

Complete range of products with a compact design.



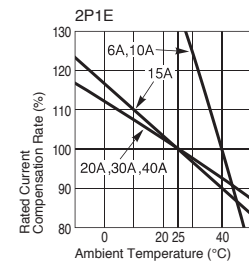
SAFETY BREAKER EARTH LEAKAGE BREAKER

Safety Breaker HB Type

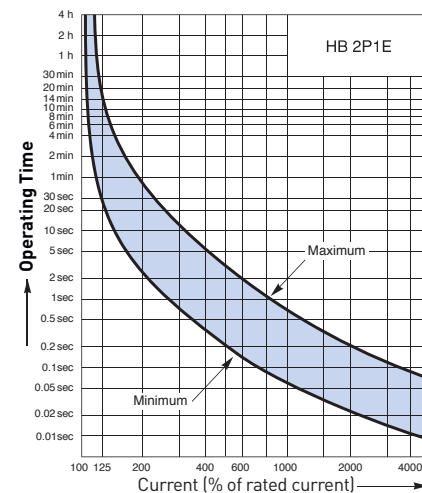
Dimension (mm) Appearance Mounting Pitch (unit:mm)		 Unit : mm
Number of Poles & Elements		2P1E
Type	6A	BS11106TV
	10A	BS1110TV
	15A	BS1111TV
	20A	BS1112TV
	30A	BS1113TV
40A	BS1114TV	
Rated Voltage (AC)		AC 240V 1.0kA (6A) AC 240V 1.5kA (10-15-20-30-40A)
Terminal Specifications		Solderless Terminals (with strap) 5.5 mm ² ~ 8 mm ² Ø1.6 ~ Ø2.6 (When using electrical appliance wire or other stranded wire [1.25 - 3.5 mm ²] use bar lug terminals.)
Weight		0.07 kg
Structure	Tipping Mechanism	Terminal Method Operation
	Arc Quenching Method	Natural Quenching
Capacity	Interrupting Time	10 ms (100%)
	Passage of Short	23 X 10 ³ A ² sec (100%)
Application Examples		Wire Protection (Over Current & Short Circuit Protection)

Note : 1. Use 20A for normal 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 current.
3. The data in capacity mentioned above are just for your reference, which are Panasonic's experimental ones.

HB Type Temperature Compensation Curves



Operating Characteristics Curves (with O.C.)

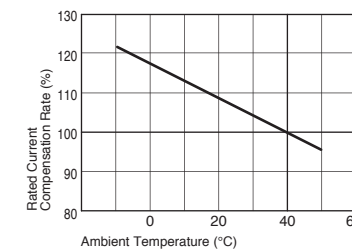


Earth Leakage Breaker Small Type

Dimension (mm) Appearance Mounting Pitch (unit:mm)		 Unit : mm									
Type	BJJS30208A2	BJJS30308A2	BJJS1512S	BJJS1522S	BJJS1532S	BJJS2012S	BJJS2022S	BJJS2032S	BJJS3012S	BJJS3022S	BJJS3032S
Rated Current (A)	30A		15A			20A			30A		
Number of Poles & Elements	2P0E					2P2E					
Rated Voltage (AC)	AC 120 - 240V					AC 100 - 240V					
Residual Operating Current (mA)	15 mA	30 mA	10 mA	15 mA	30 mA	10 mA	15 mA	30 mA	10 mA	15 mA	30 mA
Residual Non-Operating Current (mA)	7.5 mA	15 mA	6 mA	7.5 mA	15 mA	6 mA	7.5 mA	15 mA	6 mA	7.5 mA	15 mA
Rated Short-Time Current	1.5 kA										
Phase and Wiring Configuration	1Ø2W					1Ø2W, 1Ø3W					
Operating Time	Within 0.1 sec										
Handle Type	standard					—					
Standard Terminal Specifications	Solderless Terminals (with strap) Ø1.6 - Ø2.6 5.5 - 8 mm ²					Note : When using electrical appliance wire or other stranded wire [1.25 - 3.5 mm ²], use bar lug terminals. WV2500 1.25 - 2.0 mm ² WV2501 2.0 - 3.5 mm ²					Tightening Torque : 1.6 - 2.0 N·m 16.3 - 20.4 kgf·cm
Connecting Method	For direct installation of electrical wiring										
Weight	0.1 kg					0.09 kg					
Overload Current Tripping Mechanism	None					Thermal Operation					
Application Examples											
Note : 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 ~ +50°C 3. Disconnect electrical wiring before measuring insulation resistance between wires.						Note : 1. Ambient Temperature Range for Usage : -10°C ~ +50°C 2. Disconnect electrical wiring before measuring insulation resistance between wires.					

Small Type

Temperature Compensation Curves



Operating Characteristics Curves (with O.C.)

