

RET 230

Electronic thermostat



RET 230
RET 230C
RET 230F
RET 230F5
RET 230L
RET 230NSB
RET 230VF
RET 230VF2



Certification Mark

This product complies with the following EC Directives:
Electro-Magnetic Compatibility Directive.
(EMC) (89\336\EEC), (92\31\EEC)
Low Voltage Directive.
(LVD) (73\231\EEC), (93\68\EEC)

CE

Danfoss

- 3 **GB** - Specification
- 4 **F** - Spécifications
- 5 **D** - Technische Daten
- 6 **ES** - Especificaciones
- 7 **DK** - Specifications
- 8 **NL** - Technische Specificaties
- 9 **GR** - Προδιαγραφή
- 10 **PL** - Specyfikacja
- 11 **LT** - Specifikacija
- 12 **I** - Specificazioni
- 13-14 **GB** - Mounting / **F** - Montage / **D** - Befestigung / **ES** - Montaje / **DK** - Montering /
NL - Montage / **GR** - Εγκατάσταση / **PL** - Montaż / **LT** - Montavimas /
I - Montaggio
- 15-19 **GB** - Wiring / **F** - Câblage / **D** - Verkabelung / **ES** - Cableado /
DK - Ledningsføring / **NL** - Aansluitingen / **GR** - Συρμάτωση / **PL** - Podłączenie
przewodów / **LT** - Laidai / **I** - Cablaggio
- 20 **GB** - Mounting / **F** - Montage / **D** - Befestigung / **ES** - Montaje / **DK** - Montering
NL - Montage / **GR** - Εγκατάσταση / **PL** - Montaż / **LT** - Montavimas /
I - Montaggio
- 21 **GB** - Locking & limiting / **F** - Verrouillage & Limitation / **D** - Sperren &
Begrenzen / **ES** - Bloquear y Limitar / **DK** - Låsning og begaensning /
NL - Blokkeren & Begrenzen / **GR** - Ασφάλιση και περιορισμός /
PL - Zamknięcie i ograniczenie / **LT** - Blokavimas ir ribojimas /
I - Bloccaggio e esclusioni



What is a room thermostat?

...an explanation for householders

A room thermostat simply switches the heating system on and off as necessary. It works by sensing the air temperature, switching on the heating when the air temperature falls below the thermostat setting, and switching it off once this set temperature has been reached.

Turning a room thermostat to a higher setting will not make the room heat up any faster. How quickly the room heats up depends on the design of the heating system, for example, the size of boiler and radiators.

Neither does the setting affect how quickly the room cools down. Turning a room thermostat to a lower setting will result in the room being controlled at a lower temperature, and saves energy.

The heating system will not work if a timeswitch or programmer has switched it off.

The way to set and use your room thermostat is to find the lowest temperature setting that you are comfortable with, and then leave it alone to do its job. The best way to do this is to set the room thermostat to a low temperature – say 18°C – and then turn it up by one degree each day until you are comfortable with the temperature. You won't have to adjust the thermostat further. Any adjustment above this setting will waste energy and cost you more money.

If your heating system is a boiler with radiators, there will usually be only one room thermostat to control the whole house. But you can have different temperatures in individual rooms by installing thermostatic radiator valves (TRVs) on individual radiators. If you don't have TRVs, you should choose a temperature that is reasonable for the whole house. If you do have TRVs, you can choose a slightly higher setting to make sure that even the coldest room is comfortable, then prevent any overheating in other rooms by adjusting the TRVs.

Room thermostats need a free flow of air to sense the temperature, so they must not be covered by curtains or blocked by furniture. Nearby electric fires, televisions, wall or table lamps may prevent the thermostat from working properly.



Specification

Specification

Specifications	
Temperature range	5-30°C
Temperature range (RET230F)	5-10°C
Construction	BS EN60730-2-9
Maximum Ambient Temperature	45°C
IP Rating	IP20
Supply Voltage	230Vac \pm 15%, 50/60Hz
Switch Rating	3(1)A
Switch Type	1B
Control Pollution Situation	Degree 2
Rated Impulse Voltage	2.5kV
Ball Pressure Test	75°C

Spécifications

F**Spécifications**

Spécifications	
Plage de températures	5-30°C
Plage de températures (RET230F)	5-10°C
Normes de fabrication	BS EN60730-2-9
Température ambiante maximale	45°C
Indice de protection	IP20
Tension d'alimentation	230Vac \pm 15%, 50/60Hz
Caractéristique de commutateur	3(1)A
Type de commutateur	1B
Etat du contrôle de pollution	Degré 2
Essai à la bille	2.5kV
Tension assignée de tenue au choc	75°C

D**Tecnishe Daten****Tecnishe Daten**

Technische Daten	
Temperaturbereich	5-30°C
Temperaturbereich (RET230F)	5-10°C
Bauart	BS EN60730-2-9
Maximale Umgebungstemperatur	45°C
Schutzart	IP20
Betriebsspannung	230Vac \pm 15%, 50/60Hz
Nominaler Kontaktstrom	3(1)A
Schalterart	1B
Emissionswerte	Grad 2
Nennimpulsspannung	2.5kV
Kugeldruckprüfung	75°C

Especificaciones

ES**Especificaciones**

Especificaciones	
Rango de temperatura	5-30°C
Rango de temperatura (RET230F)	5-10°C
Fabricación	BS EN60730-2-9
Temperatura ambiente máxima	45°C
Protección IP	IP20
Alimentación	230Vac \pm 15%, 50/60Hz
Carga del interruptor	3(1)A
Tipo de interruptor	1B
Estado de control de polución	Grado 2
Tensión del impulso	2.5kV
Ensayo de presión con bola	75°C

DK Specifications

Specifications

Specifications	
Temperaturområde	5-30°C
Temperaturområde (RET230F)	5-10°C
Konstruktionsnorm	BS EN60730-2-9
Maks. omgivende temperatur	45°C
Tæthedegrad	IP20
Forsyningsspænding	230Vac \pm 15%, 50/60Hz
Kontaktbelastning	3(1)A
Kontakttype	1B
Kontrol Forurenings Situation	Grad 2
Nominel Impuls Spænding	2.5kV
Kugle tryk test	75°C

Technische Specificaties

NL**Technische Specificaties**

Technische Specificaties	
Temperatuurbereik	5-30°C
Temperatuurbereik (RET230F)	5-10°C
Fabrikage norm	BS EN60730-2-9
Maximale omgevingstemperatuur	45°C
Beschermingsfactor	IP20
Voedingsspanning	230Vac \pm 15%, 50/60Hz
Kontakt belasting	3(1)A
Kontakt type	1B
Emissie waarde	Niveau 2
Nominale piekspanning	2.5kV
Kogeltest	75°C

Προδιαγραφή	
Περιοχή θερμοκρασιών	5-30°C
Περιοχή θερμοκρασιών (RET230F)	5-10°C
Προδιαγραφές σχεδιασμού	BS EN60730-2-9
Μέγιστη θερμοκρασία περιβάλλοντος	45°C
Ονομαστική τιμή IP	IP20
Τάση τροφοδότησης	230Vac \pm 15%, 50/60Hz
Ονομαστική τιμή διακόπτη	3(1)A
Τύπος διακόπτη	1B
Κατάσταση ελέγχου ρύπανσης	Βαθμού 2
Ονομαστική τάσης ώθησης	2.5kV
Δοκιμή σφαιρικής πίεσης	75°C

Specyfikacja

PL

Specyfikacja

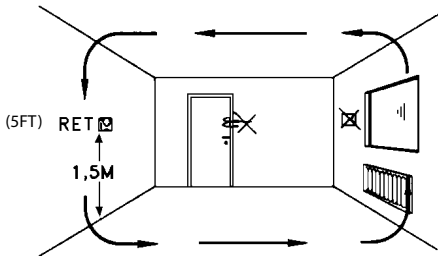
Specyfikacja	
Zakres temperatury	5-3/4 °C
Zakres temperatury (RET ² 3/4 F)	5-1 °C
Zgodność z normą	BS EN6 7 ^{3/4} - ² -9
Maksymalna temperatura otoczenia	45°C
Stopień ochrony	IP ²
Napięcie zasilania	² 3/4 Vac ±15%, 5 /6 Hz
Obciążalność styków	3/4(1)A
Typy x budowanych przekaźników	1B
Znamionowe napięcie impulsu	² .5kV

Specifikacija	
Temperatūros diapazonas	5-3/4 °C
Temperatūros diapazonas (RET ² 3/4 F)	5-1 °C
Atitinka standartus	BS EN6 7 3/4 -2 -9
Didžiausia aplinkos temperatūra	45°C
IP parametras	IP ²
Maitinimo įtampa	2 3/4 Vac ±15%, 5 /6 Hz
Jungiklio parametras	3/4(1)A
Jungiklio tipas	1B
Kontroliuojama tarša	2 lysis
Nominali impulso įtampa	2 .5kV
Rūgūlinio slėgio bandymas	75°C

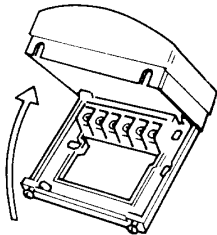
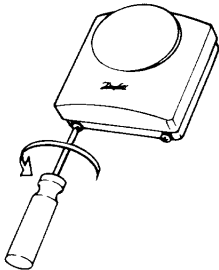
Specificazioni

Specificazioni	
Intervallo temperatura	5-30°C
Intervallo temperatura (RET230F)	5-10°C
Standard di progetto	BS EN60730-2-9
Temperatura ambiente massima	45°C
Grado di protezione	IP20
Tensione di alimentazione	230Vac \pm 15%,50/60Hz
Corrente nominale interruttore	3(1)A
Tipo di interruttore	1B
Livello antinquinamento	Livello 2
Tensione nominale impulsi	2.5kV
Prova di pressione con sfere	75°C

GB - Mounting / **F**- Montage / **D** - Befestigung / **ES** - Montaje
DK - Montering / **NL** - Montage / **GR** - Εγκατάσταση /
PL - Montaż / **LT** - Montavimas / **I** - Montaggio

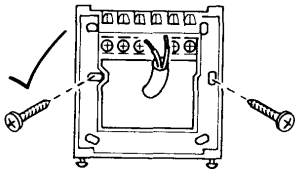
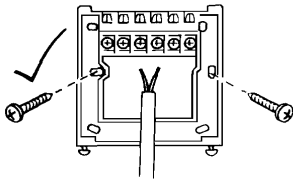


GB - Mounting / **F**- Montage / **D** - Befestigung / **ES** - Montaje
DK - Montering / **NL** - Montage / **GR** - Εγκατάσταση /
PL - Montaż / **LT** - Montavimas / **I** - Montaggio

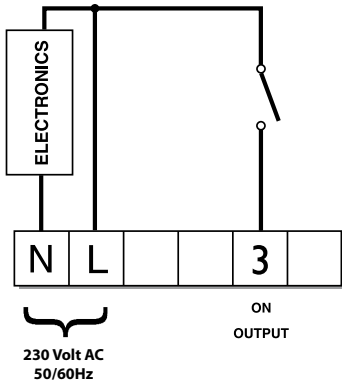


GB - Wiring / F- Câblage / D - Verkabelung / ES - Cableado /
DK - Ledningsføring / NL - Aansluitingen / GR - Συμπτώση /
PL - Podłączenie przewodów / LT - Laidai / I - Cablaggio

GB - Wiring / F- Câblage / D - Verkabelung /
ES - Cableado / DK - Ledningsføring / NL - Aansluitingen
GR - Συμπτώση / PL - Podłączenie przęx odóx /
LT - Laidai / I - Cablaggio



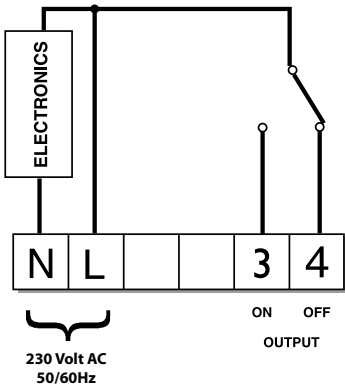
RET 230C / RET 230F RET230F5



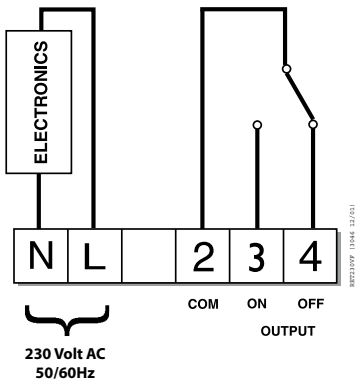
REDACTED

GB - Wiring / F - Câblage / D - Verkabelung / ES - Cableado /
DK - Ledningsføring / NL - Aansluitingen / GR - Συμπτώση /
PL - Podłączanie przewodów / LT - Laidai / I - Cablaggio

RET 230 / RET 230L

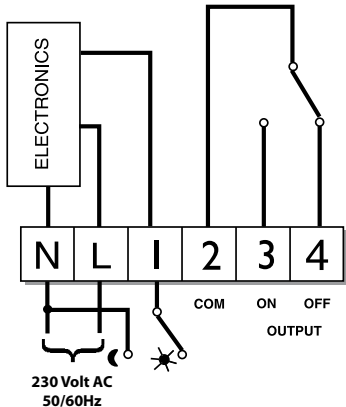


RET 230VF / RET 230VF2

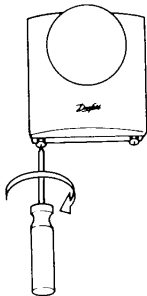
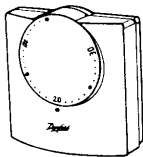
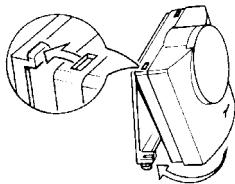


**GB - Wiring / F- Câblage / D - Verkabelung / ES - Cableado /
DK - Ledningsføring / NL - Aansluitingen / GR - Συμπύρωση /
PL - Podłączanie przewodów / LT - Laidai / I - Cablaggio**

RET 230NSB

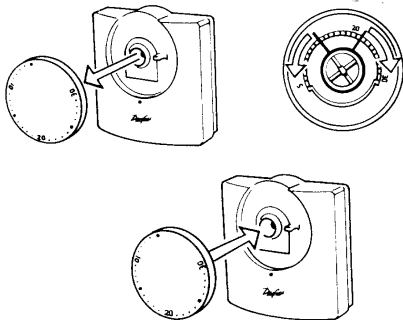


GB - Mounting / **F**- Montage / **D** - Befestigung / **ES** - Montaje
DK - Montering / **NL** - Montage / **GR** - Εγκατάσταση
PL - Montaż / **LT** - Montavimas / **I** - Montaggio



GB - Locking & limiting / **F** - Verrouillage & Limitation / **D** - Sperren & Begrenzen
ES - Bloquear y Limitar / **DK** - Låsning og begrænsning / **NL** - Blokkeren &
Begrenzen / **GR** - Ασφάλιση και περιορισμός / **PL** - Zamknięcie i ograniczenie
LT - Blokavimas ir ribojimas / **I** - Bloccaggio e esclusioni

GB - Locking & limiting / **F** - Verrouillage & Limitation /
D - Sperren & Begrenzen / **ES** - Bloquear y Limitar /
DK - Låsning og begrænsning / **NL** - Blokkeren & Begrenzen
GR - Ασφάλιση και περιορισμός / **PL** - Zamknięcie i
ograniczenie / **LT** - Blokavimas ir ribojimas /
I - Bloccaggio e esclusioni



www.danfoss.com/BusinessAreas/Heating

This product complies with the following EC Directives:

Electro-Magnetic Compatibility Directive.

(EMC) (89\336\EEC), (92\31\EEC)

Low Voltage Directive.

(LVD) (73\23\EEC), (93\68\EEC)



Part No 25490 Issue 3 05/06

