

# PIT gb RLLE y ETH



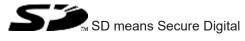
Control and signal devices

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# Introduction

## Validity of documentation

This documentation is valid for the product PIT gb RLLE y ETH. It is valid until new documentation is published.

This operating manual explains the function and operation, describes the installation and provides guidelines on how to connect the product.

## Using the documentation

This document is intended for instruction. Only install and commission the product if you have read and understood this document. The document should be retained for future reference.

## **Definition of symbols**

Information that is particularly important is identified as follows:



## DANGER!

This warning must be heeded! It warns of a hazardous situation that poses an immediate threat of serious injury and death and indicates preventive measures that can be taken.



## WARNING!

This warning must be heeded! It warns of a hazardous situation that could lead to serious injury and death and indicates preventive measures that can be taken.



## CAUTION!

This refers to a hazard that can lead to a less serious or minor injury plus material damage, and also provides information on preventive measures that can be taken.



## NOTICE

This describes a situation in which the product or devices could be damaged and also provides information on preventive measures that can be taken. It also highlights areas within the text that are of particular importance.



#### INFORMATION

This gives advice on applications and provides information on special features.

## Overview

#### **Unit features**

- Slimline design
- Labelling option for individual marking of the control elements
- Control elements finally wired and installed
- Housing with E-Stop pushbutton, 2 pushbuttons and PITreader
- PITreader as electronic key switch for operation and authentication with a transponder key PITreader key (see Order reference: Transponder key [22])
- Can be installed in different directions (see Assembly positions [44] 13])
- Coloured caps for marking the function of the control elements (see Order reference: Accessories [23])
- PIT gb RLLE y ETH has a 12-pin M12 male connector and a 4-pin M12 female connector PIT gb RLLE y ETH is available in two types. Unless stated otherwise, diagrams show the type with plug-in connectors at the opposite end to the E-STOP.
  - PIT gb RLLE y up ETH with male connectors at the E-STOP end
  - PIT gb RLLE y down ETH with male connectors at the opposite end to the E-STOP

#### Scope of supply

- PIT gb RLLE y up/down ETH
- 2 washers M5
- Coloured caps (set), sorted by colour

## Safety

#### Intended use

The unit PIT gb RLLE y ETH is intended for use in safety circuits in accordance with IEC/ EN 60947-5-5, EN ISO 13850. Before using the device, a safety assessment of the overall system must be performed in accordance with the Machinery Directive.

The PIT gb RLLE y ETH is a system for authentication and authorisation on control systems. Authentication is via transponder key.

The PIT gb RLLE y ETH must be used in combination with a suitable evaluation device (see Connection to evaluation device [1] 15]).

The following is deemed improper use in particular:

- Any component, technical or electrical modification to the product
- Use of the product outside the areas described in this manual

Use of the product outside the technical details (see chapter entitled "Technical details [19]").

## Foreseeable misuse

Use of the PIT gb RLLE y ETH under corrosive environmental conditions (cooling emulsions, surface treatment, gases, ...)
Please contact Bilz

Please contact Pilz.

#### Safety regulations

## Additional documents that apply

Please read and take note of the following document.

Operating manual PITreader

You will need to be conversant with the information in this document to fully understand this operating manual.

## Use of qualified personnel

The products may only be assembled, installed, programmed, commissioned, operated, maintained and decommissioned by competent persons.

A competent person is a qualified and knowledgeable person who, because of their training, experience and current professional activity, has the specialist knowledge required. To be able to inspect, assess and operate devices, systems and machines, the person has to be informed of the state of the art and the applicable national, European and international laws, directives and standards.

It is the company's responsibility only to employ personnel who

- Are familiar with the basic regulations concerning health and safety / accident prevention,
- > Have read and understood the information provided in the section entitled Safety
- Have a good knowledge of the generic and specialist standards applicable to the specific application.

#### Warranty and liability

All claims to warranty and liability will be rendered invalid if

- > The product was used contrary to the purpose for which it is intended,
- Damage can be attributed to not having followed the guidelines in the manual,
- Operating personnel are not suitably qualified,
- Any type of modification has been made (e.g. exchanging components on the PCB boards, soldering work etc.)
- The product was opened.

#### Disposal

When decommissioning, please comply with local regulations regarding the disposal of electronic devices (e.g. Electrical and Electronic Equipment Act).

## For your safety



#### WARNING!

Risk of injury due to loss of the safety function.

Manipulation of the E-STOP pushbutton control element (S4) may lead to serious injury and death.

- You should prevent the control element being manipulated with a spare control element.
- Only Pilz may exchange control elements.
- Destroy any defective PIT gb RLLE y ETH before disposing of it.



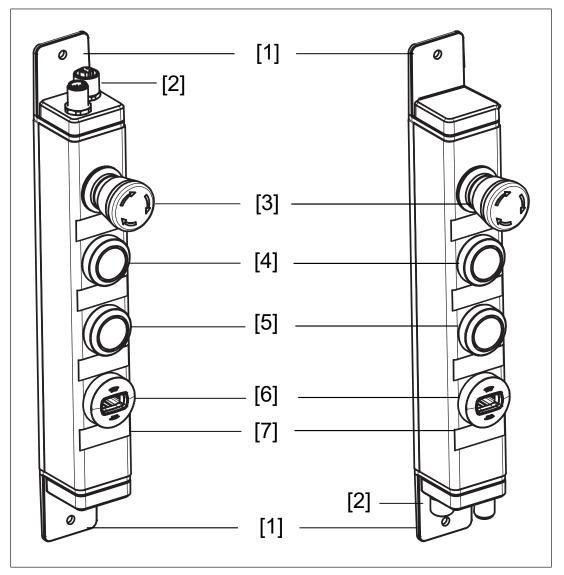
## INFORMATION

Do not remove the protective caps until you are just about to connect the device.

# **Function description**

#### Device types

The PIT gb RLLE y ETH provides an E-STOP pushbutton, two pushbuttons and a PITreader to control the functions of an entire plant or machine. The two M12 connectors used to connect the product are located either on the E-STOP end (PIT gb RLLE y up ETH) or on the opposite end to the E-STOP (PIT gb RLLE y down ETH).



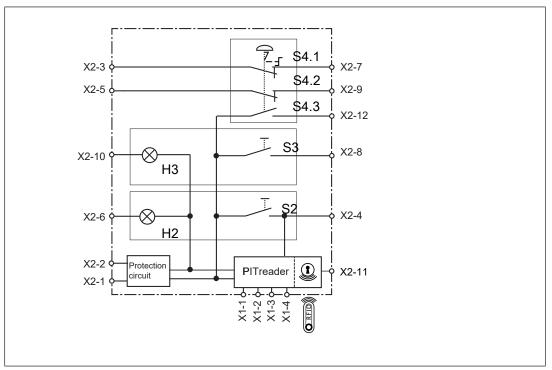
- [1] Rotatable mounting bracket
- [2] Connector
- [3] S4: Emergency stop pushbutton
- [4] S3: Pushbutton 3, illuminated
- [5] S2: Pushbutton 2, illuminated
- [6] S4: PITreader
- [7] Individual labelling option (width: 35 mm, height: 13 mm)

- PITreader as electronic key switch
- E-STOP pushbutton

The E-STOP pushbutton is used to shut down plant and machine sections in order to reduce or avert imminent or existing hazards to persons and damage to machinery or materials.

- Pushbutton generally
  - The pushbutton is used to switch a signal and as the status display.
  - The pushbutton lights up if the corresponding input is connected.
- Pushbutton 2 (to reset the password)
  - Pushbutton 2 can be used to reset the password for the PITreader to the default settings [2] 17] during power-up.

#### **Block diagram**



#### PITreader

The function of the PITreader is described in the operating manual for the authentication system PITreader (see Additional documents that apply [2] 7]).

#### **Coloured caps**

The control elements can be marked with coloured caps according to the function of the control elements (see Order reference: Accessories [23])

# Wiring

Please note:

- ▶ Information given in the Technical details [□ 19] must be followed.
- The power supply must meet the regulations for extra low voltages with protective electrical separation (SELV, PELV).
- ▶ The supply voltage must be fitted with a 4 A fuse, characteristic B/C.
- ▶ Ensure the wiring and EMC requirements of EN 60204-1 are met.
- ▶ To connect the PIT gb RLLE y ETH to the evaluation devices, use a 12-pin cable with an A-coded M12 female connector (see Order reference: Accessories [□ 24]).
- ▶ To connect the PIT gb RLLE y ETH to a controller, use a 4-pole cable with a D-coded M12 male connector (see Order reference: Accessories [□ 24]).
- Route the cables so that they are protected.

## **Terminal assignment connectors**

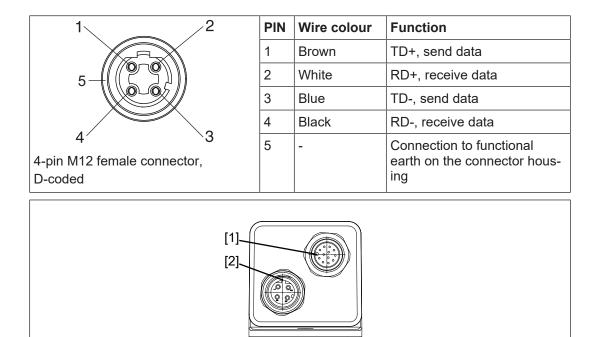


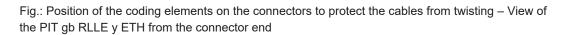
## NOTICE

The colour marking for the connection lead only applies for the cable that Pilz supplies as an accessory

11 2 1	F
10	1
3 0 0 9	2
	3
4 0 0 0 0 8	2
	Ę
5 6 7	6
	7
12-pin M12 male connector	8
	ę
	1
	1

PIN	Wire colour	Function
1	Brown	+24 V UB
2	Blue	0 V UB
3	White	E-STOP channel 1
4	Green	Pushbutton 2
5	Pink	E-STOP channel 2
6	Yellow	LED pushbutton 2 (H2)
7	Black	E-STOP channel 1
8	Grey	Pushbutton 3
9	Red	E-STOP channel 2
10	Purple	LED pushbutton 3 (H3)
11	Grey-pink	Signal output PITreader I0/ O0
12	Red-blue	E-STOP signal contact





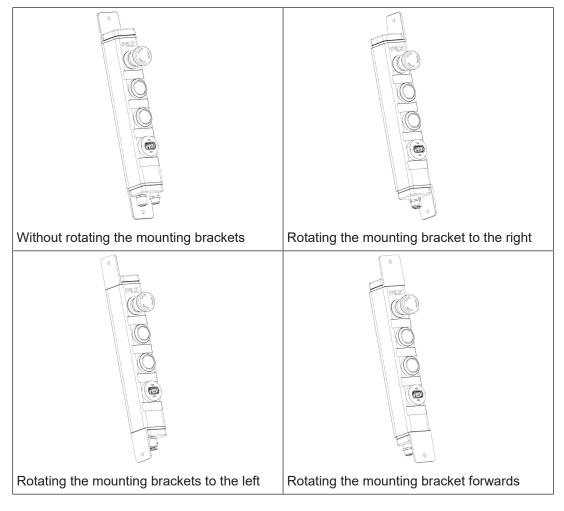
#### Legend

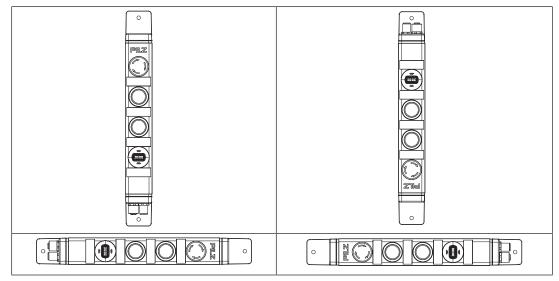
- [1] Coding element on the 12-pin connector
- [2] Coding element on the 4-pin connector

# Installation

## Assembly positions

The mounting brackets used to fasten the PIT gb RLLE y ETH to the mounting surface can be rotated before assembly PIT gb RLLE y ETH (see diagrams with the example of the PIT gb RLLE y down ETH).





## Possible assembly positions for the PIT gb RLLE y ETH:

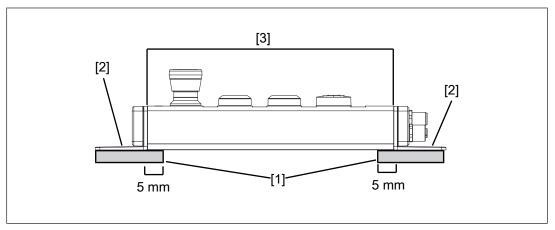
## Installation of device

Please note:

- > The PIT gb RLLE y ETH must be installed on a solid surface (e.g. profile, panel).
- The PIT gb RLLE y ETH must be situated so that it can easily be reached above the access level (e.g. base level, platform level).

The E-STOP pushbutton must be accessible at a height of between 0.6 m to 1.7 m above the access level.

- ▶ The mounting surface must have a max. unevenness of 0.5 mm.
- The housing of the PIT gb RLLE y ETH must make contact with the mounting surface over at least 5 mm on both ends (see figure).



#### Legend

- [1] Mounting surface
- [2] Mounting bracket
- [3] Housing

▶ To fasten the PIT gb RLLE y ETH, use M5 screws and the provided washers M5.

#### **Procedure:**

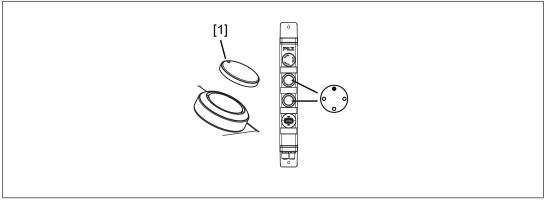
- Provide the mounting surface with drill holes for fastening the PIT gb RLLE y ETH (see Dimensions [2] 19]).
- 2. Turn the mounting bracket to the correct position for installation.
- 3. Fasten the PIT gb RLLE y ETH to the mounting surface and tighten the screws (including washers) with 4 Nm.

## Attach coloured caps

Place the coloured caps (supplied) on the control element.

Ensure that the alignment marking on the coloured cap matches up with one of the positions illustrated.

Press on the coloured cap until you feel it click into position.



#### Legend

[1] Alignment marking

# Commissioning

#### Connection to evaluation device

Suitable Pilz evaluation devices for the actuation of the LED and reading out all control elements include:

- PNOZmulti
- PSSuniversal PLC

Suitable Pilz evaluation devices for the evaluation of the E-STOP:

- PNOZelog
- PNOZsigma
- PNOZ X

The correct connection to the respective evaluation device is described in the operating manual for the evaluation device. Make sure that the connection is made in accordance with the specifications in the operating manual for the selected evaluation device.

#### **Configure PITreader**

The configuration of the PITreader is described in the operating manual for the authentication system PITreader.

## Checking the unit

Once the unit has been installed and aligned, final inspections must be carried out before it can be put into service.



## INFORMATION

This inspection may only be carried out by qualified personnel.

- Check the PIT gb RLLE y ETH for damage.
- Always test the function with a connected evaluation device.
- Check the function of the E-STOP.
- Check the function of the other control elements.

# Troubleshooting

Error	Cause	Description/measure
LED off	0 V voltage supply not present and/or no signal at corresponding input	Check the wiring of the inputs and outputs and rectify wiring errors
No output signal with control element operation	24 V voltage supply not present	Check the wiring of the inputs and outputs and rectify wiring errors
Function of the unit impaired	Connection cable dam- aged	Check connection cable and ex- change if necessary
Control element damaged	External force	Contact Pilz and arrange a re- placement for the defective con- trol element.
LED on PITreader flashes red	Fault on the PITreader (e.g. hardware error, configuration error, in- valid or uncoded transponder key,).	See LED display PITreader [🛄 17].

# Operation

## **Display and control elements**

The use and display of pushbutton 2 and pushbutton 3 depends on the application in the connected controller.

## LED display PITreader

#### Legend

$\rightarrow$	LED on
-22-	

€ LED flashes

Colour	State	Meaning
Yellow	¢-	Device is starting up or the firmware is being updated (if the device is re- starting after uploading a firmware update and the firmware update is being applied, the LED flashes yellow)
Yellow	×.	Device is in external authentication mode and as yet no authentication has been set for the inserted transponder key
Blue	->>-	Device is ready for operation, no transponder key has been inserted
Green	-×-	Transponder key has been recognised as valid
Red	->>-	Transponder key has been recognised as invalid (permission 0 or in external authentication mode)
Red	¢-	Error (e.g. hardware error, configuration error, in- valid or uncoded transponder key,). Possible remedies in the event of a configuration error, when the device is no longer accessible un- der the set IP address:
		Try to open the web application with the default IP address or
		Reset the device to its default settings.

#### Firmware update PITreader

The update for the firmware of the PITreader is described in the operating manual for the authentication system PITreader (see Additional documents that apply [22 7]).

## Reset PITreader to default setting

#### Procedure:

- 1. Switch off the supply voltage to the PIT gb RLLE y ETH.
- 2. Press and hold pushbutton 2.
- 3. Switch on the supply voltage to the PIT gb RLLE y ETH.

4. Release pushbutton 2 when the yellow LED lights up and press it again with 10 seconds.

The LED light up yellow and then green.

The PIT gb RLLE y ETH has been reset successfully.

# LED statuses on the PITreader for resetting the PIT gb RLLE y ETH to its factory settings

Description	Colour	State
Pushbutton S2 pressed	Yellow	-X-
Pushbutton S2 is released		0
Pushbutton S2 is pressed again, resetting the device to its de- fault settings		-×-
The device has successfully been reset to its default settings	Green	-×

## Maintenance and testing

It is not necessary to perform maintenance work on the product in normal operation. Please return any faulty products to Pilz.

#### Cleaning

Clean the unit every month with a soft cloth and a mild cleaning agent.

#### Monthly check

▶ Perform a manual function test [□ 16] of the PIT gb RLLE y ETH every month.



#### INFORMATION

This inspection may only be carried out by qualified personnel.

#### **Check after modifications**

Check the PIT gb RLLE y ETH each time the plant/machine is modified. Exchanging the PIT gb RLLE y ETH is also to be classed as a modification.

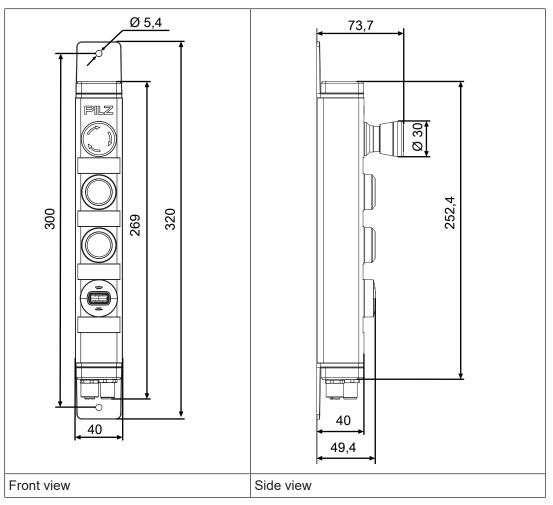
You must comply with the requirements of the applicable national regulations.



#### INFORMATION

This inspection may only be carried out by qualified personnel.

# Dimensions



# Technical details

General	G1000020	G1000021
Certifications	CE, EAC (Eurasian), FCC, IC, UL/ cUL	CE, EAC (Eurasian), FCC, IC, UL/ cUL
Self-monitored	No	No
Lamp		
Kind	LED	LED
Colour	white	white
Electrical data	G100020	G1000021
Supply voltage		
Voltage	24 V	24 V
Kind	DC	DC
Type of power supply	SELV/PELV	SELV/PELV
Voltage tolerance	-15 %/+20 %	-15 %/+20 %
Output of external power supply		
(DC)	2,88 W	2,88 W
Duty cycle	100 %	100 %

Electrical data	G1000020	G1000021
Min. contact current	1 mA	1 mA
E-STOP	G1000020	G1000021
Quantity	1	1
Number of N/C contacts	2	2
	1	<u>-</u>
Number of signal contacts E-STOP release type	Turn release	Turn release
	Turri release	
Utilisation category In accordance with the standard	EN 60047 5 4	EN 60947-5-1
DC13 at	24 V	24 V
Current	0,1 A	0,1 A
Contact material	Ag	Ag
Mechanical life	50,000 cycles	50,000 cycles
Electrical life	6050 cycles	6050 cycles
	· · ·	
Pushbutton	G1000020	G1000021
Quantity	2	2
Number of N/O contacts	2	2
Utilisation category		
In accordance with the standard		EN 60947-5-1
DC13 at	24 V	24 V
Max. current	0,1 A	0,1 A
Mechanical life	1,000,000 cycles	1,000,000 cycles
B10	1,300,000 cycles	1,300,000 cycles
Contact material	Ag	Ag
PITreader	G1000020	G1000021
Sensor's mode of operation	Transponder	Transponder
Transponder's energy supply	passive (battery free)	passive (battery free)
Transponder's frequency band	13,24 - 13,88 MHz	13,24 - 13,88 MHz
Max. transmitter output of		
transponder	170 mW	170 mW
Supply interruption before de-ener- gisation	10 ms	10 ms
Galvanic isolation (semiconductor	10 1115	
output)	No	Νο
Switching current per semicon-		
ductor output	100 mA	100 mA
Short circuit proof (semiconductor		
output)	yes	yes
Signal level at "1" (input)	15 - 30 V DC	15 - 30 V DC
Input current range	4 mA	4 mA
Galvanic isolation (input)	No	Νο
Ethernet interface	G1000020	G1000021
Number	1	1
IP address, factory setting	192.168.0.12	192.168.0.12
Connection type	M12x1, 4-pin, D-code	M12x1, 4-pin, D-code
Transmission rate	10/100 Mbit/s	10/100 Mbit/s

Freedom and all shades	0400000	04000004
Environmental data	G1000020	G1000021
Ambient temperature		
Temperature range	-20 - 55 °C	-20 - 55 °C
Storage temperature		
Temperature range	-25 - 70 °C	-25 - 70 °C
Climatic suitability		
In accordance with the standard	EN 60068-2-78	EN 60068-2-78
Humidity	93 % r. h. at 40 °C	93 % r. h. at 40 °C
Vibration		
In accordance with the standard	EN 60947-5-2	EN 60947-5-2
Frequency	10 - 55 Hz	10 - 55 Hz
Amplitude	1 mm	1 mm
Shock stress		
In accordance with the standard	EN 60947-5-2	EN 60947-5-2
Acceleration	30g	30g
Duration	11 ms	11 ms
Airgap creepage		
In accordance with the standard	EN 60947-1	EN 60947-1
Overvoltage category	Ш	Ш
Pollution degree	3	3
Protection type		
Housing	IP65	IP65
In accordance with UL	Type 1	Type 1
Mechanical data	G1000020	G1000021
Mounting position	Any	Any
Connection type	M12, 12-pin male connector	M12, 12-pin male connector
Material		
Housing	Zn	Zn
Connection type	M12	M12
Fixing screws torque settings	4 Nm	4 Nm
Dimensions		
Height	320 mm	320 mm
Width	40 mm	40 mm
Depth	40 mm	40 mm
Weight	920 g	920 g
<u> </u>		<b>v</b>

Where standards are undated, the 2020-08 latest editions shall apply.

Safety characteristic data	
Operating mode	B10d in accordance with EN ISO 13849-1: 2015 and EN 62061
E-STOP	130.000



## NOTICE

You must comply with the safety characteristic data in order to achieve the required safety level for your plant/machine.

# Supplementary data

#### **Radio approvals**

**FCC/IC** approval

# USA/Canada FCC ID: VT8- PITGB01 IC: 7482A-PITGB01

ECC/IC-Requirements: This product complies with Part 15 of the FCC Rules and with Industry Canada licence-exempt RSS standards.

Operation is subject to the following two conditions: 1) this product may not cause harmful interference, and 2) this product must accept any interference received, including interference that may cause undesired operation.

Changes or modifications made to this product not expressly approved by Pilz may void the FCC authorization to operate this equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Le présent produit est conforme aux CNR d'Industrie Canada applicables aux appareils radio

exempts de licence. L'exploitation est autorisée aux deux conditions suivantes

(1) le produit ne doit pas produire de brouillage, et

(2) l'utilisateur de le produit doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

## Network data

Pro- tocol	Direc- tion	Trans- port log	Port no.	Can be deactiv- ated	Description
HTTP	In	ТСР	1 65535 Default: 80	No	Web application: Browser is always forwarded to HTTPS
HTTPS	In	ТСР	1 65535 Default: 443	No	<b>Web application:</b> Transport protection by TLSv1.2. Access to the web application via user name and password. The server is authenticated via an X.509 certificate.
Modbus TCP	In	ТСР	1 65535 Default: 502	Yes	Modbus/TCP Server
NTP	out	UDP	1 65535 Default: 123	Yes Default: Inactive	SNTP Client

# Order reference

## Product

Product type	Features		Order no.
PIT gb RLLE y up ETH	Housing with two illuminated push- buttons, one E-STOP and PITreader	M12, 12-pin male connector and	G1000020
	Plug-in connector connection at the top	M12, 4-pin D-coded male connector	
PIT gb RLLE y down ETH	Housing with two illuminated push- buttons, one E-STOP and PITreader	M12, 12-pin male connector and	G1000021
	Plug-in connector connection at the bottom	M12, 4-pin D-coded male connector	

## Transponder key

Product type	Features	Order no.
PITreader key ye 1	Transponder key for authentication system PITreader, permission for operating mode 1 Colour: yellow Material: plastic	402 261
PITreader key ye 2	Transponder key for authentication system PITreader, permission for operating mode 1 and 2 Colour: yellow Material: plastic	402 262
PITreader key ye 3	Transponder key for authentication system PITreader, permission for operating mode 1, 2 and 3 Colour: yellow Material: plastic	402 263

Product type	Features	Order no.
PITreader key ye 4	Transponder key for authentication system PITreader, permission for operating mode 1, 2, 3 and 4 Colour: yellow Material: plastic	402 264
PITreader key ye 5	ye 5 Transponder key for authentication system PITreader, permission 4 for operating mode 1, 2, 3, 4 and 5 Colour: yellow Material: plastic	
PITreader key ye 5 service	Transponder key for authentication system PITreader, permission for operating mode 1, 2, 3, 4 and 5 (Service) Colour: yellow Material: plastic	402 269
PITreader key ye g	Generic transponder key for authentication system PITreader, per- missions freely configurable Colour: yellow Material: plastic	402 260

## Accessories

Product type	Features	Order no.		
PIT gb color covers	PIT gb color covers Colour covers for the illuminated pushbuttons (set)			
PIT gb color cover wh s1				
PIT gb color cover wh s2	Colour covers for the illuminated pushbuttons, white, IEC symbol ON	G1000014		
PIT gb color cover wh s3	Colour covers for the illuminated pushbuttons, white, IEC symbol Unlocking	G1000015		
PIT gb color cover wh s4	Colour covers for the illuminated pushbuttons, white, IEC symbol Locking	G1000016		
PIT gb color cover bl s5	Colour covers for the illuminated pushbuttons, blue, IEC symbol Request	G1000017		
PIT gb color cover bl s6	Colour covers for the illuminated pushbuttons, blue, IEC symbol Reset	G1000018		
PIT gb color cover bl s4	Colour covers for the illuminated pushbuttons, blue, IEC symbol Locking	G1000019		

# Cable

Product type	Features	Connector X1	Connector X2	Connector X3	Order no.
PSEN cable M12-12sf 2m	2 m	M12, 12-pin fe- male con- nector, straight			570350
PSEN cable M12-12sf 3m	3 m	M12, 12-pin fe- male con- nector, straight			570351
PSEN cable M12-12sf 5m	5 m	M12, 12-pin fe- male con- nector, straight			570352

Product type	Features	Connector X1	Connector X2	Connector X3	Order no.
PSEN cable M12-12sf 10m	10 m	M12, 12-pin fe- male con- nector, straight			570353
PSEN cable M12-12sf 20m	20 m	M12, 12-pin fe- male con- nector, straight			570354
PSEN cable M12-12sf 30m	30 m	M12, 12-pin fe- male con- nector, straight			570355
PSEN cable M12-12sf 50m	50 m	M12, 12-pin fe- male con- nector, straight			570356
PSEN cable M12-12sf/ M12-12sm 1m	1 m	M12, 12-pin fe- male con- nector, straight	M12, 12-pin male con- nector, straight		570357
PSEN cable M12-12sf/ M12-12sm 2m	2 m	M12, 12-pin fe- male con- nector, straight	M12, 12-pin male con- nector, straight		570358
PSEN cable M12-12sf/ M12-12sm 3m	3 m	M12, 12-pin fe- male con- nector, straight	M12, 12-pin male con- nector, straight		570359
PSEN cable M12-12sf/ M12-12sm 5m	5 m	M12, 12-pin fe- male con- nector, straight	M12, 12-pin male con- nector, straight		570360
PSEN cable M12-12sf/ M12-12sm 10m	10 m	M12, 12-pin fe- male con- nector, straight	M12, 12-pin male con- nector, straight		570361
PSEN cable M12-12sf/ M12-12sm 20m	20 m	M12, 12-pin fe- male con- nector, straight	M12, 12-pin male con- nector, straight		570362
SafetyNET p cable	By the metre, 4-core CAT5e,				380000

# Connector

Product type	Features	Connector X1	Connector X2	Connector X3	Order no.
M12 con., straight, male, 4-pin, D	D-coded	M12, 4-pin male con- nector, straight			380316
SafetyNET p con- nector RJ45s		4-pin RJ45 male con- nector, straight, Cat 5a			380400

# EC declaration of conformity

This product/these products meet the requirements of the following directives of the European Parliament and of the Council.

- > 2006/42/EC on machines
- ▶ 2011/65/EU RoHS Directive
- > 2014/53/EC on radio equipment
- > 1907/2006/EG REACH

The complete EC Declaration of Conformity is available on the Internet at www.pilz.com/ downloads.

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