

Product Family

Power Cables

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Version	V1.0
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Language	English
Valid for	
Schuko – Schuko	PT1-GF / PT1-GU PT2-GF / PT2-GU PIE-SI / PIE-EI
Schuko – powerCON TRUE1	PT1-NFG PT2-NFG / PT2-NMU PCONST / PCONAT
Schuko – powerCON A/B	PT1-GA PT2-GA / PT2-BU PCONS / PCONA
Schuko – PowerTwist TR1	PT1-SFG PT2-SFG PCONSTW / PCONATW
PowerTwist TR1	PT1-SFM PT2-SFM
powerCON TRUE1	PT1-NFM PT2-NFM
powerCON A/B	PT1-NMA / PT1-BA PT2-BA

1. Product Description

The KLOTZ AIS power cable range covers single-phase AC cables for professional use in event technology, stage, touring and AV installations. Depending on the product variant, the cables are fitted with different connector types:

- Schuko cables: Schuko plug (M) and Schuko coupler (F), Type DE or FR/BEL
- Combination cables: Schuko side with powerCON TRUE1, powerCON A/B or PowerTwist TR1
- powerCON TRUE1 cables: locking Neutrik powerCON TRUE1 connectors on both ends
- powerCON A/B cables: Neutrik powerCON A or powerCON B
- PowerTwist TR1: SAC3MX and SAC3FX connectors

Cable types: TITANEX H07RNF (outdoor, oil- and weather-resistant / EM2) or H05VV-F / PVC (indoor, flexible). Not suitable for underground installation.

2. Symbol Description

Symbol	Meaning
	Warning – general hazard
	Warning – electric shock / mains voltage
	Prohibited action
i	Note / important information

3. Product Variants & Order Numbers

The article number is printed directly on the cable. Use this number to find the relevant manual at:

instructions.klotz-ais.com

Schuko Power Cables // TITANEX H07RNF (EM2) or H05VV-F (PVC)

Order No.	Connector 1	Connector 2
PT1-GF / PT2-GF	Schuko M	Schuko F (FR/BEL)
PT1-GU / PT2-GU	Schuko M	Schuko F (DE)
PIE-SI	Schuko M	IEC C13
PIE-EI	IEC C14	IEC C13

Schuko – powerCON TRUE1 // TITANEX H07RNF (EM2) or H05VV-F (PVC)

Order No.	Connector 1	Connector 2
PT1-NFG / PT2-NFG	Schuko M	powerCON TRUE1 F
PT2-NMU	powerCON TRUE1 M	Schuko F
PCONST / PCONAT	Schuko M	powerCON TRUE1 F

Schuko – powerCON A/B // TITANEX H07RNF (EM2) or H05VV-F (PVC)

Order No.	Connector 1	Connector 2
PT1-GA / PT2-GA	Schuko M	powerCON A
PT2-BU	powerCON B	Schuko F
PCONS / PCONA	Schuko M	powerCON A

Schuko – PowerTwist TR1 // TITANEX H07RNF (EM2) or H05VV-F (PVC)

Order No.	Connector 1	Connector 2
PT1-SFG / PT2-SFG	Schuko M	PowerTwist TR1 F
PCONSTW / PCONATW	Schuko M	PowerTwist TR1 F

powerCON TRUE1 – powerCON A/B – PowerTwist TR1 (both ends) // TITANEX H07RNF (EM2) or H05VV-F (PVC)

Order No.	Connector 1	Connector 2
PT1-NFM / PT2-NFM	powerCON TRUE1 M	powerCON TRUE1 F
PT1-NMA	powerCON TRUE1 M	powerCON A
PT1-BA / PT2-BA	powerCON B	powerCON A
PT1-SFM / PT2-SFM	PowerTwist TR1 M	PowerTwist TR1 F

Available lengths and cross-sections: see product catalogue at klotz-ais.com

4. Technical Data

Parameter	Value
Operating voltage	250 V AC, 50/60 Hz
Max. rated current	16 A
IP class – Schuko side	IP44
IP class – powerCON TRUE1 (connected)	IP65
IP class – PowerTwist TR1 (connected)	IP65
IP class – powerCON A/B (connected)	IP20
Cable type outdoor	H07RNF (TITANEX – oil-resistant, halogen-free / EM2)
Cable type indoor	H05VV-F (PVC, flexible)

Cross-sections	1.0 mm ² / AWG 17 · 1.5 mm ² / AWG 15 · 2.5 mm ² / AWG 13
Operating temperature	−10 °C to +45 °C
Min. bending radius	10× outer diameter
Plugging under load (CBC)	powerCON TRUE1, powerCON A/B and SAC3MX/FX
CE conformity	Low Voltage Directive 2014/35/EU · RoHS 2011/65/EU

5. Intended Use

Power cables supply single-phase electrical loads (230 V / 50 Hz) in professional event, studio and AV environments. The connector type determines the permitted application.

i Connector Notes

Switch off the device before connecting. Verify compatibility before use.

Modification or alteration is strictly prohibited. It invalidates the product's CE certification and warranty.

Improper use (not permitted):

- Use outside the specified technical parameters
- Operation in explosive atmospheres (ATEX zones)
- Use in medical environments
- Underground or submerged installation
- Continuous operation with coiled cable (fire risk due to inductive heating)
- Operation above the rated current (max. 16 A)
- Using incompatible connectors

6. Target Groups

Qualified Electricians Only

- Assembly, disassembly, maintenance and servicing
- Knowledge of relevant electrical regulations (VDE, IEC)
- Application of all safety and accident prevention regulations
- Handover of this manual to the operator / user

Operator / User

- Read and follow this manual before and during use
- Use the product only as intended
- Brief all users before operation
- Ability to identify and avoid risks

7. Safety Instructions

DANGER – Risk to Life

Contact with live parts can be fatal. Before any maintenance, disconnect the product from mains and secure against re-energisation.

WARNING – Electric Shock Hazard

Work on electrical systems must only be carried out by qualified electricians.

- Not a toy – keep away from children and pets
- Protect from extreme temperatures, direct sunlight and flammable materials
- Do not walk on, kink, crush or apply tension to cables
- Always pull by the connector – never by the cable
- Fully uncoil cable before use (fire risk due to inductive heating)
- Repairs by qualified personnel only – no self-repair
- Insert Schuko plugs into earthed sockets only (CEE 7/4 or CEE 7/5)
- Check locking mechanism after every connection

8. Initial Commissioning

- Visual inspection for transport damage before first use
- Check cable insulation, connectors and strain relief for integrity
- If damage is found: do not use – contact manufacturer
- Verify mains voltage: 230 V / 50 Hz
- Check connector compatibility
- Check locking / CBC function of the respective connector

9. Operation

Operation by non-electricians is permitted (children excluded), provided the initial briefing by a qualified electrician has been completed.

- Regular visual inspection during operation
- If cable temperature rises above ambient: take out of service immediately
- Do not operate covered or bundled at full load

10. Maintenance & Testing

Before any maintenance:

- Disconnect from mains and secure against re-energisation

Minimum inspection intervals (annually, per DGUV V3):

Inspection / Test	Requirement
Visual inspection	Cables, insulation, connectors, strain relief
Protective conductor test	Resistance $\leq 0.3 \Omega$ (cables ≤ 5 m)
Insulation resistance	$\geq 1 \text{ M}\Omega$ at 500 V DC
Locking / CBC	powerCON A/B / powerCON TRUE1 / PowerTwist TR1: check locking mechanism
Documentation	Record date, inspector, measured values and result

11. Storage & Cleaning

- Disconnect from power before cleaning
- Store dry and at moderate temperature (-10°C to $+45^\circ\text{C}$)
- Coil cables loosely – observe minimum bend radius
- Protect connectors from dirt and contamination
- Clean with a dry, soft cloth only – no solvents
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12. Heat-shrink Tubing (optional)

Optional transparent heat-shrink tubing to protect article numbers and markings on the cable.

- Shrink temperature: $70\text{--}90^\circ\text{C}$ (hot air, no open flame)
- Keep product de-energised during shrinking

13. Disposal**i Disposal Notice**

This product must not be disposed of with household waste. Separate collection required under EU Directive 2012/19/EU (WEEE). Contact your local dealer or municipality for disposal information.

14. Manufacturer & Contact

Manufacturer	KLOTZ AIS GmbH
Address	Johann-Sebastian-Bach Str. 36, 85591 Vaterstetten / Munich, Germany
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E-Mail	info@klotz-ais.com
Website	klotz-ais.com
User manual online	instructions.klotz-ais.com

Printed copies of this manual are available free of charge upon request.

15. Limitation of Liability

This product complies with all applicable national and European requirements. KLOTZ AIS GmbH reserves the right to make technical changes. All applicable national regulations of the country of use must be observed.

16. Simplified EU Declaration of Conformity

KLOTZ AIS GmbH, Johann-Sebastian-Bach Str. 36, 85591 Vaterstetten, Germany declares that the power cables (order numbers see Chapter 3) comply with the following EU directives:

Directive / Regulation	Description
2014/35/EU	Low Voltage Directive (LVD)
2011/65/EU + 2015/863/EU	RoHS – Restriction of Hazardous Substances
(EU) 2023/988	EU General Product Safety Regulation (GPSR)
REACH (EC) No. 1907/2006	Chemicals Regulation

Full EU Declarations of Conformity and further documentation: instructions.klotz-ais.com

17. Legal Notices

17.1 Copyright

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17.2 Disclaimer of Liability

This manual has been compiled with the utmost care. KLOTZ AIS GmbH accepts no liability for damages resulting from: failure to observe this manual · use of the product other than as intended · unauthorised modifications · unsuitable accessories or replacement parts · external influences beyond the specified operating range · non-compliance with applicable national regulations at the place of use.

Statutory product liability under EU Directive 85/374/EEC (as amended, from 2026: 2024/2853/EU) and claims arising from personal injury remain unaffected.

17.3 Case-by-Case Assessment & Operator Responsibility

This manual serves as general guidance only. The assessment of the product's suitability for any specific application and ensuring correct operation are the sole responsibility of the operator or qualified electrician on site. KLOTZ AIS GmbH accepts no liability for damages arising from use beyond the intended purpose described in this manual.

17.4 Notice Regarding Use by AI Systems (EU AI Act)

This manual is intended exclusively for direct use by human operators. Any automated processing by AI systems or language models is the sole responsibility of the AI system operator. Safety-critical decisions must not be based solely on AI-generated output (EU AI Act, (EU) 2024/1689).

17.5 Version Control

The version of this manual current at the time of placing the product on the market is always binding. Earlier versions lose their validity upon publication of a successor version. Latest version always available at:

instructions.klotz-ais.com

Person responsible for content pursuant to §55 (2) RStV:

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