

Product Family

Energy Fanout

Last-Mile Power Distributor

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Valid for	
Harting HAN 16ES	EBI6HF-GD EBO6HM-UD+UF / EBO6HM-NF EBI8HF-GD EBO8HM-UD+UF / EBO8HM-NF
RMP 419AR (Socapex compatible)	LT-I20015 LT-O20015 LT-I20016 LT-O20016

1. Product Description

The KLOTZ AIS Energy Fanout range consists of last-mile distributors for multi-phase energy multicore cables. They split a multi-phase supply into single-phase 230 V AC outputs (Schuko or powerCON TRUE1). Typical applications: stage, events, touring and event technology.

Two input connector systems:

- Harting HAN 16ES: 16-pin industrial connector, 6- or 8-channel fanout
- RMP 419AR: 19-pin connector (Socapex-compatible), 6-channel fanout

WARNING – Multi-Phase Mains Voltage

This product carries 230 V AC (multi-phase). Risk to life. Connection, commissioning and maintenance exclusively by qualified electricians.

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

Harting HAN 16ES – 6-Channel Fanout BOX

Order No.	Input	Outputs	Cable type
EBI6HF-GD	HAN 16ES F (socket)	6× Schuko M	H07RNF / 2.5 mm ²
EBO6HM-UD+UF	HAN 16ES M (plug)	6× Schuko F	H07RNF / 2.5 mm ²
EBO6HM-NF	HAN 16ES M (plug)	6× powerCON TRUE1 F	H07RNF / 2.5 mm ²

Harting HAN 16ES – 8-Channel Fanout BOX

Order No.	Input	Outputs	Cable type
EBI8HF-GD	HAN 16ES F (socket)	8× Schuko M	H07RNF / 2.5 mm ²
EBO8HM-UD+UF	HAN 16ES M (plug)	8× Schuko F	H07RNF / 2.5 mm ²
EBO8HM-NF	HAN 16ES M (plug)	8× powerCON TRUE1 F	H07RNF / 2.5 mm ²

RMP 419AR – 6-Channel Fanout (Socapex compatible)

Order No.	Input	Outputs	Cable type
LT-I20015	RMP 419AR F (socket)	6× Schuko M	H07RNF / 2.5 mm ²
LT-O20015	RMP 419AR M (plug)	6× Schuko F	H07RNF / 2.5 mm ²
LT-I20016	RMP 419AR F (socket)	6× powerCON TRUE1 M	H07RNF / 2.5 mm ²
LT-O20016	RMP 419AR M (plug)	6× powerCON TRUE1 F	H07RNF / 2.5 mm ²

4. Technical Data

Parameter	Value
Input – Harting HAN 16ES	3-phase + N + PE (230 V AC, 50 Hz)
Input – RMP 419AR	3-phase + N + PE (230 V AC, 50 Hz)
Outputs	230 V AC, single-phase, 16 A each
Cable type	H07RNF (TITANEX), 3G 2.5 mm ²
Operating temperature	–10 °C to +45 °C
CE conformity	✓ 2014/35/EU · RoHS 2011/65/EU

5. Phase Assignment**⚠ IMPORTANT – Verify Phase Assignment Before Commissioning**

The phase assignment depends on the wiring of the multicore system. A qualified electrician must verify and document the pin assignment before commissioning. Incorrect assignment causes overload or short circuit.

Harting HAN 16ES (typical pin assignment):

Channel	Pin L	Pin N	PE	Phase
Channel 1	Pin 01	Pin 09	HAN Frame	L1
Channel 2	Pin 02	Pin 10	HAN Frame	L1
Channel 3	Pin 03	Pin 11	HAN Frame	L2
Channel 4	Pin 04	Pin 12	HAN Frame	L2
Channel 5	Pin 05	Pin 13	HAN Frame	L3
Channel 6	Pin 06	Pin 14	HAN Frame	L3
Channel 7	Pin 07	Pin 15	HAN Frame	L1
Channel 8	Pin 08	Pin 16	HAN Frame	L2/L3

RMP 419AR (standard pin assignment, 19-pin / Socapex compatible):

Channel	Pin L	Pin N	Pin PE	Phase
Channel 1	1	2	13	L1
Channel 2	3	4	14	L1
Channel 3	5	6	15	L2
Channel 4	7	8	16	L2
Channel 5	9	10	17	L3
Channel 6	11	12	18	L3

Pin 19 unused / not connected. Note: verify pin assignment on-site with a qualified electrician.

i Connector Compatibility

Harting HAN 16ES and RMP 419AR are not cross-compatible. Verify that the input connector matches the multicore system before connecting. Socapex variants (LT-I/O20016) with powerCON TRUE1 outputs: plugging under load (CBC) permitted – check locking after every connection.

6. Intended Use

Last-mile distribution from multi-phase energy multicore cables (Harting HAN 16ES or RMP 419AR) to single-phase 230 V Schuko or powerCON TRUE1 loads in professional event environments.

Improper use (not permitted):

- Operation without upstream protection per phase (MCB B16 + RCD)
- Unbalanced phase loading (overloading individual phases)
- Connecting incompatible connectors (Harting ≠ Socapex)
- Operation without knowledge of phase assignment
- Underground installation

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

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

- Connection and commissioning by qualified electricians only
- Verify and document phase assignment before commissioning
- Distribute load evenly across all phases (≤ 16 A per phase)
- Do not walk on, kink or apply tension to cables
- Tighten Harting screw lock after every connection
- Secure RMP 419AR bayonet/screw lock after connection
- powerCON TRUE1 outputs (LT-I/O20016): check locking after every connection
- Take out of service immediately if visible damage is present

8. Initial Commissioning

- Visual inspection for transport damage
- Verify and document phase assignment of supply and outputs – by qualified electrician
- Check upstream protection (MCB B16 + RCD per phase)
- Connect input cable and tighten locking mechanism
- Connect outputs – max. 16 A per phase
- Apply power and verify all outputs

9. Operation

Operation by non-electricians is permitted (children excluded), provided installation and briefing by a qualified electrician have been completed.

- Monitor phase loads (≤ 16 A per phase)
- Check input connector for secure seating
- If fuse trips: identify cause before resetting

10. Maintenance & Testing

Before any maintenance:

- Disconnect from mains and secure against re-energisation

Minimum inspection intervals (annually, per DGUV V3 / BGV A3):

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
Harting connector	Check screw lock, contacts and seal
Socapex RMP 419AR	Check lock, contacts, seal and housing
powerCON TRUE1 outputs (if present)	Check locking mechanism for correct function
Phase assignment	Verify and document input→output mapping
Documentation	Record date, inspector, measured values and result

11. Storage & Cleaning

- Disconnect from mains before cleaning
- Store dry and at moderate temperature (–10 °C to +45 °C)
- Coil cables loosely – observe minimum bend radius
- Store connectors and sockets with protective caps/covers
- Clean with a dry, soft cloth only – no solvents

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
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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 Energy Fanout 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

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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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