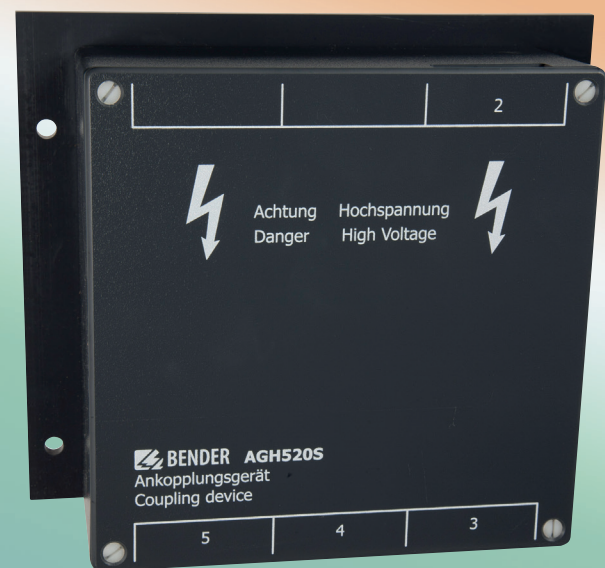


# Voltage Couplers

High voltage coupling equipment

For use with Bender ground fault detectors



# AGH150W-4

Voltage coupler for Bender ground fault detectors  
For DC systems up to 1760 VDC



AGH150W-4

## Technical data

### Insulation coordination acc. to IEC 60664-1

Rated insulation voltage	DC 1600 V
Rated impulse voltage/pollution degree	12 kV/3

### Voltage ranges

Nominal system voltage $U_n$	DC 0 - 1760 V
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### Other details

Shock resistance IEC 60068-2-27 (during operation)	15 g/11 ms
Bumping IEC 60068-2-29 (during transport)	40 g/6 ms
Vibration resistance IEC 60068-2-6 (during operation)	1 g/10 - 150 Hz
Vibration resistance IEC 60068-2-6 (during transport)	2 g/10 - 150 Hz
Ambient temperature (during operation)	- 10 °C - + 55 °C
Ambient temperature (during storage)	- 40 °C - + 70 °C
Climatic class acc. to DIN IEC 60721-3-3	3K5
Operating mode	continuous operation
Mounting	any position
Connection	flat terminals
Connection properties rigid/flexible	0.2 - 4 mm <sup>2</sup> /0.2 - 2.5 mm <sup>2</sup>
Degree of protection, internal components (DIN EN 60529)	IP 30
Degree of protection, terminals (DIN EN 60529)	IP 20
DIN rail mounting acc. to	DIN EN 60715/IEC 60715
Flammability class	UL94V-0
Operating manual	BP109001
Weight approx.	900 g

## Ordering Information

Type	Ordering No.
AGH150W-4	B 9801 8006

## Description

The AGH150W-4 extends the system voltage range of compatible Bender ground fault detectors up to 1760 VDC.

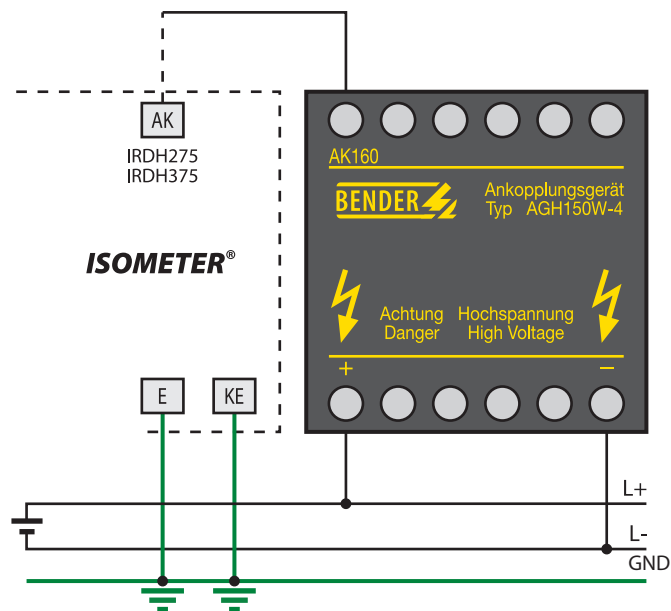
## Features

- Extends voltage range up to 1760 VDC for Bender ground fault detectors
- Compatible devices: IRDH275 / IRDH375

## Approvals

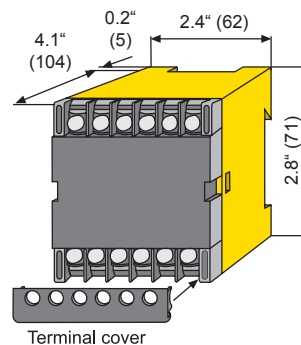


## Wiring



## Dimensions

Dimensions in inches (mm)



# AGH204S-4

**Voltage coupler for Bender ground fault detectors**  
**For AC systems up to 1600 VAC (1300 VAC for systems with AC/DC conversion)**



AGH204S

## Description

The AGH204S-4 extends the voltage capabilities of Bender ground fault detectors. For standard AC systems, the range is extended to 1600 VAC. For systems with AC/DC power conversion (such as rectifiers and variable frequency drives), it extends the range to 1300 VAC.

## Features

- Extends voltage range of Bender ground fault detectors up to 1600 VAC (standard AC systems) or 1300 VAC (for systems with AC/DC power conversion)
- Compatible devices: IR470LY / IRDH275 / IRDH375

## Approvals



## Technical data

### Insulation coordination acc. to IEC 60664-1

Rated insulation voltage AC	1500 V
Rated impulse voltage/pollution degree	12 kV/3

### Voltage ranges

Nominal system voltage $U_n$	AC, 3(N)AC 50 - 400 Hz 1650 V/0 - 1300 V
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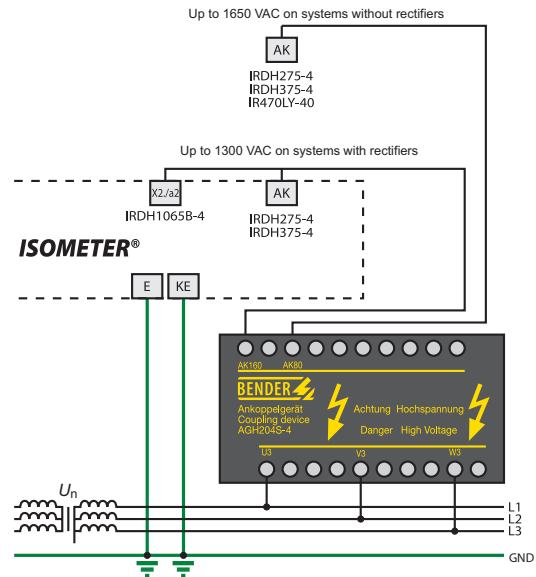
### Other details

Shock resistance IEC 60068-2-27 (during operation)	15 g/11 ms
Bumping IEC 60068-2-29 (during transport)	40 g/6 ms
Vibration resistance IEC 60068-2-6 (during operation)	1 g/10 - 150 Hz
Vibration resistance IEC 60068-2-6 (during transport)	2 g/10 - 150 Hz
Ambient temperature (during operation)	- 10 °C - + 55 °C
Ambient temperature (during storage)	- 40 °C - + 70 °C
Climatic class acc. to DIN IEC 60721-3-3	3K5
Operating mode	continuous operation
Mounting	any position
Connection	flat terminals
Connection properties rigid/flexible	0.2 - 4 mm <sup>2</sup> /0.2 - 2.5 mm <sup>2</sup>
Degree of protection, internal components (DIN EN 60529)	IP 30
Degree of protection, terminals (DIN EN 60529)	IP 20
Screw mounting	2 x M4
DIN rail mounting acc. to	DIN EN 60715/IEC 60715
Flammability class	UL94V-0
Operating manual	BP109002
Weight approx.	1350 g

## Ordering Information

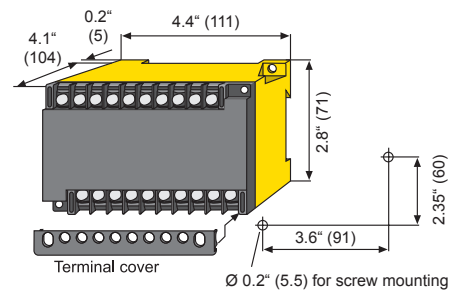
Type	Ordering No.
AGH204S-4	B 914 01

## Wiring



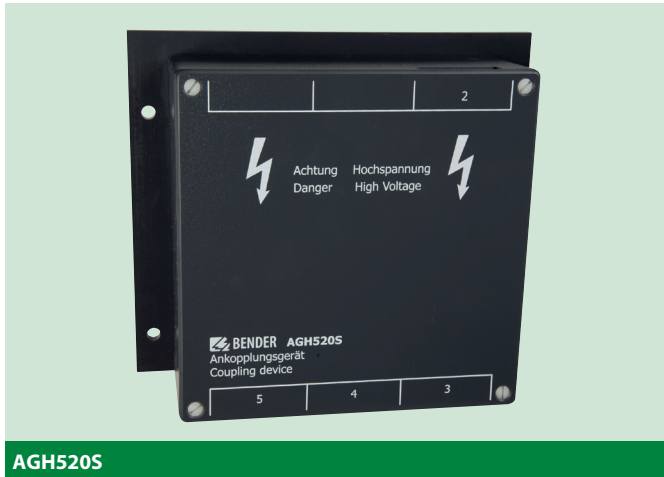
## Dimensions

Dimensions in inches (mm)



# AGH520S

Voltage coupler for Bender ground fault detectors  
For AC systems up to 7200 VAC



## Description

The AGH520S extends the system voltage range of compatible Bender ground fault detectors up to 7200 VAC.

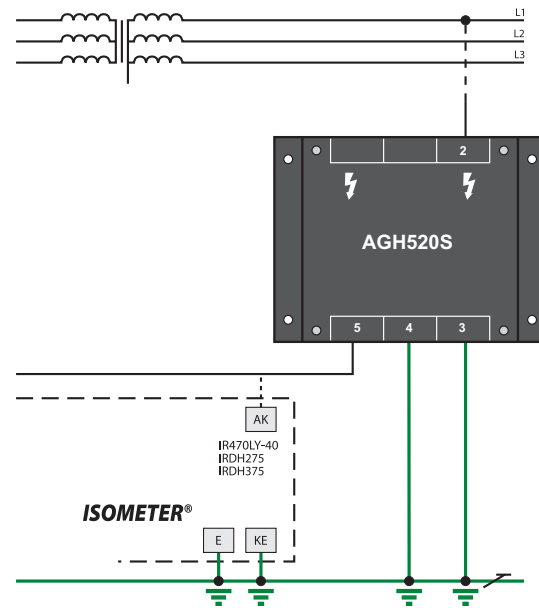
## Features

- Extends voltage range up to 7200 VAC for Bender ground fault detectors
- Compatible devices: IR470LY / IRDH275 / IRDH375

## Approvals



## Wiring



## Technical data

### Insulation coordination acc. to IEC 60664-1

Rated insulation voltage	AC 6.3 V
Rated impulse voltage/pollution degree	17 kV/3

### Voltage ranges

Nominal system voltage $U_n$	AC, 3(N)AC 0 - 7200 V
Rated frequency $f_n$	50 - 400 Hz

### General data

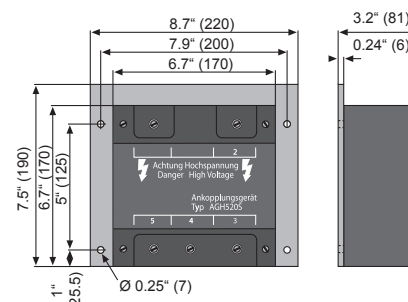
Shock resistance IEC 60068-2-27 (during operation)	15 g/11 ms
Bumping IEC 60068-2-29 (during transport)	40 g/6 ms
Vibration resistance IEC 60068-2-6 (during operation)	1 g/10 - 150 Hz
Vibration resistance IEC 60068-2-6 (during transport)	2 g/10 - 150 Hz
Ambient temperature (during operation)	- 10 °C - + 55 °C
Ambient temperature (during storage)	- 40 °C - + 70 °C
Climatic class acc. to DIN IEC 60721-3-3	3K5
Operating mode	continuous operation
Mounting	any position
Connection	screw-type terminals
Degree of protection, internal components (DIN EN 60529)	IP 64
Degree of protection, terminals (DIN EN 60529)	IP 20
Type of enclosure	resin-encapsulated block
Screw mounting	4 x M5
Flammability class	UL94V-0
Operating manual	BP109003
Weight approx.	4500 g

## Ordering Information

Type	Ordering No.
AGH520S	B 913 033

## Dimensions

Dimensions in inches (mm)





**AGH676S-4**

**Ordering Information**

Type	Ordering No.
AGH676S-4	B 913 055

**Description**

The AGH520S extends the system voltage range of compatible Bender ground fault detectors up to 12 kV AC.

**Features**

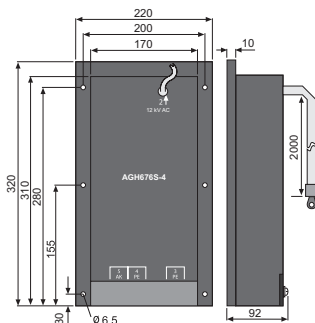
- Extends voltage range up to 12 kV AC for Bender ground fault detectors
- Compatible devices: IRDH275 / IRDH375

**Approvals**

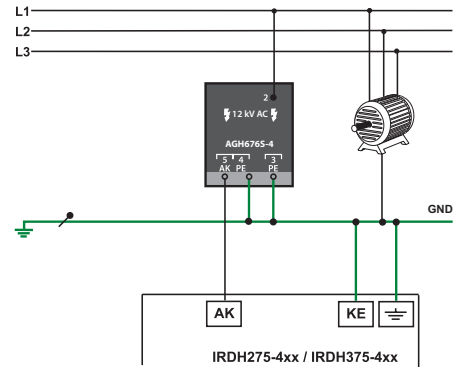


**Dimensions**

Dimensions in inches (mm)



**Wiring**



**Technical data**

**Insulation coordination acc. to IEC 61800-5-1**

Rated insulation voltage AC 12 kV

**Voltage test acc. to IEC 61800-5-1**

Type test	
Voltage impulse test	≥ AC 75 kV
AC voltage test	≥ AC 45 kV
Partial discharge test	≥ 16.5 kVeff

**Routine test**

AC voltage test, rate of increase < 2 kV/s AC 25 kV

**Voltage ranges**

Nominal system voltage Un	AC / 3(N)AC 0...12 kV
Nominal frequency fn	50...460 Hz
Internal DC resistance Ri	≥ 160 kΩ
Impedance Zi at 12 kV and 50 Hz	≥ 12 MΩ

**Environmental conditions**

Shock resistance IEC 60068-2-27 (during operation)	15 g/11 ms
Bumping IEC 60068-2-29 (during transport)	40 g/6 ms
Vibration resistance IEC 60068-2-6 (during operation)	1 g / 10...150 Hz
Vibration resistance IEC 60068-2-6 (during transport)	2 g / 10...150 Hz
Ambient temperature, during operation	-10...+55 °C
Storage temperature range	-40...+70 °C
Climatic class acc. to IEC 60721-3-3	3K5

**Connection**

Connection medium voltage	high-voltage cable (encapsulated on the device side)
Connection, flexible with ring terminal	M8
Connection terminals 3, 4, 5	screw terminals
Connection properties rigid/flexible	0.2...4 mm <sup>2</sup> /0.2...2.5 mm <sup>2</sup>

**Other**

Operating mode	continuous operation
Position	any position
Degree of protection, internal components (DIN EN 60529)	IP64
Degree of protection, terminals (DIN EN 60529)	IP20
Type of enclosure	resin-encapsulated block
Screw fixing	M5
Flammability class	UL94 V-0
Documentation number	D00096
Weight	≤ 8400 g



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