

STRS1

Standard 230 VAC transformer controller with TK



The STRS1 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), control the speed manually in five steps and feature TK monitoring for thermal motor protection. The used technology 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
- TK monitoring for thermal motor protection
- 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, I _{max} 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]
STRS1-15L22	1,5	(5*20 mm) F: T-2,5 A-H
STRS1-22L22	2,2	(5*20 mm) F: T-3,15 A-H
STRS1-25L22	2,5	(5*20 mm) F: T-4,0 A-H
STRS1-35L22	3,5	(5*20 mm) F: T-5,0 A-H
STRS1-50L22	5,0	(5*20 mm) F: T-5,0 A-H
STRS1-75L22	7,5	(5*20 mm) F: T-12,5 A-H
STRS1100L22	10,0	(6*32 mm) F: T-16,0 A-H
STRS1130L22	13,0	(6*32 mm) F: T-20,0 A-H
STRS1160L20	16,0	(6*32 mm) F: T-25,0 A-H
STRS1200L20	20,0	(6*32 mm) F: T-30,0 A-H

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

Voltage series

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

Area of use

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

Wiring and connections

STRS1-15L22, STRS1-22L22 and STRS1-25L22	
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
TK	TK monitoring for thermal motor protection
TK	TK monitoring for thermal motor protection
STRS1-35L22, STRS1-50L22, STRS1-75L22, STRS1100L22, STRS1130L22, STRS1160L20 and STRS1200L20	
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
TK	TK monitoring for thermal motor protection
TK	TK monitoring for thermal motor protection
Pe	Earth terminal

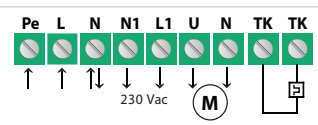
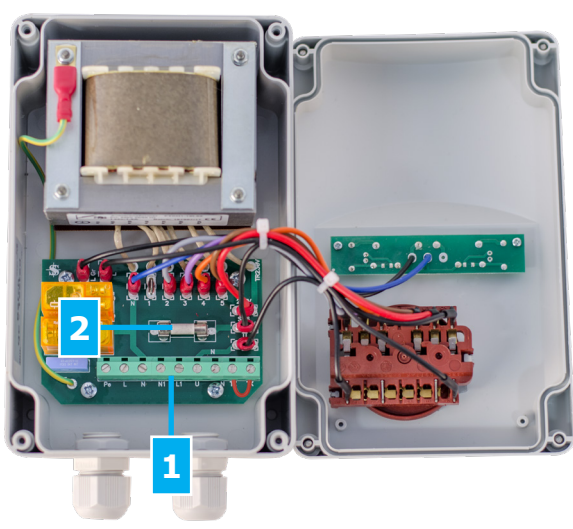
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Legend

STRS1-15L22, STRS1-22L22 and STRS1-25L2

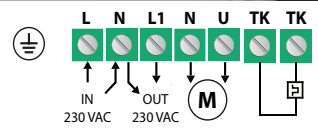
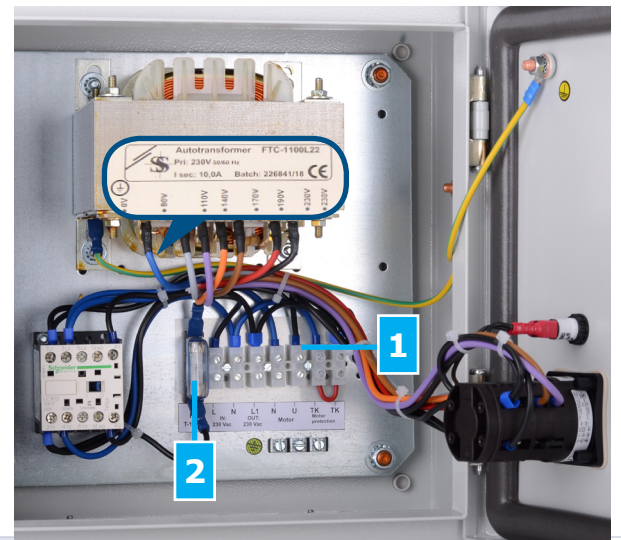


1 - Terminal block

2 - Fuse

Legend

STRS1100L22, STRS1130L22, STRS1160L20 and STRS1200L20

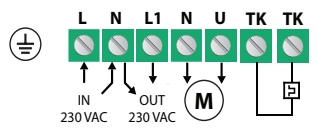
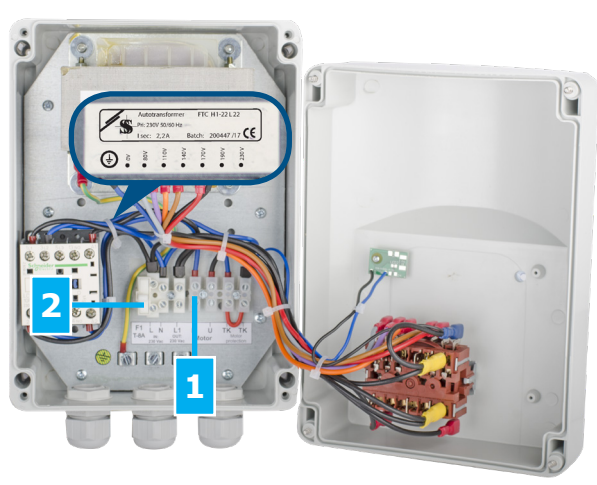


1 - Terminal block

2 - Fuse

Legend

STRS1-35L22, STRS1-50L22 and STRS1-75L22



1 - Terminal block

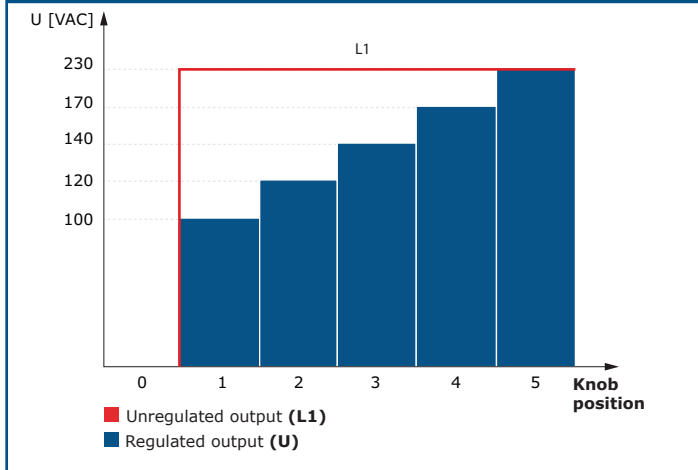
2 - Fuse

STRS1

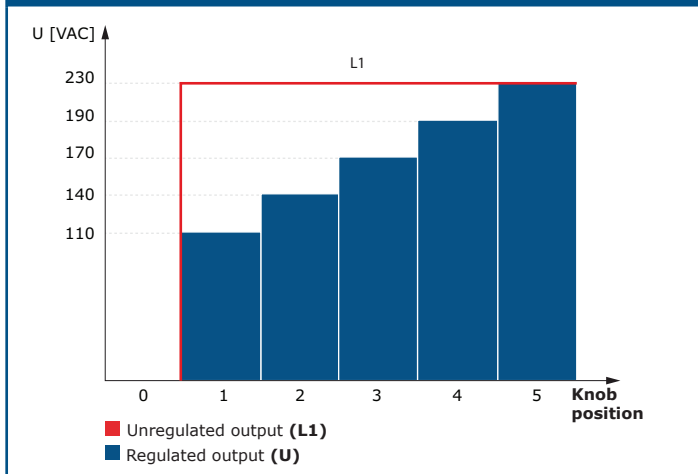
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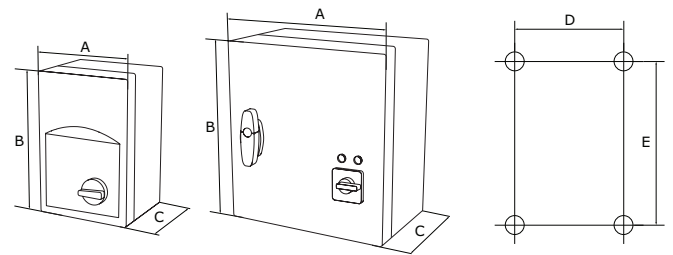
Operational diagram - L20



Operational diagram - L22

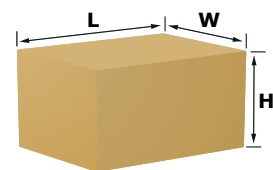


Fixing and dimensions



Article code	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	Enclosure
STRS1-15L22	115	205	100	98	140	plastic (R-ABS, UL94-V0, grey RAL 7035)
STRS1-22L22	115	205	100	98	140	
STRS1-25L22	170	255	140	155	194	
STRS1-35L22	170	255	140	155	194	
STRS1-50L22	170	255	140	155	194	
STRS1-75L22	200	305	140	183	236	sheet steel (RAL7035, polyester powder coating)
STRS1100L22	300	325	185	255	255	
STRS1130L22	300	325	185	255	255	
STRS1160L20	300	425	235	255	355	
STRS1200L20	300	430	235	255	355	

Packaging



Article code	Packaging	Length [mm]	Width [mm]	Height [mm]	Net weight [kg]	Gross weight [kg]
STRS1-15L22	Unit (1 pc.)	216	130	110	2,10	2,20
STRS1-22L22	Unit (1 pc.)	216	130	110	2,20	2,30
STRS1-25L22	Unit (1 pc.)	262	180	160	5,00	5,20
STRS1-35L22	Unit (1 pc.)	262	180	160	4,70	4,90
STRS1-50L22	Unit (1 pc.)	262	180	160	5,40	5,60
STRS1-75L22	Unit (1 pc.)	320	210	160	8,10	8,36
STRS1100L22	Unit (1 pc.)	340	310	210	13,20	13,70
STRS1130L22	Unit (1 pc.)	340	310	210	16,90	17,40
STRS1160L20	Unit (1 pc.)	430	310	255	19,90	20,46
STRS1200L20	Unit (1 pc.)	430	310	255	21,50	22,06

Standards

- Low Voltage Directive 2014/35/EC
- EMC Directive 2014/30/EC: EN 61326
- WEEE Directive 2012/19/EC
- RoHS Directive 2011/65/EC

