

ITR

Electronic fan speed controller



The ITR-9 series of electronic fan speed controllers regulate the speed of single-phase (110–240 VAC / 50–60 Hz) voltage controllable motors by varying the supplied voltage. The ITR-9 controllers provide automatic power supply detection. The minimum speed is adjusted via an internal trimmer. The output is regulated by a potentiometer in the range between the minimum output voltage and the supply voltage. The series features an unregulated output for connecting a valve, lamp, damper, etc. There are two start-up modes - kick start and soft start, selectable via a jumper.

Key features

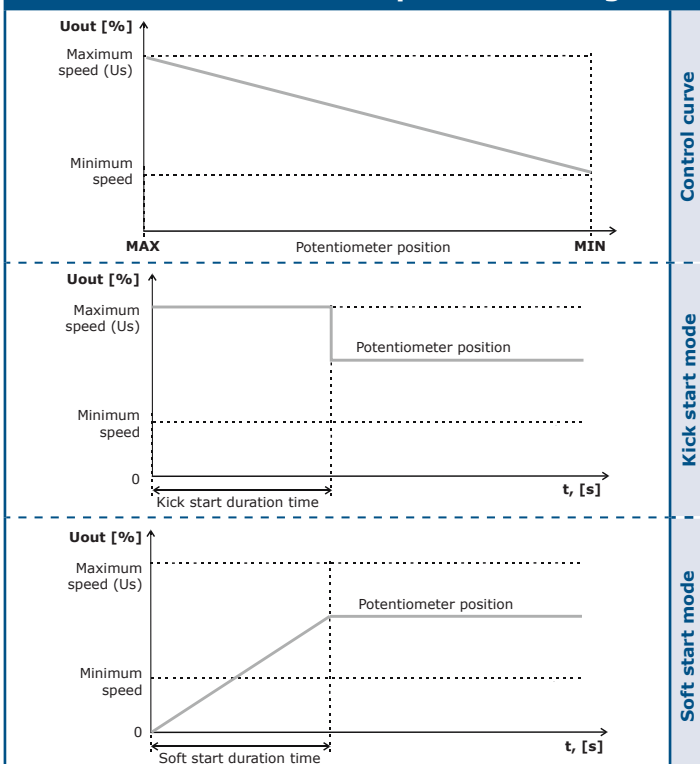
- Wide power supply range (110–240 VAC / 50–60 Hz)
- Automatic supply voltage detection
- Adjustable stepless output voltage
- Minimum speed adjustable by internal trimmer
- Kick start or soft start
- Illuminated on/off switch

Technical specifications

Power supply, Us	110–240 VAC / 50–60 Hz	
Regulated output	Umin–Us	
Maximum load	depends on the version	
Unregulated output	Imax. 2 A	
Minimum output voltage, MIN	30–60 of % Us	
Maximum output voltage, MAX	100 % Us	
Kick start duration	8–10 s	
Protection standard	IP54 (according to EN 60529)	
Ambient conditions	Temperature	-20–35 °C
	Rel. humidity	5–95 % rH (non-condensing)



Operational diagrams



Article codes

	Rated max. current [A]	Fuse [A]
ITR-9-15-DT	1,5	(5*20 mm) F 3,15 A H 250 VAC
ITR-9-30-DT	3,0	(5*20 mm) F 5,0 A H 250 VAC
ITR-9-50-DT	5,0	(5*20 mm) F 8,0 A H 250 VAC
ITR-9-60-DT	6,0	(6,3*32) F 10,0 A H 250 VAC
ITR-9-100-DT	10,0	(6,3*32) F 16,0 A H 250 VAC

Area of use

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

Standards

- Low Voltage Directive 2006/95/EC
- EMC Directive 2004/108/EC: EN 61000-6-3:2007/A1:2011/AC:2012
- WEEE Directive 2012/19/EU
- RoHS Directive 2011/65/EU



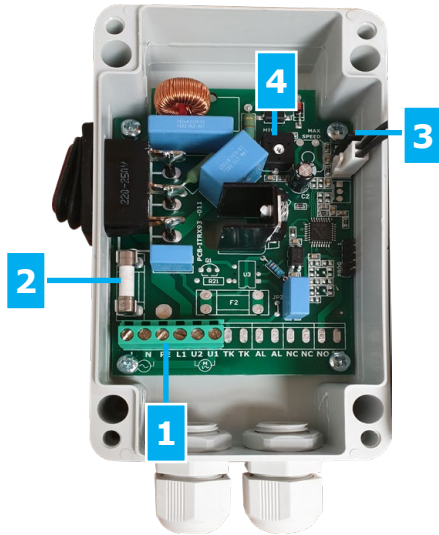
ITR

Electronic fan speed controller

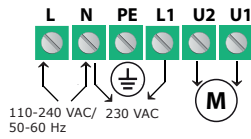


Legend

ITR-9-15-DT, ITR-9-30-DT



1 - Terminal block



2 - Fuse



3 - Kick start selection jumper



Kick start is enabled

Soft start is enabled

4 - Minimum speed trimmer

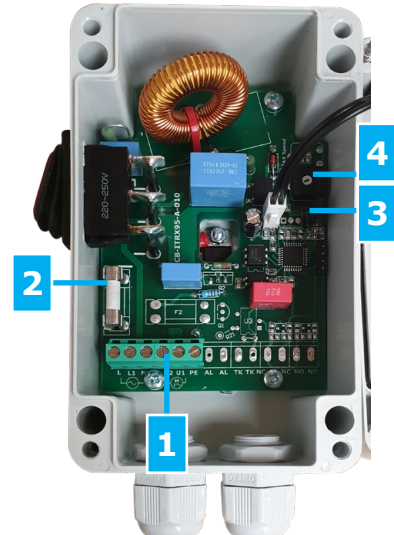


Adjusts the min. speed (factory preset to 45 % of Us)

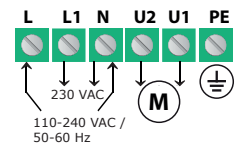
* indicates closed position of the jumper.

Legend

ITR-9-50-DT



1 - Terminal block



2 - Fuse



3 - Kick start selection jumper



Kick start is enabled

Soft start is enabled

4 - Minimum speed trimmer



Adjusts the min. speed (factory preset to 45 % of Us)

* indicates closed position of the jumper.

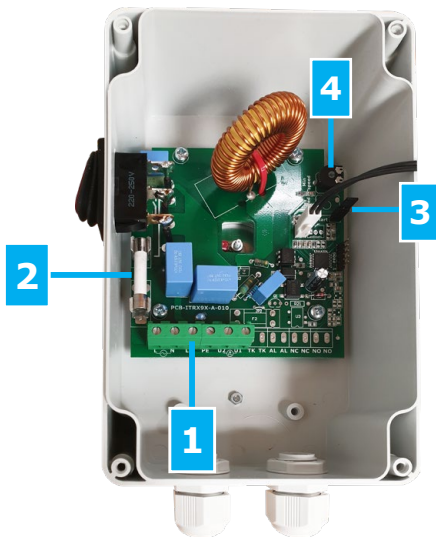
ITR

Electronic fan speed controller

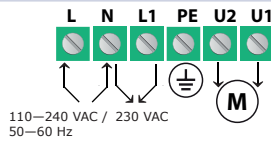


Legend

ITR-9-60-DT, ITR-9100-DT



1 - Terminal block



2 - Fuse



3 - Kick start selection jumper



Kick start is enabled

Soft start is enabled

4 - Minimum speed trimmer



Adjusts the min. speed (factory preset to 45 % of Us)

* indicates closed position of the jumper.

Wiring and connections

ITR-9-15-DT, ITR-9-30-DT

L	Power supply, line (230 VAC / 50–60 Hz)
N	Neutral
L1	Unregulated output, I _{max} . 2 A
PE	Protective earth
U2	Regulated output to motor - line
U1	Regulated output to motor - neutral

ITR-9-50-DT

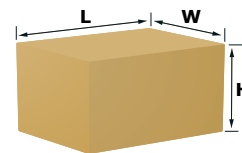
L	Power supply (230 VAC / 50–60 Hz)
L1	Unregulated output, line (230 VAC / I _{max} . 2 A)
N	Neutral
U2	Regulated output to motor - line
U1	Regulated output to motor - neutral
PE	Protective earth

ITR-9-60-DT, ITR-9100-DT

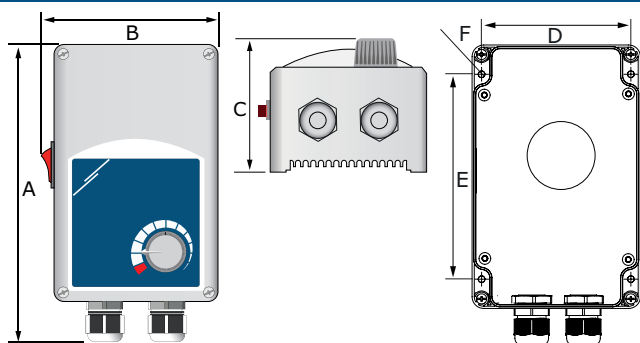
L	Power supply, line (230 VAC / 50–60 Hz)
N	Neutral
L1	Unregulated output, I _{max} . 2 A
PE	Protective earth
U2	Regulated output to motor - line
U1	Regulated output to motor - neutral

Connections	Cable cross section	max. 2,5 mm ²
	Cable gland clamping range	5–10 mm

Packaging



Fixing and dimensions



Article code	A	B	C	D	E	F
ITR-9-15-DT ITR-9-30-DT	162 mm	96 mm	75 mm	71 mm	108,8 mm	Ø 4,2
ITR-9-50-DT	162 mm	96 mm	93 mm	71 mm	108,8 mm	Ø 4,2
ITR-9-60-DT ITR-9100-DT	205 mm	124 mm	97 mm	102 mm	140 mm	Ø 4,6

Article code	Packaging	Length [mm]	Width [mm]	Height [mm]	Net weight	Gross weight
ITR-9-15-DT	Unit (1 pc.)	175	96	95	0,36 kg	0,42 kg
	Box (24 pcs.)	590	380	280	8,65 kg	11,1 kg
ITR-9-30-DT	Unit (1 pc.)	175	96	95	0,42 kg	0,46 kg
	Box (24 pcs.)	590	380	280	10,1kg	12 kg
ITR-9-50-DT	Unit (1 pc.)	175	96	95	0,56 kg	0,62 kg
	Box (24 pcs.)	590	380	280	13,5 kg	16 kg
ITR-9-60-DT	Unit (1 pc.)	210	130	110	0,83 kg	0,92 kg
	Box (15 pcs.)	540	405	245	12,42 kg	14,64 kg
ITR-9100-DT	Unit (1 pc.)	210	130	110	0,95 kg	1,04 kg
	Box (15 pcs.)	540	405	245	14,25 kg	16,44 kg