

Solid-state relay series

The HHG series solid-state relay adopts internationally popular circuits and technologies: input includes linear control, constant current control and AC control, LED indicating work status, bidirectional thyristor output or unidirectional thyristor anti-parallel output, zero voltage connection, zero current disconnection. Optoelectronic isolation between input and output, with built-in absorption circuit. It's widely used in industrial automation control equipment, power plant and substation electromechanical protection system.

This series of solid-state relay complies with the GB/T14048.5 standard and has passed CCC self-declaration and UL certification in the United States.

DC controls AC DC controls DC

HHG41-0/032F-06(SSR-DD)
HHG41-1/032F-22/38(SSR-DA)



Adaptive socket41F-1Z-C2N 5V

Control voltage	3-32VDC
Control current	5-20mA
Load voltage	06: 5-60VDC 22: 24-240VAC 38: 24-440VAC
Load current	1A, 2A
On-state voltage drop	DC ≤ 1.2V AC ≤ 1.6VAC
On-off time	DC ≤ 5ms AC ≤ 10ms
Off-state leakage current	DC ≤ 5mA AC ≤ 10mA
Dielectric strength	≥ 1500VAC
Ambient temp.	-30~80°C
Dimension	28×18.5×5mm
Installation form	Single line direct plug-in
Instruction	Installed next to well ventilated heat dissipation window

DC controls AC DC controls DC

HHG1D-1/032F-22 (SSR-DA)
HHG1D-1/032F-38 (SSR-DA)
HHG1D-0/032F-20 (SSR-DD)



Control voltage	3-32VDC
Control current	6-25mA
Load voltage	22: 24-240VAC 38: 24-440VAC 20: 12-200VDC
Load current	3A, 4A
On-state voltage drop	DC ≤ 1.2V AC ≤ 1.6VAC
On-off time	DC ≤ 5ms AC ≤ 10ms
Off-state leakage current	DC ≤ 5mA AC ≤ 10mA
Dielectric strength	≥ 1500VAC
Ambient temp.	-30~80°C
Dimension	43×12×25.5mm
Installation form	Single line direct plug-in
Instruction	Installed next to well ventilated heat dissipation window

DC controls AC DC controls DC

HHG41-0/032F-06-D(SSR-DD)
HHG41-1/032F-22/38-D(SSR-DA)



Control voltage	3-32VDC
Control current	5-20mA
Load voltage	06: 5-60VDC 22: 24-240VAC 38: 24-440VAC
Load current	1A, 2A
On-state voltage drop	DC ≤ 1.2V AC ≤ 1.6VAC
On-off time	DC ≤ 5ms AC ≤ 10ms
Off-state leakage current	DC ≤ 5mA AC ≤ 10mA
Dielectric strength	≥ 1500VAC
Ambient temp.	-30~80°C
Dimension	97×82×6.2mm
Installation form	-D: DIN Rail installation
Instruction	Installed next to well ventilated heat dissipation window

DC controls AC DC controls DC

HHG1D-1/032F-22 (SSR-DA)
HHG1D-1/032F-38 (SSR-DA)
HHG1D-0/032F-20 (SSR-DD)



Control voltage	3-32VDC
Control current	6-25mA
Load voltage	22: 24-240VAC 38: 24-440VAC 20: 12-200VDC
Load current	5A (with heat dissipation plate)
On-state voltage drop	DC ≤ 1.2V AC ≤ 1.6VAC
On-off time	DC ≤ 5ms AC ≤ 10ms
Off-state leakage current	DC ≤ 5mA AC ≤ 10mA
Dielectric strength	≥ 1500VAC
Ambient temp.	-30~80°C
Dimension	43×12×34mm
Installation form	Single line direct plug-in
Instruction	Installed next to well ventilated heat dissipation window

DC controls AC DC controls DC

HHG1D-0/032F-06 1A/2A(SSR-DD)
HHG1D-1/032F-22/38 1A/2A(SSR-DA)



Control voltage	3-32VDC
Control current	5-20mA
Load voltage	06: 5-60VDC 22: 24-240VAC 38: 24-440VAC
Load current	1A, 2A
On-state voltage drop	DC ≤ 1.2V AC ≤ 1.6VAC
On-off time	DC ≤ 5ms AC ≤ 10ms
Off-state leakage current	DC ≤ 5mA AC ≤ 10mA
Dielectric strength	≥ 1500VAC
Ambient temp.	-30~80°C
Dimension	25×7×20mm
Installation form	Single line direct plug-in
Instruction	Installed next to well ventilated heat dissipation window

DC controls AC DC controls DC

HHG1-1/032F-22 (SSR-DA)
HHG1-1/032F-38 (SSR-DA)
HHG1-0/032F-20 (SSR-DD)



Control voltage	3-32VDC
Control current	6-25mA
Load voltage	22: 24-240VAC 38: 24-440VAC 20: 12-200VDC
Load current	1A
On-state voltage drop	DC ≤ 1.2V AC ≤ 1.6VAC
On-off time	DC ≤ 5ms AC ≤ 10ms
Off-state leakage current	DC ≤ 5mA AC ≤ 10mA
Dielectric strength	≥ 1500VAC
Ambient temp.	-30~80°C
Dimension	32.5×17.5×18.5mm
Installation form	Dual line direct plug-in
Instruction	Installed next to well ventilated heat dissipation window

**DC controls AC
DC controls DC**

HHG1-1/032F-22 (SSR-DA)
 HHG1-1/032F-38 (SSR-DA)
 HHG1-0/032F-20 (SSR-DD)



Control voltage	3-32VDC
Control current	6-25mA
Load voltage	22: 24-240VAC 38: 24-440VAC 20: 12-200VDC
Load current	2A, 3A, 4A
On-state voltage drop	DC ≤ 1.2V AC ≤ 1.6VAC
On-off time	DC ≤ 5ms AC ≤ 10ms
Off-state leakage current	DC ≤ 5mA AC ≤ 10mA
Dielectric strength	≥ 1500VAC
Ambient temp.	-30~80°C
Dimension	34×26.5×18mm
Installation form	Dual line plug-in
Instruction	Installed next to well ventilated heat dissipation window

**DC controls AC
DC controls DC**

HHG63-0/032F-20(SSR-DD)
 HHG63-1/032F-22/38(SSR-DA)
 Adaptive socket P69F05E/P69F05A1



New type

Control voltage	3-32VDC
Control current	5-25mA
Load voltage	22: 24-240VAC 38: 24-440VAC 20: 12-200VDC
Load current	5A (aluminum shell)
On-state voltage drop	DC ≤ 1.2V AC ≤ 1.6V
On-off time	DC ≤ 5ms AC ≤ 10ms
Off-state leakage current	DC ≤ 5mA AC ≤ 10mA
Dielectric strength	≥ 1500VAC
Ambient temp.	-30~80°C
Dimension	28.8×12.8×38.5mm
Installation form	Dual in-line insertion and rail installation
Instruction	Installed next to well ventilated heat dissipation window

**DC controls AC
DC controls DC**

HHG1-1/032F-22 (SSR-DA)
 HHG1-1/032F-38 (SSR-DA)
 HHG1-0/032F-20 (SSR-DD)



Control voltage	3-32VDC
Control current	6-25mA
Load voltage	22: 24-240VAC 38: 24-440VAC 20: 12-200VDC
Load current	5A
On-state voltage drop	DC ≤ 1.2V AC ≤ 1.6VAC
On-off time	DC ≤ 5ms AC ≤ 10ms
Off-state leakage current	DC ≤ 5mA AC ≤ 10mA
Dielectric strength	≥ 1500VAC
Ambient temp.	-30~80°C
Dimension	42×31×20mm
Installation form	Dual line direct plug-in
Instruction	Installed next to well ventilated heat dissipation window

Dual output solid-state relay

HHG68-0/032F-20 1-5A-2 (SSR-DD)(DC controls DC)
 HHG68-1/032F-22, 38 1-5Z-2 (SSR-DA)(DC controls AC)



New type

Control voltage	3-32VDC
Control current	Each circuit < 5-25mA
Load voltage	24-240VAC 24-440VAC 12-200VDC
Load current	1A, 2A, 3A, 4A, 5A (dual output) aluminum shell
On-state voltage drop	DC ≤ 1.2V AC ≤ 1.5V
On-off time	DC ≤ 5ms AC ≤ 10ms
Off-state leakage current	DC ≤ 5mA AC ≤ 10mA
Dielectric strength	≥ 1500VAC
Ambient temp.	-30~80°C
Installation form	Dual line direct plug-in and DIN rail installation
Dimension	27×21×39.5mm
Instruction	Installed next to well ventilated heat dissipation window

**DC controls AC
DC controls DC**

HHG62-1/032F-22(SSR-DA)
 HHG62-1/032F-38(SSR-DA)
 HHG62-0/032F-20(SSR-DD)
 Adaptive socket RX78624



Control voltage	3-32VDC
Control current	5-25mA
Load voltage	22: 24-240VAC 38: 24-440VAC 20: 12-200VDC
Load current	1A, 2A, 3A, 4A
On-state voltage drop	DC ≤ 1.2V AC ≤ 1.6VAC
On-off time	DC ≤ 5ms AC ≤ 10ms
Off-state leakage current	DC ≤ 5ms AC ≤ 10ms
Dielectric strength	≥ 1500VAC
Ambient temp.	-30~80°C
Dimension	29×12.6×28mm
Installation form	Dual line direct plug-in and DIN rail installation
Instruction	Installed next to well ventilated heat dissipation window

Single output solid-state relay

HHG68-0/032F-06 3-8A-1 (SSR-DD)(DC controls DC)
 HHG68-1/032F-22, 38 3-8Z-1 (SSR-DA)(DC controls AC)



New type

Control voltage	3-32VDC
Control current	DA < 5-25mA DD < 7-45mA
Load voltage	24-240VAC 24-440VAC 5-60VDC
Load current	3A, 5A, 8A (single output) aluminum shell
On-state voltage drop	DC ≤ 1.2V AC ≤ 1.5V
On-off time	DC ≤ 5ms AC ≤ 10ms
Off-state leakage current	DC ≤ 5mA AC ≤ 10mA
Dielectric strength	≥ 1500VAC
Ambient temp.	-30~80°C
Installation form	Dual line direct plug-in and DIN rail installation
Dimension	27×21×39.5mm
Instruction	Installed next to well ventilated heat dissipation window

**DC controls AC
DC controls DC**

HHG63-0/032F-20(SSR-DD)
 HHG63-1/032F-22/38(SSR-DA)
 Adaptive socket P69F05E/P69F05A1



Control voltage	3-32VDC
Control current	5-25mA
Load voltage	22: 24-240VAC 38: 24-440VAC 20: 12-200VDC
Load current	1A, 2A, 3A, 4A
On-state voltage drop	DC ≤ 1.2V AC ≤ 1.6VAC
On-off time	DC ≤ 5ms AC ≤ 10ms
Off-state leakage current	DC ≤ 5mA AC ≤ 10mA
Dielectric strength	≥ 1500VAC
Ambient temp.	-30~80°C
Dimension	30.6×12.8×33mm
Installation form	Dual line direct plug-in and DIN rail installation
Instruction	Installed next to well ventilated heat dissipation window

**DC controls AC
(Small volume)**

HHG5-1/032F-22 (SSR-DA)
 HHG5-1/032F-38 (SSR-DA)



Control voltage	3-32VDC
Control current	6-25mA
Load voltage	22: 24-240VAC 38: 24-440VAC
Load current	5A, 10A, 15A
On-state voltage drop	≤ 1.6VAC
On-off time	≤ 10ms
Off-state leakage current	≤ 10mA
Dielectric strength	≥ 2500VAC
Ambient temp.	-30~80°C
Dimension	38.5×28.7×18mm
Installation form	Bolt installation
Instruction	A radiator must be installed for loads above 5A

RELAY SERIES

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RELAY SERIES

Single-phase solid-state relay (DC controls DC)

HHG1-0/032F-20(SSR-DD)
HHG1-0/032F-06(SSR-DD)



Control voltage	5-32VDC
Control current	10-45mA
Load voltage	20: 12-250VDC 06: 5-60VDC 20: 10A, 15A, 20A, 25A, 30A, 40A, 60A 06: 100A
Load current	
On-state voltage drop	≤ 1.2VDC
On-off time	≤ 5ms
Off-state leakage current	≤ 5mA
Dielectric strength	≥ 2000VAC
Ambient temp.	-30~80°C
Dimension	60×45×29mm
Installation form	Bolt installation
Instruction	A radiator must be installed for loads above 5A

Single-phase solid-state relay (DC controls AC)

HHG1-1/032F-22 (SSR-DA)
HHG1-1/032F-38 (SSR-DA)



Control voltage	3-32VDC
Control current	6-25mA
Load voltage	22: 24-240VAC 38: 24-440VAC
Load current	10A, 15A, 20A, 25A, 30A, 40A, 60A, 80A, 100A
On-state voltage drop	≤ 1.6VAC
On-off time	≤ 10ms
Off-state leakage current	≤ 10mA
Dielectric strength	≥ 2500VAC
Ambient temp.	-30~80°C
Dimension	60×45×29mm
Installation form	Bolt installation
Instruction	A radiator must be installed for loads above 5A; A fan of strong cooling or water cooling must be added for loads above 80A

Single-phase solid-state relay (AC controls AC)

HHG1-1/250F-22 (SSR-AA)
HHG1-1/250F-38(SSR-AA)



Control voltage	90-250VAC
Control current	6-20mA
Load voltage	22: 24-240VAC 38: 24-440VAC
Load current	10A, 15A, 20A, 25A, 30A, 40A, 60A, 80A, 100A
On-state voltage drop	≤ 1.6VAC
On-off time	≤ 10ms
Off-state leakage current	≤ 10mA
Dielectric strength	≥ 2500VAC
Ambient temp.	-30~80°C
Dimension	60×45×29mm
Installation form	Bolt installation
Instruction	A radiator must be installed for loads above 5A; A fan of strong cooling or water cooling must be added for loads above 80A

Dual control solid-state relay (DC controls AC)

HHG1-2/032F-38 (SSR-DA)



Control voltage	3-32VDC
Control current	Single circuit < 15mA
Load voltage	38: 24-440VAC
Load current	10A, 15A, 20A, 25A, 30A, 40A(single-circuit)
On-state voltage drop	≤ 1.6VAC
On-off time	≤ 10ms
Off-state leakage current	≤ 10mA
Dielectric strength	≥ 2500VAC
Ambient temp.	-30~80°C
Dimension	57×44×30mm
Installation form	Bolt installation
Instruction	A radiator must be installed for loads above 5A

DC controls AC (Anti-interference type)

HHG1M-1/032F-22(SSR-DA)
HHG1M-1/032F-38(SSR-DA)



Control voltage	3-32VDC
Control current	6-25mA
Load voltage	22: 24-240VAC 38: 24-440VAC
Load current	10A, 15A, 20A, 25A, 30A, 40A, 60A, 80A, 100A
On-state voltage drop	≤ 1.6VAC
On-off time	≤ 10ms
Off-state leakage current	≤ 10mA
Dielectric strength	≥ 2500VAC
Ambient temp.	-30~80°C
Dimension	60×45×29mm
Installation form	Bolt installation
Instruction	A radiator must be installed for loads above 5A; A fan of strong cooling or water cooling must be added for loads above 80A

Three-phase solid-state relay (DC controls AC)

HHG1-3/032F-38 (SSR-DA)



Control voltage	3-32VDC
Control current	16-30mA
Load voltage	24-440VAC
Load current	10A, 15A, 20A, 25A, 30A, 40A, 60A, 80A, 100A, 120A
On-state voltage drop	≤ 1.6VAC
On-off time	≤ 10ms
Off-state leakage current	≤ 10mA
Dielectric strength	≥ 2500VAC
Ambient temp.	-30~80°C
Dimension	106×75×40mm
Installation form	Bolt installation
Instruction	A radiator must be installed for loads above 5A; A fan of strong cooling or water cooling must be added for loads above 80A

DC controls AC (Single-phase thyristor anti-parallel)

HHG1H-1/032F-38(SSR-DA)
HHG1H-1/032F-120(SSR-DA)



Control voltage	3-32VDC
Control current	6-25mA
Load voltage	22: 24-440VAC 38: 40-1200VAC
Load current	60A, 80A, 100A, 120A
On-state voltage drop	≤ 1.6VAC
On-off time	≤ 10ms
Off-state leakage current	≤ 10mA
Dielectric strength	≥ 2500VAC
Ambient temp.	-30~80°C
Dimension	60×45×29mm
Installation form	Bolt installation
Instruction	A radiator must be installed for loads above 5A; A fan of strong cooling or water cooling must be added for loads above 80A

Three-phase solid-state relay (AC controls AC)

HHG1-3/250F (SSR-AA)



Control voltage	90-250VAC
Control current	8-30mA
Load voltage	24-440VAC
Load current	10A, 15A, 20A, 25A, 30A, 40A, 60A, 80A, 100A, 120A
On-state voltage drop	≤ 1.6VAC
On-off time	≤ 10ms
Off-state leakage current	≤ 10mA
Dielectric strength	≥ 2500VAC
Ambient temp.	-30~80°C
Dimension	106×75×40mm
Installation form	Bolt installation
Instruction	A radiator must be installed for loads above 5A; A fan of strong cooling or water cooling must be added for loads above 80A

**DC controls AC
(Three-phase forward and reverse)**

HHG1F-3/005F-38(SSR-DA)
 HHG1F-3/024F-38(SSR-DA)



Control voltage	5VDC/12-32VDC
Control current	≤ 50mA
Load voltage	24-440VAC
Load current	10A, 15A, 20A, 25A, 30A, 40A, (60A, 80A enhanced type)
On-state voltage drop	≤ 1.6VAC
On-off time	Input terminal forward and reverse interlock delay of 100ms
Off-state leakage current	≤ 10mA
Dielectric strength	≥ 2500VAC
Ambient temp.	-30~80°C
Dimension	106×75×41mm
Installation form	Bolt installation
Instruction	A radiator must be installed for loads above 5A; A fan of strong cooling or water cooling must be added for loads above 80A

**DC controls AC
(Three-phase forward and reverse)**

HHG1F-3/024F-38(common-anode)



Control voltage	12-32VDC
Control current	≤ 60mA
Load voltage	24-440VAC
Load current	10A, 15A, 20A, 25A, 30A, 40A
On-state voltage drop	≤ 1.6VAC
On-off time	Input terminal forward and reverse interlock delay of 100ms
Off-state leakage current	≤ 10mA
Dielectric strength	≥ 2500VAC
Ambient temp.	-30~80°C
Dimension	106×75×32mm
Installation form	Bolt installation
Instruction	A radiator must be installed for loads above 5A

**DC controls AC
(Industrial grade)**

HHG1S-1/032F-120
(SSR-DA) water-cooled type



Control voltage	3-32VDC
Control current	5-25mA
Load voltage	120: 60-1200VAC
Load current	500A, 600A, 800A, 1000A
On-state voltage drop	< 1.6VAC
On-off time	≤ 10ms
Off-state leakage current	≤ 10mA
Dielectric strength	≥ 2500VAC
Ambient temp.	-30~80°C
Dimension	500-600A: 150×53×68mm 800A: 160×63×75mm 1000A: 185×66×81mm
Installation form	Bolt installation
Instruction	A radiator must be installed for loads above 5A; A fan of strong cooling or water cooling must be added for loads above 80A

**DC controls AC
(Industrial grade)**

HHG1A-1/032F-38(SSR-DA)
 HHG1C-1/032F-120(SSR-DA)



Control voltage	3-32VDC
Control current	5-25mA
Load voltage	38: 40-440VAC 120: 60-1200VAC
Load current	60A, 80A, 100A, 120A, 150A
On-state voltage drop	≤ 1.6VAC
On-off time	≤ 10ms
Off-state leakage current	≤ 10mA
Dielectric strength	≥ 2500VAC
Ambient temp.	-30~80°C
Dimension	94×25×38mm
Installation form	Bolt installation
Instruction	A radiator must be installed for loads above 5A; A fan of strong cooling or water cooling must be added for loads above 80A

**DC controls AC
(Industrial grade)**

HHG1A-1/032F-38(SSR-DA)
 HHG1C-1/032F-120(SSR-DA)



Control voltage	3-32VDC
Control current	5-25mA
Load voltage	38: 40-440VAC 120: 60-1200VAC
Load current	200A, 250A, 300A, 350A, 400A
On-state voltage drop	≤ 1.6VAC
On-off time	≤ 10ms
Off-state leakage current	≤ 10mA
Dielectric strength	≥ 2500VAC
Ambient temp.	-30~80°C
Dimension	(200-350A)94×34×43mm (400A)96×39×43mm
Installation form	Bolt installation
Instruction	A radiator must be installed for loads above 5A; A fan of strong cooling or water cooling must be added for loads above 80A

**DC controls AC
(Industrial grade)**

HHG1K-1/032F-120
(SSR-DA) air-cooled type



Control voltage	3-32VDC
Control current	5-25mA
Load voltage	120: 60-1200VAC
Load current	500A, 600A, 800A, 1000A
On-state voltage drop	< 1.6VAC
On-off time	≤ 10ms
Off-state leakage current	≤ 10mA
Dielectric strength	≥ 2500VAC
Ambient temp.	-30~80°C
Dimension	500-600A: 115×53×60mm 800A: 125×63×70mm 1000A: 149×66×76mm
Installation form	Bolt installation
Instruction	A radiator must be installed for loads above 5A; A fan of strong cooling or water cooling must be added for loads above 80A