

High Voltage DC Relay

What is LS High Voltage DC Relay?

The LS High Voltage DC Relay serves to supply and disconnect DC power, and contains hydrogen and nitrogen gas, which is optimized to withstand making and breaking. Therefore, it has excellent electrical durability, compact size, and low noise.



GPR Specifications



Rating

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	120s	-	100A
	15Min	15A	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		80g	145g
Certification		CE CCC	CE CCC

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

Features

Compact Design

Achieved compact size by filling with hydrogen and nitrogen gas to improve the breaking performance.

Proven Safety

High value of short circuit current withstanding.

Superior Reliability

Excellent performance with electrical and mechanical dururances.



	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	900A
	150A	225A	350A	600A
	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)

High Voltage DC Relay

GPR-M/GPR-H Specifications

Rating



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	120s	-	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, 1,000cycles (at 360cycles/Hr)(only Making)	25A, 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.

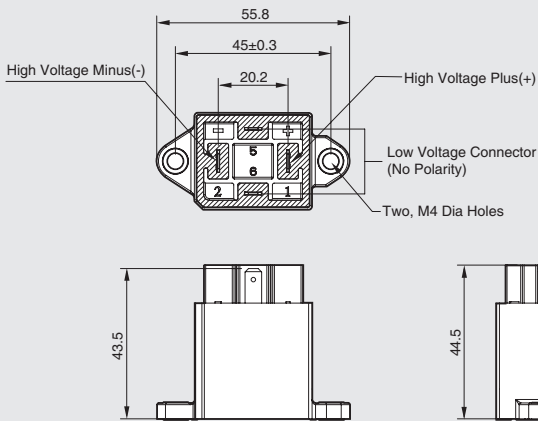


	GPR-M150	GPR-M250	GPR-M400	GPR-M400-A	GPR-H500-A
	1 Pole	1 Pole	1 Pole	1 Pole	1 Pole
	DC 1000V	DC 1000V	DC 1000V	DC 1000V	DC 1500V
	6kV	6kV	6kV	6kV	8kV
	150A	250A	400A	400A	500A
	320A	500A	750A	750A	900A
	225A	350A	500A	500A	750A
	200,000 cycles	200,000 cycles	200,000 cycles	200,000 cycles	200,000 cycles
	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)	200A, 1500VDC, 1,000cycles (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. 35ms
	Max. 30ms	Max. 10ms	Max. 10ms	Max. 10ms	Max. 15ms
	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	118×70×108
	-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	1.3kg
	CE cRU ^{us} CCC	CE cRU ^{us} CCC	CE cRU ^{us} CCC	CE cRU ^{us}	CE cRU ^{us} CCC

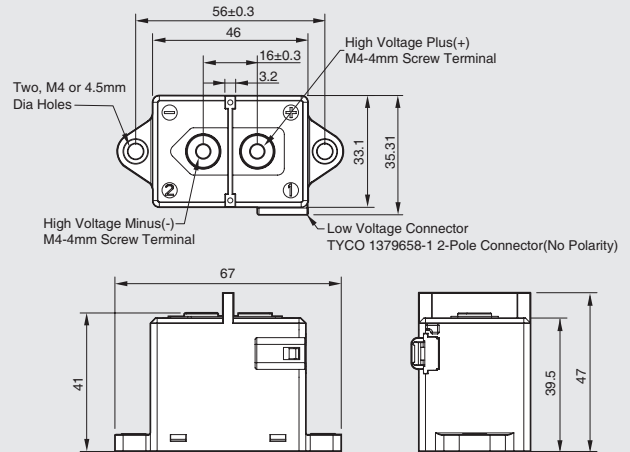
High Voltage DC Relay

Dimensions

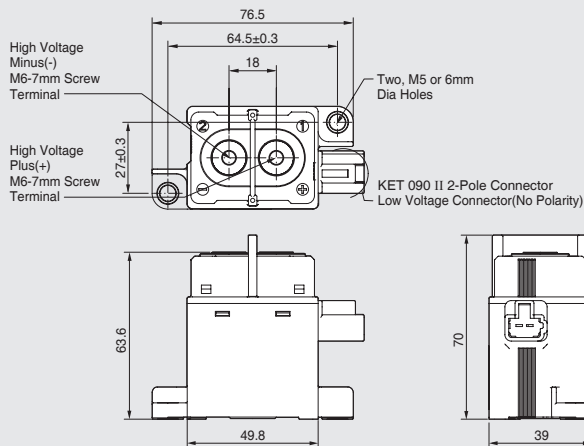
GPR010 / GPR-M010



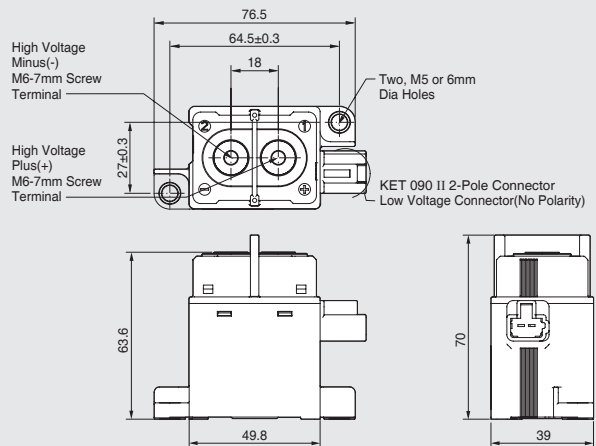
GPR040 / GPR-M040



GPR100 / GPR-M100

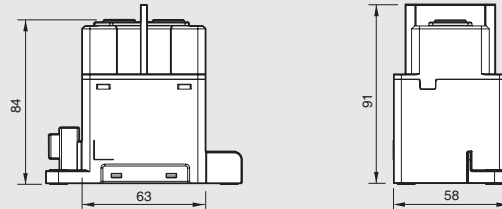
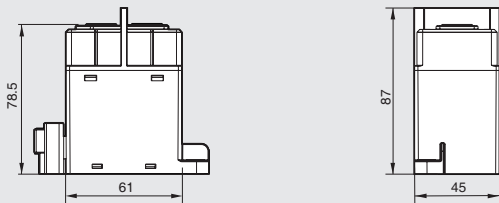
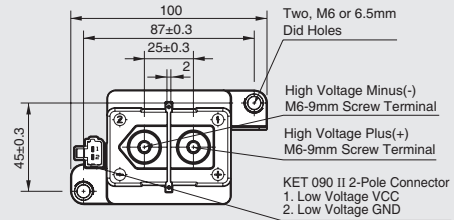
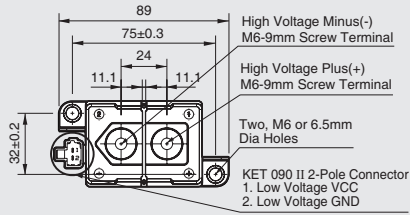


GPR150 / GPR-M150



GPR250 / GPR-M250

GPR400 / GPR-M400



GPR-M400-A

GPR-H500-A

