

Network and Wireless Solutions

ISbus fieldbus technology Yokogawa bus-Carrier

for Zone 2

9419/08F-YO1-01A5 Art. No. 221454



- Time- and cost-saving installation on DIN rails or mounting plates
- High availability thanks to redundant auxiliary power supply with signalling contact and separate signalling contact for segment errors
- Special slot for 9415 series DCM for online transmission of physical layer diagnostics

MY R. STAHL 9419B



9419 series bus carriers allow 9412 series fieldbus power supplies for FF H1 segments to be installed quickly and securely. Variants are available for eight segments with simplex supply and for four or eight segments with redundant supply.

Connectors are integrated in this version to connect the AKB336 system cable for Yokogawa ALF111 host assemblies.

Technical Data

| Explosion Protection | |
|--|--|
| Application range (zones) | 2 |
| IECEX gas certificate | IECEX BVS 09.0042X |
| IECEX gas explosion protection | Ex nA nC IIC T4 Gc |
| ATEX gas certificate | BVS 09 ATEX E 100 X |
| ATEX gas explosion protection | Ⓔ II 3 G Ex nA nC IIC T4 Gc |
| FMus certificate | 3026646 |
| cFM certificate | 3026646C |
| Marking cFMus | Nonincendive for, Class I, Div. 2, Groups A,B,C,D; T4, at Ta = 70 °C Class I, Zone 1, AEx/Ex nA nC IIC T4 , at Ta = 70 °C 9419 6 031 001 1 |
| Certificates | ATEX (BVS), Canada (FM), IECEX (BVS), USA (FM) |
| Electrical Data | |
| Version | Yokogawa bus-Carrier |
| Connection electrical data | To Yokogawa ALF111 FF H1 hosts |
| Trunk supply | Simplex |
| Number of segments | 8 |
| Number of slots | 8 FPS + 1 DCM |
| Error detection Power Fail (pri / red) | Contact "PF" (35 V/100 mA) closed in go-state |
| Error detection Diagnostic | Contact "Dia" (35 V/100 mA) closed in go-state |
| Auxiliary Power | |
| Nominal voltage V_{nom} | 24 V DC |
| Auxiliary power voltage range | 19 to 32 V DC |
| Voltage range residual ripple | $\leq 3,6 V_{ss}$ |
| Current consumption | Depending on support equipment |
| Redundant supply | Yes, diode-decoupled |
| Polarity reversal protection | Yes |

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Auxiliary Power

| | |
|-------------------|------------------------------------|
| Power dissipation | Depending on the carrier equipment |
|-------------------|------------------------------------|

Device Specific Data

| | |
|---|--|
| Auxiliary power operating condition LED | "pri" LED, green "red" LED, green |
| DIP switch diagnostics | Diagnostics activated Diagnostics deactivated |
| DIP switch redundancy | Redundant auxiliary power monitoring activated Redundant auxiliary power monitoring deactivated |

Ambient Conditions

| | |
|-------------------------------|--|
| Ambient temperature °C | -20 °C ... +70 °C |
| Ambient temperature °F | -4 °F ... +158 °F |
| Storage temperature °C | -40 °C ... +80 °C |
| Storage temperature °F | -40 °F ... +176 °F |
| Max. relative humidity | 95% (without condensation) |
| Max. operating altitude | < 2000 m |
| Max. operating altitude, ft | < 6562 ft |
| Electromagnetic compatibility | Tested to the following standards and regulations: EN 61326 (IEC/EN 61000-4-1 to 61000-4-6 and 61000-4-11), NAMUR NE21 |
| Note | For further information, see the 9412 type operating instructions |

Mechanical Data

| | |
|---|---|
| Connection type auxiliary power | 2-pole (+, -) on bus-Carrier (pri/red) |
| Connection type error message contacts | 2-pole (+, -) on bus-Carrier (PF/Dia) |
| Connection type Trunk | 2-pole (+, -) on bus-Carrier 3-pole (+, -, shield) on 9412 series fieldbus power supply |
| Connection type Host / red. Host | System connector for Yokogawa AKB336 system cable |
| Connection type diagnostics | 26-pole ribbon cable on 9415 series diagnostics communication module |
| Connection type cable shields | Shield bus with clamping bracket |
| Connection earthing | Via earth connection terminal |
| Rigid single-wire connection | Trunk 0.2 to 2.5 mm ² Host 0.2 to 2.5 mm ² Auxiliary power 0.2 to 2.5 mm ² Fault message contact 0.2 to 2.5 mm ² Earthing 0.2 to 2.5 mm ² |
| Flexible single-wire connection | Trunk 0.2 to 2.5 mm ² Host 0.2 to 2.5 mm ² Auxiliary power 0.2 to 2.5 mm ² Fault message contact 0.2 to 2.5 mm ² Earthing 0.2 to 2.5 mm ² |
| Flexible single-wire connection with sleeve | Trunk 0.25 to 2.5 mm ² Host 0.25 to 2.5 mm ² Auxiliary power 0.25 to 2.5 mm ² Fault message contact 0.25 to 2.5 mm ² Earthing 0.25 to 2.5 mm ² |
| Two-core connection, flexible | Trunk 0.2 to 1.5 mm ² Host 0.2 to 1.5 mm ² Auxiliary power 0.2 to 1.5 mm ² Fault message contact 0.2 to 1.5 mm ² Earthing 0.2 to 1.5 mm ² |

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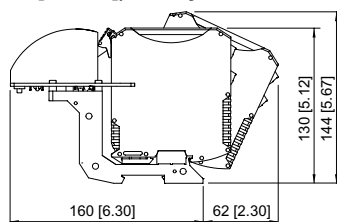
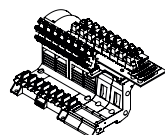
Mechanical Data

| | |
|---|---|
| Two-core connection, rigid | Trunk 0.2 to 1 mm ² Host 0.2 to 1 mm ² Auxiliary power 0.2 to 1 mm ² Fault message contact 0.2 to 1 mm ² Earthing 0.2 to 1 mm ² |
| Two-core connection, flexible with sleeve | Trunk 0.25 to 1 mm ² Host 0.25 to 1 mm ² Auxiliary power 0.25 to 1 mm ² Fault message contact 0.25 to 1 mm ² Earthing 0.25 to 1 mm ² |
| Degree of protection (IP) (IEC 60529) | IP00 IP20 terminals |
| Module enclosure | PA 6.6 |
| Fire resistance (UL 94) | V0 |
| Pollutant class | Corresponds to G3 |
| Width | 252 mm |
| Width, inches | 9.92 in |
| Length | 160 mm |
| Length in inches | 6.3 in |
| Depth of cut-out | 129 mm |
| Mounting depth in inches | 5.08 in |
| Weight | 600 g |
| Weight | 1.32 lb |

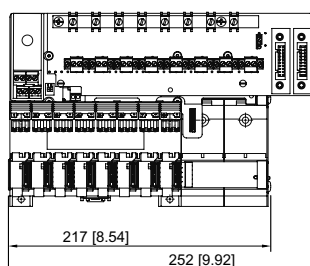
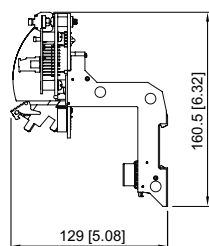
Mounting / Installation

| | |
|---------------------------|---|
| Mounting type | on NS 35/15 DIN rail (DIN EN 60715) On mounting plate (4 x M5 screw) |
| Tightening torque | 2.6 Nm |
| Mounting orientation note | For further information, see the 9412 type operating instructions |
| Mounting orientation | Horizontal Vertical |

Dimensional Drawings (All Dimensions in mm [inches]) – Subject to Alterations



9419 bus-Carrier with modules



9419/08F bus-Carrier for 8 fieldbus segments

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Accessories

Diagnostics communication module 9415

Art. No.



Transmission of diagnostic data for up to eight segments via FF H1

207903

Fieldbus power supply

Art. No.



Fieldbus supply, diagnostics and adjustable warning level

200588

Spring clamp clip

Art. No.



Spring clamp clip KLBÜ C01

113509

We reserve the right to make alterations to the technical data, dimensions, weights, designs and products available without notice. The illustrations cannot be considered binding.