

Issue 7



# Installer Handbook

- Product ranges
- Wiring diagrams
- Smart controls

**Drayton**

by **Schneider Electric**

# Contents

RTS Room Thermostat Range .....	3
Combi-Stat Room Thermostat .....	3
Digistat+/-RF Wired & Wireless Room Thermostats .....	4
Digistat+1/+1RF Wired & Wireless Room Thermostat .....	5
Digistat Digital Universal Thermostats .....	6
LP Clip-in Controls for Worcester Boilers .....	7
Wiser 2nd Generation - Smart Heating & Smart Home .....	8 - 9
Wiser 1st Generation - Complete Home Heating .....	10 - 11
Wiser Compatibility Table .....	12
Lifestyle LP & LPSi Electronic Timeswitches & Programmers.....	13
SM1 & SM2 Electro-Mechanical Timeswitch & Programmer .....	14
Motorised Valves; Two Port & Mid Position Valves .....	15
RT414 & RT212 Thermostatic Radiator Valves .....	16
TRV4 Thermostatic Radiator Valves .....	17
Auto-balancing Thermostatic Radiator Valves .....	18
TS Ultra Thermal Actuator .....	19
HTS Cylinder Thermostat .....	20
Digistat+ CRF Wireless Cylinder Thermostat .....	20
PTS1 Pipe Thermostats.....	20
Control Packs.....	21
Programmer Compatibility Guide .....	22
Timeswitch Compatibility Guide .....	23
Room Thermostat Compatibility Guide .....	24

## Wiring Diagrams

Wiring diagrams for Combi systems .....	26
Wiring diagrams for Zoned Combi systems .....	27 - 28
Wiring diagrams for Biflo systems .....	29 - 35
Wiring diagrams for Twinzone systems .....	36 - 42
Wiring diagrams for Three Channel systems .....	43

## Wiser Explained

Removing & resetting devices .....	44
LED behaviour .....	45 - 51

Full listings and part numbers can be found in our Product Catalogue, downloadable from [www.draytoncontrols.co.uk](http://www.draytoncontrols.co.uk)

The Drayton Community

facebook

join the conversation

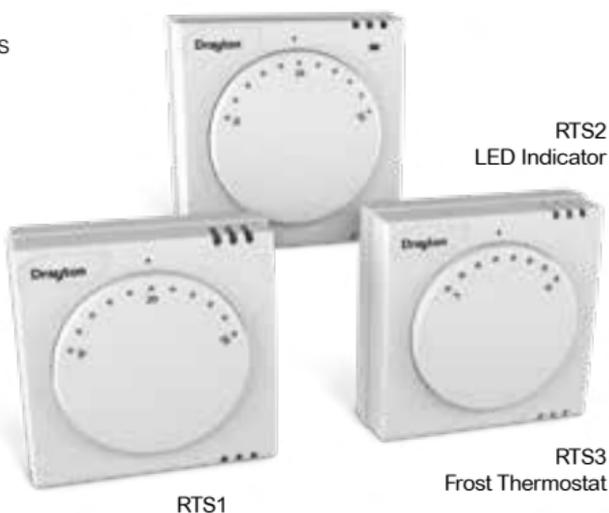


# RTS

## Room Thermostat Range

### Features:

- Range limiting stops
- Set point locking
- Surface or conduit box mounting
- Double insulated



Product	Part No.
RTS1 SPST contacts	24001
RTS2 SPST with LED indicator	24002
RTS3 SPST frost thermostat	24003
RTS4 SPDT volt free contacts	24004
RTS9 SPDT volt free + LED	24030

## CombiStat Room Thermostat

### Features:

- 2 or 3 wire
- Switch rating up to 6A
- Range limiting stops
- Set point locking
- Surface or conduit box mounting
- Double insulated



Product	Part No.
RTS8 CombiStat	24028

# Digistat+ / +RF

## Wired and Wireless Room Thermostats



### Features:

- Conventional dial adjustment
- On/off load compensation
- 1°C setting steps
- Tactile & audible feedback via click of the dial
- Visual feedback via digital display
- Set-back feature
- Min/Max temperature setting
- Tamper-proof (set Min/Max the same)
- Battery powered
- Digital display situated above dial for ease of reading

Wireless systems are a cost effective and convenient solution to problems encountered during the installation of a standard wired thermostat.

Product	Part No.
Digistat+	30002
Digistat+RF room thermostat & SCR	RF601N
Digistat+RF room thermostat spare	31003N
Digistat+ SCR spare	22149

# Digistat+1/+1RF

## Wired and Wireless Room Thermostats



### Features:

- Easy to use - only 4 buttons
- On/off load compensation
- Visual feedback via digital display
- Comfort feature
- Set-back feature
- Min/Max temperature setting
- Tamper-proof (set Min/Max the same)
- Battery powered (Digistat+1)
- Part L compliant (Part J in Scotland)

Consider the benefits of a wireless thermostat:

- No disruption to decor
- No surface wiring
- Positioning not restricted by cable runs

Product	Part No.
Digistat+1 (Battery)	22192
Digistat+1 (Mains)	22193
Digistat+1RF room thermostat & SCR	RF710N
Digistat+1RF room thermostat spare	22190N
Digistat+ SCR spare	22149

# Digistat

## Digital Universal Thermostats



### Common Features:

- Simple programming via the Wiser Home app in the home (via local Bluetooth connection)
- Boiler Plus compliant
- Large backlit LCD display
- ON/OFF load compensation
- Settings to optimise use with gas boilers, heat pumps, oil boilers or electric heating
- Can be used as 7day, 5/2day, 24hr programmable thermostat or as a simple room thermostat
- 12 or 24hr clock
- Intelligent delayed start or optimum start
- 5th button simplifies programming from the thermostat
- New Boost feature
- Timed Away Mode
- Time and date factory set
- Automatic summer/winter time update
- 3 default programmes



RF901 Digistat Single Channel RF

### Service Interval Features:

- Flexible service interval mode (reminder, reduced comfort or off)
- Adjustable warning period
- Adjustable service period
- Visual indication on LCD and on app where used
- Selectable boost feature
- Selectable audible alarm
- Reset by installer's 4-digit code

Product	Part No.
Digistat Battery 3A Relay	2290B
Digistat Mains 16A Relay with OpenTherm®	2290M
Digistat Dual-Channel Mains 3A Relay with OpenTherm NEW	2290Z
Digistat Single-Channel RF with OpenTherm®	RF901
Digistat Dual-Channel RF	RF902
Digistat Additional RF Thermostat	RF90T
Digistat Single-Channel Receiver spare	RF90S
Digistat Dual-Channel Receiver spare	RF90D



# LP Clip-in Controls For Worcester Boilers



## Features:

- Clip-in controls
- Suitable for Worcester boilers
- 4 pack options
- Simple wireless installation
- Wireless receiver built into the LP devices
- Signal strength indicator
- On/off load compensation
- 7 day programmes
- 3 on/off periods per day
- Automatic summer/winter time updates
- Pre-programmed on/off periods
- Dedicated advance buttons
- 12 or 24 hour back-lit digital display
- Holiday function
- Pre-wired with PCB connector



LP20RF & Digistat+RF

Product	Part No.	Replaces Worcester product
LP20 Dual Channel Programmer	25039DR	7 716 192 038
LP10RF Single Channel Programmer & Digistat +2RF	RF560DR	7 716 192 052
LP10RF Single Channel Programmer spare	22589DR	8 716 106 667 0
LP10RF Single Channel Programmer & Digistat+3RF	RF561DR	7 716 192 053
LP10RF Single Channel Programmer spare	22589DR	8 716 106 667 0
LP20RF Dual Channel Programmer & Digistat+RF	RF562DR	7 716 192 054
LP20RF Dual Channel Programmer spare	22590DR	8 716 106 669 0
Digistat+RF thermostat spare	31003N	-

# Wiser 2nd Generation

## Smart Heating and Smart Home.

Take home heating and automation to the next level with our new range of Hubs and smart home products. Designed for UK heating systems and incorporating OpenTherm, Wiser 2nd Generation is the first step towards full home energy management.



### Wiser 2nd Generation Hub<sup>R</sup>

Enable smart heating and smart home control via the Wiser Home app.

- One channel for combi boilers
- Two channel for conventional boilers
- Three channel for systems with two heating zones plus hot water



### Wiser Non-relay 2nd Generation Hub

Suitable for non-relay heat emitters and Wiser Devices. Connect with Wiser smart devices to enable Smart Home security and automation via the Wiser Home app.

### Wiser Window & Door Sensor

Connect to the Wiser 2nd Generation Hub/Hub<sup>R</sup> to remotely monitor the status of windows or doors. Set automations with Wiser Room or Radiator Thermostats to turn heating off if open window/door is detected. In-app notifications of window/door status.



### Wiser Motion Sensor

Connect to the Wiser 2nd Generation Hub/Hub<sup>R</sup> along with Wiser Plug or other Wiser Smart Home devices to enable security lighting if motion is detected. In-app notifications of incidents.



Product	Part No.
Wiser 1 Channel 2nd Generation Hub <sup>R</sup>	CCTFR6311G2D
Wiser 2 Channel 2nd Generation Hub <sup>R</sup>	CCTFR6312G2D
Wiser 3 Channel 2nd Generation Hub <sup>R</sup>	CCTFR6313G2D
Wiser Non-relay 2nd Generation Hub	CCT501800
Wiser Window & Door Sensor	CCT591012
Wiser Motion Sensor	CCT595012

## Wiser Water Leakage Sensor

Connect to the Wiser 2nd Generation Hub/Hub<sup>R</sup> for intelligent leak detection to prevent damage. In-app notifications of incidents.



## Wiser Smoke Alarm - Battery

Connect to the Wiser 2nd Generation Hub/Hub<sup>R</sup> for in-app notification of smoke detection when away from home.



## Wiser Temperature & Humidity Sensor

Connect to the Wiser 2nd Generation Hub/Hub<sup>R</sup> for a discreet and low-cost alternative to the Wiser Room Thermostat. Monitor temperature and humidity and set automations with other Wiser Smart Home devices via the Wiser Home app.



## Wiser Shades Control Micro Module

Connect to the Wiser 2nd Generation Hub/Hub<sup>R</sup> for curtains, blinds, shutters or awning control. Schedules and moments can be activated via the Wiser Home app.



## Wiser Power Micro Module

Connect to the Wiser 2nd Generation Hub/Hub<sup>R</sup> to control electrical loads up to 14A such as immersion heaters. Set schedules and automation via the Wiser Home app. In-app reporting of power consumption.



## Wiser LED Dimmer Micro Module

Connect to the Wiser 2nd Generation Hub/Hub<sup>R</sup> to convert a conventional LED light switch into a dimmable one which can be controlled via the Wiser Home app. Set in-app automations, moments and schedules. Dimmable LEDs are required for conversion.



Product	Part No.
Wiser Water Leakage Sensor	CCT592012
Wiser Smoke Alarm - Battery	CCT599002
Wiser Temperature & Humidity Sensor	CCT593012
Wiser Shades Control Micro Module	CCT5015-0002W
Wiser Power Micro Module	CCTFR6730
Wiser LED Dimmer Micro Module	CCT5010-0003

# What makes Wiser wiser?



## Flexibility

Buildable system,  
add devices  
at any time



## Multi-zoning

Add Radiator  
Thermostats, UFH &  
EHS as required



## App Control

Simple app to control  
the whole home  
from anywhere



## Smart Modes

Eco Mode,  
Away Mode,  
Comfort Mode



## Automation

Create custom  
automations for  
any eventuality



## OpenTherm

Digital boiler interface  
enabling more  
efficient control



## Insights & Heat Report

Monitor system  
activity



## Electric Load Control

Switch loads  
up to 3200W



# Wiser 1st Generation

## Complete Home Heating



### Wiser Thermostat Kits

Enable heating control via the Wiser Home app.

- One channel for combi boilers
- Two channel for conventional boilers
- Three channel for systems with two heating zones plus hot water



### Wiser Multi-zone Kits

Come with two radiator thermostats to start zoning your system; control via the Wiser Home app.

- One channel for combi boilers
- Two channel for conventional boilers

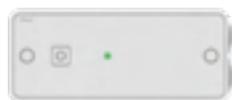
### Wiser Underfloor Heating Controller

Add this underfloor heating controller to your existing system to control UFH and radiators via the Wiser Home app. One room thermostat is required per zone. Works with all Wiser kits.



### Wiser Electrical Heat Switch

Add this electric heat switch to control electric radiators, electric towel rails, electric UFH via the Wiser Home app.



### Wiser Radiator Thermostat

Add additional single radiator thermostats to any Wiser system.



### Wiser Plug

Add up to 20 plugs to any system to enable remote scheduling of your home electrical appliances via the Wiser Home app.



Product	Part No.
Wiser Thermostat Kit 1	WT714R9K0902
Wiser Thermostat Kit 2	WT724R9K0902
Wiser Thermostat Kit 3	WT734R9K0902
Wiser Multi-zone Kit 1	WV714R9K0902
Wiser Multi-zone Kit 2	WV724R9K0902
Wiser Radiator Thermostat	WV704R0A0902
Wiser Room Thermostat	WN704R0S0902
Wiser Plug	WB704H1A0902
Wiser UFH controller	WF762F1A0902
Wiser Electrical Heat Switch	WE714U1A0902
Wiser Remote Floor Sensor	193720
Wiser Radiator Thermostat Anthracite	WV704R0A0901
Wiser Room Thermostat Anthracite	WN704R0S0901

# Wiser Compatibility Table

	Wiser Hub <sup>R</sup> (1, 2 and 3 channel)	Wiser 2nd Generation Hub <sup>R</sup> (1, 2 and 3 channel)	Wiser Non-relay 2nd Generation Hub
Wiser Radiator Thermostat	✓	✓	✓
Wiser Room Thermostat	✓	✓	✓
Wiser Plug	✓	✓	✓
Wiser Electrical Heat Switch	✓	✓	✓
Wiser Floor Sensor	✓	✓	✓
Wiser UFH Controller 230V	✓	✓	✓
Wiser Window & Door Sensor	✗	✓	✓
Wiser Motion Sensor	✗	✓	✓
Wiser Water Leakage Sensor	✗	✓	✓
Wiser Micro Module Shades Control	✗	✓	✓
Wiser Smoke Alarm - Battery	✗	✓	✓
Wiser Power Micro Module	✗	✓	✓
Wiser Micro Module Dimmer	✗	✓	✓
Wiser Temperature & Humidity Sensor	✗	✓	✓

# Lifestyle LP and LPSi

## Electronic Timeswitches & Programmers

### Features:

- Pre-set clock with automatic summer, winter time change
- Schedule, time & date never need re-entering in the event of power loss
- 3 timing periods per day
- Programme advance buttons, with LCD indication
- Boost, giving 1, 2 or 3 hours with LCD indication
- All programmers suitable for fully pumped or gravity heating systems
- Timeswitches are ideal for combination boilers and control of additional zones etc. (volt free contacts)
- Industry standard wallplate



LPSi features a service interrupter to alert householders when their boiler service is due. Thirty days before the boiler is due to be serviced the LPSi enters a warning period. During this time, the backlit display flashes providing a visual warning and the resident can read when the service is due on the display.

Product	Timing Periods	Part No.
LP111 Timeswitch	24 hour	25477
LP711 Timeswitch	7 day	25478
LP811 Timeswitch	Universal Timeswitch (24hr, 5day/2day, 7day)	25463
LP112 Programmer	24 hour (common timings for heating & hot water)	25473
LP241 Programmer	24 hour (separate timings for heating & hot water)	25474
LP522 Programmer	5 day/2 day (separate timings for heating & hot water)	25475
LP722 Programmer	7 day (separate timings for heating & hot water)	25476
LP822 Programmer	Universal Programmer (24hr, 5day/2day, 7day)	25464
LPSi Reset Unit		25489
LP241Si Programmer	24 hour (separate timings for heating & hot water)	25490
LP522Si Programmer	5 day/2 day (separate timings for heating & hot water)	25491
LP722Si Programmer	7 day (separate timings for heating & hot water)	25492
LP111Si Timeswitch	24 hour	25493
LP711Si Timeswitch	7 day	25494

# SM1 & SM2

## Electro-Mechanical Timeswitches & Programmers

### Features:

- Single and dual channel
- Advance feature
- LED on indication
- Intuitive time setting for two ON/OFF functions per day
- 4 position slide
- Suitable for gravity and pumped systems
- All day option
- Industry standard wallplate



Product	Part No.
SM1	29205
SM2	29206

**DRAYTON MOTORISED VALVES.**

**SNAPS ON.  
FITS IN.**

**ZONES OUT.**



**75 YEARS OF EASY INSTALLS.**

**Drayton**  
by Schneider Electric

# Motorised Valves

## Two Port & Mid Position Valves

The Drayton 2 port, diverter and mid-position valves are available in 22mm and 28mm.

All models feature “snap-on” actuators and have industry-standard wiring and dimensions.



Product	Part No.
Complete valve and actuator	
22mm 2 Port zone valve - 5 wire SPST switch	27100
22mm Mid-position valve - 5-wire SPST switch	27101
22mm 3 Port diverter valve - no switch	27102
22mm 3 Port diverter valve - 5 wire SPST switch	27111
28mm 2 Port zone valve - 6 wire SPDT switch	27205
28mm Mid-position valve - 6 wire SPDT switch	27206
28mm 3 Port diverter valve - no switch	27207

Spare valve bodies	Part No.
22mm 2 Port body	27600
22mm 3 Port body	27602
28mm 2 Port body	27601
28mm 3 Port body	27603

Spare actuators	Part No.
3 Wire Zone valve 230V actuator - no switch	27652
5 Wire Zone valve 230V actuator - SPST switch	27650
6 Wire Zone valve 230V actuator - SPDT switch	27653
5 Wire Zone valve 24V actuator - SPST switch	27656
5 Wire Zone valve 24V actuator - SPST switch	27657
Mid-position actuator 230V	27651

Spare motor	Part No.
Synchronous motor pack 230V	27011
Synchronous motor pack 24V	06170002001

For other variants see full Drayton catalogue

# RT414 & RT212

## Thermostatic Radiator Valves

The 15mm angled valve can be mounted vertically or horizontally on flow or return.

### RT414

#### Key Features:

- Accurate liquid-filled sensor
- Stylish head design
- Non-stick valve internals
- Flow rate adjustment
- Reverse-flow angled valve
- Chrome finish



Product	Part No.
RT414 with 15mm angle valve	10 10 015
RT414 with 15mm straight valve	10 10 115
RT414 with 15mm angle valve & lockshield	10 10 260
RT414 with 15mm angle DOTP lockshield	10 10 264

### RT212

#### Key Features:

- Entry-level model
- Accurate liquid-filled sensor
- Chrome valve



Product	Part No.
RT212 with 15mm angle valve	08 09 015
RT212 with 15mm straight valve	08 09 115
RT212 with 15mm angle & lockshield	08 09 260
RT212 with 15mm angle & DOTP lockshield	08 09 264

## Chrome accessories to match TRV4, RT414 & RT212

Product	Part No.
15mm angle lockshield with white cap	07 05 900
10mm push-fit elbow	07 05 904

# TRV4

## Thermostatic Radiator Valve

### Features:

- Classic & White awarded Class I rating for energy efficiency
- Contemporary slim-line design
- Ultra sensitive liquid-filled sensor
- Easy to clean smooth surfaces
- Half/full click stop settings
- Frost protection position
- Four stylish options: Classic, White, Chrome and Anthracite
- Complete with chrome-plated valves
- Non-stick valve internals
- Pre-setting as standard
- Double gland seal
- Flow rate adjustment



Product	Part No.
<b>TRV4 White</b>	
With 15mm angle valve	07 07 015
With 15mm straight valve	07 07 115
With 15mm angle valve and chrome lockshield	07 07 260
<b>TRV4 Classic</b>	
With 15mm angle valve	07 05 150
With 15mm straight valve	07 05 151
With 15mm angle valve and chrome lockshield	07 05 180
<b>TRV4 Chrome</b>	
With 15mm angle valve	07 05 150C
With 15mm straight valve	07 05 151C
With 15mm angle valve and chrome lockshield	07 05 174
<b>TRV4 Anthracite</b>	
With 15mm angle valve and chrome lockshield	07 05 210
With 15mm straight valve and chrome lockshield	07 05 211

### Drayton Balancing Key

Did you know, you can use this handy tool to balance the system without draining it down? So it's ideal for maintenance. Get a pack including gland seals at your merchant.

Part No 07 35 009



# Auto-balancing Thermostatic Radiator Valves

## TRV4 & RT414



TRV4  
Angle



RT414  
Angle



TRV4  
Straight



RT414  
Straight



### Features:

- Reduces energy use by 8.8%
- Saves installation time as flow rate is set when fitting the valve
- Automatically adjusts radiators according to pressure changes / TRVs opening and closing
- Permanently maintains correct flow to each radiator
- Ensures lower return flow temperatures to aid condensing – improving boiler efficiency
- Eliminates cold spots around the home
- Use new Drayton balancing key to adjust setting
- Lead-free brass valve body

Product	Part No.
Auto-balancing TRV4 angle with lockshield	07 05 560
Auto-balancing TRV4 straight with lockshield	07 05 561
Auto-balancing RT414 angle with lockshield	10 10 560
Auto-balancing RT414 straight with lockshield	10 10 561

## Valve bodies

Valve bodies are also available to purchase on their own, for retrofit solutions.

Product	Part No.
Auto-balancing 15mm angle valve	07 15 560
Auto-balancing 15mm straight valve	07 15 561

# TS Ultra Thermal Actuator

## TS Ultra & TS Ultra+



TS Ultra



TS Ultra+

### Features:

#### TS Ultra – the entry-level model

- 360° valve status indication
- IP44
- Closing force 100N
- Stroke 5.5mm
- Fast response – opening to 4mm in 2 minutes
- 230V and 24V options

#### TS Ultra+ - the ultimate in design and performance

- All the features of the TS Ultra and:
- IP55 ingress protection
- Closing Force 120N
- Plug-in cable
- Manual feature

The ultimate in thermal actuators with more stroke, more power, faster response and compact enough to fit on the latest manifolds with 40mm valve centres.

Product	Part No.
230V TS Ultra+	0481 1105 1017
24V TS Ultra+	0482 1105 1017
230V TS Ultra	0483 1005 0817
24V TS Ultra	0484 1005 0817

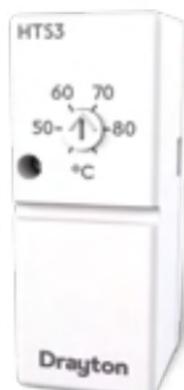
# HTS3

## Cylinder Thermostat

### Features:

- Set point recommended 60°C to 65°C
- Positive On/Off for test purposes
- Tamper resistant
- Double insulated

Product	Part No.
HTS3	13007



# Digistat+ CRF

## Wireless Cylinder Thermostat

### Features:

- Conventional dial adjustment
- 5°C setting steps
- Min/Max temperature setting
- Battery powered



Product	Part No.
Digistat+CRF cylinder thermostat & SCR & sensor	13616
Digistat+CRF SCR receiver spare	22598
Digistat+CRF transmitter spare	13618
Digistat+CRF sensor spare	13619

# PTS1

## Pipe Thermostats

### Features:

- Frost protection solution when used in conjunction with the RTS3 air frost thermostat
- Changeover contacts
- Lockable setting knob
- High or low limit applications

Product	Part No.
PTS1	03 01 260



# Control Packs



## Biflo Control Packs

Part No.	Programmer	Room Stat	Cylinder Stat	Valve	Wiring Centre	ErP rating
PBBE66	LP241	RTS1	HTS3	22mm Mid Position	LWC1	1%
PBBE669S	LP241Si	RTS9	HTS3	22mm Mid Position	LWC1	1%
PBBE68	LP241	RTS1	HTS3	22mm Mid Position	LWC3	1%
PBBE86	LP522	RTS1	HTS3	22mm Mid Position	LWC1	1%
PBBE86S	LP522Si	RTS1	HTS3	22mm Mid Position	LWC1	1%
PBBE869S	LP522Si	RTS9	HTS3	22mm Mid Position	LWC1	1%
PBBE88	LP522	RTS1	HTS3	22mm Mid Position	LWC3	1%

## Twinline Control Packs

Part No.	Programmer	Room Stat	Cylinder Stat	Valve	Wiring Centre	ErP rating
PBTE66	LP241	RTS1	HTS3	2 x 22mm 2-Port	LWC1	1%
PBTE68	LP241	RTS1	HTS3	2 x 22mm 2-Port	LWC3	1%
PBTE86	LP522	RTS1	HTS3	2 x 22mm 2-Port	LWC1	1%
PBTE88	LP522	RTS1	HTS3	2 x 22mm 2-Port	LWC3	1%
PBTE96	LP722	RTS1	HTS3	2 x 22mm 2-Port	LWC1	1%

## Unvented Control Packs

Part No.	Programmer	Room Stat	Cylinder Stat	Valve	Wiring Centre	ErP rating
UWH62	LP241	RTS1	-	22mm 2-Port	LWC1	1%
UWH82	LP522	RTS1	-	22mm 2-Port	LWC1	1%

## Frost Protection Pack

Part No.	Room Stat	Pipe Stat
FPP1	RTS3	PTS1

## Social Housing Packs

Part No.	Programmer	Room Stat
PBTE120	LP811	Digistat+RF with SCR
PBTE122	LP811	Digistat+

## New Build Packs

Part No.	Thermostat	Valve	Programmer	Wiring Centre	ErP rating
PBTE114	Wiser Room Thermostat (x2)	22mm 2-port (x2)	Wiser 3ch. Hub	LWC3	4%
PBTE115	Digistat 2290M (x2)	22mm 2-port (x2)	-	LWC3	3%
PBTE116	Digistat RF902 & RF90T	22mm 2-port (x2)	-	LWC3	2%
PBTE910	RTS1 (x2)	22mm 2-Port (x2)	LP722	LWC3	1%

\*For 28mm versions, add B to the end of the part number.

## Dual Channel Programmer Terminal Comparisons

Make	Model	Earth	Neutral	Live	H/W off	C/H off	H/W on	C/H on
<b>Current Models</b>								
Drayton	Wiser Thermostat Kit 2, Multizone Kit 2		N	L	1	2	3	4
Drayton Lifestyle	LP112, LP241, LP522, LP722, LP241Si, LP522Si, LP722Si		N	L	1	2	3	4
Drayton	SM2		N	L	1	2	3	4
<b>Discontinued / Competitors' Models</b>								
Drayton	miGenie Wish 2		N	L	1	2	3	4
	MiTime MT721R, MiTime RF Pack 2		N	L	1	2	3	4
	Tempus 3, 4, 6, 7 (Old models), Tempus 6, 7		N	L	1	2	3	4
Switchmaster	400, 600 (No connection to terminal 4 on 600)		N	L		4	3	1
Switchmaster	805, 900, 900i		N	L	4	2	3	1
ACL	MP (Towerchron)		2	1				
ACL	FP (Towerchron)		2	1	8	11	6	10
British Gas	EMP2, UP1, UP2		N	L	1	2	3	4
Danfoss	CP15, CP715, FP15, FP715 (Mk18), CP715 Si, FP715 Si		N	L	1	2	3	4
	3020P, 3060	E	7	6			4	2
	4033 (link 1-6)	E	7	6	5	3	4	2
	102, 102E, 102E5, 102E7, (link 6-3)	E	5	6			1	2
	701 (link L-5 and 5-6)	E	N	L			3	1
	702 (link L-5 and 5-6)	E	N	L	4	2	3	1
	922, 972 (link L-2 and 2-5)	E	N	L	1	4	3	6
Honeywell	SET2, SET2E, SET3E, SET3M, FP975, SET5 (link L-2 and 2-5)	E	N	L	3	6	1	4
	ST 699/799 (link L-5 and 5-8)		N	L	7	4	6	3
	ST 6200, ST 6300, ST 6400, ST 6450, ST6400S, ST9400A/C, ST9400S, ST9500C, Y9420H RF <sup>2</sup> Pack 2, Y9420S RF <sup>2</sup> Pack 3, Y9520Z RF <sup>2</sup> Pack 5		N	L	1	2	3	4
Horstmann	ST 7100 (link L-3 and 3-6)		N	L	7	4	8	5
	525, 527, 425 Diadem, H21, H27, H121, Tiara, (link L-2 and 2-5), Channelplus H21XL, H27XL, H27ZXL	E	N	L	3	6	1	4
Myson	Centaur Plus C21, C27, C121 & C127		N	L	1	2	3	4
	Microtimer (link L-5 and 5-8)		N	L	7	4	6	3
Potterton Myson	MEP2C		N	L	1	2	3	4
	All EP2000's, EP3000's, EP6000's, (link L-5 and N-N)		N	L	1	2	3	4
Siemens / Landis & Staefa	Mini Minder		N	L	1	2	3	4
	RWB2, RWB2E, 20, 40, 102, 200, 252 & 270, RWB9, RWB29		N	L	1	2	3	4
Sunvic	Select 207, SunPro2000		N	L	1	2	3	4
	SP50, SP100 (link L-3)		N	L	1	4	2	5
Salus	EP200, SP220		N	L	1	2	3	4
Grasslin Towerchron	DP 72, QE2		N	L	1	2	3	4
Sangamo	M5, (Link 1-6)		N	L			1	8

## Multi Channel Programmer Terminal Comparisons

Make	Model	Earth	Neutral	Live	Ch1 on	Ch2 on	Ch3 on	Ch4 on
<b>Current Models</b>								
Drayton	Wiser Thermostat Kit 3		N	L	1	2	3	4
<b>Discontinued / Competitors' Models</b>								
Drayton	miGenie Wish 3		N	L	1	2	3	4
	MiTime MT742R, MiTime RF Pack 4		N	L	1	2	3	4
Horstmann	H47XL	E	N	L	1	3	4	6
Horstmann	H37VXL, H37XL	E	N	L	1	3	5	
Sunvic	Select 307 XLS		N	L	3	4	5	

## Single Channel Timeswitch Terminal Comparisons

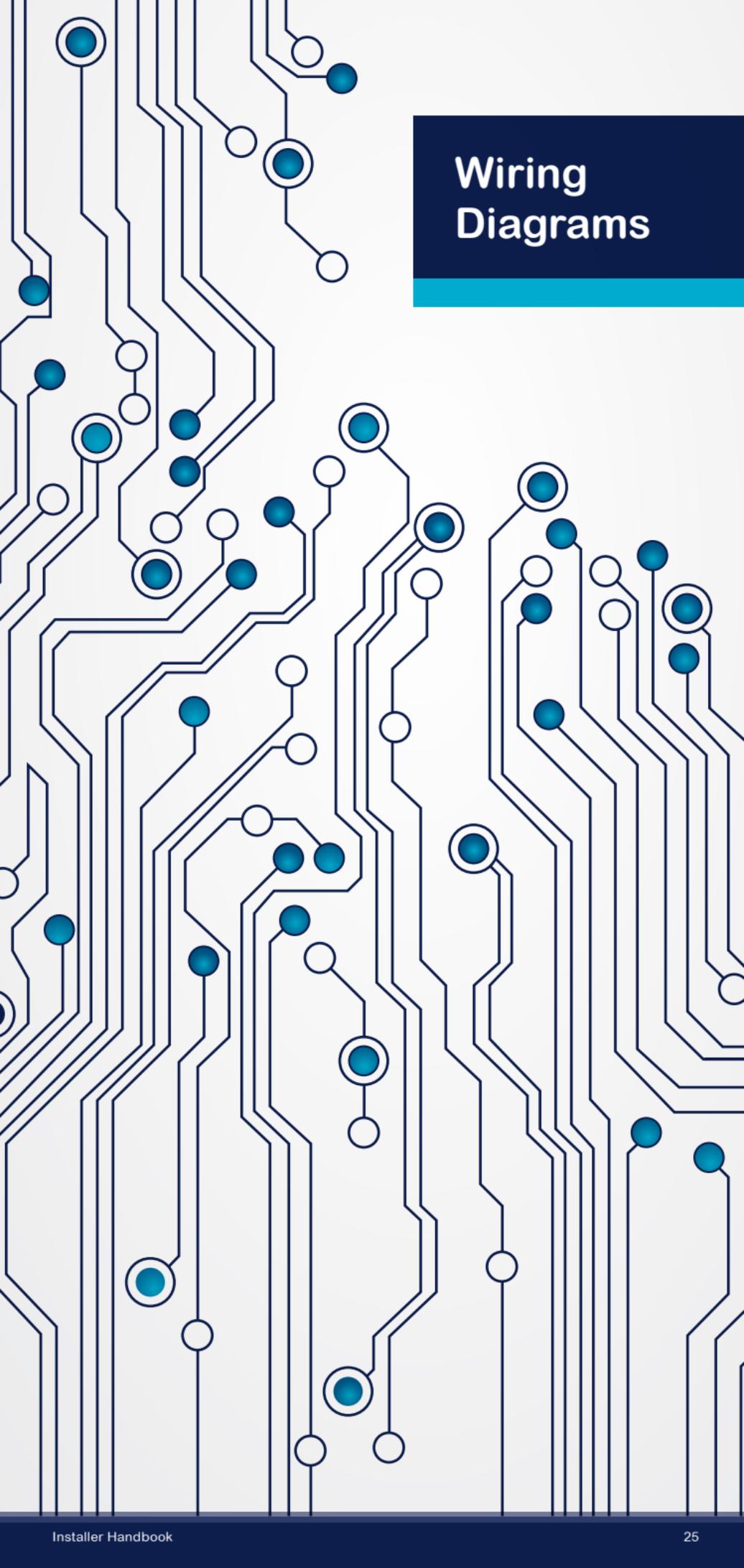
Make	Model	Earth	Neutral	Live	Common	On	Off	Spare
<b>Current Models</b>								
Drayton	Wiser Thermostat Kit 1		N	L	1	2	3	4
	Wiser Multizone Kit 1		N	L	1	2	3	4
Drayton Lifestyle	LP111, LP711, LP111Si, LP711Si		N	L	1	3	2	4
Drayton	SM1		N	L	1	3	2	4
<b>Discontinued / Competitors' Models</b>								
Drayton	miGenie Wish 1		N	L	1	3	2	4
Drayton	MiTime MT711R, MiTime RF Pack 1		N	L	1	3	2	4
Drayton	Tempus 1 and 2		N	L	1	3	2	4
Drayton	Tempus 1 and 2 (Old models)		N	L	1	2	3	4
Switchmaster	300, 980		N	L	4	1		
ACL	TC (Towerchron)		2	1	4	7		
British Gas	EMT2, UT1, UT2		N	L	1	3	2	4
Danfoss	TS15, 75 (Mk18)	E	N	L	1	4	2	5/6
	TS715, TS715 Si		N	L	1	4	2	3
	TS975	E	N	L	5	4	6	1,2,3
	SET1, SET1E	E	N	L	5	4	6	
	SET4	E	N	L	5	4	6	
	103, 103E, 103E5, 103E7	4	5	6	3	1		2
Honeywell	911, 971	E	N	L	5	6	4	2
	ST 6100A, ST 6100C, ST6100S, ST9100A/C, ST9100S, Y9120H RF <sup>2</sup> Pack 1, Y9120W RF <sup>2</sup> Pack 4		N	L	1	4	2	
	ST 7000B		N	L	1	2	3	4
Horstmann	Centaur SC1, SC7			L		3	2	
	Channelplus H17XL, H11XL	E	N	L		4	6	
	Centaur Plus C11, C17, C17-ZW		N	L	2	4	3	
	Emerald 423, Pearl Auto		N	L	2	4	3	
	517, Coronet, H11, H17	E	N	L	3	4		
Myson	Microtimer (link L-5 and 5-8)		E	N	L	5	4	6
	MEP1C		N	L	1	3	2	4
Potterton Myson	EP4000, 4001, 4002, 5002		N	L	5	4	2	
	RWB3		N	L		4	3	
Siemens / Landis & Staefa	RWB27, RWB30, RWB50, 100, 152, 170		N	L	2	4	3	
	RWB7	E	N	L	2	4	3	
Sunvic	Select 107, SunPro1000		N	L	1	3	2	4
	SP20, SP35		N	L	3	5	4	5
Salus	EP101, SP120		N	L	4	3		
Grasslin Towerchron	QE1		N	L	2	4		
	T2001, T2001Q	E	N	L		7		
Sangamo	M6			E	4	6	3	1
Smiths	Centroller Mk1 & Mk2		N	L	3	2		
	Centroller 30		1	2		3/4		
	Centroller 300, 980		N	L	4	1		
Venner	Vennerette		N	L	LINE	LOAD		

## Room Thermostat Terminal Comparisons

Make	Model	Earth	Neutral	Live	Common	Satisfied	Demand
<b>Current Models</b>							
Drayton	Wiser Thermostat Kit 1		N	L	C	Off	On
	Digitat Universal (Mains)		N	L	C	Off	On
Drayton	Digitat+, +1, Digitat Universal (Battery)				C	Off	On
	RTS 1, 2		N		L		3
	RTS 4, 5 & 6, 9		N	L	1	2	3
<b>Discontinued / Competitors' Models</b>							
Drayton	Digitat+2 and +3 (Mains)		N	L	C	Off	On
	Digitat+2 and +3 (Battery)				C	Off	On
Drayton	"Digitat 1, 2, 3, 3 and 4 miGenie Wish 1"		N	L	1	2	3
	RT/RTE		4		1	3	2
ACL Lifestyle	PT 271, 371		N	L	1	2	3
	OPT 170, PT 110, 170		N	L	4		3
	TP2, 3, 4, 5, 5E, RT1				1	2	3
	TP 5000, RT51, RT52, TP5000 Si				B	A	C
	TP7000				1	3	2
	TP7001A				H COM	H OFF	H ON
	TP7001M		N	L	H COM	H OFF	H ON
	TP75				3	6	5
	TP75H				COM	OFF	ON
	RET-B				3	1	2
Danfoss	TP7000M		N	L	1	3	2
	TP6000M				N	L	1
	RET M, MD				N	L	2
	TP75M, MA		N	L	1	2	4
	TP 1		E	N		L	2
	RD3, RD3A		4		1		2
	RTC, RTM, RSR		E	N	3	2	1
	RMT 230		4		1	3	2
	R504				N		3
	RET 230, NL213		N		L	4	3
	TP5000M Si, TP5000MA Si		N	L	2	1	3
Honeywell	CM31, 37, 41, 51, 61, 67, CM721, CM727, CM901, CM907				AA	CC	BB
	CT200, T6620, DT200, DT90E						
	T6060/6160/6063/6360		2		1	4	3
	C-Stat 11-B, C-Stat 17-B				1	3	4
	C-Stat 11-M, C-Stat 17-M		N	L	1	3	4
	AS2				1		2
Horstmann	AS1		N	L	2		4
	Centuarstat 1 & 7		4		1	3	2
	HRT 1		E	4	1		2
	HRT4-A		2		1		4
	HRT4-B				1		4
Myson	MPRT, MRTE MRT1		4		2		1
	PRT 1		N		L		H
Potterton	PRT2 & 100 ST			N		TL	
	PRT 100 DT		N		TL	C	H
Siemens / Landis & Gyr / Landis & Staefa	REV 11, 12				L		L1
	RAD 1		E			1	3
	RAA02		N		1	Y3	Y2
	TLX 1001 / 1005		N	L	COM	OFF	ON
	TLX 9000 series		4		1	2	3
	TLX 6501				1	3	2
	TLX 7501, TLX 1009				3	1	2
Sunvic	TLX 2251				3		1
	TLX 2222, 2259, 2267		E	4	3		1
	TLX 2356				3	2	1
	TXL 3101, 5101		2		1		8
	TLX 4101, 4102				2	3	1
	TLX 5201, 5202		2		1	6	8
	TA 351		E	4	1	2	3
Salus	RT100				COM	NC	NO
	RT200, RT300, RT500, ST320, ST320PB, ST620, ST620B, 091FL, 091FLPB		N		L		SL
Tower	SS		E	4	1		2

## Wireless Room Thermostat Terminal Comparisons

Make	Model	Earth	Neutral	Live	Common	Satisfied	Demand
<b>Current Models</b>							
Drayton	Digitat+RF, +1RF, Digitat Universal		N	L	1	2	3
<b>Discontinued / Competitors' Models</b>							
	Digitat+2RF and +3RF		N	L	1	2	3
Drayton	miGenie Wish 1		N	L	1	2	3
	MiStat MN110R and MP710R		N	L	1	2	3
	Digitat RF1, RF2, RF3 and RF3i		N	L	1	2	3
Danfoss	RET B-RF, RT51-RF, TP4000-RF, TP5000-RF Si, TP7000-RF		N	L	2	4	3
Honeywell	Y6630D, DT92E, CM921, CM927		N	L	A	C	B
Horstmann	C-Stat 11-ZW, C-Stat 17-ZW, AS2RF, HRT4-ZW		N	L	2	3	4
Myson	MPRT-RF		N	L	C		1
Siemens	RDH10RF, RDJ10RF, REV24RF		N	L	Lx	L2	L1
Sunvic	TLX RFPv		N	L	2	3	1
	TLX 1010 RF, TLX 1012 RF		N	L	COM	OFF	ON
Salus	RT300RF, RT500RF, RT500ROF, 091FLRF, ST320RF, ST620RF, IT500		N	L	COM		NO

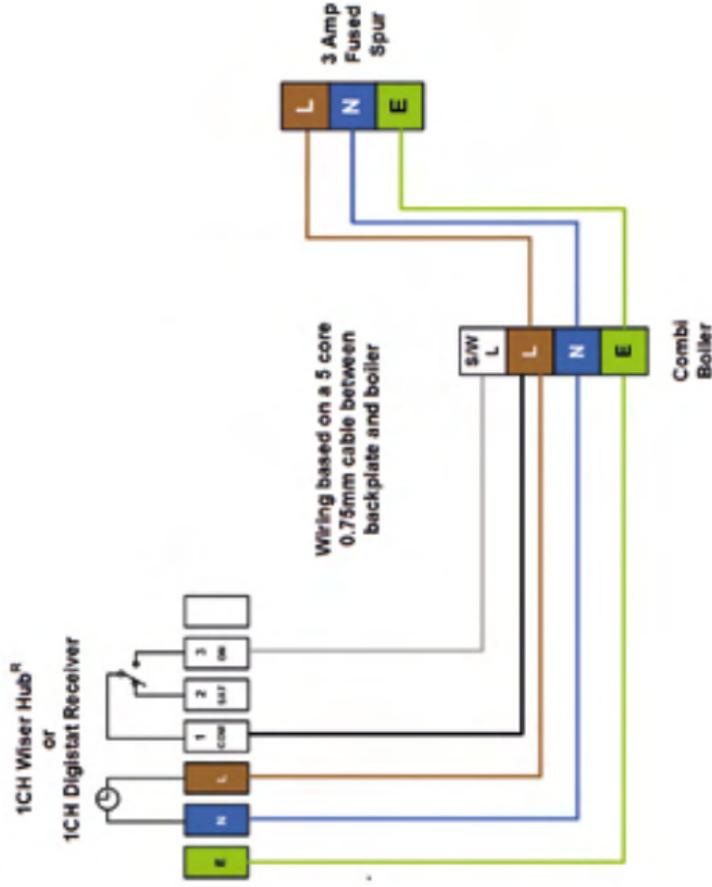


# Wiring Diagrams

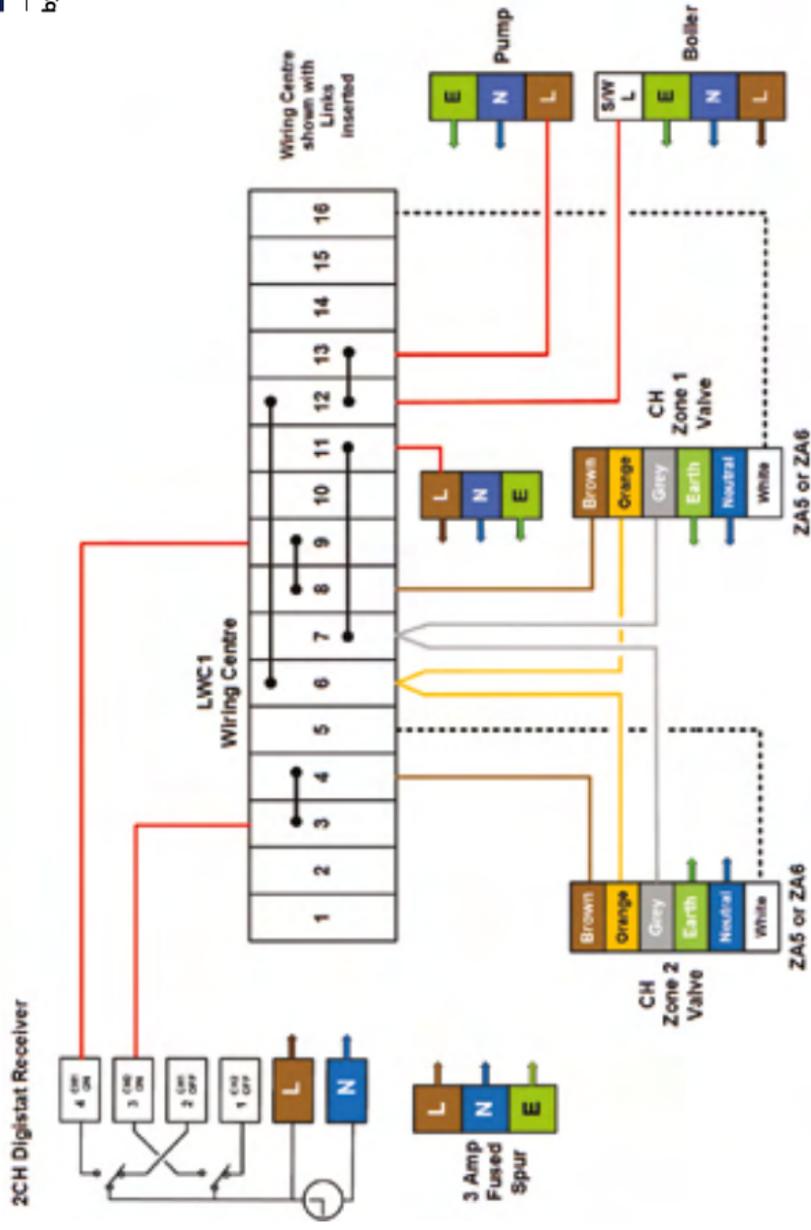
# Combi with Wiser & Digistat RF

**Drayton**

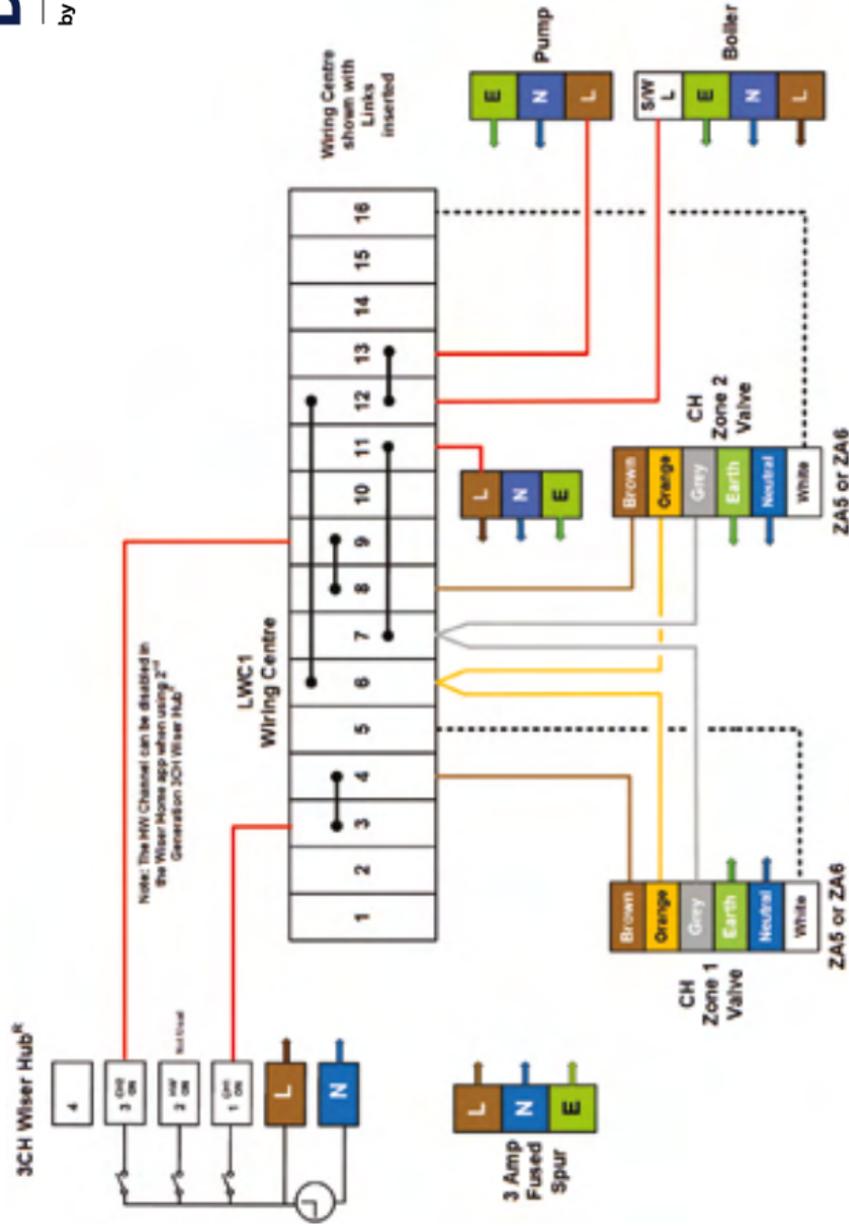
by Schneider Electric



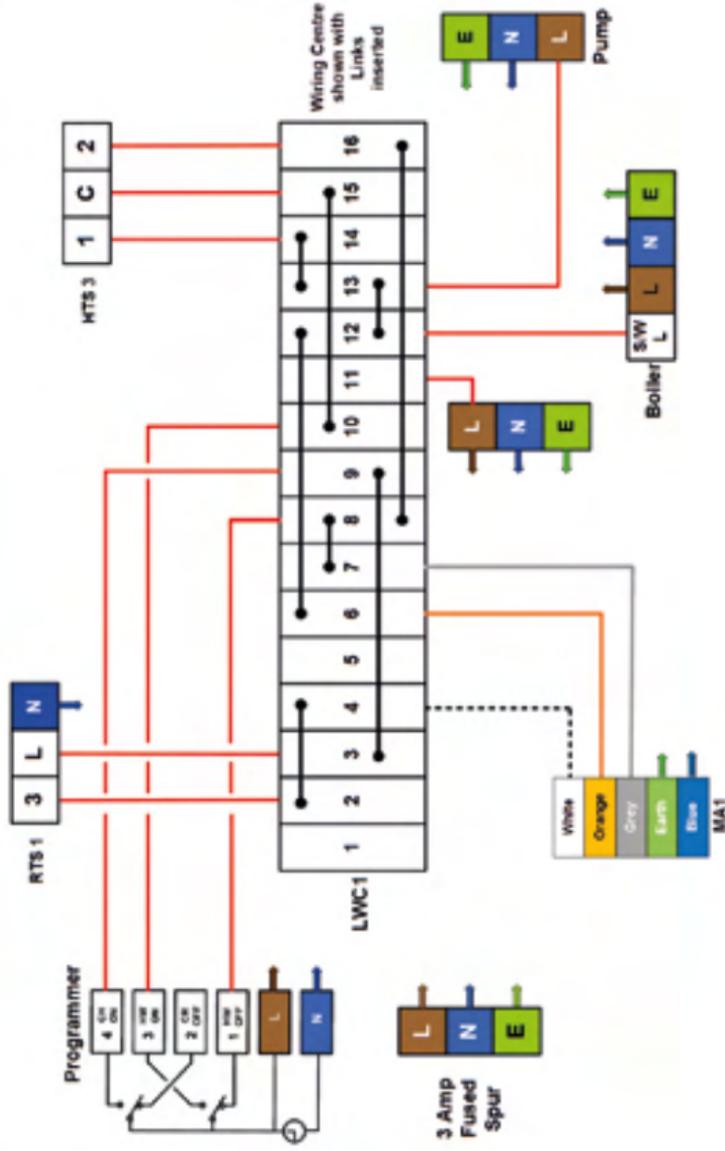
# Zoned Combi with Digistat RF902



# Zoned Combi with Wiser



# Biflo with LWC1

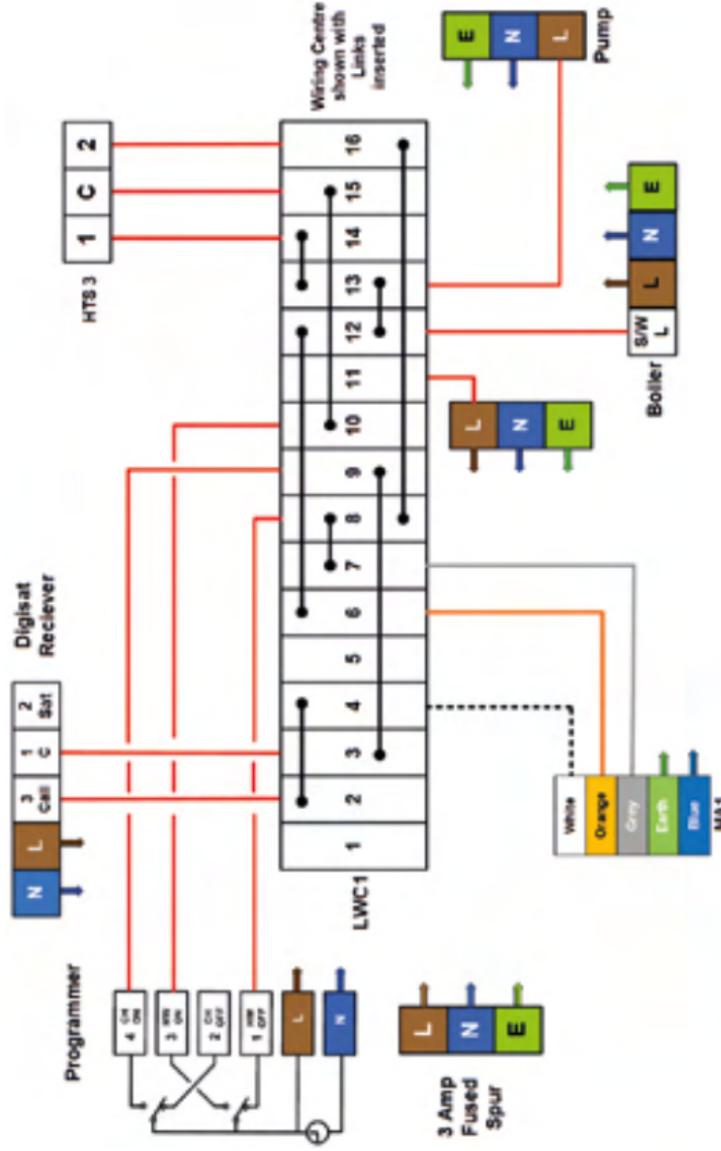


# Biflo

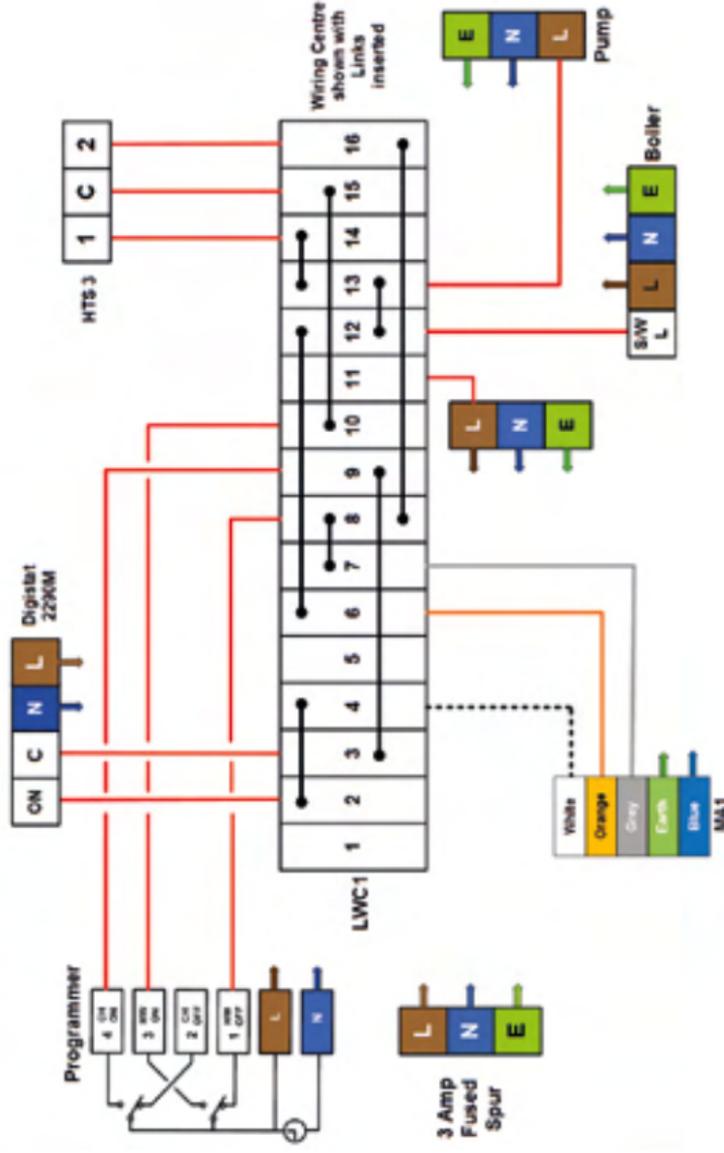
## with LWC1 & Digistat Receiver

**Drayton**

by Schneider Electric

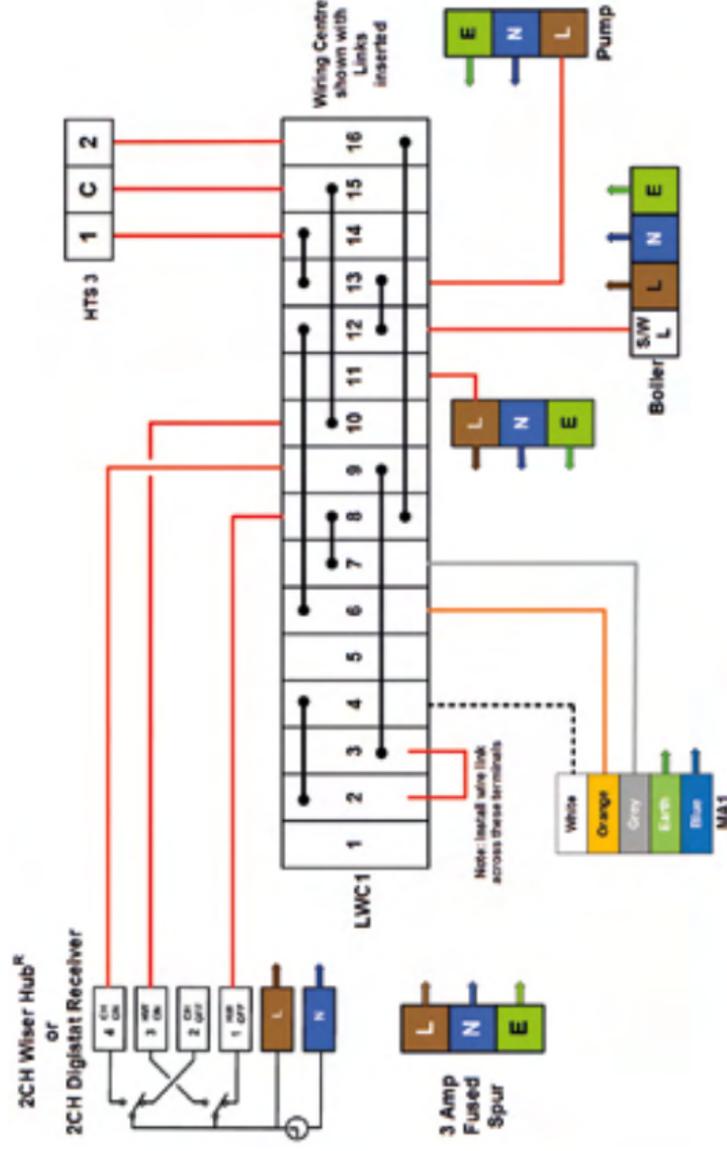


# Biflo with LWC1 & Digistat 2290M





# Biflo with LWC1 and Wiser or Digistat RF902

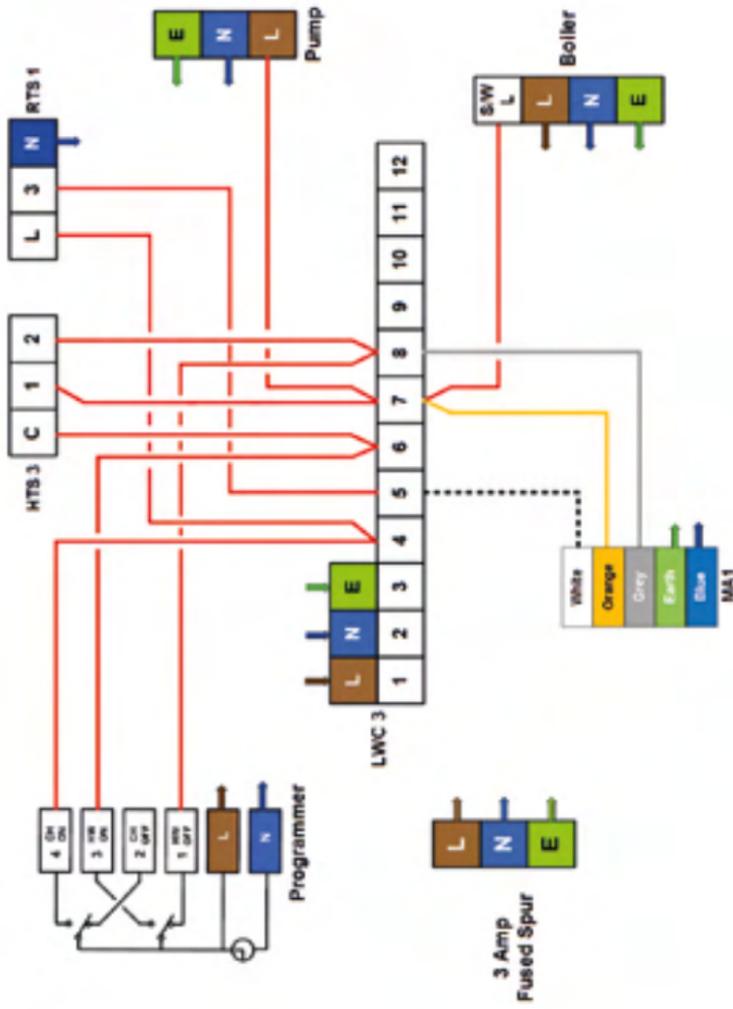


# Biflo

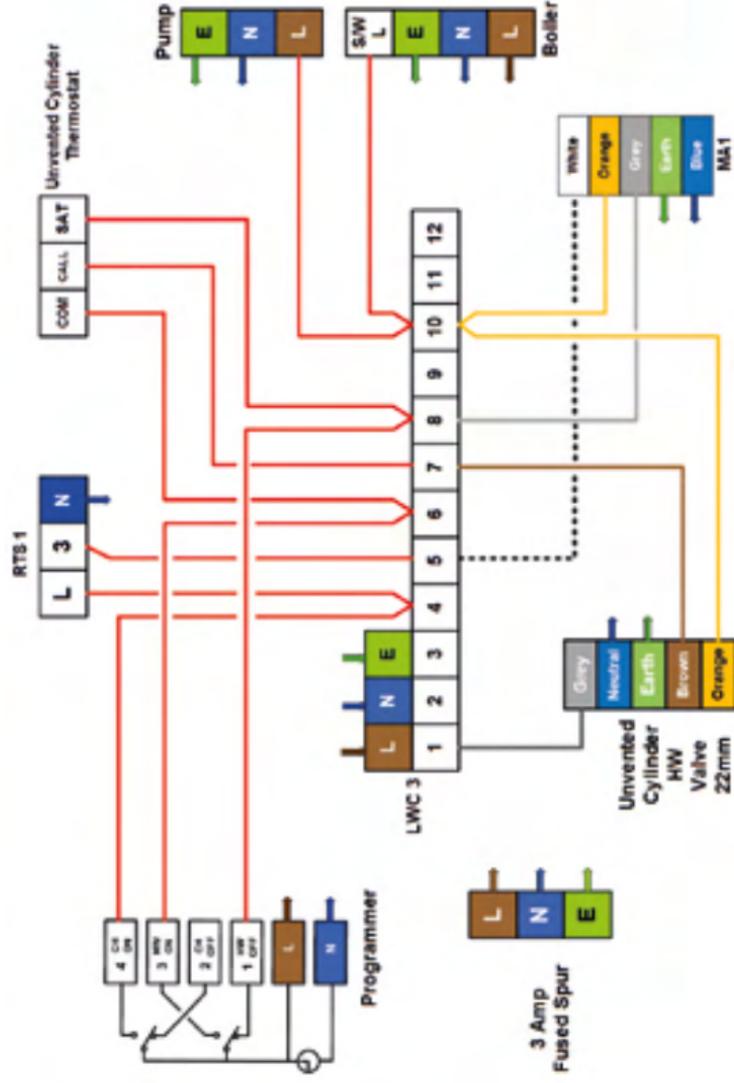
## with LWC3

**Drayton**

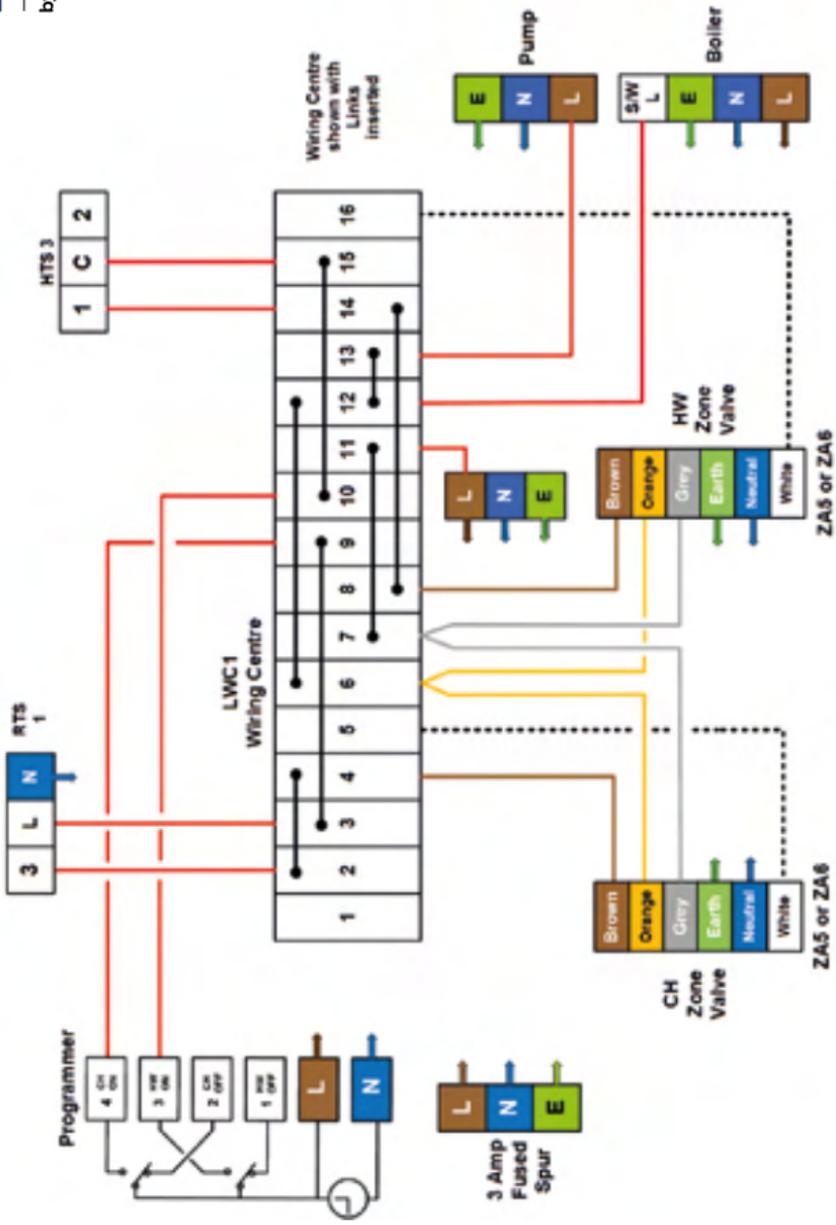
by Schneider Electric



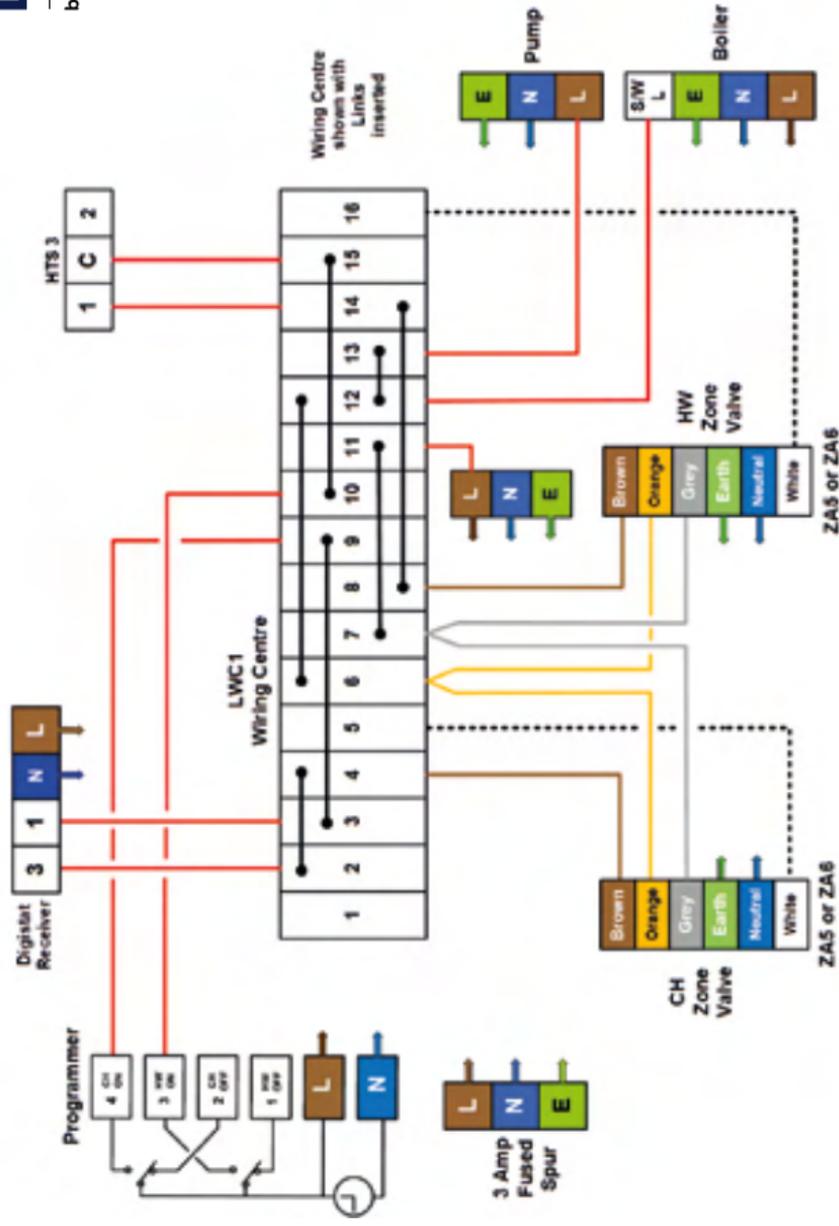
# Biflo with LWC3 & Unvented Cylinder



# Twinzone with LWC1



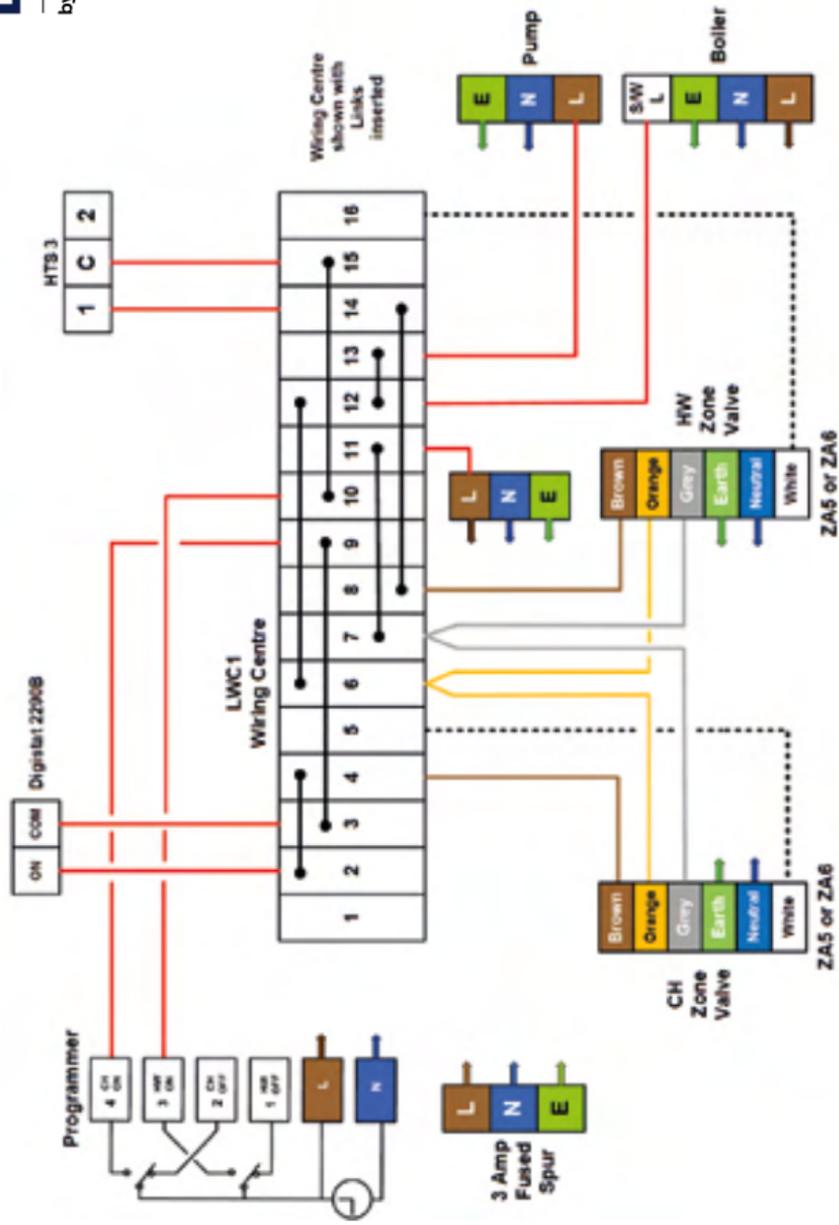
# Twinzone with LWC1 & Digistat Receiver



# Twinzone with LWC1 & Digistat 2290B

**Drayton**

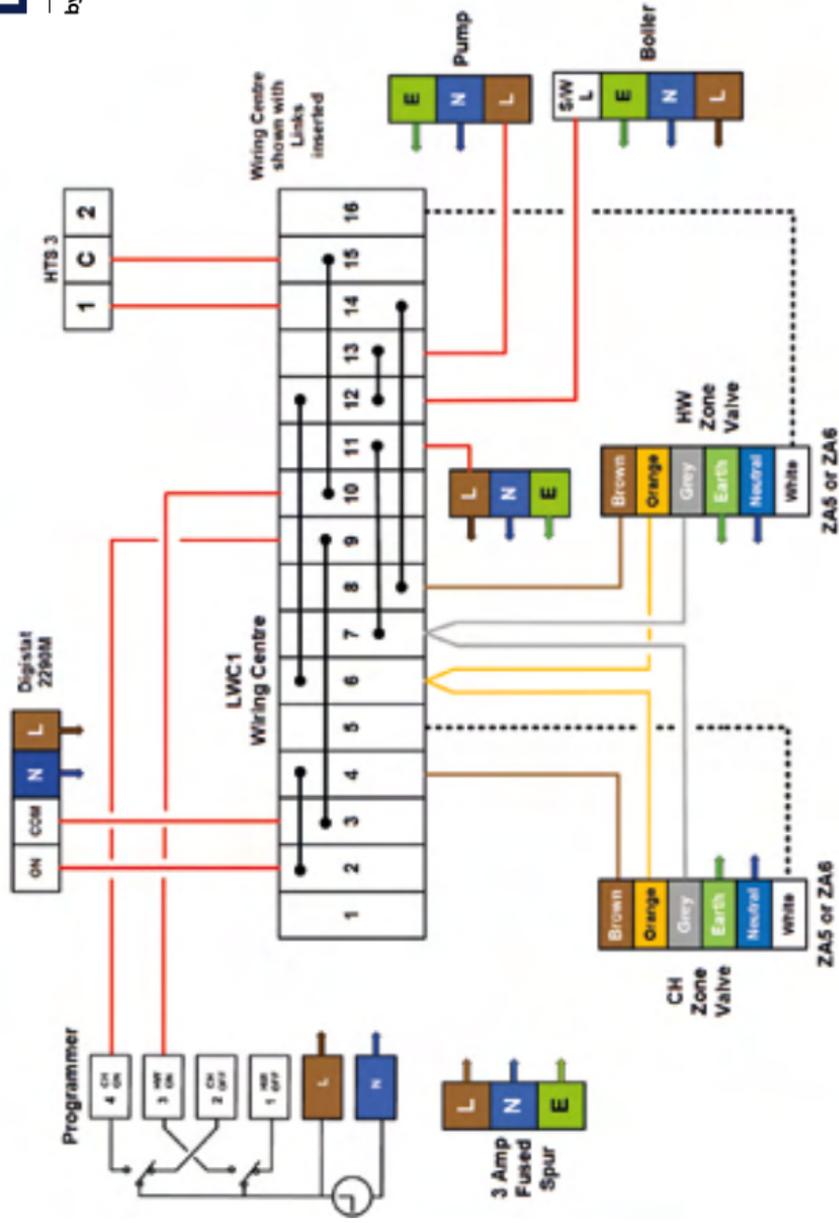
by Schneider Electric



# Twinzone with LWC1 & Digistat 2290M

**Drayton**

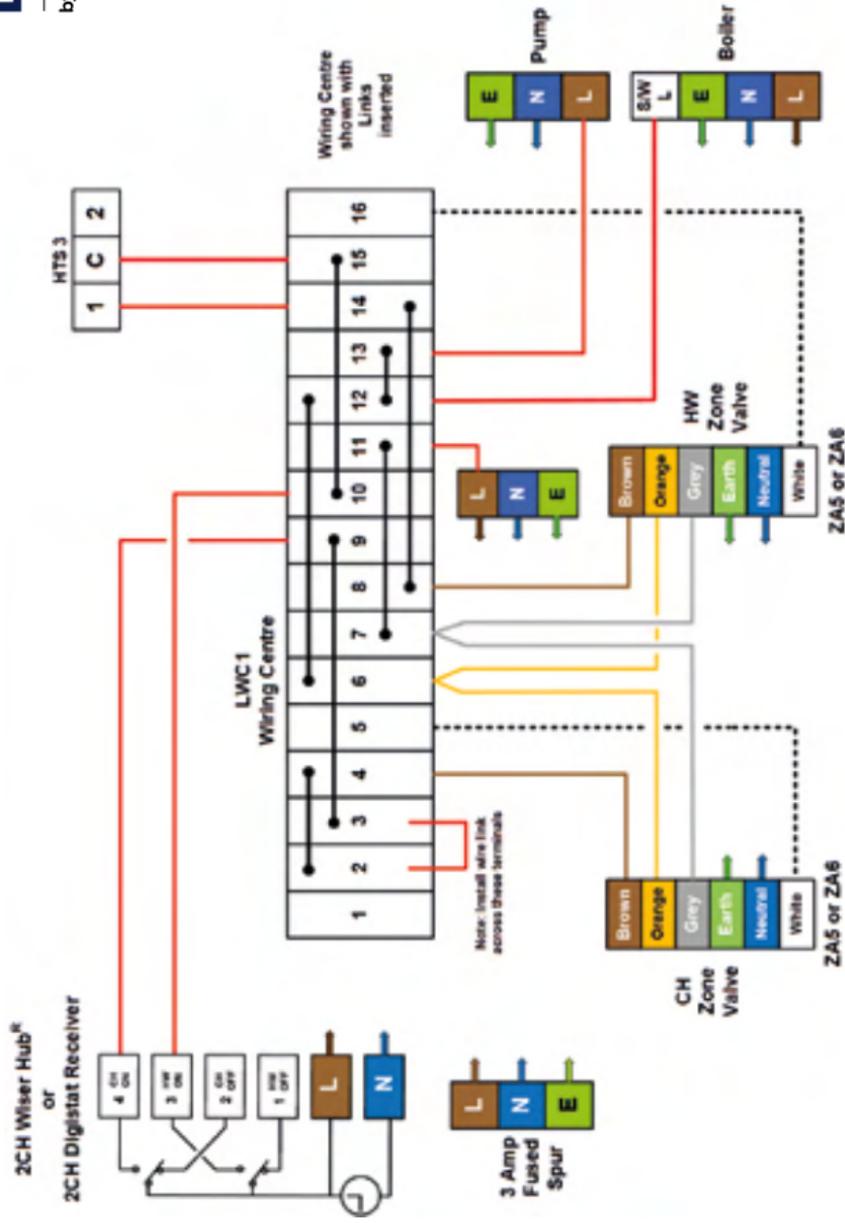
by Schneider Electric



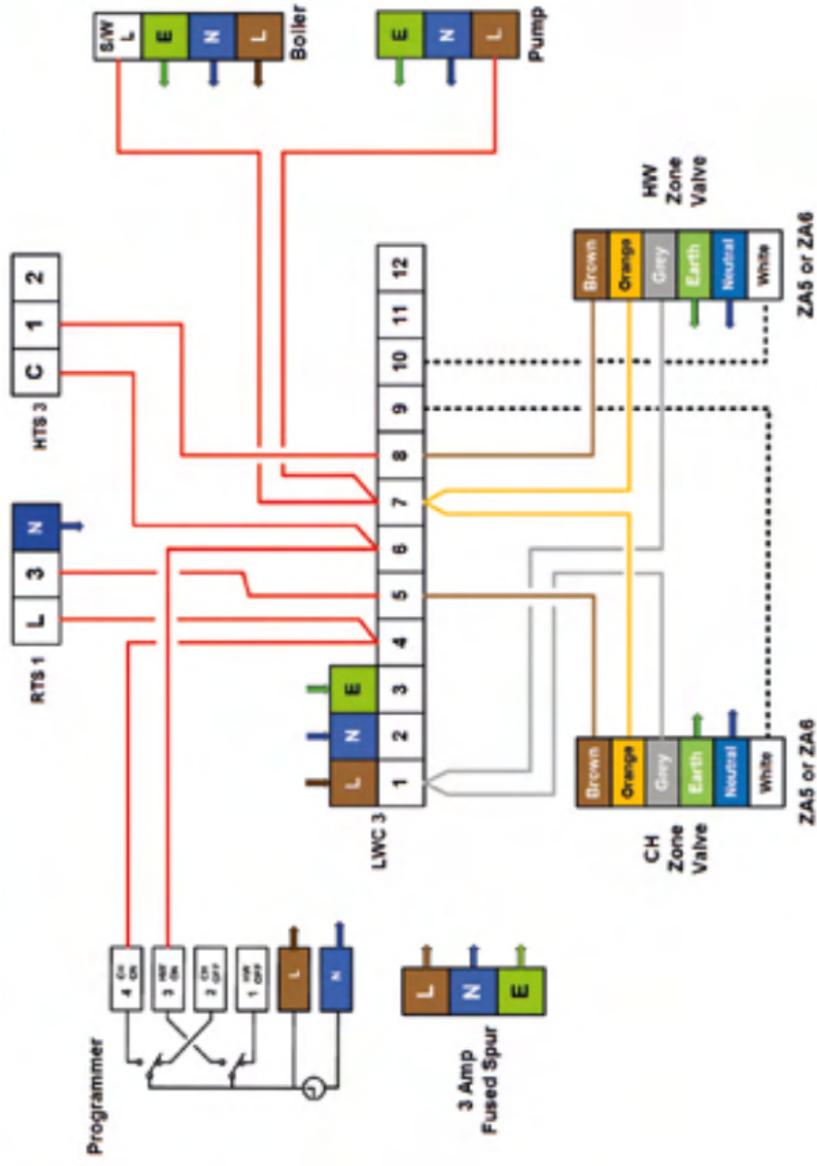
# Twinzone with LWC1 & Wiser or Digistat RF902

**Drayton**

by Schneider Electric



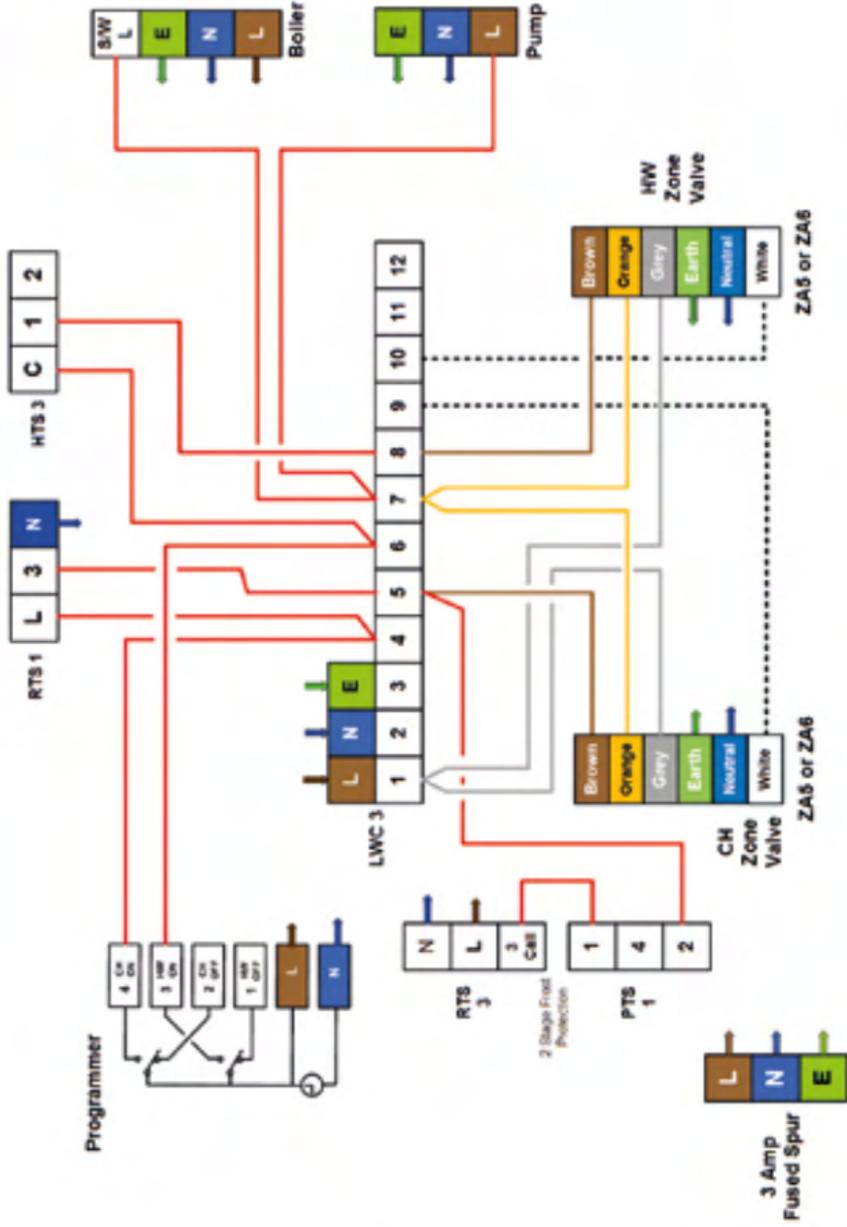
# Twinzone with LWC3



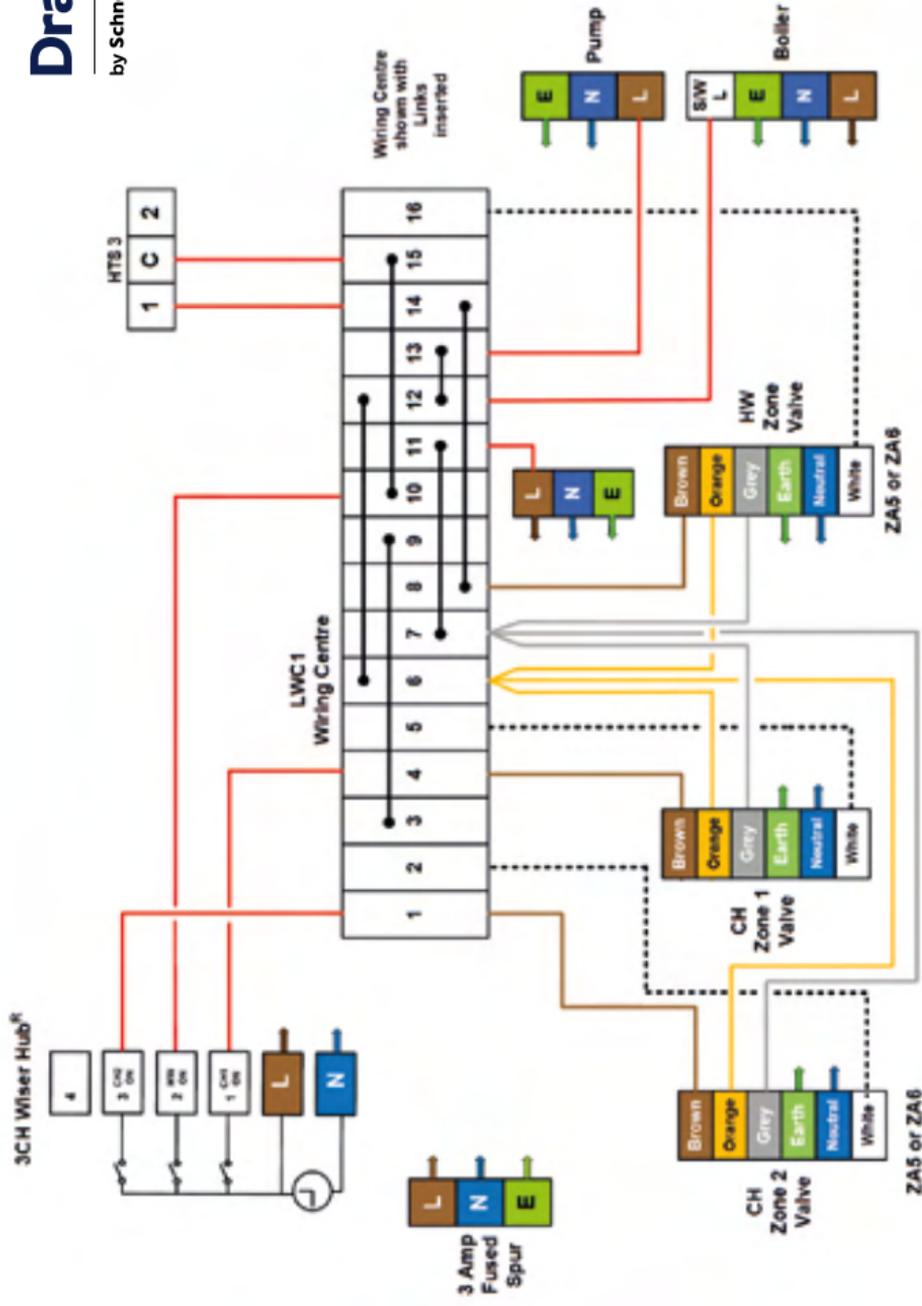
# Twinzone with LWC3 & 2 Stage Frost Protection

**Drayton**

by Schneider Electric



# Three Channel System



# Wiser Troubleshooting

## Removing devices and factory reset

Devices can be removed from the heating system using the Wiser Home app. Go to 'Home' then 'Settings' then 'Rooms', tap on the device then tap on the 'Remove from System' button on the 'Device Details' menu screen.

**Note:** If a device has been removed from the system, it will no longer be visible in the app. However, if a device is out of range, or is switched OFF when the request is made it will need to be factory reset separately (see Device Factory Reset below). Where a radiator thermostat has to be taken off a radiator valve following removal from the system, follow steps below:

- Open the valve as indicated in the table "Head calibration" on page 55
- Unscrew the radiator thermostat from the radiator valve.

### Factory reset 1st and 2nd generation Hub<sup>R</sup>

The Hub<sup>R</sup> can be reset to factory settings, which will remove all devices from the system and remove the Wi-Fi connection settings.

**Note:** This will not remove your Cloud account so you will either need to call customer services to remove your account or register with a different e-mail address.

To factory reset the Hub<sup>R</sup> refer below:

- Press and hold the 'Set-up' button for more than 20 seconds

**Note:** The LED will go through a few LED sequences, however the reset warning is indicated by solid Red. This is the final LED sequence and upon extinguishing it will implement the reset.

**Note:** To re-use devices you may also need to perform Device Factory Resets on individual products in accordance with the instructions in this section.

### Device factory reset

Devices can be reset manually at any time e.g. if the Hub<sup>R</sup> is replaced. To remove the device binding to a heating system allowing it to be joined to another system do the following:

#### Room thermostat:

- Remove the batteries and re-insert them
- When the 'Wiser Thermostat' splash screen is displayed press and hold the + and – buttons for 20 seconds until the pulsing Wi-Fi icon is displayed.

#### Radiator thermostat:

- Twist and hold the cap of the radiator thermostat in the '-' direction
- Wait a few seconds until the centre LED begins to flash Red
- Keep holding the cap in the '-' direction and wait for 8 red flashes, which may take 20 seconds. Release the cap; all 3 LEDs flash once to indicate that the device is resetting.

#### Electrical Heat Switch:

- Press and hold the button for more than 20 seconds.
- After 15 seconds the LED will flash red. Once the LED stops flashing red, release the button and the unit is factory reset.

### Smart plug factory reset

To remove the smart plug from a heating system, allowing it to be joined to another system, follow these steps:

- Ensure that the smart plug is installed in a wall socket.
- Press and hold the ON/OFF button.
- In five seconds the LED will flash blue six times then go out. The device is now reset.

# LED behaviour key



Solid



Flashing



Pulsing

## LED behaviour Radiator Thermostat

### Normal use

State	User Interaction	Left LED	Centre LED	Right LED	Duration
Boost up	Twist the cap in the + direction				Solid for 5 seconds
Boost down	Twist the cap in the - direction				Solid for 5 seconds

### Head calibration

State	User Interaction	Left LED	Centre LED	Right LED	Duration
Start up	Insert the batteries				Single quick flash
Opening the valve	Automatic upon inserting batteries OR Twist and hold the cap in + direction for 8 seconds (for changing batteries)				Solid until the valve is open
Ready to install on the valve	The radiator thermostat is ready to install when the valve is fully open (see above)		 		Red and Blue: flash for up to 5 minutes Orange solid = not joined   Green solid = joined
Closing the valve	Twist and hold the cap in the - direction for 2 seconds				Solid until the valve is closed
Joining	Twist and hold the cap in the + direction for 3 seconds				Pulses for up to 2 minutes
Join success					Solid for 5 seconds
Joining failed	If no network is found after 2 minutes				Flashes for 5 seconds

# LED behaviour Radiator Thermostat

## Error state

State	User Interaction	Left LED	Centre LED	Right LED	Duration
Low battery					Solid for 1 second (Repeated each hour)
Critical battery					Fast flash for 5 seconds (Repeated each minute)
No signal	Twist the cap in the + direction to start a boost				Fast flash for 5 seconds (Repeated)
No signal	Twist the cap in the - direction to start a boost				Fast flash for 5 seconds (Repeated)
No network	Twist the cap in the + or - direction to start a boost				Solid with fade-out after 2 seconds. In this event, the radiator thermostat has not joined the Wiser system and must either join the Hub <sup>R</sup> or be re-installed.

# LED behaviour Smart Plug

## Normal use

State	User Interaction	LED
-	Plug into wall socket (when not joined to the Hub <sup>R</sup> )	1 red flash followed by 3 purple / red flashes followed by blue flashes
-	Plug into wall socket (when joined to the Hub <sup>R</sup> )	Red flash followed by solid purple for 1 second followed by solid blue for 1 second
Socket ON	Press ON/OFF button	Solid blue
Socket OFF	Press ON/OFF button	Off
Join smart plug to the Hub <sup>R</sup>	Press and hold ON/OFF button for 2 seconds	Quick blue flashes. If the smart plug successfully joins the Hub <sup>R</sup> , the LED stops flashing. If the smart plug fails to join the Hub <sup>R</sup> , after 60 seconds, the quick blue flashes are followed by 6 slow flashes.
Interrupt Join Mode	Press ON/OFF button	Quick blue flashes are interrupted and followed by 6 slow blue flashes.
Reset the smart plug and return to factory settings	Press and hold ON/OFF button for 5 seconds	6 slow blue flashes

# INTRODUCING NEW WISER. ALTOGETHER SMARTER



## **Wiser 2nd Generation from Drayton**

brings together a whole host of smart products and sensors that offer greater comfort and security for your customers — and more ways for you to grow your business. Visit our website to discover our complete range of connected smart home devices backed by trusted support and services.

# Drayton

by Schneider Electric

# LED behaviour of the 1st Generation Hub<sup>R</sup>

## Set-up

State	Button Press	LED	Description
Normal			Indicates the Hub <sup>R</sup> is powered ON and operating as normal.
Set-up	Single press		In this mode, it is possible to connect directly to the Hub <sup>R</sup> via Wi-Fi and make changes to the system.
Adding a device	Press and hold for > 3s (or initiate from the app)	 	Indicates the Hub <sup>R</sup> is open to new devices joining the network.
Wi-Fi Error			The Hub <sup>R</sup> is unable to connect to the Wi-Fi Network. Check the Wi-Fi router is powered ON and connected to the internet. If you have changed your Wi-Fi credentials (password) or if you have a new router, you must connect to your Hub <sup>R</sup> in Set-up Mode and update your Wi-Fi network details.
Firmware upgrade			During a firmware upgrade cycle, the hub disconnects from the internet for a number of minutes to upgrade the firmware
Wiser Cloud connection lost			The Hub <sup>R</sup> is currently unable to contact the Wiser Cloud service. You will still be able to use the Wiser Heat app at home when connected to the same Wi-Fi network as your Hub <sup>R</sup>

## Heating and hot water

State	Button Press	LED	Description
Normal			Indicates the respective heating or hot water relay is currently active.
Emergency Heat/Test	Single press		This will manually switch the relay ON. <b>Hot Water:</b> ON for 1 hour <b>Heating:</b> ON for 2 hours

## Others

State	Button Press	LED	Description
Adding a RF range extender	Press and Hold 'Set-up' for longer than 3 s	 	Hub <sup>R</sup> Set-up LED Indicates the Hub <sup>R</sup> is ready to pair a range extender.
Reset	Press and Hold for longer than 20 s	   	Set-up LED Red followed by all LEDs flashing once  Indicates the Hub <sup>R</sup> has been returned to factory settings. This will remove all devices from the system instantly. To re-use the devices, you must perform a device reset on all products.

# LED behaviour of the 2nd Generation Hub<sup>R</sup>

## Set-up

LED	Description
	<b>Hub is starting up. Please wait two minutes.</b>
	Hub is powered on and operating as normal.
	Temporary Wi-Fi network of Hub is enabled.
	The Hub is actively searching for the device to pair.
	<b>Wi-Fi Error</b> Hub is unable to connect to your Wi-Fi network. Check if your router is powered on and operating as normal. If you have changed your Wi-Fi credentials or installed a new router, configure the hub accordingly. <b>Firmware update</b> During the firmware update process, Hub will disconnect from Wi-Fi.
	Hub cannot connect to Wiser Cloud. The hub continues to control the connected devices as normal. The App will only connect to the Hub when your smartphone is in the same Wi-Fi network as the Hub.

## Heating

LED	Description
	Connected heating is active.
	Override is active.

# LED behaviour

## Underfloor Heating

User Action	LED	LED Status	Behaviour
	 LED		Mains power supplied
	Channel 1-6 LED	Off	Relay closed (no call for heat)
	Channel 1-6 LED		Relay closed (call for heat)
	Channel 1-6 LED		Delay on relay activation
	Channel 1-6 LED		System test/emergency operation
	Setup LED 		Connected to the Hub <sup>R</sup>
	Setup LED 		Attempting to pair with the Hub <sup>R</sup>
	Setup LED 		Not connected to the Hub <sup>R</sup> . To connect see 4.
	Setup LED 		Floor temperature exceeded
Emergency operation / wiring test	Selected LEDs	Slow 	Channels activated. See 1.g
Connect the UFH Controller with the Hub <sup>R</sup> Press  and hold setup button for >2 secs	Setup LED 	 	The Wiser UFH is attempting to pair with the Hub <sup>R</sup> . Follow the instructions in the app, see point 3 and 4.
Reset the UFH Controller Press  and hold setup button for >20 secs	Setup LED 	 until all LEDs flash	Reset: the Wiser UFH will be removed from the system
Identify device from the app	All LEDs	All LEDs flash	To identify the Wiser UFH
	Heating/ Cooling LED		In cooling mode
	Heating/ Cooling LED		Dew sensor activated
	Pump LED		Pump activated
	Boiler LED		Boiler activated

# LED behaviour

## Electrical Heat Switch

State	Button Press	LED Status	Behaviour
			Output is on
	Single press	 	Indicates joining is in progress
			Flashes for 5 seconds for join success
			Flashes for 5 seconds for failure to join

# Become a Wiser Installer today



**We're giving professional installers the opportunity to grow their business with Wiser.**

Complete our Wiser training online via Drayton Rewards+ and start to reap the benefits.

You'll get leads from our consumer website where homeowners look for a pro to fit their Wiser system.

Plus being a Drayton Rewards+ member means you can claim points for all your Wiser product installs and get an extended 5-year warranty.

**Join our Drayton Rewards+ programme to access the free training to learn all you need to know about fitting Wiser for your customers.**

**SCAN  
TO JOIN**



**Drayton**  
Rewards+

# AFTER 75 YEARS WE KNOW THE VALUE OF LOYALTY.

**CLAIM POINTS FOR ALL YOUR DRAYTON  
INSTALLATIONS AND GET FREE STUFF.**



SCAN TO JOIN

Customer & Technical Support: 0333 6000 622

[draytoncontrols.co.uk](https://draytoncontrols.co.uk)

**MADE IN  
BRITAIN**®

D127-7

In accordance with our continuous improvement procedures, we reserve the right to change design features and specifications without prior notification. The data contained in this document is for guidance only. Drayton accepts no liability for any consequential losses, injury or damage resulting from the use of this document or the information contained within. Amazon, Alexa, and all related logos are trademarks of Amazon.com, Inc. or its affiliates.



Join The Drayton Community  
Facebook Group

**Drayton**

by **Schneider** Electric