

Specifications (Standard Type)

GPR Specifications (Operating voltage DC450V)



Model		GPR010	GPR040
Number of poles		1 Pole	1 Pole
Operating voltage, Ue		DC 450V	DC 450V
Rated impulse withstand voltage, Uimp		4kV	4kV
Conventional thermal current, Ith		10A	40A
Short time withstand current	2Min	15A	100A
	15Min	-	60A
Durability	Mechanical (*) (3,600 operations per hour)	200,000 cycles	200,000 cycles
	Electrical	10A, 450VDC, 150,000cycles (at 360cycles/Hr)(only Making)	40A, 450VDC, 1,000cycles (at 1,200cycles/Hr)
Voltage drop (Initial)		0.5V @ 10A	0.2V @ 20A
Operating time		Max. 50ms	Max. 50ms
Release time		Max. 30ms	Max. 30ms
Insulation strength (Initial)		Min. 100MΩ(@500VDC)	Min. 100MΩ(@500VDC)
Size, W × H × D(mm)		56 × 28 × 45	67 × 35 × 47
Temperature range		-40 ~ 85℃	-40 ~ 85℃
Humidity		5-95% R.H.	5-95% R.H.
Weight		85g	145g
Certification		CE CCC	CE CCC

* The number of Mechanical times is the number that meets the basic performance after durability.



	GPR100	GPR150	GPR250	GPR400
	1 Pole	1 Pole	1 Pole	1 Pole
	DC 450V	DC 450V	DC 450V	DC 450V
	4kV	4kV	4kV	4kV
	100A	150A	250A	400A
	225A	320A	500A	800A
	150A	225A	350A	600A(7min)
	200,000 cycles	200,000 cycles	200,000 cycles	200,000 cycles
	100A, 450VDC, 1,000cycles (at 1,200cycles/Hr)	150A, 450VDC, 1,000cycles (at 1,200cycles/Hr)	250A, 450VDC, 1,000cycles (at 360cycles/Hr)	400A, 450VDC, 1,000cycles (at 360cycles/Hr)
	0.04V @ 20A	0.04V @ 20A	0.02V @ 20A	0.02V @ 20A
	Max. 50ms	Max. 50ms	Max. 30ms	Max. 30ms
	Max. 30ms	Max. 30ms	Max. 10ms	Max. 10ms
	Min. 100MΩ(@500VDC)	Min. 100MΩ(@500VDC)	Min. 100MΩ(@500VDC)	Min. 100MΩ(@500VDC)
	81 × 39 × 70	81 × 39 × 70	92 × 45 × 87	100 × 58 × 91
	-40 ~ 85°C	-40 ~ 85°C	-40 ~ 85°C	-40 ~ 85°C
	5-95% R.H.	5-95% R.H.	5-95% R.H.	5-95% R.H.
	330g	330g	500g	630g
	CE (CCC)	CE cRU ^{us} (CCC)	CE (CCC)	CE (CCC)

[GPR]

Specifications (Standard Type)

GPR-M Specifications (Operating voltage DC1000V)



Model		GPR-M010	GPR-M040	GPR-M100
Number of poles		1 Pole	1 Pole	1 Pole
Operating voltage, Ue		DC 600V	DC 1000V	DC 1000V
Rated impulse withstand voltage, Uimp		4kV	4kV	6kV
Conventional thermal current, Ith		10A	40A	100A
Short time withstand current	2Min	-	100A	225A
	15Min	15A	60A	150A
Durability	Mechanical (*) (3,600 operations per hour)	200,000 cycles	200,000 cycles	200,000 cycles
	Electrical	5A, 600VDC, 10,000cycles (at 360cycles/Hr)(only Making)	20A, 1000VDC, 1,000cycles (at 360cycles/Hr)	50A, 1000VDC, 1,000cycles (at 360cycles/Hr)
Voltage drop(Initial)		0.5V @ 10A	0.2V @ 20A	0.04V @ 20A
Operating time		Max. 50ms	Max. 50ms	Max. 50ms
Release time		Max. 30ms	Max. 30ms	Max. 30ms
Insulation strength(Initial)		Min. 100MΩ(@1000VDC)	Min. 100MΩ(@1000VDC)	Min. 100MΩ(@1000VDC)
Size, W × H × D(mm)		56 × 28 × 45	67 × 35 × 47	81 × 39 × 70
Temperature range		-40 ~ 85℃	-40 ~ 85℃	-40 ~ 85℃
Humidity		5-95% R.H.	5-95% R.H.	5-95% R.H.
Weight		80g	145g	330g
Certification		CE cRUus CCC	CE cRUus CCC	CE cRUus CCC

* The number of Mechanical times is the number that meets the basic performance after durability.



* Bi-directional

	GPR-M150	GPR-M250	GPR-M400	GPR-M400-A	GPR-M400-A BI
	1 Pole	1 Pole	1 Pole	1 Pole	1 Pole
	DC 1000V	DC 1000V	DC 1000V	DC 1000V	DC 1000V
	6kV	6kV	6kV	6kV	4kV
	150A	250A	400A	400A	400A
	320A	500A	750A	750A	750A
	225A	350A	500A	500A	500A
	200,000 cycles	200,000 cycles	200,000 cycles	200,000 cycles	200,000 cycles
	75A, 1000VDC, 1,000cycles (at 360cycles/Hr)	125A, 1000VDC, 1,000cycles (at 360cycles/Hr)	200A, 1000VDC, 1,000cycles (at 360cycles/Hr)	200A, 1000VDC, 3,000cycles (at 360cycles/Hr)	100A, 1000VDC, 6,000cycles 220A, 800VDC, 1500cycles (at 360cycles/Hr)
	0.04V @ 20A	0.02V @ 20A	0.02V @ 20A	0.02V @ 20A	0.04V @ 20A
	Max. 50ms	Max. 30ms	Max. 30ms	Max. 30ms	Max. 30ms
	Max. 30ms	Max. 10ms	Max. 10ms	Max. 10ms	Max. 10ms
	Min. 100MΩ(@1000VDC)	Min. 100MΩ(@1000VDC)	Min. 100MΩ(@1000VDC)	Min. 100MΩ(@1000VDC)	Min. 100MΩ(@1000VDC)
	81 × 39 × 70	92 × 45 × 87	100 × 58 × 91	100 × 58 × 99	100 × 58 × 99
	-40 ~ 85°C	-40 ~ 85°C	-40 ~ 85°C	-40 ~ 85°C	-40 ~ 85°C
	5-95% R.H.	5-95% R.H.	5-95% R.H.	5-95% R.H.	5-95% R.H.
	330g	500g	630g	750g	800g
	CE cRUUS CCC	CE cRUUS CCC	CE cRUUS CCC	CE cRUUS	CE cRUUS CCC

[GPR-M]

Specifications (Standard Type)

GPR-H Specifications (Operating voltage DC1500V)



* Bi-directional



* Bi-directional

Model		GPR-H500-A	GPR-H600-A
Number of poles		1 Pole	1 Pole
Operating voltage, Ue		DC 1500V	DC 1500V
Rated impulse withstand voltage, Uimp		8kV	8kV
Conventional thermal current, Ith		500A	600A
Short time withstand current	2Min	900A	1000A
	15Min	750A	800A
Durability	Mechanical (*) (3,600 operations per hour)	200,000 cycles	200,000 cycles
	Electrical	200A, 1500VDC, 1,000cycles (at 360cycles/Hr)	200A, 1500VDC, 1,500 cycles 150A, 1500VDC, 6,000 cycles (at 360cycles/Hr)
Voltage drop(Initial)		0.04V @ 20A	0.04V @ 20A
Operating time		Max. 35ms	Max. 35ms
Release time		Max. 15ms	Max. 15ms
Insulation strength(Initial)		Min. 100MΩ(@1000VDC)	Min. 100MΩ (at DC1000V)
Size, W × H × D(mm)		118 × 70 × 108	118 × 70 × 110.5
Temperature range		-40 ~ 85°C	-40 to 85°C
Humidity		5-95% R.H.	5 to 95% R.H.
Weight		1.3kg	1.3kg
Certification		CE cRU _{us} CCC	CE cRU _{us} CCC

* The number of Mechanical times is the number that meets the basic performance after durability.

[GPR-H]