



USX

Electronic fan speed controller

The USX series are electronic fan speed controllers intended to regulate the speed of single-phase voltage controllable motors. They have a potentiometer for output voltage adjustment and an internal trimmer for minimum output voltage setting. There are three product versions featuring different maximum output current.

Key features

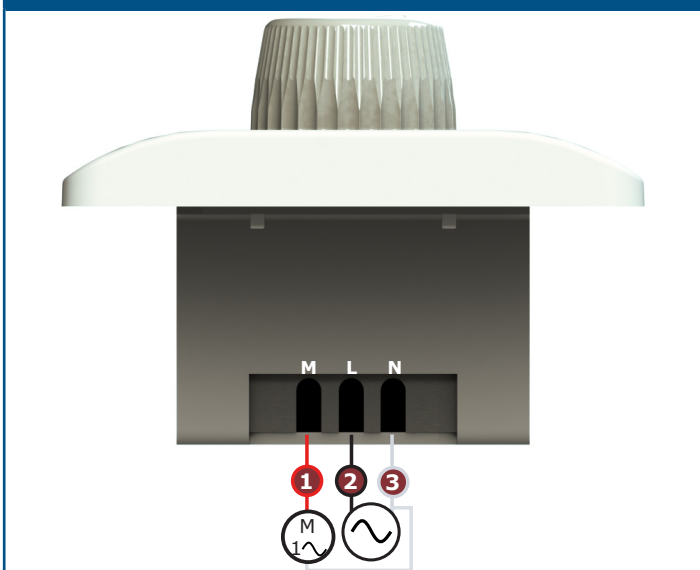
- Electronic fan speed controller with zero-output at leftmost position
- Minimum output voltage adjustment via internal trimmer
- Different current ratings available

Technical specifications

Power supply, U_s	120 VAC \pm 10 % / 60 Hz	
Regulated output	U_{min} — U_s	
Minimum output voltage	20—70 % of U_s	
Ambient conditions	Operating temperature	-5—40 °C / 23—104 °F
	Rel. humidity	5—85 % rH (non-condensing)
Storage temperature	-20—50 °C / -4—122 °F	



Wiring and connections



1 - Red wire (M)	Regulated output to motor	USX-7-15-DT: max 1,5 A USX-7-30-DT: max 3,0 A USX-7-60-DT: max 6,0 A
2 - Black wire (L)	Power supply, phase 120 VAC / 60 Hz	
3 - White wire (N)	Neutral	
Cable cross section	0,75 mm ² / AWG 18	

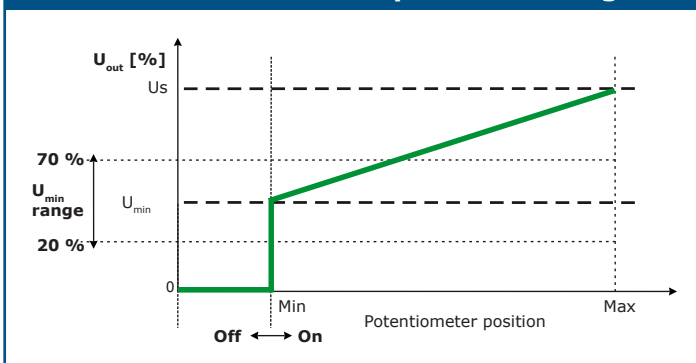
Article codes

Article codes	Rated maximum current [A]
USX-7-15-DT	1,5
USX-7-30-DT	3,0
USX-7-60-DT	6,0

Area of use

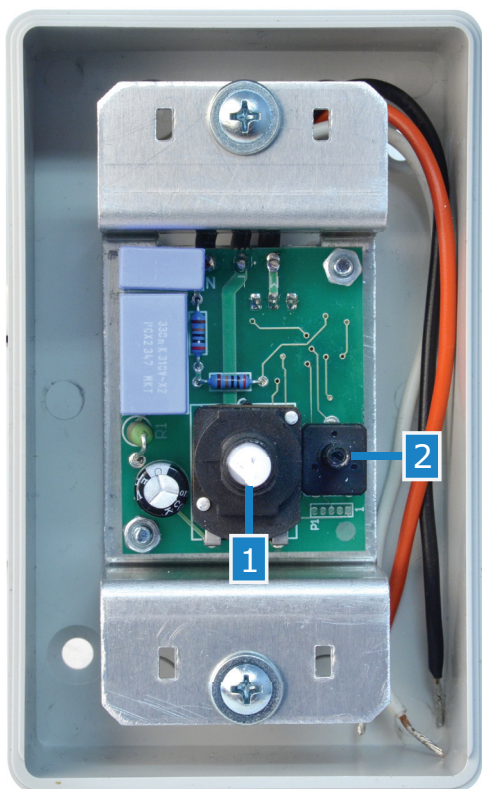
- Fan speed control in ventilation systems or air-conditioning systems
- Direct AC fan / motor control of whole house fans, fireplace blowers, humidifiers, range hoods, etc.

Operational diagrams





Settings



1 - Output voltage potentiometer



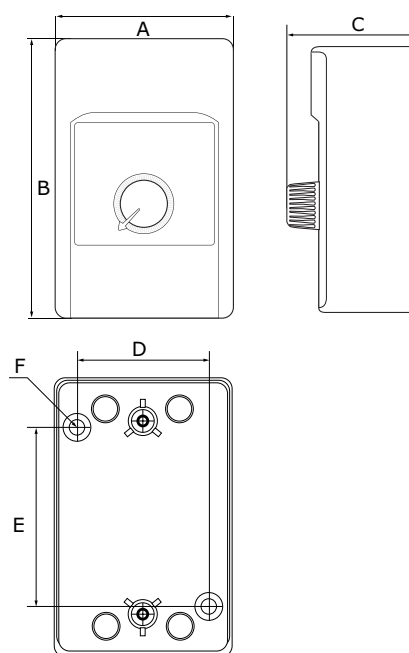
Adjusts the output voltage

2 - Minimum speed trimmer



Adjusts the min. speed from 20 to 70 % of Us

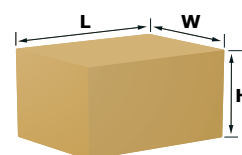
Fixing and dimensions



USX

A	B	C	D	E	F
70 mm / 2,76 "	115 mm / 4,52 "	58 mm / 2,28 "	51 mm / 2,01 "	80 mm / 3,15 "	2 x Ø 4,8 mm / 0,19 "

Packaging



Article code	Packaging	Length	Width	Height	Net weight	Gross weight
USX	Unit (1 pc.)	125 mm / 4,94 "	80 mm / 3,14 "	70 mm / 2,76 "	0,18 kg / 0,40 lb	0,24 kg / 0,53 lb
	Box (70 pcs.)	590 mm / 23,23 "	380 mm / 14,96 "	500 mm / 19,69 "	12,60 kg / 27,78 lb	18,03 kg / 39,74 lb

Standards



- Low Voltage Directive 2014/35/EU: EN 60730-1:2011 Automatic electrical controls for household and similar use - Part 1: General requirements
- EMC Directive 2014/30/EC
 - EN 60730-1:2011 Automatic electrical controls for household and similar use - Part 1: General requirements
 - EN 61000-3-2:2014 Electromagnetic compatibility (EMC) - Part 3-2: Limits - Limits for harmonic current emissions (equipment input current ≤ 16 A per phase)
 - EN 61000-6-2:2005 Electromagnetic compatibility (EMC) - Part 6-2: Generic standards - Immunity for industrial environments Amendment AC:2005 to EN 61000-6-2:2005
 - EN 61000-6-3:2007 Electromagnetic compatibility (EMC) - Part 6-3: Generic standards - Emission standard for residential, commercial and light-industrial environments Amendments A1:2011 and AC:2012 to EN 61000-6-3:2007
- WEEE 2012/19/EC
- RoHS Directive 2011/65/EC