IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.:	**IECEx FME 07.0004X**	Page 1 of 4

Status: **Current** Issue No: 6

Date of Issue: 2019-12-17

Applicant: **Hans Turck GmbH & CO KG**
Witzlebenstrasse 7
DE 45472
Mulheim an der Ruhr
Germany

Optional accessory:

Equipment: **BL20 Modular I/O Bus Terminal System**

Type of Protection: **Type of protection 'n' electrical appartus**

Marking: Ex nA IIC T4 Gc Ta = 0°C to +55°C

Ex nA IIC T4 Gc Ta = -25°C to +60°C (modules with "/ET" suffix only)

Ex nA nC IIC T4 Gc Ta = 0°C to +55°C (Relay Modules)

Approved for issue on behalf of the IECEx
Certification Body: **Andrew Was**

Position: **Certification Manager**

Signature:
(for printed version)

Date:

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.

Certificate issued by:

FM Approvals Ltd
Voyager Place
Maidenhead
Berkshire
SL6 2PJ
United Kingdom

FM Approvals
Member of the FM Global Group

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Manufacturer: **Werner Turck GmbH & Co KG**
Goethestrasse 7
DE 58553 Halver
Germany

Additional manufacturing locations:

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements.This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended

STANDARDS :
The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

IEC 60079-0:2011   Explosive atmospheres - Part 0: General requirements
Edition:6.0

IEC 60079-15:2010   Explosive atmospheres - Part 15: Equipment protection by type of protection "n"
Edition:4

This Certificate **does not** indicate compliance with safety and performance requirements
other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:
A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Reports:

GB/FME/ExTR07.0002/00	GB/FME/ExTR07.0002/01	GB/FME/ExTR07.0002/02
GB/FME/ExTR07.0002/03	GB/FME/ExTR07.0002/04	GB/FME/ExTR07.0002/05
GB/FME/ExTR07.0002/06		

Quality Assessment Report:

DE/PTB/QAR06.0013/05

EQUIPMENT:
Equipment and systems covered by this Certificate are as follows:

The BL20 I/O Bus-Terminal System is a modular system and offers gateways for communication with bus system such as PROFIBUS, DeviceNet™ and CanOpen. There are a number of I/O modules for both digital and analogue for connection to unspecified field devices. In addition to the analog and digital modules there are a number of modules for specific applications such as a counter or RS232 interfaces and for relay outputs. The modules plug in to bases which are used to mount the modules and which also carry the electrical power and signals via the bus to the Power Feed Modules and Gateway Modules. The bus has a maximum operational limit, but this can be increased by use of an intermediate power feed module. User connections are only made to the Gateway modules and to the signal terminals on the individual modules.

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. In Zone 2 installations, the BL20 – Modular I/O Bus-Terminal Systems shall be mounted within a tool-secured enclosure which meets the requirements of IEC 60079-0 and IEC 60079-15 and is capable of accepting one or more of the Zone 2 wiring methods specified in IEC 60079-14. Where installed in outdoor or potentially wet locations, the enclosure shall, at a minimum, meet the requirements of IP54. Where installed in locations providing adequate protection against the entry of solid foreign objects or water capable of impairing safety, the enclosure shall, at a minimum, meet the requirements of IP4X.

2. The BL20 I/O Modules shall be installed on an EN 50 022 NS35 rail with each group completed by an end plate (Type BL20-ABPL, Ident-no. 6827123) and sandwiched between two end brackets (Type BL20-WEW-35/2-SW, Ident-no. 6827124).

3. The input voltage for the BL20 2-channel digital relay module shall be limited to 30 Vac or dc (max. contact voltage).

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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)
Addition of 15 new modules.

Annex:

Annex to IECEx FME 07-0004X issue No 6.pdf

Module names and descriptions

Module	Description
BL20-2DI-24VDC-P	2 channel digital input modules - pnp
BL20-2DI-24VDC-N	2 channel digital input modules - npn
BL20-4DI-24VDC-P	4 channel digital input modules - pnp
BL20-4DI-24VDC-N	4 channel digital input modules - npn
BL20-4DI-NAMUR	4 channel digital input modules - NAMUR input
BL20-32DI-24VDC-P	32 channel digital Input modules -pnp
BL20-2AI-I(0/4...20MA)	2 channel analogue input module - current
BL20-2AI-U(-10/0...+10VDC)	2 channel analogue input module - voltaqe
BL20-2AI-PT/NI-2/3	2 channel analogue input module - platinum and nickel resistance elements
BL20-2AI-THERMO-PI	2 channel analogue input module - thermoelements
BL20-4AI-U/I	4 channel analogue input module - current or voltage
BL20-2DO-24VDC-0,5A-P	2 channel digital output - 0.5A - pnp
BL20-2DO-24VDC-0,5A-N	2 channel digital output - 0.5A - npn
BL20-2DO-24VDC-2A-P	2 channel digital output - 2.0A - pnp
BL20-4DO-24VDC-0,5A-P	4 channel digital output - 0.5A - pnp
Bl20-16DO-24VDC-0,5A-P	16 channel digital output - 0.5A - pnp
BL20-32DO-24VDC-0,5A-P	32 channel digital output - 0.5A - pnp
BL20-2AO-I(0/4...20MA)	2 channel analogue output module - current
BL20-2AO-U(-10/0...+10VDC)	2 channel analogue output module - voltage
BL20-1CNT-24VDC	Counter
BL20-1RS232	RS232 interface
BL20-1RS485/422	RS485/422 interface
BL20-1SSI	SSI interface
BL20-BR-24VDC-D	Power Supply Module with internal SV DC Bus
BL20-PF-24VDC-D	Power Feed Module Field Supply 24V
BL20-BR-24VDC-RED	Power module for redundant supply
BL20-E-2CNT-2PWM	Economy module, 2 x counter/encoder channels,2 x PWM outputs
BL20-E-4AI-TC	Economy module,4 analogue inputs for thermocouples
BL20-E-4AI-TC/ET	Economy module, 4 analogue inputs for thermocouples with extended temperature range.
BL20-E-4AO-U/I/ET	Economy module,4 analogue outputs for current/voltage
BL20-E-4IOL	Economy module, 4 IO-Link master channels, 4 configurable digital channels, PNP, channel diagnostics,0.5A
BL20-E-4IOL-10	Economy module, 4 configurable digital channels, PNP, channel diagnostics,0.5A
BL20-E-8DI-24VDC-P	8 channel digital input module - pnp - Economy
BL20-E-16DI-24VDC-P	16 channel digitalinput module - pnp - Economy
BL20-E-8DI-24VDC-P /ET	8 channel digital input module - pnp with extended temperature range - Economy
BL20-E-8DO-24VDC-0,5A-P	8 channel digital output module - 0.5A - pnp - Economy
BL20-E-8DO-24VDC-0.5A-P/ET	8 channel digital output module - 0.5A - pnp with extended temperature range - Economy

Module	Description
BL20-E-16DO-24VDC-0,5A-P	16 channel digital output module - 0.5A - pnp - Economy
BL20-GWBR-PBDP	Gateway for Profibus-DP with internal 5V DC Bus
BL20-GW-DPV1	Gateway for Profibus-DPV1
BL20-GW-EN	Gateway for Modbus TCP
BL20-GW-EN-IP	Gateway for Ethernet IP
BL20-PG-EN-IP	Programmable Gateway for Ethernet IP
BL20-PG-EN	Programmable Gateway for Modbus TCP
BL20-PG-EN-V3	CODESYS 3 Programmable Gateway for PROFINET, Ethernet/IP™and Modbus TCP
BL20-PG-EN-V3-WV	CODESYS 3 Programmable Gateway for PROFINET,Ethernet/IP™ and Modbus TCP with WebVisu License
BL20-GWBR-DNET	Gateway for DeviceNet with internal SV DC Bus
BL20-GWBR-CANOPEN	Gateway for CANopen with internal SV DC Bus
BL20-2RFID-A	2 Channel RFID module asynchronous
BL20-2RFID-C	2 Channel RFID module cyclic
BL20-2DO-R-NC	2 channel digital output - relay - normally closed
BL20-2DO-R- NO	2 channel digital output - relay - normally open
BL20-2DO-R-CO	2 channel digital output - relay - change over
BL20-16DI-24VDC-P	16 channel digital inputs module - pnp
BL20-2AIH-I	2 channel analogue inputs module - 0/4...20mA
BL20-2AOH-I	2 channel analogue outputs module - 0/4...20mA
BL20-E-8AI-U/I -4PT/NI	8 channel analogue inputs U/I resp. 4 PT/NI inputs module - Economy
BL20-E-8AI-U/I-4PT/NI/ET	8 channel analogue inputs U/I resp. 4 PT/NI inputs module with extended temperature range - Economy
BL20-E-4AO-U/I	4 channel analogue outputs module - Economy
BL20-2RFID-S	2 channel RFID module
BL20-E-GW-CO	Gateway for CANopen - Economy
BL20-E-GW-DN	Gateway for DeviceNet - Economy
BL20-E-GW-DP	Gateway for PROFIBUS-DP - Economy
BL20-E-GW-DP/ET	Gateway for PROFIBUS-DP with extended temperature range - Economy
BL20-E-GW-EN	Gateway for MPDBUS TCP incl. supply - Economy
BL20-E-GW-EN/ET	Gateway for MPDBUS TCP incl. supply with extended temperature range - Economy
BL20-E-GW-EN-1P	Gateway for Ethernet/IP incl. supply - Economy
BL20-E-GW-EN-PN	Gateway for PROFINET 10 incl. supply
BL20-E-GW-RS-MB/ET	Gateway for Modbus RTU/ASCII with extended temperature range - Economy
BL20-PG-EN-DN-JA	Gateway for MODBUS TCP and DeviceNet incl. supply.