Operating instructions

ATEX Drum heater series WODVX...-00EX

ATEX IBC heater series WOCV...-00EX

Rev.0.1 03/2025

Important safety instructions for the use of Drum heaters and ATEX IBC heaters

Please read the operating instructions very carefully before using the ATEX Drum heater and the ATEX IBC heater. Observe the information on the rating plate and any warnings on the product. The operating instructions are part of the e x p l o s i o n c o m m e n t d o c u m e n t according to §6 of the GefStoffV. It must be available to every user during use / operation. Keep the document in a safe place for future use of the product.
The ATEX Drum heaters and ATEX IBC heaters are used in an area for which special operating regulations apply and requirements must be met. Please note this and find out about the regulations in advance so that you can ensure trouble-free, intended operation.
This also includes regular cleaning of the surface of the ATEX heater so that no dangerous dust deposits can form.

ATEX Drum heaters and ATEX IBC heaters are electrical equipment

The operation and maintenance of ATEX Drum heaters and ATEX IBC heaters may only be carried out by a qualified electrician or persons with electrical training. Regular testing and maintenance of the ATEX heater in accordance with the applicable technical regulations (VDE / DGUV V3 / ...) is required to avoid hazards from electrical current.

A residual current circuit breaker of 30 mA must be provided for safe operation.
The standard ATEX Drum heaters WODVX...-00EX, up to 200 liters, must b e equipped with a 16A type C circuit breaker. The standard ATEX IBC heater WOCV1001-230XX033-00EX must b e equipped with a 20A type C circuit breaker.
This must be checked for proper function before commissioning and at regular intervals.

Application range of ATEX Drum heaters and ATEX IBC heaters

For potentially explosive gas atmospheres> in zone 1 and
zone 2 For potentially explosive dust atmospheres> in zone
21 and zone 22 Not suitable for use in zone 0 or zone 20!

Additional safety information

In the event of obvious damage, the ATEX heater must be taken out of service immediately and may no longer be used. The cause of the damage must be determined and rectified:

- Mechanical damage to the outer or inner sheath> Cause: external force
- Mechanical damage to the connection cables / screw connections> Caused by external forces
- Brittle or broken protective tube> Thermal overload or extreme solar radiation (provide UV protection). Avoid any

overheating of the ATEX heater. Observe the minimum and maximum operating temperatures and do not exceed or fall below them. Overheating can occur in different ways. Please check the operating and ambient conditions in advance and monitor the initial heating processes.

Please check the permissible operating temperature of the product in your application. If necessary, operate the ATEX heater with the appropriate safety devices, e.g. for monitored operation with suitable controllers approved for the ATEX area (e.g. WEXRBL25-230ZE000).

Directives and regulations on explosion protection

The following directives and regulations were taken into account during the development, testing, official approval and manufacture of ATEX heaters.

Directive 2014/34/EU - Equipment and protective systems intended for use in potentially explosive atmospheres

EN standards and regulations on explosion protection:

EN 1127-1	Explosive atmospheres - Explosion prevention and protection - Part 1: Basic concepts and methodology
EN 60079-0	Explosive atmospheres - Part 0: Equipment - General requirements
EN 60079-7	Explosive atmospheres - Part 7: Equipment protection by increased safety "e"
EN 60079-11	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
EN 60079-14	Explosive atmospheres - Part 14: Design, selection and erection of electrical installations **EN 60079-30-1** Explosive atmospheres - Part 30-1: Electrical resistance trace heating - General and test requirements
EN 60079-31	Explosive atmospheres - Part 31: Dust explosion protection of equipment by enclosures "t"

Operating instructions ATEX Drum heaters series WODVX...-00EX and ATEX IBC heaters series WOCV...-00EX

With the ATEX heaters, you have purchased a high-quality product that can be used in potentially explosive atmospheres in compliance with the relevant standards and regulations as well as the conditions listed here. We constantly strive to manufacture our products in such a way that they work to your satisfaction and meet the desired requirements. Please read the following installation instructions carefully and observe the operating instructions. If you have any questions, please contact us (see chapter 12, Contact).
In the following, ATEX Drum heaters and ATEX IBC heaters are referred to as ATEX heaters for short.

Any other operating conditions that deviate from these installation instructions / operating instructions or if the Drum heater is not operated as intended will invalidate the warranty and may result in damage. If you have any questions, please contact us in good time so that we can help you.

Contents

1 General / Inspection of Drum heaters

Before installing the ATEX heaters, make sure that the information on the rating plate matches the order data (e.g. mains voltage, power, type and maximum operating temperature). Check that the ATEX heater is correctly and securely attached to the body to be heated. Ensure that measures have been taken to protect against overheating (and that the temperature sensor is located at the hottest point in the case of monitored operation). It must be ensured that the ATEX heater can be quickly disconnected from the power supply in the event of danger.
ATEX heaters are generally suitable for a wide range of applications. However, if the ATEX heater is intended for a specific application, which may change over time, the user should consult the manufacturer regarding its continued use. The ATEX heater must be protected from chemical, mechanical or aggressive environmental conditions, as such influences can lead to damage and jeopardize safe and intended operation.

The maximum operating temperatures of the ATEX heaters are specified on the rating plate and defined by the ATEX marking. The temperature class of the ATEX area must be taken into account.

The WODVX and **WOCV. series** are suitable for applications up to 85°C (T6) without a Controller**.**
The series is equipped with a self-limiting heating cable and only needs to be regulated and limited during use.

Depending on the application or permissible product operating temperature, the temperature must be operated with appropriately approved temperature controllers (temperature regulators). Extremely low ambient temperatures or deviating medium temperatures can falsify the values measured by the temperature sensor.

2 Area of application / electrical connection

The ATEX marking of the ATEX heaters of the **WODVX...-00EX** and **WOCV...-00EX** series is as follows:
for potentially explosive gas atmospheres **II 2G EX 60079-30-1 IIC T6 GB**
for potentially explosive dust atmospheres **II 2D EX 60079-30-1 IIIC T85°C Db**
applies to both ranges **-20°C≤ Ta≤ +55°C**

ATEX heaters can be used to control the temperature of media in Zone 1 and Zone 2 potentially explosive gas atmospheres and in Zone 21 and Zone 22 potentially explosive dust atmospheres. They are not suitable for use in zone 0 or zone 20. They can be used for frost protection, temperature maintenance and temperature increase up to max. 65°C when switched on / 85°C when switched off (temperature class T6). The nominal voltage of the ATEX heaters is 230V as standard. The maximum permissible ambient temperature for the use of Drum heaters is between -20°C and +55°C. Depending on the application, the maximum media temperature must be ensured by suitable temperature control devices. The heat output of the ATEX heaters is determined by the design and depends on the operating temperature.

Different ambient temperatures in the area of the ATEX heaters lead to different outputs, see temperature/output curves in the data sheet.
If temperature control is required due to the application, the position of the sensor for the operating temperature can be defined on a customer-specific or application-specific basis.

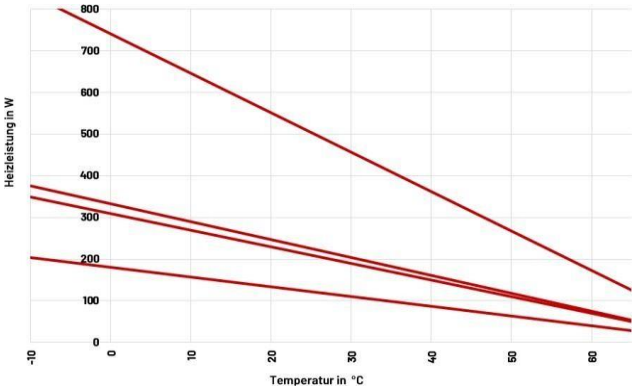
As this is a product that can be used in the ATEX area under special conditions, all relevant regulations and directives as well as other provisions must be determined, applied and monitored. The information can be found in the explosion protection document for the entire system, which the operator must keep in accordance with the Hazardous Substances Ordinance (GefStoffV) §6 (9) Explosion protection document. The following manufacturer's instructions (installation instructions / operating conditions) must also be observed for the intended operation of the ATEX heaters.
Before commissioning, please clarify which additional regulations or internal factory regulations apply in order to ensure trouble-free and safe operation
The electrical safety measures and contact protection must be implemented in accordance with DIN VDE 0100. The mains connection cable has a standard length of 5 m, but can be longer or shorter as required. The electrical connection cables (supply network) must be dimensioned according to the *fuse size (WODVX...- 00EX, up to 200 liters, 16A type C; WOCV1001-230XX033-00EX, 20A type C)* and the maximum permissible voltage drop. The cable cross-section must be designed according to the current consumption in accordance with DIN VDE 0100, whereby a minimum cross-section of 1.5 mm² is required. This requirement also applies to all connecting cables of the temperature control units. There is a protective conductor on the heater. This must be included in the protective measures and properly connected to the protective conductor.

The manufacturer's liability expires if the operating conditions deviate from these installation instructions / operating instructions or if the ATEX heaters are not operated as intended. If you have any questions in this regard, please contact us in good time so that we can help you.

3 Installation with self-limiting heating tapes (PTC heating capacity)

Self-limiting heating tapes have two supply conductors with a specially manufactured matrix in between. An insulating material is extruded over the supply conductors with matrix, followed by an earthing braid and a second extruded insulating material.

The special matrix is able to conduct the current flow between the supply conductors and thus generate heat. When the Ca- ble heats up, the molecules of the matrix move apart and reduce the current flow between the supply conductors and thus the amount of heat generated.
In other words: the higher the temperature, the lower the output.



4 Installation / Commissioning

In EN **60079-14** - "Potentially explosive atmospheres - Part 14: Design, selection and erection of electrical installations" you will find basic information for proper operation. Electrical heating appliances must be installed and operated in such a way that they cannot pose a hazard even if they are switched off unattended or accidentally. Suitable safety measures must be taken for this purpose.

Depending on the application and customer requirements, the ATEX heater is manufactured ready for connection and can be used as intended in accordance with the following installation instructions:
ATEX heaters are mechanically sensitive and must not be pulled or placed over burrs or sharp edges. Special care must be taken during installation. If metal parts or metallic surfaces are heated, this must be included in the protective measures, such as protective earthing.
When used outdoors, appropriate protective measures are required in accordance with the applicable regulations. The connection cables of the ATEX heaters must not be twisted or kinked. Depending on the type of closure of the ATEX heater, such as hooks, eyelets or Velcro, it must be firmly connected to the object to be heated. Care must be taken to ensure optimum heat transfer, as an ATEX heater that does not fit properly cannot dissipate heat efficiently.
Several ATEX heaters must not be installed on top of each other.

1. Check the information on the rating plate. Do the type, design, mains voltage, power and operating temperature match your requirements? If in doubt, check the documents for correctness.
2. Does the supplied ATEX heater also comply with the regulations applicable at the place of use (ATEX marking / ATEX zone) and is it suitable for this?
3. Are all attestations and certificates available and has the person responsible for the system (operator) carried out an inspection of the entire ATEX system (explosion protection documents)? Do the prerequisites and ambient conditions match the conditions of the intended operation? Do other special regulations apply at the place of use and were they observed during installation?
4. If monitored operation is required, suitable temperature control devices (approved for ATEX areas) must always be used. ATEX PT100 sensors (temperature sensors) must always be connected. The relevant installation guidelines and connection diagrams for the temperature control units must be observed!
5. If an extension of the connection cables (mains / sensors) is required, appropriate ATEX junction boxes (WZX188EX for ATEX-e mains and WZX189EX for ATEX-I sensors) must be used. It must be ensured that the screw connections are tight. If this is not guaranteed, the ATEX heater must not be put into operation.
6. The electrical connection must be provided on site with a main switch (3 mm contact opening) as a disconnecting device and 16 A type C or 20 A type C according to the heating capacity (observe cable cross-section).
7. The use of a residual current circuit breaker RCD (FF) of IF <30mA must be provided.

8. The connection cables are prepared ready for connection. If they need to be shortened, suitable tools must be used. Wires and wire end ferrules must be crimped onto the stripped wire ends.
9. The user must check whether the materials coming into contact with the medium are resistant or resistant to the media to be heated (see chapter 8, General technical data). If you have any questions about this, please contact us directly so that we can advise you.
10. Always monitor the initial heat-up phases of the ATEX heaters in order to detect any faults at an early stage and take safety measures if necessary. Check whether surrounding objects, system components or other items could damage or impair the function of the ATEX heaters and remove or dispose of them.
11. Touchable conductive system parts must be included in the local equipotential bonding.

5 Operation / Disassembly

1. Check the initial heating phase carefully and monitor the further operation of the ATEX heaters.
2. Ensure that the object to be heated does not become hotter than the maximum operating temperature (85 °C, T6) of the ATEX heaters, otherwise the ATEX heater may be damaged.
3. When operating the ATEX heaters, extreme vibrations or movements must be avoided (shaking, rattling, etc.).
4. Before the ATEX heater is dismantled, it must be cooled down and disconnected from the power supply at all poles.
5. Never pull on the connection cables of the ATEX heater, as they are not suitable for this purpose.
6. If damage or irregularities in the function of the ATEX heater are detected during operation, it must be switched off as quickly as possible and disconnected from the mains at all poles. A precise analysis of the cause of the fault must be carried out.
7. Never **open the ATEX heater or the ATEX connection boxes** during operation!
8. Direct sunlight (UV) on the ATEX heater must be avoided or, if this is not possible, protection must be provided. Direct and prolonged exposure to sunlight can cause damage to the outer housing, which is only visible after prolonged and dynamic operation and therefore impairs the protective effect.

An ATEX heater that is permanently installed or removed or has not been in operation for a longer period of time must be checked before recommissioning and the insulation resistance to the object to be heated must be measured. The first heating phase after recommissioning must be monitored.

6 Maintenance/inspection and repair

Regular maintenance and testing of the analyzer cables is necessary. In DIN **EN IEC 60079-17 -** "Potentially explosive atmospheres - Part 17: Testing and maintenance of electrical installations" you will find basic information on this. The maintenance and testing must be documented accordingly.

1. If external defects are found on the ATEX heater or on the connection cables, the ATEX heater must be disconnected from the mains immediately, removed and returned to the factory for inspection. Never open the ATEX heater or its components yourself, otherwise the ATEX protection will be jeopardized. In the event of obvious damage, the ATEX heater must be replaced immediately.
2. The inspection and maintenance must be adapted to the operating conditions on site. The inspection intervals must be adapted to the operating conditions on site. According to DGUV V3, however, an inspection must be carried out and documented at least every 6 months by a qualified electrician using suitable measuring and testing equipment.
3. The service life of the ATEX heater depends on the operating conditions. It is not possible to make a general statement about the service life. However, it can be assumed that it is shorter under harsh operating conditions than with occasional use under optimum conditions. In this case, please contact us directly so that we can provide you with expert advice.

4. If the ATEX heater is to be used for a different purpose than originally planned, it is necessary to consult our specialist advisors to determine the extent to which it is suitable for this purpose. Unauthorized misuse is not permitted.
5. Any modification to the ATEX heater jeopardizes operational safety and automatically voids the warranty.
6. If you have any problems or questions, please contact us directly so that we can help you quickly and competently (see Chapter 12, Contact).

According to **DIN VDE 0100-600 -** "Low-voltage electrical installations - Part 6: Verification", the installer of an electrical installation is obliged to ensure that the protective measures provided are properly applied and functioning before commissioning. This includes a thorough inspection of all safety-relevant system components as well as measurements and tests to check the effectiveness of the protective measures.

According to **EN 50678 VDE 0701 -** "General procedure for verifying the effectiveness of the protective measures of electrical equipment after repair" and **EN 50699 VDE 0702** - "Periodic testing of electrical equipment", it is the responsibility of the operator of electrical systems to test them regularly and to provide proof of the proper and safe functioning of the system.

7 Thermal insulation / temperature influence

ATEX heaters are equipped with thermal insulation, the thickness of which varies depending on the type of heater application or customer requirements. To avoid injuries such as burns or damage to the system, suitable protective measures must be taken in accordance with **VDE 0100-420** - "Low-voltage electrical installations". This can be done by using mineral wool, foam insulation or spacer grids. In addition, a sign with the inscription "ELECTRICALLY HEATED" must be affixed to the thermal insulation to clearly identify heated electrical system components.
To ensure that the ATEX heater maintains an accurate process temperature, the ATEX heater must be operated with a control system. The temperature sensor should always be installed at the hottest point of the heating sleeve. The manufacturer's "Installation and application instructions for temperature sensors" must be observed. The maximum permissible operating temperature specified on the type plate of the heating sleeve must not be exceeded at any point.

It should also be noted that Drum heaters reheat when operating with incorrectly set temperature controllers/temperature sensors.

8 General technical data

Ambient temperature:	-20°C to +55°C
maximum operating temperature:	65°C when switched on / 85°C when switched off (temperature class T6)
Nominal operating voltage:	230V / 50Hz
Rated power:	depending on the size/dimension of the Drum heater and the temperature (see data sheet)
Power tolerance:	+/- 10 %
Mains connection cable:	5.0 m silicone cable (EWKF H05SS-F3G1.5 mm²)

Properties of the outer jacket:

The chemical resistance of the electrically conductive outer sheath depends on the temperature, the duration of exposure (constant contact or occasional contact), the chemical substance and its concentration. It has good resistance to chemical and thermal stresses and is flame retardant (B2).
The maximum continuous temperature load is the maximum permissible application temperature of max. 85°C. However, suitability must be checked by the user in the respective application. If you have any questions or problems, please contact us directly for further information (see chapter 12, Contact).

9 Maintenance and servicing

Maintenance and servicing must be carried out at regular intervals in accordance with the standards listed under "Safety instructions" and the regulations applicable to the application. The function of the heating element, the controller and the limiter must be checked and documented at least once a year.
The inspection must be carried out after the Heating jacket has cooled down to ambient temperature and been disconnected from the power supply. The Heating jacket must not have any cuts, tears or seams. The insulation of the connection cable must not show any visible damage. The Heating jacket must not have any dirt, oil, grease or foreign bodies. Warning notices and type plates must be undamaged and clearly legible.
Heating mantles with visible heating conductors are damaged or overheated. They must be taken out of service immediately and may no longer be used.

9.1 Repair

Conversions or modifications to the Container heating system may impair its function. Repairs may only be carried out by specialist personnel trained by Winkler. Only original spare parts and accessories may be used. Do not attempt to repair a damaged Container heater yourself! Instead, contact our service department.

9.2 Return

For returns, we ask that you always decontaminate the Heating jacket beforehand, confirm this in writing and enclose it with the Heating jacket as information. If you require a decontamination confirmation, please contact us.

10 Guarantee

Winkler guarantees the original purchaser of the product for a period of twelve (12) months from the date of delivery (handover of the goods).
In the event of justified complaints, Winkler shall repair or replace the goods at its discretion. Winkler is entitled to have the defect rectified by a third party.
Details can be found in our General Terms and Conditions.

11 Waste disposal

Environmental information for industrial customers in the EU:
The WEEE Directive 2012/19/EU aims to prevent waste from electrical and electronic equipment and to reduce it through reuse, recycling and other forms of recovery.

The symbol indicates that the product must be disposed of separately from normal commercial/household waste. It is your responsibility to dispose of this product only via the legally prescribed disposal channels or the appropriate collection points designated by the government or local authorities.

Proper disposal and recycling will help prevent possible negative consequences for the environment and human health. If you require further information on the disposal of your old appliances, please contact the local authorities, the municipal waste disposal services or the dealer from whom you purchased the product.

12 Heating tape ATEX certificates

SIA CE-TEST
Notified body No. 2861

EN ISO/IEC 17065
S1-622

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

[2] Equipments intended for use in potentially explosive atmospheres – Directive 2014/34/EU

[3] EU-type examination certificate Number: **CETS 23 ATEX 030 X** **Issue:1**

[4] Equipment: Heating systems **HTM, HTA, HTP, CTE, BTC, BTCe, BTX, BTXe**
Type: HTM type 211-4-*11-***, HTA type 211-4**-*12-***, HTP type 211-4**-*13-***, CTE 211-4**-*18-***, BTC type 211-4**-*24-*****, BTCe type 211-4**-*25-***, BTX 211 -4**-*26-***, BTXe 211 -4**-*27-***.

[5] Manufacturer: SST Thermal Solutions ME FZE

[6] Address: No. LB01109, First Floor, Building No.1, PO Box No. 392750, Jebel Ali Free Zone, Dubai, United Arab Emirates
RA08 JA-01 & 02, Blue Shed Area, Jebel Ali Free Zone, Dubai, United Arab Emirates
[7] This equipment any of acceptable variation thereto is specified in the schedule to this certificate and the documents herein referred to.
[8] The Certification body SIA «CE-Test», notified body number 2861 in accordance with Article 17 of the Directive 2014/34/EU of European Parliament and of the Council, dated 26 February 2014, certifies that this equipment 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 confidential Evaluation report number 030-1/2023 from 20.03.2023.

[9] Compliance with Essential Health and Safety Requirements has been assured by compliance with: EN IEC 60079-0:2018, EN 60079-30-1:2017.

[10] The 'X' suffix after the certificate number indicates that the equipment is subject to conditions of safe use (affecting correct installation or safe use). These are specified in Section 14.
[11] This EU-Type Examination Certificate relates only to the design and construction of the specified equipment in accordance to the Directive 2014/34/EU. Further requirements of the directive apply to the manufacturing process and supply of this equipment. These are not covered by this certificate.

[12] The marking of the equipment shall include the following

II 2 G D	
Ex 60079-30-1 IIC T6 Gb	for HTM, HTA, HTP, CTE
EX 60079-30-1 IIIC T85°C Db	
Ex 60079-30-1 IIC T3 Gb	for BTC, BTCe,
Ex 60079-30-1 IIIC T200°C Db	
Ex 60079-30-1 IIC T3 Gb	for BTX, BTXe before and including 60 W/m
Ex 60079-30-1 IIIC T200°C Db	

Certification body Ltd "CE-Test"
Delu iela 4, Riga
Latvia, LV-1004
Phone: + 37128163200
E-mail: info@ce-test.lv
www.ce-test.lv

Certificate without signature are void. This certificate may only be reproduced in its entirety and without any change, schedule included.
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CE-TEST SIA NB 2861

Ex 60079-30-1 IIC 240°C (T2) Gb
Ex 60079-30-1 IIIC T300°C Db
-60≤Tamb≤+55 °C

for BTX, BTXe upper 60 W/m

SIA "CE-Test" 42103087208 CE-TEST

Date of certification: 21.03.2023

Responsible person: Ing. Pavel Horunzij

Head of certification body

Certificate without signature are void. This certificate may only be reproduced in its entirety and without any change, schedule included.
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CE-TEST SIA NB 2861

[13] SCHEDULE

[14] EU-TYPE EXAMINATION CERTIFICATE: **CETS 23 ATEX 030 X** **Issue: 1**

[15] Description of Product

The Heating System consists of Self Limiting Parallel Trace Heaters HTM, HTA, HTP, CTE, BTC, BTCe, BTX, BTXe and Connection Technology products are designed for heating of pipelines, vessels and other process equipment in safe and hazardous areas, and for use as part of heating devices and apparatus at a rated voltage up to 120/230 VAC, 50–60 Hz, 12/24 VAC (DC). Self Limiting Parallel Trace Heaters HTM, HTA, HTP, CTE, BTC, BTCe, BTX, BTXe comprise a two nickel plated copper conductors, self-regulating matrix, inner insulation, electrically conductive cover and overjacket.

Connection Technology products are including CP-6, CP-7 Trace Heater – Trace Heater (repair) or Trace Heater – Power Cable, TKT/M Power Termination without Junction Box end Termination without Junction Box, TKL/JB, TKR/JB Power Termination inside Junction Box and without End Termination, TKL, TKR Power Termination inside Junction Box and End Termination without Junction Box.

Types of heating system

211 - 4 X X - X X X - X X X
a b c d e f g h i j k

position	explanation		Possible values	Value explanation
a, b, c, d	General product selector		211-4	Industry group self limiting parallel trace heater – heating systems, with connection technology products
e	Connection technology method	CP-6, CP-7, TKT/M	1	Heat-shrink
		TKR, TKL	2	Silicone boot + sealant (cold)
f	Application use cases	CP-6, CP-7	1	Trace heater – trace heater (repair) or trace heater – power cable
		TKT/M	2	Power termination without junction box + end termination without junction box
		TKR/JB, TKL/JB	3	Power termination inside junction box + without end termination
		TKR, TKL	4	Power termination inside junction box + end termination without junction box
g	Branches		1	No branches (single input – single output)
			2	One branch (single input – two outputs)
h	Temperature group		1	Low temperature
			2	High temperature
i	Trace heater used		1	211-111-***-*** (HTM)
			2	211-113-***-*** (HTA)
			3	211-115-***-*** (HTP)
			4	211-125-***-2** (BTC)
			5	211-155-***-2** (BTCe)
			6	211-135-***-2** (BTX); 211-136-***-2** (BTX – 75, 100 W/m)
			7	211-145-***-2** (BTXe); 211-146-***-2** (BTXe – 75, 100 W/m)
			8	211-116-***-2** (CTE)
j	Revision code		0-9	Revision number
k	Revision code		00 - 99	Revision number

CE-TEST SIA NB 2861

Table 1 - Technical characteristics of Heating systems HTM, HTA, HTP, CTE, BTC, BTCe, BTX, BTXe.

Name of indicator, unit of measurement	Value							
	HTM	HTA	HTP	CTE	BTC	BTCe	BTX	BTXe
Rated output, W/m	10; 15	10, 15, 20, 25, 30	10, 15, 20, 25, 33, 40	50	8, 15, 24, 30, 37, 45, 60	8, 15, 24, 30, 37, 45, 60	8, 15, 30, 45, 60, 75, 100	8, 15, 30, 45, 60, 75, 100
Rated voltage AC, V	230	230	12 AC (DC), 24 AC (DC), 120, 230	230	230	230	230	230
Maximum maintain temperature / maximum continuous operating temperature, °C	65	65	65	80	120	150	205	250
Maximum continuous exposure temperature (de-energized), °C	85	85	85	100	200	250	250	250
The degree of protection of the shell in accordance with IEC 60529:2013	IP67							
Minimum Installation Temperature, °C	-30 (TPE) / -60 (fluoropolymer)				-60			
Minimum Bending Radius	25 mm							

Where the product incorporates certified parts or safety critical components the manufacturer shall ensure that any changes to those parts or components do not affect the compliance of the certified product that is the subject of this certificate.
: The power output rating for each length of parallel trace heater shall be verified by measurement of the rated output at rated voltage and given temperature as per EN 60079-30-1:2017, Clause 5.1.10b,
For a more detailed description of the design, please refer to the relevant instruction manual.

[16] Test Report
The examination and test results are recorded in confidential Evaluation Report number 030-1/2023 from 20.03.2023

[17] Specific conditions of use
none.

[18] Essential health and safety requirements
The Essential Health and Safety Requirements (EHSRs) covered by the standards listed at item 9.
Additional information: None.

[19] Drawings and Documents
The documents are listed in the Evaluation report number 030-1/2023 from 20.03.2023

CE-TEST SIA NB 2861

Title Technical Documents	Decimal number	Date
Nomenclature and electrical data of Self Limiting Parallel Trace Heaters HTM, HTA, HTP, CTE, BTC, BTCe, BTX, BTXe	TS PRM.201.01.000N	11.2022
Technical data of Self Limiting Parallel Trace Heaters	TS PRM.201.00.000TD	11.2022
Drawings	TS PRM.201.03.334-01-01; TS PRM.201.03.334-01-01L; TS PRM.201.03.334-03-01; TS PRM.201.03.334-03-01L; TS PRM.201.03.334-02-01; TS PRM.201.03.334-02-01L; TS PRM.201.03.334-01-02; TS PRM.201.03.334-01-02L; TS PRM.201.03.334-03-02; TS PRM.201.03.334-03-02L; TS PRM.201.03.334-02-02 TS PRM.201.03.334-02-02L; TS PRM.201.03.334-01-03; TS PRM.201.03.334-01-03L; TS PRM.201.03.334-03-03; TS PRM.201.03.334-03-03L; TS PRM.201.03.334-02-03; TS PRM.201.03.334-02-03L; TS PRM.201.03.333-01-01; TS PRM.201.03.333-01-01L; TS PRM.201.03.333-02-01; TS PRM.201.03.333-02-01L TS PRM.201.03.374-01-01; TS PRM.201.03.374-01-01L TS PRM.201.03.374-02-01; TS PRM.201.03.374-02-01L TS PRM.201.03.396-01-01; TS PRM.201.03.396-01-01L; TS PRM.201.03.396-02-01; TS PRM.201.03.396-02-01L; TS PRM.201.03.314-01-01; TS PRM.201.03.314-01-01L;	11.2022
List of non-metallic materials (kits CP-6, CP-7, TKT/M, TKL, TKL/JB, TKR, TKR/JB	TS PRM.201.01.000L	11.2022
Labelling of Self Limiting Parallel Trace Heaters HTM (211-111-***-2**), HTA (211-113-***-2**), HTP (211-115-***-***), CTE (211-116-***-2**), BTC (211-125-***-2**), BTCe (211-155-***-2**), BTX (211-13*-***-2**), BTXe (211-14*-***-2**)	TS PRM.201.01.000LB	11.2022
Marking plates for kits	TS PRM.541.00.000LB	11.2022
SELF LIMITING PARALLEL TRACE HEATERS HTM, HTA, HTP, CTE, BTC, BTCe, BTX, BTXe WITH CONNECTION KITS Installation and maintenance manual	TS PRM.201.01.000M	11.2022
Repair kit for self-regulating heating cables CP-6 Installation manual	-	11.2022

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Connection & Repair kit for self-regulating heating cables CP-7 Installation manual	-	11.2022
Connection kit for self-regulating heating cables TKT/M	-	11.2022
Connection kits for self-regulating heating cables TKR, TKL TKR/JB, TKL/JB. Installation manual	-	11.2022

13 EU type examination certificate

(1) **EU - Type Examination Certificate**

(2) Equipment and protective systems intended for use in potentially explosive atmospheres – **Directive 2014/34/EU**

(3) EU - Type Examination Certificate Number

EPS 13 ATEX 1 616 **Revision 2**

(4) Equipment: Connection and junction box type Q*-****-****-***5/...

(5) Manufacturer: Quintex GmbH

(6) Address: i_Park Tauberfranken 13
97922 Lauda-Königshofen
Germany

(7) This equipment and any acceptable variation thereto are specified in the annex to this certificate and the documentation therein referred to.

(8) Bureau Veritas Consumer Products Services Germany GmbH, notified body No. 2004 in accordance with Article 21 given in the Directive 2014/34/EU of the European Parliament and of the Council of 26 February 2014, certifies that this equipment has been found to comply with the essential health and safety requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres, given in Annex II of the Directive. The examination and test results are recorded in the confidential documentation under the reference number 13TH0337.

(9) Compliance with the essential health and safety requirements has been assured by compliance with:

EN IEC 60079-0:2018 **EN IEC 60079-7:2015+A1:2018**

EN 60079-11:2012 **EN 60079-31:2014**

(10) If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the annex to this certificate.

(11) This EU - Type Examination Certificate relates only to the design and construction of the specified equipment in accordance with Directive 2014/34/EU. Further requirements of this Directive apply to the manufacture of this equipment and its placing on the market. Those requirements are not covered by this certificate.

(12) The marking of the equipment shall include the following:

II 2G Ex eb ia IIC/IIB/IIA T6/T5/T4 Gb

II 2D Ex tb IIIC T85°C/T100°C/ T120°C Db

Certification department of explosion protection

Tuerkheim, 2022-12-08

Ulrich Feike

Certificates without signature and seal are void. This certificate is allowed to be distributed only if not modified. Extracts or modifications must be authorized by Bureau Veritas Consumer Products Services Germany GmbH.

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Certificate number EPS 13 ATEX 1 616, Revision 2

ZERT-0211-DEU-ZE-EX-V01/TEMP-0052-DEU-ZE-V02

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(13) # Annex

(14) **EU - Type Examination Certificate EPS 13 ATEX 1 616** **Revision 2**

(15) Description of equipment:

The connection and Junction Box type Q*-****-****-***5/... consists of a enclosure in the type of protection Increased safety "e" or dust tight enclosure "t" for stationary assembly. The enclosure is equipped with terminals for circuits in the type of protection Increased safety "e" or intrinsic safety "ia" or a combination of both. The components of intrinsically safe circuits are to be marked accordingly. The empty enclosure as well as all mounted and attached components have been tested and certified under separate examination certificate.

Electrical data:

Rated voltage: max. 2200 V AV/DC*

Rated current: max. 500A AC/DC*

Rated wire range: max. 300 mm²*

Protective conductor section: max. 150mm²*

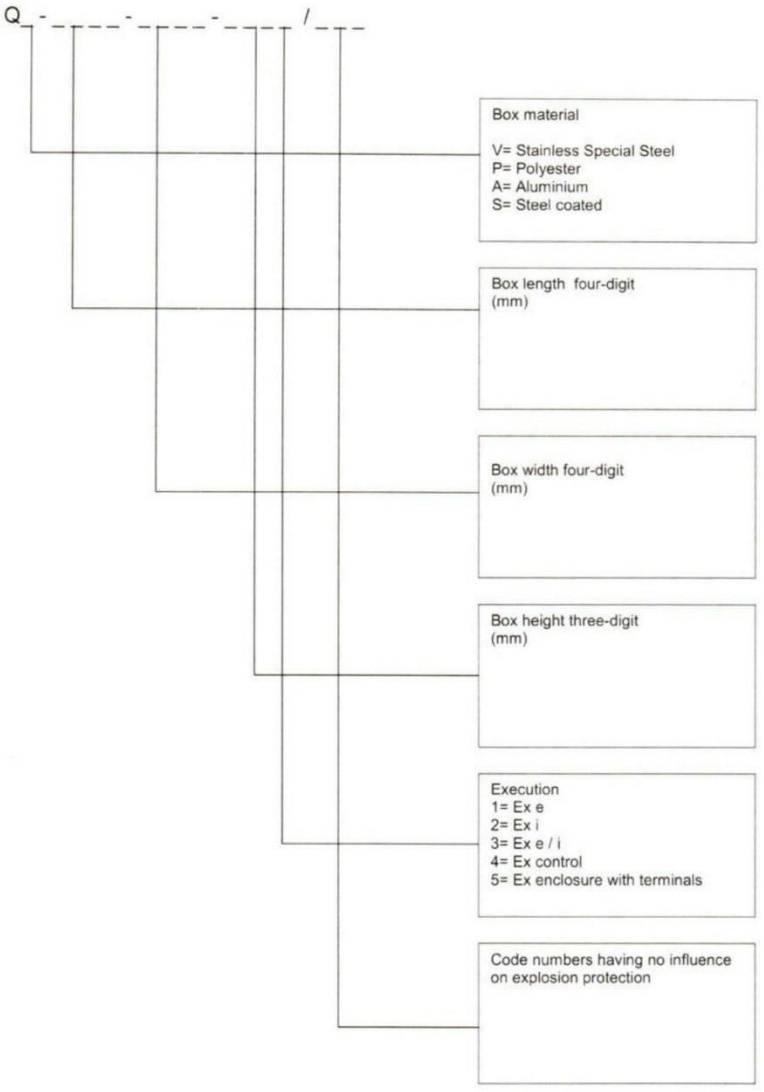
*) according to terminal type used.

Size	Length in mm	Width in mm	Heigth in mm
min	85	75	55
max	600	600	200

Maximum amount of conductors depending on diameter permitted constant current acc. to enclosure sizes. Every inserted conductor and every internal connecting conductor counts as one conductor; bridges and earth conductors are not mentioned.

EU - Type Examination Certificate EPS 13 ATEX 1 616 **Revision 2**

Type key:



CERTIFIED

EU - Type Examination Certificate EPS 13 ATEX 1 616 **Revision 2**

(16) Reference number: 13TH0337

(17) Special conditions for safe use:

None

(18) Essential health and safety requirements:

Met by compliance with standards.

Certification department of explosion protection

Tuerkheim, 2022-12-08

Ulrich Feike

14 EU Declaration of Conformity

EU-DECLARATION OF CONFORMITY

Manufacturer: WINKLER AG
Englerstr. 24
69126 Heidelberg

CE

Product group: Heating jackets

Series / Product: **Serie WODVX...-00EX, WOCV...-00EX**

Directives: DIRECTIVE 2014/34/EU (ATEX)
"of the European Parliaments and Council of 26 February 2014 on the harmonisation of laws of Members States relating to equipment and protective systems intended for use in potentially explosive atmospheres"

We hereby declare that in planning and manufacturing of this product the basic safety and health requirements of the EU Directives mentioned above, and the up-to-date EMC / RoHS Directives have been observed.

Winkler AG maintains a quality assurance system according to Annex VII of Directives 2014/34/EU (ATEX), which is subject to a yearly audit by the notified body TÜV Süd Product Service GmbH.
Certificate number TPS 24 ATEX Q 029587 0026

Identification: **II 2G Ex 60079-30-1 IIC T6 Gb**
II 2D Ex 60079-30-1 IIIC T85°C Db
- 20°C ≤ Ta ≤ +50°C

Heating cable and termination: **CETS 23 ATEX 030 X**
Housing EU-Type Examination Certificate: **EPS 13 ATEX 1 616**

Further rules and technical specifications applied:

EN 1127-1:2019
EN IEC 60079-0:2018
EN 60079-7:2015 / A1:2018
EN 60079-11:2012
EN 60079-14:2021
EN 60079-30-1:2018
EN 60079-31:2014

Any modification to the product without our consent will make this declaration invalid.

Heidelberg, February 10th 2025

Winkler AG

COO Daniel Ernst

For your notes