



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 PCET 24.0027X	Page 1 of 4	<u>Certificate history:</u>
Status:	Current	Issue No: 0	
Date of Issue:	2025-05-15		
Applicant:	WAROM TECHNOLOGY INCORPORATED COMPANY No. 555 Baoqian Road, Jiading District, Shanghai, 201808 China		
Equipment:	Explosion-proof Distribution Panel Model HRMD96-□/□/□		
Optional accessory:			
Type of Protection:	"db", "ia", "ib", "tb"		
Marking:	see attachment		

Approved for issue on behalf of the IECEx
Certification Body:

Yin Hong

Position:

General manager

Signature:
(for printed version)

Date:
(for printed version)

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:

PCEC (Tianjin) Certification Services Co. Ltd
No 85-1, No. 3 Road, Hongqiao District
Tianjin Post Code 300131
China





IECEx Certificate of Conformity

Certificate No.: **IECEx PCET 24.0027X**

Page 2 of 4

Date of issue: 2025-05-15

Issue No: 0

Manufacturer: **WAROM TECHNOLOGY INCORPORATED COMPANY**
No. 555 Baoqian Road, Jiading District, Shanghai, 201808
China

Manufacturing locations: **WAROM TECHNOLOGY INCORPORATED COMPANY**
No. 555 Baoqian Road, Jiading District, Shanghai, 201808
China

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 60079-1:2014](#) Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition:7.0

[IEC 60079-11:2011](#) Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition:6.0

[IEC 60079-31:2022](#) Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure "t"
Edition:3.0

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:

[CN/PCET/ExTR24.0035/00](#)

Quality Assessment Report:

[CN/CQM/QAR07.0003/13](#)



IECEx Certificate of Conformity

Certificate No.: **IECEx PCET 24.0027X**

Page 3 of 4

Date of issue: 2025-05-15

Issue No: 0

EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The HRMD96 series products feature nine different enclosure sizes, identified by the codes I, II, IIB, III, IIIB, IV, IVB, V, and VB. Product consists of a enclosure, cover, and plug. The enclosure and cover are made from Q235 carbon steel, or stainless steel types 304 or 316L. The covers can be equipped with components such as push buttons, indicator lights, operating handles of the circuit breakers and universal switches, glass windows, potentiometer, thermostat panel-buttons, etc., The interior can accommodate a wide range of certified components(Refer to clause 12 of " Specific Conditions of Use" / "Schedule of Limitations" of test cover), and the components in the enclosure include MCCBs, MCBs, AC contactors, thermal relays, intermediate relays, time relays, DC power supplies, current transformers, surge protectors, fuses, control transformers, PLCs, soft starters, frequency converters, photocontrol switches, timers, heaters, temperature-controlled heating tapes, motor protection devices, lighting/building controllers, energy-saving lighting controllers, fire monitoring controllers, thermostats, humidity controllers, current/voltage monitors, dual power transfer switches, counters, timers, solid-state relays, diode modules, industrial computers, UPS systems, HID ballast components, fluorescent and LED emergency drivers, LED drivers, certified intrinsic safety interface devices, terminals, and copper busbars. Internal and external grounding screws are provided to ensure safety.

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. The flameproof joint cannot be repaired.
2. As there is a potential electrostatic charging hazard, the HRMD96series Explosion-proof Distribution Panels only to be cleaned with a damp cloth.
3. The HRMD96series Explosion-proof Distribution Panels are intended to be mounted according to the mounting direction specified in the manual.
4. The content of the Ex component enclosure equipment may be placed in any arrangement, provided that an area of at least 40% of each cross-sectional area remains free to permit an unimpeded gas flow and, therefore, unrestricted development of an explosion. Separate relief areas may be aggregated provided that each area has a minimum dimension in any direction of 12.5mm.
5. Only high temperature-resistant cable can be used, and shall not be lower than 80°C(T6) or 95°C(T5) and 110°C(T4) .
6. 30 minutes later the surface temperature of enclosed hot components reduces to below the assigned maximum surface temperature of the electrical equipment.
7. It cannot be used in areas affected by charge generation process, mechanical friction, separation process, electronic emission and pneumatic transport dust.
8. Before application, IECEx certified cable glands must be incorporated, rated minimum IP66, suitable for the conditions of use and correctly installed.
9. The HK control switch, potentiometer, miniature circuit breaker (MCB) and moulded case circuit breaker (MCCB) have non-threaded cylindrical flamepath between the shaft and sheath, this joint is not repairable, when the flameproof gap exceeds 0.13mm due to wear during use, then it shall be replaced according to the manufacturer's requirements.
10. For the HD indicator mounted on the cover, risk of mechanical danger is low, reduce the risk of impact of foreign objects during installation.
11. When certified intrinsically safe associated equipment is installed, association with intrinsically safe equipment shall comply with the requirements of the standard IEC 60079-25/EN 60079-25.
12. WARNING – POTENTIAL ELECTROSTATIC CHARGING HAZARD – SEE INSTRUCTIONS.
CAUTION – USE FASTENERS WITH YIELD STRESS $\geq 450\text{MPa}$.
WARNING – AFTER DE-ENERGIZING DELAY 30 MINUTES BEFORE OPENING.



IECEx Certificate of Conformity

Certificate No.: **IECEx PCET 24.0027X**

Page 4 of 4

Date of issue: 2025-05-15

Issue No: 0

Additional information:

Routine tests:

The pressure applied is as follows(Static pressure test conducted according to Clause 16.1 of the IEC60079-1:2014):

Type	Pressure(kPa)
HRMD96-I	1650
HRMD96-IIB	1750
HRMD96-IIIB	2100
HRMD96-IVB	2000
HRMD96-VB	1700

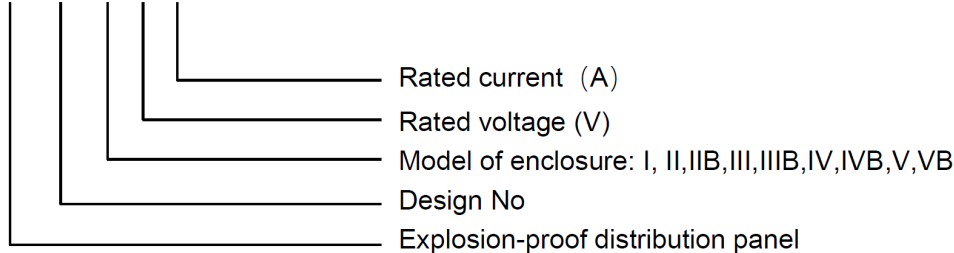
Annex:

[Annex to CoC-IECEx PCET 24.0027X.pdf](#)



1. This certificate covers the following types:

HRMD96 - □/□/□



2. Main parameters

Rated voltage: Max. 1000 V AC 50/60 Hz

Max. 1500 V DC

Rated current: Max. 1000 A

Type	Ex-marking	Ambient temperature	Ingress protection
HRMD96-□/□/□	When there is no intrinsically safe associated device in the cavity: Ex db IIC T6...T4 Gb Ex tb IIIC T80°C...T130°C Db	-60°C ~ +40(+60°C)	IP66
	When there is an intrinsically safe associated device inside the cavity: See annex table A	See annex table A	

3. Form of maximum power dissipation and temperature rise

Cover without glass window						
Type	T4/T130°C		T5/T95°C		T6/T80°C	
	Power consumption (W)		Power consumption (W)		Power consumption (W)	
	Ta=40°C	Ta=60°C	Ta=40°C	Ta=60°C	Ta=40°C	Ta=60°C
HRMD96-I	130	101	79	51	51	22
HRMD96-II	355	216	168	110	136	41
HRMD96-IIB	355	216	168	110	136	41
HRMD96-III	474	302	223	127	158	69
HRMD96-IIIB	474	302	223	127	158	69
HRMD96-IV	800	600	400	250	300	150
HRMD96-IVB	800	600	400	250	300	150
HRMD96-V	858	652	479	276	330	140
HRMD96-VB	858	652	479	276	330	140



Cover with glass window						
Type	T4/T130℃		T5/T95℃		T6/T80℃	
	Power consumption (W)		Power consumption (W)		Power consumption (W)	
	Ta=40℃	Ta=60℃	Ta=40℃	Ta=60℃	Ta=40℃	Ta=60℃
HRMD96-I	130	101	79	51	51	22
HRMD96-II	355	216	168	110	136	41
HRMD96-IIB	355	216	168	110	136	41
HRMD96-III	474	302	223	127	158	69
HRMD96-IIIB	474	302	223	127	158	69
HRMD96-IV	800	600	400	250	300	150
HRMD96-IVB	800	600	400	250	300	150
HRMD96-V	858	652	479	276	330	140
HRMD96-VB	858	652	479	276	330	140

4. Form certified Ex components, List of the components covered by separated IECEx certificates and statement of the assessments regarding the older editions of the standards:

Components	Type	Manufacturer	Ex-marking	Certificate	Standards
Flameproof Pushbutton	HA Series	Warom	Ex db IIC Gb Ex tb IIIC Db	IECEX CML 17.0161U	IEC 60079-0:2011 ⁽¹⁾ IEC 60079-1:2014 IEC 60079-31:2013 ⁽³⁾
Indicator	HD-** Series	Warom	Ex db IIC Gb Ex tb IIIC Db IP66	IECEX CQM 17.0008U	IEC 60079-0:2011 ⁽¹⁾ IEC 60079-1:2014 IEC 60079-31:2013 ⁽³⁾
Control Switch	HK Series	Warom	Ex db IIC Gb Ex tb IIIC Db	IECEX CML 17.0166U	IEC 60079-0:2011 ⁽¹⁾ IEC 60079-1:2014 IEC 60079-31:2013 ⁽³⁾
Stopping plug type	BPT Series	Warom	Ex db IIC Gb Ex tb IIIC Db	IECEX LCIE 15.0070U	IEC 60079-0:2011 ⁽¹⁾ IEC 60079-1:2014 IEC 60079-7:2006 ⁽²⁾ IEC 60079-31:2013 ⁽³⁾

(1): not impacted by the major technical changes until the standard IEC 60079-0:2017.

(2): not impacted by the major technical changes until the standard IEC 60079-7:2017.

(3): not impacted by the major technical changes until the standard IEC 60079-31:2022.

Note: When there is an intrinsically safe associated device inside the cavity-See annex table A.



5. Annex Table A:

Internal component						Explosion-proof distribution panel	
No.	Manufacturer	Components	Type	Certificate	Ex-marking	Ambient temperature	Ex-marking
1	Pepperl+Fuchs SE	Transformer Isolated Driver	KFD2-SCD2 –Ex1.LK KFD2-SCD2 –Ex2.LK	IECEX BAS 04.0014X	[Ex ia Ga] II C; [Ex ia Da] IIIC	-40℃ ~ +60℃	Ex db [Ex ia Ga] IIC T6...T4 Gb Ex tb [Ex ia Da] IIIC T80℃...T130℃ Db
2	Pepperl+Fuchs SE	Dual channel Smart Transmitter Isolator	KFD2-STC(V)4-EX2	IECEX BAS 04.0015X	[Ex ia Ga] II C; [Ex ia Da] IIIC	-20℃ ~ +60℃	Ex db [Ex ia Ga] IIC T6...T4 Gb Ex tb [Ex ia Da] IIIC T80℃...T130℃ Db
3	Pepperl+Fuchs SE	Transformer Isolated Loop Powered Current Separator	KFD0-CS-Ex*.5*	IECEX BAS 05.0004X	[Ex ia Ga] II C; [Ex ia Da] IIIC	-20℃ ~ +60℃	Ex db [Ex ia Ga] IIC T6...T4 Gb Ex tb [Ex ia Da] IIIC T80℃...T130℃ Db
4	Pepperl+Fuchs SE	Transformer Isolated Repeater/Power Supply	KFD2-VR4-Ex1.26	IECEX BAS 05.0078	[Ex ia Ga] II C; [Ex ia Da] IIIC	-20℃ ~ +60℃	
5	Pepperl+Fuchs SE	Transformer Isolated Voltage Repeater	KFD2-VR2-Ex1.50M / 500M	IECEX BAS 06.0011	[Ex ia Ga] II C; [Ex ia Da] IIIC	-40℃ ~ +60℃	
6	Pepperl+Fuchs SE	Switch Amplifier	HiC2821, HiC2822	IECEX BAS 06.0026X	[Ex ia Ga] II C; [Ex ia Da] IIIC	-20℃ ~ +60℃	
7	Pepperl+Fuchs SE	Transformer Isolated Driver	KFD0-SD-Ex1.1245*	IECEX BAS 06.0032	[Ex ia Ga] II C; [Ex ia Da] IIIC	-20℃ ~ +60℃	
8	Pepperl+Fuchs SE	Transformer Isolated Solenoid Drivers	KFD0-SD2-ExSeries	IECEX BAS 06.0058	[Ex ia Ga] II C; [Ex ia Da] IIIC	-20℃ ~ +60℃	
9	Pepperl+Fuchs SE	Hart loop Converter	KFD2-HLCEx1.D Series	IECEX BAS 07.0047	[Ex ia Ga] II C; [Ex ia Da] IIIC	-20℃ ~ +60℃	



Internal component						Explosion-proof distribution panel	
No.	Manufacturer	Components	Type	Certificate	Ex-marking	Ambient temperature	Ex-marking
10	Pepperl+Fuchs SE	Voltage Repeater	HiC2095, HiD2096	IECEX BAS 11.0012X	[Ex ia Ga] II C; [Ex ia Da] IIIC	-20℃ ~ +60℃	
11	Pepperl+Fuchs SE	Isolated Switch Amplifier	KCD2-ST/S OT/ SON-Ex* Series	IECEX BAS 13.0046	[Ex ia Ga] II C; [Ex ia Da] IIIC	-20℃ ~ +60℃	Ex db [Ex ia Ga] IIC T6...T4 Gb Ex tb [Ex ia Da] IIIC T80℃...T130℃ Db
12	Pepperl+Fuchs SE	Universal Temperature Converter	KCD2-UT2- Ex1	IECEX BAS 13.0057X	[Ex ia Ga] II C; [Ex ia Da] IIIC	-20℃ ~ +60℃	Ex db [Ex ia Ga] IIC T6...T4 Gb Ex tb [Ex ia Da] IIIC T80℃...T130℃ Db
13	Pepperl+Fuchs SE	Universal Temperature Converter	HIC2081	IECEX BAS 14.0071X	[Ex ia Ga] II C; [Ex ia Da] IIIC	-20℃ ~ +60℃	
14	Pepperl+Fuchs SE	Isolation Amplifier	KFD0-RO-EX2.**	IECEX BVS 10.0025	[Ex ia Ga] II C; [Ex ia Da] IIIC	-20℃ ~ +60℃	
15	Pepperl+Fuchs SE	Galvanically Isolated Barrier	HiC2025, HiC2025A, HiC2031	IECEX CES 06.0002X	[Ex ia Ga] II C; [Ex ia Da] IIIC	-20℃ ~ +60℃	
16	Pepperl+Fuchs SE	Galvanically Isolated Barrier	HiC2025ES* *, HiD2025ES* *	IECEX CES 06.0021X	[Ex ia Ga] II C; [Ex ia Da] IIIC	-40℃ ~ +60℃	
	Pepperl+Fuchs SE	Galvanically Isolated Barrier	HiC2025HC* *, HiC2031HC*	IECEX CES 11.0010X	[Ex ia Ga] II C; [Ex ia Da] IIIC	-20℃ ~ +60℃	Ex db [Ex ia Ga] IIC T6...T4 Gb Ex tb [Ex ia Da] IIIC T80℃...T130℃ Db
	Pepperl+Fuchs SE	Galvanically Isolated Barrier	KCD2-STCEX1.ES-* KCD2-STCEX1.ES.SP	IECEX CES 11.0001X	[Ex ia Ga] II C; [Ex ia Da] IIIC	-20℃ ~ +60℃	
17	Pepperl+Fuchs SE	Smart Transmitter Power Supplies	HiD2022, HiD2022SK	IECEX CML 17.0072X	[Ex ia Ga] II C; [Ex ia Da] IIIC	-20℃ ~ +60℃	



Internal component						Explosion-proof distribution panel	
No.	Manufacturer	Components	Type	Certificate	Ex-marking	Ambient temperature	Ex-marking
18	Pepperl+Fuchs SE	Isolation switching Amplifier	KFD2-SR2-Ex2.W.SM	IECEX PTB 11.0034	[Ex ia Ga] II C; [Ex ia Da] IIIC	-20℃ ~ +60℃	
	Pepperl+Fuchs SE	Isolation switching Amplifier	KFD2-SR2-Ex1.W.* KFD2-SR2-Ex1.W.LB KFD2-SR2-Ex2.W*	IECEX PTB 11.0034	[Ex ia Ga] II C; [Ex ia Da] IIIC	-40℃ ~ +60℃	
19	Pepperl+Fuchs SE	Strain Gauge Converter	KFD2-WAC2-Ex1*	IECEX TUN 06.0005	[Ex ia Ga] II C; [Ex ia Da] IIIC	-20℃ ~ +60℃	Ex db [Ex ia Ga] IIC T6...T4 Gb Ex tb [Ex ia Da] IIIC T80℃...T130℃ Db
20	Pepperl+Fuchs SE	Smart Current Driver	HiD2038, HiD2038**	IECEX ULD 20.0012X	[Ex ia Ga] II C; [Ex ia Da] IIIC	-40℃ ~ +60℃	
21	Pepperl+Fuchs SE	Solenoid Driver module	KFD2-SL2-Ex1.LK, KFD2-SL2-Ex1.LK.1045, KFD2-SL2-Ex1.LK.1270	IECEX ZLM 14.0001	[Ex ia Ga] II C; [Ex ia Da] IIIC	-20℃ ~ +60℃	
22	Eaton Electric Limited	Shunt Zener Diode Barriers	MTL7700 series	IECEX BAS 04.0025	[Ex ia Ga] II C; [Ex ia Da] IIIC	-20℃ ~ +60℃	
23	Eaton Electric Limited	Power Supply	9121-IS	IECEX BAS 04.0031X	[Ex ib Gb] II C; [Ex ib Db] IIIC	-40℃ ~ +60℃	Ex db [Ex ib] IIC T6...T4 Gb Ex tb [Ex ib] IIIC T80℃...T130℃ Db
	Eaton Electric Limited		9121-IS-CM	IECEX BAS 04.0031X	[Ex ib Gb] II C; [Ex ib Db] IIIC	-20℃ ~ +60℃	
24	Eaton Electric Limited	Standard I.S. Trip Amplifier Supply	MTL5314	IECEX BAS 05.0010	[Ex ia Ga] II C	-20℃ ~ +60℃	Ex db [Ex ia Ga] IIC T6...T4 Gb
25	Eaton Electric Limited	Intrinsically Safe Serial Data Communications Isolator	MTL5051	IECEX BAS 05.0021	[Ex ia Ga] II C; [Ex ia Da] IIIC	-20℃ ~ +60℃	Ex db [Ex ia Ga] IIC T6...T4 Gb Ex tb [Ex ia Da] IIIC T80℃...T130℃ Db

Annex to: IECEx PCET 24.0027X
Applicant: WAROM TECHNOLOGY INCORPORATED COMPANY
Equipment: Explosion-proof distribution panel



Internal component						Explosion-proof distribution panel	
No.	Manufacturer	Components	Type	Certificate	Ex-marking	Ambient temperature	Ex-marking
26	Eaton Electric Limited	Universal Isolator	MTL SUM5	IECEX BAS 19.0018X	[Ex ia Ga] II C; [Ex ia Da] IIIC	-40℃ ~ +60℃	Ex db [Ex ia Ga] IIC T6...T4 Gb Ex tb [Ex ia Da] IIIC T80℃...T130℃ Db
27	Eaton Electric Limited	Galvanic Isolators – Digital In modules	MTL4500 & MTL5500 Series	IECEX BAS 23.0011	[Ex ia Ga] II C; [Ex ia Da] IIIC	-20℃ ~ +60℃	Ex db [Ex ia Ga] IIC T6...T4 Gb Ex tb [Ex ia Da] IIIC T80℃...T130℃ Db
28	Eaton Electric Limited	Galvanic Isolators – Analogue Input modules	MTL4500 & MTL5500 Series	IECEX BAS 23.0013	[Ex ia Ga] II C; [Ex ia Da] IIIC	-20℃ ~ +60℃	Ex db [Ex ia Ga] IIC T6...T4 Gb Ex tb [Ex ia Da] IIIC T80℃...T130℃ Db
29	Eaton Electric Limited		MTL5541-T	IECEX BAS 23.0013	[Ex ia Ga] II C; [Ex ia Da] IIIC	-20℃ ~ +60℃	
30	Eaton Electric Limited		MTL5544D-L	IECEX BAS 23.0013	[Ex ia Ga] II C; [Ex ia Da] IIIC	-40℃ ~ +60℃	
31	Eaton Electric Limited	Galvanic Isolators– Analogue Output modules	MTL4500 & MTL5500Series	IECEX BAS 23.0014	[Ex ia Ga] II C; [Ex ia Da] IIIC	-20℃ ~ +60℃	Ex db [Ex ia Ga] IIC T6...T4 Gb Ex tb [Ex ia Da] IIIC T80℃...T130℃ Db
	Eaton Electric Limited		MTL5546Y-T				
32	Eaton Electric Limited	Galvanic Isolators – Miscellaneous modules	MTL4500 & MTL5500 Series	IECEX BAS 23.0015	[Ex ia Ga] II C; [Ex ia Da] IIIC	-20℃ ~ +60℃	Ex db [Ex ia Ga] IIC T6...T4 Gb Ex tb [Ex ia Da] IIIC T80℃...T130℃ Db
33	GM Interna tional S.R.L	Power Supply-Gateway	D2050M-***	IECEX BVS 09.0049X	[Ex ia Ga] II C; [Ex ia Da] IIIC	-20℃ ~ +60℃	
34	Shang haiChe nzhu Instru ment CO.,LT D	Safety barriers	GS8500-EX series safety barriers: GS8512-EX.11, GS8512-EX.12, GS8512-EX.22,	IECEX SIR 21.0022X	[Ex ia Ga] II C; [Ex ia Da] IIIC	-20℃ ~ +60℃	

Annex to: IECEx PCET 24.0027X
Applicant: WAROM TECHNOLOGY INCORPORATED COMPANY
Equipment: Explosion-proof distribution panel



Internal component						Explosion-proof distribution panel	
No.	Manufacturer	Components	Type	Certificate	Ex-marking	Ambient temperature	Ex-marking
			GS8523-EX, GS8523-EX.I, GS8547-EX, GS8567-EX, GS8572-EX, GS8572-EX.RTD, GS8572-EX.R, GS8572-EX.TC,				