



SD-DT

Electronic fan speed controller

These infinitely variable fan speed controllers allow you to manually adjust the rotational speed of single phase AC motors by varying the motor voltage through phase angle control. The integrated AC switch enables or disables the motor.

Key features

- Infinitely variable speed control
- Regulation from low to high speed (SDY) and from high to low speed (SDX)
- Minimum speed adjustable via internal trimmer
- Flush or surface mounting
- OFF position can be disabled if necessary
- Unregulated output 230 VAC / 50–60 Hz

Area of use

- Manual control of the motor / fan speed in HVAC applications
- For indoor use only

Technical specifications

Supply voltage	230 VAC ±10 % / 50-60 Hz	
Regulated output	U _{min} –U _s	
Unregulated output	230 VAC / max. 2 A	
Minimum speed adjustment	20–70 % of U _s	
Ambient conditions	Temperature	0–40°C
	Relative humidity	< 100 % rH (non-condensing)
Protection standard	Flush mounting	IP44 (according to EN 60529)
	Surface mounting	IP54 (according to EN 60529)

Settings



1 - Minimum speed adjustment trimmer		Adjusts the min. speed (factory preset to 100 VAC)
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Wiring and connections

L	Power supply, line (230 VAC ±10 % / 50–60 Hz)
L1	Unregulated output, line (230 VAC ±10 % / 50–60 Hz, I _{max} 2 A)
N	Power supply, neutral
N	Unregulated output, neutral
U2	Regulated output to motor, neutral
U1	Regulated output to motor, line
Connections	Screw terminal block, pitch 5 mm maximum cable diameter 2,5 mm ²

Note: To disable the OFF position, connect the 230 VAC supply voltage to the unregulated output (L1). In this case, do not connect the power supply to: L.

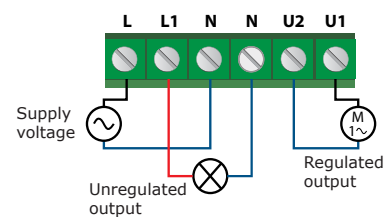


Article codes

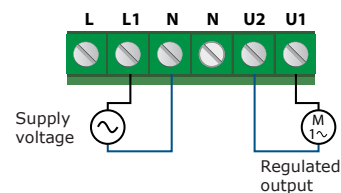
Article code	Rated current range [A]
LOW TO HIGH SPEED CONTROLLERS	
SDY-1-15-DT	0,1–1,5
SDY-1-30-DT	0,2–3
HIGH TO LOW SPEED CONTROLLERS	
SDX-1-15-DT	0,1–1,5
SDX-1-30-DT	0,2–3

Wiring diagrams

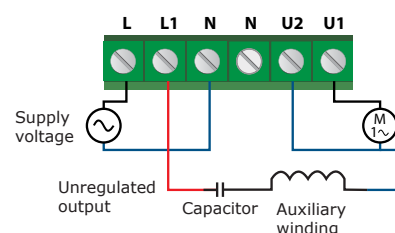
Run indicator light connected to unregulated output



OFF position disabled



Three-wire motor connection



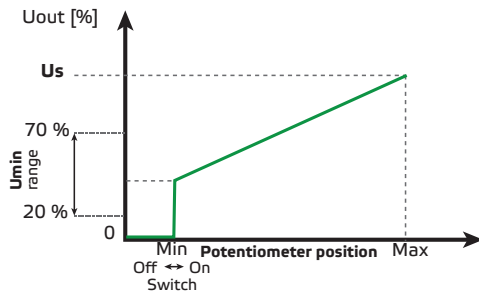


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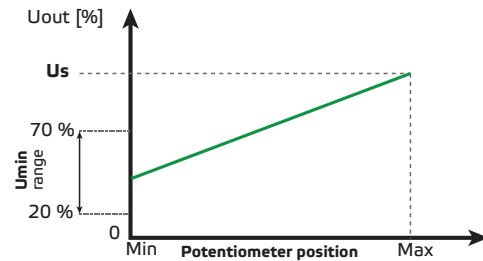
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Operational diagrams

OFF position enabled: supply voltage connected to L and N

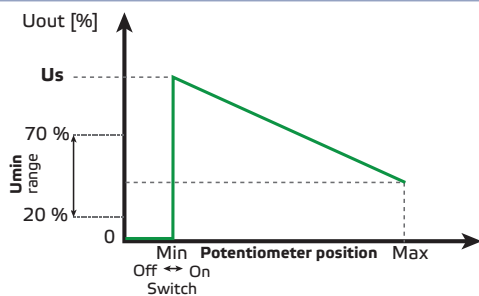


OFF position disabled: supply voltage connected to L1 and N

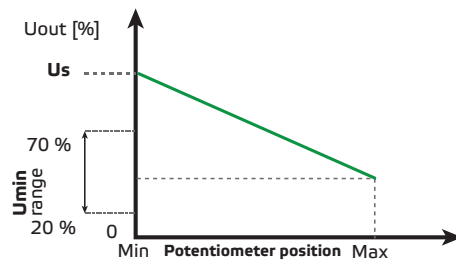


SDY: from low to high speed

OFF position enabled: supply voltage connected to L and N

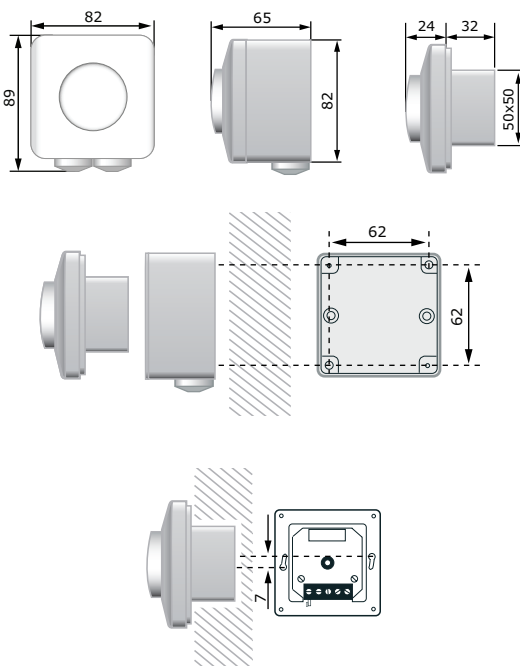


OFF position disabled: supply voltage connected to L1 and N



SDX: from high to low speed

Fixing and dimensions



Standards

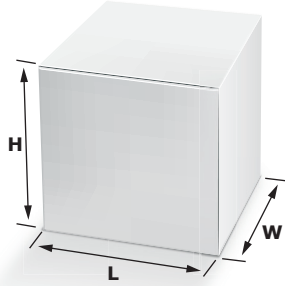
- Low Voltage Directive 2014/35/EU
 - EN 60529:1991 Degrees of protection provided by enclosures (IP Code) Amendments A1:2000, A2:2013, AC:1993, AC:2016-12 and A2:2013/AC:2019-02 to EN 60529:1991
- EMC directive 2014/30/EU
 - EN 61000-6-2:2005 Electromagnetic compatibility (EMC) - Part 6-2: Generic standards - Immunity for industrial environments Amendment AC:2005 to EN 61000-6-2
 - 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
 - EN 61000-3-2:2014 Electromagnetic compatibility (EMC) - Part 3-2: Limits - Limits for harmonic current emissions (equipment input current ≤ 16 A per phase)
- RoHS Directive 2011/65/EU



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Packaging



Article	Packaging	Length [mm]	Width [mm]	Height [mm]	Net weight	Gross weight
SDY-1-XX-DT	Unit (1 pc.)	95	85	70	0,16 kg	0,19 kg
	Carton (10 pcs.)	492	182	84	1,55 kg	1,99 kg
	Box (60 pcs.)	590	380	280	9,30 kg	12,5 kg

Global trade item numbers (GTIN)

Packaging	Unit	Carton	Box
SDX-1-15-DT	05401003017517	05401003302224	05401003503324
SDX-1-30-DT	05401003017524	05401003302231	05401003503331
SDY-1-15-DT	05401003017531	05401003302248	05401003503348
SDY-1-30-DT	05401003017548	05401003302255	05401003503355