Контроллер комнатной температуры с 7-дневным таймером REV24..

Для приложений отопления и охлаждения

- **Энергонезависимый, работающий от батареи комнатный температурный контроллер, простой в обращении, большой дисплей с крупными символами**
- **Самонастраиваемый 2-позиционный PID контроллер (запатентован)**
- **Выбор режимов работы:**
  - **7-дневный режим Авто, до 3-х переключений отопление-охлаждение**
  - **Поддержание режима Комфорт**
  - **Поддержание режима Энергосбережение**
  - **Защита от заморозки и перегрева**
  - **Особые дни (работа 24ч) до 3-х переключений отопление-охлаждение**
- **Возможность задать уставку для каждого из режимов в режиме Авто и для Особых дней для режимов отопление и охлаждение**
- **Регулирование для зоны отопления**
- **Возможность управлять охладительным оборудованием**

Применение

Регулирование температуры в помещениях для:

- Для индивидуальных домов и коттеджей
- Аппартаментов и офисов
- Отдельных помещений
- Коммерческих помещений

Управление оборудованием:

- Магнитные клапаны для водонагревателей
- Магнитные клапаны для атмосферных газовых горелок
- Газовые и жидкотопливные горелки с нагнетантем
- Электротермические приводы
- Циркуляционные насосы в отопительных системах
- Электрообогреватели
- Вентиляторы потолочных электронагревателей

Функции

- PID-контроллер с самонастройкой и выбором циклов переключения
- 2-позиционное регулирование
- 7-дневное расписание
- Дистанционное управление
- Предустановленные 24-час. режимы
- Ручной режим
- Режим Каникулы
- Режим Вечеринка
- Защита от заморозки и перегрева
- Уровни доступа для проверки параметров
- Функция Сброс
- Калибровка датчиков
- Отопление или охлаждение
- Минимальное ограничение уставки
- Периодический пуск насосов
- Защита от заклинивания клапанов
- Оптимальный пуск утром (P.1)

Сводка типов

Комнатный температурный контроллер с 7-дневнйм таймером	**REV24**
Комнатный температурный контроллер с 7-дневнйм таймером и приемником радио сигналов из Франкфурта (DCF77)	**REV24DC**

Заказ

Укажите тип прибора из «Сводки типов».

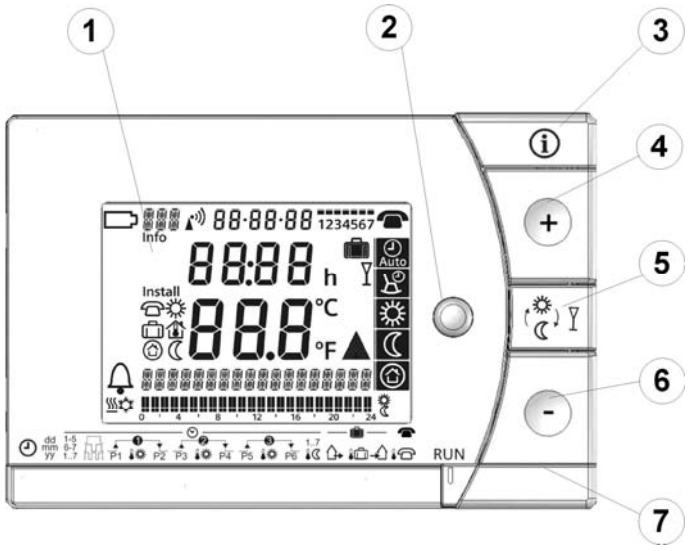
Поставка

Контроллер поставляется с батарейками.

Механическая конструкция

Пластиовый корпус с большим дисплеем с крупными символами, простые элементы управления и съмная база.
Копус содержит электронную плату, DIP-переключатели и реле с безпотенциальными перекидными контактами. Легкодоступный отсек для 2-х лементов питания 1.5 V, тип AA.
База с блоком клемм позволяет без труда разместить нужные провода.

Дисплей и элементы управления



1	**Дисплей**		
	Заменить батарею	17·03·08	Дата (дд - мм - гг)
	Тревога	22:30	Время дня
	Режим отопление	21.0°C	Температура в комнате (измерена)
	Режим охлаждения	TEMPERATURE	Дисплей для строчного теста (макс. 18 симв.)
WED	День недель (3 симв.)		24 час. Шкала времени Режим переключ. Мигающий курсор
Info	Инфо		
Without language selection		12345 67	Блок дней недели Блок выходных дней День недели
	Уставка для дистанцион. управления		
	Уставка режима Комфорт		
	Уставка режима Отсутств.	**h**	Единицы времени
	Температура в комнате		Режим Отсутств/Каникулы
	Уставка режима Защита		Режим Отсутств/Каникулы активный
	Уставка режима Энергосбережение		Режим Вечеринка
		°C / °F	Единицы темпер. °C или °F
	Время из Франкфурта		Отопл/охлажд/насос вкл
			Дистанцион. Управление активно

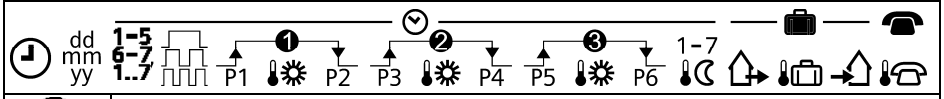
2	**Селектор режимов работы**
Auto	Автоматический недельный режим, до 3-х переключений отопление/охлаждение в день.
	Особый режим, до 3-х переключений отопление/охлаждение в день.
	Непрерывный режим Комфорт (= постоянная уставка Комфорт).
	Непрерывный режим Энергосбережение (= постоянная уставка Энергосбережение).
	Режим защиты (Защита от заморозки и перегрева).

3	**ИНФО**
	Первое нажатие кнопки Инфо подсвечивает дисплей. Подсветка автоматически отключается вскоре. Повторное нажатие кнопки Инфо активирует информационный дисплей

4	**Кнопка плюс**
+	Увеличение значений, задание времени, или выбор параметра.

5	**Кнопка отключения автоматики / Режим Вечеринка**
	В режиме программы расписаний эта кнопка позволяет быстро переключиться с текущей уставки на следующую и назад. Таким образом, можно быстро переключиться на режим Энергосбережение при уходе из квартиры. Этот дисплей отображает изменение. Это дейтвует только до следующего периода переключения. **Активизация режима Вечеринка: Нажмите кнопку на 3 сек.** Режим Вечеринка доступен только из режимов  и  . В режиме Вечеринка контроллер регулирует любую заданную уставку температуры в течение любого периода времени. В режиме Вечеринка, символ  активен во время всего периода.

6	**Кнопка минус**
	Уменьшение значений, задание времени, или выбор параметра.

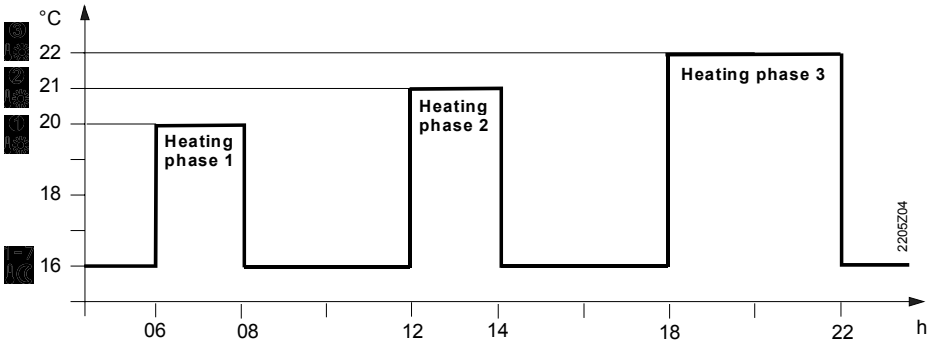
7	**Ползунок выбора программы**						
							
	Время						
	ДД – ММ – ГГ (2 симв. День, Месяц, Год)						
	Блок дней недели, блок выходных или особых дней						
	1, 2, или 3 фазы комфорта.						
	Старт фазы комфорта1		Старт фазы комфорта2		Старт фазы комфорта3		
	Уставка фазы комфорта1		Уставка фазы комфорта2		Уставка фазы комфорта3		
	Окончание фазы комфорта1		Окончание фазы комфорта2		Окончание фазы комфорта3		
	Температура режима Энергосбережение в режимах Авто и Особые дни.						
	Начало периода Отсутствие/Каникулы						
	Уставка температуры периода Отсутствие/Каникулы						
	Окончание периода Отсутствие/Каникулы						
	Temperature setpoint at active remote control						
RUN	Положение ползунка RUN позволяет закрыть крышку						

Работа по расписанию

Контроллер допускает 2 программы расписаний Auto и .

Введите время старта и окончания для каждого режима. Также комфортная температурная уставка может быть введена для каждого режима. Между комфортными режимами контроллер допускает ввод уставок режимов Энергосбережение.

Пример для
3-х режимов отопления



Непрерывные режимы работы

Контроллер допускает 3 непрерывных режима: комфортный ,
режим энергосбережение и защита от заморозки.

Уставки

Вы можете легко настраивать уставки для недельных расписаний и 24-часовых режимов.

Диапазон изменения для всех уставок без ограничения уставки 3…35 °C.

Диапазон изменения для всех уставок с ограничением уставки 16…35 °C.

Заводские уставки

	Заводские уставки отопление	Заводские уставки охлаждение
, , ,	20 °C	24 °C
1-7,	16 °C	28 °C
	8 °C	35 °C
,	12 °C	30 °C

Заводские уставки: Время переключения						
Фазы комфорта	P1	P2	P3	P4	P5	P6
1.	07:00	23:00	PASS	PASS	PASS	PASS
2.	06:00	08:00	17:00	22:00	PASS	PASS
3.	06:00	08:00	11:00	13:00	17:00	22:00

7-дневное расписание

Имеются 3 различных шаблона для простого ввода интервала расписаний. Они могут быть связаны с соответствующими днями недели 1…5 и выходными днями 6…7. В результате вам нужно адаптировать периоды переключения и комнатные температурные уставки только один раз для каждого блока.

Шаблон переключений	Блоки
	12345 67

Также вы можете настроить особые дни 1 … 7.

Задание режимов Каникулы/Отсутствие

Можно задать начало, окончание каникул и температуры. В начале каникул контроллер переключается на заданную уставку до окончания каникул.

В режиме Каникулы, символ отображается постоянно.

Процедура задания параметров:

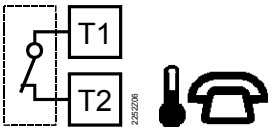
	Переместите ползунок в положение 15 (начало отсутствия): Нажмите + или - для задания даты начала каникул.
	Переместите ползунок в положение 16 (температура при отсутствии): Нажмите + или - для задания температурной уставки.
	Переместите ползунок в положение 17 (окончание отсутствия): Нажмите + или - для задания даты окончания каникул.
RUN	Переместите ползунок в положение RUN. Символ отобразиться левее символа Auto. Нажмите , +, -, или переместите ползунок на преждевременное окончание периода каникул.

Дистанционное управление

Используйте подходящее устройство для дистанционного управления температурной уставкой контроллера . Изменеие уставки происходит при замыкании безпотенциального контакта на клеммах T1 и T2.

При мигании символа можете быть уверены, что режим дистанционного управления активен.

После размыкания контактов, контроллер переходит на регулирование устаки заданной ранее.

Работа согласно уставкам контроллера	Работа при активном режиме “дистанционное управление“
	

Подходящие устройства для дистанционного управления:

Телефонный модем, речевой переключатель, оконный контакт, датчик присутствия и т.д.

Задание температуры для режима дистанционное управление

Вы можете свободно задавать температуру для режима дистанционное управление. Активизация дистанционного управления незамедлительно приводит к смене уставки. При деактивации режима дистанционное управление контроллер возвращается на поддержание активной температурной уставки.

Мигание символа индицирует активный режим дистанционого управления.

Процедура задания параметров:

	Переместите ползунок в положение 18 (температура для активного режима дист.управления): Нажмите + или - для задания требуемой температуры для активного режима дист.управления.
RUN	Переместите ползунок в положение **RUN**.

Технические возможности

DIP-переключатели

DIPперекл.△ **ВКЛ** / ▽ **ВЫКЛ**		1	2	3	4	5	6	7	8	9	10		
A	Калибровка датчика Вкл	△					△					Периодическое включение насоса и функция анти-накипь Вкл	**E**
	Калибровка датчика Выкл	▽					▽					Периодическое включение насоса и функция анти-накипь Выкл	
B	Ограничение уставки 16-35°C		△					△	△			Старт оптимизации: 1ч/°C	**F**
	Ограничение уставки 3-35°C		▽					△	▽			Старт оптимизации: ¼ ч/°C	
C	Температура °F			△				▽	△			Старт оптимизации: ½ ч/°C	
	Температура °C			▽				▽	▽			Старт оптимизации: Выкл	
D	Самонастраиваемый PID				△	△				△		❄ (Режим: Охлаждение)	**G**
	PID 6				△	▽				▽		≋ (Режим: Отопление))	
	PID12				▽	△					△	Кварц	**H**
	2-точечн.				▽	▽					▽	Радио часы	
J	Сброс DIP-переключателей  После переключения одного или нескольких DIP-переключателей, требуется нажать кнопку Сброс DIP-переключателей. В противном случае сохраняться предыдущие установки**!**												**J**
Заводское положение: Все DIP-переключатели ▽ ВЫКЛ													

A Калибровка датчиков:
DIP-перекл. 1

Если показание комнатной температуры отличается от измеренной, можно откалибровать температурный датчик.
Установить DIP-перекл. ВКЛ и нажать Сброс DIP-перекл.:
Отображается символ **CAL**. Текущая измеренная температура мигает.
Нажать + или - для рекалибровки, макс. **± 5 °C**.
Переместить DIP-перекл. ВЫКЛ и Сброс DIP-перекл. для сохранения параметров.

B Ограничение уставки:
DIP-перекл. 2

Минимальное ограничение уставки 16 °C предотвращает непредвиденный перенос холодного воздуха между отопительными зонами.
DIP-перекл. ВКЛ: Ограничение уставки **16…35 °C**.
DIP-перекл. ВЫКЛ: Ограничение уставки **3…35 °C** (заводская установка).
Нажать Сброс DIP-перекл. для сохранения параметров.

C Температура в °C или °F:
DIP-перекл. 3

DIP-перекл. ВКЛ: Температура в **°F**.
DIP-перекл. ВЫКЛ: Температура в **°C** (заводская установка).
Нажать Сброс DIP-перекл. для сохранения параметров.

D Работа контроллера:
DIP-перекл. 4 и 5

REV24… является 2-позиционным контроллером с PID-регулятором. Комнатная температура регулируется с помощью циклического включения исполнительного механизма.

DIP-перекл. 4 ВКЛ и 5 ВКЛ: **PID самонастраиваемый**
Адаптивнре управление для всех приложений.

DIP-перекл. 4 ВКЛ и 5 ВЫКЛ: **PID 6**
Регулирование для быстрых систем, с большими перепадами температуры.

DIP-перекл. 4 ВЫКЛ и 5 ВКЛ: **PID 12**

Регулирование для нормальных систем

DIP-перекл. 4 ВЫКЛ и 5 ВЫКЛ: **2-точечн.**

Для компелксных управляемых систем, простой 2-позиц. Регулятор с дифференциалом переключения 0.5 °C (заводская установка).

Нажать Сброс DIP-перекл. для сохранения параметров.

E Периодическое включение насоса и функция анти-накипь:

DIP-перекл. 6

Применима только для приложений с цирк.насосом или клапаном!

Эта функция защищает насос или клапан в режиме ожидания от образования отложений кальция.

Периодический толчок насоса активируется каждые 24часа в 12 p.m. на 3 минуты (символ ▲ отображается при рабте насоса).

DIP-перекл. ВКЛ: Толчок насоса вкл.

DIP-перекл. ВЫКЛ:Толчок насоса выкл (заводская установка).

Нажать Сброс DIP-перекл. для сохранения параметров.

F Старт оптимизации:

DIP-перекл. 7 и 8

Режим оптимизации гарантирует выход на заданную температурную уставку P.1 в расчетное время. Параметры зависят от системы регулирования, например от длины трубопроводов, радиаторов, теплопроводности здания, теплоизоляции и параметров теплоносителя.

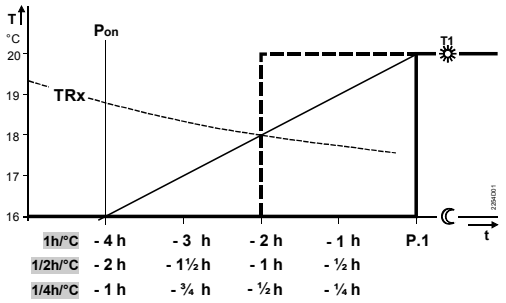
DIP-перекл.7 ВКЛ и 8 ВКЛ: 1 ч/°C Для «медленных» систем.

DIP-перекл.7 ВКЛ и 8 ВЫКЛ:¼ ч/°C Для «быстрых» систем.

DIP-перекл.7 ВЫКЛ и 8 ВКЛ:½ ч/°C Для «средних по времени» систем.

DIP-перекл.7 ВЫКЛ и 8 ВЫКЛ: Оптимизация выкл (заводская установка).

Нажать Сброс DIP-перекл. для сохранения параметров.



Пояснения к рисунку (5).:

T	Температура (°C)
t	Перемещение вперед точки переключения (ч)
TRx	Текущее значение комнатной температуры
Pon	Время старта режима оптимизации

G Режим работы отопление или охлаждение:

DIP-перекл. 9

Можно задать переключение контроллера на приложение охлаждение с помощью DIP-перекл. 9.

DIP-перекл. 9 ВКЛ: Охлаждение

DIP-перекл. 9 ВЫКЛ: Отопление (заводская установка)

Нажать Сброс DIP-перекл. для сохранения параметров.

H Радио-часы:

DIP-перекл. 10

Применимо для REV..DC (в непосредственной близости Frankfurt, Germany)!

J Сброс DIP-перекл.

После смены положения одного или более DIP-переключателей, требуется нажать кнопку Сброс DIP-перекл..

В противном случае сохраняться предыдущие установки**!**

Переход на экспертный уровень

Переместить селектор программы в положение RUN. Нажать + и − одновременно на 3сек, отпустить кнопки, и в течение 3 сек нажать и удерживать 3 сек кнопки ○ и ⏻ одновременно, отпустить ⏻, и нажать ○ на следующие 3сек. Это переводит в экспертный режим. Отображается **Install**.
На дисплее сначала отображается код 00 Смена языка. Нажать + или − для навигации по настройкам.
Подтвердить выбор кнопкой ⏻.
Нажать кнопку ○ для выхода из экспертного режима.

Список кодов

Функц.блок	Код	Имя	Заводские установки	Ваши установки
Базове настройки	00	Язык	English	
	01	Калибровка датчика	выкл	
	02	Дифф.переключения 2-точечн.	0.5 °C	
LCD настройка	10	Время подсветки	10 сек	
	11	Яркость подсветки	0	
	12	Контраст	0	
Установка часов	30	Временная зона Отклонение от сигнала из Франкфурта (Central European Time CET)	0 час	
	31	Переход на летнее время	Март 31 (03-31)	
	32	Переход на зимнее время	Октябрь 31 (10-31)	

Проверка работоспособности

a) Проверить дисплей. Если нет сигнала, проверьте батарейки.
b) Рабочий режим “Непрерывный комфорт“ ☼, считайте значение температуры.
c) REV.. в режиме отопления: Установить уставку температуры выше комнатной температуры (см инструкцию).
REV.. в режиме охлаждения: Установить уставку температуры ниже комнатной температуры (см инструкцию)
d) Реле, и как следствие исполнительный механизм должны включться как минимум на 1 минуту. Символ ▲ отображается. Если не отображается:
   - Проверить привод и проводку
   - Возможно, в режиме отопления комнатная температура выше уставки (и ниже в режиме охлаждения)
e) Задать уставку температуры для режима “Непрерывный комфорт “ ☼ для расчетных условий
f) Выбрать требуемый режим работы

Сброс

Пользовательские настройки:

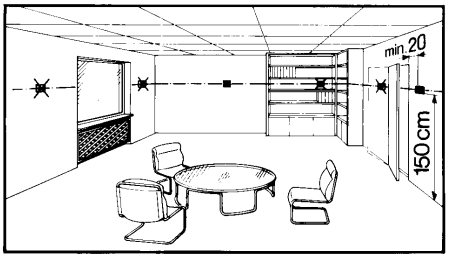
Нажать ○, [+] и [-] одновременно на 3 сек:
Это приводит к сбросу всех температурных временных параметров на значения по умолчанию (см "Заводские установки"). Установки уровня эксперт остаются без изменения.
Часы стартуют в 12 p.m., дата 01-01-08 (01 января 2008).
При сбросе, все поля дисплея засвечиваются и их можно проверить.

Все пользовательские настройки, плюс экспертные настройки:

Нажать кнопку Сброс DIP-перекл.  , [+] и [-] одновременно на 5 сек:
После жсброса, све заводские уставки перезагружаются.

Инжиниринг

- Установить контроллер в главной жилой комнате
- При выборе места установки контроллера убедитесь, что датчик температуры точно измеряет комнатную температуру, и не подвержен влиянию солнечной радиации, отопительных и охлаждающих приборов.
- Высота монтажа ~ 1.5 м над полом
- Можно монтировать непосредственно на стену или на монтажную коробку



Монтаж и инсталляция

- Начать монтаж следует с установки основания и электропроводки. Затем установить контроллер сверху вниз в основание.
  За подробными инструкциями обращайтесь к Руководству по монтажу.
- Соблюдайте все местные правила по электроустановке
- Проводку для дистанционного управления контактами T1 / T2 выполните отдельным экранированным кабелем
-

Наладка

- Удалите транспортную прокладку, изолирующую контакты. Выбрать требуемый язык [+] или [-]. Подтвердить [⚙].
- Вы можете изменить настройки с помощью DIP-переключателей
- Установить термостатические ралиаторные клапаны в комнате в полность открытое положение, если таковые присутствут
- Проведите калибровку температурного датчика (см "Калибровка датчика") если комнатная температура не соответствует показаниям датчика

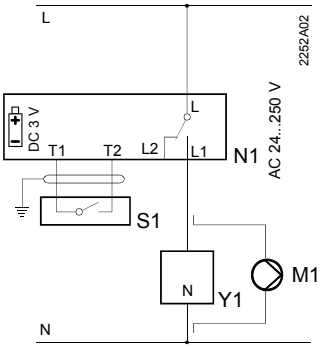
Примечания

Этот прибр является цфровым контроллером класса A, расчитанным на эксплуатацию при нормальных условиях загрязнения.

Технические характеристики

Общие характеристики	Электропитание	DC 3 V
	Батареи (alkaline AA)	2 x 1.5 V
	Срок службы	приблизит. 2 года
	Работа часов при смене батареи (все остальные данные сохраняются в EEPROM)	Макс. 1 мин
	Нагрузка реле	
	Напряжение	AC 24…250 V
	Ток	0.1…6 (2.5) A
	Класс защиты	II as per EN 60 730-1
	Чувствительный элемент	NTC 10 kΩ ±1 % at 25 °C
	Диапазон	0…50 °C
	Постоянная времени	Макс. 10 мин
	Диапазон задания уставки	
	Температурные уставки	3…35 °C
	Разрешение для настроек и отображения величин	
	Уставки	0.2 °C
	Время переключения	10 мин
	Текущие измерения значений	0.1 °C
	Текущие отображение значений	0.2 °C
	Время дисплея	1 мин
Стандарты	CE подобие	
	Электромагнитная совместимость	2004/108/EEC
	Низковольтная директива	2006/95/EC
	C-tick	N474
Безопасность	автоматическое электронное управление для зданий и схожих приложений	EN 60 730-1
	Электромагнитная совместимость	
	Нечуствительность	EN 61000-6-2
	Выбросы	EN 61000-6-3
	Класс защиты	IP20
Окружающая среда	Работа	
	Климатические условия	3K3 согл. IEC 60 721-3
	Температура	5...40 °C
	Влажность	<85 % r.h.
	Хранение и транспортировка	
	Климатические условия	2K3 согл IEC 60 721-3
	Температура	-25...70 °C
	Влажность	<93 % r.h.
	Механические условия	2M2 согл IEC 60 721-3
Вес	Без упаковки	0.29 кг
Цвет	Корпус	RAL9003 белый
	Основание	RAL7038 серый
Габариты	Корпус с основанием	90 x 134.5 x 30 мм

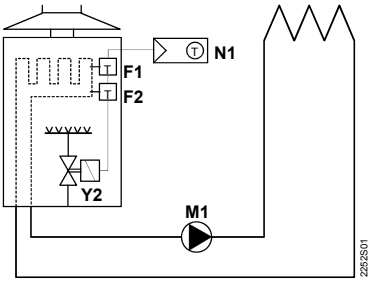
Схема подключения



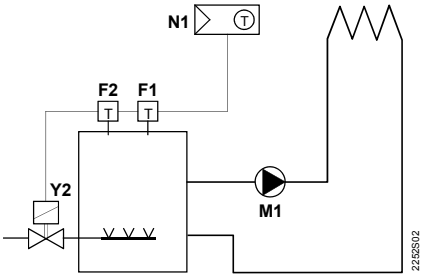
REV24 / REV24DC

L	Фаза, AC 24 … 250 V	S1	Прибор дистанционного управления (безпотенциальный)
L1	N.O. контакт, AC 24 …250 V / 6 (2.5) A	T1	Сигнал дистанционного управления
L2	N.C. контакт, AC 24 … 250 V / 6 (2.5) A	T2	Сигнал дистанционного управления
M1	Циркуляционный насос	Y1	Исполнительный механизм
N1	REV24… контроллер		

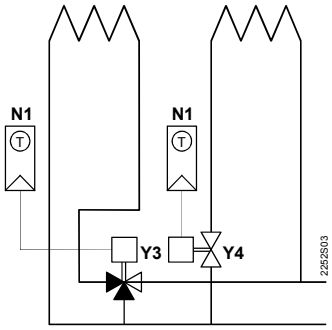
Примеры приложений



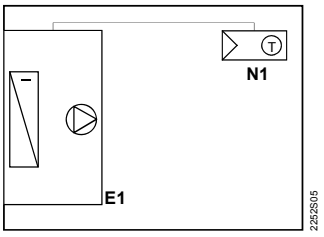
Водонагреватель



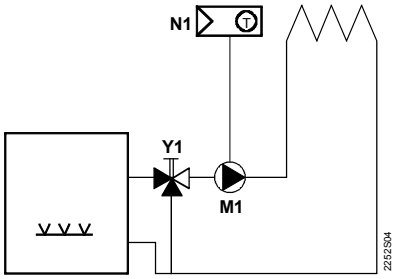
Атмосферная газовая горелка



Зональные клапаны



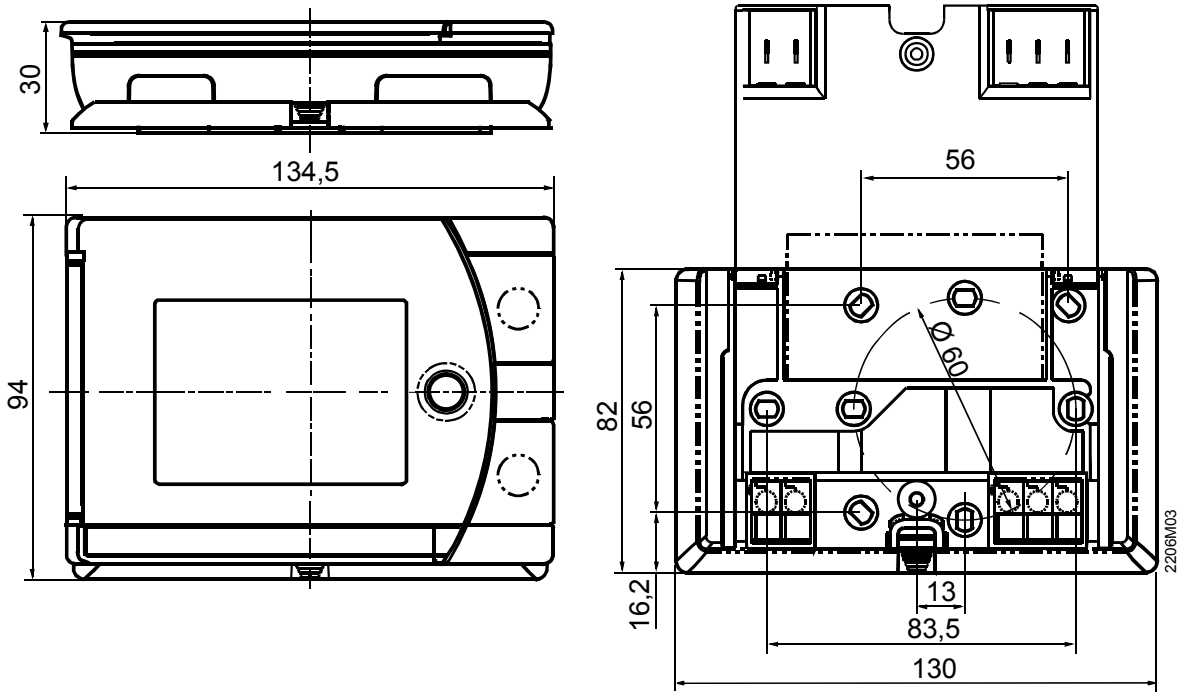
Холодилка



Циркуляционный насос с предварительным управлением ручным смесительным клапаном

E1	Холодильная машина	Y1	3-ходовой клапан с ручной настройкой
F1	Ограничительный термостат со сбросом по температуре	Y2	Магнитный клапан
F2	Ограничительный термостат с ручным сбросом	Y3	3-ходовой клапан с приводом
M1	Циркуляционный насос	Y4	2-ходовой клапан с приводом
N1	REV24.. контроллер комнатной температуры		

Габариты



SIEMENS

24-hour
room temperature controller REV13..

Heating applications

- **Mains-independent, battery-operated room temperature controller featuring user-friendly operation, easy-to-read display and large numbers**
- **Self-learning two-position controller with PID response (patented)**
- **Operating mode selection:**
  - **Automatic mode with two heating phases**
  - **Automatic mode with one heating phase**
  - **Continuous comfort mode**
  - **Continuous energy saving mode**
  - **Frost protection**
- **Automatic modes with time switch program**
- **Heating zone control**

Use

Room temperature control in:

- Single-family and vacation homes.
- Apartments and offices.
- Individual rooms and professional office facilities.
- Commercially used spaces.

Control for the following equipment:

- Magnetic valves of an instantaneous water heater.
- Magnetic valves of an atmospheric gas burner.
- Forced draught gas and oil burners.
- Electrothermal actuators.
- Circulating pumps in heating systems.
- Electric direct heating.
- Fans of electric storage heaters.
- Zone valves (normally open and normally closed).

Function

- PID control with self-learning or selectable switching cycle time
- 2-point control
- 24-hour time switch
- Remote control
- Preselected 24-hour operating modes
- Override function
- Party mode
- Frost protection mode
- Information level to check settings
- Reset function
- Sensor calibration
- Minimum limitation of setpoint
- Synchronization to radio time signal from Frankfurt, Germany (REV13DC)

Type summary

24-hour room temperature controller	**REV13**
24-hour room temperature controller with receiver for time signal from Frankfurt, Germany (DCF77)	**REV13DC**

Ordering

Please indicate the type number as per the "Type summary" when ordering.

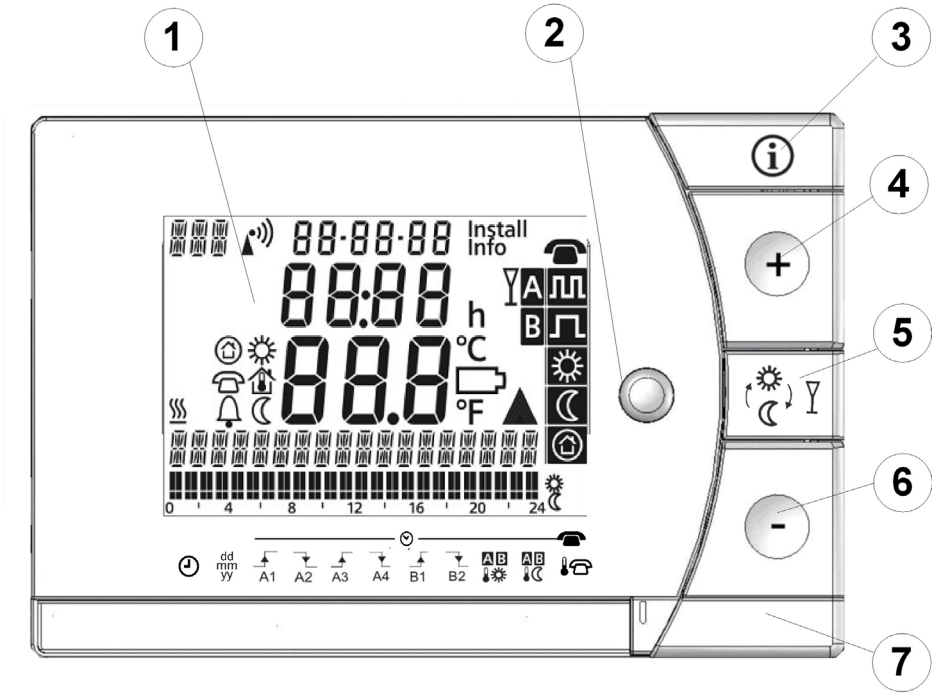
Delivery

The controller is supplied with batteries.

Mechanical design

Plastic casing with an easy-to-read display and large numbers, easily accessible operating elements, and removable base.
The housing contains the controller's electronics, DIP switches, and the relay with potential-free changeover contact. The easily accessible battery compartment allows for easy exchange of two 1.5 V alkaline batteries, type AAA.
The base with terminal block provides lots of space to connect the wires.

Display and operating elements



1	**Display**		
WED	Weekday (max. 3 spaces)		24 hour timeframe Switching pattern with flashing time cursor
	Heating mode		
	Time signal from Frankfurt	**Info**	Information display
Without language selection	Setpoint for frost protection mode	**h**	Time unit
	Setpoint for comfort mode	**°C / °F**	Temperature unit °C or °F
	Setpoint for remote control		Change battery
	Room temperature		Party mode active
	Alarm		Heating / pump on
	Setpoint for energy saving mode		Remote control active
17·03·08	Date (day - month - year)		Operating mode (operating mode selector, see below)
22:30	Time of day		
21.0°C	Room temperature (measured)		
TEMPERATURE	Clear text display line (max. 18 spaces)		

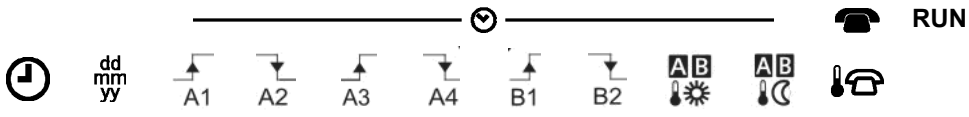
2	**Operating mode selector**
	Automatic 24-hour mode with two heating phases
	Automatic 24-hour mode with one heating phase
	Continuous comfort mode (= continuous comfort temperature)
	Continuous energy saving mode (= continuous energy saving temperature)
	Frost protection mode (= continuous frost protection temperature)

3	**INFO**
	Pressing the Info button once illuminates the display. Illumination automatically turns off after a short period of time. Pressing the Info button again activates the information display: **Info** is lit. The unit first displays queued error messages followed by important information (e.g. time switch programs, etc.).

4	**Plus button**
+	Increase values, set time, or make a selection.

5	**Override button / party mode**
	In the time switch program, this button allows you to quickly change from the active temperature level to the next and back. Thus, you can quickly change to energy saving temperature when you leave the apartment for a short period of time, thus saving energy. The display indicates the change. It is valid only until the next switching time. **Activate party mode: Press the button for 3 seconds.** Party mode is available only in operating modes A and A. In party mode, the controller controls to a freely selectable temperature for a freely selectable period of time. In party mode, symbol is displayed along with the end of party mode.

6	**Minus button**
	Decrease values, set time, or make a selection.

7	**Program selection slider**
	RUN dd mm yy A1 A2 A3 A4 B1 B2

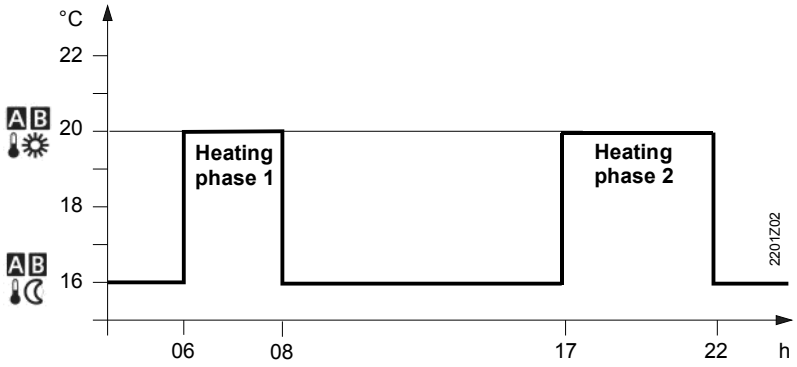
	Time.	
dd mm yy	Day – Month – Year (2 spaces for day, month, and year).	
A1	Start time 1	User-specific settings for 1st heating phase for automatic mode with 2 heating phases A.
A2	End 1	
A3	Start time 2	User-specific settings for 2nd heating phase for automatic mode with 2 heating phases A.
A4	End 2	
B1	Start time	User-specific settings for automatic mode with 1 heating phase B.
B2	End	
AB	Comfort temperature for the automatic mode time switches A and B.	
AB	Energy saving temperature for the automatic mode time switches A and B.	
	Temperature setpoint at active remote control.	
RUN	Slider position RUN allows for closing the cover.	

24-hour operation with time switch program

Example A with
2 heating phases

The controller offers the two time switch programs A and B.

Enter a start time and end time for each heating phase. The comfort temperature setpoint can be freely entered and is the same for both heating phases. Between the heating phases the controller always switches to the same, freely selectable energy saving temperature setpoint.



Continuous operating modes

The controller also offers the three 3 continuous modes comfort mode, energy saving mode and frost protection mode.

Setpoints

You can freely adjust temperature setpoints.
Setting range for all setpoints without setpoint limitation 3…35 °C.
Setting range for all setpoints with setpoint limitation 16…35 °C.

Factory setting

Factory settings: Heating		
	,	20 °C
	,	16 °C
		8 °C
		12 °C

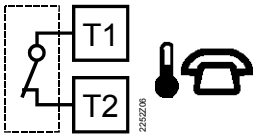
Factory settings: Switching times				
A	A1	A2	A3	A4
	06:00	08:00	17:00	22:00

B	B1	B2
	07:00	23:00

Remote control

Use a suitable remote control unit to activate the "Remote control" temperature setpoint in the controller. Changeover takes place by making a **potential-free contact** connected to terminals T1 and T2.

A flashing symbol indicates active remote control mode.
After the contact opens, the previously set operating mode is reactivated.

Operation according to controller setting	Temperature setpoint “remote control“ active
	

Suitable remote control units are:
Telephone modem, manual switch, window contact, presence detector, central unit, etc.

Enter temperature for active remote control

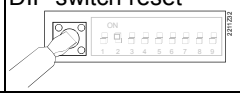
You can freely select the temperature for active remote control. Activating remote control immediately enables control to the remote control temperature regardless of the currently active operating mode. When you deactivate remote control, the controller returns to the set operating mode.
A flashing symbol indicates active remote control mode.

Proceed as follows to enter your settings:

	Set slider to temperature for active remote control: Press + or + to set the desired temperature.
RUN	Return the slider to position **RUN**.

Technical features

DIP switches

△ ON / ▽ OFF		1	2	3	4	5	6
See **A**	Sensor calibration On	△					
	Sensor calibration Off	▽					
B	Setpoint limitation 16…35 °C		△				
	Setpoint limitation 3…35 °C		▽				
C	Temperature display °F			△			
	Temperature display °C			▽			
D	PID self-learning				△	△	
	PID 6				△	▽	
	PID12				▽	△	
	2-point				▽	▽	
E	Quartz						△
	Radio clock						▽
F	DIP switch reset 	After you change one or several DIP switch positions, you must press the DIP switch reset button to reset the DIP switch. **Otherwise, the previous setting remains active!**					
Factory setting: All DIP switches to ▽ OFF							

A Sensor calibration:
DIP switch 1

If the displayed room temperature does not match the measured room temperature, the temperature sensor can be recalibrated.
Set DIP switch to ON and press the DIP switch reset button:
CAL symbol is displayed. The currently measured temperature flashes.
Press + or + to recalibrate by max. **± 5 °C**.
Set DIP switch to OFF and press the DIP switch reset button to save the settings.

B Setpoint limitation:
DIP switch 2

The minimum setpoint limitation of 16 °C prevents undesired heat transfer to neighboring spaces in buildings featuring several heating zones.
DIP switch ON: Setpoint limitation **16…35 °C**.
DIP switch OFF: Setpoint limitation **3…35 °C** (factory setting).
Press the DIP switch reset button to save the settings.

C Temperature display in °C or °F:
DIP switch 3

DIP switch ON: Temperature display in **°F**.
DIP switch OFF: Temperature display in **°C** (factory setting).
Press the DIP switch reset button to save the settings.

D Control behavior:
DIP switches 4 and 5

The REV13… is a two-position controller with PID control. The room temperature is controlled through cyclic switching of an actuating unit.

DIP switches 4 ON and 5 ON: **PID self-learning**
Adaptive control for all applications.

DIP switches 4 ON and 5 OFF: **PID 6**
Fast controlled system for applications in locations with large temperature deviations.

DIP switches 4 OFF and 5 ON: **PID 12**
Normal controlled system for applications in locations with normal temperature deviations.

DIP switches 4 OFF and 5 OFF: **2-point**
For complex controlled systems, simple two-position controller with 0.5 °C switching differential (factory setting).

Press the DIP switch reset button to save the settings.

E Radio clock:
DIP switch 10

Only applicable to REV..DC (with integrated DCF77 receiver to receive time signal from Frankfurt, Germany)!
DIP switch ON: Clock run by controller-internal quartz.
DIP switch OFF: Time signal DCF77 from Frankfurt, Germany.

Press the DIP switch reset button to save the settings.

Note
on synchronization

During startup, REV..DC synchronizes automatically to the time signal (DCF77) from Frankfurt, Germany. Synchronization takes max. 10 minutes. Synchronization restarts each time you press the button or move the program selection slider from the RUN position during these 10 minutes. Siemens recommends to set the desired settings upon startup, install the REV..DC in the desired location, and not carry out any actions on the REV..DC for the next 10 minutes.
In normal operation, the REV..DC synchronizes to the radio clock every day at 3:10 a.m.

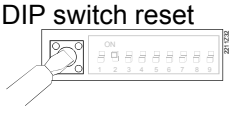
Note
on reception

The time signal from Frankfurt is modulated to a radio signal. The reception of this radio signal depends on the distance to Frankfurt, atmospheric conditions as well as the location where the REV..DC is installed. Siemens cannot guarantee that the REV..DC can receive the time signal from Frankfurt at any time and any place.

No reception

The radio clock symbol is deactivated and an error message is displayed if the clock was not able to synchronize the time for 7 consecutive days. The controller then runs on the internal quartz.

F DIP switch reset



After you change one or several DIP switch positions, you must press the DIP switch reset button to reset the DIP switch.
Otherwise, the previous setting remains active!

Access to the expert level

Set the program selection slider to RUN. Press + and + simultaneously for 3 seconds, release the buttons, and within 3 seconds press and hold down ○ and 🌡 simultaneously for 3 seconds, release 🌡, and press ○ for another 3 seconds. This releases the engineering settings. **Install** is displayed.
The display first shows language selection with Code 00. Press the buttons + or + to navigate the settings.
Confirm settings by pressing 🌡.
Press the operating mode selector ○ to exit the engineering settings.

Code list

Function block	Code	Name	Factory setting	Your setting
Basic settings	00	Language	English	
	01	Sensor calibration	off	
	02	Switching differential 2-point	0.5 °C	
LCD optimization	10	Illumination time	10 seconds	
	11	Background brightness	0	
	12	Contrast	0	
Clock settings	30	Time zone Deviation from time signal in Frankfurt (Central European Time CET) (see Note 1)	0 hours	
	31	Start of daylight saving time (see Note 2)	March 31 (03-31)	
	32	End of daylight saving time (see Note 3)	October 31 (10-31)	

Note 1: This entry has no effect if the radio clock either is inactive or not available. The time signal received from Frankfurt is shifted by the value set in Code 30 (time zone) if the radio clock is active.

Note 2: The time is always changed over at 2 a.m. on the Sunday preceding the set date if there is no radio clock or if it is inactive. The time change is shifted by the value set in Code 30 (time zone) when the radio clock is active.

Note 3: The time is always changed over at 3 a.m. on the Sunday preceding the set date if there is no radio clock or if it is inactive.

Functional check

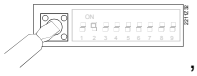
a) Check the display. If there is no display, check insertion and function of the batteries.
b) Operating mode “Continuous comfort mode“ ☼, read displayed temperature.
c) Set the temperature setpoint higher than the displayed room temperature (see operating instructions).
d) The relay and, as a result, the actuating device must switch at the latest after one minute. Symbol ▲ is displayed. If not displayed:
   - Check actuating device and wiring.
   - It is possible that in heating mode the room temperature is higher than the set temperature setpoint.
e) Set the temperature setpoint for operating mode “Continuous comfort mode“ ☼ to the desired value.
f) Select the desired operating mode.

Reset

User-defined settings:

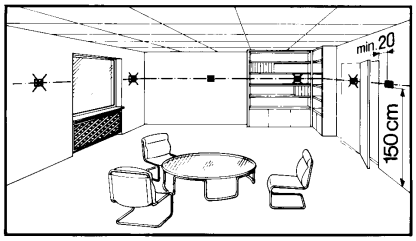
○, + and - simultaneously for 3 seconds:
This resets all temperature and time settings of the program selection slider to default values (see also "Factory settings" in the operating instructions). The expert settings remain unchanged.
The clock starts at 12 p.m., the date on 01-01-08 (01 - January - 2008).
During the reset, all display fields are lit and can be checked accordingly.

All user-defined settings plus expert settings:

Press the DIP switch reset button  , + and + simultaneously for 5 seconds:
After the reset, **all factor settings** are reloaded. This applies to the program selection slider as well as to the expert settings.

Engineering

- Mount the room temperature controller in the main living room.
- Select the mounting place so that the sensor can acquire the air temperature in the room as accurately as possible and without being influenced by solar radiation or other heat or refrigeration sources.
- Mounting height is approx. 1.5 m above the floor.
- You can mount the unit on most commercially available recessed conduit boxes or directly on the wall.



Mounting and installation

- Begin installation by first attaching and wiring the base. You can mount the base on most commercially available recessed conduit boxes or directly on the wall. Then insert the controller from top to bottom into the base.
  For more information, see the installation instructions supplied with the unit.
- Comply with all local regulations on electrical installation.
- Wire separately the remote control contact T1 / T2 using a separate, shielded cable.

Commissioning

- Remove from the batteries the battery transit tab designed to prevent premature activation of the unit: Select desired language by + or -. Confirm by .
- You can change the control characteristics using the DIP switch on the rear of the unit.
- Set any thermostatic radiator valves to their fully open position, if present in the reference room.
- Recalibrate the temperature sensor (see "Sensor calibration") if the displayed room temperature does not match the room temperature measured.

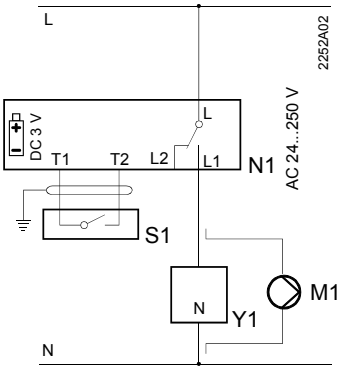
Notes

This is a software class A controller designed for use at a normal degree of pollution.

Technical data

General unit data	Power	DC 3 V
	Batteries (alkaline AAA)	2 x 1,5 V
	Life	Ca. 2 years
	Backup of clock when changing battery (all other data remain in EEPROM)	Max. 1 min
	Switching capacity of relay	
	Voltage	AC 24…250 V
	Current	0.1…6 (2.5) A
	Protection class	II as per EN 60 730-1
	Sensing element	NTC 10 kΩ ±1 % at 25 °C
	Measuring range	0…50 °C
	Time constant	Max. 10 min
	Setpoint setting ranges	
	All temperature settings	3…35 °C
	Resolution for settings and displays	
	Setpoints	0.2 °C
	Switching times	10 min
	Actual value measurement	0.1 °C
	Actual value display	0.2 °C
	Time display	1 min
Standards	CE conformity	
	Electromagnetic compatibility	2004/108/EEC
	Low voltage directive	2006/95/EC
	C-tick	N474
Product safety	Automatic electrical controls for household and similar use	EN 60 730-1
	Electromagnetic compatibility	
	Immunity	EN 61000-6-2
	Emissions	EN 61000-6-3
	Degree of protection	IP20
Environmental conditions	Operation	
	Climatic conditions	3K3 as per IEC 60 721-3
	Temperature	5...40 °C
	Humidity	< 85 % r.h.
	Storage and transport	
	Climatic conditions	2K3 as per IEC 60 721-3
	Temperature	-25...70 °C
	Humidity	< 93 % r.h.
	Mechanical conditions	2M2 as per IEC 60 721-3
Weight	Excl. packaging	0.24 kg
Color	Housing	RAL9003 signal white
	Base	RAL7038 gray
Size	Housing with base	94 x 130 x 30 mm

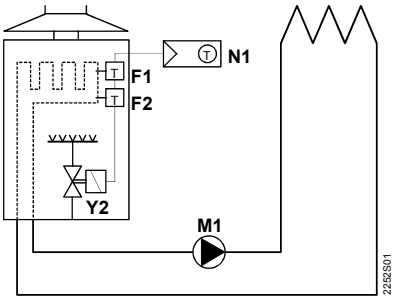
Connection diagrams



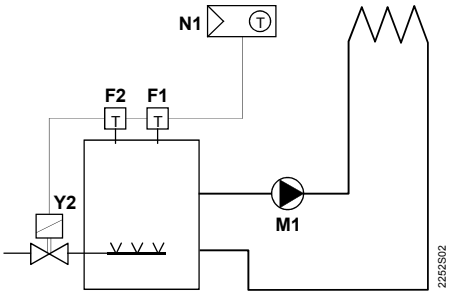
REV13 / REV13DC

L	Phase, AC 24 … 250 V	S1	Remote control unit (potential-free)
L1	N.O. contact, AC 24 …250 V / 6 (2.5) A	T1	Remote control signal
L2	N.C. contact, AC 24 … 250 V / 6 (2.5) A	T2	Remote control signal
M1	Circulating pump	Y1	Actuating device
N1	REV13… controller		

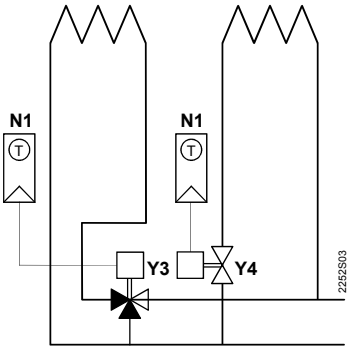
Application examples



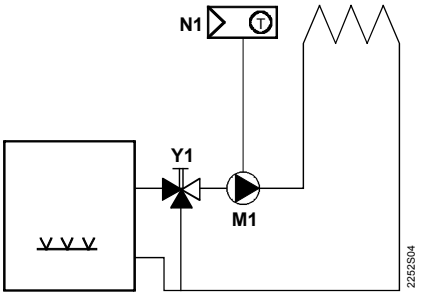
Instantaneous water heater



Atmospheric gas burner



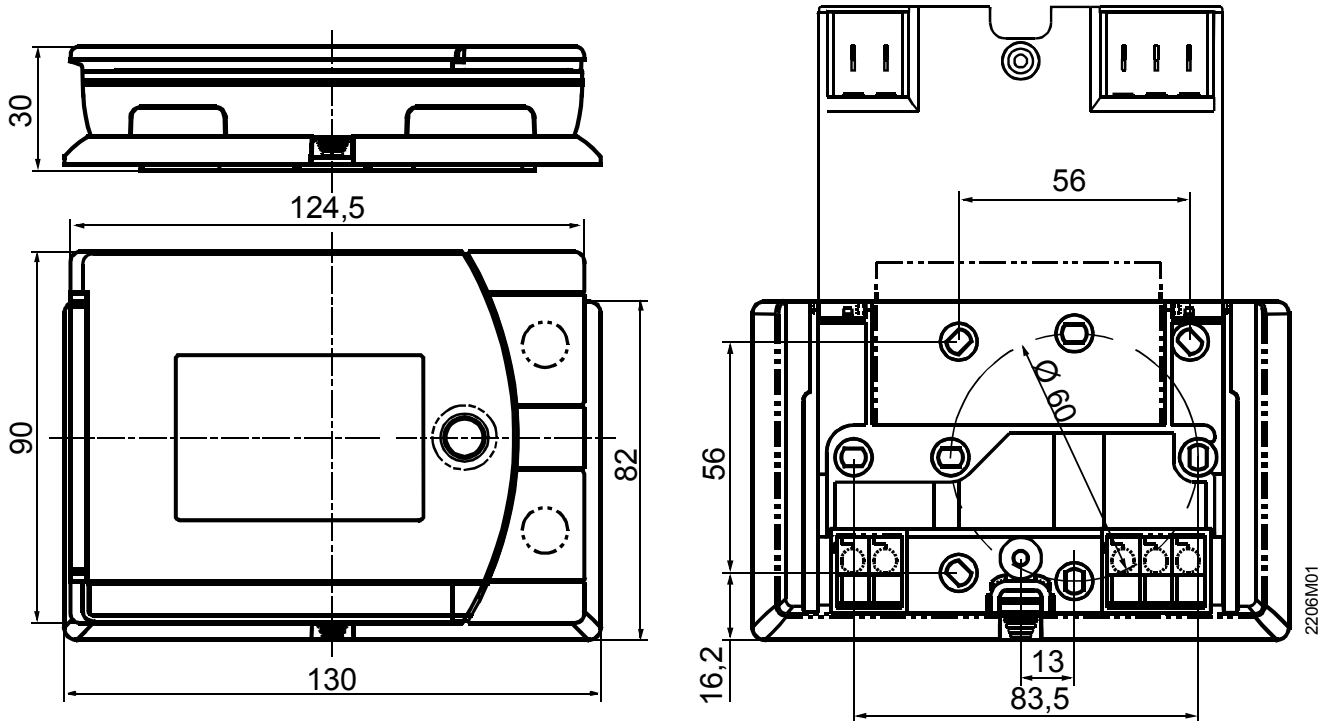
Zone valve



Circulating pump with precontrol by manual mixing valve

F1	Thermal reset limit thermostat	Y1	3-port valve with manual adjustment
F2	Manual reset safety limit thermostat	Y2	Magnetic valve
M1	Circulating pump	Y3	Three-port valve with actuator
N1	REV13.. room temperature controller	Y4	Two-port valve with actuator

Dimensions



SIEMENS

Weekday / weekend room temperature controller REV17..

Heating applications

- **Mains-independent, battery-operated room temperature controller featuring user-friendly operation, easy-to-read display and large numbers**
- **Self-learning two-position controller with PID response (patented)**
- **Operating mode selection:**
  - **7-day (weekday / weekend) automatic mode. with max. 3 heating phases**
  - **Continuous comfort mode**
  - **Continuous energy saving mode**
  - **Frost protection**
  - **Exception day (24 hour operation) with max. 3 heating phases**
- **A separate temperature setpoint can be entered in automatic mode and for the exception day for each heating phase**
- **To control a heating zone**

Use

Room temperature control in:

- Single-family and vacation homes
- Apartments and offices
- Individual rooms and professional office facilities
- Commercially used spaces

Control for the following equipment:

- Magnetic valves of an instantaneous water heater
- Magnetic valves of an atmospheric gas burner
- Forced draught gas and oil burners
- Electrothermal actuators
- Circulating pumps in heating systems
- Electric direct heating
- Fans of electric storage heaters
- Zone valves (normally open or normally closed)

Function

- PID control with self-learning or selectable switching cycle time
- 2-point control
- 7-day time switch
- Remote control
- Preselected 24-hour operating modes
- Override function
- Holiday mode
- Party mode
- Frost protection mode
- Information level to check settings
- Reset function
- Sensor calibration
- Minimum limitation of setpoint
- Periodic pump run
  Protection against valve seizure
- Synchronization to radio time signal from Frankfurt, Germany (REV17DC)

Type summary

Room temperature controller with 7-day (weekday/weekend) time switch	**REV17**
Room temperature controller with 7-day (weekday/weekend) time switch and receiver for time signal from Frankfurt, Germany (DCF77)	**REV17DC**

Ordering

Please indicate the type number as per the "Type summary" when ordering.

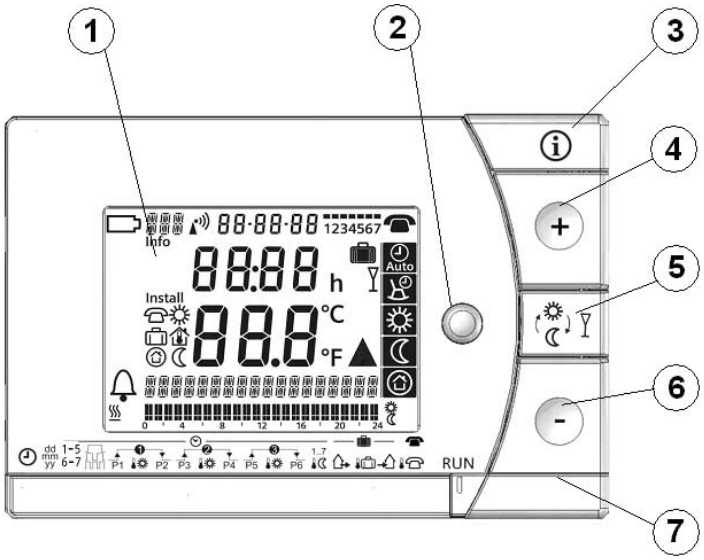
Delivery

The controller is supplied with batteries.

Mechanical design

Plastic casing with an easy-to-read display and large numbers, easily accessible operating elements, and removable base.
The housing contains the controller's electronics, DIP switches, and the relay with potential-free changeover contact. The easily accessible battery compartment allows for easy exchange of two 1.5 V alkaline batteries, type AA.
The base with terminal block provides lots of space to connect the wires.

Display and operating elements



1	**Display**		
	Change battery	17:03:08	Date (day - month - year)
	Alarm	22:30	Time of day
	Heating mode	21.0°C	Room temperature (measured)
		TEMPERATURE	Clear text display line (max. 18 spaces)
WED	Weekday (max. 3 spaces)		24 hour timeframe Switching pattern with flashing time cursor
Info	Info		
Without language selection			Weekday block
	Setpoint for remote control	12345 67	Weekend block
	Setpoint for comfort mode		
	Setpoint for absence	**h**	Time unit
	Room temperature		Absence/holiday mode set
	Setpoint for frost protection mode		Absence/holiday mode active
	Energy saving mode setpoint		Party mode active
		°C / °F	Temperature unit °C or °F
	Time signal from Frankfurt		Heating/pump on
			Remote control active

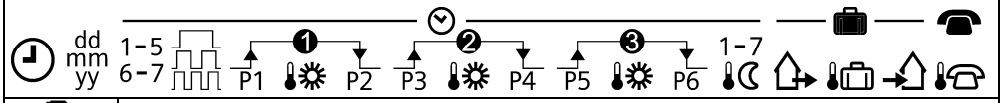
2	**Operating mode selector**
Auto	Automatic weekly mode with max. three heating phases per day.
	Exception day with max. three heating phases.
	Continuous comfort mode (= continuous comfort temperature).
	Continuous energy saving mode (= continuous energy saving temperature).
	Frost protection mode (= continuous frost protection temperature).

3	**INFO**
	Pressing the Info button once illuminates the display. Illumination automatically turns off after a short period of time. Pressing the Info button again activates the information display: **Info** is lit. The unit first displays queued error messages followed by important information (e.g. time switch programs, etc.).

4	**Plus button**
+	Increase values, set time, or make a selection.

5	**Override button / party mode**
	In the time switch program, this button allows you to quickly change from the active temperature level to the next and back. Thus, you can quickly change to energy saving temperature when you leave the apartment for a short period of time, thus saving energy. The display indicates the change. It is valid only until the next switching time. **Activate party mode: Press the button for 3 seconds.** Party mode is available only in operating modes  and  . In party mode, the controller controls to a freely selectable temperature for a freely selectable period of time. In party mode, symbol  is displayed along with the end of party mode.

6	**Minus button**
	Decrease values, set time, or make a selection

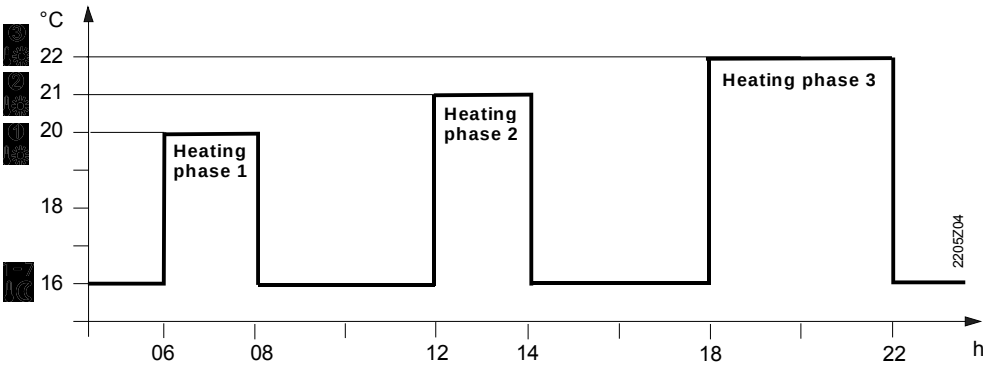
7	**Program selection slider**						
							
	Time						
	Day – Month – Year (2 spaces for day, month, and year)						
	Block of weekdays or block of weekend						
	1, 2, or 3 heating phases						
	Start Heating phase 1			Start Heating phase 2			Start Heating phase 3
	Setpoint Heating phase 1			Setpoint Heating phase 2			Setpoint Heating phase 3
	End Heating phase 1			End Heating phase 2			End Heating phase 3
	Energy saving temperature in the automatic mode and exception day time switch programs						
	Start of absence / holiday						
	Temperature setpoint during absence / holiday						
	End of absence / holiday						
	Temperature setpoint at active remote control						
RUN	Slider position RUN allows for closing the cover						

Operation with time switch program

The controller offers the two time switch programs Auto and .

Enter a start time and end time for each heating phase. Also comfort temperature setpoint can be freely entered for each heating phases. Between the heating phases the controller always switches to the same, freely selectable energy saving temperature setpoint.

Example with 3 heating phases



Continuous operating modes

The controller also offers the three 3 continuous modes comfort mode, energy saving mode and frost protection mode.

Setpoints

You can freely adjust the setpoints for the weekly and 24-hour operating modes.
Setting range for all setpoints without setpoint limitation 3…35 °C.
Setting range for all setpoints with setpoint limitation 16…35 °C.

Factory setting

Factory settings: Heating		
		20 °C
	1–7	16 °C
		8 °C
		12 °C

Factory settings: Switching times						
Heating phases	P1	P2	P3	P4	P5	P6
1.	07:00	23:00	PASS	PASS	PASS	PASS
2.	06:00	08:00	17:00	22:00	PASS	PASS
3.	06:00	08:00	11:00	13:00	17:00	22:00

Weekday / Weekend - Time switch

Three different switching patterns are available to simplify entry of switching times. These can be assigned as blocks to the corresponding weekdays 1…5 and weekend days 6…7. As a result, you need to adapt the switching times and room temperatures only once for each block.

Switching pattern	Blocks
	12345 67

Enter holidays or absences

You can enter the beginning, temperature and end of your holidays. At the beginning of the holidays, the controller switches to the desired holiday temperature and returns to the previously set operating mode at the end of the holidays.

In holiday mode, symbol is displayed along with the end of holiday mode.

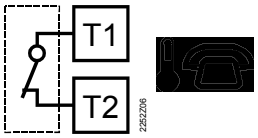
Proceed as follows to enter your settings:

	Set slider to position 15 (start of absence): Press + or - to set the start date for your holidays.
	Set slider to position 16 (temperature during absence): Press + or - to set the desired temperature while on holidays.
	Set slider to position 17 (end of absence): Press + or - to set the end date for your holidays.
RUN	Return the slider to position RUN. Symbol is displayed to the left of the Auto symbol. Press , +, -, or move the slider to end holiday mode prematurely.

Remote control

Use a suitable remote control unit to activate the "Remote control" temperature setpoint in the controller. Changeover takes place by making a **potential-free contact** connected to terminals T1 and T2.

A flashing symbol indicates active remote control mode.
After the contact opens, the previously set operating mode is reactivated.

Operation according to controller setting	Temperature setpoint “remote control“ active
	

Suitable remote control units are:
Telephone modem, manual switch, window contact, presence detector, central unit, etc.

Enter temperature for active remote control

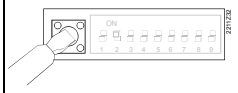
You can freely select the temperature for active remote control. Activating remote control immediately enables control to the remote control temperature regardless of the currently active operating mode. When you deactivate remote control, the controller returns to the set operating mode.
A flashing symbol indicates active remote control mode.

Proceed as follows to enter your settings:

	Set slider to position 18 (temperature for active remote control): Press + or - to set the desired temperature for active remote control.
RUN	Return the slider to position **RUN**.

Technical features

DIP switches

△ ON / ▽ OFF		1	2	3	4	5	6	7			
A	Sensor calibration On	△					△			Periodic pump run and anti-lime function On	E
	Sensor calibration Off	▽					▽			Periodic pump run and anti-lime function Off	
B	Setpoint limitation 16…35 °C		△					△		Quartz	F
	Setpoint limitation 3…35 °C		▽					▽		Radio clock	
C	Temperature display °F			△			After you change one or several DIP switch positions, you must press the DIP switch reset button to reset the DIP switch. **Otherwise, the previous setting remains active!**			DIP switch reset 	G
	Temperature display °C			▽							
D	PID self-learning				△	△					
	PID 6				△	▽					
	PID12				▽	△					
	2-point				▽	▽					
Factory setting: All DIP switches to ▽ OFF											

A Sensor calibration:
DIP switch 1

If the displayed room temperature does not match the measured room temperature, the temperature sensor can be recalibrated.
Set DIP switch to ON and press the DIP switch reset button:
CAL symbol is displayed. The currently measured temperature flashes.
Press + or - to recalibrate by max. **± 5 °C**.
Set DIP switch to OFF and press the DIP switch reset button to save the settings.

B Setpoint limitation:
DIP switch 2

The minimum setpoint limitation of 16 °C prevents undesired heat transfer to neighboring spaces in buildings featuring several heating zones.
DIP switch ON: Setpoint limitation **16…35 °C**.
DIP switch OFF: Setpoint limitation **3…35 °C** (factory setting).
Press the DIP switch reset button to save the settings.

C Temperature display in °C or °F:
DIP switch 3

DIP switch ON: Temperature display in **°F**.
DIP switch OFF: Temperature display in **°C** (factory setting).
Press the DIP switch reset button to save the settings.

D Control behavior:
DIP switches 4 and 5

The REV17… is a two-position controller with PID control. The room temperature is controlled through cyclic switching of an actuating unit.

DIP switches 4 ON and 5 ON: **PID self-learning**
Adaptive control for all applications.

DIP switches 4 ON and 5 OFF: **PID 6**
Fast controlled system for applications in locations with large temperature deviations.

DIP switches 4 OFF and 5 ON: **PID 12**
Normal controlled system for applications in locations with normal temperature deviations.

DIP switches 4 OFF and 5 OFF: **2-point**
For complex controlled systems, simple two-position controller with 0.5 °C switching difference (factory setting).

Press the DIP switch reset button to save the settings.

E Periodic pump run and anti-lime function:
DIP switch 6

Only applicable with controlled circulating pump or valve!
This function protects the pump or valve during extended OFF periods against possible seizure caused by liming. Periodic pump run is activated every 24 hours at 12 p.m. for three minutes (symbol ▲ is displayed during active pump run).
DIP switch ON: Pump run ON.
DIP switch OFF: Pump run OFF (factory setting).
Press the DIP switch reset button to save the settings.

F Radio clock:
DIP switch 10

Only applicable to REV..DC (with integrated DCF77 receiver to receive time signal from Frankfurt, Germany)!
DIP switch ON: Clock run by controller-internal quartz.
DIP switch OFF: Time signal DCF77 from Frankfurt, Germany.
Press the DIP switch reset button to save the settings.

Note on synchronization

During startup, REV..DC synchronizes automatically to the time signal (DCF77) from Frankfurt, Germany. Synchronization takes max. 10 minutes. Synchronization restarts each time you press the button or move the program selection slider from the RUN position during these 10 minutes. Siemens recommends to set the desired settings upon startup, install the REV..DC in the desired location, and not carry out any actions on the REV..DC for the next 10 minutes.

Note on reception

In normal operation, the REV..DC synchronizes to the radio clock every day at 3:10 a.m. The time signal from Frankfurt is modulated to a radio signal. The reception of this radio signal depends on the distance to Frankfurt, atmospheric conditions as well as the location where the REV..DC is installed. Siemens cannot guarantee that the REV..DC can receive the time signal from Frankfurt at any time and any place.

No reception

The radio clock symbol is deactivated and an error message is displayed if the clock was not able to synchronize the time for 7 consecutive days. The controller then runs on the internal quartz.

G DIP switch reset

After you change one or several DIP switch positions, you must press the DIP switch reset button to reset the DIP switch.
Otherwise, the previous setting remains active!

Access to the expert level

Set the program selection slider to RUN. Press + and − simultaneously for 3 seconds, release the buttons, and within 3 seconds press and hold down ○ and ⚙ simultaneously for 3 seconds, release ⚙, and press ○ for another 3 seconds. This releases the engineering settings. **Install** is displayed.
The display first shows language selection with Code 00. Press the buttons + or − to navigate the settings.
Confirm settings by pressing ⚙.
Press the operating mode selector ○ to exit the engineering settings.

Code list

Function block	Code	Name	Factory setting	Your setting
Basic settings	00	Language	English	
	01	Sensor calibration	off	
	02	Switching differential 2-point	0.5 °C	
LCD optimization	10	Illumination time	10 seconds	
	11	Background brightness	0	
	12	Contrast	0	
Clock settings	30	Time zone Deviation from time signal in Frankfurt (Central European Time CET) (see Note 1)	0 hours	
	31	Start of daylight saving time (see Note 2)	31. March 31 (03-31)	
	32	End of daylight saving time (see Note 3)	31. October 31 (10-31)	

Note 1: This entry has no effect if the radio clock either is inactive or not available.
The time signal received from Frankfurt is shifted by the value set in Code 30 (time zone) if the radio clock is active.

Note 2: The time is always changed over at 2 a.m. on the Sunday preceding the set date if there is no radio clock or if it is inactive. The time change is shifted by the value set in Code 30 (time zone) when the radio clock is active.

Note 3: The time is always changed over at 3 a.m. on the Sunday preceding the set date if there is no radio clock or if it is inactive.

Functional check

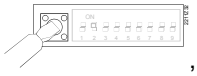
a) Check the display. If there is no display, check insertion and function of the batteries.
b) Operating mode “Continuous comfort mode“ ☼, read displayed temperature.
c) Set the temperature setpoint higher than the displayed room temperature (see operating instructions).
d) The relay and, as a result, the actuating device must switch at the latest after one minute. Symbol ▲ is displayed. If not displayed:
   - Check actuating device and wiring.
   - It is possible that in heating mode the room temperature is higher than the set temperature setpoint.
e) Set the temperature setpoint for operating mode “Continuous comfort mode“ ☼ to the desired value.
f) Select the desired operating mode.

Reset

User-defined settings:

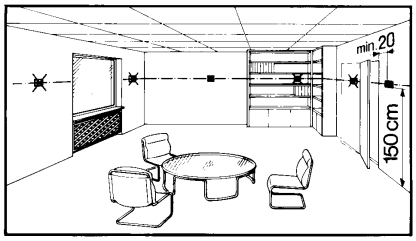
, + and - simultaneously for 3 seconds:
This resets all temperature and time settings of the program selection slider to default values (see also "Factory settings" in the operating instructions). The expert settings remain unchanged.
The clock starts at 12 p.m., the date on 01-01-08 (01 - January - 2008).
During the reset, all display fields are lit and can be checked accordingly.

All user-defined settings plus expert settings:

Press the DIP switch reset button  , + and - simultaneously for 5 seconds:
After the reset, **all factor settings** are reloaded. This applies to the program selection slider as well as to the expert settings.

Engineering

- Mount the room temperature controller in the main living room.
- Select the mounting place so that the sensor can acquire the air temperature in the room as accurately as possible and without being influenced by solar radiation or other heat or refrigeration sources.
- Mounting height is approx. 1.5 m above the floor.
- You can mount the unit on most commercially available recessed conduit boxes or directly on the wall.



Mounting and installation

- Begin installation by first attaching and wiring the base. You can mount the base on most commercially available recessed conduit boxes or directly on the wall. Then insert the controller from top to bottom into the base.
  For more information, see the installation instructions supplied with the unit.
- Comply with all local regulations on electrical installation.
- Wire separately the remote control contact T1 / T2 using a separate, shielded cable.

Commissioning

- Remove from the batteries the battery transit tab designed to prevent premature activation of the unit: Select desired language by + or -. Confirm by .
- You can change the control characteristics using the DIP switch on the rear of the unit.
- Set any thermostatic radiator valves to their fully open position, if present in the reference room.
- Recalibrate the temperature sensor (see "Sensor calibration") if the displayed room temperature does not match the room temperature measured.

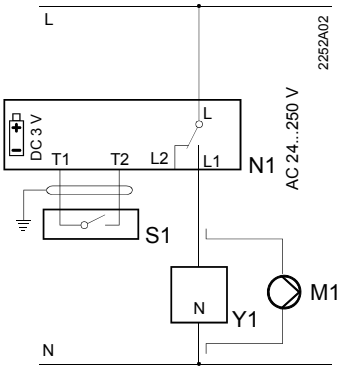
Notes

This is a software class A controller designed for use at a normal degree of pollution.

Technical data

General unit data	Supply	DC 3 V
	Batteries (alkaline AA)	2 x 1,5 V
	Life	Ca. 2 years
	Backup of clock when changing battery (all other data remain in EEPROM)	Max. 1 min
	Switching capacity of relay	
	Voltage	AC 24…250 V
	Current	0.1…6 (2.5) A
	Protection class	II as per EN 60 730-1
	Sensing element	NTC 10 kΩ ±1 % at 25 °C
	Measuring range	0…50 °C
	Time constant	Max. 10 min
	Setpoint setting ranges	
	All temperature settings	3…35 °C
	Resolution for settings and displays	
	Setpoints	0.2 °C
	Switching times	10 min
	Actual value measurement	0.1 °C
	Actual value display	0.2 °C
	Time display	1 min
Standards	CE conformity	
	Electromagnetic compatibility	2004/108/EEC
	Low voltage directive	2006/95/EC
	C-tick	N474
Product safety	Automatic electrical controls for household and similar use	EN 60 730-1
	Electromagnetic compatibility	
	Immunity	EN 61000-6-2
	Emissions	EN 61000-6-3
Environmental conditions	Operation	
	Climatic conditions	3K3 as per IEC 60 721-3
	Temperature	5...40 °C
	Humidity	<85 % r.h.
	Storage and transport	
	Climatic conditions	2K3 as per IEC 60 721-3
	Temperature	-25...70 °C
	Humidity	<93 % r.h.
	Mechanical conditions	2M2 as per IEC 60 721-3
Weight	Excl. packaging	0.29 kg
Color	Housing	RAL9003 signal white
	Base	RAL7038 gray
Size	Housing with base	90 x 134.5 x 30 mm

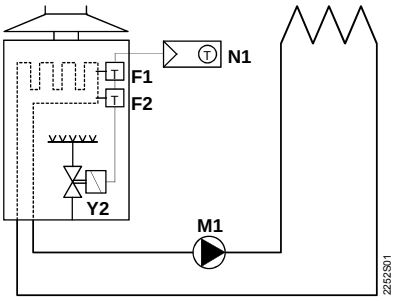
Connection diagrams



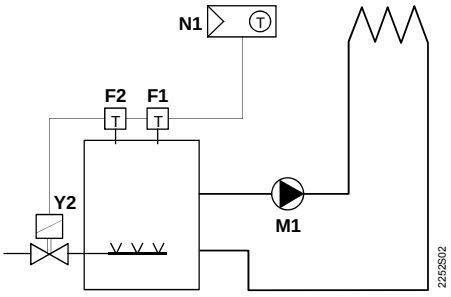
REV17 / REV17DC

L	Phase, AC 24 … 250 V	S1	Remote control unit (potential-free)
L1	N.O. contact, AC 24 …250 V / 6 (2.5) A	T1	Remote control signal
L2	N.C. contact, AC 24 … 250 V / 6 (2.5) A	T2	Remote control signal
M1	Circulating pump	Y1	Actuating device
N1	REV17… controller		

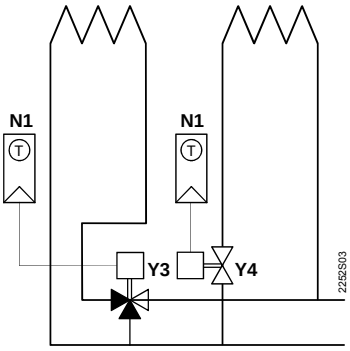
Application examples



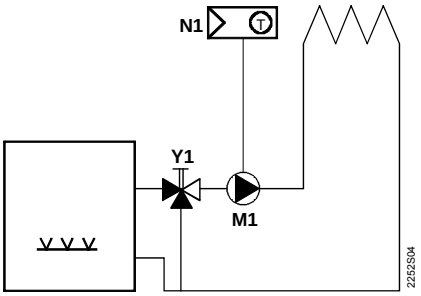
Instantaneous water heater



Atmospheric gas burner



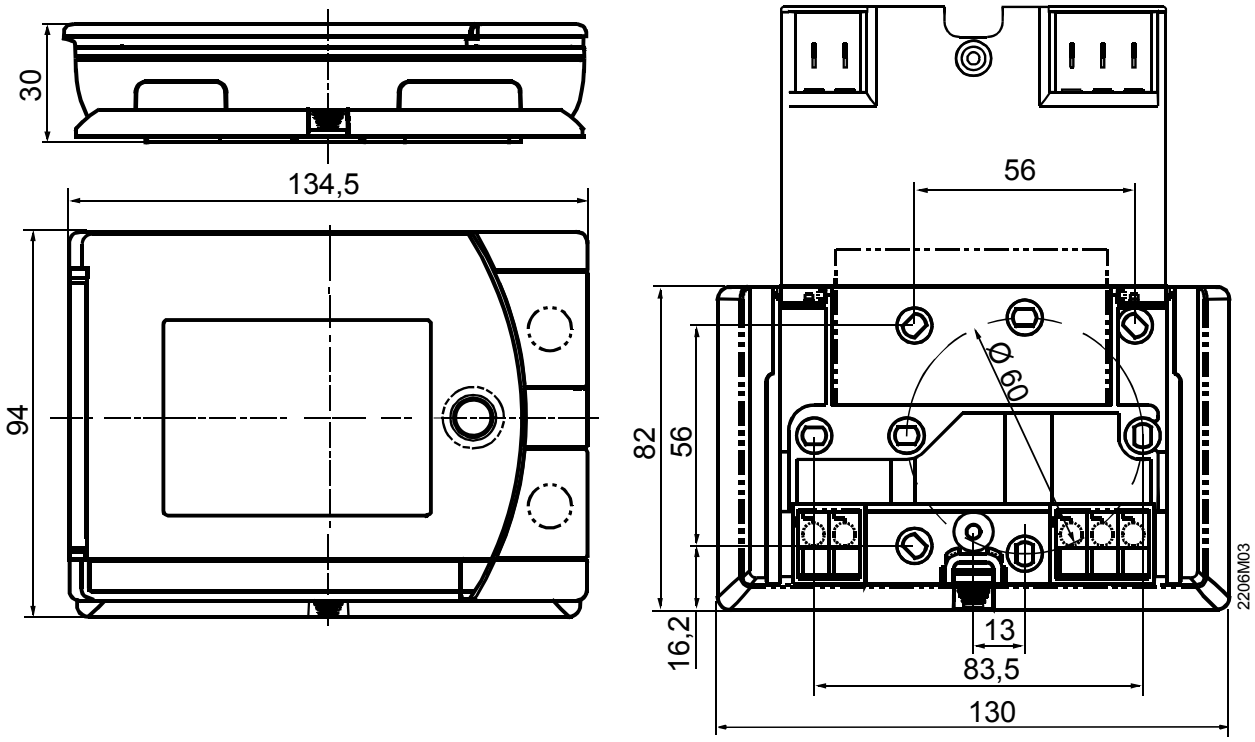
Zone valve



Circulating pump with precontrol by manual mixing valve

F1	Thermal reset limit thermostat	Y1	3-port valve with manual adjustment
F2	Manual reset safety limit thermostat	Y2	Magnetic valve
M1	Circulating pump	Y3	Three-port valve with actuator
N1	REV17.. room temperature controller	Y4	Two-port valve with actuator

Dimensions



SIEMENS

7-day
room temperature controller REV34..

Heating applications

- **Mains-independent, battery-operated room temperature controller featuring user-friendly operation, easy-to-read display and large numbers.**
- **3-position controller with PI mode and optimum start control.**
- **Possibility to adapt volume and control gain.**
- **Operating mode selection:**
  - **7-day automatic mode with max. 3 heating phases.**
  - **Continuous comfort mode.**
  - **Continuous energy saving mode.**
  - **Frost protection.**
  - **Exception day (24 hour operation) with max. 3 heating phases.**
- **A separate temperature setpoint can be entered in automatic mode and for the exception day for each heating phase.**
- **Heating zone control.**

Use

Room temperature control in:

- Single-family and vacation homes.
- Apartments and offices.
- Individual rooms and professional office facilities.
- Commercially used spaces.

To control electric 3-position actuators with a running time of **120….150 seconds**, for use with stroke and rotary actuators.

Function

- PI control.
- 3-point control.
- 7-day time switch.
- Remote control.
- Preselected 24-hour operating modes.
- Override button.
- Holiday mode.
- Party mode.
- Frost protection.
- Holiday mode.
- Information level to check settings.
- Reset function.
- Sensor calibration.
- Optimum start control in the morning (P.1).
- Adaption of integral action time (volume adaption).
- Adaption of control gain (heat output adaption).
- Synchronization to radio time signal from Frankfurt, Germany (REV34DC).

Type summary

Room temperature controller with 7-day time switch	**REV34**
Room temperature controller with 7-day time switch and receiver for time signal from Frankfurt, Germany (DCF77)	**REV34DC**

Ordering

Please indicate the type number as per the "Type summary" when ordering.

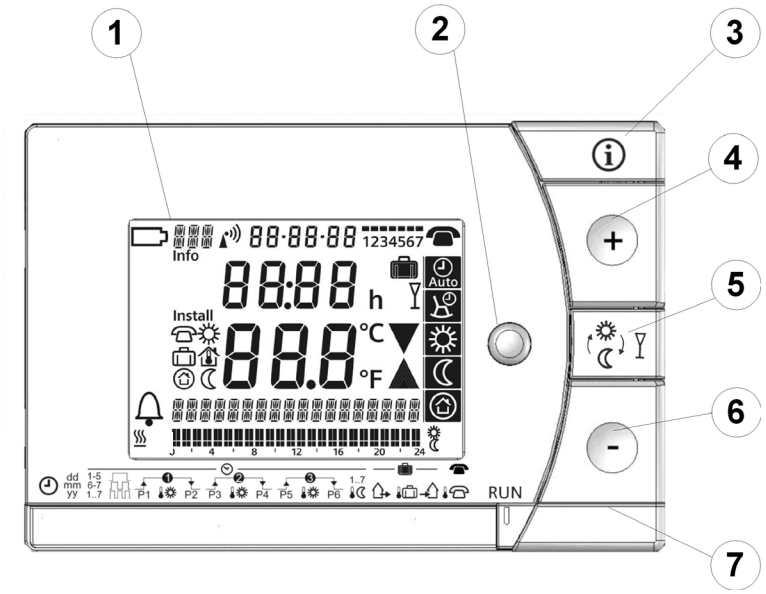
Delivery

The controller is supplied with batteries.

Mechanical design

Plastic casing with an easy-to-read display and large numbers, easily accessible operating elements, and removable base.
The housing contains the controller's electronics, DIP switches, and the relay with potential-free changeover contact. The easily accessible battery compartment allows for easy exchange of two 1.5 V alkaline batteries, type AA.
The base with terminal block provides lots of space to connect the wires.

Display and operating elements



1	**Display**		
	Change battery	21.0°C	Room temperature (measured)
	Alarm	TEMPERATURE	Clear text display line (max. 18 spaces)
	Heating mode		24 hour timeframe Switching pattern with flashing time cursor
WED	Weekday (max. 3 spaces)		
Info	Info	12345	Weekday block
Without language selection	Setpoint for remote control	67	Weekend block
		7	Weekday
	Setpoint for absence	**h**	Time unit
	Room temperature		Absence/holiday mode set
	Setpoint for frost protection mode		Absence/holiday mode active
	Energy saving mode setpoint		Party mode active
	Time signal from Frankfurt	**°C / °F**	Temperature unit °C or °F
17.03.08	Date (day - month - year)		Close actuator/valve
22:30	Time of day		Open actuator/valve
			Remote control active

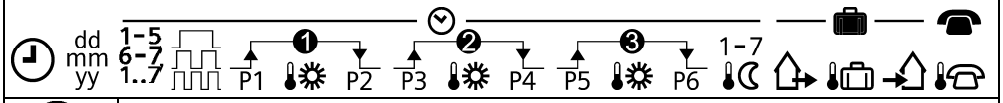
2	**Operating mode selector**
Auto	Automatic weekly mode with max. three heating phases per day.
	Exception day with max. three heating phases.
	Continuous comfort mode (= continuous comfort temperature).
	Continuous energy saving mode (= continuous energy saving temperature).
	Frost protection.

3	**INFO**
	Pressing the Info button once illuminates the display. Illumination automatically turns off after a short period of time. Pressing the Info button again activates the information display: **Info** is lit. The unit first displays queued error messages followed by important information (e.g. time switch programs, etc.).

4	**Plus button**
+	Increase values, set time, or make a selection.

5	**Override button / party mode**
	In the time switch program, this button allows you to quickly change from the active temperature level to the next and back. Thus, you can quickly change to energy saving temperature when you leave the apartment for a short period of time, thus saving energy. The display indicates the change. It is valid only until the next switching time. **Activate party mode: Press the button for 3 seconds.** Party mode is available only in operating modes Auto and Auto. In party mode, the controller controls to a freely selectable temperature for a freely selectable period of time. In party mode, symbol is displayed along with the end of party mode.

6	**Minus button**
	Decrease values, set time, or make a selection

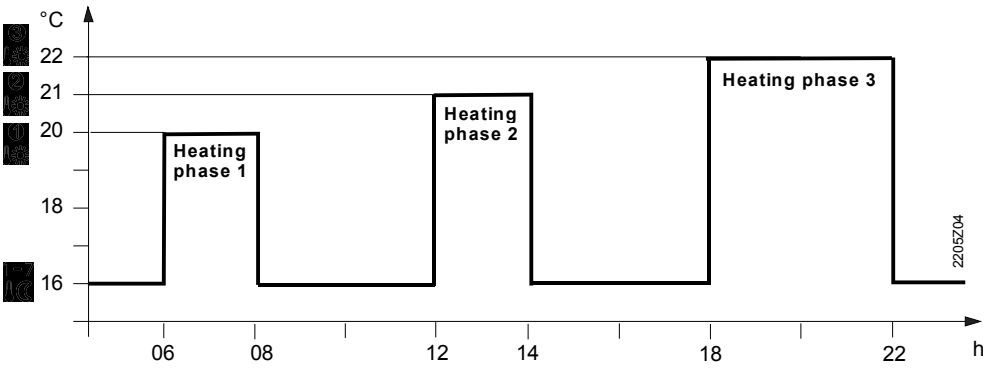
7	**Program selection slider**						
							
	Time.						
dd mm yy	Day – Month – Year (2 spaces for day, month, and year)						
1-5 6-7 1..7	Weekday, weekend, or individual day blocks						
	1, 2, or 3 heating phases						
P1	Start Heating phase 1		P3	Start Heating phase 2		P5	Start Heating phase 3
❶	Setpoint Heating phase 1		❷	Setpoint Heating phase 2		❸	Setpoint Heating phase 3
P2	End Heating phase 1		P4	End Heating phase 2		P6	End Heating phase 3
1-7	Energy saving temperature in the automatic mode and exception day time switch programs						
	Start of absence / holiday						
	Temperature setpoint during absence / holiday						
	End of absence / holiday						
	Temperature setpoint at active remote control						
RUN	Slider position RUN allows for closing the cover						

Operation with time switch program

The controller offers the two time switch programs Auto and .

Enter a start time and end time for each heating phase. Also comfort temperature setpoint can be freely entered for each heating phases. Between the heating phases the controller always switches to the same, freely selectable energy saving temperature setpoint.

Example with 3 heating phases



Continuous operating modes

The controller also offers the three 3 continuous modes comfort mode, energy saving mode and frost protection mode.

Setpoints

You can freely adjust the setpoints for the weekly and 24-hour operating modes.
Setting range for all setpoints without setpoint limitation 3…35 °C.
Setting range for all setpoints with setpoint limitation 16…35 °C.

Factory setting

Factory settings: Heating		
	❶ ❷ ❸	20 °C
	1–7	16 °C
		8 °C
		12 °C

Factory settings: Switching times						
Heating phases	P1	P2	P3	P4	P5	P6
1.	07:00	23:00	PASS	PASS	PASS	PASS
2.	06:00	08:00	17:00	22:00	PASS	PASS
3.	06:00	08:00	11:00	13:00	17:00	22:00

7-day time switch

Three different switching patterns are available to simplify entry of switching times. These can be assigned as blocks to the corresponding weekdays 1…5 and weekend days 6…7. As a result, you need to adapt the switching times and room temperatures only once for each block.

Switching pattern	Blocks
	12345 67

You can also enter individual days 1 … 1 .

Enter holidays or absences

You can enter the beginning, temperature and end of your holidays. At the beginning of the holidays, the controller switches to the desired holiday temperature and returns to the previously set operating mode at the end of the holidays.

In holiday mode, symbol is displayed along with the end of holiday mode.

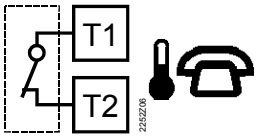
Proceed as follows to enter your settings:

	Set slider to position 15 (start of absence): Press + or + to set the start date for your holidays.
	Set slider to position 16 (temperature during absence): Press + or + to set the desired temperature while on holidays.
	Set slider to position 17 (end of absence): Press + or + to set the end date for your holidays.
RUN	Return the slider to position **RUN**. Symbol is displayed to the left of the symbol. Press , , , or move the slider to end holiday mode prematurely.

Remote control

Use a suitable remote control unit to activate the "Remote control" temperature setpoint in the controller. Changeover takes place by making a **potential-free contact** connected to terminals T1 and T2.

A flashing symbol indicates active remote control mode.
After the contact opens, the previously set operating mode is reactivated.

Operation according to controller setting	Temperature setpoint “remote control“ active
	

Suitable remote control units are:
Telephone modem, manual switch, window contact, presence detector, central unit, etc.

Enter temperature for active remote control

You can freely select the temperature for active remote control. Activating remote control immediately enables control to the remote control temperature regardless of the currently active operating mode. When you deactivate remote control, the controller returns to the set operating mode.

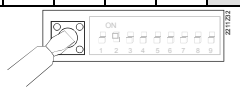
A flashing symbol indicates active remote control mode.

Proceed as follows to enter your settings:

	Set slider to temperature position for active remote control: Press + or + to set the desired temperature for active remote control.
RUN	Return the slider to position **RUN**.

Technical features

DIP switches

△ ON / ▽ OFF		1	2	3	4	5	6	7	8	9	10		See
See **A**	Sensor calibration On	△					△	△				Medium-sized room	**E**
	Sensor calibration Off	▽					△	▽				Small room	
B	Setpoint limitation 16…35 °C		△				▽	△				Large room	
	Setpoint limitation 3…35 °C		▽				▽	▽				Medium-sized room	
C	Temperature display °F			△					△	△		Normally sized heat output	**F**
	Temperature display °C			▽					△	▽		Undersized heat output	
D	Start optimization: 1 h/°C				△	△			▽	△		Oversized heat output	
	Start optimization: ¼ h/°C				△	▽			▽	▽		Normally sized heat output	
	Start optimization: ½ h/°C				▽	△					△	Quartz	**G**
	Start optimization: Off				▽	▽					▽	Radio clock	
H	DIP switch reset  After you change one or several DIP switch positions, you must press the DIP switch reset button to reset the DIP switch (see also Fig. ⑤). **Otherwise, the previous setting remains active!**												**H**
Factory setting: All DIP switches to ▽ OFF													

A Sensor calibration: DIP switch 1

If the displayed room temperature does not match the measured room temperature, the temperature sensor can be recalibrated.
Set DIP switch to ON and press the DIP switch reset button:
CAL symbol is displayed. The currently measured temperature flashes.
Press + or + to recalibrate by max. **± 5 °C**.
Set DIP switch to OFF and press the DIP switch reset button to save the settings.

B Setpoint limitation: DIP switch 2

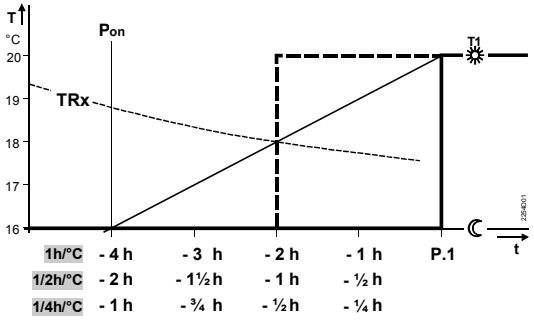
The minimum setpoint limitation of 16 °C prevents undesired heat transfer to neighboring spaces in buildings featuring several heating zones.
DIP switch ON: Setpoint limitation **16…35 °C**.
DIP switch OFF: Setpoint limitation **3…35 °C** (factory setting).
Press the DIP switch reset button to save the settings.

C Temperature display in °C or °F: DIP switch 3

DIP switch ON: Temperature display in **°F**.
DIP switch OFF: Temperature display in **°C** (factory setting).
Press the DIP switch reset button to save the settings.

D Start optimization: DIP switches 4 and 5

Optimization advances the switch-on point P.1 to ensure that the selected setpoint is reached at the desired time. The setting depends on the controlled system, i.e., on heat transmission (piping system, radiators), building dynamics (building mass, insulation), and heat output (boiler capacity, flow temperature).
DIP switches 4 ON and 5 ON: 1 h/°C For slow controlled systems.
DIP switches 4 ON and 5 OFF: ¼ h/°C For fast controlled systems.
DIP switches 4 OFF and 5 ON: ½ h/°C For medium controlled systems.
DIP switches 4 OFF and 5 OFF: OFF Off, no effect (factory setting).
Press the DIP switch reset button to save the settings.



Key for diagram:

T Temperature (°C)
t Forward shift of switch-on point (h)
TRx Room temperature actual value
Pon Starting point for optimized heat-up time.

E Integral action time (Volume adaption): DIP switches 6 and 7

DIP switches 6 ON and 7 ON:
Normally sized controlled system, see factory setting.

DIP switches 6 ON and 7 OFF:
Fast controlled system: For small rooms, light radiators (plate heat exchangers), well insulated building or fan coils.

DIP switches 6 OFF and 7 ON:
Slow controlled system: For large rooms, heavy radiators (cast iron radiators), poorly insulated building, and large masses.

DIP switches 6 OFF and 7 OFF (factory setting):
Normally sized controlled system: For normal-size rooms, normally sized radiators (steel pipe radiator) and average insulated building.

Press the DIP switch reset button to save the settings.

F Control gain (Heat output adaptation): DIP switches 8 and 9

DIP switches 8 ON and 9 ON:
Normally sized heat output, see factory setting.

DIP switches 8 ON and 9 OFF:
Undersized heat output:
For low boiler/flow temperatures, undersized radiators (area) and undersized volumetric flow (valve nominal width).

DIP switches 8 OFF and 9 ON:
Oversized heat output:
For high boiler/flow temperatures, oversized radiators (area) and oversized volumetric flow (valve nominal width).

DIP switch 8 OFF and 9 OFF (factory setting):
Normally sized heat output.

Press the DIP switch reset button to save the settings.

G Radio clock: DIP switch 10

Only applicable to REV..DC (with integrated DCF77 receiver to receive time signal from Frankfurt, Germany)!

DIP switch ON: Clock run by controller-internal quartz.

DIP switch OFF: Time signal DCF77 from Frankfurt, Germany.

Press the DIP switch reset button to save the settings.

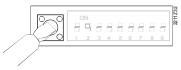
Note on synchronization

During startup, REV..DC synchronizes automatically to the time signal (DCF77) from Frankfurt, Germany. Synchronization takes max. 10 minutes. Synchronization restarts each time you press the button or move the program selection slider from the RUN position during these 10 minutes. Siemens recommends to set the desired settings upon startup, install the REV..DC in the desired location, and not carry out any actions on the REV..DC for the next 10 minutes.

In normal operation, the REV..DC synchronizes to the radio clock every day at 3:10 a.m.

Note on reception	The time signal from Frankfurt is modulated to a radio signal. The reception of this radio signal depends on the distance to Frankfurt, atmospheric conditions as well as the location where the REV..DC is installed. Siemens cannot guarantee that the REV..DC can receive the time signal from Frankfurt at any time and any place.
No reception	The radio clock symbol is deactivated and an error message is displayed if the clock was not able to synchronize the time for 7 consecutive days. The controller then runs on the internal quartz.

H DIP switch reset



After you change one or several DIP switch positions, you must press the DIP switch reset button to reset the DIP switch.
Otherwise, the previous setting remains active!

Access to the expert level

Set the program selection slider to RUN. Press + and - simultaneously for 3 seconds, release the buttons, and within 3 seconds press and hold down ○ and ⚙ simultaneously for 3 seconds, release ⚙, and press ○ for another 3 seconds. This releases the engineering settings. **Install** is displayed.
The display first shows language selection with Code 00. Press the buttons + or - to navigate the settings.
Confirm settings by pressing ⚙.
Press the operating mode selector ○ to exit the engineering settings.

Code list

Function block	Code	Name	Factory setting	Your setting
Basic settings	00	Language	English	
	01	Sensor calibration	off	
	02	Switching differential 2-point	0.5 °C	
LCD optimization	10	Illumination time	10 seconds	
	11	Background brightness	0	
	12	Contrast	0	
Clock settings	30	Time zone Deviation from time signal in Frankfurt (Central European Time CET) (see Note 1)	0 hours	
	31	Start of daylight saving time (see Note 2)	March 31 (03-31)	
	32	End of daylight saving time (see Note 3)	October 31 (10-31)	

Note 1: This entry has no effect if the radio clock either is inactive or not available.
The time signal received from Frankfurt is shifted by the value set in Code 30 (time zone) if the radio clock is active.

Note 2: The time is always changed over at 2 a.m. on the Sunday preceding the set date if there is no radio clock or if it is inactive. The time change is shifted by the value set in Code 30 (time zone) when the radio clock is active.

Note 3: The time is always changed over at 3 a.m. on the Sunday preceding the set date if there is no radio clock or if it is inactive.

Functional check

a) Check the display. If there is no display, check insertion and function of the batteries.
b) Operating mode “Continuous comfort mode“ ☼, read displayed temperature.
c) Set temperature setpoint to maximum (see operating instructions).
d) After 1…5 minutes, the relay to open the actuator must switch on. Symbol ▲ is displayed. The actuator OPENS. If not:
   - Check actuating device and wiring.
   - It is possible that the room temperature is higher than the set temperature setpoint.
e) Set temperature setpoint to minimum (see operating instructions).
f) After 1…5 minutes, the relay to open the actuator must switch off and the relay to close the actuator must switch on. Symbol ▼ is displayed. The actuator CLOSES. If not:
   - Check actuating device and wiring.
   - It is possible that the room temperature is lower than the set temperature setpoint.
g) Set the temperature setpoint for operating mode “Continuous comfort mode“ ☼ to the desired value.
h) Select the desired operating mode.

Reset

User-defined settings:

○, [+] and [-] simultaneously for 3 seconds:
This resets all temperature and time settings of the program selection slider to default values (see also "Factory settings" in the operating instructions). The expert settings remain unchanged.
The clock starts at 12 p.m., the date on 01-01-08 (01 January 2008).
During the reset, all display fields are lit and can be checked accordingly.

All user-defined settings plus expert settings:

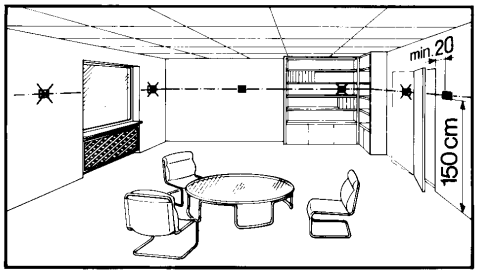
Press the DIP switch reset button  , [+] and [+] simultaneously for 5 seconds:
After the reset, **all factor settings** are reloaded. This applies to the program selection slider as well as to the expert settings.

⚠

The controller starts with an initialization phase of 180 seconds after each reset. In this phase, the actuator is driven to the basic position CLOSED.

Important: Driving the actuator to the fully CLOSED position takes max. 150 seconds. After a reset, reinsert the controller in the base within **30 seconds**.

- Mount the room unit in the main living room.
- Select the mounting place so that the sensor can acquire the air temperature in the room as accurately as possible and without being influenced by solar radiation or other heat or refrigeration sources.
- Mounting height is approx. 1.5 m above the floor.
- You can mount the unit on most commercially available recessed conduit boxes or directly on the wall.



Mounting and installation

- Begin installation by first attaching and wiring the base. You can mount the base on most commercially available recessed conduit boxes or directly on the wall. Insert the controller from top to bottom in the base.
  See the operating instructions delivered with the unit for more information.
- Comply with all local regulations on electrical installations.
- Wire the remote control contact T1/ T2 separately, i.e. using a separate, screened cable.

Preparations to commission the unit

- Set any thermostatic radiator valves to their fully open position, if present in the reference room.
- Recalibrate the temperature sensor (see "Sensor calibration") if the displayed room temperature does not match the room temperature measured.

Commissioning

- Remove the battery transit tab.
- The unit is ready for operation and executes a 180 second initialization period as soon as you remove the transit tab from the battery contact. In this phase, the actuator is driven to the basic position CLOSED.

Important:

Driving the actuator to the fully CLOSED position takes max. 150 seconds.

Reinsert the controller in the base within 30 seconds after removing the black battery transit tab!

Select operating language

- During the above actuator initialization phase, the controller type is displayed at the top left along with a welcome message "THANK YOU…" in all available languages.
- Press any button to interrupt the scrolling text. Operating language selection starts with “ENGLISH“ (factory setting). Press + or - until you reach the desired operating language. Press or move the slider to confirm the selected operating language.
- If synchronization is not yet completed after language selection, the remaining time is counted down on the display.
  Do not press any button during this time!
- If synchronization is complete after you select the operating language, you can continue to set the time of day (as needed), date, comfort phases, etc..

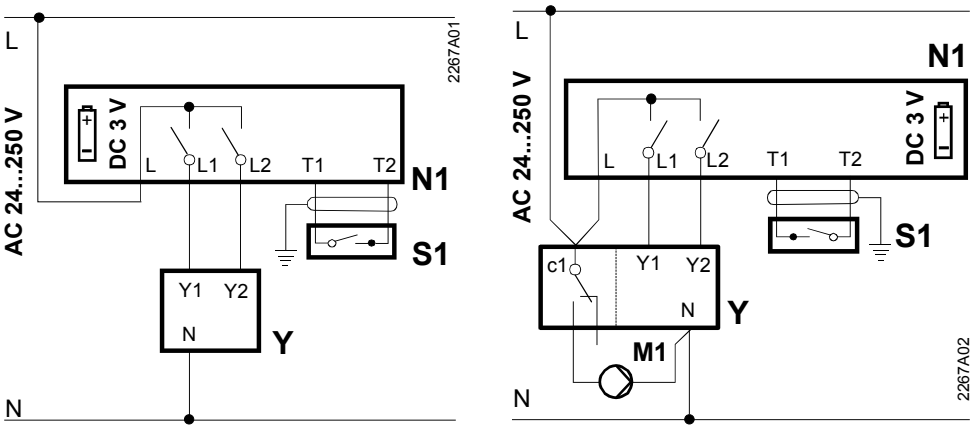
Notes

This is a software class A controller designed for use at a normal degree of pollution.

Technical data

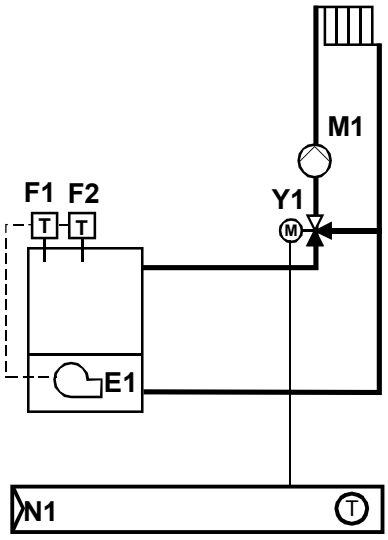
General unit data	Power	DC 3 V
	Batteries (alkaline AA)	2 x 1.5 V
	Life	Ca. 2 years
	Backup of clock when changing battery (all other data remain in EEPROM)	Max. 1 min
	Switching capacity of relay	
	Voltage	AC 24…250 V
	Current	0.1…6 (2.5) A
	Protection class	II as per EN 60 730-1
	Sensing element	NTC 10 kΩ Ω1 % at 25 °C
	Measuring range	0…50 °C
	Time constant	Max. 10 min
	Setpoint setting ranges	
	All temperature settings	3…35 °C
	Resolution for settings and displays	
	Setpoints	0.2 °C
	Switching times	10 min
	Actual value measurement	0.1 °C
	Actual value display	0.2 °C
	Time display	1 min
Standards	CE conformity	
	Electromagnetic compatibility	2004/108/EEC
	Low voltage directive	2006/95/EC
	C-tick	N474
Product safety	Automatic electrical controls for household and similar use	EN 60 730-1
	Electromagnetic compatibility	
	Immunity	EN 61000-6-2
	Emissions	EN 61000-6-3
	Degree of protection	IP20
Environmental conditions	Operation	
	Climatic conditions	3K3 as per IEC 60 721-3
	Temperature	5...40 °C
	Humidity	< 85 % r.h.
	Storage and transport	
	Climatic conditions	2K3 as per IEC 60 721-3
	Temperature	-25...70 °C
	Humidity	< 93 % r.h.
	Mechanical conditions	2M2 as per IEC 60 721-3
Weight	Excl. packaging	0.32 kg
Color	Housing	RAL9003 signal white
	Base	RAL7038 gray
Size	Housing with base	90 x 134.5 x 30 mm

Connection diagrams

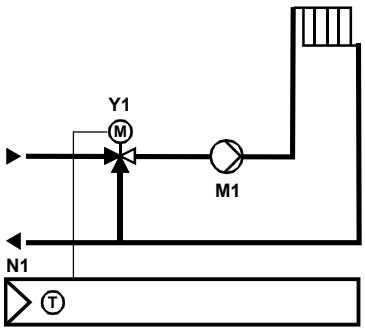


c1	Auxiliary switch	S1	Remote control unit (potential-free)
L	Phase, AC 24 …250 V	T1	Remote control signal
L1	N.O. contact, AC 24 …250 V / 6 (2.5) A	T2	Remote control signal
L2	N.O. contact, AC 24 …250 V / 6 (2.5) A	Y1	Positioning signal “open”
M1	Circulating pump	Y2	Positioning signal “close”
N	Neutral conductor	Y	Actuating device
N1	REV34.. room temperature controller		

Application examples



Instantaneous water heater



Zone valve

E1	Burner
F1	Thermal reset limit thermostat
F2	Manual reset safety limit thermostat
M1	Circulating pump
N1	REV34.. room temperature controller
Y1	Three-port valve with actuator

Dimensions