

## Coupling device AGH204S-4



# Coupling device AGH204S-4



## Product description

The coupling device AGH204S-4 is designed to extend the nominal voltage range of the ISOMETER® iso685... and IRDH... series to AC, 3(N)AC 0...1650/0...1300 V, 50...400 Hz.

The coupling device is connected to the system to be monitored according to the wiring diagram and connected to the terminal AK of the ISOMETER® by means of terminal AK...

## Approvals

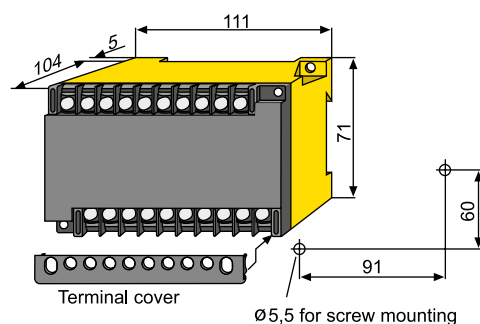


## Ordering information

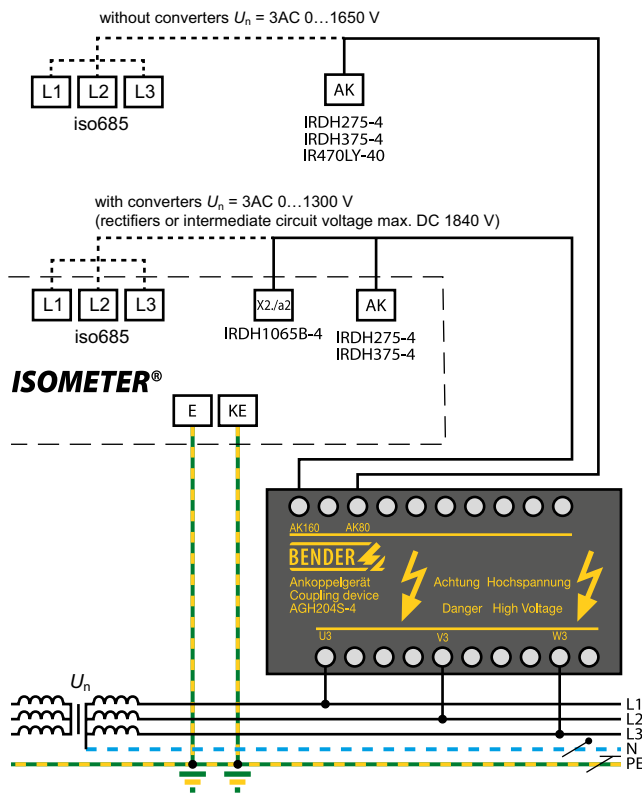
| Nominal system voltage $U_s$ | Type      | Art. No. |
|------------------------------|-----------|----------|
| AC                           | AGH204S-4 | B914013  |
| 0...1650 V/0...1300 V        |           |          |

## Dimension diagram X200

Dimensions in mm



## Wiring diagram



## Technical data

### Insulation coordination acc. to DIN EN 61800-5-1 (VDE 0160-105-1)

|                          |           |
|--------------------------|-----------|
| Rated insulation voltage | AC 1500 V |
|--------------------------|-----------|

### Voltage test acc. to DIN EN 61800-5-1 (VDE 0160-105-1)

|                                         |              |
|-----------------------------------------|--------------|
| Impulse voltage test (basic insulation) | ≥ AC 10.4 kV |
| AC voltage test (basic insulation)      | ≥ AC 5 kV    |
| Partial discharge test                  | ≥ 3 kV       |

### Voltage ranges

|                                                        |              |
|--------------------------------------------------------|--------------|
| Nominal system voltage $U_n$ (including DC components) | 0...1300 V   |
| Nominal system voltage $U_n$ (AC only)                 | 0...1650 V   |
| Nominal frequency $f_n$                                | 50...400 Hz  |
| Overvoltage category/rated impulse voltage             | III/≥10.4 kV |

### Internal DC resistance $R_i$

|                   |        |
|-------------------|--------|
| Coupling to AK80  | 80 kΩ  |
| Coupling to AK160 | 160 kΩ |

### Environment

|                                                            |                                                |
|------------------------------------------------------------|------------------------------------------------|
| Shock resistance IEC 60068-2-27 (device in operation)      | 15 g/11 ms                                     |
| Bumping IEC 60068-2-29 (transport)                         | 40 g/6 ms                                      |
| Vibration resistance IEC 60068-2-6 (device in operation)   | 1 g/10...150 Hz                                |
| Vibration resistance IEC 60068-2-6 (transport)             | 2 g/10...150 Hz                                |
| Ambient temperature (during operation)                     | -10...+55 °C                                   |
| Ambient temperature for UL applications (during operation) | -10...+45 °C                                   |
| Ambient temperature (during storage)                       | -40...+70 °C                                   |
| Climatic class acc. to DIN IEC 60721-3-3                   | 3K5 (except condensation and formation of ice) |

### Connection

|                                                             |                                                    |
|-------------------------------------------------------------|----------------------------------------------------|
| Connection                                                  | screw-type terminals                               |
| Connection properties                                       |                                                    |
| rigid/flexible                                              | 0.2...4 mm <sup>2</sup> /0.2...2.5 mm <sup>2</sup> |
| Tightening torque                                           | 0.5 Nm                                             |
| Conductor sizes (AWG)                                       | 24...12                                            |
| Length of the connecting lead between the ISOMETER® and AGH | ≤ 0.5 m                                            |

### Other

|                                                          |                         |
|----------------------------------------------------------|-------------------------|
| Operating mode                                           | continuous operation    |
| Mounting                                                 | any position            |
| Degree of protection, internal components (DIN EN 60529) | IP30                    |
| Degree of protection, terminals (DIN EN 60529)           | IP20                    |
| Type of enclosure                                        | X112, free from halogen |
| Screw mounting                                           | 2 x M4                  |
| DIN rail mounting                                        | DIN EN 60715/IEC 60715  |
| Flammability class                                       | UL94 HB                 |
| Documentation number                                     | D00094                  |
| Weight                                                   | ≤ 1350 g                |



**Bender GmbH & Co. KG**

P.O. Box 1161 • 35301 Gruenberg • Germany  
Londorfer Strasse 65 • 35305 Gruenberg • Germany  
Tel.: +49 6401 807-0 • Fax: +49 6401 807-259  
E-Mail: [info@bender.de](mailto:info@bender.de) • [www.bender.de](http://www.bender.de)



**BENDER Group**

# Contact Information



Solutions for industries  
and automation

---

## Quad Industry GmbH

Barmer Str. 62a, 42899, Remscheid,  
Germany

Tel: +49 (30) 994-04-988

Fax: +49 (30) 994-04-987

Mail: [sales@quad-instruments.com](mailto:sales@quad-instruments.com)  
[services@quad-instruments.com](mailto:services@quad-instruments.com)



[www.quad-instruments.com/contacts](http://www.quad-instruments.com/contacts)



[www.quad-instruments.com/services](http://www.quad-instruments.com/services)

---

We reserve the right to make technical changes or modify the contents of this document without prior notice. With regard to purchase orders, the agreed particulars shall prevail. ABB does not accept any responsibility whatsoever for potential errors or possible lack of information in this document.

We reserve all rights in this document and in the subject matter and illustrations contained therein. Any reproduction, disclosure to third parties or utilization of its contents – in whole or in parts – is forbidden without prior written consent of ABB.

© Copyright 2018 ABB.

All rights reserved.