

Safety Breaker and Earth Leakage Breaker, HB and BJS Type

Complete range of products with a compact design.

Safety Breaker HB and S-HB Type

Dimensions, mm												
Appearance	Safety Breaker, HB Type						S-HB Type					
Mounting Pitch, mm												
Type	BS11106TV	BS1110TV	BS1111TV	BS1112TV	BS1113TV	BS202TV	BS203TV	BS220TV	BS230TV	BS2202TV	BS2302TV	
Poles & Elements	2P1E						2P2E		2P1E		2P2E	
Rated Current, In	6A	10A	15A	20A	30A	20A	30A	20A	30A	20A	30A	
Rated Voltage, Ue	AC240V, 1.0kA (6A), 1.5kA (10, 15, 20, 30A)						AC120/240V, 1.5kA		AC240/415V, 2.5kA			
Tripping Mechanism	Terminal Method Operation											
Arc Quenching Method	Natural Quenching											
Interrupting Time	10ms (100%)						5ms (50%)					
Passage of Short	23x10 ³ A ² Sec (100%)						5.7x10 ³ A ² Sec (25%)					
Weight	0.07kg						0.08kg		0.09kg		0.11kg	
Application	Air Conditioner, Water Pump, Water Heater											

1. Use 20A for normal current branch circuits, and 30A for high capacity dedicated circuits;
2. Use 15A or less for machine protection, after consideration of its characteristic: inrush current and usual currents;
- 3 The data in capacity mentioned above are just for your reference, which are Panasonic's experimental ones;

Earth Leakage Breaker BJS Type




Dimensions, mm												
Appearance												
Mounting Pitch, mm												
Type	BJS30208A2	BJS30308A2	BJS15125	BJS15225	BJS15325	BJS20125	BJS20225	BJS20325	BJS30125	BJS30225	BJS30325	
Poles & Elements	2P0E						2P2E					
Rated Current, In	30A		15A			20A			30A			
Rated Voltage, Ue	AC120-240V						AC100-240V					
Rated Operating Current	15mA	30mA	10mA	15mA	30mA	10mA	15mA	30mA	10mA	15mA	30mA	
Rated Non-operating Current	7.5mA	15mA	6mA	7.5mA	15mA	6mA	7.5mA	15mA	6mA	7.5mA	15mA	
Rated Short-time Current	1.5kA											
Phase & Wiring Configuration	1Ø2W						1Ø2W, 1Ø3W					
Operating Time	Within 0.1 Second											
Handle Type	Standard						-					
Connecting Method	For direct installation of electrical wiring											
Weight	0.1kg						0.09kg					
Overload Current	None						Thermal Operation					
Tripping Mechanism												
Application	Water Heater, Refrigerator, Fleezer											

1. Rated short-time current means that although short-circuit protection is not possible, the internal circuitry and conductors can withstand 1.5kA for 0.02 seconds;
2. Ambient temperature range for usage: -10°C to +50°C;
3. Disconnect electrical wiring before measuring insulation resistance between wires;

Safety Breakers BSB1

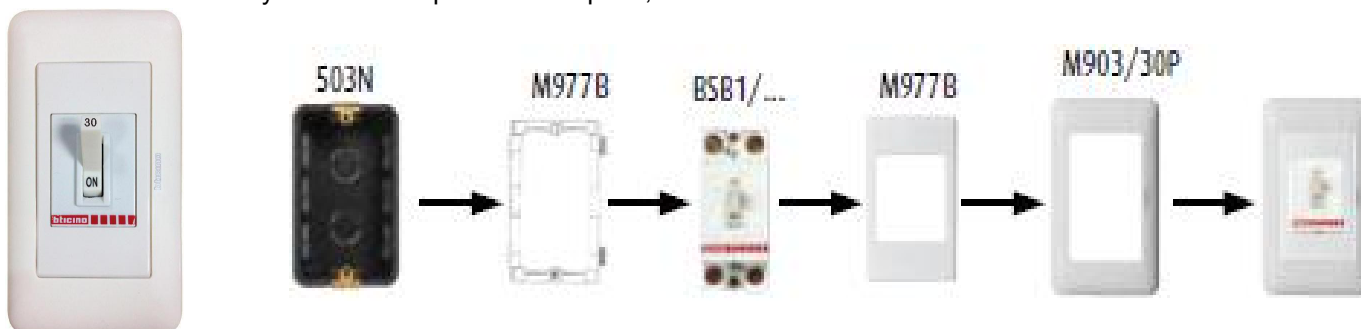
Safety breakers BSB1 are the ideal solution for protection of your appliances, they provide high reliability with aesthetic look, protect all kinds of home appliances against thermal overload with ratings from 10A to 30A. Available flush mounted safety breakers in Matix coverplates and Magic advance coverplates, and surface mounted safety breaker in plastic backbox.

Selection Table of BSB1 Safety Breakers

			Safety Breakers	BSB1/10	BSB1/15	BSB1/20	BSB1/30
			Poles and Elements	2P1E	2P1E	2P1E	2P1E
			Rated Current, In	10A	15A	20A	30A
			Rated Voltage, Ue	220VAC	220VAC	220VAC	220VAC
			Rated Short Circuit Current, Icu	1.5kA	1.5kA	1.5kA	1.5kA
			Weight	0.10kg	0.10kg	0.10kg	0.10kg

BSB1/10 BSB1/15 BSB1/30

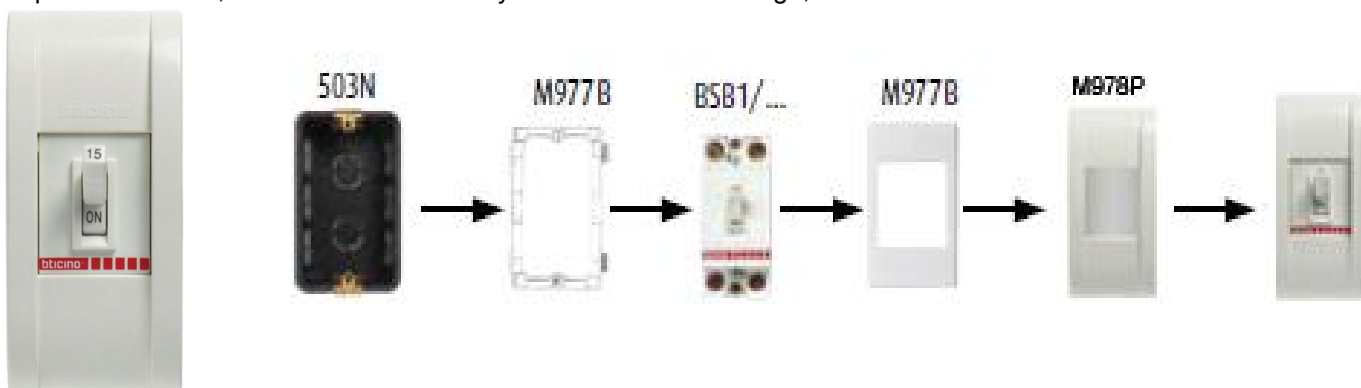
A flush-mounted safety breaker with plastic cover plate, M903/30P



A surface-mounted safety breaker with plastic cover plate



A plastic mini-box, surface-mounted safety breaker with new design, M978P



Disjoncteur Dismatic

New circuit breaker and switch combination for protection of air-conditioning systems.

Design engineers today are trying to systematically reduce individual components, this is a key factor of cost-efficient design.

Normally less components also means more space which is enabled by the design of compact products, in order to support Design Engineers in their search for parts reduction, E-T-A offers a combination of circuit breakers and switches, these are thermal circuit breakers providing overcurrent protection and serve as an On/Off switch for devices, machinery and equipment at the same time, E-T-A is the world market leader in circuit protection and offers a wide range of circuit breaker and switch combinations, it does not only include various designs and actuating methods, but also a wealth of color, marking and illumination options.

New: type 3130 with push button operation

The latest model in the circuit breaker/switch combination range of E-T-A is the single pole thermal circuit breaker type 3130 with push button operation, the design was initiated by our French customer Legrand who uses E-T-A's circuit breakers in installation frames of On/Off switches for air-conditioning systems, the 3130 provides overcurrent protection for the installation cables leading from the switch frame to the air-conditioning system, in the event of an overcurrent the E-T-A circuit breaker trips, goes into Off position and reliably disconnects the air-conditioning system and its cables from the supply network. Another feature of type 3130 with push button operation is a new option for electrical connection: it can be ordered with 45° angled screw terminals with M4 screws and clamping piece, this makes the 3130 a valuable and highly suitable component for installation technology.



The new installation frame "Dismatic" made by Legrand

A Choice of applications

E-T-A circuit breaker and switch combinations are suited for a wide range of applications due to their robust and reliable design, including medical equipments, professional tools, household appliances and gardening tools, for example in France, E-T-A products are used by manufacturers of floor sanding machines and concrete vibrators, another application field is sailing yachts where the E-T-A circuit breakers are installed in central dashboards, they serve for switching on and off of all loads on board such as bilge pump the anchor light of interior lights, at the same time they protect cables and loads against possible damages caused by overheating in the event of overcurrents.



New E-T-A circuit breaker version type 3130 with two push buttons






Diruptor Range 7000

Technical Data

Range	7000																										
Mounting	0 Plug-in 9 Plug in base for Print Circuit				1 Flush Mounting 2 Screws on Front Face			2 Flush Mounting Threaded Collar on Front Face				3 Snap on DIN Rail Asymmetrical 7 Symmetrical				5 Push-push											
Number of Poles	1	2	3	4	1	2	3	1	2	3	4	1	2	3	4	1											
Standard Connections	0	7	7	9	4	0	9	1	0	1	0	4	0	9	4	0	2	4	1	3	1	0	1	0	4	0	9
Rated Voltages	230/400VAC, 72VDC																										
Release Characteristics																											
Thermal	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04											
Rated Current, A	20	20	20	20	40	32	32	40	32	32	32	40	32	32	32	40											
Thermal-magnetic	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10											
Rated Current, A	20	20	20	20	40	32	32	40	32	32	32	40	32	32	32	40											
Magnetic Only (1)	14A eff. 20A, AC Maxi																										
Rated Current, A (1)	-																										
Mixed Poles	-	■	■	■	-	■	■	-	■	■	■	-	■	■	■	-											
Special Characteristics	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■											
Number of Electrical Cycles	8000				8000			8000				8000				8000											
Breaking Capacity	Up to 1500A, AC/1500A, DC48V(56V)/800A, DC72V(90V)																										
Tropicalization	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■											
Compensation	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■											
Adjustment at 60°C	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■											
Special Contacts, thermal on	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■											
Special Adjustment for Magnetic Release	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■											
Outside Control of Release	On Request																										
Auxiliary Contacts																											
Normally Open	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■											
Normally Closed	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■											
Changeover	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■											
Marking	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■											
Raised Base	■	■	■	■	-	-	-	-	-	-	-	-	-	-	-	-											
Base for Print Circuit	■	■	■	■	-	-	-	■	■	■	■	-	-	-	-	■											
Base for Rail DIN	■	■	■	■	-	-	-	■	■	■	■	-	-	-	-	-											
Waterproof Cap	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■											

Diruptor Range Option HP and 7500

Technical Data

Range	Option HP				7500				
Mounting	0 Plug-in 9 Plug in base for Print Circuit	1 Flush Mounting 2 Screws on Front Face	2 Flush Mounting Threaded Collar on Front Face	3 Snap on DIN Rail Asymmetrical 7 Symmetrical	1 Flush Mounting 1 Screw on Front Face 3 Asymmetrical 7 Symmetrical				
									
Number of Poles	1 2 3 4	1 2 3	1 2 3 4	1 2 3 4	1				
Standard Connections	0 707 9 409 909	101-104-463-514	101-104-409-514	402-413	502-504				
Rated Voltages	230/400VAC, 30VDC								
Release Characteristics									
Thermal	- - - -	- - -				2			
Rated Current, A						100			
Thermal-magnetic	2 2 2 2	2 2 2	2 2 2 2	2 2 2 2	2	2			
Rated Current, A	20 20 20 20	40 32 32	40 32 32 32	40 32 32 32	70	70			
Magnetic Only (1)									
Rated Current, A (1)									
Mixed Poles	- ■ ■ ■	- ■ ■	- ■ ■ ■	- ■ ■ ■	-				
Special Characteristics	■ ■ ■ ■	■ ■ ■	■ ■ ■ ■	■ ■ ■ ■	■				
Number of Electrical Cycles	8000				8000				
Breaking Capacity	6kA, AC								
Tropicalization	■ ■ ■ ■	■ ■ ■	■ ■ ■ ■	■ ■ ■ ■	■				
Compensation	- - - -	- - - -	- - - -	- - - -	-				
Adjustment at 60°C	■ ■ ■ ■	■ ■ ■	■ ■ ■ ■	■ ■ ■ ■	■				
Special Contacts, thermal only	- - - -	- - -	- - - -	- - - -	-				
Special Adjustment for Magnetic Release	■ ■ ■ ■	■ ■ ■	■ ■ ■ ■	■ ■ ■ ■	■				
Outside Control of Release	On Request								
Auxiliary Contacts									
Normally Open	- - - -	- - - -	- - - -	- - - -	-				
Normally Closed	- - - -	- - - -	- - - -	- - - -	-				
Changeover	- - - -	- - - -	- - - -	- - - -	■				
Marking	■ ■ ■ ■	■ ■ ■	■ ■ ■ ■	■ ■ ■ ■	■				
Raised Base	■ ■ ■ ■	- - - -	- - - -	- - - -	-				
Base for Print Circuit	■ ■ ■ ■	- - - -	- - - -	- - - -	-				
Base for Rail DIN	■ - - -	- - - -	- - - -	- - - -	-				
Waterproof Cap	■ ■ ■ ■	■ ■ ■	■ ■ ■ ■	■ ■ ■ ■	-				

Diruptor Range 7000, Option HP and 7500

Dimensions of Diruptor

Front View

1
Screw Fixing
Range 7000: 2 screws 3.5x5
Range 7500: 1 screw 5x5

2
Threaded Collar M12

	A	B	C	D	E	F	H	J	K	L
1P	18	56	50	40	31	2.5	20	14	8	9.5
2P	39	57	58	48	37	4	20	14	8	11
3P	60	57	58	48	37	4	20	14	8	11
4P	28	86	78	62	-	5	28	19	11	16

	A	B	C	D	E	F	H
1P	18	56	58	43	33	5.5	20
2P	39	57	65	51	40	5.5	20
3P	60	57	65	51	40	5.5	20
4P	80	58	69	54	43	5.5	20

7
Symetrical Rail 35mm

3
Asymetrical Rail 32mm

Plug In
0 Pins Ø7mm
9 Fast Connections 6.35x0.8

	A	B	C	D	E	F	H	J	K	L	C*	D*	L*
1P	18	56	58	49	2.5	77	20	14	8	20	65	56	26
2P	39	57	66	56	4	77	20	14	8	20	73	62	26
3P	60	57	66	56	4	77	20	14	8	20	73	63	26
4P	80	58	69	59	4	77	20	14	8	20	76	66	26
7500	28	86	-	-	5	118	28	19	11	-	89	72	26

	A	B	C*	D*	E	F	H	J	K	M	N*
1P	18.4	56.0	58.5	49.0	30.5	20	20	14	8	2.5	15
2P	39.0	56.5	66.0	55.5	36.5	20	20	14	8	4	15
3P	59.5	56.5	66.0	55.5	36.5	20	20	14	8	4	15
4P	79.5	57.5	69.5	59.5	40.5	20	20	14	8	4	15

Standard Connections

101

453

413

104 - 504

**909
409**

204

403

402 - 502

463

