

PTB 01 ATEX 2064 U, IECEx PTB 16.0019U

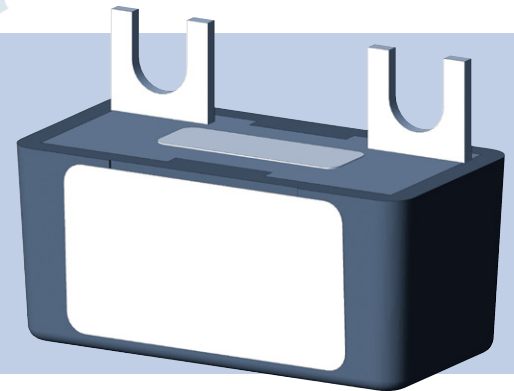
Equipment protection fuse with Ex mb IIC Gb approval

Geräteschutzsicherung mit Zulassung Ex mb IIC Gb

Fusible de protection d'appareil avec homologation Ex mb IIC Gb

Example / Beispiel / Exemple:

Type 1058

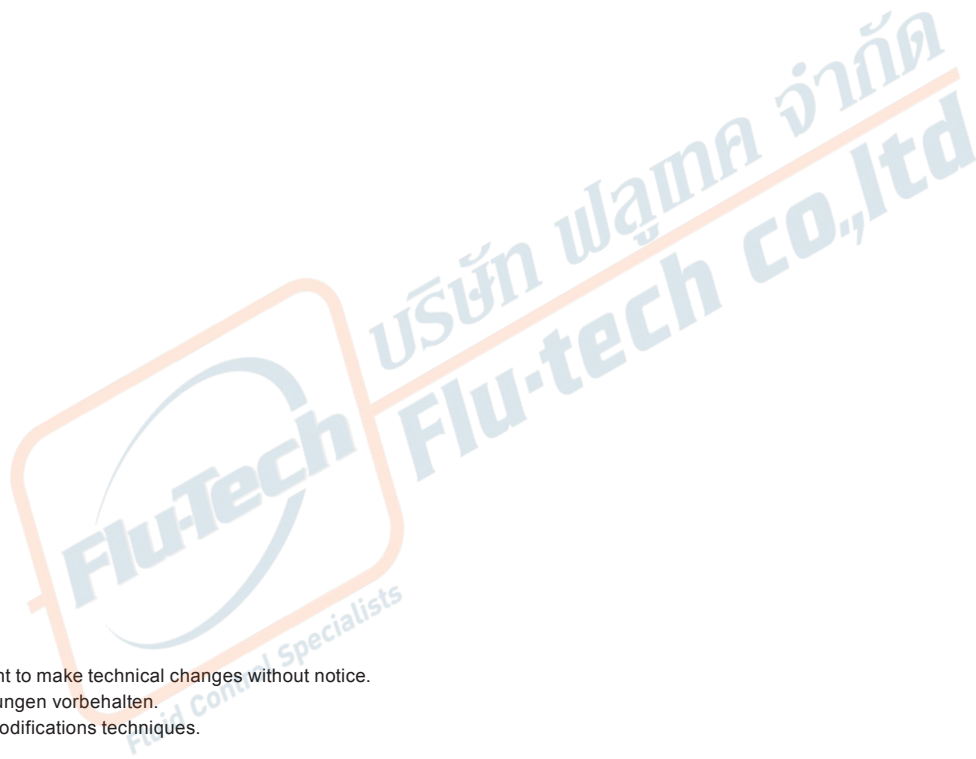


Operating Instructions

Bedienungsanleitung

Manuel d'utilisation





We reserve the right to make technical changes without notice.
Technische Änderungen vorbehalten.
Sous réserve de modifications techniques.

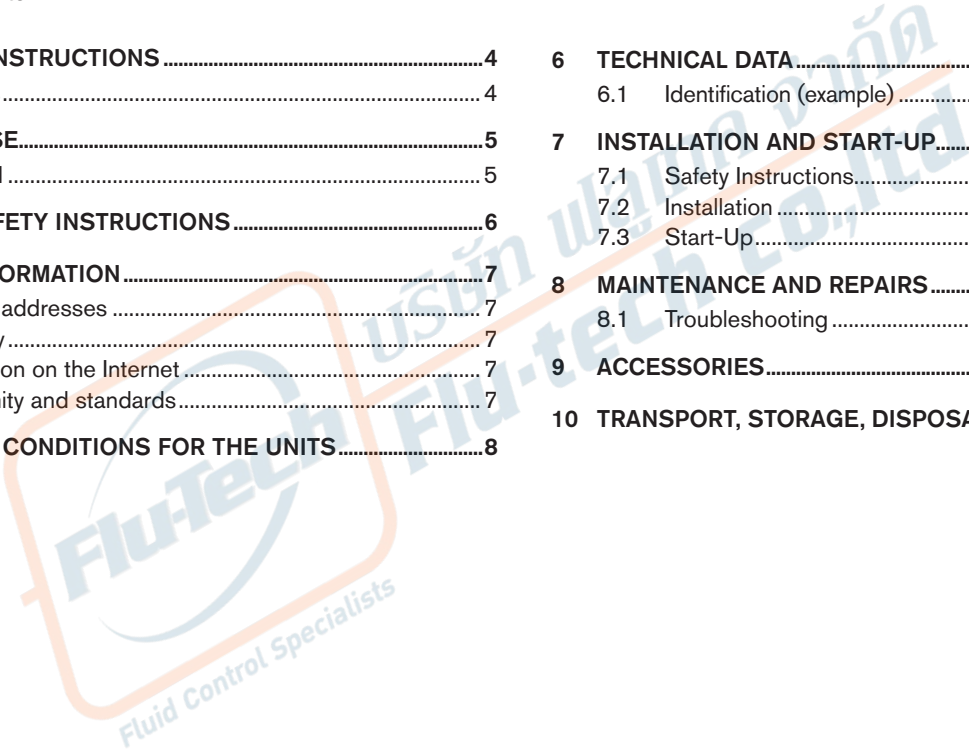
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Operating Instructions 1805/14_EU-EN_00803973 / Original DE



Table of Contents:

1	OPERATING INSTRUCTIONS	4	6	TECHNICAL DATA	8
1.1	Symbols	4	6.1	Identification (example)	8
2	INTENDED USE	5	7	INSTALLATION AND START-UP	9
2.1	Approval	5	7.1	Safety Instructions	9
3	GENERAL SAFETY INSTRUCTIONS	6	7.2	Installation	9
4	GENERAL INFORMATION	7	7.3	Start-Up	10
4.1	Contact addresses	7	8	MAINTENANCE AND REPAIRS	10
4.2	Warranty	7	8.1	Troubleshooting	10
4.3	Information on the Internet	7	9	ACCESSORIES	11
4.4	Conformity and standards	7	10	TRANSPORT, STORAGE, DISPOSAL	11
5	APPLICATION CONDITIONS FOR THE UNITS	8			



1 OPERATING INSTRUCTIONS

The operating instructions describe the entire life cycle of the device. Keep these instructions in a location which is easily accessible to every user and make these instructions available to every new owner of the device.

WARNING!

The operating instructions contain important safety information!

Failure to observe these instructions may result in hazardous situations. **The operating instructions must be read and understood.**

- ▶ Carefully read the operating instructions before using the device.
- ▶ In particular observe the chapter entitled “2 Intended Use”, and “3 General Safety Instructions” as well as the chapter entitled “5 Application Conditions for the units”.

1.1 Symbols

To identify important information, the following symbols are used in the operating instructions:

DANGER!

Warns of an immediate danger!

- ▶ Failure to observe the warning may result in a fatal or serious injury.

WARNING!

Warns of a potentially dangerous situation!

- ▶ Failure to observe the warning may result in serious injuries or death.

CAUTION!

Warns of a possible danger!

- ▶ Failure to observe the warning may result in moderately serious or minor injuries.

NOTE!

Warns of damage to property!



designates additional significant information, tips and recommendations.



refers to information in these operating instructions or in other documentation.

- ▶ designates instructions for risk prevention.

→ designates a procedure which you must carry out.


2 INTENDED USE



WARNING!

The device may only be used for the applications indicated in the chapter *Operating conditions for the devices*, and only in connection with third-party devices or components recommended or approved by Bürkert. Observe the instructions in this operating manual, as well as the conditions of use and permissible data specified in the chapter *Operating conditions for the devices*.

The proper and safe function of the system depends on proper transport, storage and installation, and on careful operation and maintenance.

- The type 1058 equipment protection fuse is used to protect small electrical consumers, e.g. electromagnets for valve control in areas subject to explosion for application in explosion group IIC, category 2 (see data on the  approval plate).
- Any other utilisation, or a utilisation going beyond this use will be regarded as **improper**. Bürkert will accept no liability for any damage resulting from such use. The user must bear all the risk alone.

2.1 Approval

The approval is only valid if the modules and components authorized by Bürkert are used as described in these operating instructions.

The equipment protection fuse Type 1058 may be used only in combination with the additional components released by Bürkert, otherwise the approval will be voided! If any unauthorized changes are made to the device, modules or components, the approval will also be voided.

The EC type-examination certificate PTB ATEX 2064 U respectively IECEX PTB 16.0019U was issued by the

PTB (Physikalisch Technische Bundesanstalt)
Bundesallee 100
38116 Braunschweig

Production is audited by:

CE 0102
PTB (Physikalisch Technische Bundesanstalt)
Bundesallee 100
38116 Braunschweig

3 GENERAL SAFETY INSTRUCTIONS

These safety instructions do not make allowance for any

- contingencies and events which may arise during the installation, operation and maintenance of the devices.
- local safety regulations, whereby the operator is responsible for their compliance, by the installation personnel too.



DANGER!

Danger of explosion!

The device is a sealed system. If used in the EX area, there is a danger of explosion if the system is opened during operation!

- ▶ The system must not be disassembled during operation.

Electrical power supply in the system!

Acute risk of injury from hazardous structure-borne voltage! Risk of damage to the device due to short circuit!

- ▶ Work on the electrical system may only be carried out by qualified electricians.
- ▶ Before starting work, switch off the power supply and secure to prevent it being switched on again!
- ▶ Observe the applicable accident prevention and safety regulations for electrical devices!



DANGER!

Danger – high pressure!

There is a serious risk of injury when reaching into the system.

- ▶ Only skilled and instructed personnel may work on the system with suitable tools.
- ▶ Before disconnecting lines and valves, switch off the pressure and bleed the lines.
- ▶ During installation note the direction of flow.
- ▶ Observe applicable accident prevention and safety regulations for pressurised devices!
- ▶ After an interruption in the power supply or fluid supply, ensure that the process is restarted in a defined or controlled manner!

General hazards!

Unintentional activation or unauthorised impairment of the system may cause general hazardous situations through to physical injury.

- ▶ Take appropriate measures to prevent the system from being accidentally actuated!
- ▶ Do not make any unauthorised changes to the system.

Non-observance of the generally acknowledged safety rules may cause general hazardous situations through to physical injury.

- ▶ Observe the generally acknowledged safety rules for resource planning and operation of the device.



Operate the device in perfect working order only and in accordance with the operating instructions.

4 GENERAL INFORMATION

4.1 Contact addresses

Germany

Bürkert Fluid Control Systems
Sales Center
Christian-Bürkert-Str. 13-17
D-74653 Ingelfingen
Tel. + 49 (0) 7940 - 10 91 111
Fax + 49 (0) 7940 - 10 91 448
E-mail: info@de.buerkert.com

International

Contact addresses can be found on the final pages of the printed operating instructions.

And also on the Internet at: www.burkert.com

4.2 Warranty

The warranty is only valid if the device is used as intended in accordance with the specified application conditions.

4.3 Information on the Internet

The operating instructions and data sheets for Bürkert products can be found on the Internet at:

www.burkert.com

4.4 Conformity and standards

The applied standards, which verify conformity with the EC Directives, can be found on the EC-Type Examination Certificate.

The following standards were used to evaluate the equipment protection fuse of Type 1058:

EN 60079-0:2012/A11:2013

EN 60079-18:2015

5 APPLICATION CONDITIONS FOR THE UNITS



GEFAHR!

Danger of explosion!

- ▶ The equipment protection fuse must be installed in a housing. The housing must comply with a suitable ignition protection type according to EN 60079-0.
- ▶ When installing the fuse as an Ex component in a complete Ex device, the following must be checked and assessed when the fuse has been installed:
 - Surface temperature of the fuse,
 - Clearance and creepage distances from the fuse to surrounding conductive parts.
- ▶ The equipment protection fuse must be attached and electrically connected to the clamping lugs using cheese-head screws M4 and secured with circlips to prevent them from working loose.

6 TECHNICAL DATA

Explosion protection	Ex mb IIC GB
Rated voltage	250 V \cong
Rated current	0.032 ... 4A
Breaking capacity	1500 A, 250 V \cong
Ambient temperature	-40...+70 °C
Melting behaviour	F to IEC 60127-2/1

6.1 Identification (example)

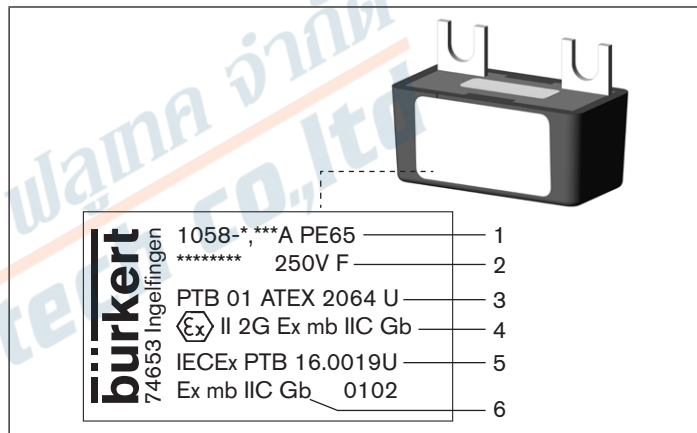


Fig. 1: Example of a type label, equipment protection fuse Type 1058

Pos.	Description
1	Type identification with nominal current and Ex code
2	Bürkert identification number, nominal voltage and melting behavior
3	ATEX, certificate author and certificate number
4	ATEX, identification of the Ex protection
5	IECEX, certificate author and certificate number
6	IECEX, identification of the Ex protection

7 INSTALLATION AND START-UP

7.1 Safety Instructions



DANGER!

Danger of explosion!

The device is a sealed system. If used in the EX area, there is a danger of explosion if the system is opened during operation!

- ▶ The system must not be disassembled during operation.

Danger of explosion caused by electrostatic charge!

If there is a sudden discharge from electrostatically charged devices or persons, there is a danger of explosion in the EX area.

- ▶ Take appropriate measures to prevent electrostatic charges in the EX area.
- ▶ Clean the device surface by gently wiping it with a **damp or antistatic** cloth

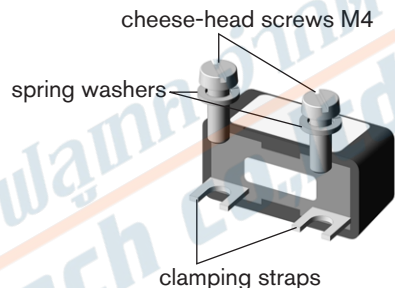
Risk of electric shock!

Acute risk of injury from hazardous structure-borne voltage!

Risk of damage to the device due to short circuit!

- ▶ Work on the electrical system may only be carried out by qualified electricians.
- ▶ Before starting work, switch off the power supply and secure to prevent it being switched on again!
- ▶ Observe the applicable accident prevention and safety regulations for electrical devices!
- ▶ Only fit the equipment protection fuse when undamaged and clean!
- ▶ To be noted when using the type 1058 equipment protection fuse the characteristic values on the equipment protection fuse!

7.2 Installation



→ Fix the equipment protection fuse to the clamping straps with two cheese-head screws (M4). This also provides electrical connection. The spring washers prevent the screws loosening.



Observe the stipulated tightening torque of the connection terminals to which the equipment protection fuse is attached.

7.3 Start-Up



WARNING!

Danger due to improper operation!

Improper operation may result in injuries as well as damage to the device and the area around it.

- ▶ Before start-up, ensure that the operating personnel are familiar with and completely understand the contents of the operating instructions.
- ▶ In particular observe the safety instructions and intended use.
- ▶ The device/the equipment may be started by adequately trained personnel only.

Before start-up, ensure that

- the equipment protection fuse has been fitted according to regulations,
- the equipment protection fuse is not damaged,
- the connecting area is clean,
- the connection has been properly made,
- all screws are fully tightened.

8 MAINTENANCE AND REPAIRS



DANGER!

Danger - improper repairs!

Hazards due to improper service, repair and maintenance work. Have the device **repaired** by the manufacturer only!

- ▶ No repairs or modifications must be made to the type 1058 equipment protection fuses. Defective equipment protection fuses must be replaced.
- ▶ Observe the valid national conditions in the country where used.

8.1 Troubleshooting

In the event of malfunctions, make sure that

- the device has been installed according to the instructions,
- the connection has been made properly,
- the device is not damaged,
- the pipelines are free.



9 ACCESSORIES

Available versions of the equipment protection fuse Type 1058:

Version	Order No.
0,050A	300254
0,063A	300255
0,080A	300256
0,100A	300257
0,125A	300258
0,160A	300259
0,200A	300260
0,250A	300261
0,315A	300262
0,400A	300263
0,500A	300264
1,000A	300265
1,250A	300266
1,600A	300267

10 TRANSPORT, STORAGE, DISPOSAL

NOTE!

Transport damages!

Inadequately protected equipment may be damaged during transport.

- ▶ During transportation protect the device against wet and dirt in shock-resistant packaging.
- ▶ Avoid exceeding or dropping below the allowable storage temperature.

Incorrect storage may damage the device.

- ▶ Store the device in a dry and dust-free location!
- ▶ Storage temperature -40 ... +55 °C.

Damage to the environment caused by device components contaminated with media.

- ▶ Ensure the device and packaging are disposed of in an environmentally sound manner.
- ▶ Observe applicable regulations relating to refuse disposal and the environment.

