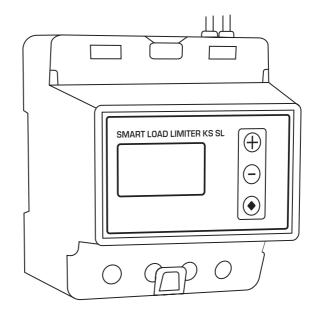


# **Smart load controller**

**KS SLC** 



Thank you for your purchase of **Könner & Söhnen®** products. This manual contains a brief description of safety, use and debugging. More information can be found on the official manufacturer's website in the support section: **konner-sohnen.com/manuals** 

You can also go to the support section and download the full version of the manual by scanning the QR code, or on the website of the official importer of Könner & Söhnen products: **www.konner-sohnen.com** 



We care about the environment, therefore, we consider it expedient to save paper and leave in print a short description of the most important sections.



# Be sure to read the full version of the manual before getting started!



Manufacturer reserves the right to make alterations into the Smart load controllers, which may not be reflected in this manual. Pictures and photos of the product may vary from its actual appearance. At the end of this manual, You may find contact information which you are free to use in case of any issues occurrence.

All data, specified in this operation manual is the most up to date for the moment of its publishing. The current list of service centers you can find at the website of official importer: **www.konner-sohnen.com** 



Failure to follow the recommendations marked with this sign may lead to serious injury or death of the operator or third parties.



IMPORTANT!

Useful information while operating the machine.



# 1

## INSTALLATION

• Installation and wiring should be done by personnel with professional qualification, otherwise, hazardous electric shock may result.

• Make sure input power supply is entirely disconnected before wiring; otherwise, hazardous electric shock may result.

## OPERATION

• Failure to read this manual carefully before operation may lead to improper operation.

### MAINTENANCE

• Maintenance should be done by personnel with professional qualification, otherwise, hazardous electric shock may result.





When the Smart load controller KS SLC products are used in homes, in order to avoid the situation of KS X-Series (KS X32/1, KS X16/3, KS X32/3) competing with other household electrical equipment for power supply during peak household electricity consumption, we developed the Smart load controller KS SLC. This product can only be used to manage the KS X-Series (KS X32/1, KS X16/3, KS X32/3) through PLC (Power Line Communication). And it always monitors the user's total household input current online.

During the KS X-Series (KS X32/1, KS X16/3, KS X32/3) in the charging process, if the total input current is detected to exceed the limit value, the Smart load controller KS SLC will automatically decrease KS X-Series (KS X32/1, KS X16/3, KS X16/

S KONNER SOHNEN KS X32/3) output current to ensure the stable operation of household electrical equipment; And if the total input current is detected a margin, the Smart load controller KS SLC will automatically increase the output current of KS X-Series (KS X32/1, KS X16/3, KS X32/3).

#### CURRENT SENSORS

Smart load controller KS SLC chose an CT (current transformer) as the current sensor, which has the advantage of open and close installation, convenient and fast wiring. One Smart load controller KS SLC is equipped with 3 open type CTs for total input current detection.

Model



## **SPECIFICATIONS**

**KS SLC** 

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	controller K
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Ш	Display
	CT's ho
	Curren
Ĕ	Comm
5	Match
Ш	Install
	Altitud
Щ	OTR
	Humid
	Dimen
Z	Weigh
ō	Protec
Ē	
H	
22	DISPLAY

Rated voltage, V	230/400
Installation	TH35mm standard din rail mounted
Display	1.3-inch OLED screen
CT's hole diameter, mm	16
Current detection, A	0 ~ 100
Communication	PLC (Power Line Communication)
Matching quantity	≤3
Installation location	Indoor
Altitude, m	≤ 2000
OTR	-20~55 °C
Humidity	≤ 95%RH, without condensation
Dimensions (LxWxH), mm	76x89x76
Weight, kg	< 0.5
Protection class	IPOO

# **PARAMETERS SETTING**

1

### Y INFORMATION DESCRIPTION

242 V	Phase voltage display area
48 A	Total input current display area (phase current)
48A	Total input current limitation setting value
1	Connection status flag. The number behind it indicates the current number of connected KS X-Series (KS X32/1, KS X16/3, KS X32/3)
K	Limitation status flag. When this sign appears, it means that the KS X-Series (KS X32/1, KS X16/3, KS X32/3) is/ are in a state of limiting current output
5	Charging status flag. When the connected KS X-Series (KS X32/1, KS X16/3, KS X32/3) in the charging state, the sign flashes, and the number displayed behind it indicates the number of KS X-Series (KS X32/1, KS X16/3, KS X32/3) currently being charged



#### PARAMETERS SETTING DESCRIPTION

#### a). Total input current limitation setting

Press the 🔹 button once, you can select the total input current limitation setting area (as shown in Fig. 1).

You can set total input current limitation value in the range of  $10 \sim 100A$  through press button -100A or -100A through press button -100A or -100A through press button -100A through press -100

#### b). Communication match function

**Step 1:** Press and hold the button for 5 seconds to enter the matching mode, the screen will display "Matching" which means the Smart load controller KS SLC enters the communication match status, and waiting for a KS X-Series (KS X32/1, KS X16/3, KS X32/3) to matching.

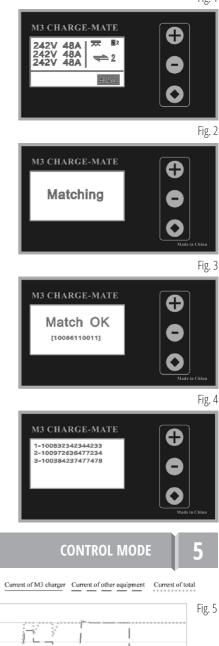
**Step 2:** At this time, power off and restart the KS X-Series (KS X32/1, KS X16/3, KS X32/3), the KS X-Series will match with the Smart load controller KS SLC automatically (Fig. 2)

**Step 3:** After the matching is successful, the buzzer will alert and display "Match OK" and the KS X-Series (KS X32/1, KS X16/3, KS X32/3) code number (Fig. 3).

**Step 4:** After the matching successful, you can press any button to exit the match function.

#### c). Matching list

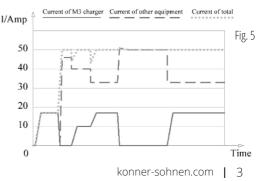
Press 🕂 button and 📼 at the same time, the Smart load controller KS SLC will display the matching list of KS X-Series (KS X32/1, KS X16/3, KS X32/3) code number.



KONNER

**Working principle:** Smart load controller KS SLC and KS X-Series (KS X32/1, KS X16/3, KS X32/3) exchange information through PLC. In the charging status, when detects that the system current is too large through CT(s), Smart load controller KS SLC will issue a current reduction instruction to the KS X-Series (KS X32/1, KS X16/3, KS X32/3).

As shown in Fig. 5, if the limit current value is set to 50A, when the current of other equipment rises, Smart load controller KS SLC will control the KS X-Series (KS X32/1, KS X16/3, KS X32/3) current to drop rapidly, and when there is enough margin



for the current drop of other equipment, Smart load controller KS SLC will control the KS X-Series (KS X32/1, KS X16/3, KS X32/3) current to rise slowly.

#### SYSTEM WIRING

#### NOTE

1. If it is a single-phase system wiring, ignore the dashed part in the Fig. 1 in Annex.

2. QF0 is main breaker (MCB or MCCB);

3. CT1~3 are open type current transformers they are must install at the output end of QF0;

4. QF1~QFn are branch breakers (MCB), supply for general household electrical equipment;

5. QFx is a MCB, supply for Smart load controller KS SLC; QFy is a MCB, supply for KS X-Series (KS X32/1, KS X16/3, KS X32/3);

Communication length of PLC (from Smart load controller KS SLC to KS X-Series (KS X32/1, KS X16/3, KS X32/3): 200m;
Rating power of Smart load controller KS SLC: 3W.

### WARRANTY SERVICE TERMS

7

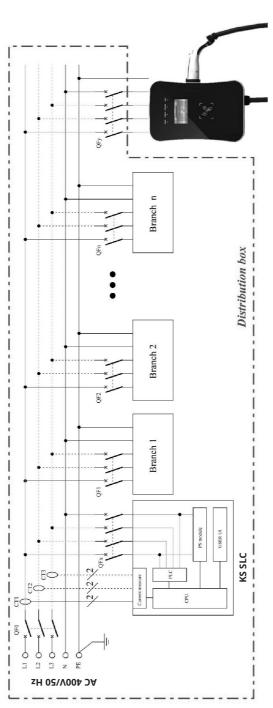
6

The international manufacturer warranty is 1 year. The warranty period starts from the date of purchase. In cases when warranty period is longer than 1 year according to local legislation please contact your local dealer. The Seller which sells the product is responsible for granting the warranty. Please contact the Seller for warranty. Within the warranty period, if the product fails because of defects in the production process, it will be exchanged on the same product or repaired.

All faults caused by the manufacturer during the warranty period will be eliminated free of charge. Warranty repair is carried out only if you have a fully completed warranty card, the Buyer's signature of acceptance of the warranty terms, as well as a document supporting the purchase (cash receipt, sales slip or invoice). In the absence thereof, as well as in the event of errors or corrections not authenticated by the seller's seal or illegible inscriptions in the warranty card or tear-off coupon, no warranty repair is carried out, no objections to quality are accepted and the warranty card is withdrawn by the service center as invalid. The device is accepted for repair clean and full.



Fig. 1



ANNEX

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# CONTACTS

Deutschland:

DIMAX International GmbH Flinger Broich 203 -FortunaPark-40235 Düsseldorf, Deutschland

www.koenner-soehnen.com

Ihre Bestellungen orders@dimaxgroup.de

Kundendienst, technische Fragen und Unterstützung support@dimaxgroup.de

Garantie, Reparatur und Service service@dimaxgroup.de

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#### Україна:

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