CONTENTS

	Page
PLUG IT - The Revolutionary NEW Plumbing System	2/3
SELECT XLS - Unique 'All-in-one' Programmer	4/5
SERVICE SENTINEL PROGRAMMERS	6/7
ROOM THERMOSTATS	8/9
PROGRAMMABLE ROOM THERMOSTATS	10
THERMOSTATIC RADIATOR VALVES	11
MOTORISED VALVES	12/13/14
SOLAR CONTROLLERS	15
SUNVIC SYSTEM ESSENTIALS	16
HEATING PACKS	17
ROD THERMOSTATS	18/19
SPARES AND ACCESSORIES	20
WIRING DIAGRAMS	21

PLUG IT

The Plug-it Control Pack was designed specifically to ease the installation of Controls in Central Heating Systems by saving time on the electrical installation costs. The motorised valves, cylinder thermostat and optional pump are pre-wired to the wiring centre,with a unique colour coded plug connecting to the controls.
The perfect solution for Builders, Developers, Local Authorities, Housing Associations, Self Build and most importantly, the Installer and Service Engineer.

- Fast and easy to fit
- Reduces installation costs
- Standard UK Mains Voltage
- Unique Colour Coded Plug Connectors

There is also the added value to Merchants supplying complete systems in one convenient pack. Plug-it Packs are supplied with a choice of Room Thermostats either hard wired, or RF and Time Controls, (1, 2 or 3 Channel Programmers) and a by-pass valve in the 2 port Valve packs.
Sunvic offer the flexibility to choose your own pack type by defining which items are included. Choose a motorised valve type from motor on/motor off or spring return technology), S or Y plan compatible, depending on your application.
There is also a choice of thermostat pack and no pump option if necessary.
FOR MORE INFORMATION PLEASE SEE PAGE 19.

TYPICAL STANDARD PACK CONTENTS:

Contents	Twin Univalent Energy Saving Plug-it Pack	Twin Univalent SR Plug-it pack	3 Port Unishare Energy Saving Plug-it Pack	3 Port Unishare SR Plug-it Pack
2 Port Energy Saving Motorised Valves	■ x 2			
2 Port Spring Return Valves		■ x 2		
1x3 Port Energy Saving Motorised Valve			■	
1x3 Port Spring Return Valve				■
SBV33 Auto By-pass Valve	■	■		
Room Thermostat TLX4101 (2 Wire Volt Free Option) Or TLX9201 (3 Wire Option)	■	■	■	■
Select207XL Programmer	■	■	■	■
Wiring Centre	■	■	■	■
Cylinder Thermostat	■	■	■	■
Circulator Pump	■	■	■	■

MOTORISED VALVES

Sunvic Motorised valves are available in Motor on/Motor Off energy saving technology or standard spring return models. They are designed and manufactured in Scotland to the highest standard and provide long lasting reliability and outstanding performance. All actuators are replaceable without draining down the system.

MULTI PURPOSE PROGRAMMER

7 day, 5/2 day and 24 hour programming options, 'All-in-One' programmer, with two independently time controlled channels e.g. Heating and Hot Water. Designed for use with fully pumped Central Heating Systems, with and option for Gravity systems, using a 3 port mid position motorised valve or two 2 port zone valves.

WIRING CENTRE SWC 2202

The Sunvic 10 way wiring centre is moulded in an attractive white high quality flame retardant ABS finish and pre-wired to include cable lengths terminated with colour coded connectors.

ROOM THERMOSTAT

The TLX 9000 shown on the left features a user friendly tactile knob to aid visually impaired users and is also available in silver effect.

TLX 4101 two wire volt free thermostat option

CYLINDER THERMOSTAT SA 2452

The surface mount cylinder thermostat comprises of a single pole double throw micro gap switch, suitable for loads up to 5A 250V.

PUMP

High quality Wilo domestic circulator pump. 130mm port to port with 1½" BSPM connection and 6 metre head.

PLUG

Unique and innovative patented plug system.

Optional 3 Port Valve

Optional 307 XLS

Optional TLX 4101

SELECT XLS RANGE
The Unique ALL-IN-ONE Programmer

NEW for 2008

Select 207 XLS
2 Channel Programmer

THE BEST SELLING PROGRAMMER ON THE MARKET

The Select 207XLS has 7 day, 5/2 day and 24 hour programming options, 'All-in-One' programmer, with two independently time controlled channels e.g. Heating and Hot Water. Designed for use with fully pumped Central Heating Systems, with and option for Gravity systems, using a 3 port mid position motorised valve or two 2 port zone valves.

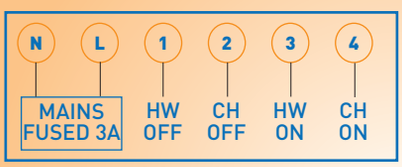
Silver effect also available

The Select Range Benefits

- Unique all-in-one Select 7 day, 5/2 day 24 hour
- Boost and advance facility on all channels
- Easy to read AM/PM illuminated display
- Automatic Summertime adjustment
- Building regulations compliant
- 6(2) A Switch rating
- Stylish design - all models available in silver effect

energy saving recommended

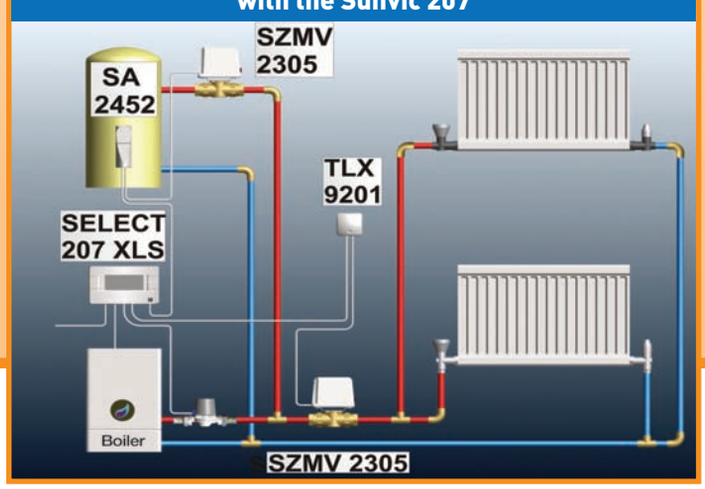
The Select range makes it extremely easy for installers to satisfy the timing requirements of a wide variety of applications. The key is in the flexibility available through 'Select' functionality. There is the choice of either 24hr, 5/2 day or 7 day programming selected via dip switches at the back of the unit.



Select 207 Wiring Diagram

Built in Program:	Mon- Fr	Sat-Sun
1st On	6.00AM	7.00AM
1st Off	8.30AM	9.00AM
2nd On	4.30PM	4.30PM
2nd Off	10.30PM	11.00PM

2 Zone Heating System with the Sunvic 207



	Select107XLS	Select207XLS	Select307XLS
Analogue Programming			
Digital Programming	■	■	■
No On/ Offs per Channel	3	3	3
Gravity/ Fully Pumped	■	■	■
Manual Override	■	■	■
24 Hour	■	■	■
5/2 days	■	■	■
7 Days	■	■	■
No Of Channels	1	2	3
Boost/ Advance	■	■	■
Industry Standard Backplate	■	■	
Service Sentinel Feature			
Backlit Display	■	■	■
Current Rating (Amps)	6	6	6
Pre-defined Programming	■	■	■
Volt Free Contacts	■		
LCD Display	■	■	■

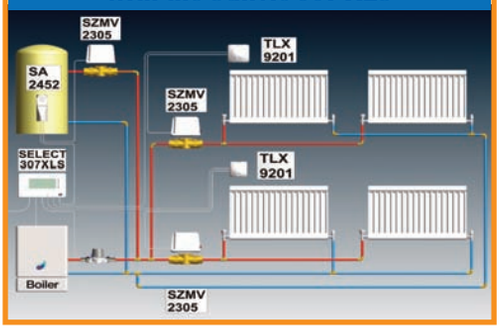
Select 307 XLS

3 Channel Programmer

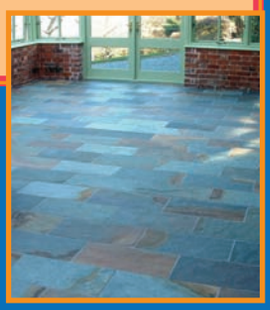
The superb new 307 XLS has a 7 day setting over 3 totally separate channels e.g. hot water and two individual heating zones. Designed for use with fully pumped central heating systems using three separate 2 port zone valves. Attractive, modern design fits in with all modern house design.

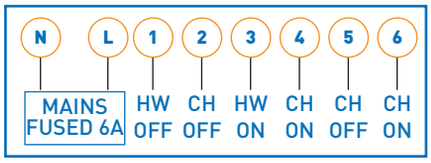
Building Regulations requires properties above 150 sq m floor space to have two individual heating zones, the 307 XLS is the perfect solution.

3 Zone Heating System with the Sunvic 307 XLS



The 307XLS 3 Channel Programmer is the perfect solution to supply control which allows separation of your; upstairs or conservatory or underfloor heating arrangements. It's multi-channel capabilities also facilitates separate time programming for living and sleeping areas throughout your home.





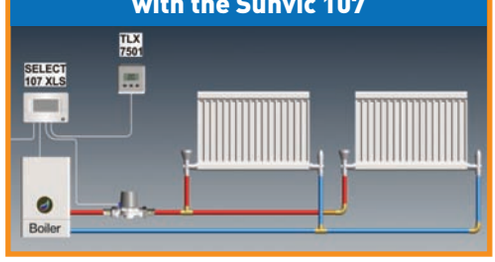
Select 307 Wiring Diagram

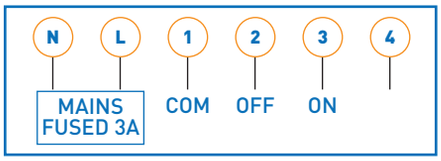
Select 107 XLS

Single Channel Programmer

The Select 107XLS 'All-in-One' programmer also has 7 day, 5/2 day and 24 hour programming options and boasts the option for use on gravity systems. Ideal for use with 'Combination Boilers where only one heating zone is necessary, or can be used for additional heating zones in retrofit with a two or three channel programmer is already installed or for when additional hot water cylinder control is required.

Single Zone Heating System with the Sunvic 107





Select 107 Wiring Diagram

For all the necessary essentials and auxiliary products relating to the Unique Select Range please see pages 2 and 3 for PlugIt and page 16 for our superb Heating Packs selection.

SERVICE SENTINEL PROGRAMMERS AND PROGRAMMABLE ROOM THERMOSTATS

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

Within the Sunvic range there are three models, Simpro - the simple, intuitive switch-and-dial programmable with Service Sentinel functionality.

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 10ºC 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

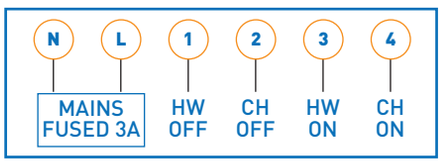
	Simpro	Simplex100	Simplex200
Current Rating (Amps)	5(3)	5	5
Temperature Range (°C)	10/30	■	■
Changeover Contacts	■	■	■
24 Hour Programming	■	■	■
5/2 Day Programming			
Radio Frequency			
LED Status Indicator	●		
Digital Display	■	■	■
Volt Free Contacts	■	■	
Backlit Display			
Optimum Start			
Clock Display	■		
Room Temperature Display	■	5	5
Pre-defined Control Programmes			
Sentinel 'Setback' Functionality	■	■	■
Manual Override	■	■	■
Frost Protection			
Analogue Programming	■		
Digital Programming			

SIMPLEX 200

Two Channel Electromechanical programmer

- Easy to use
- "Timeline" programme select switches
- Independent control of heating and hot water
- Fully building regulations Part L compliant
- Boost and advance buttons
- Industry standard backplate
- Direct plug in replacement for most makes
- Programmer and timeclock version
- Service sentinel feature

SIMPLEX200 TWO CHANNEL 24HR ELECTRONIC PROGRAMMER WITH SERVICE SENTINEL FUNCTIONALITY



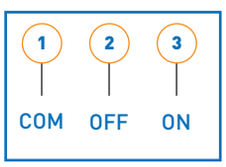
Simplex 200 Wiring Diagram

SIMPLEX 100

Electromechanical programmer

- Easy to use
- "Timeline" programme select switches
- Combined control of heating and hot water, ideal for Combi Boilers
- Fully building regulations Part L compliant
- Boost and advance buttons
- Industry standard backplate
- Direct plug in replacement for most makes
- Programmer and timeclock version
- Service sentinel feature

SIMPLEX100 SINGLE CHANNEL 24HR ELECTRONIC TIMESWITCH WITH SERVICE SENTINEL FUNCTIONALITY



Simplex 100 Wiring Diagram

The Simplex Range has been developed for the needs of the homeowner or landlord who desire a central heating controller that is simple to use and easy to understand. The programmer provides a 24Hr "timeline" of manual switches to select the on/off periods for either heating or hot water. This approach means programming the unit is simple, with fast modifications as and when desired.

ROOM THERMOSTATS

SUNVIC room thermostats are sensing devices which measure the air temperature within a building and switch the central heating on or off according to the required level of comfort.

Our expertise in room temperature control means that you will find a thermostat to suit a wide variety of applications. From basic 2 or 3 wire room thermostats, to radio frequency digital models we have it covered. The range includes products suitable for industrial, commercial and domestic installations.

Selection Guide

	TLX2251	TLX2259	TLX2356	TLX2358	TLX2360	TLM2253	TLM2257	TLM2402	TLM2453	TLM2628	TLM2802	TLX4101	TLX5101	TLX5301	TLX5302	TLX7501	TLX9201	TLX9301	TLX9401	TLX9701	TLX9901	TLXRFD
Current Rating (Amps)	1	6(2)	6(2)	6(2)	6(2)	20(9)	20(9)	20(9)	20(9)	20(9)	20(9)	4(1)	10(4)	10(4)	10(4)	2(1)	10(4)	16(7)	10(4)	10(4)	10(4)	6(2)
Temperature Range (°C)	3/27	3/27	3/27	3/27	0/15	3/27	-15/10	3/27	3/27	3/27	10/40	8/30	5/30	5/30	5/30	5/35	5/30	5/30	-5/15	5/30	Graphic	5/35
Changeover Contacts			■	■							■	■		■	■	■	■		■	■	■	■
Tamperproof				■	■			■	■										■	■		
Radio Frequency																						■
Operating Voltages	24	220/240	220/240	220/240	220/240	220/240	220/240	220/240	220/240	220/240	220/240	VF	220/240	220/240	220/240	VF	220/240	220/240	220/240	220/240	220/240	VF
Accelerator Heater	■	■		■	■	■	■	■	■	■	■						■	■	■	■	■	
Adjustable Range Stops	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■		■	■	■	■	■	
LED Status Indicator													■	■	■		■	■	■	■	■	
Digital Display																■						■
Volt Free Contacts												■				■						■
ON/OFF Switch															■							
Heating Applications Only	■	■			■	■	■	■	■	■			■					■				
Heating & Cooling Applications			■	■							■	■		■	■	■	■		■	■	■	■

TLX2000 SERIES

Electromechanical range for light to medium duty applications

- High specification and reliability
- Wide range available to suit all applications
- Models available for both 240V and 24V applications
- Reliable temperature control via built in Accelerator Heater
- Tamperproof models
- Adjustable range stops option (available on request)

See Spares & Accessories for optional damage/ weatherproof accessories

TLX2251 Low voltage model to control warm air heating
TLX2259 Controls boiler, pumps, spring return motorised valves and any device requiring on/off switching
TLX2356 Controls motor open/ motor closed motorised valves or any other device requiring changeover switching
TLX2358 Two accelerator heaters and tamperproof concealed setting (including shear off screws)
TLX2360 Frost thermostat with tamperproof concealed setting (including shear off screws)

TLM2000 SERIES

Electromechanical range for medium to heavy duty applications

- High specification and reliability
- Wide range available to suit all applications
- 20Amp rated On/Off contacts
- Robust magnetically controlled switch mechanism
- Tamperproof models
- Adjustable range stops option (available on request)

See Spares & Accessories for optional damage/ weatherproof accessories

TLM2253 Controls any direct electrical heating system - Gold Finish
TLM2257 Frost thermostat to protect heating systems and machinery from low temperature damage
TLM2402 Non-ventilated tamperproof concealed setting (including shear off screws)
TLM2453 Tamperproof concealed setting (including shear off screws)
TLM2628 Indicated OFF position for use when a positive switch is required
TLM2802 Changeover back contact rated 5A resistive

TLX4000/9000 SERIES

Electromechanical range with stylish design

- Stylish low profile design
- Large setting dial with thumbwheel operation
- LED status indicator
- Changeover contacts
- Double insulated
- TLX9501 includes user friendly tactile knob to aid visually impaired users
- Adjustable range stops
- Available in silver effect

TLX4101 Volt Free, Combi Boiler
TLX9201 Controls boiler, pumps, spring return motorised valves and any device requiring on/off switching
TLX9201S Silver Effect finish
TLX9301 High Current On/Off Contacts
TLX9401 Frost thermostat with tamperproof concealed setting
TLX9701 Tamperproof concealed setting to prevent unauthorised adjustment
TLX9901 Graphical Hi-Lo scale for applications where temperature dial not required

TLX5000 SERIES

Electronic range

- Ergonomic design
- LED status indicator
- Internal or external sensor
- 10 Amp current rating
- Adjustable range stops
- Adjustable deadzone 0-5k

TLX5101 Controls boiler, pumps, spring return motorised valves and any device requiring on/off switching
TLX5301 Adjustable deadzone 0-5K to provide off period between switching (i.e. heating/ cooling appliances)
TLX5302 Adjustable deadzone 0-5K to provide off period between switching with manual switch for off/ auto selection

TLX7501

Digital room thermostat

- Ideal for combi boilers
- Easy to use with large digital display
- Responds fast to changes in temperature
- Volt free contacts
- Suitable for a variety of heating and cooling applications
- Available in silver effect
- **No neutral required**

TLX7501 Controls mains circuits, combination circuits and heating/ cooling applications
TLX7501S Silver Effect finish

TLX RFD

Radio frequency digital

- Easy to install – no wiring between thermostat and receiver
- Transmission range 30m (typical)
- Large digital display
- Trouble free operation (unique identity code)
- Battery powered thermostat
- Room temperature display
- Ideal for combi boilers
- Volt free contacts

PROGRAMMABLE ROOM THERMOSTATS

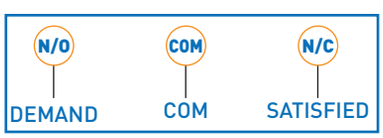
The TLX6501 provides control of your heating or cooling system by switching between user adjusted comfort and economy temperatures under control of pre-defined or user-defined daily programmes. Complete with Backlit display and Optimum Start feature providing maximum user comfort and control.

TLX 6501

Digital programmable room thermostat

- Fully featured 24hr, 5/2 day programmable room thermostat
- Room temperature display
- Manual override
- 6 Pre-defined and 3 User-defined control programmes
- Real time clock and day of the week display
- Large multiparameter backlit display
- Frost protection & optimum start feature
- Volt free contacts
- **No neutral required**

TLX6501 Programmable Room Thermostat



The TLXRFP PROGRAMMABLE ROOM THERMOSTAT has been developed for use in areas where it is not practical, or acceptable, to run cables between the room thermostat and other control components in the system.

With an attractive slim line design, multiple installation options (mounted or free standing) and 30 metre range, the RFP is a truly flexible solution.

Programming is simple, choose from one of the six pre-defined control programs, or set up a unique user-defined programme to create a preferred temperature cycle. Both Comfort and Economy programme options are available at the push of a button. There is also the option to manually override the programmed cycles.

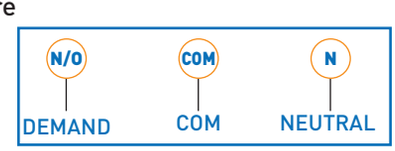
With built in frost protection safeguarding pipes from freezing, and optimum start for energy efficiency, the TLXRFP also delivers economic benefits.

TLX RFPv

Radio frequency programmable room thermostats

- Easy to install – No wiring between thermostat and receiver
- Transmission range 30m (typical)
- Large Multi-parameter backlit display
- 6 Pre-defined and 3 User-defined control programmes
- Room temperature display
- Real time clock and day of the week display
- Manual or automatic operation
- Frost protection & optimum start feature
- Volt free contacts

TLXRFPv Controls mains circuits and heating/ cooling applications



THERMOSTATIC RADIATOR VALVES

SUNVIC thermostatic radiator valves (TRVs) give you control over individual room temperatures by regulating the water flow to the radiator.

Within the range there are a variety of styles and finish to allow for personal choice. All Sunvic thermostatic radiator valves are available as single (TRV) or pack version (TRV plus lockshield)

- Fully reversible
- Frost protection
- Designed & manufactured to EN215 standard
- Extendible ½ inch BSP connecting tail
- Max service pressure 10 bar
- Lockshield packs available
- Straight and Angled versions available

	TRV200	TRV300	TRV500	TRV750
Head (liquid/wax/vapour)	Wax	Wax	Wax	Wax
Temperature Range (°C)	5/27	5/27	5/27	5/27
Size (mm)	10/15	10/15	10/15	10/15
One Pipe System	1	1	1	1
Single entry/ Twin entry	S	S	S	S
Vertical Installation	■	■	■	■
Horizontal Installation	■	■	■	■
Two way valve	■	■	■	■
Positive Shut off	■	■	■	■
Frost Protection	■	■	■	■
Tamperproof	■	■	■	■
Lockshield Pack available	■	■	■	■

TRV 500

TRV 750

TRV200

Thermostatic radiator valve with temperature lock feature

TRV200 Thermostatic radiator Valve
TRV200 Pack Thermostatic radiator Valve with lockshield

TRV300

Thermostatic radiator valve. Sleek stylish design with temperature lock feature

TRV300 Thermostatic radiator Valve
TRV300 Pack Thermostatic radiator Valve with lockshield

TRV500

Thermostatic radiator valve. Stylish robust design with Anti tamper temperature limit (min/max) feature

TRV500 Thermostatic radiator Valve
TRV500 Pack Thermostatic radiator Valve with lockshield

TRV750

Thermostatic radiator valve. Sleek stylish design with fully chromed head, body and fittings and temperature lock feature

TRV750 Thermostatic radiator Valve
TRV750 Pack Thermostatic radiator Valve with lockshield

2 PORT SPRING RETURN MOTORISED VALVES

SUNVIC motorised valves are guaranteed to be of high quality, high reliability and high specification. Years of experience in the mastery of valve design and manufacture gives uniqueness to the products within our range.
The motorised valve is probably the hardest working component in 'wet' domestic central heating systems, so you need to be sure it belongs to a name you can trust.
Our expertise is evident in our ability to create patented technology for both actuators and valve bodies.

- Spring return action
- Manual lever for filling/ draining system
- Actuator replaceable without draining down systems
- Self cleaning shoe action
- auxiliary Switch for electrical control of pump boilers & other ancillaries
- Available as complete valves or separate body and actuator
- Normally Closed and Normally open Actuators available
- Valve OPEN Neon Actuators available

Valve Size and Connection Detail:	Complete Valve and Actuator Order Code	Actuator Only Order Code	Valve Body only Order Code
15 mm (external Compression)	SZV 2286	SZ 2301	ML 3402
22 mm (External Compression)	SZV 2212	SZ2301	EML 3454
28 mm (External Compression)	SZV 2228	SZ 2301	EML 3503
½ "bsp (female)	SZV 2288	SZ 2301	ML 3401
3/4" bsp (female)	SZV 2289	SZ 2301	ML 3451
1" bsp (female)	SZV 2218	SZ2301	ML 3501

SPECIALS FOR IRISH MARKET:

Valve Size and Connection Detail	Complete Valve and Actuator with Neon	Actuator only	Valve body only
22mm / 3/4" (Imperial Copper)	SZV 2543	SZ 2401	EML 3505
28mm / 1" (Imperial Copper)	SZV 2544	SZ 2401	EML 3504
3/4" bsp (female)	SZV 2545	SZ 2401	EML 3451

FOR FULL RANGE OF SZ ACTUATORS FOR OTHER APPLICATIONS SEE SPARES PAGE 20

3 PORT 'UNISHARE' SPRING RETURN MOTORISED VALVES

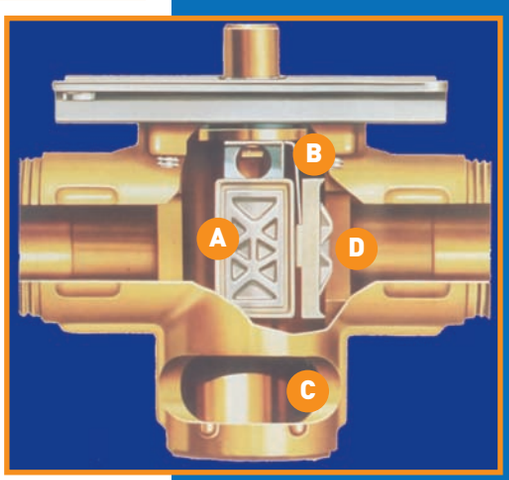
- Spring return action
- Manual lever for filling/ draining system
- Actuators for Mid Position or Diverter applications
- Actuator replaceable without draining system
- Revolutionary patented 'Slipseal' action

Valve Size and Connection Detail:	Complete Valve and Actuator Order Code	Actuator Only Order Code	Valve Body only Order Code
Mid Position:			
22 mm (External Compression)	SDV 2211	SD 2701	EDT 2702
28 mm (External Compression)	SDV 2294	SD 2701	EDT 2706
1" bsp (female)	SDV 2296	SD 2701	DT 2606
Diverter:			
22 mm (external compression)	SDV 2291	SD 2601	EDT 2702
28 mm (external compression)	SDV 2295	SD 2601	EDT 2706
1" bsp (female)	SDV 2297	SD 2601	DT 2606

SD ACTUATORS	Order Code	No of Wires
Mid Position Actuator	SD 2701	4
Diverter	SD 2601	2

VALVE BODY UNIQUE SPECIFICATION:

- **A** Self Cleaning Rubber Seal ensures good shut off
- **B** Driven by Stainless Steel Leaf Spring and no bulky Spindle to reduce Flow and cause turbulence
- **C** Clear unimpeded water flow and no ball or paddle
- **D** Unique patented ramp feature moves rubber seal away from valve chamber wall to allow self cleaning



MoMo 2 & 3 PORT MOTORISED VALVES

MOTOR OPEN / MOTOR CLOSED

2 Port MoMo

- Energy Saver : Powered only when motoring
- Highly reliable and reduced energy consumption
- Simple Industry Standard Wiring
- Replaces most makes of Spring Return Valves
- Robust Manual Wheel and Valve position indicator
- Motor Open / Motor Closed Operation

Valve Size and Connection Detail:	Complete Valve and Actuator Order Code	Actuator Only Order Code	Valve Body only Order Code
2 Port Valve:			
15 mm (external compression)	SZMV 2322	SZM 1801	ML 4402
22 mm (external compression)	SZMV 2305	SZM 1801	ML 4201
28 mm (external compression)	SZMV 2323	SZM 1801	EML 4503
1/2" bsp (female)	SZMV2324	SZM 1801	ML 4401
3/4" bsp (female)	SZMV 2325	SZM 1801	ML 4451
1" bsp (female)	SZMV2326	SZM 1801	ML 4501

3 Port MoMo

All features and Benefits as 2 Port Valve above.

Valve Size and pipe connection	Complete Valve & Actuator	Actuator Only Order Code	Valve Body only Order Code
22 mm (external compression)	SDMV 2304	SDM 1901	EDT 3201
28 mm (external compression)	SDMV 2320	SDM 1901	EDT 3706
1" bsp (female)	SDMV 2321	SDM 1901	DT 3606

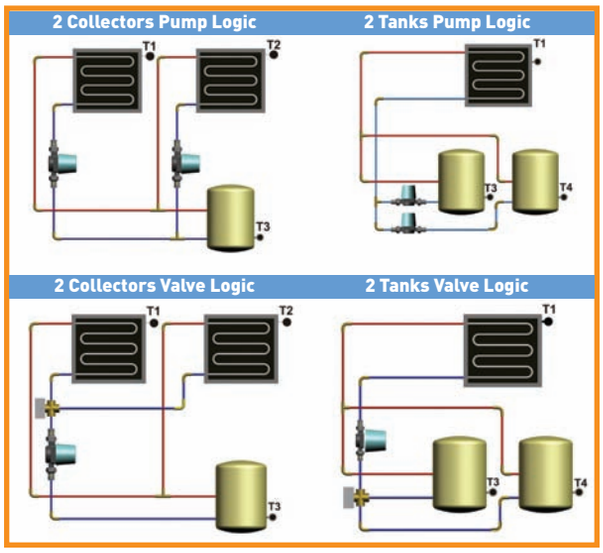
SOLAR CONTROLLERS

Solar Control XL

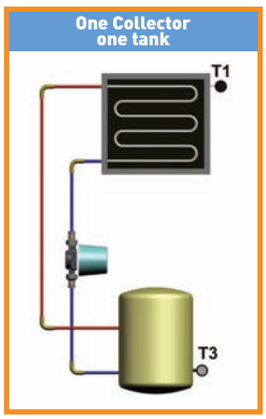
The Sunvic Solar Controller with backlit LCD can control up to 2 solar panels in five different possible configurations:

- 1 Solar Panel + 1 Pump + 1 Tank
- 2 Solar Panels + 2 Pumps + 1 Tank
- 2 Solar Panels + 1 Pump + 1 Valve + 1 Tank
- 1 Solar Panel + 2 Pump + 2 Tank
- 1 Solar Panel + 1 Pump + 1 Valve + 2 Tanks

This high spec system can drive up to 5 different temperature sensors including 2 for solar panels, 2 for cylinders and one extra. A microprocessor compares the temperature at each sensing point then controls the speed of the pump which automatically opens or closes the valve when 2 panels are operated.



Solar Control



The essential Sunvic Solar Control controls the complete solar panel using 3 separate sensors (solar panel, tank and additional heat source), to drive the pump depending on the temperature difference between the solar panel and tank. The pump can also be manually operated for up to 4 hours.
It also features a pump test function to eliminate any circulation problems, automatically testing the system for 15 seconds every 5 days. Optional connection to external heating element to increase water temperature and a safety protection if sensor fails.

Solar Control Features

- **Stylish Design**
- **Easily navigated Graphic Display**
- **User friendly Keyboard**
- **PC Computer Link**
- **Freeze Protection**
- **Tank Priority**
- **Manual or Automatic**
- **Overheat Protection**

SUNVIC SYSTEM ESSENTIALS

SA 2452 SURFACE MOUNT THERMOSTATS

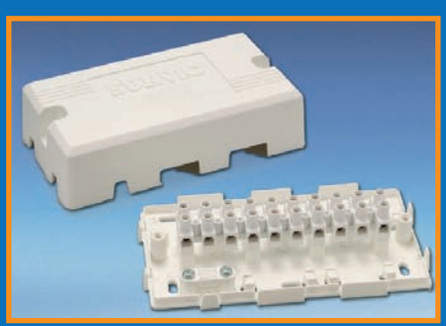
- Easy to install
- Large control knob
- Both cylinder and pipe thermostat models available
- New Styling

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.

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.



SBV 33 AUTOMATIC BY-PASS VALVE

The automatic by-pass valve is designed to maintain a minimum flow rate in heating systems fitted with TRVs (thermostatic radiator valves). When all the TRVs are open, the by-pass valve remains closed, allowing the full boiler output to circulate around the heating system. As TRVs sense that the selected room temperatures are reached and begin to close, the by-pass valve starts to open, maintaining optimum flow through the boiler, thus eliminating possible damage to the boiler and pump. Installation of the by-pass valve also minimises the noise often experienced when flow through the boiler decreases.

PRODUCT	TYPE	SCALE (˚C)	SWITCH RATING	DIFFERENTIAL (˚C)	SENSING ELEMENT
SA 2452	Cylinder Thermostat	40 – 90	5(1) A 230/240V S.P.D.T.	Approx. 9 – Non adjustable	Bimetal

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

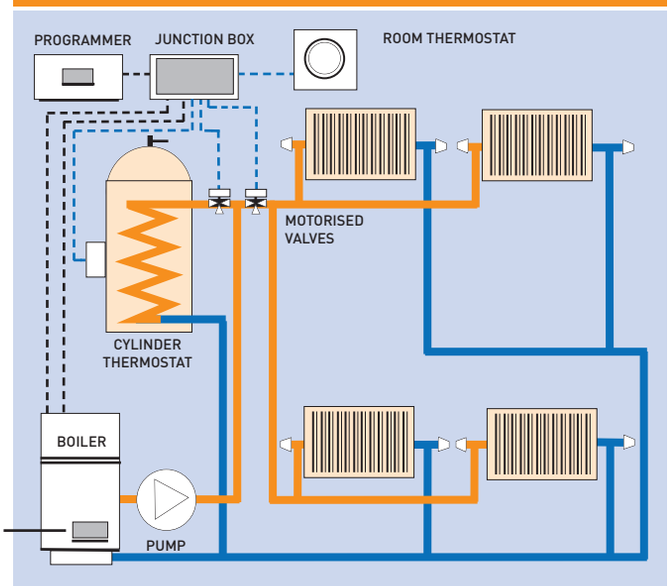
MoMo Univalve 3 Energy Saving Kit

MoMo Unishare Energy Saving Kit

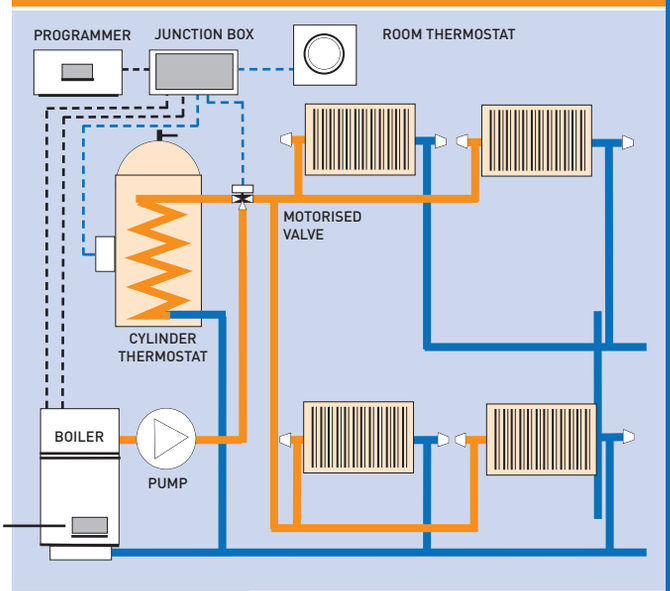
MoMo Univalve Energy Saving Kit

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	■		■	■	■

TWIN UNIVAL COMPLETE SYSTEM PACK



UNISHARE COMPLETE SYSTEM PACK



ROD THERMOSTATS

VKL 3000

Safety ROD Thermostat

The SUNVIC VKL3000 rod thermostat for domestic immersion heaters provides unsurpassed performance and service and, at the same time, totally overcomes all concerns about complying with the newly effective regulations pertaining to this type of control. The unit's 'one-shot' over-temperature switching action makes resetting impossible.

- Unique, patented 'One Shot' over temperature sensor
- Complies with latest European Safety Legislation EN60335-2-73
- Conforms to EN60730-1-2-9, BEAB approved
- 16 Amp rating
- Small head design, suitable for retrofit applications
- Available in 3 Standard lengths
- Simple 2 wire connection

Selection Guide

MODEL	STEM LENGTH	RANGE (°C)	DIFFERENTIAL (°C)	VOLTAGE	CURRENT RATING (AMPS)	OVERTEMP CUT-OUT (°C)
VKL 3201	7" / 178mm	40 - 70	10	230V AC	16 A	96°C
VKL 3301	11" / 280mm	40 - 70	6	230V AC	16 A	96°C
VKL 3401	18" / 457mm	40 - 70	5	230V AC	16 A	96°C

VKL 3000 SERIES TECHNICAL SPECIFICATION

Control thermostat	Overtemp. Thermostat
Contacts: Single pole	Contacts: Single pole
Function: Break on temp. rise Make on temp fall	Function: Break on temp. rise
Voltage: 230V AC	Voltage: 230V AC
Load current: 16 A	Load current: 16 A
Switch action: 1˚C on opening 2 ˚C on closing	Switch action: 1˚C on opening

VKL 2000

ROD Thermostat

- 16 Amp rating
- Simple 2 wire connection
- Manual reset model
- Available in three standard lengths

Selection Guide

MODEL	STEM LENGTH	RANGE (°C)	DIFFERENTIAL (°C)	VOLTAGE	CURRENT RATING (AMPS)
VKL 2201	7" / 178mm	50 - 80	10	230V AC	16 A
VKL 2251	7" / 178mm	45 - 95	Manual re-set	230V AC	16 A
VKL 2301	11" / 280mm	50 - 80	6	230V AC	16 A
VKL 2303	11" / 280mm	25 - 65	6	230V AC	16 A
VKL 2351	11" / 280mm	45 - 95	Manual re-set	230V AC	16 A
VKL 2401	18" / 457mm	50 - 80	5	230V AC	16 A

VKL 2000 SERIES TECHNICAL SPECIFICATION

Contacts: Single pole.	Function: Break on temperature rise.
Voltage; 230V AC	Load current: 16 Amps

VK 4000

ROD Thermostat

- 20 Amp rating
- Simple 2 wire connection
- Available in three standard lengths

Selection Guide

MODEL	STEM LENGTH	RANGE (°C)	DIFFERENTIAL (°C)	VOLTAGE	CURRENT RATING (AMPS)	FEATURES
VK 4251	7" / 178mm	10 - 88	10	230V AC	20 A	
VK 4252	7" / 178mm	10 - 88	10	230V AC	20 A	Pocket Clip Fitted
VK 4253	7" / 178mm	30 - 110	10	230V AC	20 A	
VK 4351	11" / 280mm	40 - 88	6	230V AC	20 A	
VK 4352	11" / 280mm	40 - 88	6	230V AC	20 A	Pocket Clip Fitted
VK 4353	11" / 280mm	60 - 120	6	230V AC	20 A	
VK 4354	11" / 280mm	60 - 120	6	230V AC	20 A	Pocket Clip Fitted
VK 4451	18" / 457mm	45 - 88	5	230V AC	20 A	

VK 4000 SERIES TECHNICAL SPECIFICATION

Contacts: Single pole.	Function: Break on temperature rise.
Voltage; 230V AC	Load current: 20 A Not recommended for currents below 0.5A AC

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
SM 5201	Drive Open / Drive Closed Actuator 4 Wire No switch
SM 5203	Drive Open / Drive Closed Actuator 5 Wire SPST N/O
SM 5205	Drive Open / Drive Closed Actuator 6 Wire SPDT

Note : SM Actuators require SPDT Thermostats

SZ 2201	Spring Return N/C 2 Wire No Switches
SZ 2251	Spring Return N/O 2 Wire No Switches
SZ 2302	Spring Return N/C 4 Wire SPDT for Gravity Systems
SZ 2351	Spring Return N/O 4 Wire SPST
SZ 2355	Spring Return N/O 5 Wire SPDT

Note :
All SM/SZ Actuators can be used with ML/EML Valve Bodies

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

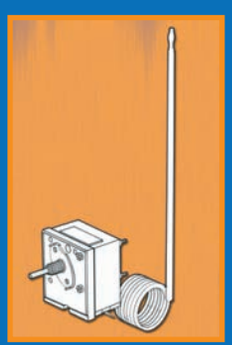
CYLINDER THERMOSTAT

ORDER CODE	PRODUCT DESCRIPTION
7171500	CIT 500 Stem, immersion

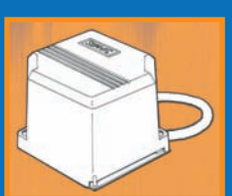
Some older specification products, spares and accessories are available upon request. Please contact Sunvic customer service team for further information.

Class 'A' Synchronous Motor

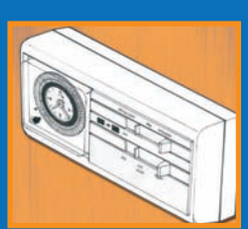
SEN 23 Electronic Thermo-stat Sensor**



TF 1602 Boiler Thermostat



Replacement Actuator



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