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	Ex 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 ... 32 V DC
Voltage range residual ripple	≤ 3,6 Vss
Current consumption	Depending on support equipment
Redundant supply	Yes, diode-decoupled
Polarity reversal protection	Yes

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 mm² Host 0.2 to 2.5 mm² Auxiliary power 0.2 to 2.5 mm² Fault message contact 0.2 to 2.5 mm² Earthing 0.2 to 2.5 mm²
Flexible single-wire connection	Trunk 0.2 to 2.5 mm² Host 0.2 to 2.5 mm² Auxiliary power 0.2 to 2.5 mm² Fault message contact 0.2 to 2.5 mm² Earthing 0.2 to 2.5 mm²
Flexible single-wire connection with sleeve	Trunk 0.25 to 2.5 mm² Host 0.25 to 2.5 mm² Auxiliary power 0.25 to 2.5 mm² Fault message contact 0.25 to 2.5 mm² Earthing 0.25 to 2.5 mm²
Two-core connection, flexible	Trunk 0.2 to 1.5 mm² Host 0.2 to 1.5 mm² Auxiliary power 0.2 to 1.5 mm² Fault message contact 0.2 to 1.5 mm² Earthing 0.2 to 1.5 mm²

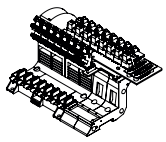
Mechanical Data

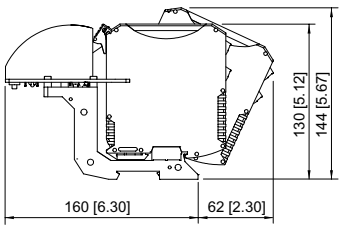
Two-core connection, rigid	Trunk 0.2 to 1 mm² Host 0.2 to 1 mm² Auxiliary power 0.2 to 1 mm² Fault message contact 0.2 to 1 mm² Earthing 0.2 to 1 mm²
Two-core connection, flexible with sleeve	Trunk 0.25 to 1 mm² Host 0.25 to 1 mm² Auxiliary power 0.25 to 1 mm² Fault message contact 0.25 to 1 mm² Earthing 0.25 to 1 mm²
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

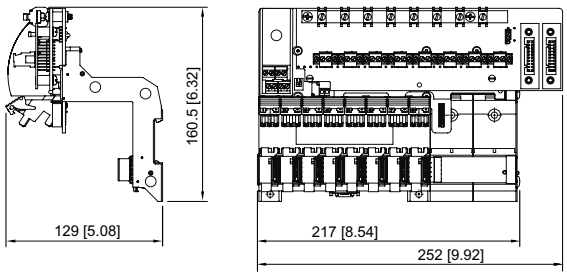
Mounting type	on NS 35/15 DIN rail (DIN EN 60715) On mounting plate (4 x M5 screw)
Tightening torque	2.6 N · m
Mounting orientation note	For further information, see the 9412 type operating instructions
Mounting orientation	Horizontal Vertical

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





9419 bus-Carrier with modules



9419/08F bus-Carrier for 8 fieldbus segments

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