

# DRX

## Electronic fan speed controller, DIN rail mounting



DRX series are electronic speed controllers for AC fans with single-phase voltage controllable motor. Using the rotary knob on the front panel, the regulated voltage can be set from high to low. By turning the knob completely to the left (Off position) the motor can be switched off. The trimmer allows the minimum speed to be optimised for the application. The enclosure is suited for DIN rail mounting.

### Key features

- Fan speed control from maximum to minimum
- Output voltage range: 100–230 VAC
- Adjustable minimum speed: by trimmer
- Suitable for DIN rail mounting (e.g. in an electrical cabinet)
- Green LED operating indication
- Storage temperature: -14–50 °C

### Area of use

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

### Article codes

| Article code      | Max. rated current, [A] | Fuse (5*20 mm), [A] |
|-------------------|-------------------------|---------------------|
| HIGH TO LOW SPEED |                         |                     |
| DRX-1-15-AT       | 1,5                     | F-3,15 A-H          |
| DRX-1-25-AT       | 2,5                     | F-5,0 A-H           |

### Technical specifications

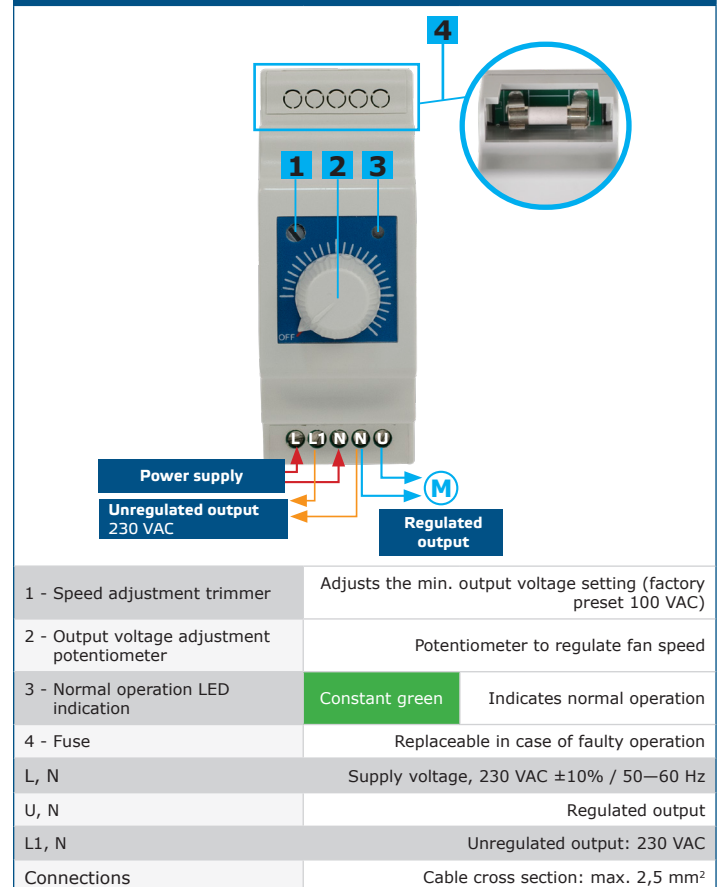
|                     |                         |        |
|---------------------|-------------------------|--------|
| Power supply        | 230 VAC ±10% / 50–60 Hz |        |
| Regulated output    | 100–230 VAC             |        |
| Unregulated output  | 230 VAC / 0,5 A         |        |
| Ambient conditions  | Temperature             | 0–40°C |
| Protection standard | IP30                    |        |

### Standards

- Low Voltage Directive 2014/35/EU
  - EN 60335-1:2012 Household and similar electrical appliances - Safety - Part 1: General requirements. Amendment A11:2014 and AC:2014 to EN 60335-1:2012
  - EN 61558-1:2005 Safety of power transformers, power supplies, reactors and similar products - Part 1: General requirements and tests. Amendment AC:2006 and A1:2009 to EN 61558-1:2005
- EMC Directive 2014/30/EU:
  - EN 61000-6-3:2007 Electromagnetic compatibility (EMC) - Part 6-3: Generic standards - Emission standard for residential, commercial and light-industrial environments
  - EN 61000-6-2:2006 Electromagnetic compatibility (EMC) - Part 6-2: Generic standards - Immunity for industrial environments
  - EN 60730-1:2011 Automatic electrical controls for household and similar use -Part 1: General requirements
- DIN rail EN 50022
- RoHS Directive 2011/65/EU



### Wiring and connections



The diagram shows the DRX unit with four numbered callouts: 1 (trimmer), 2 (potentiometer), 3 (LED), and 4 (fuse). The power supply is connected to terminals L, N, and U. The unregulated output (230 VAC) is connected to terminals L1 and N. The regulated output is connected to terminals U and N. A motor symbol (M) is shown connected to the regulated output terminals.

|                                             |                                                                  |                            |
|---------------------------------------------|------------------------------------------------------------------|----------------------------|
| 1 - Speed adjustment trimmer                | Adjusts the min. output voltage setting (factory preset 100 VAC) |                            |
| 2 - Output voltage adjustment potentiometer | Potentiometer to regulate fan speed                              |                            |
| 3 - Normal operation LED indication         | Constant green                                                   | Indicates normal operation |
| 4 - Fuse                                    | Replaceable in case of faulty operation                          |                            |
| L, N                                        | Supply voltage, 230 VAC ±10% / 50–60 Hz                          |                            |
| U, N                                        | Regulated output                                                 |                            |
| L1, N                                       | Unregulated output: 230 VAC                                      |                            |
| Connections                                 | Cable cross section: max. 2,5 mm <sup>2</sup>                    |                            |

**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. Set the minimum motor voltage according to the application requirements and motor specifications.

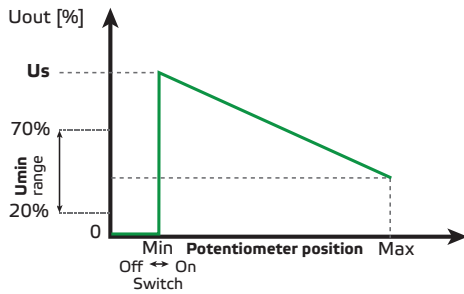
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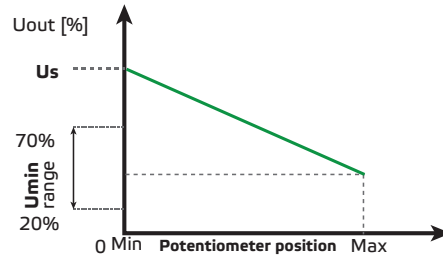


## Operational diagrams

OFF position enabled: supply voltage connected to L and N

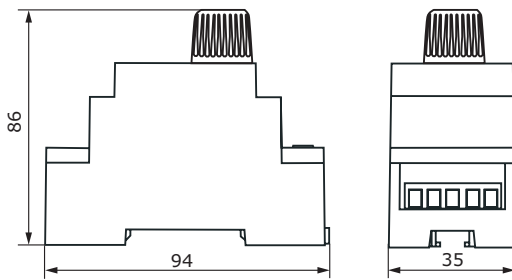


OFF position disabled: supply voltage connected to L1 and N

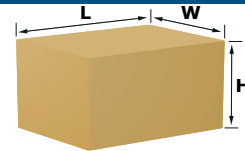


From high to low speed

## Fixing and dimensions



## Packaging



| Article     | Packaging     | Length [mm] | Width [mm] | Height [mm] | Net weight | Gross weight |
|-------------|---------------|-------------|------------|-------------|------------|--------------|
| DRX-1-15-AT | Unit (1 pc.)  | 106         | 104        | 50          | 0,109 kg   | 0,125 kg     |
|             | Box (20 pcs.) | 325         | 210        | 155         | 2,18 kg    | 2,77 kg      |
| DRX-1-25-AT | Unit (1 pc.)  | 106         | 104        | 50          | 0,109 kg   | 0,125 kg     |
|             | Box (20 pcs.) | 325         | 210        | 155         | 2,18 kg    | 2,77 kg      |

## Global trade item numbers (GTIN)

| Packaging   | Unit           | Box            |
|-------------|----------------|----------------|
| DRX-1-15-AT | 05401003001820 | 05401003500620 |
| DRX-1-25-AT | 05401003001837 | 05401003500637 |