


## BCS3608<sup>ex</sup>-IS corded – connection options

Picture	Option
	<p><b>Option 1</b> Connection via Universal Supply Module to a PC/Host* in safe area.</p> <hr/>
	<p><b>Option 2</b> Connection via Universal Supply Module to a HMI certified for use in Zone 1/21</p> <hr/>
	<p><b>Option 3</b> Connection via Supply Module Exi to a HMI certified for use in Zone 1/21</p>

### About PC/Host\*:

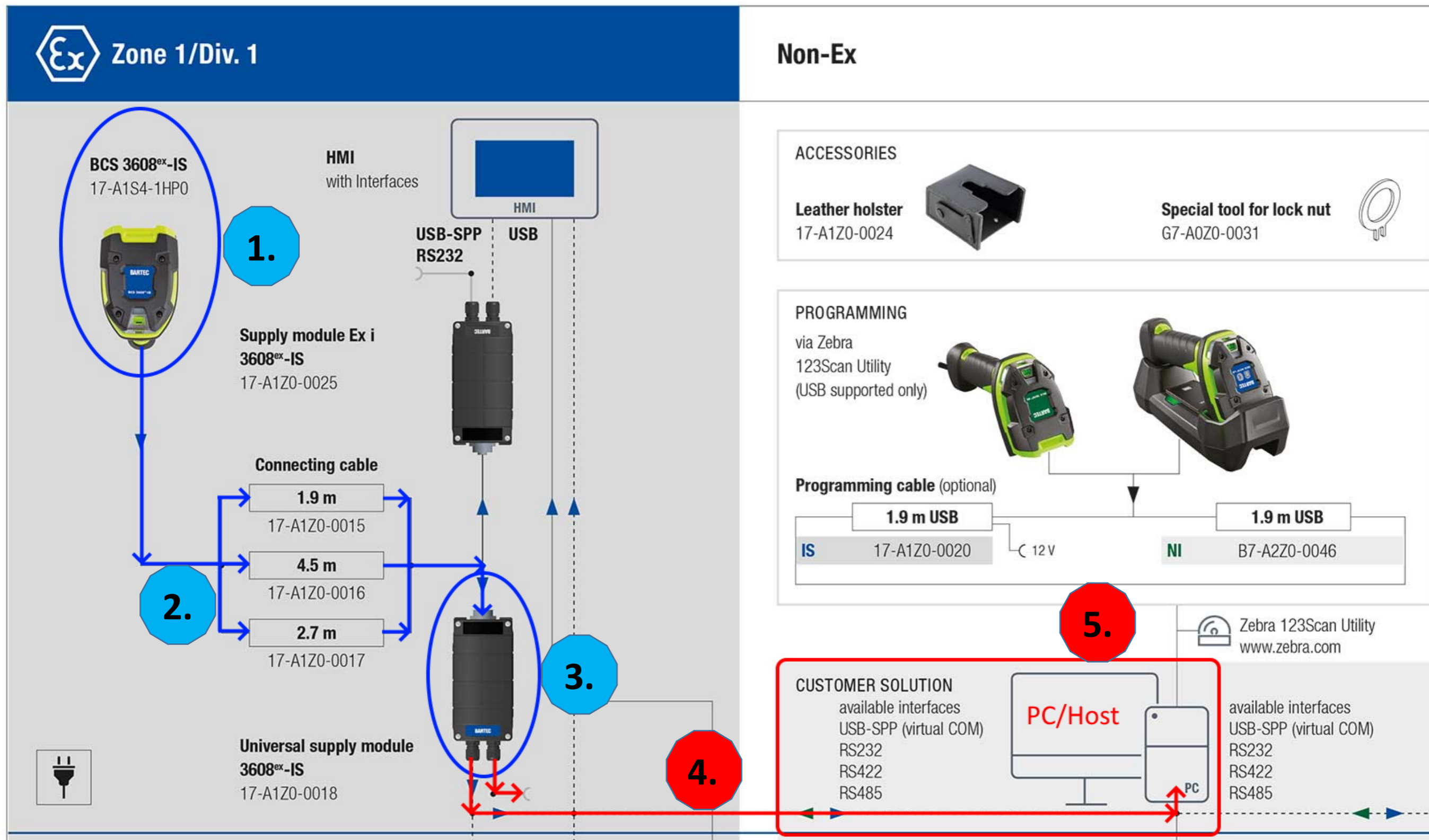
The designation PC/Host covers a wide range of possible devices to which the BCS3608<sup>ex</sup>-NI can be connected.

- PC with operating system e.g. Windows
- remote station
- PLC
- Scale system
- Any other system with a compatible interface and the ability to process serial data.



Important is that the system need to have a compatible interface that scanner can be connected.




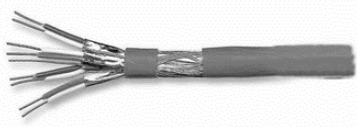

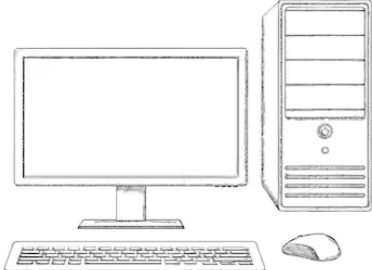
## Option 1: BCS3608<sup>EX</sup>-IS via Universal Supply Module (USM) connected to a PC/Host in Non-Ex area



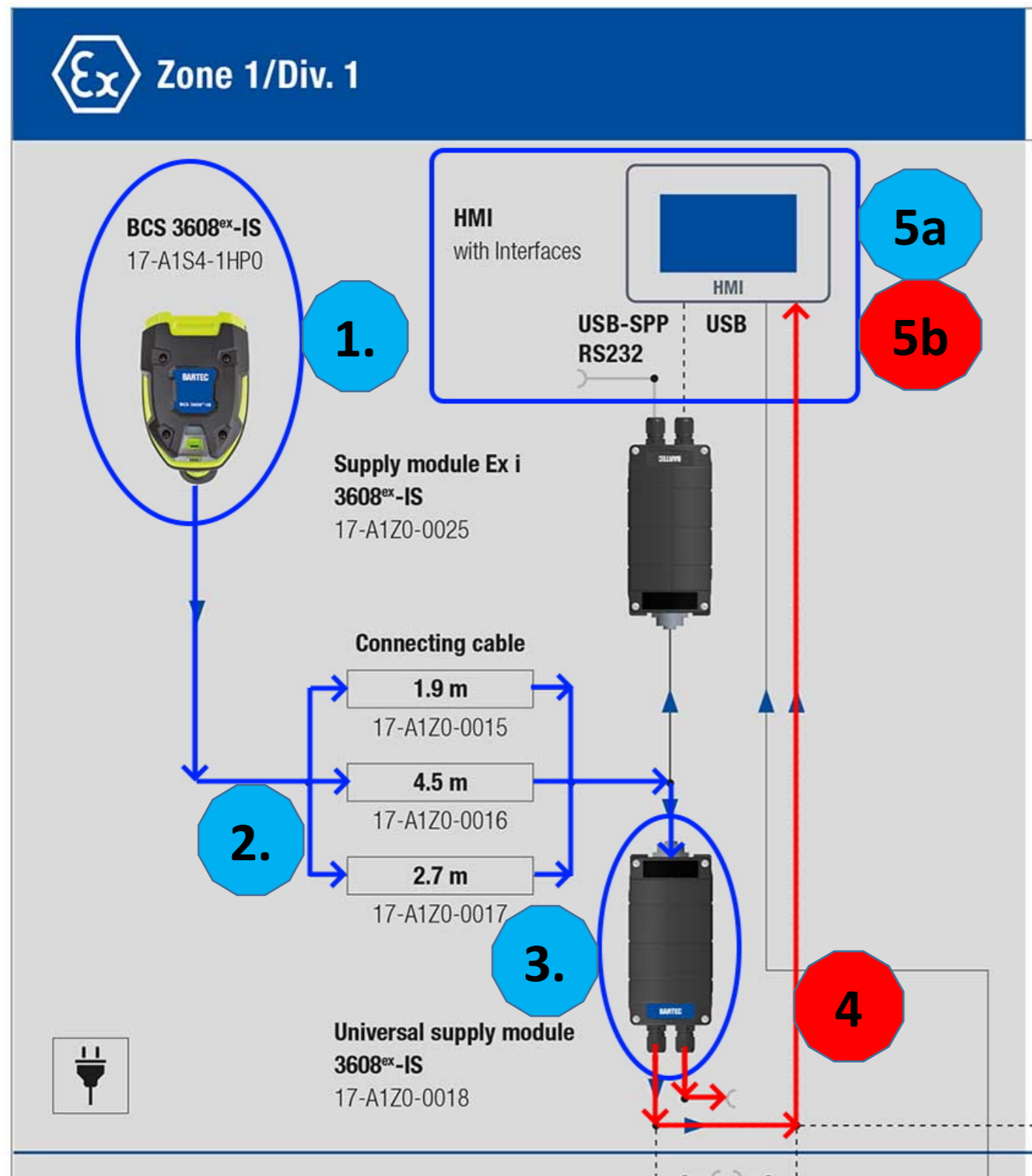
Blue = Components from BARTEC for use in hazardous location Zone 1/21

Red = Customer-specific components (not supplied by BARTEC)

## Required parts

No.	Picture	Part	Interfaces and their Ex-protection type
1.		<b>BCS3608<sup>ex</sup>-IS corded</b> <ul style="list-style-type: none"> <li>ATEX/IECEX Zone 1/21</li> <li>P/N: 17-A1S4-1xxx</li> </ul>	<b>Exi (ia) interface for:</b> <ul style="list-style-type: none"> <li>connection cable to USM</li> </ul>
2.	 (Sample picture P/N: 17-A1Z0-0015)	<b>Connection cable</b> <ul style="list-style-type: none"> <li>1.9 m (plain) P/N: 17-A1Z0-0015</li> <li>4.5 m (plain) P/N: 17-A1Z0-0016</li> <li>2.7 m (spiral) P/N: 17-A1Z0-0017</li> </ul>	<b>Connection</b> between BCS3608 <sup>ex</sup> -IS and Universal Supply Module (USM).
3.		<b>Universal supply module</b> <ul style="list-style-type: none"> <li>ATEX/IECEX Zone 1/21</li> <li>P/N: 17-A1Z0-0018</li> </ul>	<b>Power supply: (Exe)</b> <ul style="list-style-type: none"> <li>AC 100 V - 240 V ± 10% / 50-60 Hz</li> <li>DC 24 V ± 10% / 0.4 A</li> </ul> <b>Data line: (Exe to PC/Host)</b> <ul style="list-style-type: none"> <li>RS232 (TxD/RxD only)</li> <li>RS422</li> <li>RS485</li> <li>USB-SPP (Serial Port Profile)</li> </ul>
4.	 (sample picture)	<b>Connection cable</b> Customer specific and not supplied by BARTEC. We recommend shielded cables e.g. CAT5 or higher.	<b>Data line: (Exe to PC/Host)</b> <ul style="list-style-type: none"> <li>RS232 (TxD/RxD only)</li> <li>RS422</li> <li>RS485</li> <li>USB-SPP (Serial Port Profile)</li> </ul> Cable laying is carried out by the customer in accordance with the Ex-protection requirements of Exe.
	 (sample picture)	<b>Power Cable</b> Customer specific and not supplied by BARTEC.	<b>Power supply: (Exe)</b> <ul style="list-style-type: none"> <li>AC 100 V - 240 V ± 10% / 50-60 Hz</li> <li>DC 24 V ± 10% / 0.4 A</li> </ul>
5.		<b>PC/Host</b> Customer specific PC/Host with interface for connection to Universal Supply Module (USM).	<b>PC/Host</b> Customer specific and installed in safe area.




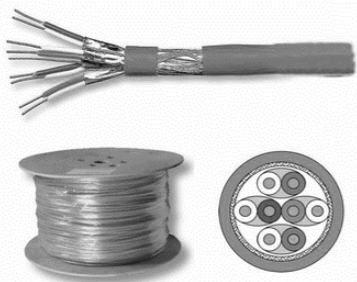
## Option 2: BCS3608<sup>ex</sup>-IS via Universal Supply Module (USM) connected to a HMI certified for Zone 1/21



Blue = Components from BARTEC for use in hazardous location Zone 1/21

Red = Customer-specific components (not supplied by BARTEC)

## Required parts

No.	Picture	Part	Interfaces and their Ex-protection type
1.		<b>BCS3608<sup>ex</sup>-IS corded</b> <ul style="list-style-type: none"> <li>• ATEX/IECEX Zone 1/21</li> </ul> P/N: 17-A1S4-1xxx	<b>Exi (ia) interface for:</b> <ul style="list-style-type: none"> <li>• connection cable to USM</li> </ul>
2.	 (Sample picture P/N: 17-A1Z0-0015)	<b>Connection cable</b> <ul style="list-style-type: none"> <li>• 1.9 m (plain) P/N: 17-A1Z0-0015</li> <li>• 4.5 m (plain) P/N: 17-A1Z0-0016</li> <li>• 2.7 m (spiral) P/N: 17-A1Z0-0017</li> </ul>	<b>Connection</b> between BCS3608 <sup>ex</sup> -IS and Universal Supply Module (USM).
3.		<b>Universal supply module</b> <ul style="list-style-type: none"> <li>• ATEX/IECEX Zone 1/21</li> </ul> P/N: 17-A1Z0-0018	<b>Power supply: (Exe)</b> <ul style="list-style-type: none"> <li>• AC 100 V - 240 V ± 10% / 50-60 Hz</li> <li>• DC 24 V ± 10% / 0.4 A</li> </ul> <b>Data line: (Exe to PC/Host)</b> <ul style="list-style-type: none"> <li>• RS232 (TxD/RxD only)</li> <li>• RS422</li> <li>• RS485</li> <li>• USB-SPP (Serial Port Profile)</li> </ul>
4.	 (sample picture)	<b>Connection cable</b> Customer specific and not supplied by BARTEC. We recommend shielded cables e.g. CAT5 or higher.	<b>Data line: (Exe to HMI)</b> <ul style="list-style-type: none"> <li>• RS232 (TxD/RxD only)</li> <li>• RS422</li> <li>• RS485</li> <li>• USB-SPP (Serial Port Profile)</li> </ul> Cable laying is carried out by the customer in accordance with the Ex-protection requirements of Exe.
		<b>Power Cable</b> Customer specific and not supplied by BARTEC.	<b>Power supply: (Exe)</b> <ul style="list-style-type: none"> <li>• AC 100 V - 240 V ± 10% / 50-60 Hz</li> <li>• DC 24 V ± 10% / 0.4 A</li> </ul>

5a



**HMI Polaris Series**

- ATEX Zone 1/21
- P/N: on request by ESS-AUT business unit

Compatible Polaris series:

- Polaris Professional with “Exe RS422” or “Exe USB”
- Polaris II Professional with “Exe RS422” or “Exe USB”
- Polaris Smart HMI with “Exe USB”
- Polaris Remote Analog (without touchscreen) with “Exe RS232”
- Polaris Remote Digital with “Exe USB”
- Polaris Zero Client WIN7 with “Exe USB”
- Polaris Zero Client WIN10 with “Exe USB”

**Data line: (Exe to HMI)**

It is important that on the Polaris device is a free interface in “Exe RS422” or “Exe USB” available. Then the “Universal Supply Module” interface can be connected to the Polaris device. The power for the scanner is supplied by “Universal Supply Module”.

5b



**HMI – Ex version of 3<sup>rd</sup> party manufacturer**

- ATEX Zone 1/21

**It is possible but customer need to check that Ex-relevant values are compatible with HMI manufacturer.**

**A compatible interface in “Exe” version must be available**

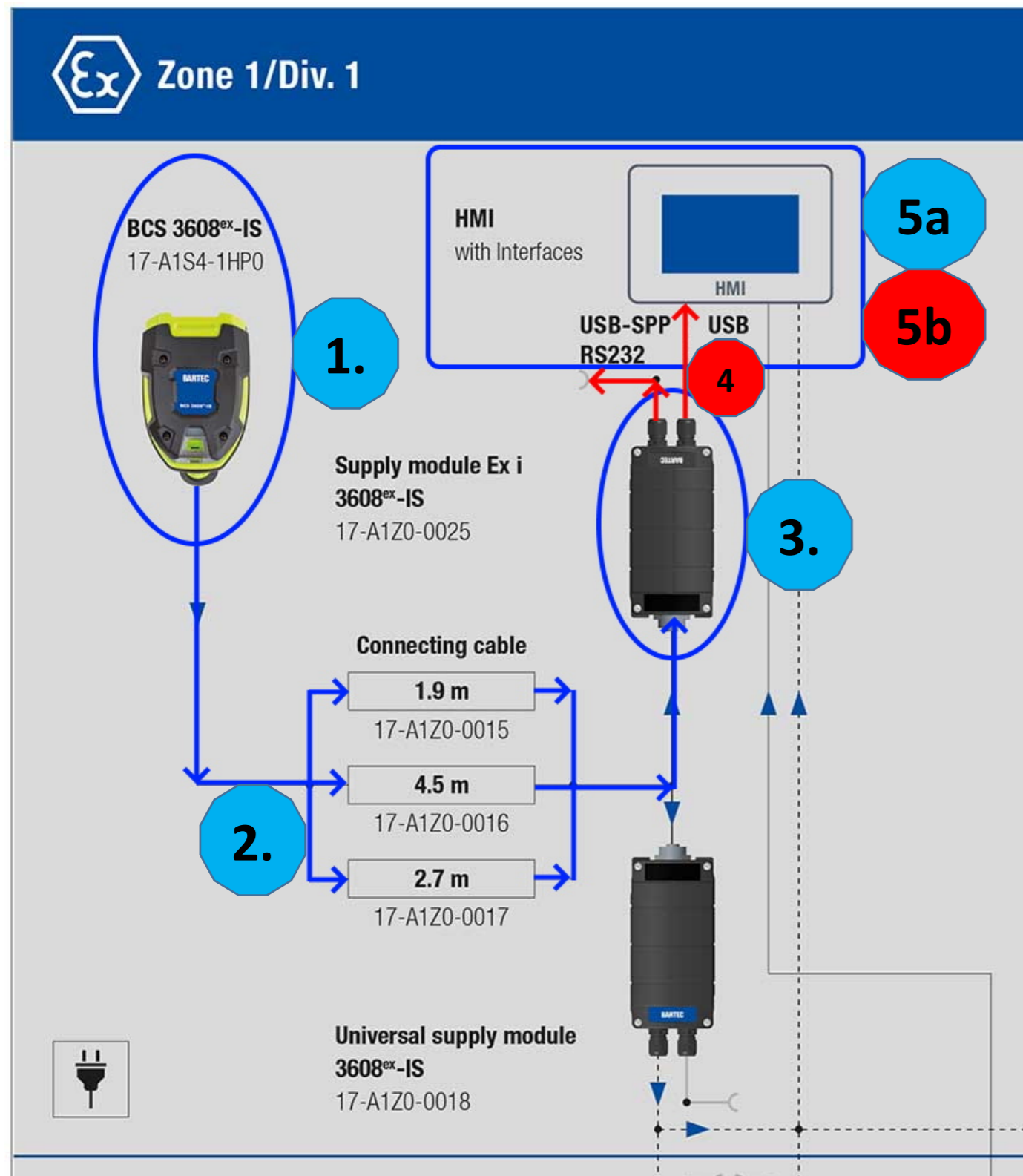
**Data line: (Exe to HMI)**

- RS232 (TxD/RxD only)
- RS422
- RS485
- USB-SPP (Serial Port Profile)




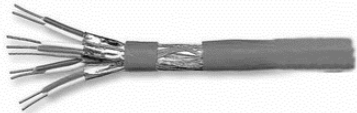

**Ex-relevant input parameter of BARTEC Universal Supply Module**

Input	Ex-Model
Power supply	Ex e
Data interface	Ex e

## Option 3: BCS3608<sup>ex</sup>-IS connection via Supply Module Exi to a HMI certified for use in Zone 1/2/1



## Required parts

No.	Picture	Part	Interfaces and their Ex-protection type
1.		<b>BCS3608<sup>ex</sup>-IS corded</b> <ul style="list-style-type: none"> <li>• ATEX/IECEX Zone 1/21</li> </ul> P/N: 17-A1S4-1xxx	<b>Exi (ia) interface for:</b> <ul style="list-style-type: none"> <li>• connection cable to USM</li> </ul>
2.	 (Sample picture P/N: 17-A1Z0-0015)	<b>Connection cable</b> <ul style="list-style-type: none"> <li>• 1.9 m (plain) P/N: 17-A1Z0-0015</li> <li>• 4.5 m (plain) P/N: 17-A1Z0-0016</li> <li>• 2.7 m (spiral) P/N: 17-A1Z0-0017</li> </ul>	<b>Connection</b> between BCS3608 <sup>ex</sup> -IS and Supply Module Exi corded.
3.		<b>Supply module Exi corded</b> <ul style="list-style-type: none"> <li>• ATEX/IECEX Zone 1/21</li> </ul> P/N: 17-A1Z0-0025	<b>Power supply: (Exe)</b> <ul style="list-style-type: none"> <li>• AC 100 V - 240 V ± 10% / 50-60 Hz</li> <li>• DC 24 V ± 10% / 0.4 A</li> </ul> <b>Data line: (Exi/passive to PC/Host)</b> <ul style="list-style-type: none"> <li>• RS232 (TxD/RxD only)</li> <li>• USB-SPP (Serial Port Profile)</li> </ul>
4.		<b>Connection cable</b> Customer specific and not supplied by BARTEC. We recommend shielded cables e.g. CAT5 or higher.	<b>Data line: (Exi to HMI)</b> <ul style="list-style-type: none"> <li>• RS232 (TxD/RxD only)</li> <li>• USB-SPP (Serial Port Profile)</li> </ul> Cable laying is carried out by the customer in accordance with the Ex-protection requirements of Exi.
	 (sample picture)	<b>Power Cable</b> Customer specific and not supplied by BARTEC.	<b>Power supply: (Exe)</b> <ul style="list-style-type: none"> <li>• AC 100 V - 240 V ± 10% / 50-60 Hz</li> <li>• DC 24 V ± 10% / 0.4 A</li> </ul>



5a



**HMI Polaris Series**

- ATEX Zone 1/21
- P/N: on request by ESS-AUT business unit

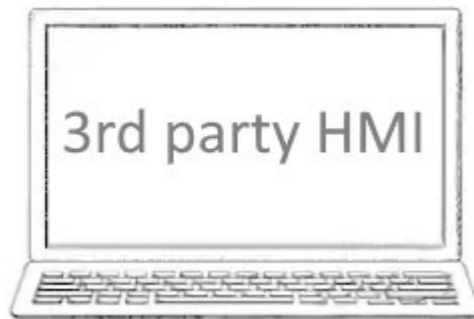
Compatible Polaris series: “Exi scanner interface” required!

- Polaris Professional with “Exi scanner interface”
- Polaris II Professional with “Exi scanner interface”
- Polaris Comfort with “Exi scanner interface”
- Polaris Basic with “Exi scanner interface”
- Polaris Remote Analog (without touchscreen) with “Exi scanner interface”
- Polaris Remote Digital with “Exi scanner interface”
- Polaris Zero Client WIN7 with “Exi scanner interface”
- Polaris Zero Client WIN10 with “Exi scanner interface”

**Data line: (Exe to HMI)**

It is important that on the Polaris device is a free scanner interface in Exi available. Then the “Supply Module Exi” interface can be connected to the Polaris device. The power for the scanner is supplied by “Supply Module Exi”.

5b



**HMI – Ex version of 3<sup>rd</sup> party manufacturer**

- ATEX Zone 1/21

**It is possible but customer need to check that Ex-relevant values are compatible with HMI manufacturer.**

**A compatible interface in “Exi” version must be available**

**Data line: (Exi to HMI)**

- RS232 (TxD only)
- USB-SPP (Serial Port Profile)

Ex-relevant input parameter of BARTEC Supply Module Ex i

Input	Ex-Model
Power Supply	Ex e
Data interface	Ex i

Type: 17-A120-0025	
Type: 17-A120-0028	
$U_i$	6 V <sub>DC</sub>
$I_i$	500 mA
$P_i$	2 W
$C_i$	5,7 μF
$L_i$	0 μH