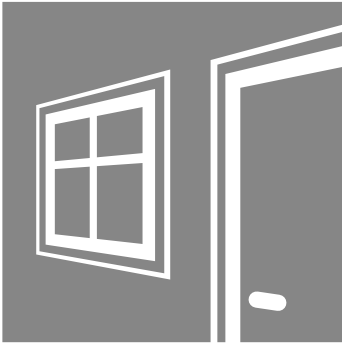


Doc.-No. 1000358603_03_EN / 11.2016
Art.-No. 263 099

Aluminium systems

Power pack for top hat rail NT-ET-TE4-A1

en

Operating Instructions



Attention: Important instructions for safe installation. Follow the instructions. Incorrect installation can result in serious injury. For the safety of individuals, it is important to adhere to these instructions. Retain these operating instructions for later use/maintenance.

Notes on the operating instructions

The operating instructions are intended for specialists, trained fitters and electricians. The relevant section of the operating instructions must be read carefully before each stage and the recommended sequence must be followed.

Read the **Safety Advice** section very carefully and memorise the warning signs and what they mean.

Qualified personnel must be used.

All work including assembly, installation and testing must be carried out by qualified personnel.

Qualified personnel include, for example:

- Window fabricators or metal fabricators for mechanical systems
- Qualified electricians, e.g. for electrical installations and testing

Applicable regulations

All the relevant local assembly and installation requirements, guidelines and regulations must be observed. This applies in particular to:

- VDE guidelines and regulations, e.g. DIN VDE 0100, DIN VDE 0160, DIN VDE 0632
- European and international standards, e.g. EN 60335-2-103 on the safety of electrical devices
- Guidelines and regulations of the professional trade associations, e.g. BGR 232 (previously ZH 1/494) for power-operated windows, doors and gates, BGV A2 (previously VBG4) accident prevention regulations for electrically-operated systems and devices
- Data sheets of the Verband der Fenster- und Fassadenhersteller e.V. (German Association of Window and Façade Manufacturers) (e.g. KB.01 / KB.02 electrically operated windows)

Please note that no liability will be accepted for incorrect use, assembly or installation or where non-original accessory components are used.

Where damage is caused by failure to observe these operating instructions, the warranty shall be invalidated. No liability is accepted for consequential damage.

For **safety reasons and in accordance with CE certification**, unauthorised modifications of and/or adjustments to products are not permitted.

Safety instructions

General

To ensure that they are comprehensive, these operating instructions do not provide every detail of all product types. They also cannot cover every possible installation, operation or maintenance scenario. Should you require further information or encounter problems not dealt with in detail in these operating instructions, contact **Schüco Mechatronic hotline (00 49) 0521 783 – 665**.

Moreover, we would like to point out that these installation instructions do not form part of or replace any previous or existing agreement or contract.

All obligations to be fulfilled by Schüco can be found in the appropriate sales contract, which also contains the complete current conditions of the warranty. These operating instructions do not add to or limit the warranty conditions.

Assembly and installation

Before installation, repairs, maintenance or any adjustments are made, all associated power packs must be disconnected and protected against anyone inadvertently switching them back on.

After installation and after any alteration to the electrical system, a test run must be carried out on all functions to check them.

When operating, note that Schüco windows and doors may open and close automatically when left unattended.

Definitions on safety issues

Qualified personnel, for the purpose of these operating instructions and any warning signs on the product, means employees who know how to install, assemble, commission, test and operate the product and who have the relevant qualifications, e.g. who have been trained and instructed in accordance with safety regulations on the maintenance and use of appropriate safety equipment and who have received training in First Aid.

Experts are people whose training and experience means that they have sufficient knowledge of power-operated windows, doors and gates, and the appropriate electrical installations. They are familiar with the relevant accident prevention regulations, government “safety at work” regulations, guidelines and generally recognised technical regulations so that they are qualified to judge the occupational safety of power-operated windows, doors and gates and the corresponding electrical installations.

For the purpose of these operating instructions and any warning signs on the product, **Danger** means that death, serious injury or damage to property could result if the relevant safety precautions are not taken.

For the purpose of these operating instructions and any warning signs on the product, **Warning** means that serious injury or significant damage to property could result if the relevant safety precautions are not taken.

For the purpose of these operating instructions and any warning signs on the product, **Caution** means that injury or damage to property could result if the relevant safety precautions are not taken.

For the purpose of these operating instructions, **Note** refers to important information about the product or a section of the installation instructions to which particular attention should be paid.

Warning and safety instructions are highlighted and indicated with special symbols.

	Risk of death or injury This warning sign indicates danger to persons due to dangerously high voltage.
	Risk of death or injury This warning sign indicates a danger point to persons.
	Damage to property This symbol means that the operation could result in damage to the product or the surrounding area.
	Note This symbol is used for important information.

Abbreviations used

AC	Alternating current
CL	Schüco internal connected load
DC	Direct current
DIN	German Institute for Standardisation
IEC	International Electrotechnical Commission
LED	Light-emitting diode
SELV	Safety Extra Low Voltage
VDE	German association for electrical, electronic and information technologies

Proper use

The switched-mode power pack is powered with single-phase alternating current from the international grid. The device is used to supply power to electronic control units and supplies a safety extra-low voltage of 24 V DC. The power pack supplies a regulated output voltage and is overload and short-circuit-proof.

If there is an overload or short circuit, the output voltage is switched off. The power pack also has integrated protection against excess temperatures.

The power pack is a series installation device and intended for installation in a distributor.

The device has the following electrical interfaces:

- Input X1 for AC 50/60 Hz 230 V grid voltage (with earth conductor)
- Output X2 for control units 24 V DC SELV

Contents of delivery

The following parts are contained in the product packaging:

Power pack Art. No. 263 099

Operating Instructions

Technical data

Connection terminal X1: input	
Input voltage	1/N/PE AC 50/60 Hz 230 V (±15%) with earth conductor
Frequency range	50 Hz to 60 Hz
Input current	Max. 0.95 A
Connection terminal X2: output	
Output voltage	24 V DC (± 5%) SELV
Output current	2.0 A
Current limit	2.35 to 2.8 A
Short circuit stability	Sustained short-circuit-proof
Operating mode	S1 (continuous operation)
Protection class	Safety class II (conforming to security standard EN 60950)
Electrical connection of X1 and X2	
Type of terminals	Terminal screws (blade width 3.5 mm / torque setting 0.5 Nm)
Connectable conductors	Terminals suitable for single, multiple and fine-stranded conductors with wire end ferrule
Cable cross section/stripped length	Cable cross section 0.5 to 1.5 mm ² / stripped length 8 to 9 mm
Mechanical data	
Housing, width, installation	Plug-in power pack with prepared connecting cables
Colour, weight, dimensions	Grey, approx. 220 g (72 x 93 x 68.5) mm
Protection rating	IP 20 (installed in the distributor)
Ambient conditions	
Operating temperature range	-5 °C to +50 °C
Transport/storage temperature	-40 °C to +80 °C
Relative humidity	5% to 95% (non-condensing)
Electromagnetic compatibility	
EMC requirements in accordance with	EN 55022 / B, EN 61000-4, EN 61000-3-2, EN 61000-3-3

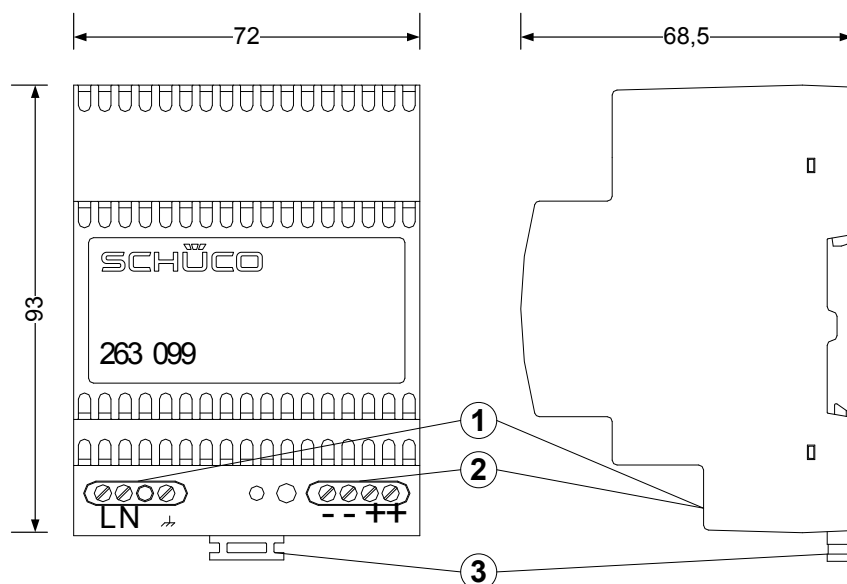
Area of use

- The device is designed for indoor use only.
- The power pack is pre-wired and is connected to a conventional shockproof socket.
- The supplied storage pouch can be used to transport the power pack and the associated cables.

Connected load

The power pack (NT-ET-TE4-A1) can be continuously loaded with maximum 2.0 A.

Connection terminals and operating units



①	Input X1	
	L	230 V AC (50/60 Hz)
	N	0 V AC (50/60 Hz)
	PE	Protective conductor/earth
②	Output X2	
	-	Ground (0 V DC)
	-	Ground (0 V DC)
	+	+24 V (24 V DC)
	+	+24 V (24 V DC)
③	Catch spring for installation	

Electrical connection

**Danger**

The device can only be installed in a suitable distributor or control cabinet and can only be installed and operated by a qualified technician. Install the unit vertically so that the terminals are at the top and bottom. After installing the device, cover the entire terminal area. This is the only way to protect the live components of the device adequately from unauthorised tampering.

**Risk of death**

Before connecting the device, switch off the electricity supply. Must be connected in accordance with VDE 0100, VDE 0160 and VDE 0185. A safety device (fuse) and an interrupter for isolating the power pack must be provided.

**Risk of death**

The housing must not be opened. Never handle the device with wet hands. If any damage is found, the power pack must not be connected.

**Danger**

The device can only be commissioned when installed and wired in. Before switching on the electricity supply, re-tighten all the terminal screws.

**Note**

The mains cable and the outgoing supply cablewire must be laid separately. It is not permitted to connect power packs in parallel to increase output.

en Translation of original operating instructions

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