



# 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](http://www.iecex.com)

Certificate No.: **IECEx EPS 19.0077X**

Page 1 of 5

Certificate history:

Issue 1 (2019-08-08)

Issue 0 (2019-07-01)

Status: **Current**

Issue No: 2

Date of Issue: 2020-01-20

Applicant:  
**Hima Paul Hildebrandt GmbH**  
Albert-Bassermann-Str. 28  
68782 Brühl  
Germany

Equipment: **HIJunction Box**

Optional accessory:

Type of Protection: **db eb ec ic nA nC [op is] [op pr] [ia] [ic]**

Marking: Ex db eb ec ic nA nC [op is] [op pr] [ia] [ic] IIC T3/T4 Gc

Approved for issue on behalf of the IECEx  
Certification Body:

Position:

Signature:  
(for printed version)

Date:

**Holger Schaffer**

Certification Manager

2020-01-20



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](http://www.iecex.com) or use of this QR Code.

Certificate issued by:

Bureau Veritas Consumer Products Services Germany GmbH  
Businesspark A96  
86842 Türkheim  
Germany





# IECEx Certificate of Conformity

Certificate No.: **IECEx EPS 19.0077X**

Page 2 of 5

Date of issue: 2020-01-20

Issue No: 2

Manufacturer: **Hima Paul Hildebrandt GmbH**  
Albert-Bassermann-Str. 28  
68782 Brühl  
**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 60079-0:2017** Explosive atmospheres - Part 0: Equipment - General requirements  
Edition:7.0

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

**IEC 60079-1:2007-04** Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"  
Edition:6

**IEC 60079-11:2011** Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"  
Edition:6.0

**IEC 60079-11:2006** Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"  
Edition:5

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

**IEC 60079-28:2006-08** Explosive atmospheres - Part 28: Protection of equipment and transmission systems using optical radiation  
Edition:1

**IEC 60079-7:2017** Explosive atmospheres - Part 7: Equipment protection by increased safety "e"  
Edition:5.1

**IEC 60079-7:2015** Explosive atmospheres – Part 7: Equipment protection by increased safety "e"  
Edition:5.0

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 Report:

DE/EPS/ExTR19.0074/01



# IECEx Certificate of Conformity

Certificate No.: **IECEx EPS 19.0077X**

Page 3 of 5

Date of issue: 2020-01-20

Issue No: 2

Quality Assessment Report:

DE/PTB/QAR11.0008/03



# IECEx Certificate of Conformity

Certificate No.: **IECEx EPS 19.0077X**

Page 4 of 5

Date of issue: 2020-01-20

Issue No: 2

**EQUIPMENT:**

Equipment and systems covered by this Certificate are as follows:

The HI Junction Box is part of a safety related control system that is designed for continuous operation and high availability. The HI Junction Box is designed for operation in zone 2 and communicates with other components of the safety control systems over a bus system.

**Electrical data:**

Feed 1/2:  
100V...240VAC/10A/50Hz  
110V...250VDC/10A

Control Circuit:  
30A/24VDC

**SPECIFIC CONDITIONS OF USE: YES as shown below:**

Ambient Temperature Range: -20 < Ta < +55°C



# IECEx Certificate of Conformity

Certificate No.: **IECEx EPS 19.0077X**

Page 5 of 5

Date of issue: 2020-01-20

Issue No: 2

## DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Updated components list and marking.

### Annex:

[HIMA\\_IECEx EPS 19.0077X - Annex -Components List\\_rev02.pdf](#)



Annex to Certificate  
IECEEx EPS 19.0077X Issue 2



**List of IECEEx certified electrical equipment for the HIMA HIJunction Box**

Item	QTY	MODEL	Manufacturer	Description	☒ Ex marking and ambient temperature range	Cert.-No.	Standards
1	2	ESX10-105-DC24V-16A-E or similar	E-T-A	Electronic Circuit Protector	Ex II 3G Ex ec nC IIC T4 Gc -20°C<Ta<+60°C	IECEEx EPS 18.0059X	IEC 60079-0 Ed. 7 IEC 60079-15 Ed. 4 IEC 60079-7 Ed. 5
2	6	ESX10-103-DC24V-1A-E or similar	E-T-A	Electronic Circuit Protector	Ex II 3G Ex ec nC IIC T4 Gc -20°C<Ta<+60°C	IECEEx EPS 18.0059X	IEC 60079-0 Ed. 7 IEC 60079-15 Ed. 4 IEC 60079-7 Ed. 5
3	1	ESX10-103-DC24V-10A-E or similar	E-T-A	Electronic Circuit Protector	Ex II 3G Ex ec nC IIC T4 Gc -20°C<Ta<+60°C	IECEEx EPS 18.0059X	IEC 60079-0 Ed. 7 IEC 60079-15 Ed. 4 IEC 60079-7 Ed. 5
4	3	18PLUS-EM02-00-PT01-01 or similar	E-T-A	Supply module for 18plus socket	Accessory to E-T-A ESX10	Accessory to E-T-A ESX10	Accessory to E-T-A ESX10
5	9	18PLUS-AM02-00- PT01-01 or similar	E-T-A	Module 18plus Socket system	Accessory to E-T-A ESX10	Accessory to E-T-A ESX10	Accessory to E-T-A ESX10
6	3	18PLUS-SM02-01- PT01-01 or similar	E-T-A	Signal module for 18plus socket	Accessory to E-T-A ESX10	Accessory to E-T-A ESX10	Accessory to E-T-A ESX10
7	2	RFI-207-F4G-T3G-EX or similar	Westermo	Redfox Industrial Routing Switch	Ex II 3G Ex nA [op is T4] IIC T3 Gc -40°C<Ta<+70°C	IECEEx BAS 15.0066X	IEC 60079-0 Ed. 6 IEC 60079-15 Ed. 4 IEC 60079-28 Ed. 1
8	2	GTX100 or similar	Westermo	SFP Transceiver FO, Single mode 1Gbit	Accessory to Westermo RFI	Accessory to Westermo RFI	Accessory to Westermo RFI
9	2	GSLC10-LX or similar	Westermo	SFP Transceiver Copper, 1Gbit	Accessory to Westermo RFI	Accessory to Westermo RFI	Accessory to Westermo RFI
10	4	PLC-RSC-24DC/21HC/EX or similar	Phoenix	PLC-Interface, relay	Ex II 3G Ex ec nC IIC T4 Gc -40°C<Ta<+60°C	IECEEx IBE 16.0029X	IEC 60079-0 Ed. 6 IEC 60079-15 Ed. 4 IEC 60079-7 Ed. 5



Annex to Certificate  
IECEx EPS 19.0077X Issue 2



BUREAU  
VERITAS

11	6	UK 10-DREHSI-EX (6.3x32) or similar	Phoenix	Fuse modular terminal block	Ex II 3 GD Ex nA IIC T4 Gc -50°C<Ta<+70°C	IECEx KEM 10.0054U	IEC 60079-0 Ed. 6 IEC 60079-15 Ed. 4
12	3	USLKG 10 N or similar	Phoenix	Ground modular terminal block	Ex II 2 GD Ex eb IIC Gb -60°C<Ta<+110°C	IECEx KEM 06.0035U	IEC 60079-0 Ed. 7 IEC 60079-7 Ed. 5.1
13	2	UT 4 – PE or similar	Phoenix	Ground modular terminal block	Ex II 2 GD Ex e II -50°C<Ta<+110°C	IECEx KEM 06.0027U	IEC 60079-0 Ed. 4 IEC 60079-7 Ed. 3
14	2	Quint4-PS/1AC/24DC/2 0/+ or similar	Phoenix	Power Supply	Ex II 3G Ex ec ic nC IIC T4 Gc -40°C<Ta<+75°C	IECEx SIQ 18.0005X	IEC 60079-0 Ed. 6 IEC 60079-11 Ed. 6 IEC 60079-15 Ed. 4 IEC 60079-7 Ed. 5
15	(Optional)	QUINT-PS/1AC/24DC/1 0/CO or similar	Phoenix	Power Supply	Ex II 3G Ex nA nC IIC T4 Gc -25°C<Ta<+60°C	IECEx TUN 11.0007X	IEC 60079-0 Ed. 5 IEC 60079-15 Ed. 4
16	1	8074/2-2-R-40 or similar	R. STAHL	Position switch	Ex II 2G Ex d e IIC T5 Gb -20°C<Ta<+60°C	IECEx BVS 16.0085	IEC 60079-0 Ed. 6 IEC 60079-1 Ed. 6 IEC 60079-31 Ed. 2 IEC 60079-7 Ed. 4
17	1	CP MULTITHERM DNA 75 T4 or similar	Intertec	Heater	Ex II 2 G Ex db IIC T4 -60°C<Ta<+60°C	IECEx PTB 07.0052X	IEC 60079-0 Ed. 6 IEC 60079-1 Ed. 6 IEC 60079-31 Ed. 1
18	1	TAE 10 or similar	Intertec	Thermostat	Ex II 2 G Ex db IIC T6 -60°C<Ta<+60°C	IECEx PTB 07.0054	IEC 60079-0 Ed. 6 IEC 60079-1 Ed. 6 IEC 60079-31 Ed. 1
19	1 (Optional)	TAE 30 D AM or similar	Intertec	Thermostat Alarmer	Ex II 2 G Ex db IIC T6 -60°C<Ta<+60°C	IECEx PTB 07.0054	IEC 60079-0 Ed. 6 IEC 60079-1 Ed. 6 IEC 60079-31 Ed. 1
20	112	2002-2951 or similar	WAGO	Double level double disconnect terminal	Ex ec IIC Gc -55°C<Ta<+105°C	IECEx KIWA 17.0014U	IEC 60079-0 Ed. 6 IEC 60079-7 Ed. 5
21	Up to 6	CF 16 Ex AISI 304	Roxtec	Cable transit device	Ex e IIC -60°C<Ta<+80°C	IECEx NEM 12.0014X	IEC 60079-0 Ed. 6 IEC 60079-31 Ed. 1 IEC 60079-7 Ed. 4
22	32	CM 15w40 Ex	Roxtec	Standard adaptable modules Ex	Ex e IIC -60°C<Ta<+80°C	IECEx NEM 12.0014X	IEC 60079-0 Ed. 6 IEC 60079-31 Ed. 1 IEC 60079-7 Ed. 4



Annex to Certificate  
IECEx EPS 19.0077X Issue 2



23	16	CM 20w40 Ex	Roxtec	Standard adaptable modules Ex	Ex e IIC -60°C<Ta<+80°C	IECEx NEM 12.0014X	IEC 60079-0 Ed. 6 IEC 60079-31 Ed. 1 IEC 60079-7 Ed. 4
24	4	CM 40 10-32 Ex	Roxtec	Standard adaptable modules Ex	Ex e IIC -60°C<Ta<+80°C	IECEx NEM 12.0014X	IEC 60079-0 Ed. 6 IEC 60079-31 Ed. 1 IEC 60079-7 Ed. 4
25	1	X-Base Plate 10 XX	HIMA	Base Plate	Ex II 3 G Ex nA nC IIC T4 Gc 0°C<Ta<+60°C	IECEx TUR 14.0035X	IEC 60079-0 Ed. 6 IEC 60079-15 Ed. 4
26	1	X - FAN 10 XX	HIMA	System Fan	Ex II 3 G Ex nA nC IIC T4 Gc 0°C<Ta<+60°C	IECEx TUR 14.0035X	IEC 60079-0 Ed. 6 IEC 60079-15 Ed. 4
27	2	X-SB 01	HIMA	System Bus Module	Ex II 3 G Ex nA nC IIC T4 Gc 0°C<Ta<+60°C	IECEx TUR 14.0035X	IEC 60079-0 Ed. 6 IEC 60079-15 Ed. 4
28	(Optional)	X-CPU 31	HIMA	Processor Module	Ex II 3 G Ex nA nC IIC T4 Gc 0°C<Ta<+60°C	IECEx TUR 14.0035X	IEC 60079-0 Ed. 6 IEC 60079-15 Ed. 4
29	(Optional)	X-COM 01	HIMA	Communication Module	Ex II 3 G Ex nA nC IIC T4 Gc 0°C<Ta<+60°C	IECEx TUR 14.0035X	IEC 60079-0 Ed. 6 IEC 60079-15 Ed. 4
30	(Optional)	X-AI 16 XX	HIMA	Analog Input / Temperature Module	Ex II 3 G Ex nA nC IIC T4 Gc 0°C<Ta<+60°C	IECEx TUR 14.0035X	IEC 60079-0 Ed. 6 IEC 60079-15 Ed. 4
31	2	X-AI 32 XX	HIMA	Analog Input Module	Ex II 3 G Ex nA nC IIC T4 Gc 0°C<Ta<+60°C	IECEx TUR 14.0035X	IEC 60079-0 Ed. 6 IEC 60079-15 Ed. 4
32	2	X-AO 16 XX	HIMA	Analog Output Module	Ex II 3 G Ex nA nC IIC T4 Gc 0°C<Ta<+60°C	IECEx TUR 14.0035X	IEC 60079-0 Ed. 6 IEC 60079-15 Ed. 4
33	(Optional)	X-DI 32 XX	HIMA	Digital Input Module	Ex II 3 G Ex nA nC IIC T4 Gc 0°C<Ta<+60°C	IECEx TUR 14.0035X	IEC 60079-0 Ed. 6 IEC 60079-15 Ed. 4
34	Optional	X-DO 12 XX	HIMA	Digital Output Module	Ex II 3 G Ex nA nC IIC T4 Gc 0°C<Ta<+60°C	IECEx TUR 14.0035X	IEC 60079-0 Ed. 6 IEC 60079-15 Ed. 4



Annex to Certificate  
IECEx EPS 19.0077X Issue 2



35	Optional	X-DO 24 XX	HIMA	Digital Output Module	Ex II 3 G Ex nA nC IIC T4 Gc 0°C<Ta<+60°C	IECEx TUR 14.0035X	IEC 60079-0 Ed. 6 IEC 60079-15 Ed. 4
36	2	X-DO 32 XX	HIMA	Digital Output Module	Ex II 3 G Ex nA nC IIC T4 Gc 0°C<Ta<+60°C	IECEx TUR 14.0035X	IEC 60079-0 Ed. 6 IEC 60079-15 Ed. 4
37	2	X-HART 32 01	HIMA	HART Interface Module	Ex II 3 G Ex nA nC IIC T4 Gc 0°C<Ta<+60°C	IECEx TUR 14.0035X	IEC 60079-0 Ed. 6 IEC 60079-15 Ed. 4
38	8	X-CB XXX XX	HIMA	Connector Board	Accessory to HIMA HIMax	Accessory to HIMA HIMax	Accessory to HIMA HIMax
39	Optional	X-BLK XX	HIMA	Spare Modules	Accessory to HIMA HIMax	Accessory to HIMA HIMax	Accessory to HIMA HIMax
40	Optional	X-FTA XXX XX	HIMA	Field Termination Assemblies	Accessory to HIMA HIMax	Accessory to HIMA HIMax	Accessory to HIMA HIMax
41	Optional	F35 03	HIMA	Compact System	Ex II 3 G Ex nA nC IIC T4 Gc 0°C<Ta<+60°C	IECEx TUR 14.0034X	IEC 60079-0 Ed. 6 IEC 60079-15 Ed. 4
42	Optional	F3 AIO 8/4 01	HIMA	Remote I/O device	Ex II 3 G Ex nA nC IIC T4 Gc 0°C<Ta<+60°C	IECEx TUR 14.0034X	IEC 60079-0 Ed. 6 IEC 60079-15 Ed. 4
43	Optional	F3 DIO 20/8 02	HIMA	Remote I/O device	Ex II 3 G Ex nA nC IIC T4 Gc 0°C<Ta<+60°C	IECEx TUR 14.0034X	IEC 60079-0 Ed. 6 IEC 60079-15 Ed. 4
44	Optional	F1 DI 16 01	HIMA	Remote I/O device	Ex II 3 G Ex nA nC IIC T4 Gc 0°C<Ta<+60°C	IECEx TUR 14.0034X	IEC 60079-0 Ed. 6 IEC 60079-15 Ed. 4
45	Optional	F2 DO 16 01	HIMA	Remote I/O device	Ex II 3 G Ex nA nC IIC T4 Gc 0°C<Ta<+60°C	IECEx TUR 14.0034X	IEC 60079-0 Ed. 6 IEC 60079-15 Ed. 4
46	Optional	UT 4-L/HESILED 24 (5x20) or similar	Phoenix	Fuse Terminal Block	Ex II 3 G Ex nA IIC Gc -60°C<Ta<+130°C	IECEx KIWA 14.0014U	IEC 60079-0 Ed. 6 IEC 60079-15 Ed. 4



Annex to Certificate  
IECEEx EPS 19.0077X Issue 2



47	Optional	8186/1 or similar	R. STAHL	Optical Fibre Splice Cassette	Ex II 2 G Ex op pr IIC Gb -40°C<Ta<+60°C	IECEEx PTB 10.0060U	IEC 60079-0 Ed. 5 IEC 60079-28 Ed. 1
48	Optional	MACX MCR-PTB – 2865625 or similar	Phoenix	Power Supply and Alarming	Ex nA nC IIC T4 Gc -20°C<Ta<+60°C	IECEEx IBE 08.0004X	IEC 60079-0 Ed. 6 IEC 60079-11 Ed. 6 IEC 60079-15 Ed. 4
49	Optional	MACX MCR-EX-TC-I – 1050233 or similar	Phoenix	Isolating Amplifier TC	Ex II 3(1) G Ex nA [ia Ga] IIC T4 Gc -20°C<Ta<+60°C	IECEEx IBE 19.0001X	IEC 60079-0 Ed. 6 IEC 60079-11 Ed. 6 IEC 60079-15 Ed. 4
50	Optional	MACX MCR-EX-SL-RPSS-2I-2I or similar	Phoenix	Repeater Power Supply	Ex II 3(1) G Ex nA [ia Ga] IIC T4 Gc -20°C<Ta<+60°C	IECEEx BVS 13.0007X	IEC 60079-0 Ed. 6 IEC 60079-11 Ed. 6 IEC 60079-15 Ed. 4
51	Optional	MACX MCR-EX-SL-IDSI-I or similar	Phoenix	Output Isolating Amplifier	Ex II 3(1) G Ex nA [ia Ga] IIC/IIB T4 Gc -20°C<Ta<+60°C	IECEEx BVS 08.0025X	IEC 60079-0 Ed. 4 IEC 60079-11 Ed. 6 IEC 60079-15 Ed. 3
52	Optional	MACX MCR-EX-SL-SD-24-48-LP or similar	Phoenix	Solenoid Driver	Ex II 3 (1)G Ex nA [ia IIC Ga] IIC T4 Gc X -20°C<Ta<+60°C	IECEEx IBE 08.0002X	IEC 60079-0 Ed. 4 IEC 60079-11 Ed. 5 IEC 60079-15 Ed. 3
53	Optional	MACX MCR-EX-SL-2NAM-RO or similar	Phoenix	Isolating Amplifier	Ex II 3 (1) G Ex nA nC [ia Ga] IIC T4 Gc -20°C<Ta<+60°C	IECEEx IBE 08.0001X	IEC 60079-0 Ed. 4 IEC 60079-11 Ed. 5 IEC 60079-15 Ed. 3
54	Optional	PSR-PS22-1NO-1NC-24VDC-SC or similar	Phoenix	Coupling Relay	Ex II 3 G Ex nA nC IIC T4 Gc -40°C<Ta<+70°C	IECEEx ULD 14.0003X	IEC 60079-0 Ed. 6 IEC 60079-15 Ed. 4
55	Optional	8562/53-2034-XXX or similar	R. STAHL	Circuit Breaker	Ex II 2G EEx de IIC Gb -20°C<Ta<+60°C	IECEEx PTB 06.0062U	IEC 60079-0 Ed. 5 IEC 60079-1 Ed. 6 IEC 60079-7 Ed. 4
56	2 (optional)	QS 40 series	PULS	Power Supply	Ex nA nC IIC T4 Gc -25°C<Ta<+70°C	IECEEx EPS 14.0007X	IEC 60079-0 Ed. 6 IEC 60079-15 Ed. 4
57	2 (optional)	P-EX-OTR opsis	Primation	Optic fibre converter	Ex II 3(2) G Ex nA [op is Gb] IIC T4 Gc X -40°C<Ta<+80°C	IBExU11AT EX1133	EN 60079-0:2009 EN 60079-28:2007 EN 60079-0:2012 EN 60079-15:2010
58	(optional)	QUINT-ORING/24DC/2 X20/1X40 or similar	Phoenix	Redundancy module	Ex nA IIC T4 GC -25 °C to +70 °C	IECEEx DEK 11.0015X	IEC 60079-0:2011 IEC 60079-15:2010



Annex to Certificate  
IECEx EPS 19.0077X Issue 2



59	(optional)	QUINT4-S-ORING/12-24DC/1X40/+ or similar	Phoenix	Redundancy module	Ex nA nC IIC Gc -40 to +70°C	IECEx SIQ 17.0006U	IEC 60079-0:2011 IEC 60079-15:2010
60	(optional)	288-936 or similar	WAGO	Component module with resistor	Ex ic [ic] IIC T4 Gc	IECEx TUN 09.0001	IEC 60079-0:2011 IEC 60079-11:2006
61	(optional)	17-9Z63-0002 or similar	BARTEC	Resistive coupling element	Simple Electrical Equipment T5	Declaration of Conformity	IEC 60079-11 IEC 60079-14
62	1	ASR*****; ASR*****-316; ASR*****-OG;	Eldon	Enclosure	Ex II 2G Ex eb IIC Gb	EPS 19 ATEX 1 107 U	EN 60079-0:2018 EN 60079-7:2015
63	1 (Optional)	PK 150-4X or similar	ELMEKO	Elmeko Peltier Thermoelectric cooler PK 150	Ex II 3G Ex ec IIC T4 Gc	EPS 19 ATEX 1 160 X	EN 60079-0:2012 EN 60079-7:2015
						-	-