

DIGITAL USER GUIDE

Protect. Reconnect. Restore.

63A three-phase over/under-voltage and over-current protector with phase-loss and imbalance protection



63A

3-phase protector
230V L-N / 415V L-L

OV · UV · OC
Phase loss · Imbalance

Auto reconnect
DIN-rail

Electrician install only. Commercial identity: **63A only** (SKU 1x3-PHASE). Owner supply: **230V L-N / 415V L-L**. Ignore any OCR 1A–100A commercial row — do not market 100A.

Your exact product

SKU **1x3-PHASE** · Brand **amiciSmart**

Product ID **8360714829979** · English · Version 1.0 · 19 September 2026

Find the help you need

Tap a section. PDF bookmarks match these entries.

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02 / OVERVIEW

Meet the protector

Three-phase voltage and current protector for motors, pumps and industrial loads.

What it does

Monitors three-phase supply for over-voltage, under-voltage, over-current, phase loss and phase imbalance. Opens the output on a fault and can auto-reconnect after recovery (subject to delay settings).

Who installs it

A **qualified electrician** only. Isolate all power before wiring. Verify the terminal map on the device. Not a DIY panel product.

Commercial scope

This manual covers **SKU 1x3-PHASE** only — marketed as **63A**. Do not use supplier OCR rows that imply a 100A commercial identity.

Supply topology (owner, 18 Sep 2026): 230V line-to-neutral · 415V line-to-line. Live title may still say 220VAC — cosmetic only.

03 / INSTALLATION

Installation boundaries

Qualified installer · power isolated · terminals verified before energising.

Before you start

1. Confirm load $\leq 63A$ and cable / DIN space.
2. Confirm site supply matches 230V L-N / 415V L-L.
3. Disconnect all power. Do not touch terminals when power is ON.
4. Wire only to the terminal map on the device / supplier diagram.

Wiring

Follow the supplier wiring diagram in the appendix. Verify phase sequence and neutral as applicable. Incorrect wiring can damage the device or the load.

After wiring

Energise under supervision. Set protection values for the site. Confirm trip and reconnect behaviour before leaving the panel live.

Safety: Never dismantle the device under warranty. Do not use in corrosive or explosive atmospheres. Failure to follow instructions can cause serious injury.

04 / OPERATION

Daily operation

Normal display, fault indication, and auto-reconnect behaviour.

Normal running

When the relay is closed, operating voltage and current values are shown. Fault LEDs remain off during healthy operation.

On a voltage fault

If a voltage fault is detected, the output relay opens and the fault indication lights. When voltage returns within the recovery window, the relay can reset automatically after the configured delay.

On a current fault

After an over-current trip, the device can auto-reset after the recovery delay. If continuous over-current fault counts exceed the preset limit, a manual reset path may be required — confirm on the device menu.

Only L1 typically shows values inside settings menus; L2/L3 may stay blank until you exit (supplier note). Long-press adjustment keys can change values rapidly — use carefully.

Technical reference

Owner-locked commercial ratings plus supplier ranges clear enough to publish.

Item	Value	Basis
SKU	1x3-PHASE	Shopify
Brand	amiciSmart	Listing
Rated current (commercial)	63A only	Owner
Supply topology	230V L-N / 415V L-L	Owner 2026-09-18
Protection	OV, UV, OC, phase loss, imbalance	Listing + supplier
Control modes	Synchronous / asynchronous	Listing
Imbalance range (listing)	20–99V	Listing
Action time (listing)	0.1–30 s class	Listing
Power-on delay (supplier)	About 1–500 s (default ~10 s)	OCR — confirm on device
Installer	Qualified electrician	Supplier + owner

Do not invent cleaner OV/UV numbers. Supplier OCR for some voltage rows is noisy. Verify exact values on the device menu and record them on the configuration page.

Settings overview

High-level supplier parameters. Exact digits: confirm on the device.

Parameter (supplier themes)	Typical class	Note
Power-on / start delay	1–500 s class	Confirm default on unit
Over-voltage protect / recover	Hundreds of volts class	OCR noisy — verify
Under-voltage protect / recover	~140–210V class	OCR noisy — verify
OV/UV action time	0.1–30 s class	Confirm
Phase voltage unbalance	Tens of volts class	Confirm
Phase sequence protect	OFF/ON	Confirm
Over-current protect	Amp class up to rating	Commercial max 63A
OC recovery delay / action	Seconds class	Confirm
Continuous OC fault counts	0–20 class / OFF	May force manual reopen

See appendix supplier pages for the original printed tables.

Troubleshooting and support

Observation → next step. No invented diagnostics.

Observation	Next step
No display / dead	Confirm supply present and wiring. Isolate and re-check terminals.
Fault LED on, load off	Read which protection tripped. Check site voltage/current. Wait recovery delay.
Repeated OC trips	Reduce load or raise OC setpoint only if cable/device rating allows.
Phase imbalance trips	Measure phase voltages. Correct imbalance before raising the threshold.
Will not auto-reconnect	Confirm recovery values and delays. Some OC lockouts need manual reset.

[Contact amiciKart support](#)

[Open product page](#)

Configuration record

Write the values you actually set after commissioning.

Setting	Value used on site	Date / initials
OV protection / recovery		
UV protection / recovery		
OC protection		
Power-on / reconnect delays		
Imbalance / phase sequence		
Sync / async mode		
Installer name		

Keep this page with the panel documentation.

Owner locks and sources

What is locked versus what must be verified on the device.

Owner locks (18 Sep 2026 IST)

- Commercial identity: **63A only** for SKU 1x3-PHASE — no 100A sibling.
- Supply: **230V L-N / 415V L-L**.
- Ignore OCR 1A–100A-style commercial row.
- Electrician language retained.

Evidence used

- Live listing / guided draft for 8360714829979.
- Supplier scan PDF 1x3-PHASE-E.pdf (image OCR — partially noisy).
- Owner corrections in Batch 2 INDEX / review-brief.

Unresolved limits

- Exact OV/UV numeric defaults: verify on device (OCR noisy).
- No separate MCB pairing requirement stated in OCR — not invented.
- Live title still says 220VAC (cosmetic).

● Main menu setting

230 V	• Voltage display
63 A	• Current display
P1	• Power-on delay time S
10	1-500
U1	• Over-voltage protection value V
270	230-300
U2	• Over-voltage recovery value V
265	225-295
U3	• Over-voltage recovery delay time S
30	1-500
U4	• Over-voltage protection action time S
10	0.1-30
U5	• Under-voltage protection value V
170	140-210
U6	• Under-voltage recovery value V
175	145-215
U7	• Under-voltage recovery delay time S
30	1-500
U8	• Under-voltage protection action time S
10	0.1-30

U9	• Three phase voltage error value
0	-95-95%
U10	• Three phase voltage unbalance value V
20	20-99
U11	• Three phase voltage unbalance recovery value V
20	15-94
U12	• Phase sequence protection switch
on	off/on
C1	• Over-current protection value A
30	1-63/100
C2	• Over-current recovery delay time S
30	1-500
C3	• Over-current protection action time S
10	0.1-30
C4	• Three phase current error value
0	-95-95%
C5	• Continuous over current faults times setting
off	0-20
REL	• Synchronizing or asynchronous control
RSY	SYN RSY

• Long press (▲▼) can increase or decrease rapidly.
• Only L1 display when setting L2 and L3 don't display.

● Indication of continuous over current faults

Display for continuous over current faults after reset/start delay is over. Over current faults times is more than preset times.

230 V	230 V	230 V
L1	L2	L3
Err A	Err A	Err A

• Disconnect the overload device
• Start the relay after reset manually

OPERATING INSTRUCTIONS

- If a voltage fault was detected when the reset/start delay of relay is counting, the output relay opens and faults indication LED lights up.
- The operating voltage and current values will be displayed on screen when the relay is operating normally. If a voltage or current fault was detected, the output relay opens and fault indication LEDs light up.
- Voltage faults: If input voltage was detected to have returned to Hys after tripped for voltage faults, the relay will reset automatically. During the counting of reset/start delay, fault indication LEDs go out and the operating Voltage and current values flash on screen.
- Current faults: After the relay tripped for current faults, it will reset automatically. During the counting of reset/start delay, fault indication LED goes out, the operating voltage and current values flash on screen.

WIRING DIAGRAM

Three Phase Voltage and Current Protector

Instruction Manual



SAFETY PRECAUTIONS

- 1.The device must be installed by a qualified person.
- 2.Disconnect all power before working on the device.Don't touch any terminal when the power is ON.
- 3.Verify correct terminal connection when wiring.
- 4.Don't dismantle or repair the device whether it operates normally, otherwise no responsibility is assumed by producer and seller.
- 5.Never use the device at the site which can be invaded by corrode gas, strong sunshine light and rain.
- 6.Clean the device with a dry cloth.
- 7.Fail to follow these instructions will result in serious injury or death.

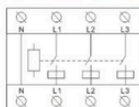
FEATURES

- Microcontroller based
- Digit display for operating voltage and current value
- Protect electrical device against over/under voltage, over current, three phase asymmetry and incorrect phase sequence
- Voltage measurement accuracy $\leq 1\%$
- Parameters setting by keys
- LEDs indication for over/under voltage and over current faults
- S Module DIN Rail mounting

TECHNICAL DATA

Rated supply voltage	AC220V
Operation voltage range	AC140V-300V
Rated frequency	50/60Hz
Hysteresis	Over voltage and asymmetry: 5V Under voltage: 3V
Asymmetry trip delay	10s
Voltage measurement accuracy	$\leq 1\%$ (over the whole range)
Rated insulation voltage	450V
Output contact	1NO
Electrical life	10^4
Mechanical life	10^5
Protection degree	IP20
Pollution degree	3
Altitude	$\leq 2000m$
Operating temperature	$-5^{\circ}C-40^{\circ}C$
Humidity	$\leq 95\%$ at $40^{\circ}C$ (without condensation)
Storage temperature	$-25^{\circ}C-55^{\circ}C$

SYMBOL



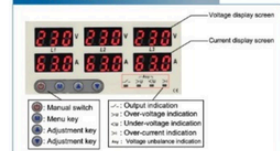
OPERATING RANGE

Technical parameter	Setting range	Factory setting	Step	Function description
Power-on delay time	1s-500s	10s	1s	After external power cut, the time needed for power-on when power recovery.
Over-voltage protection value	230V-300V	270V	1V	When the voltage is higher than the set value, the protector will cut off the line.
Over-voltage recovery value	225V-295V	265V	1V	When the voltage is lower than the set value, the protector will automatically reset, and the set value must be less than the over-voltage protection value by more than 5V.
Over-voltage recovery delay time	1s-500s	30s	1s	After voltage recovery, the time needed for automatic reset.
Over-voltage protection action time	0.1s-30s	1.0s	0.1s	When the voltage is higher than the set value, the time needed for protection action.
Under-voltage protection value	140V-210V	170V	1V	When the voltage is lower than the set value, the protector will cut off the line.
Under-voltage recovery value	145V-215V	175V	1V	When the voltage is higher than the set value, the protector will automatically reset, and the set value must be more than the under-voltage protection value by more than 5V.
Under-voltage recovery delay time	1s-500s	30s	1s	After voltage recovery, the time needed for automatic reset.
Under-voltage protection action time	0.1s-30s	1.0s	0.1s	When the voltage is lower than the set value, the time needed for protection action.
Three phase voltage error value	-9.5%-9.5%	0		Correct the three phase voltage error.
Three phase voltage unbalance value	20V-99V	20V	1V	When the error among the three phase voltage is bigger than the set value, the protector will cut off the line.
Three phase voltage unbalance recovery value	15V-94V	15V	1V	When three phase voltage unbalance value is lower than the set value, the protector will automatically reset.
Phase sequence protection switch	OFF/ON	ON		Switch on or on the phase sequence protection function.
Over-current protection value	1A-63A 1A-100A	30A	1A	When the current is higher than the set value, the protector will cut off the line.
Over-current recovery delay time	1s-500s	30s	1s	After current recovery, the time needed for automatic reset.
Over-current protection action time	0.1s-30s	1.0s	0.1s	When the current is higher than the set value, the time needed for protection action.
Three phase current error value	-9.5%-9.5%	0		Correct the three phase current error.
Times of continuous over current protection	0-20	OFF	1	When the times of continuous over-current protection exceeds the set value, the protector will cut off the line, then it needs to be opened manually.
Phase-loss protection	ON			One of the three-phase voltages is losing, the protector will cut off the line.

3 PHASE VOLTAGE AND CURRENT PROTECTOR

Please read complete instructions prior to installation and operation of the device.

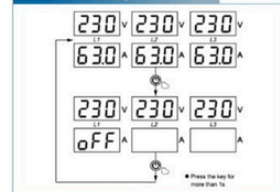
FRONT-FACE PANEL



Reset/start delay display



Switch on/off manually



Indication for incorrect phase sequence

