

# STR-1

## Standard 230 VAC transformer controller



The STR-1 series of transformer fan speed controllers regulate the rotational speed of single-phase voltage controllable motors by varying the output voltage. They are equipped with auto-transformer(s) and control the speed manually in five steps. The technology used provides a regulated output voltage with a perfect sinusoidal shape. The controllers up to 7,5 A are available in plastic enclosure, while the models above 7,5 A are available in a metal enclosure.

### Key features

- Wide power range: 0,8 A–20 A
- 5-step rotary switch for manual control plus off-position
- LED status indication

### Technical specifications







Supply voltage	230 VAC / 50–60 Hz	
Maximum load	depends on the version	
Unregulated output	230 VAC, 2 A	
Enclosure	plastic (R-ABS, UL94-V0, grey RAL 7035) or sheet steel (RAL 7035, polyester powder coating), depending on the product version	
Protection standard	IP54 (according to EN 60529)	
Ambient conditions	Temperature	-20–35 °C
	Rel. humidity	5–95 % rH (non-condensing)

### Article codes

Article code	Rated max. current, [A]	Fuse, [A]
STR-1-08L22	0,8	(5*20 mm) F: T-1,25 A-H
STR-1-10L10	1,0	(5*20 mm) F: T-1,25 A-H
STR-1-15L22	1,5	(5*20 mm) F: T-2,5 A-H
STR-1-22L22	2,2	(5*20 mm) F: T-3,15 A-H
STR-1-35L22	3,5	(5*20 mm) F: T-5,0 A-H
STR-1-50L22	5,0	(5*20 mm) F: T-8,0 A-H
STR-1-75L22	7,5	(5*20 mm) F: T-12,5 A-H
STR-1100L22	10,0	(6*32 mm) F: T-16,0 A-H
STR-1130L22	13,0	(6*32 mm) F: T-20,0 A-H
STR-1160L20	16,0	(6*32 mm) F: T-25,0 A-H
STR-1200L20	20,0	(6*32 mm) F: T-30,0 A-H

\*The last 3 characters represent the voltage series. See table "Voltage series".

### Voltage

Knob position	0	-	1	2	3	4	5
Wires		-					
Regulated output [VAC]							
L10 version	0	-	80*	110	140	170	230
L20 version**	0	80*	100	120	140	170	230
L22 version**	0	80*	110	140	170	190	230
Unregulated output [VAC]							
All voltage series, L1	0	230	230	230	230	230	230

\* Available but not connected.

\*\*If more than 5 output voltages are available, it is possible to adjust the 5 steps by changing the internal wiring.

### Standards

- Low Voltage Directive 2014/35/EC
- EMC Directive 2014/30/EC: EN 61326
- RoHS Directive 2011/65/EC



### Area of use

- Fan speed control of voltage controllable motors (pumps and fans) in ventilation systems
- For indoor use only

### Wiring and connections

STR-1-10L10	
L	Power supply, line (230 VAC / 50–60 Hz)
N	Power supply, neutral
Pe	Earth terminal
L1	Unregulated output, line
N	Unregulated output, neutral
N	Regulated output to motor, neutral
U	Regulated output to motor, line
Pe	Earth terminal
STR-1-08L22, STR-1-15L22 and STR-1-22L22	
Pe	Earth terminal
L	Power supply, line (230 VAC / 50–60 Hz)
N	Power supply, neutral
N1	Unregulated output, neutral
L1	Unregulated output, line
U	Regulated output to motor, line
N	Regulated output to motor, neutral
STR-1-35L22, STR-1-50L22, STR-1-75L22, STR-1100L22, STR-1130L22, STR-1160L20 and STR-1200L20	
L	Power supply, line (230 VAC / 50–60 Hz)
N	Power supply, neutral
L1	Unregulated output, line
N	Regulated output to motor, neutral
U	Regulated output to motor, line
Pe	Earth terminal

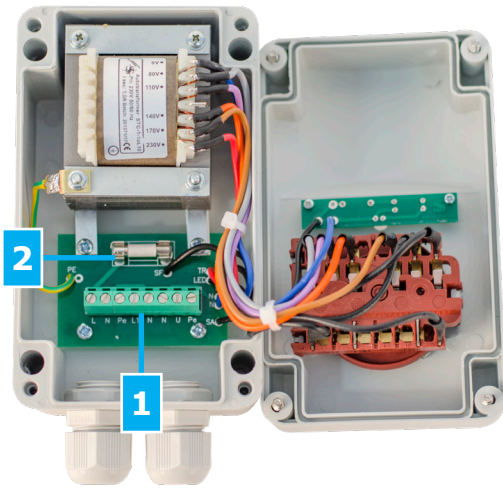
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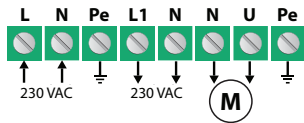


### Legend: 10L10

STR-1-10L10



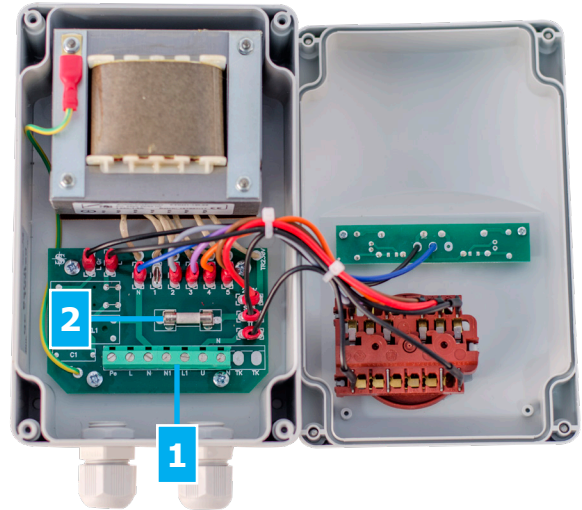
1 - Terminal block



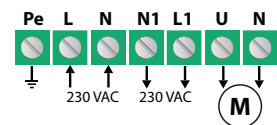
2 - Fuse

### Legend: 08L22—>22L22

STR-1-08L22, STR-1-15L22 and STR-1-22L22



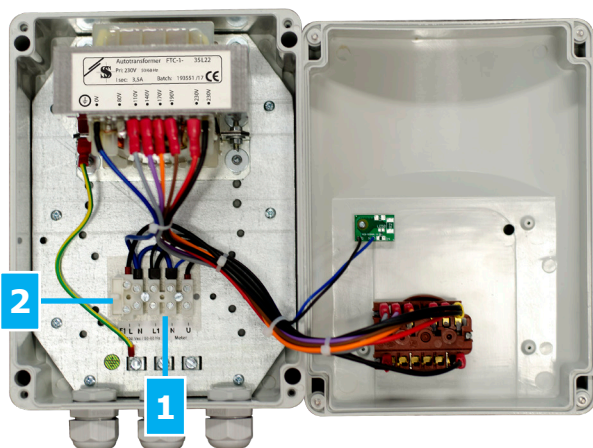
1 - Terminal block



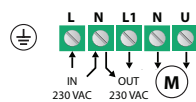
2 - Fuse

### Legend: 35L22—>75L22

STR-1-35L22, STR-1-50L22, STR-1-75L22



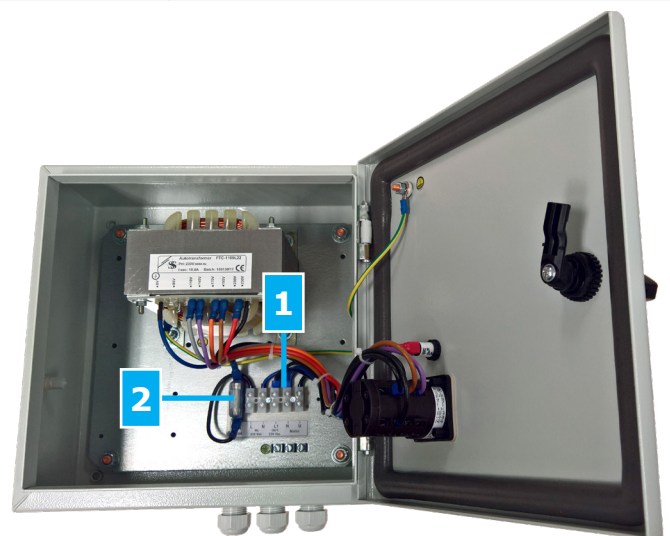
1 - Terminal block



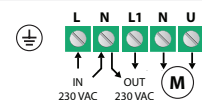
2 - Fuse

### Legend: 1100L22—>1200L20

STR-1-1100L22, STR-1-1130L22, STR-1-1160L20, STR-1-1200L20



1 - Terminal block



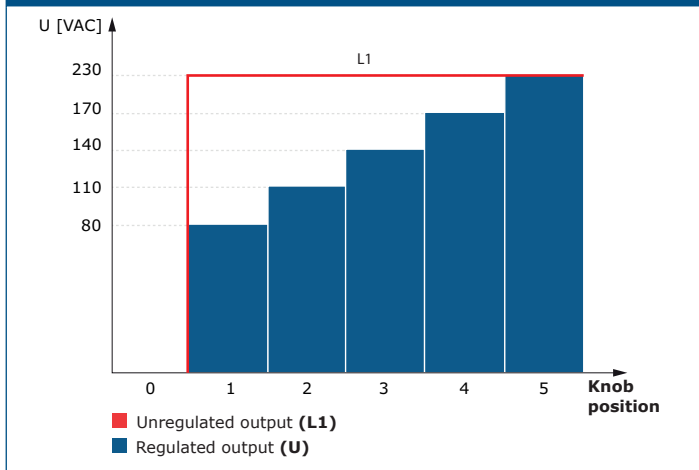
2 - Fuse

# STR-1

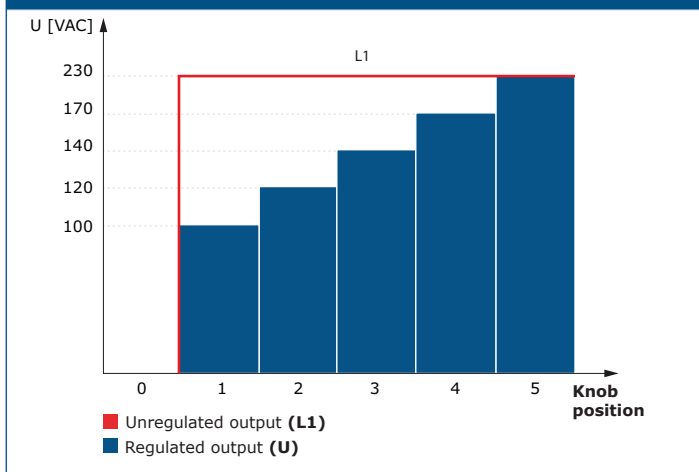
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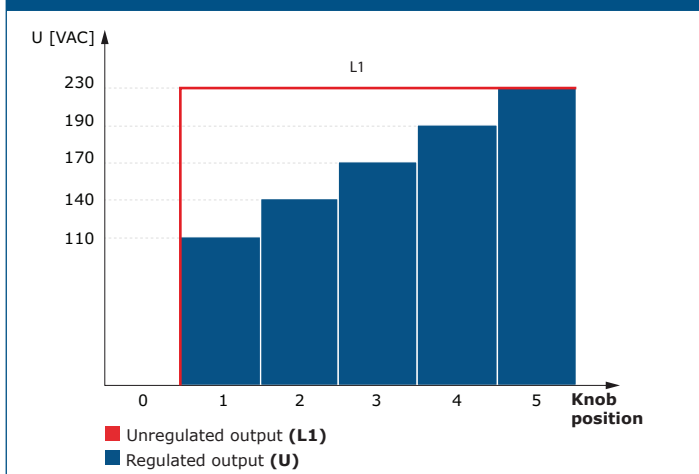
**Operational diagram - L10**



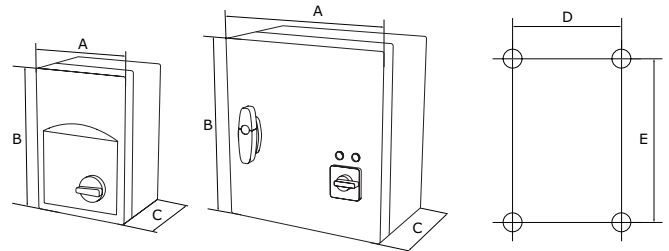
**Operational diagram - L20**



**Operational diagram - L22**

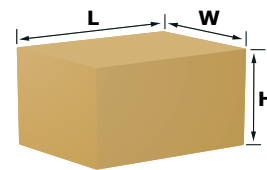


**Fixing and dimensions**



Article code	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	Enclosure
STR-1-10L10	84	160	88	71	108	plastic (R-ABS, UL94-V0, grey RAL 7035)
STR-1-08L22	115	205	100	98	140	
STR-1-15L22	115	205	100	98	140	
STR-1-22L22	115	205	100	98	140	
STR-1-35L22	170	255	140	155	194	
STR-1-50L22	170	255	140	155	194	
STR-1-75L22	200	305	140	183	236	sheet steel (RAL7035, polyester powder coating)
STR-1100L22	300	325	185	255	255	
STR-1130L22	300	325	185	255	255	
STR-1160L20	300	425	235	255	355	
STR-1200L20	300	430	235	255	355	

**Packaging**



Article code	Packaging	Length [mm]	Width [mm]	Height [mm]	Net weight [kg]	Gross weight [kg]
STR-1-10L10	Unit (1 pc.)	176	100	96	1,07	1,104
STR-1-08L22	Unit (1 pc.)	216	130	110	1,50	1,63
STR-1-15L22	Unit (1 pc.)	216	130	110	2,08	2,18
STR-1-22L22	Unit (1 pc.)	216	130	110	2,07	2,18
STR-1-35L22	Unit (1 pc.)	262	180	160	4,40	4,60
STR-1-50L22	Unit (1 pc.)	262	180	160	5,07	5,29
STR-1-75L22	Unit (1 pc.)	320	210	160	7,51	7,79
STR-1100L22	Unit (1 pc.)	340	310	210	12,384	12,842
STR-1130L22	Unit (1 pc.)	340	310	210	14,80	15,26
STR-1160L20	Unit (1 pc.)	430	310	255	17,858	18,18
STR-1200L20	Unit (1 pc.)	430	310	255	20,6	21,15