

# **ETAL100.3200-12**

## **User's manual**

Version: **1.00 (December 2020)**  
Order no.: **User's manual**

### **Translation of the original documentation**

B&R reserves the right to make changes to the content without prior notice. B&R assumes no liability for typographical errors or for any other information in this document as far as legally possible. Liability claims against B&R regarding the content of delivery and documentation of third-party components used in the product are excluded in any case. The user is responsible for compliance with all relevant and professionally pertinent safety measures as well as the intended use. B&R points out that the software and hardware designations and brand names of the respective companies are subject to the legal protection regulations of intellectual property law.

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# Chapter 1 • Introduction

## 1 Manual history

Version	Date	Change
0.10	May 2019	First internal version

### 1.1 INFOBOX: Current user's manual

#### Information:

B&R makes every effort to keep documents as current possible. The most current versions can be downloaded from the B&R website ([www.br-automation.com](http://www.br-automation.com)).

## 2 Organization of notices

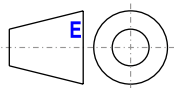
### Safety guidelines

Contain **only** information that warns of dangerous functions or situations.

Signal word	Description
<b>Danger!</b>	Failure to observe these safety guidelines and notices will result in death, severe injury or substantial damage to property.
<b>Warning!</b>	Failure to observe these safety guidelines and notices can result in death, severe injury or substantial damage to property.
<b>Caution!</b>	Failure to observe these safety guidelines and notices can result in minor injury or damage to property.
<b>Notice!</b>	Failure to observe these safety guidelines and notices can result in damage to property.

Contain **useful** information for users and instructions for avoiding malfunctions.

Signal word	Description
<b>Information:</b>	Useful information, application tips and instructions for avoiding malfunctions.



European dimension standards apply to all dimension diagrams.

#### All dimensions in millimeters.

Unless otherwise specified, the following general tolerances apply:

Nominal dimension range	General tolerance per DIN ISO 2768 medium
Up to 6 mm	±0.1 mm
Over 6 to 30 mm	±0.2 mm
Over 30 to 120 mm	±0.3 mm
Over 120 to 400 mm	±0.5 mm
Over 400 to 1000 mm	±0.8 mm

## Chapter 2 • Intended use

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These products are developed and produced exclusively for training and development in the area of automation. Any use beyond this is not permitted, in particular the integration of these products or parts thereof in machines, systems or other devices and processes. B&R does not assume liability for damages of any kind that occur when using the products outside of training and development or for harm that results from modifying the products. Expansions using products from the ETA system or ETA light system series are permitted.

In addition, the products are only permitted to be used in closed rooms (such as laboratories, offices and classrooms) that do not require separate protective equipment. Trainers shall inform the trainees of the relevant safety guidelines and precautions before using the product.

# Chapter 3 • Safety notices

## 1 Safety notices

### Warning!

#### Observe safety notices

Disregarding safety notices can result in serious damage to property and personal injury.

The safety notices on the product and in the documentation must be observed.

Products that cannot be ensured as safe due to damage, for example, are not permitted to be started up under any circumstance. Disturbances that impair general safety must be eliminated immediately.

## 2 Usage

This product is designed and manufactured for training and development. General safety guidelines must be observed at all times.

### Caution!

#### Risk of injury

Disregarding safety notices can result in serious damage to property and personal injury.

The data sheets of components and the safety notices contained therein must be observed.

For a list of the components used, see the technical data of this product.

## 3 Responsibilities of the operator

The operator is the person who operates the product or who provides it for use/application by a 3rd party while carrying legal product responsibility for the protection of the user, personnel or other 3rd parties.

- The operator is obliged to know and implement the applicable industrial safety regulations.
- The operator is obliged to know and implement national, local and plant-specific regulations.
- The operator is obliged to clearly define and manage responsibilities for installation, operation, fault correction, maintenance and cleaning.
- The operator is obliged to ensure that responsible personnel have read and understood this user's manual.

## Chapter 4 • System characteristics

### 1 General information

This ETA light system includes a prewired X20TB12 terminal block, including label, for the easy power supply of your X20 components. The product can be connected directly to wide-range desktop power supply unit OTP650.07 from the ETA light system.

#### ETAL100.3200-12 - 24 VDC power supply with X20TB12

- Prewired terminal block for CPU and I/O power supply
- Terminal block with label 0 / 24 V
- Direct connection with ETA light system power supply unit

### 2 Order data


Model number	Short description	Figure
	<b>Accessories</b>	
ETAL100.3200-12	ETA light system 24 VDC power supply with X20TB12 terminal block for power supply of X20 components	
	<b>Optional accessories</b>	
	<b>Accessories</b>	
OTP370.76	Attachment cable to wide-range desktop power supply unit for office and laboratory use, CEE 7/7 to IEC C13 connector typical application: power supply for ETA light evaluation and training systems	
OTP650.07	Wide-range desktop power supply unit for office and laboratory use, output parameters: 24 VDC, 2.5 A, connection: low voltage connector 5.5 mm / 2.1 mm (+ pin inside), typical application: power supply for ETA light evaluation and training systems	

Table 1: ETAL100.3200-12 - Order data

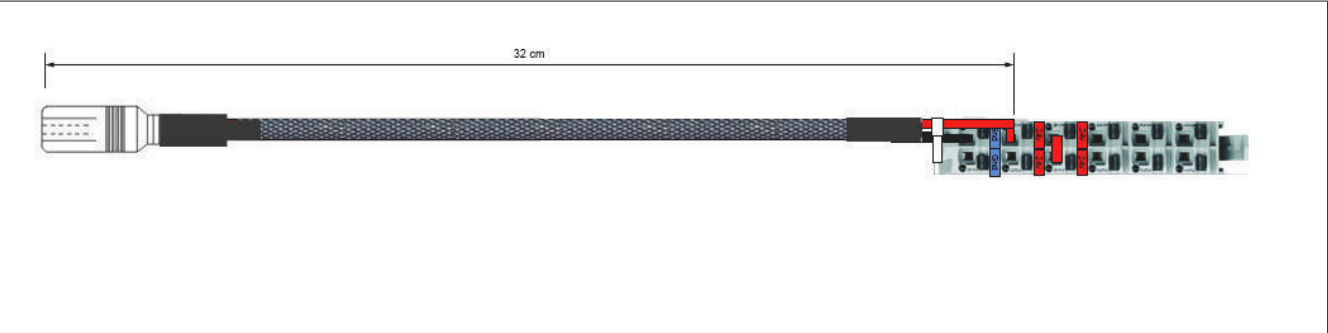
## Chapter 5 • Technical data

<b>Model number</b>	<b>ETAL100.3200-12</b>
<b>General information</b>	
Input voltage	24 VDC -15% / +20%
B&R ID code	0xE4E4
<b>24 VDC power supply</b>	
Connection	Low voltage female connector 5.5 mm / 2.1 mm (0TP650.07)
<b>Cable construction</b>	
Wire cross section	2x 0.4 mm <sup>2</sup>
Properties	Wired to terminal block X20TB12
Outer jacket	
Material	PVC
<b>Mechanical properties</b>	
Length	320 mm

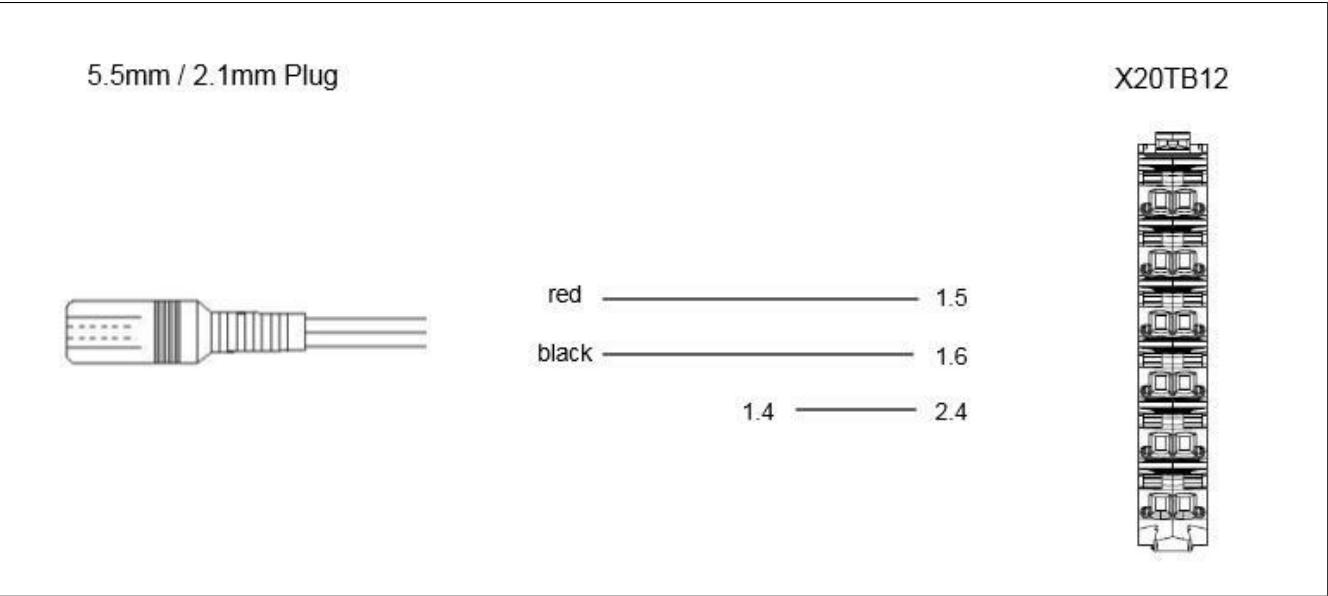
Table 2: ETAL100.3200-12 - Technical data

# Chapter 6 • Wiring

## 1 Dimensions



## 2 Cable pinout



## Chapter 7 • Compatibility

This product is compatible with X20 components that can be connected to an X20TB12. This includes the following product groups.

- X20CPx58x
- X20CPx68x
- X20BC00xx

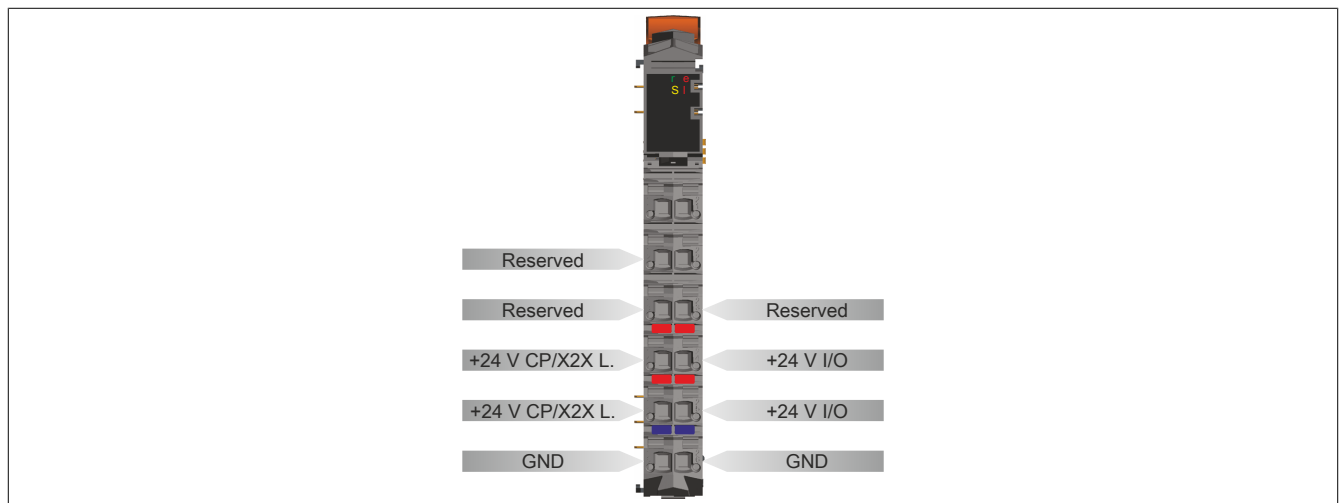
### Information:

Check whether the terminal block can be used on the desired device. For additional information, see the data sheet of the product used.

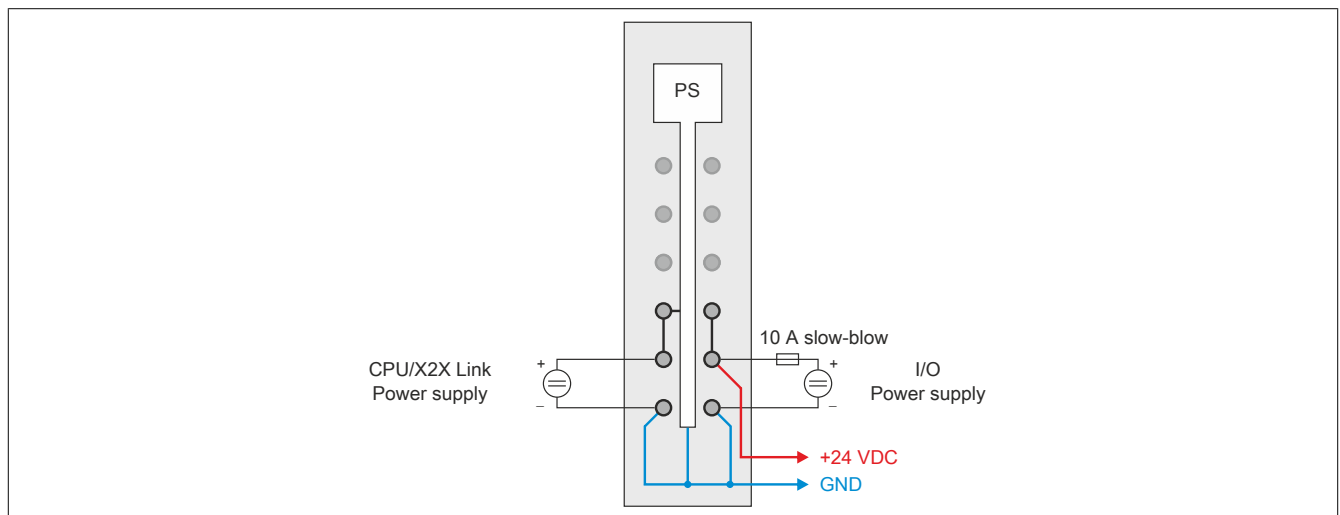
### 1 CPU power supply

A power supply unit is integrated in the X20 CPUs. It is equipped with a supply for the CPU, X2X Link and the internal I/O power supply. The bus power supply and internal I/O power supply are galvanically isolated from each other.

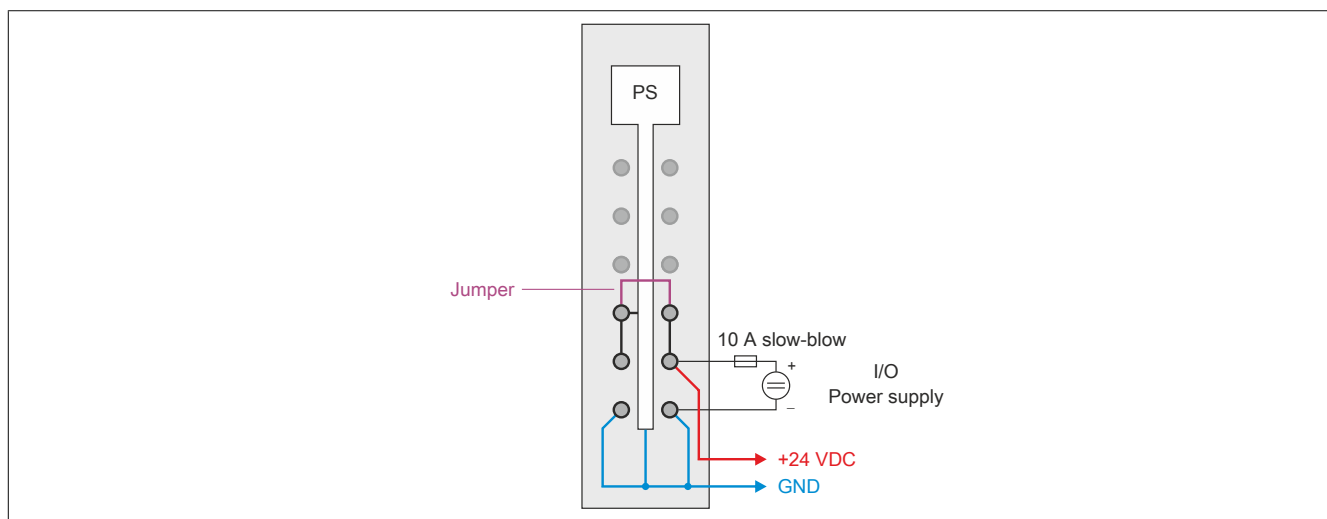
#### Integrated power supply unit - Pinout



#### Connection example with 2 separate power supplies



## Connection example with power supply and jumper



## Chapter 8 • Maintenance

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The following chapter describes the maintenance work that can be carried out by a qualified and trained end user.

### **Information:**

Only components approved by B&R are permitted to be used for maintenance work.

### **1 Repairs/Complaints and replacement parts**

### **Danger!**

Unauthorized opening or repair of a device may result in personal injury and/or serious damage to property. Repairs are therefore only permitted to be carried out by authorized qualified personnel at the manufacturer's premises.

To process a repair/complaint, a repair order or complaint must be created via the B&R Material Return Portal on the B&R website ([www.br-automation.com](http://www.br-automation.com)).

## Chapter 9 • Environmentally friendly disposal

All programmable logic controllers, operating and monitoring devices and uninterruptible power supplies from B&R are designed to have as little impact on the environment as possible.

### 1 Separation of materials

To ensure that devices can be recycled in an environmentally friendly manner, it is necessary to separate out the different materials.

Component	Disposal
Programmable logic controllers Operating and monitoring devices Uninterruptible power supplies Batteries and rechargeable batteries Cables	Electronics recycling
Paper/Cardboard packaging	Paper/Cardboard recycling
Plastic packaging material	Plastic recycling

Disposal must be carried out in accordance with applicable legal regulations.



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