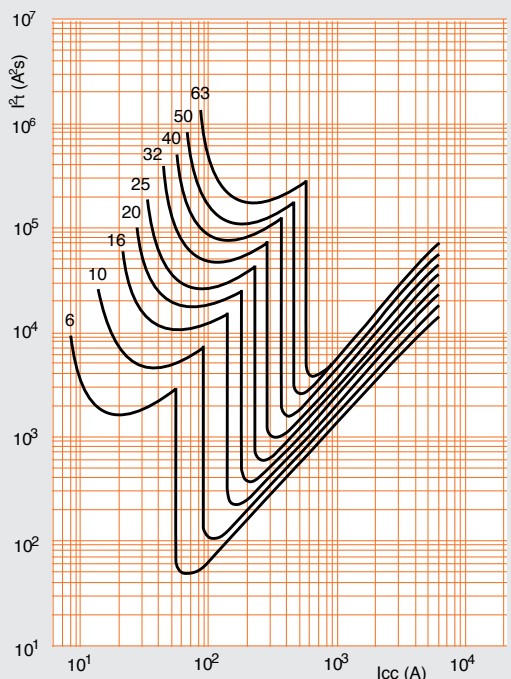
THERMAL MAGNETIC CHARACTERISTIC



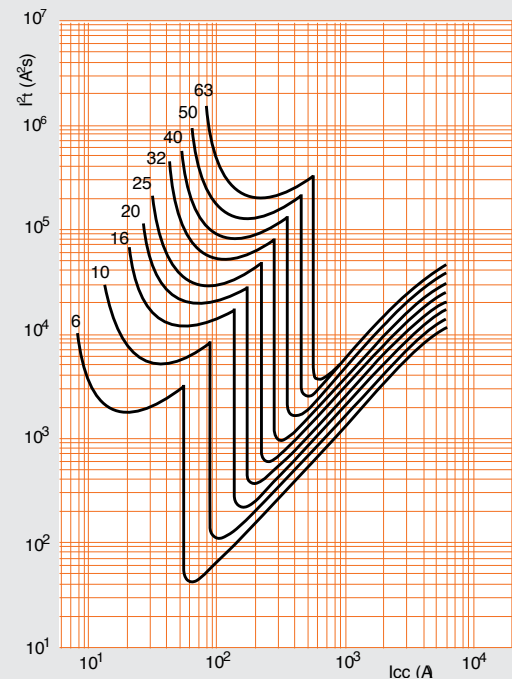
PASSING ENERGY 2P 230 V A.C.



PASSING ENERGY 1P-3P

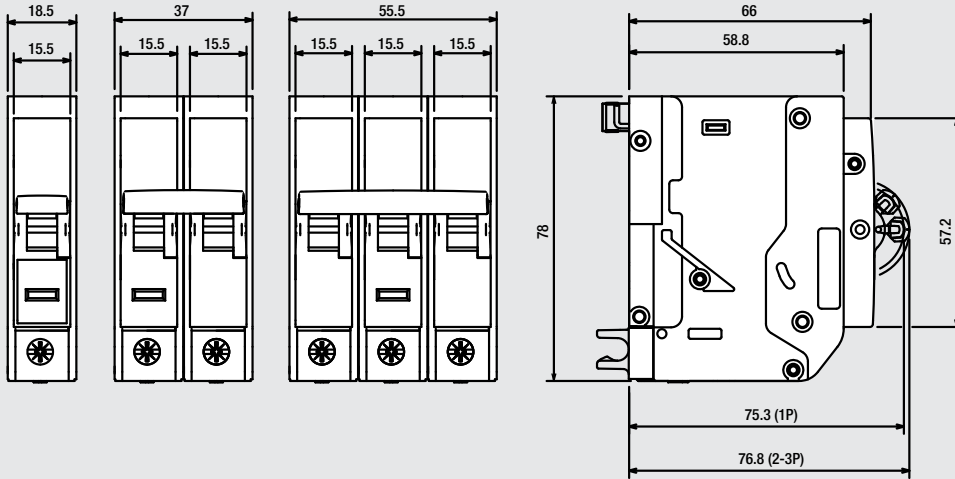


PASSING ENERGY 2P 415 V A.C.

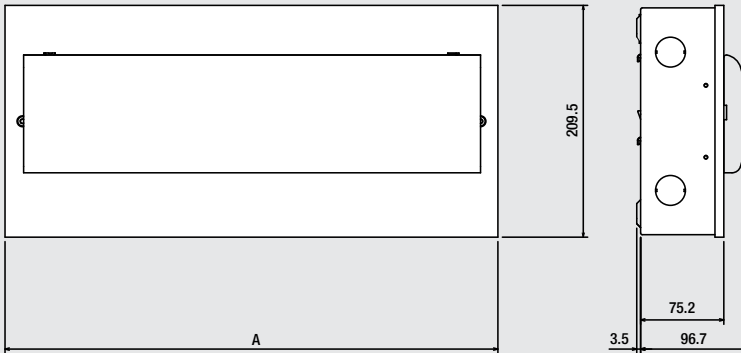


Dimensional data

BTPLUG2



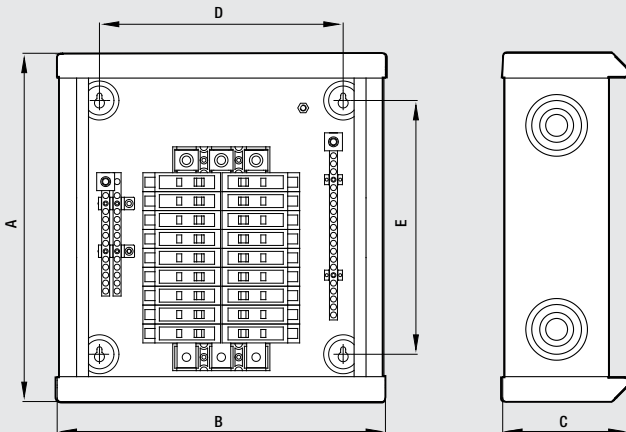
CONSUMER UNIT



CONSUMER UNIT DIMENSION (mm)

Item code	A
BTCN4	256.5
BTCN6	256.5
BTCN8	294.5
BTCN12	370.5
BTCN16	445.5

LOAD CENTER



MAIN LUG TYPE STANDARD DIMENSION (mm)

Item code	A	B	C	D	E
BTL/12ML125..125G	350	330	126	245	255
BTL/18ML125..125G	350	330	126	245	255
BTL/24ML125..125G	500	330	126	245	405
BTL/30ML125..125G	500	330	126	245	405
BTL/24ML250..250G	500	330	126	245	405
BTL/30ML250..250G	500	330	126	245	405

MAIN BREAKER TYPE STANDARD DIMENSION (mm)

Item code	A	B	C	D	E
BTL/12M..125..125G	500	330	126	245	405
BTL/18M..125..125G	500	330	126	245	405
BTL/24M..125..125G	660	330	126	245	565
BTL/30M..125..125G	660	330	126	245	565
BTL/36M..250..250G	915	330	126	245	820
BTL/42M..250..250G	915	330	126	245	820



BTicino (Thailand) Limited

Bangkok: 10f Ploenchit Center, 2 Sukhumvit Road,
Klongtoey, Bangkok 10110

Tel: 02 656 9162-7

Fax: 02 656 9197

Phuket: Unit 16 The Court Yard, 90/5 Moo2,
Chaofa Road West, Vichit, Muang, Phuket 83000

Tel: 076 264 477

Fax: 076 264 494

บริษัท บีทีซิปโน (ประเทศไทย) จำกัด

กรุงเทพฯ: ชั้น 10 อาคารเพลินจิต เซ็นเตอร์ เลขที่ 2 ถนนสุขุมวิท

แขวงคลองเตย เขตคลองเตย กรุงเทพฯ 10110

โทร. 02 656 9162-7

แฟกซ์. 02 656 9197

ภูเก็ต: ยูนิต 16 เดอะคอร์ทยาร์ด 90/5 หมู่ 2 ถนนเจ้าฟ้าตะวันตก

ตำบลวิชิต อำเภอเมือง ภูเก็ต 83000

โทร. 076 264 477

แฟกซ์. 076 264 494

www.bticino.co.th

info.thailand@bticino.com