

STRS1

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: 1,5 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-8,0 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

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

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

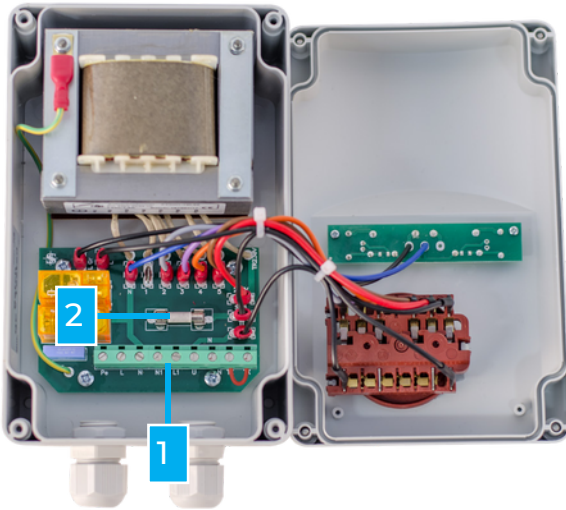
STRS1

230 VAC transformer controller with TK

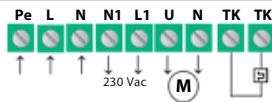


Legend

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



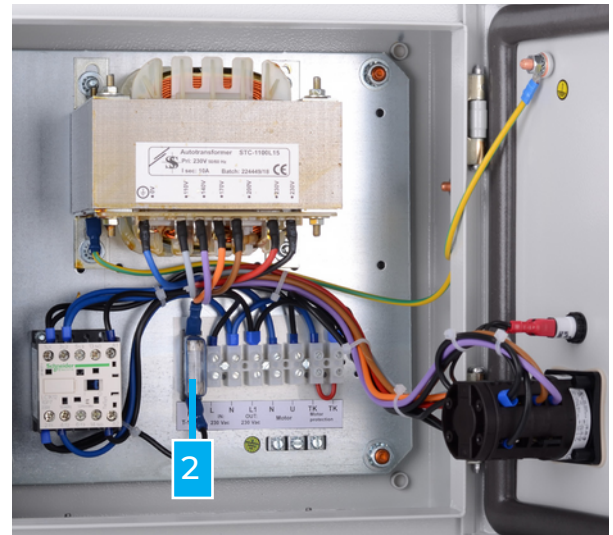
1 - Terminal block



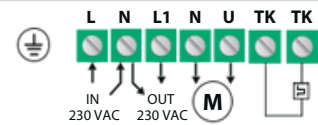
2 - Fuse

Legend

STRS1100L22, STRS1130L22, STRS1160L20 and STRS1200L20



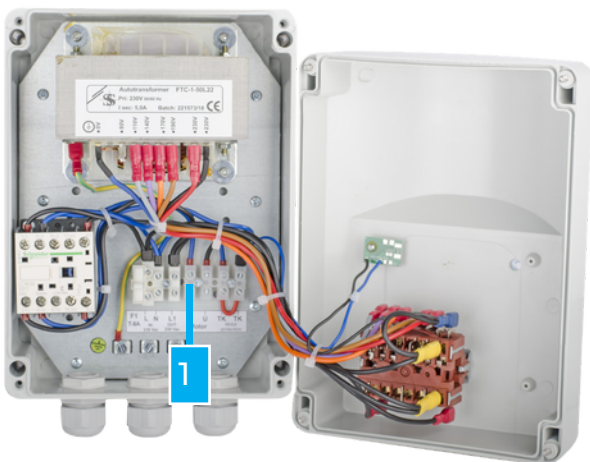
1 - Terminal block



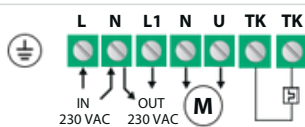
2 - Fuse

Legend

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



1 - Terminal block



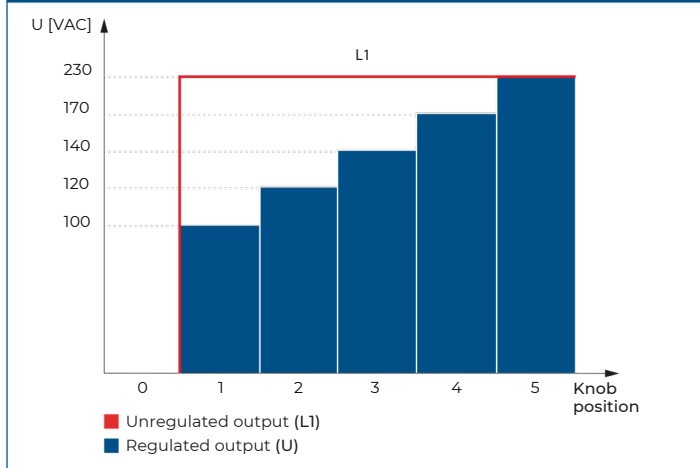
2 - Fuse

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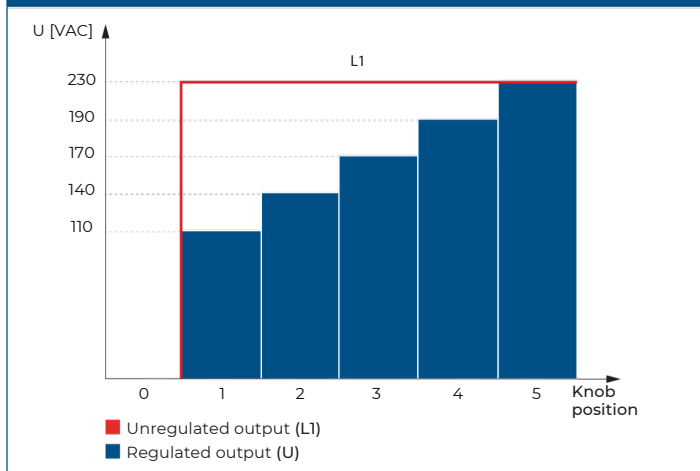
230 VAC transformer controller with TK



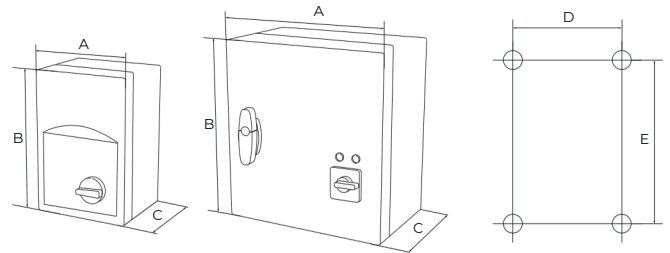
Operational diagram - L20



Operational diagram - L22

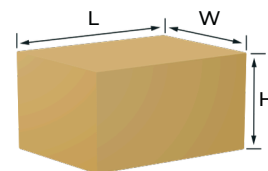


Fixing and dimensions



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	
STRS1100L22	300	325	185	255	255	sheet steel (RAL7035, polyester powder coating)
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.)	205	125	105	2,11	2,21
STRS1-22L22	Unit (1 pc.)	205	125	105	2,13	2,23
STRS1-25L22	Unit (1 pc.)	260	170	140	3,56	3,76
STRS1-35L22	Unit (1 pc.)	260	170	140	4,66	4,86
STRS1-50L22	Unit (1 pc.)	260	170	140	5,31	5,51
STRS1-75L22	Unit (1 pc.)	315	200	145	7,90	8,18
STRS1100L22	Unit (1 pc.)	330	300	190	12,54	12,97
STRS1130L22	Unit (1 pc.)	330	300	190	15,08	15,51
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
- RoHs Directive 2011/65/EC





Global trade item numbers (GTIN)

Article	Unit
STRS1-15L22	05401003016015
STRS1-22L22	05401003016022
STRS1-25L22	05401003016039
STRS1-35L22	05401003016046
STRS1-50L22	05401003016053
STRS1-75L22	05401003016060
STRS1100L22	05401003016077
STRS1130L22	05401003016084
STRS1160L20	05401003016091
STRS1200L20	05401003016107