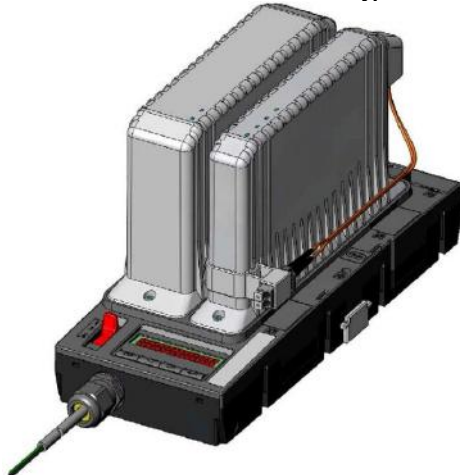


The copying, distribution and utilization of this document as well as the communication of its contents to others without expressed authorization is prohibited. Offenders will be held liable for the payment of damages. All rights reserved in the event of the grant of a patent, utility model or ornamental design registration.

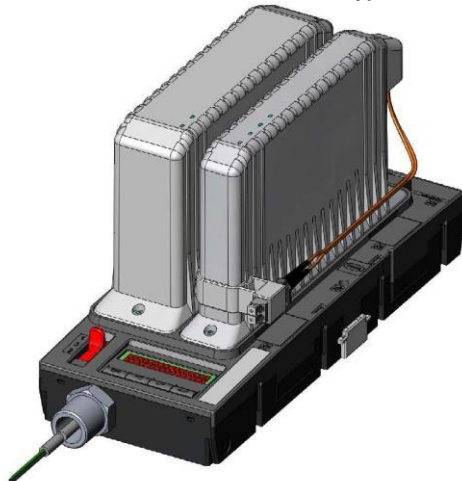
Class I, DIV 2 / Zone 1 Installation
for connection to I/O Modules located in
Class I, II, III, Division 2, Group A-G,
or Class I, Zone 1, Group IIC/IIB
Hazardous (Classified) Locations

Division 2/Zone 1 installation with Socket type 9492/12-11-:**



Class I, DIV 1 / Zone 1 Installation
for connection to I/O Modules located in
Class I, II, III, Division 1, Group A-G,
or Class I, Zone 1, Group IIC/IIB
Hazardous (Classified) Locations

Division 1/Zone 1 installation with Socket type 9492/13-13-:**



- Ethernet CPU Module 9441/12-0*-0 and Power Module 9444/12-11: with Socket 9492/12-11-** are Explosion-proof modules for installation in Class I, Division 2, Group A-D or Class I, Zone 1, Group IIC/IIB areas;
- with Socket 9492/13-13-** are Explosion-proof modules for installation in Class I, Division 1, Group A-D or Class I, Zone 1, Group IIC/IIB areas;

Both types providing intrinsically safe BusRail and RS485-IS Service Bus interfaces according to NEC Article 504/505 or Canadian Electrical Code, CSA C22. As well as an optical inherently safe Ethernet interface for data and communication.

Safety data for wiring configurations to the left are as follows:

Power Supply (input/primary):

Conduit (9492/13-13-**) or type of protection Ex e (9492/12-11-**):

Power Module Type 9444/12-11
 $U_{in} = 24 \text{ V DC (20 V ... 35 V DC)}$
 $I_{in} = 3.0 \text{ A at 24 V DC}$
 $U_m = 253 \text{ V}$

RS 485- IS Service bus interface, connections X9:

CL I, II, III, DIV 1, A-G / CL I Zone 0, GP IIC/IIB:

$V_{OC} = \pm 3.7 \text{ V}$ $I_{SC} = 134 \text{ mA}$,
 $P_O = 124 \text{ mW}$ $V_{max} = \pm 4.2 \text{ V}$
 $C_a = 1000 \mu\text{F}$ $L_a = 1.9 \text{ mH}$

Optical Ethernet Interface X10:

Maximum radiated optical power: $P_o \leq 15 \text{ mW}$

Module 1 - 8 over BusRail:

Connect BusRail 9494 either at right hand side BusRail socket X5 or at top end BusRail socket X6. Leave cover at that connector not in use. CL I, DIV 1, A-D / CL I Zone 1, GP IIC/IIB:

Power Supply (output/secondary):

Maximum value: $V_{OC} = 26.2 \text{ V}$
 The circuit requires external current limitation which is provided by the system

Address and data bus (secondary):

Maximum values: $V_{OC} = 6.51 \text{ V}$
 $I_{SC} = 110 \text{ mA}$
 $P_O = 179 \text{ mW}$
 $V_{max} = 6.6 \text{ V}$

Linear characteristic curve, the effective internal capacitance and inductance are negligibly small; $C_a = 25 \mu\text{F}$, $L_a = 2.5 \text{ mH}$

Follow the notes on the next page.

Connection allocation

CPU Module 9441/12-0*-0 and Power Module 9444/12-11
 for Division 1 / Zone 1 installation with Socket type 9492/13-13-**
 for Division 2 / Zone 1 installation with Socket type 9492/12-11-**

Power supply input (fixed Cable at the socket)

Power Module	Power supply input	Function	Wire no.
9444/12-11	24 V DC (20 V ... 35 V DC)	+	1 (black)
		-	2 (black)
		Ground	(yellow-green)

Servicebus interface (X9 d-Sub connector at the sockets)

Signal	Description	Pin
B+; RXD /TXD-P	Received / transmitted data P, wire B	3
U-	Bus termination ground	5
U+	Bus termination plus	6
A-; RXD / TXD-N	Received / transmitted data N, wire A	8
	Not connected	1,2,4,7,9

Optical Ethernet Interface (X10 at the CPU Module)

TD-A	Transmitter data
RD-A	Receiver data

Weitergabe sowie Vervielfältigung dieses Dokuments, Verwertung und Mitteilung seines Inhalts sind verboten, soweit nicht ausdrücklich gestattet. Zuwiderhandlungen verpflichten zu Schadensersatz. Alle Rechte für den Fall der Patent-, Gebrauchsmuster- oder Geschmacksuntereintrag vorbehalten.

Version	Date	Name	2016	Date	Name	Certification drawing		Scale	
			Drawn by	03.03.	Bagusch	CPU Module, Type 9441/12-0*-0 Power Module, Type 9444/12-11 Socket, Type 9492/13-13-** or 9492/12-11-**		none	
			Checked		Kaiser			Sheet	1 of 2
								Agency	FM
						9441 6 031 001 1			
						Rep. f.	Rep. t.	A4	

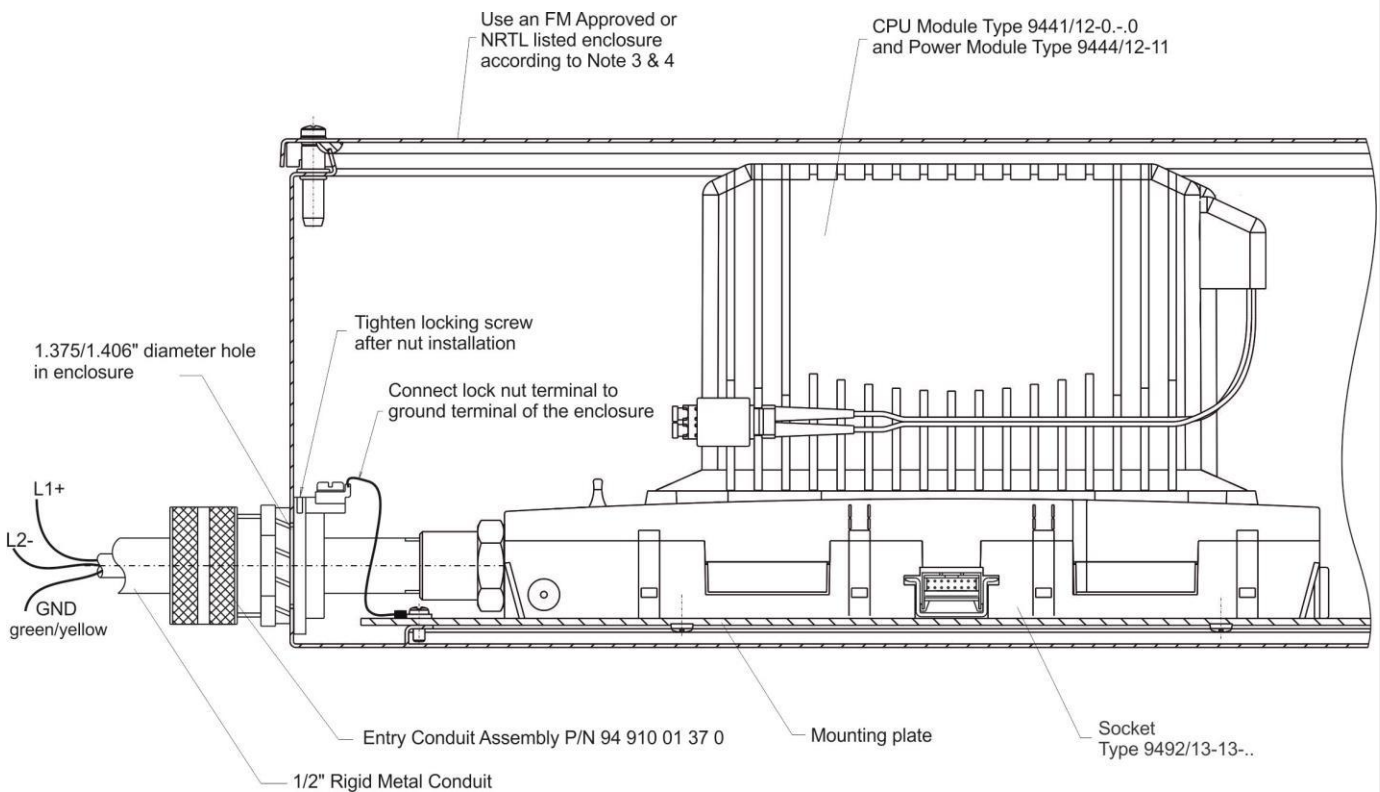


Notes:

1. Mount socket to guaranty vertical position of the Power Module and the CPU Module with the cable entry at the lower end.
2. Electrical Apparatus connected to an intrinsically safe system should not use or generate voltages > 253 V (Um)
3. Do not connect or disconnect the fixed cable of socket 9492 for the non I.S. power supply unless area is known to be non-hazardous.
4. The CPU and the Power Module may be detached from the Socket or plugged onto it during operation in hazardous location.
5. Make sure that the Socket's release lever is in position 1 before plug in the Power Module. To unplug the Power Module, set the release lever from position 1 to position 2 first, which disconnects the Power Module from the Socket. Pull the power module out of the base up to the intermediate position and then continue to position 3 to take it off.
6. Intrinsically safe apparatus may be switches, thermocouples, LEDs, RTDs or an FM approved system or entity devices connected in accordance with the manufacturer's installation instructions.
7. For entity concept use the appropriate parameters from above to ensure the following:
 $V_{OC} \text{ or } V_i \leq V_{max}$ $C_a \geq C_i + C_{leads}$
 $I_{SC} \text{ or } I_t \leq I_{max}$ $L_a \geq L_i + L_{leads}$
8. Live connection or disconnection of the fibre optic communication link in hazardous location is only permitted when connected to an "op is" limiting device (e.g. R. STAHL types 9721)
9. General Notes see Certification drawing for IS1 resp. IS1+ Remote I/O System No. 9400 6 031 003 1 or 9400 6 031 004 1.

WARNING: Do not disconnect the power supply input or the socket when a flammable or combustable atmosphere is present.
AVERTISSEMENT: Ne pas débrancher l'entrée d'alimentation ou le socle en présence d'atmosphère inflammable ou combustible.

Customer installation into a suitable enclosure IS1 resp. IS1+ for Class I, II, III, DIV 1 application with Socket type 9492/13-13-:**



Notes:

1. Electrical apparatus connected to an intrinsically safe system should not use or generate voltages > 250 V (Umax).
2. Installation should be in accordance with the National Electrical Code, AINSI/NFPA 70 or resp. Canadian Electrical Code.
3. Use a general purpose enclosure meeting the requirements of ANSI/ISA 61010-1 for use in nonhazardous or Class I, Division 1 or Class I, Zone 1 hazardous (classified) locations.
4. Use an FM approved or NRTL listed Dust-Ignition proof enclosure appropriate for environmental protection in Class II and Class III, Hazardous (Classified) Location.
5. Entry Condit Assembly P/N 94 910 01 37 0 provides a NEMA Type 4 environmental seal and Class II / III / dust / fiber seal.
6. The socket is factory sealed for the conduit entry.

F 4830 503

			2016	Date	Name	Certification drawing CPU Module, Type 9441/12-0*-*0 Power Module, Type 9444/12-11 Socket, Type 9492/13-13-** or 9492/12-11-**	Scale
			Drawn by	03.03.	Bagusch		none
			Checked		Kaiser		Sheet 2 of 2
					STAHL	9441 6 031 001 1	Agency FM
Version	Date	Name				Rep. f.	Rep. t.
							A4