EU-Type Examination Certificate

Certificate No:
ACE24ATEX007X
Rev00

Issued: 11/07/2024

[1] **EU - TYPE EXAMINATION CERTIFICATE**

[2] **Equipment or Protective System Intended for use in Potentially Explosive Atmospheres**
Directive 2014/34/EU

[3] EU – Type Examination Certificate Number: ACE24ATEX007X Rev00

[4] Product: Explosion-proof Power (Illumination) Distribution Boxes BH-8127 Series

[5] Manufacturer: Daqing Hengchi Electric Co.,Ltd.

[6] Address: South fifth intersection of Tieren Ecological Industry demonstration Area, Honggang District, Daqing, Heilongjiang 163511 China

[7] This equipment or protective system and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

[8] Advanced Consulting and Engineering Iberia SL (A.C.&E. Iberia S.L.), Notified body Accreditation nº: NB3024 in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive
The examination and test results are recorded in the confidential Report nº.
EX_EXD001_24_24-922, EX_EXE002_24_24-922, EX_EXT002_24_24-922

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
EN 60079-0 2018: Explosive atmospheres — Part 0: Equipment — General requirements
EN 60079-1 2014: Explosive atmospheres — Part 1: Equipment protection by flameproof enclosures ‘d’
EN 60079-7: 2015/A1: 2018: Explosive atmospheres — Part 7: Equipment protection by increased safety ‘e’
EN 60079-31 2014: Explosive atmospheres — Part 31: Equipmentdust ignition protection by enclosure ‘t’

[10] If the sign “X” is placed after the certificate number, it indicates that the product is subject to the Special Conditions for Use specified in the point 17 of This certificate.

[11] This EU-Type Examination Certificate relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

[12] The marking of the equipment or protective system shall include the following:

II 2G Ex db eb IIC T5…T6 Gb
II 2D Ex tb IIIC T80°C Db

Date: 11/07/2024

Advanced Consulting and Engineering Iberia SL
Notified Body No NB3024
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Date: 11/07/2024 17:23:51

Matteo Marconi, CEO

This certificate may only be reproduced in its entirety and without any change, including schedules.

[13] **SCHEDULE**

[14] EC-Type Examination Certificate No: ACE24ATEX007 Rev00

[15] Description of equipment

BH-8127 Series Explosion-proof Power (Illumination) Distribution Boxes include BH-8127-I, BH-8127-II and BH-8127-III.

The BH-8127-I has one ”d” chamber and one small “e” chamber, the BH-8127-II has two ”d” chambers and one middle “e” chamber, and the BH-8127-III has three ”d” chambers and one “e” chamber. Each "d"chamber is the same size and is connected with the other "d"chamber and "e" chamber by epoxy resin. The "d" chamber is composed of an enclosure and a cover, and the "e" chamber is composed of an enclosure and a cover, both of which are made of Q235 carbon steel or SUS 304 stainless steel (the dimensions remain the same when the material changes). The seals of the housing are made of nitrile rubber. Electrical components (e.g. circuit breakers, etc.) are installed in the "d" chamber, and the terminals and rails are installed in the"e"chamber. Different numbers of holes are provided on the outer surface of the "e" chamber for installation with explosion-proof cable glands.

Both external and internal earthings are provided. The degree of protection of the enclosure is IP66. the suitable application location for it as below: For gas is zone 1 and zone 2, this Explosion-proof Power (Illumination) Distribution Boxes for gas group, it is IIC; for gas protection, it is Gb.

For dust is zone 21 and zone 22, this Explosion-proof Power (Illumination) Distribution Boxes for dust group, it is IIIC; for dust protection, it is Db.

Model designation:

BH-8127-□ - □ / □ / □ / □ / □
1 2 3 4 5 6 7 8

“1”: Explosion-Proof Distribution box;
“2”:Design Number;
“3”:Qty of "d" Chamber,”I”:1, ”II”:2, ”III”:3;
“4”:Branch number ≤30;
“5”:Branch current ≤315A;
“6”:K, have main switch (null: no main switch) ;
“7”:Main switch current≤400A;
“8”:Other;

The model and the number of terminal blocks installed inside, the cross-sectional area and the corresponding current of conductor when using Weidmüller WDU/WPE series:

Cross-sectional area of conductor(mm2)		35	50	95	120	150	240
Terminal current (A)		100	125	200	200	250	400
Terminal model (Weidmüller)		WDU /WPE 35N	WDU/ WPE 50N	WDU/ WPE 70/95	WDU/ WPE 95N/120N	WDU/ WPE 120/150	WDU 240
Terminal tightening torque		0.5N·m	1N·m	1.5N·m	2N·m	3N·m	3.5N·m
Number of Terminals	BH-8127-I	8	4	4	4	4	4
	BH-8127-II	8	4	4	4	4	4
	BH-8127-III	8	4	4	4	4	4

The model and the number of terminal blocks installed inside, the cross-sectional area and the corresponding current of conductor when using Phoenix UK/UKH series:

Cross-sectional area of conductor (mm2)		1.5	2.5	3	5	6	10
Terminal current (A)		15	20	18	28	40	50
Terminal model （Phoenix ）		UK 1.5 N	UK 2.5 N	UK 3 N	UK 5 N	UK 6 N	UK 10 N
Terminal tightening torque		0.5N·m	1N·m	0.8N·m	1.5N·m	2N·m	3N·m
Number of Terminals	BH-8127-I	50	50	50	50	50	24
	BH-8127-II	100	100	100	100	100	24
	BH-8127-III	150	150	150	150	150	24

Cross-sectional area of conductor (mm2)		16	35	50	95	150	240
Terminal current (A)		64	100	125	175	250	350
Terminal model （Phoenix）		UK 16 N	UK 35	UKH 50	UKH 95	UKH 150	UKH 240
Terminal tightening torque		3.5N·m	4N·m	6N·m	15N·m	25N·m	25N·m
Number of Terminals	BH-8127-I	8	4	4	4	4	4
	BH-8127-II	8	4	4	4	4	4
	BH-8127-III	8	4	4	4	4	4

Maximum Dissipated Power(‘e’ Chamber):

Model	Maximum Dissipated Power(W)
BH-8127-I	501
BH-8127-II	883
BH-8127-III	1246

The number of holes which can be processed on the increased safety enclosure:

Model	Dimensions (mm)	Diameter of the hole							
		Φ20.5	Φ25.5	Φ32.5	Φ40.5	Φ50.5	Φ63.5	Φ90.5	Φ110
BH-8127-I	650×580×309	57	43	28	22	17	14	7	7
BH-8127-II	1320×580×309	114	86	56	44	34	28	14	14
BH-8127-III	1990×580×309	171	129	84	66	51	42	21	21

[13] **SCHEDULE**

[14] EC-Type Examination Certificate No: ACE24ATEX007X Rev00

[16] Test documents are listed in the test report nº
EX_EXD001_24_24-922, EX_EXE002_24_24-922, EX_EXT002_24_24-922

[17] Special conditions for safe use

1. Ambient temperature range: -40°C to +40°C;
2. End user shall use certified cable gland suitable type of protection for final installation purpose;
3. Use screws with yield strength ≥450MPa for Ex db chamber;
4. WARNING–DO NOT OPEN WHEN ENERGIZED;
5. WARNING - DO NOT OPEN WHEN AN EXPLOSIVE ATMOSPHERE IS PRESENT.

[18] Essential Health and Safety Requirements are
Fulfilled by the harmonized standards

[19] Documents and technical datasheets:

Title	Object	Revision	Date
BH-8127 Series Explosion-proof Power (Illumination) Distribution Boxes User Manual	/	V1.0	2023.06
Assembly diagram	BH-8127-III-00	V1.0	2024.5.15
Main box body	BH-8127-III-01	V1.0	2024.5.15
Flameproof compartment cover	BH-8127-III-02	V1.0	2024.5.15
Increased safety compartment cover	BH-8127-III-03	V1.0	2024.5.15
M10 Ring	BH-8127-III-04	V1.0	2024.5.15
Install base plate 1	BH-8127-III-05	V1.0	2024.5.15
Install base plate 2	BH-8127-III-06	V1.0	2024.5.15
Sealing washer	BH-8127-III-07	V1.0	2024.5.15
α sealing rubber strip	BH-8127-III-08	V1.0	2024.5.15
Grounding sign	BH-8127-III-09	V1.0	2024.5.15
Switching knob mechanism （larger model）	BH-8127-III-10	V1.0	2024.5.15
Marking cover （larger model）	BH-8127-III-10.1	V1.0	2024.5.15
Φ69 Base sealing ring	BH-8127-III-10.2	V1.0	2024.5.15

Panel base	BH-8127-III-10.3	V1.0	2024.5.15
Knob handle（larger model）	BH-8127-III-10.4	V1.0	2024.5.15
Handle shaft	BH-8127-III-10.5	V1.0	2024.5.15
Cork	BH-8127-III-10.6	V1.0	2024.5.15
Locking panel	BH-8127-III-10.7	V1.0	2024.5.15
Hinge linkage board	BH-8127-III-10.8	V1.0	2024.5.15
Spring	BH-8127-III-10.9	V1.0	2024.5.15
Explosion proof shaft sleeve	BH-8127-III-10.10	V1.0	2024.5.15
Φ12 sealing ring	BH-8127-III-10.11	V1.0	2024.5.15
Linkage shaft	BH-8127-III-10.12	V1.0	2024.5.15
Switching knob mechanism （smaller model）	BH-8127-III-11	V1.0	2024.5.15
Panel base（smaller model）	BH-8127-III-11.1	V1.0	2024.5.15
Marking cover（smaller model）	BH-8127-III-11.2	V1.0	2024.5.15
Cover plate	BH-8127-III-11.3	V1.0	2024.5.15
Knob handle（smaller model）	BH-8127-III-11.4	V1.0	2024.5.15
Locking device	BH-8127-III-11.5	V1.0	2024.5.15
Card spring	BH-8127-III-11.6	V1.0	2024.5.15
Locking device spring	BH-8127-III-11.7	V1.0	2024.5.15
Φ37 Base sealing ring	BH-8127-III-11.8	V1.0	2024.5.15
Spring gasket	BH-8127-III-11.9	V1.0	2024.5.15
Lever shaft	BH-8127-III-11.10	V1.0	2024.5.15
Nameplate	BH-8127-III-12	V1.0	2024.5.15
Assembly diagram	BH-8127-II-00	V1.0	2024.5.15
Main box body	BH-8127-II-01	V1.0	2024.5.15

Flameproof compartment cover	BH-8127-II-02	V1.0	2024.5.15
Increased safety compartment cover	BH-8127-II-03	V1.0	2024.5.15
M10 Ring	BH-8127-II-04	V1.0	2024.5.15
Install base plate 1	BH-8127-II-05	V1.0	2024.5.15
Install base plate 2	BH-8127-II-06	V1.0	2024.5.15
Sealing washer	BH-8127-II-07	V1.0	2024.5.15
α sealing rubber strip	BH-8127-II-08	V1.0	2024.5.15
Grounding sign	BH-8127-II-09	V1.0	2024.5.15
Switching knob mechanism （larger model）	BH-8127-II-10	V1.0	2024.5.15
Marking cover （larger model）	BH-8127-II-10.1	V1.0	2024.5.15
Φ69 Base sealing ring	BH-8127-II-10.2	V1.0	2024.5.15
Panel base	BH-8127-II-10.3	V1.0	2024.5.15
Knob handle （larger model）	BH-8127-II-10.4	V1.0	2024.5.15
Handle shaft	BH-8127-II-10.5	V1.0	2024.5.15
Cork	BH-8127-II-10.6	V1.0	2024.5.15
Locking panel	BH-8127-II-10.7	V1.0	2024.5.15
Hinge linkage board	BH-8127-II-10.8	V1.0	2024.5.15
Spring	BH-8127-II-10.9	V1.0	2024.5.15
Explosion proof shaft sleeve	BH-8127-II-10.10	V1.0	2024.5.15
Φ12 sealing ring	BH-8127-II-10.11	V1.0	2024.5.15
Linkage shaft	BH-8127-II-10.12	V1.0	2024.5.15
Switching knob mechanism （smaller model）	BH-8127-II-11	V1.0	2024.5.15

Panel base (smaller model)	BH-8127-II-11.1	V1.0	2024.5.15
Marking cover (smaller model)	BH-8127-II-11.2	V1.0	2024.5.15
Cover plate	BH-8127-II-11.3	V1.0	2024.5.15
Knob handle (smaller model)	BH-8127-II-11.4	V1.0	2024.5.15
Locking device	BH-8127-II-11.5	V1.0	2024.5.15
Card spring	BH-8127-II-11.6	V1.0	2024.5.15
Locking device spring	BH-8127-II-11.7	V1.0	2024.5.15
Φ37 Base sealing ring	BH-8127-II-11.8	V1.0	2024.5.15
Spring gasket	BH-8127-II-11.9	V1.0	2024.5.15
Lever shaft	BH-8127-II-11.10	V1.0	2024.5.15
Nameplate	BH-8127-II-12	V1.0	2024.5.15
Assembly diagram	BH-8127-I-00	V1.0	2024.5.15
Main box body	BH-8127-I-01	V1.0	2024.5.15
Flameproof compartment cover	BH-8127-I-02	V1.0	2024.5.15
Increased safety compartment cover	BH-8127-I-03	V1.0	2024.5.15
M10 Ring	BH-8127-I-04	V1.0	2024.5.15
Install base plate 1	BH-8127-I-05	V1.0	2024.5.15
Install base plate 2	BH-8127-I-06	V1.0	2024.5.15
Sealing washer	BH-8127-I-07	V1.0	2024.5.15
α sealing rubber strip	BH-8127-I-08	V1.0	2024.5.15
Grounding sign	BH-8127-I-09	V1.0	2024.5.15
Switching knob mechanism (larger model)	BH-8127-I-10	V1.0	2024.5.15
Marking cover (larger model)	BH-8127-I-10.1	V1.0	2024.5.15

Φ69 Base sealing ring	BH-8127-I-10.2	V1.0	2024.5.15
Panel base	BH-8127-I-10.3	V1.0	2024.5.15
Knob handle (larger model)	BH-8127-I-10.4	V1.0	2024.5.15
Handle shaft	BH-8127-I-10.5	V1.0	2024.5.15
Cork	BH-8127-I-10.6	V1.0	2024.5.15
Locking panel	BH-8127-I-10.7	V1.0	2024.5.15
Hinge linkage board	BH-8127-I-10.8	V1.0	2024.5.15
Spring	BH-8127-I-10.9	V1.0	2024.5.15
Explosion proof shaft sleeve	BH-8127-I-10.10	V1.0	2024.5.15
Φ12 sealing ring	BH-8127-I-10.11	V1.0	2024.5.15
Linkage shaft	BH-8127-I-10.12	V1.0	2024.5.15
Switching knob mechanism (smaller model)	BH-8127-I-11	V1.0	2024.5.15
Panel base (smaller model)	BH-8127-I-11.1	V1.0	2024.5.15
Marking cover (smaller model)	BH-8127-I-11.2	V1.0	2024.5.15
Cover plate	BH-8127-I-11.3	V1.0	2024.5.15
Knob handle (smaller model)	BH-8127-I-11.4	V1.0	2024.5.15
Locking device	BH-8127-I-11.5	V1.0	2024.5.15
Card spring	BH-8127-I-11.6	V1.0	2024.5.15
Locking device spring	BH-8127-I-11.7	V1.0	2024.5.15
Φ37 Base sealing ring	BH-8127-I-11.8	V1.0	2024.5.15
Spring gasket	BH-8127-I-11.9	V1.0	2024.5.15
Lever shaft	BH-8127-I-11.10	V1.0	2024.5.15
Nameplate	BH-8127-I-12	V1.0	2024.5.15

Technical Document of Epoxy Resin	CZ-01	Rev. A	2023.06.05
Technical Document of Nitrile Rubber	CZ-02	Rev. A	2023.06.05
Technical Document of SUS304	CZ-03	Rev. A	2023.06.05
Technical Document of Q235	CZ-04	Rev. A	2023.06.05
Terminal blocks of certificate	IECEx PTB 19.0039U	Issue 0	2020.01.09
Terminal blocks of certificate	IECEx KEM 06.0034U	Issue 7	2021.06.23
Terminal blocks of certificate	IECEx KEM 06.0029U	Issue 7	2021.06.30
Terminal blocks of certificate	PTB 19 ATEX 1014U	Issue 0	2020.01.09
Terminal blocks of certificate	KEMA 98 ATEX 1651U	Issue 6	2021.06.23
Terminal blocks of certificate	KEMA 98 ATEX 1786U	Issue 6	2021.06.30
Terminal blocks of certificate	IECEx ULD 14.0005U	Issue 7	2021.03.26
Terminal blocks of certificate	IECEx DEK 21.0033U	Issue 0	2021.11.15
Terminal blocks of certificate	DEMKO 14 ATEX 1338U	Issue 7	2021.03.26
Terminal blocks of certificate	KEMA 01 ATEX 2186U	Issue 3	2021.11.15
Dissipation power table-"d" Chamber of BH-8127-I	DQHCGL2024051601	V1.0	2024.05.15
Dissipation power table-"d" Chamber of BH-8127-II	DQHCGL2024051602	V1.0	2024.05.15
Dissipation power table-"d"	DQHCGL2024051603	V1.0	2024.05.15

Chamber of BH-8127-III			
Dissipation power table-"e" Chamber of BH-8127-I	DQHCGL2024051604	V1.0	2024.05.15
Dissipation power table-"e" Chamber of BH-8127-II	DQHCGL2024051605	V1.0	2024.05.15
Dissipation power table-"e" Chamber of BH-8127-III	DQHCGL2024051606	V1.0	2024.05.15

The documents above-mentioned are strictly confidential and they are of only use of authorities.
A copy of the documents are saved by A.C.&E. Iberia S.L.

[20] Certificate History

Number of certificate	Rev.	Comments	Date
ACE24ATEX007X Rev00	00	First issue	11/07/2024

Date: 11/07/2024

Advanced Consulting and Engineering Iberia SL
Notified Body No NB3024

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Matteo Marconi, CEO