

STVS4

400 VAC 3-phase transformer controller with TK and analogue control



The STVS4 series of transformer fan speed controllers regulate the rotational speed of three-phase voltage controllable motors in five steps by varying the output voltage according to a 0–10 VDC analogue input signal. They are equipped with auto-transformers and feature TK monitoring for thermal motor protection.

Key features

- Analogue input signal (0–10 VDC) galvanically isolated
- Wide power range: 1,5 A–11 A
- TK monitoring for thermal motor protection
- 5 switching levels according to the input signal
- LED status indication
- +12 VDC output (e.g. as supply for MTP-X10K-NA potentiometer from Sentera)

Technical specifications

Supply voltage	400 VAC / 50–60 Hz	
Control signal input	0–10 VDC	
Output	12 VDC / I _{max} 50 mA	
Unregulated output	230 VAC (max. 2 A)	
Switching levels	Up	2; 4; 6; 8; 9,5 VDC
	Down	Up level – 0,2 VDC
Enclosure	sheet steel (RAL 7035, polyester powder coating)	
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]
STVS4-15L40	1,5
STVS4-25L40	2,5
STVS4-40L40	4
STVS4-60L40	6
STVS4-80L40	8
STVS4110L40	11

Standards

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



Voltage

0–10 VDC or external potentiometer positions (MTV or MTP)*	Regulated output [VAC]					
	0	1	2	3	4	5
Voltages	0	130	180	230	300	400
Unregulated output [VAC]						
L1	0	230	230	230	230	230

* See the operational diagram on the next page for the corresponding voltages.



Area of use

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

Wiring and connections

Pe	Earth terminals
R	
S	Power supply 3*400 VAC / 50–60 Hz
T	
N	Neutral
U	
V	Regulated output to motor
W	
L1	Unregulated output, line
N1	Unregulated output, neutral
TK	
TK	Input - TK monitoring for thermal motor protection
OV	Ground
+12V*	Output 12 VDC / I _{max} 50 mA
+V*	Digital output 12 VDC / I _{max} 50 mA (0 VDC = TK fault; 12 VDC = normal operation)
V/C	Input U: 0–10 VDC

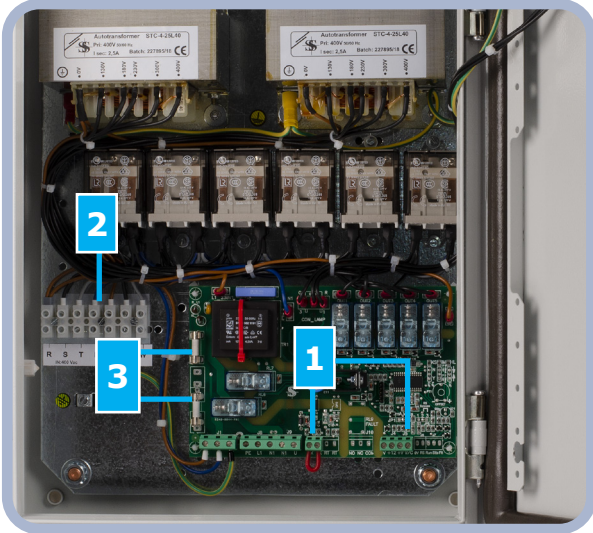
*Note: The total output current for both outputs (+12V and +V) must not exceed 100 mA!

STVS4

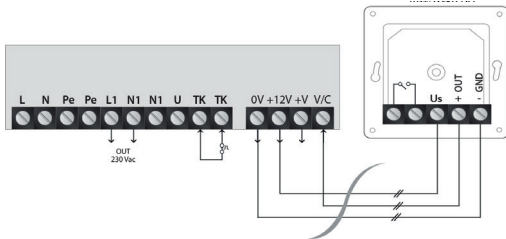
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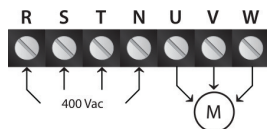
Legend



1 - Control terminal block

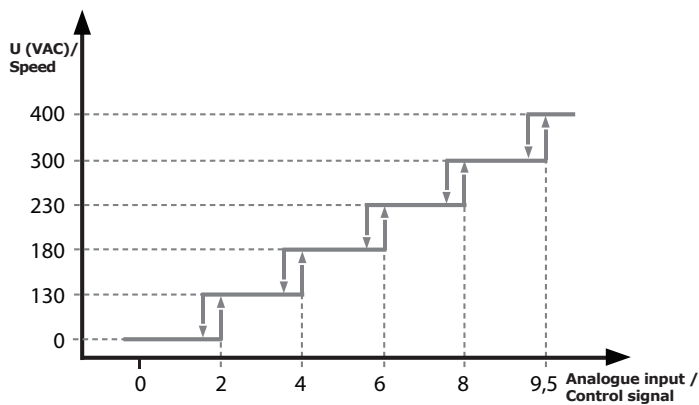


2 - Power terminal block

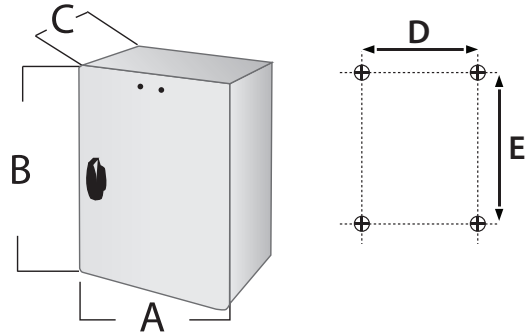


3 - Fuse

Operational diagram

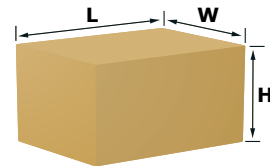


Fixing and dimensions



Article code	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]
STVS4-15L40	300	425	170	255	355
STVS4-25L40	300	425	170	255	355
STVS4-40L40	400	425	200	355	355
STVS4-60L40	400	425	200	355	355
STVS4-80L40	400	425	200	355	355
STVS4110L40	400	425	200	355	355

Packaging



Article code	Packaging	Length [mm]	Width [mm]	Height [mm]	Net weight [kg]	Gross weight [kg]
STVS4-15L40	Unit (1 pc.)	430	310	205	13,55	14
STVS4-25L40	Unit (1 pc.)	430	310	205	14,52	15,04
STVS4-40L40	Unit (1 pc.)	445	410	255	21,37	22,12
STVS4-60L40	Unit (1 pc.)	445	410	255	24,89	25,64
STVS4-80L40	Unit (1 pc.)	445	410	255	33,05	33,97
STVS4110L40	Unit (1 pc.)	445	410	255	39,92	40,82

Global trade item numbers (GTIN)

Article code	Packaging (Unit)
STVS4-15L40	05401003016336
STVS4-25L40	05401003016343
STVS4-40L40	05401003016350
STVS4-60L40	05401003016367
STVS4-80L40	05401003016374
STVS4110L40	05401003016381