

The right phase, automatically.

3P to 1P Automatic Phase Selection Switch · Model 3P-2P-AUTO 63A · Version 1.0



63A

Three-phase input
Single-phase output
Priority phase
Voltage and current protection
Live voltage and current

DIN-rail mounting. 3 × 220 V AC input.

First time? Read the safety notes (page 3), have the unit wired as shown on page 5, then check the settings P-1 to P-8 (page 6).

For the unit marked “3P TO 1P Automatic Phase Selection switch”, IN:63A. Installation and settings must be done by a qualified electrician with all supplies switched off.

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SKU 1x3P-2P-AUTO · Model 3P-2P-AUTO 63A · Version 1.0

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Before you start

This unit switches mains voltage. Read this page first.

Qualified electrician only

Installation, wiring and changing settings must be done by a qualified electrician. Switch off and isolate every incoming phase and the neutral before touching the terminals.

Stay within the ratings

Rated current 63 A, maximum 80 A. Do not exceed 350 V on any phase. The connected load must not draw more than the rated current.

Upstream protection

Feed the unit through suitable circuit protection on the incoming supply, as required by your local wiring rules.

Where to install

Mount on a 35 mm DIN rail inside a dry, dust-free enclosure. Ambient temperature –25 to +50 °C, humidity up to 50% at 40 °C without condensation.

Changeover is not a UPS

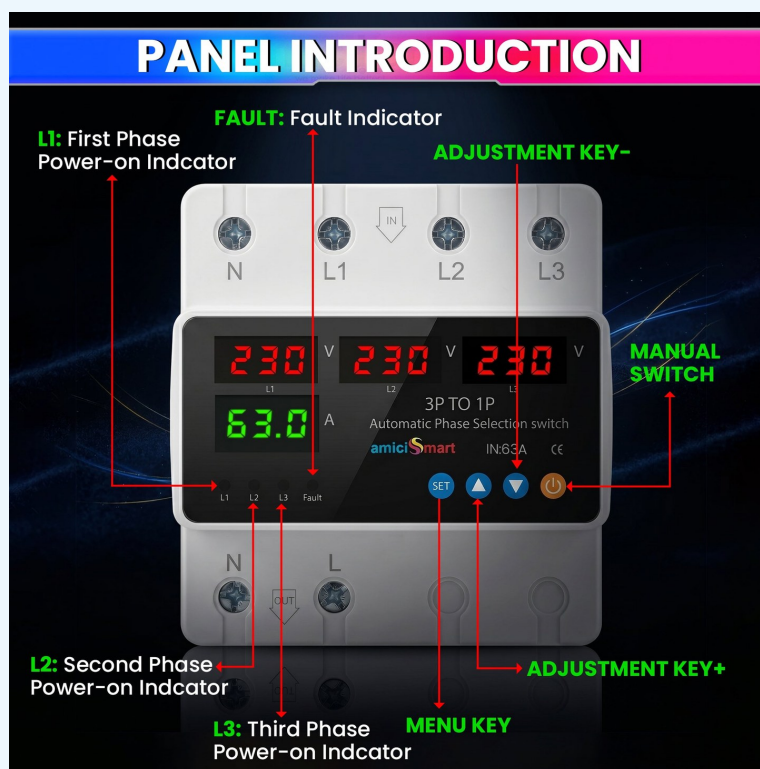
When the unit moves the load to another phase, the supply to the load is briefly interrupted. Use a UPS for equipment that must not lose power.

Terminals

Tighten every terminal screw firmly and choose cables suitable for the load current under your local wiring rules.

Know the unit

Displays, indicators and buttons on the front panel

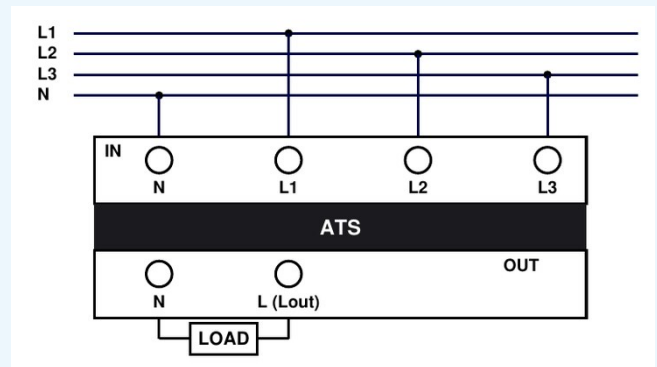
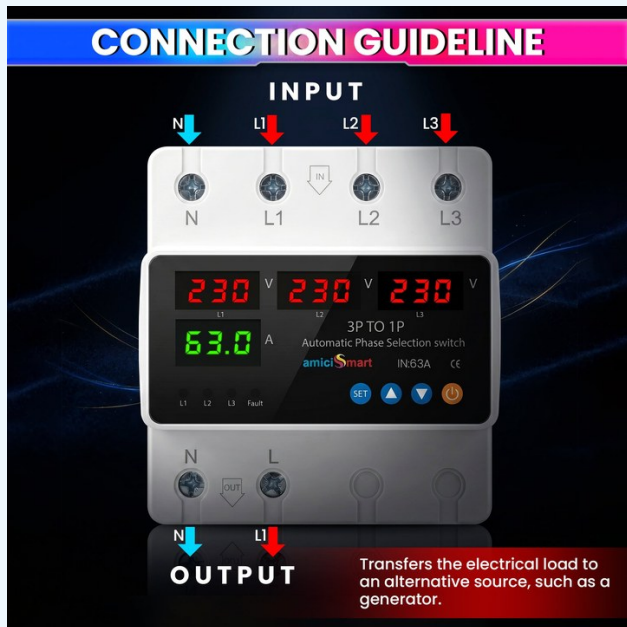


Part	What it does
Voltage displays (red)	Live voltage of L1, L2 and L3
Current display (green)	Load current in amperes
L1 / L2 / L3 LEDs	The lit LED shows which phase is feeding the load
Fault LED	On = a protection function is active
SET	Steps through the settings P-1 to P-8
▲ / ▼	Increase or decrease the value shown
Orange key	Manual ON / OFF of the output

03 · INSTALLATION AND WIRING

Wire it up

Three phases and neutral in at the top, load out at the bottom



Steps

1. Switch off and isolate all incoming supplies.
2. Clip the unit onto a 35 mm DIN rail.
3. Connect the incoming neutral to **N** and the three phases to **L1**, **L2** and **L3** on the top (IN) terminals.
4. Connect the load to the bottom (OUT) terminals: neutral to **N**, line to **L**.
5. Tighten all terminals firmly and close the enclosure.
6. Switch the supply on. The three voltages appear; after the power-on delay (P-1) one phase LED lights and the load is supplied.

Neutral is required

The unit measures each phase against neutral. Always connect the incoming neutral to the top N terminal.

04 · SETTINGS

Settings P-1 to P-8

Press SET to step through the settings; use ▲ / ▼ to change the value shown

No.	Setting	Default	Range
P-1	Power-on delay	5 s	1–600 s
P-2	Protection recovery delay	30 s	1–600 s
P-3	Over-voltage limit	270 V	230–300 V
P-4	Under-voltage limit	170 V	140–210 V
P-5	Priority phase	L1	L1 / L2 / L3 / Auto
P-6	Over-current limit	63 A	1–80 A
P-7	Over-current trip time	0.5 s	0.1–10 s
P-8	Repeated over-current count	OFF	OFF, 0–20

How it works

Priority phase (P-5): the selected phase feeds the load whenever it is within limits; the other phases are reserves. Changeover to a reserve phase takes less than 0.2 s.

Voltage limits (P-3 / P-4): a phase above P-3 or below P-4 is not used. It is accepted again once it is 5 V inside the limit.

Over-current (P-6 / P-7): the output switches off if the current stays above P-6 for longer than P-7. The Fault LED lights and the output reconnects after the recovery delay (P-2).

After changing a value, step through P-1 to P-8 again with SET and check that each value is as you want it.

05 · SPECIFICATIONS

Technical data

Model 3P-2P-AUTO 63A

Item	Value
Input	3 phases + neutral (N, L1, L2, L3)
Output	Single phase (N, L)
Rated voltage	3 × 220 V AC (each phase to neutral)
Frequency	50 / 60 Hz
Rated current	63 A
Maximum current	80 A
Maximum phase voltage	350 V
Changeover to reserve phase	Less than 0.2 s
Voltage trip delay	0.1 s
Voltage hysteresis	5 V
Voltage accuracy	Better than 1%
Electrical life	100,000 operations
Mechanical life	1,000,000 operations
Pollution degree	3
Altitude	Up to 2000 m
Operating temperature	−25 to +50 °C
Humidity	Up to 50% at 40 °C, non-condensing
Storage temperature	−25 to +55 °C
Mounting	35 mm DIN rail
Size and weight	98 × 90 × 66 mm, 350 g

06 · TROUBLESHOOTING

If something is not right

Always switch off and isolate the supply before opening the enclosure

What you see	Possible cause	Next step
Display dark	No supply at the top terminals, or neutral not connected	Have an electrician check N and L1–L3 at the IN terminals.
Voltages shown but no output	Power-on delay (P-1) still running, or output switched off with the orange key	Wait for P-1 to finish; press the orange key once.
Fault LED on	A voltage or current limit has been reached	Check the displayed voltages and the load current against P-3, P-4 and P-6.
Output trips when a large load starts	Starting current above P-6 for longer than P-7	Have an electrician check the load against 63 A and review P-6 / P-7.
Load not on the priority phase	Priority phase outside the limits	The unit returns to the priority phase once it is healthy again.
Frequent changeovers	Limits P-3 / P-4 set very close to the normal supply voltage	Have an electrician review P-3 and P-4.

Still unsure? Contact amiciKart support with a photo of the front panel and a short description.

[Contact support](#)

[Product page](#)

Your installed settings

Fill in after installation and keep with the distribution board

Setting	Default	Set to
P-1 Power-on delay	5 s	
P-2 Recovery delay	30 s	
P-3 Over-voltage limit	270 V	
P-4 Under-voltage limit	170 V	
P-5 Priority phase	L1	
P-6 Over-current limit	63 A	
P-7 Over-current trip time	0.5 s	
P-8 Repeated over-current count	OFF	
Installed by		
Date		
Location / board		

Original instruction sheet

The settings and data in this guide come from this sheet

amiciSmart 3P to 1P Automatic Phase Selection Switch (ATS)

User Manual | 3-phase automatic transfer switch with priority phase | 63A | DIN-rail | Microcontroller based

PRODUCT DESCRIPTION

1. Automatic transfer switch with selectable "Priority" phase
2. Microcontroller based
3. Parameters set with front-panel buttons
4. Overvoltage and undervoltage protection
5. Overcurrent protection
6. LED indication of operating phase and fault
7. Digital display of phase voltages and load current
8. DIN-rail mounting
9. Net weight: 378 g
10. Size: 90 x 95 x 66 mm (W x L x H)

TECHNICAL DATA

Supply terminals	N, L1, L2, L3
Rated supply voltage	AC 3 x 220 V (N-L1/L2/L3)
Rated frequency	40 / 50 / 60 / 70 Hz
Umax setting range	230-300 V
Umin setting range	140-210 V
Auto-reclosing delay (Ton)	1-600 s
Return delay to priority phase	1-600 s
Switch delay to reserve phases	< 0.2 s
Voltage hysteresis	5 V
Overvoltage trip delay	0.1 s; ≥ 350 V: 0.02 s
Undervoltage trip delay	0.1 s; ≥ 350 V: 0.02 s
Voltage accuracy	< 1%
Max. operating phase voltage	350 V
Rated operating current	63 A
Max. operating current	80 A
Pollution degree	3
Electrical life	10 ⁶ operations
Mechanical life	10 ⁶ operations
Altitude	≤ 2000 m
Ambient temperature	-25 to +50 °C
Relative humidity	≤ 50% at 40 °C, non-condensing
Storage temperature	-25 to +55 °C
Conductor size	0.5-1 mm ² (as printed on original; verify)

Please read this manual before installation and keep it for future reference.

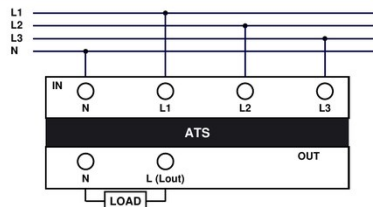
PRODUCT & FRONT PANEL



amiciSmart 3P to 1P Automatic Phase Selection Switch, IN: 63A

Voltage / current	Top: voltage of L1, L2, L3 (V). Left: load current (A)
L1 / L2 / L3 LED	Load is fed from that phase
Fault LED	Protection active
SET	Menu selection / Reset
Up / Down	Digit + / Digit -
Power	Manual ON / OFF

WIRING DIAGRAM



Size: 90 x 95 x 66 mm (W x L x H); rail clip 35 mm; depth 46 mm

SETUP MENU

No.	Parameter	Default	Range
P-1	Power-on delay time	5 s	1-600 s
P-2	Protection recovery delay	30 s	1-600 s
P-3	Overvoltage protection value	270 V	230-300 V
P-4	Undervoltage protection value	170 V	140-210 V
P-5	Priority phase	L1	L1 / L2 / L3 / Auto
P-6	Overcurrent protection value	63 A	1-80 A
P-7	Overcurrent protection action time	0.5 s	0.1-10 s
P-8	Continuous overcurrent protection frequency	OFF	0-20

OPERATION NOTES

- Press **SET** to step through P-1 to P-8; use the **up / down** buttons to change the value.
- **P-5**: the priority phase feeds the load whenever healthy; other phases are reserve. Transfer takes under 0.2 s.
- **P-3 / P-4**: a phase is disconnected above the overvoltage or below the undervoltage value (5 V hysteresis on recovery).
- **P-6 / P-7**: trips if current stays above P-6 for longer than P-7.
- **Fault LED** on = protection active; output reconnects after the recovery delay.

SAFETY

Installation by a qualified electrician only. Isolate all supply before wiring. Do not exceed 63 A rated / 80 A max current or 350 V per phase. Tighten terminals firmly; use a dry, dust-free enclosure.

Where this guide and the sheet differ, follow this guide. Choose cable sizes for the load current under your local wiring rules.