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# PROGRAMMABLE ROOM THERMOSTATS

SUNVIC programmable room thermostats combine the functionality of timeswitch with that of a room thermostat, allowing different target temperatures to be programmed over different time periods for central heating.

Within the Sunvic range there are three models, Simpro - the simple, intuitive switch-and-dial programmable with Service Sentinel functionality. The TLX6501, a fully feature digital programmable, and the TLX RFP Radio Frequency model, for applications where it is not practical or acceptable to run cable.

## SIMPRO >>>>>>>>>>>>>>>>

### Electromechanical programmable room thermostat

- Fast and simple programming
- 24 separate time periods possible
- Clock/room temperature display toggle
- Manual or automatic operation
- Frost protection feature
- Ideal for combi boiler installations
- Service Sentinel feature
- **No neutral required**



The Simpro programmable room thermostat has been developed firmly with the user in mind, and the Sunvic philosophy of high quality functionality and ease of use is evident in the intuitive design.

Programming couldn't be simpler. Dip switches with clearly marked time intervals allow the homeowner to create their own preferred temperature cycle, whilst two colour-coded temperature dials allow for Comfort and Economy settings.

#### Service Sentinel (Patented Feature)

This feature offers protection for tenants and landlord against illegal boiler negligence in compliance with Gas safety Regulation 36.

Its not always easy to gain access to the boiler in tenanted properties. Un-authorised access or failing to comply with boiler safety regulations are both dangerous and costly.

Service Sentinel offers a solution to the problem by using Intelligent circuitry to interrupt usual programmer control after a pre-determined period of time. Normal tenant control of the boiler can only resume after an authorised engineer has performed the statutory boiler check, and reset the programmer with a unique recoding key.

Service Sentinel gives the tenant 4 weeks notice when the boiler check is due by flashing a "service" message on the LCD. The red status indicators for heating and hot water will also flash continually. This gives the tenant sufficient time to contact their landlord and arrange access.

If the boiler is not attended in time the Service Sentinel does not switch OFF the power supply to the boiler, instead it kicks into "set-back" mode reducing the temperature to approximately 10°C ensuring the safety of both the tenant and property.

Simpro also gives you the option to switch between the programmed cycle to OFF or manual operation. When in manual mode, Simpro behaves as a standard room thermostat and controls the heating according to the 'Comfort' dial.

### Selection Guide

	Simpro	TLX6501	TLXRFP
Current Rating (Amps)	5(3)	5(3)	16(8)
Temperature Range (°C)	10/30	7/30	7/30
Changeover Contacts	●	●	
24 Hour Programming	●	●	●
5/2 Day Programming		●	●
Radio Frequency			●
Operating Voltages	230	230	230
LED Status Indicator	●		●
Digital Display	●	●	●
Volt Free Contacts	●	●	
Backlit Display		●	●
Optimum Start		●	●
Clock Display	●	●	●
Room Temperature Display	●	●	●
Pre-defined Control Programmes		●	●
Sentinel 'Setback' Functionality	●		
Manual Override	●	●	●
Frost Protection		●	●
Analogue Programming	●		
Digital Programming		●	●















**Use the Sunvic easy guide to choose the right motorised valve for your installation**

**2 Port Selection Guide:**

Complete Actuator & Valve order code	Actuator only order code	2 port	Spring return	MoMo	4 Wire	Actuator normally closed	Auxiliary switch	S.P.S.T normally open	Thumb-wheel	Flushing lever	Valve Body only order code	15mm	22mm	28mm	1/2" BSP	3/4" BSP	1" BSP	External compression	Female
	SZ 2201	•	•			•					ml 3402	•						•	
	SZ 2302	•	•		•	•					eml 3454		•					•	
	SZ 2351	•	•		•			•			eml 3503			•				•	
	SZ 2301F	•	•		•	•		•		•	ml 3401				•				•
	SM 5201	•			•						ml 3451					•			•
	SM 5203	•					•				ml 3501						•		•
	SM5205	•					•												•
SMV2217	SM 5203	•					•				eml 3454		•					•	
Any of the above SM/SZ actuators can be used with any of the ml/eml series of valves																			
SZV2286	SZ 2301	•	•		•	•		•		•	ml 3402	•						•	
SZV2212	SZ 2301	•	•		•	•		•		•	eml 3454		•					•	
SZV2228	SZ 2301	•	•		•	•		•		•	eml 3503			•				•	
SZV2288	SZ 2301	•	•		•	•		•		•	ml 3401				•				•
SZV2289	SZ 2301	•	•		•	•		•		•	ml 3451					•			•
SZV2218	SZ 2301	•	•		•	•		•		•	ml 3501						•		•
SZMV2322	SZM 1801	•		•	•		•		•		ml 4402	•							•
SZMV2305	SZM 1801	•		•	•		•		•		eml 4201		•					•	
SZMV2323	SZM 1801	•		•	•		•		•		eml 4503			•				•	
SZMV2324	SZM 1801	•		•	•		•		•		ml 4401				•				•
SZMV2325	SZM 1801	•		•	•		•		•		ml 4451					•			•
SZMV2326	SZM 1801	•		•	•		•		•		ml 4501						•		•

**3 Port Selection Guide:**

Complete Actuator & Valve order code	Actuator only order code	3 port	Spring return	MoMo	Diverter	Mid-position	2 Wire	4 Wire	Auxiliary switch	Thumb-wheel	Flushing lever	Valve Body only order code	15mm	22mm	28mm	1/2" BSP	3/4" BSP	1" BSP	External compression	Female
SDMV2304	SDM 1901	•		•		•		•	•	•		edt 3201		•					•	
SDMV2320	SDM 1901	•		•		•		•	•	•		edt 3706			•				•	
SDMV 2321	SDM 1901	•		•		•		•	•	•		dt 3606						•		•
SDV 2211	SD 2701	•	•			•		•	•		•	edt 2702		•					•	
SDV 2291	SD 2601	•	•		•			•	•		•	edt 2702		•					•	
SDV 2294	SD 2701	•	•			•		•	•		•	edt 2706			•				•	
SDV 2295	SD 2601	•	•		•			•	•		•	edt 2706			•				•	
SDV 2296	SD 2701	•	•			•		•	•		•	dt 2606						•		•
SDV 2297	SD 2601	•	•		•			•	•		•	dt 2606						•		•
	SD 2751	•	•			•		•	•		•	edt 2702		•					•	
	SD 2601	•	•		•			•	•		•	edt 2706			•				•	
												dt 2606						•		•
												dt 2601						•		•

Any of the above sd actuators can be used with any of the dt/edt valves





# HEAT PACKS

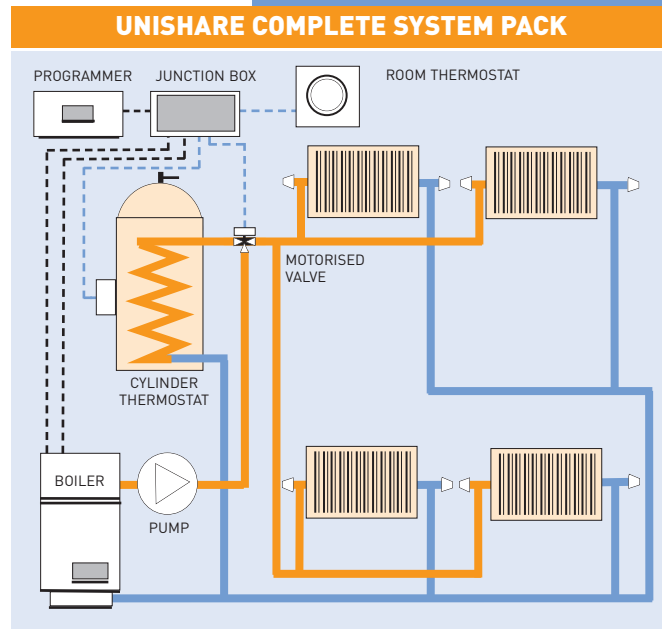
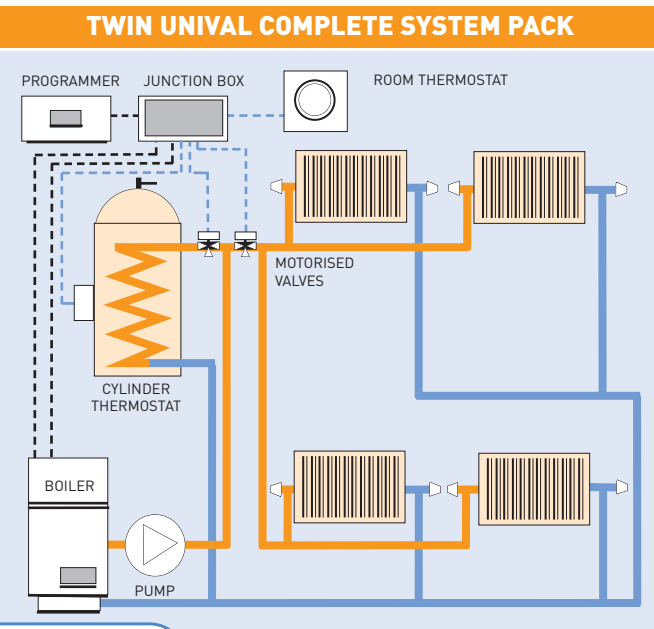
As well as off the shelf solutions, SUNVIC offer the flexibility to make up your own pack design by selecting any one of our quality products and combining them to make the pack of your choice.

Contact your local Sunvic representative for further information on custom pack design.

- Complete system in a single pack
- Positive, independent control of domestic hot water and central heating
- Possible to extend control system to add further zone control
- Available in timed and untimed versions
- Matched components for trouble free installation



ORDER CODE	DESCRIPTION	PACK CONTENTS				
		2 PORT MOMO VALVE SZMV 2305	3 PORT MOMO VALVE SDMV 2304	ROOM THERMOSTAT TLX 9201	7 DAY PROGRAMMER SELECT 207XL	CYLINDER THERMOSTAT SA 2452
891-2482	Unishare MoMo Select 22mm		★	★	★	★
891-2483	Unival MoMo Select 22mm	★		★	★	★



# ANCILLARIES

## SURFACE MOUNT THERMOSTATS >>>>>>>>>>>>>>>

PRODUCT	TYPE	SCALE (°C)	SWITCH RATING	DIFFERENTIAL (°C)	SENSING ELEMENT
<b>SA 2452</b>	Cylinder Thermostat	40 – 90	5(1) A 230/240V S.P.D.T.	Approx. 9 – Non adjustable	Bimetal
<b>SA 2601</b>	Pipe Thermostat	45 - 85	5(1) A 230/240V S.P.D.T.	Approx. 9 - Non adjustable	Bimetal

- Easy to install
- Large control knob
- Both cylinder and pipe thermostat models available
- New Styling

The SA range of thermostats are designed for surface mounting to control the temperature of domestic hot water cylinders, pre-insulated cylinders, industrial baths or pipes.

The thermostats are attractively styled and have a large control knob to make adjustment simple, resulting in more accurate temperature setting and efficient energy control.

The SA 2452 comprises of a single pole double throw micro gap switch, suitable for loads up to 5A, 250V. It is supplied complete with a coated expanding galvanised wire which enables the thermostat to be mounted to cylinders up to 450mm (18") diameter.

The SA 2601 pipe thermostat can be clamped onto steel or copper pipes which have a diameter between 15mm and 50mm.



## SWC2202 WIRING CENTRE >>>>>>>>>>>>>>>

- Easy access 10 terminal block, 230V 10 amp
- Moulded in attractive white high quality flame retardant ABS finish
- Knock-out cable entries giving above; below, left and right surface access
- Rear knock out cable entries for sub-surface access
- Provision for easy cable clamping using cable ties
- Moulded terminal numbers to aid wiring

The SUNVIC SWC2202 ten-way wiring centre provides a compact, yet easily accessible solution to all your wiring problems. Good clearance under the terminal block ensures straightforward, easy to follow wiring.

For use with surface mounted fixed wiring or sub-surface rear entry. Only the cable entries actually required need to be knocked out, leaving a clean, professional looking job with no unsightly or dangerous access holes.

The SWC2202 is stylish too. Its clean, sculpted appearance will make even the most complicated wiring installation look professional.







# SPARES & ACCESSORIES

## ROOM THERMOSTAT ACCESSORIES

ORDER CODE	PRODUCT DESCRIPTION
8362405	BX3 Weather Resistant case for TLX/TLM
8371203	Guard Pack for TLX/TLM to protect against physical damage
3172205	SEN 2205 Sensors for use with Electronic TLX
3172301	SEN 2301 Sensors for use with Electronic TLX
3172303	SEN 2303 Sensors for use with Electronic TLX

## TIME SWITCHES & PROGRAMMERS

ORDER CODE	PRODUCT DESCRIPTION
4983300	Sentinel Software Key
4942202	CB 2202
4943303	CB 3303 (MP2)
2237227	Clock Timer for CLOCK BOX 494

## ACTUATORS & VALVE BODIES

ORDER CODE	PRODUCT DESCRIPTION
4525601	DM 5601 Mid position actuator (Duoflo)
4525651	DM 5651 Mid position actuator & plug (Duoflo)
6151453	MK 1453 22mm 3 port valve (Duoflo)
8031612	CLASS "A" SYN. Motor
8031603	Spares kit for ML/EML valves 28mm
8031604	Spares kit for MK Valves 22mm
8031601	Spares kit for ML valves 15mm
8031602	Spares kit for ML/EML valves 22mm
8031613	Spares kit for DT/EDT valves 22mm

## AUTO BY-PASS VALVES

ORDER CODE	PRODUCT DESCRIPTION
7171022	SBV 22 Auto By-pass Valve (22mm)

## ROD THERMOSTATS

ORDER CODE	PRODUCT DESCRIPTION
8522701	VK 11" Pkt
8512601	VK 7" Pkt
8542801	VK 18" Pkt

## ENERGY REGULATORS

ORDER CODE	PRODUCT DESCRIPTION
4176202	TYJ 6202
4176303	TYJ 6303
0002/861	TYJ Clamping Nut
0003/861	TYJ Clamping Washer
8111510	TYJ Black Knob
8111509	TYJ White Knob
8111901	ERY Black Knob
8111902	ERY White knob
8111602	SCALE PLATE ERX/ERY

## THERMAL RELAYS

ORDER CODE	PRODUCT DESCRIPTION
4182301	TDW 2301

## REMOTE PHIAL THERMOSTATS

ORDER CODE	PRODUCT DESCRIPTION
2441201	TO 1201
2441228	TO 1228
8113251	TO Knob
8141202	TO/TF Escutcheon

## BOILER THERMOSTATS

ORDER CODE	PRODUCT DESCRIPTION
2613501	TK 3501
2613504	TK 3504
2623501	TKR 3501
2623504	TKR 3504
2651602	TF 1602
2651603	TF 1603
2651609	TF 1609
2633301	TKD 3301
2633501	TKD 3501
2633502	TKD 3502
8113258	TF 1603 Knob
8511303	TK Pocket

## CYLINDER THERMOSTAT

ORDER CODE	PRODUCT DESCRIPTION
7171500	CIT 500 Stem, immersion

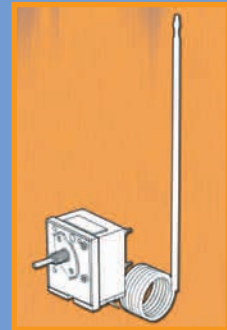
Some older specification products, spares and accessories are available upon request. Please contact Sunvic customer service team for further information.



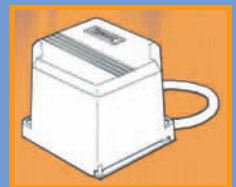
Class 'A' Synchronous Motor



SEN 23\*\* Electronic Thermostat Sensor



TF 1602 Boiler Thermostat



Replacement Actuator



MP2  
24 hr, independent control of central heating & hot water





Tel: 01698 812944

# SYSTEM WIRING GUIDE

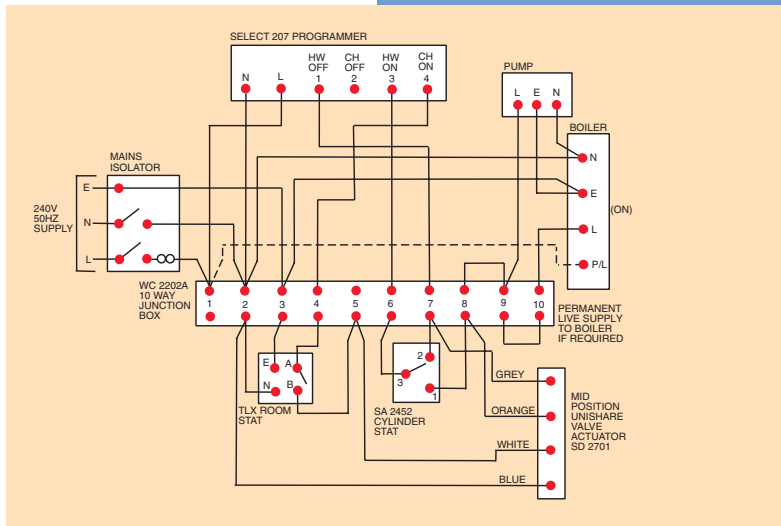
## General Information

- 1 All installations and maintenance must be carried out by a competent person and in accordance with current building and wiring regulations. Please consult user and installation instruction for all products used.
- 2 Please consult boiler manufacturers instructions before completing wiring of pump and boiler

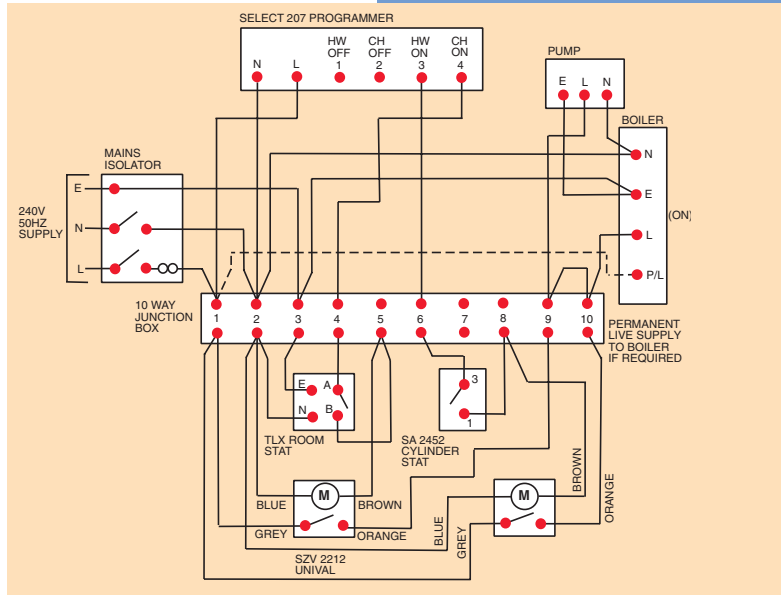
### ROOM THERMOSTAT WIRING

Terminal Thermostat	A	B	N	E
TLX2XXX	3	1	4	E
TLX4XXX	2	1	N/A	N/A
TLX5XXX	1	8	2	N/A
TLX6XXX	COM	N/O	N/A	N/A
TLX7XXX	3	2	N/A	N/A
TLX9XXX	1	3	4	N/A

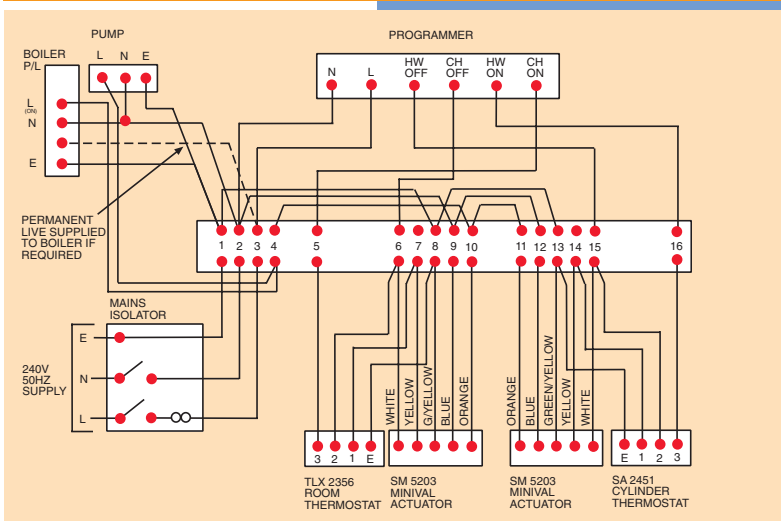
### UNISHARE SYSTEM: 3 PORT MID POSITION



### TWIN UNIVAL SYSTEM: 2X2 PORT ZONE VALVE



### MINIVAL SYSTEM: 2X2 PORT ( MOTOR ON/MOTOR OFF ZONE VALVE)



# COMPATIBILITY GUIDE

## ROOM THERMOSTATS

Manufacturer	Model	Description	SUNVIC Equivalent
Drayton	RTS8	Combi stat	TLX 2259, TLX 4101, TLX 9501
	RTS2	Std room thermostat, with LED 'ON' indicator	TLX 5101
	RTS3	Frost thermostat	TLX 5101
	Digistat 1	Digital room thermostat	TLX 7501
	Digistat 2	24 Hour Programmable room thermostat	TLX 6501
	Digistat 4	24 Hour Programmable room thermostat	TLX 6501
	Digistat RF	Radio frequency digital room thermostat	TLX RFD
	Digistat RF2	24 hour programmable room thermostat	TLX RFP
Danfoss Randall	RMT230	Electro-mechanical SPDT no acc heater	TLX2356
	RET230C	Std electronic room thermostat spst	TLX 5101
	RTE230	Std electronic room thermostat with LED	TLX 5301
	TP4	24 hr programmable room 'stat	TLX 6501
	TP5	5day/2day programmable room 'stat	TLX 6501
	TP5000	5day/2day programmable room 'stat	TLX 6501
Honeywell	CM61	24 hr programmable room thermostat	TLX 6501
	T4360	Frost thermostat t/proof	TLX 2360
	T6360	Changeover room thermostat	TLM2802
Horstmann	Centaurostat1	24 hr programmable room thermostat	TLX 6501
	HRT2	Std. Room thermostat	TLM 2253
	DRT1	Digital room thermostat	TLX 7501
	DRT2 *	Programmable room thermostat	TLX 6501
Myson	MRT1	Std. Room thermostat	TLM 2253

\* denotes identical terminal numbers

## ACTUATORS

Manufacturer	Model	Description	SUNVIC Equivalent	
Danfoss	HSA3	3 port mid-position actuator	SPRING RETURN SD 2701	MoMo SDM 1901
	HSA3D	3 port diverter actuator	SD 2601	
	HPA2	2 port actuator (normally closed)	SZ 2301	SZM 1801
	HPA2C	2 port actuator (normally closed)	SZ 2301	SZM 1801
Myson	ACT322	3 port mid-position actuator	SD 2701	SDM 1901
	ACT222	2 port actuator (normally closed)	SZ 2301	SZM 1801
	ACT228	2 port actuator (normally closed)	SZ 2301	SZM 1801

## MOTORISED VALVES

Manufacturer	Model	Description	SUNVIC Equivalent		
Danfoss	HS3B/HS3	3 port mid-position actuator 22mm	SPRING RETURN SDV 2211	MoMo SDMV 2304	
	HS3B28	3 port mid-position actuator 28mm	SDV 2294	SDMV 2320	
	HS3BD	3 port diverter actuator 22mm	SDV 2291		
	HS3DB28	3 port diverter actuator 28mm	SDV 2295		
	HP22/22B	2 port 22mm	SZV 2212	SZMV 2305	
	HP28/28B	2 port 28 mm	SZV 2228	SZMV2323	
	Myson	MPE 322	3 port mid-position actuator 22mm	SDV 2211	SDMV 2304
		MPE 328	3 port mid-position actuator 28mm	SDV 2294	SDMV 2320
MPE 322DV		3 port diverter actuator 22mm	SDV 2291		
MPE222		2 port 22mm	SZV 2212	SZMV 2305	
Honeywell	MPE228	2 port 28 mm	SZV 2228	SZMV2323	
	V4073A1039	3 port mid-position actuator 22mm	SDV 2211	SDMV 2304	
	V4073A1088	3 port mid-position actuator 28mm	SDV 2294	SDMV 2320	
	V4044C1288	3 port diverter actuator 22mm	SDV 2291		
	V4044C1569	3 port diverter actuator 28mm	SDV 2295		
	V4043H1056	2 port 22mm	SZV 2212	SZMV 2305	
	V4043H1106	2 port 28 mm	SZV 2228	SZMV2323	

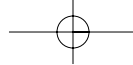


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**PROGRAMMER/ TIMECLOCK**

<b>Manufacturer</b>	<b>Model</b>	<b>Description</b>	<b>SUNVIC Equivalent</b>
ACL Drayton	LP112	Elect 24 hr. two-channel programmer	SELECT 207xl / Sentinel 200
	LS 241	Elect 24 hr. two-channel programmer	SELECT 207xl / Sentinel 200
	LP 241	Elect 24 hr. two-channel programmer	SELECT 207xl / Sentinel 200
	LS 522	Electronic 5/2 day full programmer	SELECT 207xl / Sentinel 200
	LP 522	Electronic 5/2 day full programmer	SELECT 207xl / Sentinel 200
	LS 722	Electronic 5/2 day full programmer	SELECT 207xl / Sentinel 200
	LP 722	Electronic 5/2 day full programmer	SELECT 207xl / Sentinel 200
Danfoss Randall	TS 15	Electronic 5/2 day or 24 hr. timeswitch	SELECT 107xl / Sentinel 100
	TS 75	Electronic 5/2 day or 24 hr. timeswitch	SELECT 107xl / Sentinel 100
	MP15	Electronic 5/2 day or 24 hr. mini. Prog	SELECT 207xl / Sentinel 200
	MP75	Electronic 5/2 day or 24 hr. mini. Prog	SELECT 207xl / Sentinel 200
	CP15	Electronic 5/2 day or 24 hr. two channel prog	SELECT 207xl / Sentinel 200
	CP75	Electronic 5/2 day or 24 hr. two channel prog	SELECT 207xl / Sentinel 200
	FP75	Electronic 7 day or 5/2 day full programmer	SELECT 207xl / Sentinel 200
Glowworm	Mastermind	Electro-mechanical 24 hr. two channel prog	SELECT 207xl / Sentinel 200
Horstmann	C27	Electronic 7 day full programmer	SELECT 207xl / Sentinel 200
	C21	Electronic 24 hr. full programmer	SELECT 207xl / Sentinel 200
	C17	Electronic 7 day time switch	SELECT 107xl / Sentinel 100
	C11	Electronic 24 hr. timeswitch	SELECT 107xl / Sentinel 100
Landis & Staefa	RWB9	Electronic 7 day 5/2 day or 24 hr. full prog.	SELECT 207xl / Sentinel 200
	RWB7	Electronic 7 day 5/2 day or 24 hr. timeswitch	SELECT 207xl / Sentinel 200
	RWB2	Electro-mechanical 24 hr. two channel prog	SELECT 207xl / Sentinel 200
	RWB2.9	Electro-mechanical 24 hr. two channel prog	SELECT 207xl / Sentinel 200
	RWB20	Electronic 7 day two channel programmer	SELECT 207xl / Sentinel 200
	RWB40	Electronic 24 hr two channel programmer	SELECT 207xl / Sentinel 200
	RWB102	Electronic mini programmer	SELECT 207xl / Sentinel 200
	RWB200	Electronic 24 hr. two channel programmer	SELECT 207xl / Sentinel 200
	RWB 252	Electronic 5/2 day two channel programmer	SELECT 207xl / Sentinel 200

Note: This list gives common examples and is by no means exhaustive.  
For further information contact Sunvic controls



# NOTES

Lined area for notes with 20 horizontal orange lines.

