



# RFSTI-11B

- EN Switch unit with a temperature sensor
- RS Prekidačka jedinica sa spoljašnjim senzorom temperature



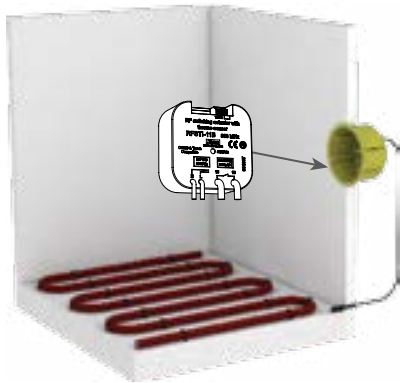
## Characteristics / Karakteristike

- The temperature unit measures the temperature by external sensor, and controls the heating circuit (electric underfloor heating, air conditioning, boiler, etc.).
- These can be combined with system units: smart RF box eLAN-RF, wireless controller RFTC-50/G or touch unit RF Touch.
- It measures temperature in a range of -20- 50 °C and sends it to the system unit in regular 5-min. intervals. It sends a signal upon sudden temperature change.
- Setting the heat/cool function, hysteresis and offset is performed in the system unit or application.
- The BOX design lets you mount it right in an installation box, a ceiling or controlled appliance cover.
- It enables connection of the switched load up to 16A (4.000W).
- For components labelled as iNELS RF Control<sup>2</sup> (RFIO<sup>2</sup>), it is possible to set the repeater function via the RFAF/USB service device.
- Range up to 160 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20 or protocol component RFIO<sup>2</sup> that support this feature.
- Communication frequency with bidirectional protocol iNELS RF Control<sup>2</sup> (RFIO<sup>2</sup>).
- External sensor TC (0 ..+70 °C) or TZ (-40 ..+125 °C) for length of 0.11 m, 3 m, 6 m, 12 m.

- Element temperature, measures temperature by external sensor and simultaneously controls the heating circuit (electric underfloor heating, climate device, boiler...).
- Can be combined with system elements: eLAN-RF-smart RF box, relay controller RFTC-50/G or contact unit RF Touch.
- Measures temperature in a range of -20.. + 50 °C and sends system unit data every 5 minutes. Sends signal after sudden temperature change.
- Setting heating/cooling, hysteresis and offset is performed in the system unit or application.
- Verzija BOX nudi montažu direktno u instalacionu kutiju, plafon ili poklopac kontrolisanog uređaja.
- Omogućava povezivanje prekidačkog opterećenja do 16 A (4 000 W).
- For elements labeled as iNELS RF Control<sup>2</sup> (RFIO<sup>2</sup>) it is possible to set the repeater function via RFAF/USB service device.
- Range up to 160m (in open space), in case of insufficient signal between controller and unit, use RFRP-20 repeater signal or element with RFIO2 protocol which supports this function.
- Frequency of communication is bidirectional iNELS RF Control<sup>2</sup> (RFIO<sup>2</sup>) protocol.
- External sensor TC (0 to +70 °C) or TZ (-40 to +125 °C) for lengths of 0,11m, 3 m, 6 m, 12 m.

## Assembly / Montaža

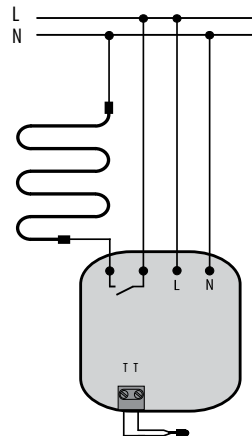
mounting in an installation box  
montaža u instalacionu kutiju



Avoid rapid temperature changes, direct sunlight and excessive moisture. The temperature units should not be located near windows or heating equipment, etc., which could affect the internal temperature sensor.

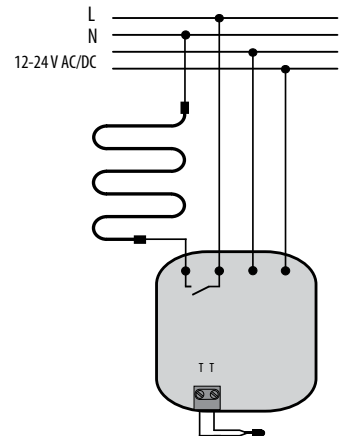
## Connection / Konekcija

RFSTI-11B/230V  
RFSTI-11B/120V



External sensor /  
Spoljašnji senzor

RFSTI-11B/24V

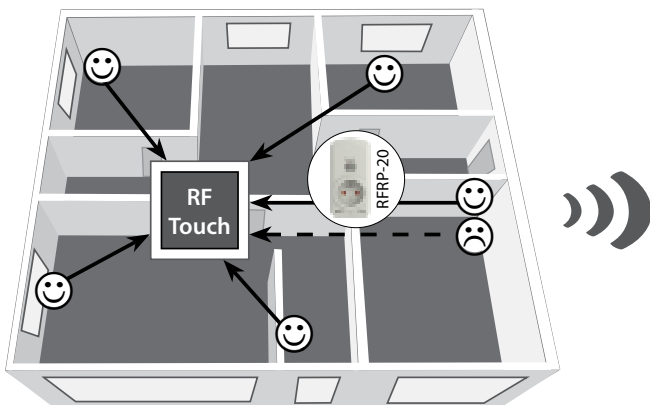


External sensor /  
Spoljašnji senzor

Ne izlažite ga naglim promenama temperature, direktnoj sunčevoj svetlosti i prekomernoj vlažnosti. Postavite temperaturne elemente tako da ne budu blizu prozora, uređaja za grejanje itd., što može uticati na unutrašnji temperaturni senzor.

## Radio frequency signal penetration through various construction materials /

## Prenos radio frekvencijskih signala preko različitih građevinskih materijala



60 - 90 %	80 - 95 %	20 - 60 %	0 - 10 %	80 - 90 %
brickwalls	wooden structures with plaster boards	reinforced concrete	metalpartitions	commonglass
zid od cigle	drvena konstrukcija sa gipsanim pločama	armirani beton	metalne pregrade	staklo

For more information, see "Installation manual iNELS RF Control":  
<http://www.elkoep.com/catalogs-and-brochures>

Za više informacija, pogledati „Instalaciono uputstvo iNELS RF kontrole“:  
<https://www.elkoep.rs/preuzimanja>

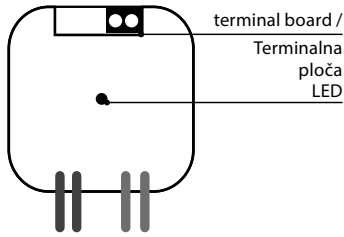


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## Indication, manual control / Indikacije, ručna kontrola



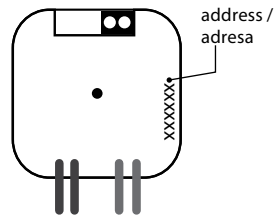
- Terminal board - connection for an external temperature sensor.
- LED STATUS - indication of the device status.
- Terminalna ploča - priključak za spoljni temperaturni senzor.
- LED STATUS - indikacija stanja uređaja.

## Programming with the RF control unit RF Touch (RFTC-50/G, eLAN-RF) /

## Programiranje sa RF kontrolnom jedinicom RF Touch (RFTC-50/G, eLAN-RF)

### Description of function / Opis funkcije

The external sensor measures temperature and sends the signal to RF Touch (RFTC-50/G, eLAN-RF). Spoljašnji senzor meri temperaturu i šalje signal RF Touch (RFTC-50/G, eLAN-RF).



### Programming / Programiranje

An address listed on the front of the actuator is used for programming and controlling the temperature actuator RFSTI-11B by RF Touch (RFTC-50/G, eLAN-RF).

Adresa navedena na prednjoj strani aktuatora koristi se za programiranje i upravljanje aktuatorom temperature RFSTI-11B pomoću RF Touch (RFTC-50 / G, eLAN-RF).

## Technical parameters / Tehnički parametri

### RFSTI-11B/230V RFSTI-11B/120V RFSTI-11B/24V

		RFSTI-11B/230V	RFSTI-11B/120V	RFSTI-11B/24V
Supply voltage:	Napon napajanja:	230 V AC / 50-60 Hz	120 V AC / 60Hz	12-24V AC/DC/50-60Hz
Apparent input:	Prividna snaga ulaza:	7 VA / cos φ = 0.1	7 VA / cos φ = 0.1	-
Dissipated power:	Frekvencija napajanja:	0.7 W	0.7 W	0.7 W
Supply voltage tolerance:	Tolerancija napajanja:	+10 %; -15 %		
Temperature measurement input:	Ulaz za merenje temperature:	1x external TZ/TC temperature sensor input / 1x izlazni TZ/TC kontakt temperaturnog senzora		
Temp. measurement range and accuracy:	Opseg i tačnost merenja temperature:	-20 .. + 50 °C; 0.5°C of the range / u opsegu		
<b>Output</b>	<b>Izlazi</b>			
Number of contacts:	Broj kontakata:	1x switching / prelaz (AgSnO <sub>2</sub> )		
Rated current:	Nominalna struja:	16 A / AC1		
Switching power:	Prekidačka snaga:	4000 VA / AC1, 384 W / DC		
Peak current:	Maksimalna snaga:	30 A / <3 s		
Switching voltage:	Prekidački napon:	250 V AC1 / 24 V DC		
Min. DC switching power:	Min. DC preklopna snaga:	500 mW		
Mechanical service life:	Mehanički radni vek:	3x10 <sup>7</sup>		
Electrical service life (AC1):	Električni radni vek (AC1):	0.7x10 <sup>5</sup>		
<b>Control</b>	<b>Kontrola</b>			
RF, by command from transmitter:	Frekvencija:	866 MHz, 868 MHz, 916 MHz		
Range:	Domet:	up to / do 160 m		
<b>Other data</b>	<b>Ostali podaci</b>			
Operating temperature:	Radna temperatura:	-15...+ 50 °C		
Status indication:	Indikacija statusa:	red / crvena LED		
Operating position:	Pozicija rada:	any / bilo gde		
Mounting:	Montaža:	free at lead-in wires / na dovodnim žicama		
Protection:	Stepen zaštite:	IP 30		
Overvoltage category:	Kategorija prenapona:	III.		
Contamination degree:	Stepen zagađenja:	2		
Outlets (CY wire, cross-section, length):	Izlazi (CY žice, poprečni presek, dužina):	2 x 0.75 mm <sup>2</sup> , 2 x 2.5 mm <sup>2</sup> , 90 mm		
Dimensions:	Dimenzije:	49 x 49 x 21 mm		
Weight:	Težina:	46 g		
Related standards:	Standardi:	EN 60669, EN 300220, EN 301489 R&TTE Directive, Order. No 426/2000 Coll. (Directive 1999/EC)		

Temperature sensor input is at the supply voltage potential.

Attention: When you instal iNELS RF Control system, you have to keep minimal distance 1 cm between each units. Between the individual commands must be an interval of at least 1s.

Ulaz senzora temperature je na potencijalu napona napajanja.

Upozorenje: Kada instalirate iNELS RF Control sistem, mora se poštovati minimalno rastojanje od 1 cm između pojedinih elemenata. Između pojedinačnih komandi potrebno je da prođe interval od 1s.



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# INEL

RF Control

02-61/2016 Rev.4

## Warning

Instruction manual is designated for mounting and also for user of the device. It is always a part of its packing. Installation and connection can be carried out only by a person with adequate professional qualification upon understanding this instruction manual and functions of the device, and while observing all valid regulations. Trouble-free function of the device also depends on transportation, storing and handling. In case you notice any sign of damage, deformation, malfunction or missing part, do not install this device and return it to its seller. It is necessary to treat this product and its parts as electronic waste after its lifetime is terminated. Before starting installation, make sure that all wires, connected parts or terminals are de-energized. While mounting and servicing observe safety regulations, norms, directives and professional, and export regulations for working with electrical devices. Do not touch parts of the device that are energized – life threat. Due to transmissivity of RF signal, observe correct location of RF components in a building where the installation is taking place. RF Control is designated only for mounting in interiors. Devices are not designated for installation into exteriors and humid spaces. They must not be installed into metal switchboards and into plastic switchboards with metal door – transmissivity of RF signal is then impossible. RF Control is not recommended for pulleys etc. – radiofrequency signal can be shielded by an obstruction, interfered, battery of the transceiver can get flat etc. and thus disable remote control.

## Upozorenje

Uputstva za upotrebu su namenjena za ugradnju kao i za korisnike proizvoda. Uputstva se uvek dobijaju uz proizvod. Instalaciju i povezivanje smeju da obavljaju samo kvalifikovane osobe, u skladu sa svim važećim propisima, koja je detaljno upoznata sa ovim uputstvom i funkcijama komponenti. Funkcija elemenata takođe zavisi od prethodnog načina transporta, skladištenja i rukovanja. Ako u bilo kom slučaju primetite nekakve znakove oštećenja, deformacije, kvara ili ako neki deo nedostaje, nemojte ugrađivati uređaj, prijavite to prodavcu. Nakon što komponenti istekle životni vek, potrebno je tretirati je kao elektronski otpad. Pre započinjanja instalacije potrebno je prvo se uveriti da su žice, povezani delovi ili terminali bez napona. Tokom instalacije i održavanja moraju se poštovati sigurnosni propisi, standardi, direktive i profesionalne odredbe za rad sa električnom opremom. Ne dodirujte elemente pod naponom golim rukama, zbog mogućnosti stujnog udara i rizika od smrti. Zbog propustljivosti RF signala, obratiti pažnju na pravilno postavljanje RF elemenata u zgradi gde će se izvoditi ugradnja. RF kontrola je namenjena samo za unutrašnju ugradnju. Elementi nisu namenjeni za spoljašnju ugradnju kao i za ugradnju u vlažne prostorije, ne smeju se ugraditi u metalne ormance kao ni u plastične ormance sa metalnim vratima iz razloga što će to sprečiti prenos radio frekventijskog signala. RF kontrola se ne preporučuje za kontrolu uređaja koji pružaju životne funkcije kao i za kontrolu opasne opreme kao što su pumpe, električni grejači bez termostata, liftova, dizalica itd. iz razloga što prenos radio frekvencije može biti preklonjen, ometen, baterija predajnika se može isprazniti i na taj način daljinski upravljač može biti onemogućen.