


BCS3608^{ex}-NI corded – connection options

Picture	Option
	<p>Option 1 Connection via Universal Supply Module to a PC/Host* in safe area.</p> <hr/>
	<p>Option 2 Connection via Universal Supply Module to a HMI certified for use in Zone 2/22 or Division 2</p> <hr/>
	<p>Option 3 Connection via HMI limiting cable (USB) to a HMI certified for use in Zone 2/22</p>

About PC/Host*:

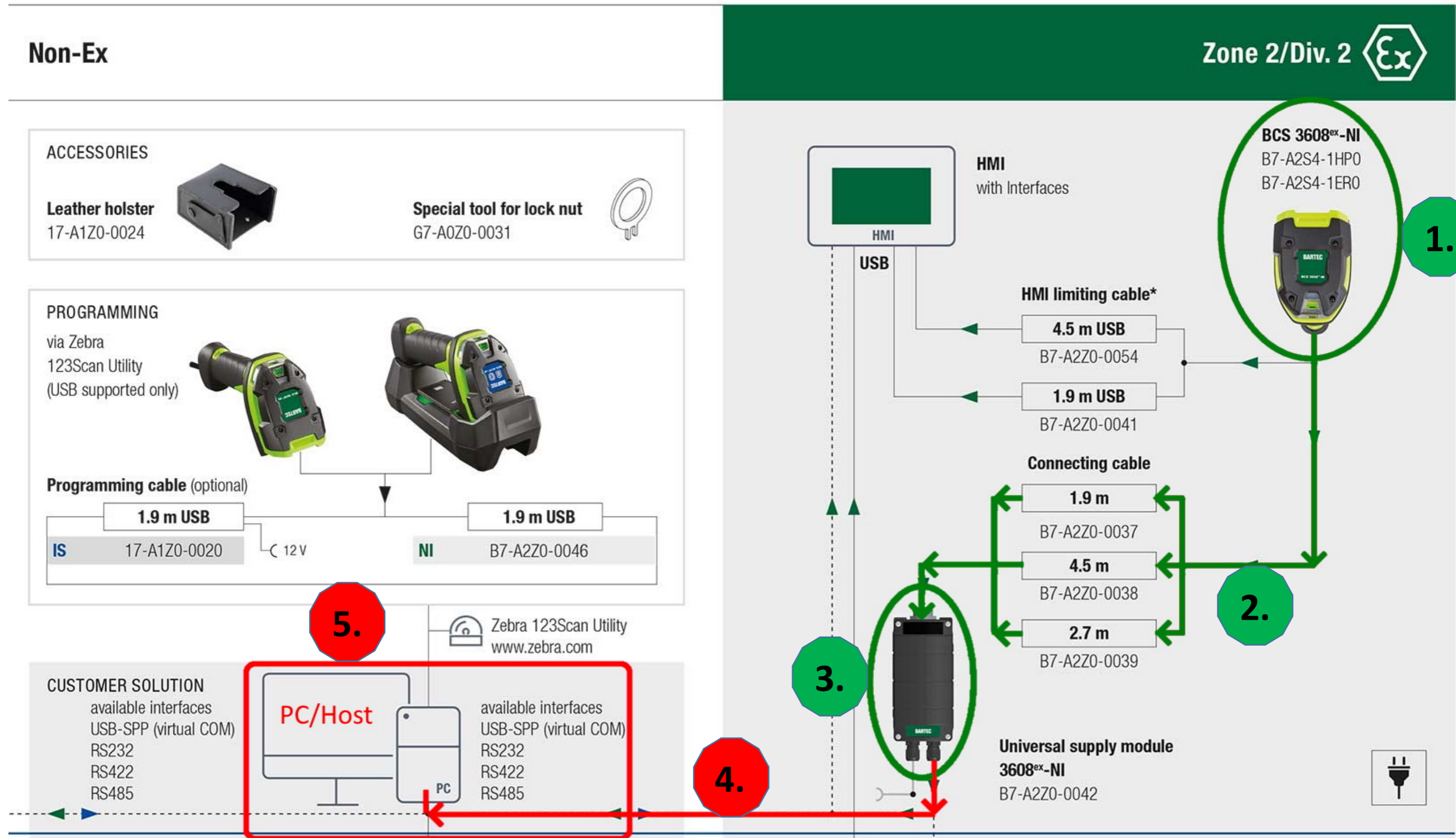
The designation PC/Host covers a wide range of possible devices to which the BCS3608^{ex}-NI can be connected.

- 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.






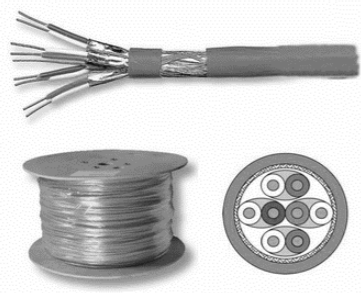
Important is that the system need to have a compatible interface that scanner can be connected.

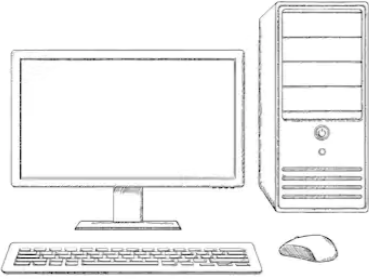
Option 1: BCS3608^{ex}-NI via Universal Supply Module (USM) connected to a PC/Host in Non-Ex area



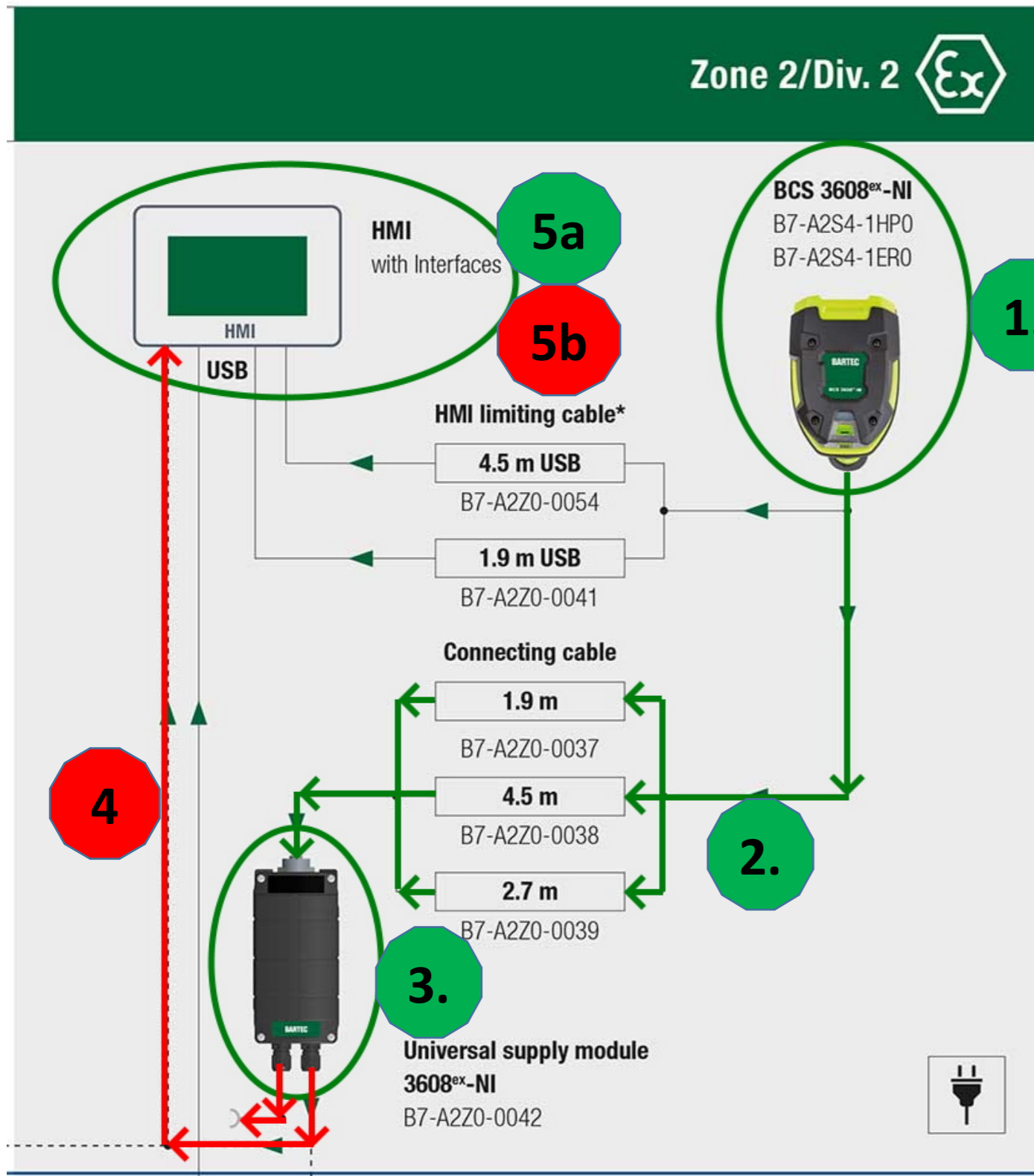
Green = Components from BARTEC for use in hazardous location Zone 2/22 or Division 2
 Red = Customer-specific components (not supplied by BARTEC)

Required parts

No.	Picture	Part	Interfaces and their Ex-protection type
1.		BCS3608^{ex}-NI corded <ul style="list-style-type: none"> • ATEX/IECEX Zone 2/22 • NEC/ETL Division 2 P/N: B7-A2S4-1xxx	Exi (ic) interface for: <ul style="list-style-type: none"> • connection cable to USM • HMI limiting cable
2.	 (Sample picture P/N: B7-A2Z0-0037)	Connection cable <ul style="list-style-type: none"> • 1.9 m (plain) P/N: B7-A2Z0-0037 • 4.5 m (plain) P/N: B7-A2Z0-0038 • 2.7 m (spiral) P/N: B7-A2Z0-0039 	Connection between BCS3608 ^{ex} -NI and Universal Supply Module (USM).
3.		Universal supply module <ul style="list-style-type: none"> • ATEX/IECEX Zone 2/22 P/N: B7-A2Z0-0042	Power supply: (Exe) <ul style="list-style-type: none"> • AC 100 V - 240 V ± 10% / 50-60 Hz • DC 24 V ± 10% / 0.4 A Data line: (Exe to PC/Host) <ul style="list-style-type: none"> • RS232 (TxD/RxD only) • RS422 • RS485 • USB-SPP (Serial Port Profile)
		Universal supply module <ul style="list-style-type: none"> • ATEX/IECEX Zone 2/22 • NEC/ETL Division 2 P/N: B7-A2Z0-004200US	Only difference is power supply supports only: <ul style="list-style-type: none"> • DC 24 V ± 10% / 0.4 A
4.	 (sample picture)	Connection cable Customer specific and not supplied by BARTEC. We recommend shielded cables e.g. CAT5 or higher.	Data line: (Exe to PC/Host) <ul style="list-style-type: none"> • RS232 (TxD/RxD only) • RS422 • RS485 • USB-SPP (Serial Port Profile) Cable laying is carried out by the customer in accordance with the Ex-protection requirements of Exe.
		Power Cable Customer specific and not supplied by BARTEC.	Power supply: (Exe) <ul style="list-style-type: none"> • AC 100 V - 240 V ± 10% / 50-60 Hz • DC 24 V ± 10% / 0.4 A

5.		PC/Host Customer specific PC/Host with interface for connection to Universal Supply Module (USM).	PC/Host Customer specific and installed in safe area.
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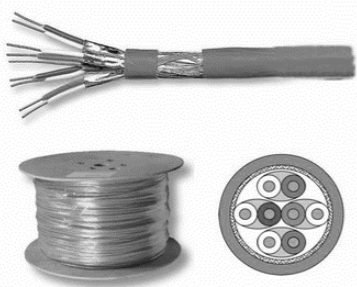
Option 2:
BCS3608^{ex}-NI via Universal Supply Module (USM) connected to a HMI certified for Zone 2/22 or Division 2



Green = Components from BARTEC for use in hazardous location Zone 2/22

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

Required parts

No.	Picture	Part	Interfaces and their Ex-protection type
1.		BCS3608^{ex}-NI corded <ul style="list-style-type: none"> ATEX/IECEX Zone 2/22 NEC/ETL Division 2 P/N: B7-A2S4-1xxx	Exi (ic) interface for: <ul style="list-style-type: none"> connection cable to USM HMI limiting cable
2.	 (Sample picture P/N: B7-A2Z0-0037)	Connection cable <ul style="list-style-type: none"> 1.9 m (plain) P/N: B7-A2Z0-0037 4.5 m (plain) P/N: B7-A2Z0-0038 2.7 m (spiral) P/N: B7-A2Z0-0039 	Connection between BCS3608 ^{ex} -NI and Universal Supply Module (USM).
3.		Universal supply module <ul style="list-style-type: none"> ATEX/IECEX Zone 2/22 P/N: B7-A2Z0-0042	Power supply: (Exe) <ul style="list-style-type: none"> AC 100 V - 240 V ± 10% / 50-60 Hz DC 24 V ± 10% / 0.4 A Data line: (Exe to HMI) <ul style="list-style-type: none"> RS232 (TxD/RxD only) RS422 RS485 USB-SPP (Serial Port Profile)
		Universal supply module <ul style="list-style-type: none"> ATEX/IECEX Zone 2/22 NEC/ETL Division 2 P/N: B7-A2Z0-004200US	Only difference is power supply supports only: <ul style="list-style-type: none"> DC 24 V ± 10% / 0.4 A
4.	 (sample picture)	Connection cable Customer specific and not supplied by BARTEC. We recommend shielded cables e.g. CAT5 or higher.	Data line: (Exe to HMI) <ul style="list-style-type: none"> RS232 (TxD/RxD only) RS422 RS485 USB-SPP (Serial Port Profile) Cable laying is carried out by the customer in accordance with the Ex-protection requirements of Exe.
		Power Cable Customer specific and not supplied by BARTEC.	Power supply: (Exe) <ul style="list-style-type: none"> AC 100 V - 240 V ± 10% / 50-60 Hz DC 24 V ± 10% / 0.4 A

5a



HMI Polaris II Series

- ATEX Zone 2/22
- P/N: on request by ESS-AUT business unit

Compatible Polaris series:

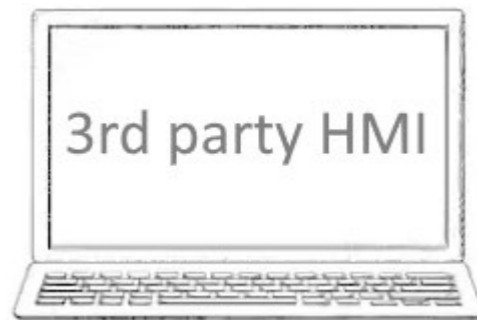
- Polaris Professional with “Exe RS422” or “Exe USB”
- Polaris II Professional with “Exe RS422” or “Exe USB”
- Polaris Smart HMI with “Exe USB”
- Polaris Remote Analog (without touchscreen) with “Exe RS232”
- Polaris Remote Digital with “Exe USB”
- Polaris Zero Client WIN7 with “Exe USB”
- Polaris Zero 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 3rd party manufacturer

- ATEX Zone 2/22
- Division 2

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

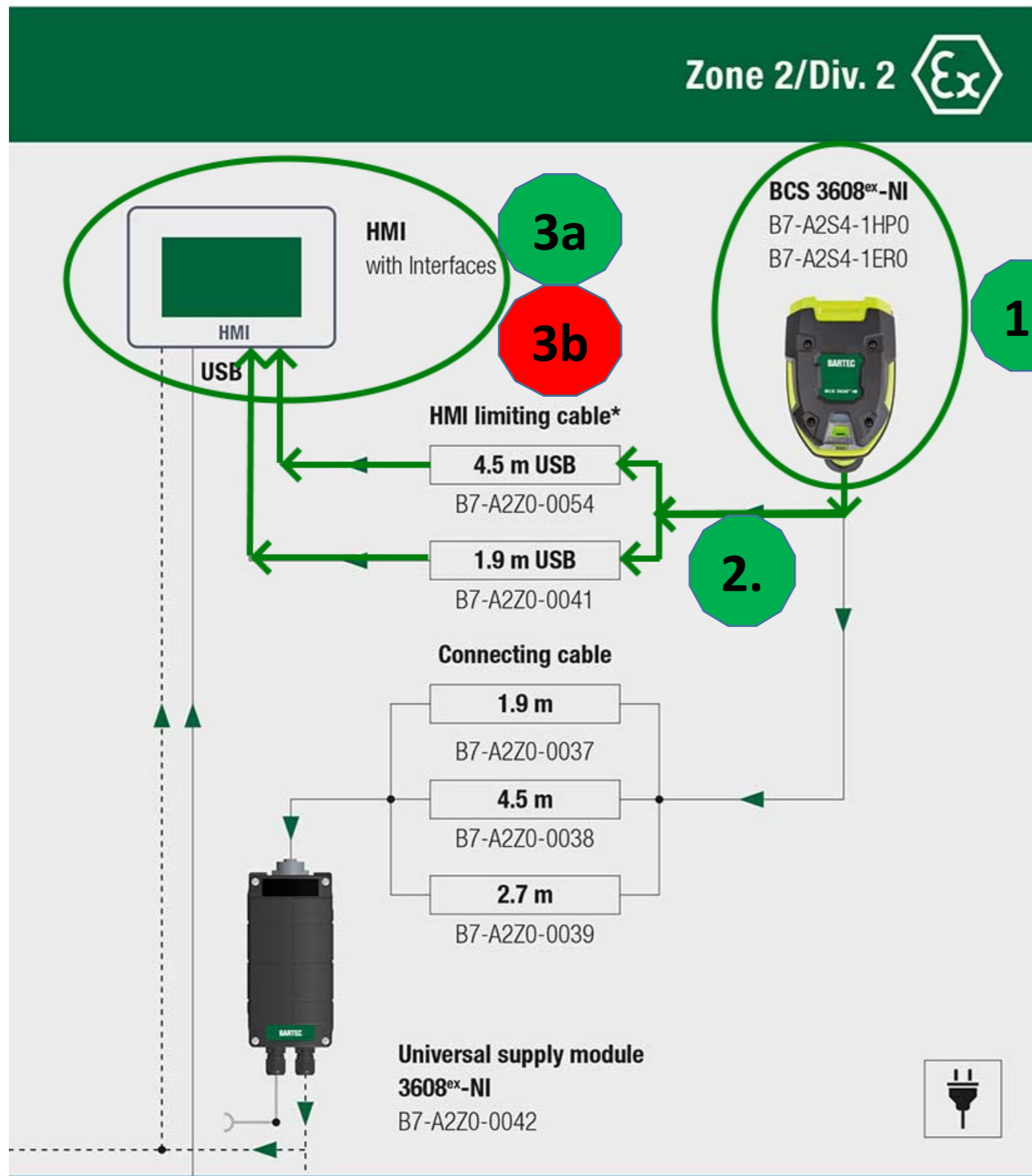
Data line: (Exe to HMI)

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




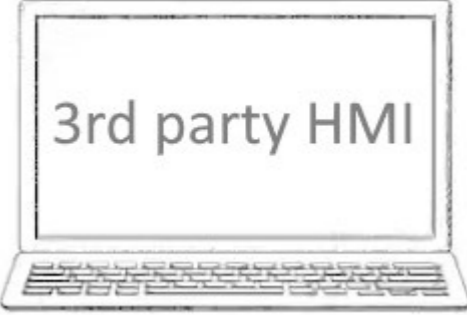
Ex-relevant input parameter of BARTEC Universal Supply Module

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

Option 3: BCS3608^{ex}-NI via HMI limiting cable (USB) connected to a HMI certified for Zone 2/22



Required parts

No.	Picture	Part	Interfaces and their Ex-protection type						
1.		BCS3608^{ex}-NI corded <ul style="list-style-type: none"> • ATEX/IECEX Zone 2/22 • NEC/ETL Division 2 P/N: B7-A2S4-1xxx	Exi (ic) interface for: <ul style="list-style-type: none"> • connection cable to USM • HMI limiting cable 						
2.	 (Sample picture P/N: B7-A2Z0-0037)	HMI limiting cable (USB) <ul style="list-style-type: none"> • 1.9 m (plain) P/N: B7-A2Z0-0041 • 4.5 m (plain) P/N: B7-A2Z0-0054 	Connection between BCS3608 ^{ex} -NI and HMI in hazardous location Zone 2/22. Important: Ex relevant parameter of HMI must be compliant/compatible with BCS3608 ^{ex} -NI!						
3a		HMI Polaris II <ul style="list-style-type: none"> • ATEX Zone 2/21/22 P/N: on request by ESS-AUT business unit	Data line: (Exe to HMI) USB-HID (Human Interface Device mode is supported – Incoming data can be processed as keyboard entry) USB interface provides the functional necessary values of 5V _{DC} /500mA						
3b		HMI – Ex version of 3rd party manufacturer <ul style="list-style-type: none"> • ATEX Zone 2/22 	It is possible but customer need to check that Ex-relevant values are compatible with HMI manufacturer. Data line: (Exe to HMI) <ul style="list-style-type: none"> • USB (HID or SPP depends on USB port functionality of HMI) Functionally values: Interface must provide 5V_{DC}/500mA <p style="text-align: center; font-size: small;">Ex-relevant input parameter of BARTEC Universal Supply Module</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Input</th> <th>Ex-Model</th> </tr> </thead> <tbody> <tr> <td>Power supply</td> <td>Ex e</td> </tr> <tr> <td>Data interface</td> <td>Ex e</td> </tr> </tbody> </table>	Input	Ex-Model	Power supply	Ex e	Data interface	Ex e
Input	Ex-Model								
Power supply	Ex e								
Data interface	Ex e								