PIT js2

Control and signal devices

Operating Manual-21130-EN-05

Introduction

Validity of documentation

This documentation is valid for the product PIT js2. It is valid until new documentation is published.

This documentation is valid for PIT js2 from the date of manufacture 2014-08.

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

Retaining the documentation

This documentation is intended for instruction and 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.

For your safety

- The unit may only be installed and commissioned by personnel who are familiar with both these instructions and the current regulations for health and safety at work and accident prevention. Ensure VDE and local regulations are met, especially those relating to protective measures.
- Any guarantee is rendered invalid if the housing is opened or unauthorised modifications are carried out.
- Check the function of the pushbutton before commissioning for the first time and then at regular intervals (at least annually).

Intended use

The PIT js2 is a manually operated command device that can be used as an enabling device. It allows authorised personnel to monitor processes in the danger zone of automated manufacturing facilities when movable guards are open.

Additional protective measures (e.g. reduced speed) may be required relative to the result of the risk analysis!

Use the following units as an evaluation device:

- PSS programmable safety system in conjunction with standard function block SB059
- PNOZmulti modular safety system with the two-hand module
- Two-hand control relays
  - P2HZ X1
  - P2HZ X1P
  - P2HZ X1.10P
  - P2HZ X2
  - P2HZ X3
  - P2HZ X4P
- PNOZelog safety relays
  - PNOZ e2.1p

Device description

The PIT js2 command device consists of a plastic housing with 3 pushbuttons.

Features:

- 2 pushbuttons (ACT1 and ACT2) for the two-hand function (N/C / N/O contact, respectively)
- 1 pushbutton (RESET) for the reset function (N/O)

- The contacts are connected by a coiled cable with an open end.

Function description

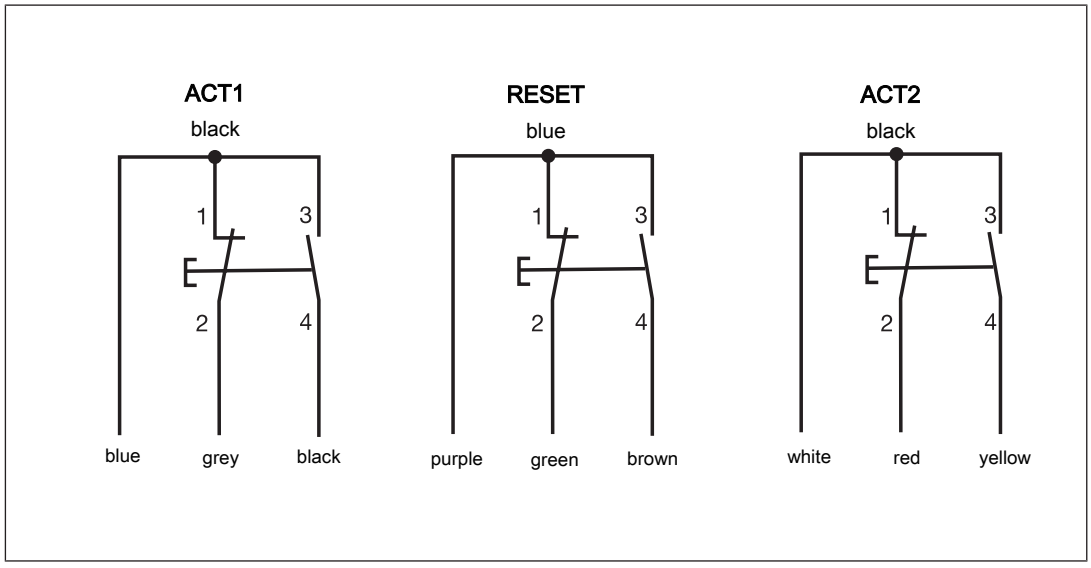
An enabling signal is generated in conjunction with a two-hand monitoring module by simultaneously pressing the ACT1 and ACT2 pushbuttons. This overrides the safety function of the movable guards. Authorised operating personnel then can enter the danger zone to monitor work processes.

Releasing one or both pushbuttons ACT1 and ACT2 will interrupt the enabling signal. A subsequent enabling signal can only be generated once both pushbuttons have been released. Additionally, the Reset pushbutton can be incorporated into the control system to generate a subsequent enabling signal.

Wiring

- Connect the ACT1 and ACT2 buttons to the control system in such a way that both pushbuttons must be actuated in order to generate an enabling signal.
- You can connect the Reset button to the control system such that, after releasing one or both pushbuttons ACT1 and ACT2, a subsequent enabling signal can only be generated once the Reset pushbutton has been actuated.

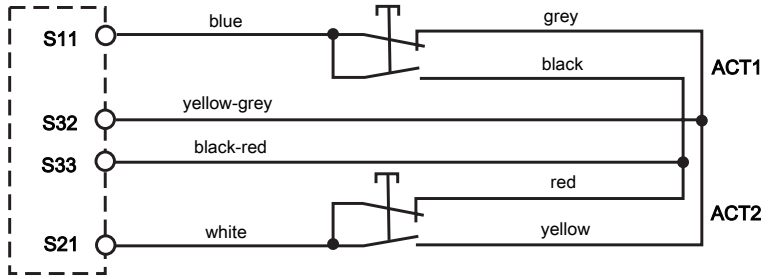
Assignment



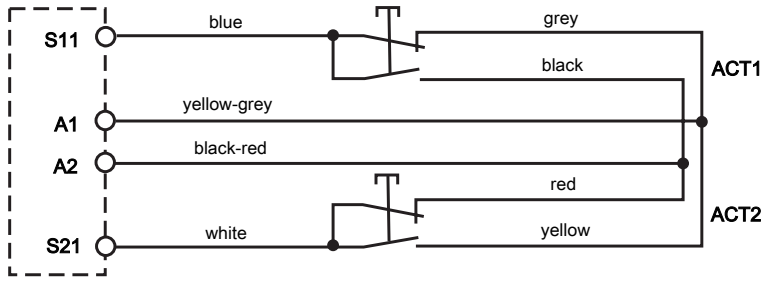
Connection to evaluation device

P2HZ X1
P2HZ X1P
P2HZ X1.10P
PNOZ e2.1p

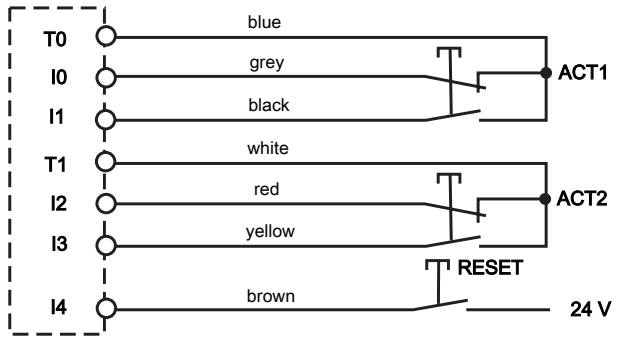
P2HZ X2
P2HZ X4P

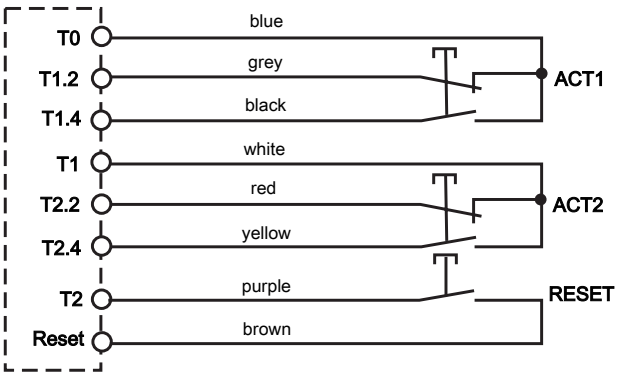


P2HZX3 (Contact fuse protection, see technical details)



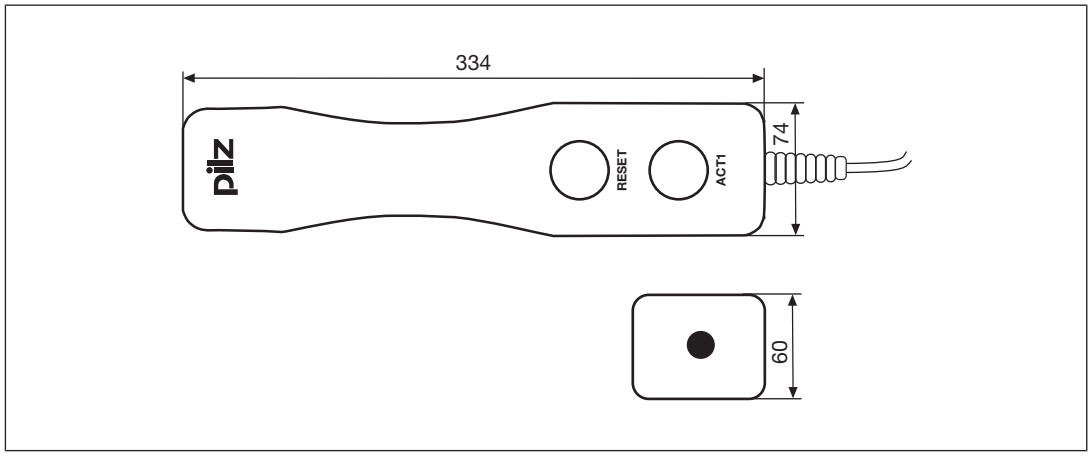
PNOZmulti (with two-hand module)



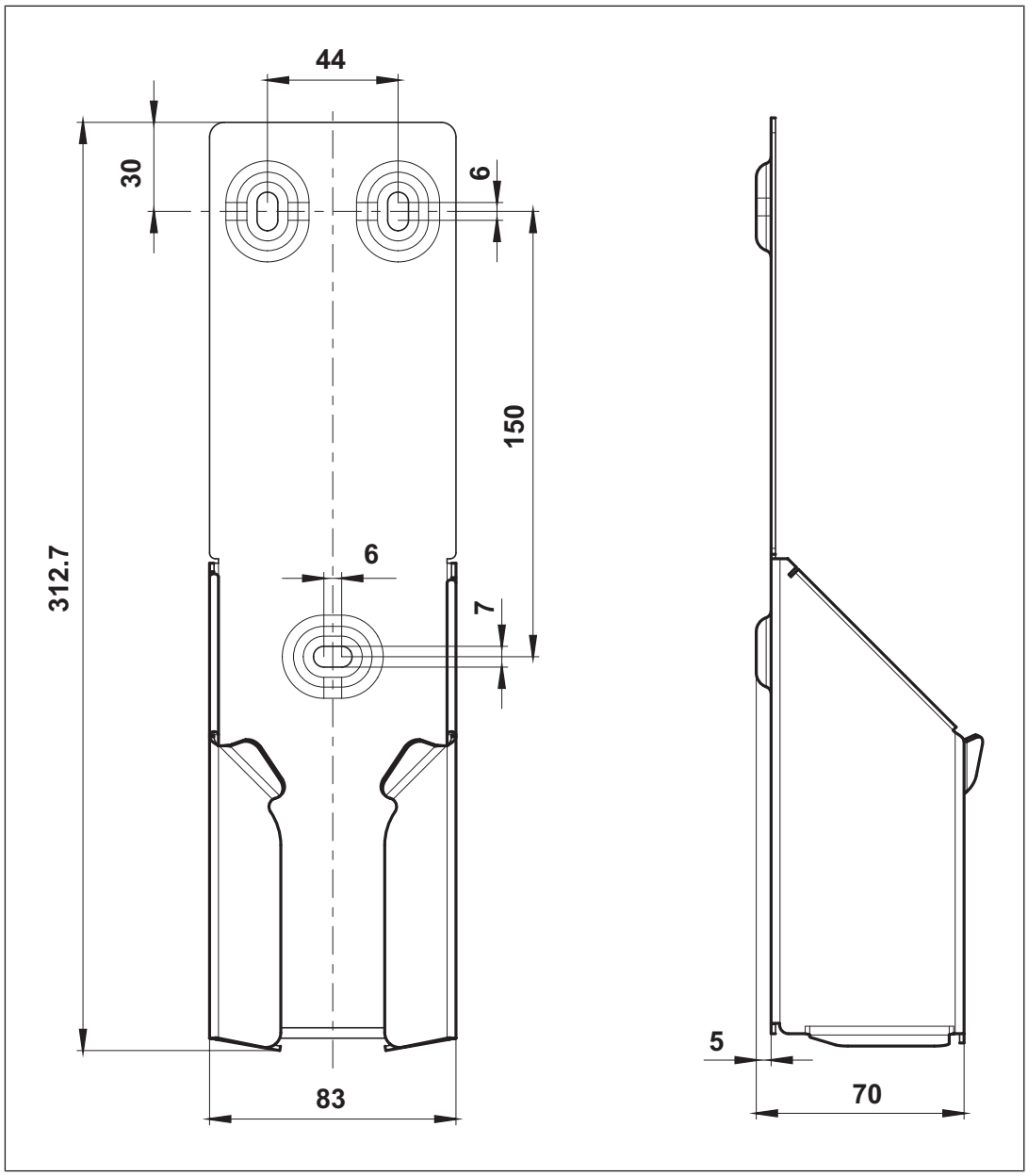
PSS SafetyBUS p (with standard function block SB059)	

Dimensions in mm

PIT js2



PIT js holder



Technical Details

General	
Approvals	**CE**
Electrical data	
Supply voltage	
Voltage	**24 V**
Kind	**AC/DC**
Max. switching current, safety contacts	**0,75 A**

Relay outputs	
Utilisation category	
DC 1 at	**24 V**
Environmental data	
Ambient temperature	
Temperature range	**-10 - 55 °C**
Protection type	
Housing	**IP50**
Mechanical data	
Cable length L1	**5,00 m**
Cable insulation material K1	**PUR**
Conductor cross section K1	**0,14 mm²**
Material	
Housing	–
Dimensions	
Height	**334,0 mm**
Width	**74,0 mm**
Depth	**60,0 mm**
Weight	**764 g**

Safety characteristic data

Safety characteristic data	
B10d in accordance with EN ISO 13849-1 and EN IEC 62061	**20.000.000**
$Lambda_d$/Lambda in accordance with EN IEC 62061	**0,10**

Order reference

Product

Type	Features	Order no.
PIT js2	Manually operated command device	401 100

Accessories

Bracket

Type	Features	Order no.
PIT js holder	Wall holder for PIT js2	401 200