

HEATING CONTROLS

RESIDENTIAL & COMMERCIAL



2022 IE / NI Catalogue

Celebrating 25 Years in business

For 25 years, EPH have been supplying state of the art products to the residential, commercial and pharmaceutical markets.

In our 2022 residential and commercial heating controls catalogue, you will find our latest products with the best of features to suit your application.

I would like to draw your attention to a few of these products.

The Boiler Plus legislation is a result of our industry looking for a more sustainable and energy efficient heating solution. The result of this will be lower fuel consumption as well as reduced carbon emissions.

Our CP4, programmable RF room thermostat has all the features to meet the Boiler Plus requirements and with its ease of use, it will continue to be a popular choice for all installers.

Following a major update, the EMBER App can now control both Programmer based systems (EMBER PS) and Thermostat based systems (EMBER TS). On top of the existing features and benefits, voice control of your heating system is now possible via Alexa and Google Assistant.

The new CP4i, smart thermostat has now been launched based on the success of the CP4. Controlled by the EMBER App, up to 6 thermostats can be installed in a home with multi zone OpenTherm® control.

Our Detach Pro range of motorised valves are manufactured with internationally recognised, market leading components. As a result, we continue to offer an industry leading 5 year warranty as we have done for the last 14 years.

These are some of the exceptional products that we have available to you.

We hope you enjoy the full range of products within this catalogue or visit our website at www.ephcontrols.com.

We shall continue to pre-empt market requirements by delivering quality products with the USP's that set us aside from our competitors and make our products the first choice for all installers.

Trevor Casey
Managing Director



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Underfloor Controls

Wiring Centre 10 Zone 230V



NEW

PRODUCT CODE	POWER SUPPLY	NO. OF ZONES	PROGRAMMER INPUTS
UFH10	230Vac, $\pm 10\%$	10	4
CONTACT RATING	UFH/RAD+HW SWITCHES	HEAT ENABLE OUTPUT	UFH PUMP OUTPUT
5A	2	Volt Free	230V~



UFH10 is compatible with the following thermostats

Mechanical Thermostats



CM2



CM3



CMT



CM2S



CM3S

Programmable Thermostats



CDTP2



CRTP2



RDTP



CP4B



CP4M

Non Programmable Thermostats



CDT2



CRT2



RDT



HDT



HRT

Cylinder Thermostats



EDBS



WRP



WRP-TP



WRP-IM



WRP-IM-TP

Dial Thermostat with Setback Function



ErP Class IV = 2%
Delay start & On / Off control



NEW

PRODUCT CODE	POWER SUPPLY	SWITCH RATING	CONTACT TYPE
HDT	230Vac $\pm$ 10%	7A 230V	SPST
HRT	2 x AA Batteries (Incl)	8A 230v	SPST
SENSOR TYPE	TEMP RANGE	ADJ. SWITCHING DIFFERENTIAL	SPECIAL FUNCTION
NTC100K	5 ... 35°C	0 ... 1.0°C	Delay Start / TPI / Setback Function

Recessed Programmable Thermostat



ErP Class IV = 2%



NEW

PRODUCT CODE	POWER SUPPLY	SWITCH RATING	SWITCH OUTPUT
RDTP	230Vac $\pm$ 10%	10(3)A 230Vac	SPDT Volt Free
SENSOR TYPE	TEMP RANGE	ADJ. SWITCHING DIFFERENTIAL	SPECIAL FUNCTION
NTC 100K Internal	5...35°C	0 ... 1.0°C	Optimum Start / TPI / Remote Sensor Compatible

ACCESSORIES CODE	DESCRIPTION
NTC 10K	NTC 10K Cable Sensor, 1.5M
NTC Housing	Cable Sensor Housing

Recessed Thermostat with Setback Function



ErP Class IV = 2%
Delay start & On / Off control



NEW

PRODUCT CODE	POWER SUPPLY	SWITCH RATING	CONTACT TYPE
RDT	230Vac $\pm$ 10%	10 (3)A 230v	SPDT
SENSOR TYPE	TEMP RANGE	ADJ. SWITCHING DIFFERENTIAL	SPECIAL FUNCTION
NTC100K	5 ... 35°C	0 ... 1.0°C	Delay Start / TPI / Setback Function

Surface Mounted Programmable Thermostat



ErP Class V = 3% On / Off control



PRODUCT CODE	POWER SUPPLY	SWITCH RATING	CONTACT TYPE
CP4M	230Vac ±10%	8A 230Vac	SPDT Volt Free

SENSOR TYPE	TEMP RANGE	ADJUSTABLE SWITCHING DIFFERENTIAL	PROGRAMMING MODE
NTC100K	5 ... 35°C	0.2 ... 1.0°C	5/2d - 7d - 24h



NEW

ErP Class IV = 2% On / Off control



PRODUCT CODE	POWER SUPPLY	SWITCH RATING	CONTACT TYPE
CDTP2	230Vac ±10%	8A 230Vac	SPDT Volt Free

SENSOR TYPE	TEMP RANGE	ADJUSTABLE SWITCHING DIFFERENTIAL	PROGRAMMING MODE
NTC100K	5 ... 35°C	0.2 ... 1.0°C	5/2d - 7d - 24h



ErP Class V = 3% On / Off control



PRODUCT CODE	POWER SUPPLY	SWITCH RATING	CONTACT TYPE
CP4B	2 x AA Batteries (Incl.)	7A 230Vac	SPDT Volt Free

SENSOR TYPE	TEMP RANGE	ADJUSTABLE SWITCHING DIFFERENTIAL	PROGRAMMING MODE
NTC100K	5 ... 35°C	0.2 ... 1.0°C	5/2d - 7d - 24h



NEW

ErP Class IV = 2% On / Off control



PRODUCT CODE	POWER SUPPLY	SWITCH RATING	CONTACT TYPE
CRTP2	2 x AA Batteries (Incl.)	8A 230Vac	SPDT

SENSOR TYPE	TEMP RANGE	ADJUSTABLE SWITCHING DIFFERENTIAL	PROGRAMMING MODE
NTC100K	5 ... 35°C	0.2 ... 1.0°C	5/2d - 7d - 24h

Surface Mounted Thermostat



NEW

ErP Class IV = 2%

Delay start & On / Off control



CE UK CA

PRODUCT CODE	POWER SUPPLY	SWITCH RATING	CONTACT TYPE
CDT2	230Vac ±10%	7A 230Vac	SPDT Volt Free
CDT2-24	24Vac ±10%	7A 24Vac	SPDT Volt Free

SENSOR TYPE	TEMP RANGE	ADJUSTABLE SWITCHING DIFFERENTIAL
NTC100K	5 ... 35°C	0.2 ... 1.0°C



NEW

ErP Class IV = 2%

Delay start & On / Off control



CE UK CA

PRODUCT CODE	POWER SUPPLY	SWITCH RATING	CONTACT TYPE
CRT2	2 x AA Batteries (Incl.)	8A 230Vac	SPDT Volt Free

SENSOR TYPE	TEMP RANGE	ADJUSTABLE SWITCHING DIFFERENTIAL
NTC100K	5 ... 35°C	0.2 ... 1.0°C

Thermal Actuator



BOX QTY 100 CE UK CA

PRODUCT CODE	POWER SUPPLY	ACTUATOR TYPE	RUNNING TIME	AUXILIARY SWITCH
TA24	24Vac	Normally Open or Closed	4.5 min	-
TA230	230Vac	Normally Open or Closed	3.5 min	-
TA230S	230Vac	Normally Closed	4.5 min	Yes

MAX. STROKE	AMBIENT TEMP RANGE	SPRING PRESSURE	VALVE CONNECTION
3.5mm	0 ... 50°C	125N	M30x1.5

Hot Water Controls

Immersion Controller



PRODUCT CODE	POWER SUPPLY	SWITCH OUTPUT	BOOST OPTIONS
IMC	230Vac, 50Hz	230Vac SPST	30mins / 1hr / 2hr / 3hr

CONTACT RATING	OPERATING PERIODS	DIMENSION	MAX AMBIENT TEMP RANGE
16A Resistive	3 per day	170x116x63 mm	0 ... 45°C

Digital Cylinder / Room Thermostat



NEW

Cylinder or Room thermostat with remote probe sensor



PRODUCT CODE	POWER SUPPLY	SWITCH RATING	CONTACT TYPE
CDC	230Vac ± 10%	16A 230Vac	SPDT

SENSOR TYPE	TEMP RANGE	ADJ. SWITCHING DIFFERENTIAL	SPECIAL FUNCTION
NTC 10K External only	5...90°C / 5...35°C	0...20°C / 0...1°C	Delay Start and TPI for heating function

ACCESSORIES CODE	DESCRIPTION
NTC 10K	NTC 10K Cable Sensor, 1.5M

Digital Cylinder Thermostat with High Limit



Built-in Legionnaires function



PRODUCT CODE	POWER SUPPLY	SWITCH RATING	CONTACT TYPE
EDBS	230Vac ± 10%	8A 230Vac	SPDT Volt Free

SENSOR TYPE	TEMP RANGE	ADJUSTABLE SWITCHING DIFFERENTIAL
NTC10K	10 ... 90°C	0 ... 20°C

Electronic Boost Timer



PRODUCT CODE	POWER SUPPLY	SWITCH RATING	MAX LOAD
BST3	230Vac ± 10%	16A 230Vac	3 Kw

TIME PERIOD
15min, 30min, 1hr, 2hr & 3hr

EPH Controls' range of motorised valves offer market leading functionality. Two port motorised valves come with a detachable actuator, detachable power cable and a power on light. In addition, all component parts of the actuator, are sourced from the market leaders in their fields in USA and Europe, making the DETACH Pro range of valves a must for all home heating installations.

2 Port Valve - Compression

DETACH PRO ►



V22_P c/w
Light
Detach cable
Detach button



DS222P c/w
Light
Detach cable

PRODUCT CODE	CONNECTION TYPE	FLOW RATE	MAX. CLOSE OFF PRESSURE	BI-DIRECTIONAL FLOW
V221P	3/4" compression	4.6 kvs	1.0 bar	No
V222P	22mm compression	4.6 kvs	1.0 bar	No
DS222P	22mm compression	4.6 kvs	1.0 bar	Yes
V228P	28mm compression	6.8 kvs	0.6 bar	No
SWITCH RATING	MAX AMBIENT TEMP	MAX FLUID TEMP		
11(3)A 230Vac	50°C	88°C		



2 Port Valve - Female BSP

DETACH PRO ►



V22_FP c/w
Light
Detach cable
Detach button

PRODUCT CODE	CONNECTION TYPE	FLOW RATE	MAX. CLOSE OFF PRESSURE
V222FP	3/4" female BSP	4.6 kvs	1.0 bar
V228FP	1" female BSP	6.8 kvs	0.6 bar
V232FP	1 1/4" female BSP	8.0 kvs	0.3 bar
SWITCH RATING	MAX AMBIENT TEMP	MAX FLUID TEMP	
11(3)A 230Vac	50°C	88°C	



3 Port Mid Position & Diverter Valve - Compression



B32_P c/w
Detach cable

PRODUCT CODE	CONNECTION TYPE	FLOW RATE	MAX. CLOSE OFF PRESSURE
B322PF	22mm compression	4.6 kvs	1.6 bar (A) 1.2 bar (B)
B328PF	28mm compression	6.8 kvs	1.2 bar (A) 0.8 bar (B)
SWITCH RATING	MAX AMBIENT TEMP	MAX FLUID TEMP	
5(2)A 230Vac	50°C	88°C	



Motorised Valves Continued

Replacement Actuator

DETACH PRO ►



A1P & C1P c/w
Light
Detach cable
Detach button



DS1P & M1P c/w
Light
Detach cable



D1PF c/w
Detach cable



PRODUCT CODE	SWITCH RATING	REPLACEMENT FOR MODEL		
A1P	11(3)A 230Vac	2 Port	EPH V type	Horstmann F222 / F228
C1P	11(3)A 230Vac	2 Port	Honeywell V404	Horstmann Z222 / Z228
DS1P	11(3)A 230Vac	2 Port	Danfoss HP22B / HP28B / HP15B Danfoss HP1.75B / HP1.0B Sunvic SZ / SZM / SM	
M1P	11(3)A 230Vac	2 Port	Myson MPE22 Myson MCZV2 3/4	Myson MPE28 Myson MCZV21
D1PF	5(2)A 230Vac	3 Port	EPH B322P / B328P Honeywell V407	EPH B322PF / B328PF Horstmann Z322 / Z328

MAX AMBIENT TEMP.

MAX FLUID TEMP

50 °C

88 °C

Accessories



PRODUCT CODE	CABLE HARNESS FOR
CH25	2 port 5 wire actuators
CH26	2 port 6 wire actuators
CH35	3 port 5 wire actuators

Cable harness to convert Detach actuator to Detach Pro actuator.

PRODUCT CODE	DESCRIPTION
DP5M	5 Metre Detach cable for 2 port 5 wire actuators

3 Port Diverter Valve - High Flow Rate



PRODUCT CODE	CONNECTION TYPE	FLOW RATE	MAX. CLOSE OFF PRESSURE
B322DIV	22mm compression	7.1 kvs	1.6 bar (A) 1.2 bar (B)
B328DIV	28mm Compression	7.6 kvs	1.2 bar (A) 0.8 bar (B)
MAX AMBIENT TEMP	MAX FLUID TEMP		
50 °C	88 °C		

3 Port Mid Position Valve - High Flow Rate



PRODUCT CODE	CONNECTION TYPE	FLOW RATE	MAX. CLOSE OFF PRESSURE
B322MID	22mm Compression	7.1 kvs	1.6 bar (A) 1.2 bar (B)
B328MID	28mm Compression	7.6 kvs	1.2 bar (A) 0.8 bar (B)
SWITCH RATING	MAX AMBIENT TEMP	MAX FLUID TEMP	
5(2)A 230Vac	50 °C	88 °C	



Design your control pack
by scanning this QR code



Introducing 2 Zone New build Heating Control Packs



NEW BUILD PACK C00P-222A01



2x CP4M

Mains Operated
Programmable Thermostats



2x V222P

2 Port 22mm
Motorised Valves



1x WC2

12 Way
Wiring Centre

NEW BUILD PACK C00P-222B01



2x CP4B

Battery Powered
Programmable Thermostats



2x V222P

2 Port 22mm
Motorised Valves



1x WC2

12 Way
Wiring Centre

Heating Control Packs

Y Plan Heating Control Pack



BOX QTY 6 CE UK CA

PRODUCT CODE	PROGRAMMER	MOTORISED VALVE	THERMOSTATS		WIRING CENTRE
CA22P	A27-HW	B322PF	CM2	WRP	WC2
CA28P	A27-HW	B328PF	CM2	WRP	WC2

PRODUCT CODE	PROGRAMMER	MOTORISED VALVE	THERMOSTATS		WIRING CENTRE
CR22P	R27-HW	B322PF	CM2	WRP	WC2
CR28P	R27-HW	B328PF	CM2	WRP	WC2

1 Zone Control Pack



BOX QTY 6 CE UK CA

PRODUCT CODE	PROGRAMMER	MOTORISED VALVE	THERMOSTATS		WIRING CENTRE
CR1P-222101	R17	V222P x 2	RDTP x 2	-	WC2
CR1P-282301	R17	DS222P x 2	CM3 x 2	-	WC2
CR1P-231901 [CP-GEG03]	R17	V228P	CP4	-	WC2

S Plan Heating Control Pack



BOX QTY 6 CE UK CA

PRODUCT CODE	PROGRAMMER	MOTORISED VALVE	THERMOSTATS		WIRING CENTRE
CA221P	A27-HW	V221P x 2	CM2	WRP	WC2
CA222P	A27-HW	V222P x 2	CM2	WRP	WC2
CA228P	A27-HW	V228P x 2	CM2	WRP	WC2

PRODUCT CODE	PROGRAMMER	MOTORISED VALVE	THERMOSTATS		WIRING CENTRE
CR221P	R27-HW	V221P x 2	CM2	WRP	WC2
CR222P	R27-HW	V222P x 2	CM2	WRP	WC2
CR228P	R27-HW	V228P x 2	CM2	WRP	WC2

2 Zone Control Pack



BOX QTY 6 CE UK CA

PRODUCT CODE	PROGRAMMER	MOTORISED VALVE	THERMOSTATS		WIRING CENTRE
CR2P-211301	R27-HW	V221P x 2	CM3	-	WC2
CR2P-211311	R27-HW	V221P x 2	CM3	WRP	WC2
CR2P-211341	R27-HW	V221P x 2	CM3	WRP-IM-TP	WC2
CR2P-211351	R27-HW	V221P x 2	CM3	WRP-TP	WC2
CR2P-281211	R27-HW	DS222P x 2	CM2	WRP	WC2
CR2P-282301	R27-HW	DS222P x 2	CM3	-	WC2



S Plan Unvented Heating Control Pack



PRODUCT CODE	PROGRAMMER	MOTORISED VALVE	THERMOSTATS		WIRING CENTRE
CA221PU	A27-HW	V221P	CM2	-	WC2
CA222PU	A27-HW	V222P	CM2	-	WC2
CA228PU	A27-HW	V228P	CM2	-	WC2

PRODUCT CODE	PROGRAMMER	MOTORISED VALVE	THERMOSTATS		WIRING CENTRE
CR221PU	R27-HW	V221P	CM2	-	WC2
CR222PU	R27-HW	V222P	CM2	-	WC2
CR228PU	R27-HW	V228P	CM2	-	WC2



2 Zone Combi Zoning Control Pack



Pictures for reference only, thermostats will differ in packs.



PRODUCT CODE	PROGRAMMER	MOTORISED VALVE	THERMOSTATS		WIRING CENTRE
C00P-210011	-	V221P x 2	-	WRP	WC2
C00P-212101	-	V221P x 2	RDTP x 2	-	WC2
C00P-212701	-	V221P x 2	CDTP2 x 2	-	WC2
C00P-212801	-	V221P x 2	CRTP2 x 2	-	WC2
C00P-212901	-	V221P x 2	CP4 x 2	-	WC2
C00P-212A01	-	V221P x 2	CP4M x 2	-	WC2
C00P-212A02	-	V221P x 2	CP4M x 2	-	WC3
C00P-222101	-	V222P x 2	RDTP x 2	-	WC2
C00P-222701	-	V222P x 2	CDTP2 x 2	-	WC2
C00P-222801	-	V222P x 2	CRTP2 x 2	-	WC2
C00P-222901	-	V222P x 2	CP4 x 2	-	WC2
C00P-222A01	-	V222P x 2	CP4M x 2	-	WC2
C00P-222B01	-	V222P x 2	CP4B x 2	-	WC2
C00P-232A00	-	V228P x 2	CP4M x 2	-	-
C00P-282B01	-	DS222P x 2	CP4B x 2	-	WC2



CR5P-212200	R27	V221P x 2	CM2 x 2	-	-
CR5P-212201	R27	V221P x 2	CM2 x 2	-	WC2
CR5P-212301	R27	V221P x 2	CM3 x 2	-	WC2
CR5P-222201	R27	V222P x 2	CM2 x 2	-	WC2
CR5P-222301	R27	V222P x 2	CM3 x 2	-	WC2
CR5P-282201	R27	DS222P x 2	CM2 x 2	-	WC2
CR5P-282301	R27	DS222P x 2	CM3 x 2	-	WC2
CR5P-282401	R27	DS222P x 2	CDT2 x 2	-	WC2



Heating Control Packs Continued

3 Zone Heating Control Pack



PRODUCT CODE	PROGRAMMER	MOTORISED VALVE	THERMOSTATS		WIRING CENTRE
CR3P	R37-HW	V221P x 3	CM2 x 2	WRP	WC2
CR322P	R37-HW	V222P x 3	CM2 x 2	WRP	WC2
CR328P	R37-HW	V228P x 3	CM2 x 2	WRP	WC2

PRODUCT CODE	PROGRAMMER	MOTORISED VALVE	THERMOSTATS		WIRING CENTRE
CR3P-222301	R37-HW	V222P x 2	CM3 x 2	-	WC2
CR3P-282301	R37-HW	DS22P x 2	CM3 x 2	-	WC2
CR3P-282401	R37-HW	DS222P x 2	CDT2 x 2	-	WC2
CR3P-322301	R37-HW	V222P x 3	CM3 x 2	-	WC2
CR3P-382211	R37-HW	DS222P x 3	CM2 X 2	WRP	WC2



3 Zone Unvented Heating Control Pack



PRODUCT CODE	PROGRAMMER	MOTORISED VALVE	THERMOSTATS		WIRING CENTRE
CR3PU	R37-HW	V221P x 2	CM2 x 2	-	WC2
CR322PU	R37-HW	V222P x 2	CM2 x 2	-	WC2
CR328PU	R37-HW	V228P x 2	CM2 x 2	-	WC2



3 Zone Combi Zoning Control Pack



PRODUCT CODE	PROGRAMMER	MOTORISED VALVE	THERMOSTATS		WIRING CENTRE
C00P-313A01	-	V221P x 3	CP4M x 3	-	WC2
C00P-323A01	-	V222P x 3	CP4M x 3	-	WC2
C00P-313101	-	V221P x 3	RDTP x 3	-	WC2
C00P-323101	-	V222P x 3	RDTP x 3	-	WC2
C00P-313701	-	V221P x 3	CDTP2 x 3	-	WC2
C00P-323701	-	V222P x 3	CDTP2 x 3	-	WC2
C00P-313801	-	V221P x 3	CRTP2 x 3	-	WC2
C00P-323801	-	V222P x 3	CRTP2 x 3	-	WC2
CR6P-313201	R37	V221P x 3	CM2 x 3	-	WC2
CR6P-323201	R37	V222P x 3	CM2 x 3	-	WC2
CR6P-313301	R37	V221P x 3	CM3 x 3	-	WC2
CR6P-323301	R37	V222P x 3	CM3 x 3	-	WC2

Pictures for reference only, thermostats will differ in packs.





4 Zone Heating Control Pack



PRODUCT CODE	PROGRAMMER	MOTORISED VALVE	THERMOSTATS		WIRING CENTRE
CR4P	R47	V221P x 4	CM2 x 3	WRP	WC2
CR422P	R47	V222P x 4	CM2 x 3	WRP	WC2
CR428P	R47	V228P x 4	CM2 x 3	WRP	WC2

4 Zone Unvented Heating Control Pack



PRODUCT CODE	PROGRAMMER	MOTORISED VALVE	THERMOSTATS		WIRING CENTRE
CR4PU	R47	V221P x 3	CM2 x 3	-	WC2
CR422PU	R47	V222P x 3	CM2 x 3	-	WC2
CR428PU	R47	V228P x 3	CM2 x 3	-	WC2

Wiring Centres

Wiring Centre



PRODUCT CODE	INTERNALLY MOUNTED
WC2	12 Block Connector Strip
WC3	16 Block Connector Strip

Wiring Centre with PCB



PRODUCT CODE	INTERNALLY MOUNTED	APPLICATION
WCA	PCB c/w Screw Terminals	S-Plan or 3 Zone System
WCC	PCB c/w Screw Terminals	2 or 3 Zone System (Heat only)
WCD	PCB c/w Screw Terminals **	S-Plan or 3 Zone System Separate Hot Water and Heating outputs.

** Suitable for Boiler with Weather Compensation.

Wiring Centre 10 Zone 230V



NEW



PRODUCT CODE	POWER SUPPLY	NO. OF ZONES	PROGRAMMER INPUTS
UFH10	230Vac, ±10%	10	4

CONTACT RATING	UFH/RAD+HW SWITCHES	HEAT ENABLE OUTPUT	UFH PUMP OUTPUT
5A	2	Volt Free	230V~

Programmeters

1 Zone Timeswitch



PRODUCT CODE	NUMBER OF ZONES	SWITCH OUTPUT	SCREEN DIMENSIONS
A17	1	Volt Free	48 x 23 mm



PRODUCT CODE	NUMBER OF ZONES	SWITCH OUTPUT	SCREEN DIMENSIONS
R17	1	Volt Free	100 x 35 mm

SWITCH RATING	AMBIENT TEMP	BACKPLATE	OPERATING PERIODS	PROGRAMMING MODE
3(1)A 230Vac	0 ... 50°C	6 pin	3 per day	5/2d - 7d - 24h

2 Zone Programmer



PRODUCT CODE	NUMBER OF ZONES	SWITCH OUTPUT	SCREEN DIMENSIONS
A27-HW	2	230Vac	48 x 23 mm



PRODUCT CODE	NUMBER OF ZONES	SWITCH OUTPUT	SCREEN DIMENSIONS
R27	2	230Vac	100 x 35 mm
R27-HW	2	230Vac	100 x 35 mm
R27-VF	2	Volt Free	100 x 35 mm

SWITCH RATING	AMBIENT TEMP	BACKPLATE	OPERATING PERIODS	PROGRAMMING MODE
3(1)A 230Vac	0 ... 50°C	6 pin	3 per day	5/2d - 7d - 24h

3 Zone Programmer



PRODUCT CODE	NUMBER OF ZONES	SWITCH OUTPUT	SCREEN DIMENSIONS
R37	3	230Vac	100 x 35 mm
R37-HW	3	230Vac	100 x 35 mm

SWITCH RATING	AMBIENT TEMP	BACKPLATE	OPERATING PERIODS	PROGRAMMING MODE
3(1)A 230Vac	0 ... 50°C	8 pin	3 per day	5/2d - 7d - 24h

4 Zone Programmer



PRODUCT CODE	NUMBER OF ZONES	SWITCH OUTPUT	SCREEN DIMENSIONS
R47	4	230Vac	100 x 35 mm

SWITCH RATING	AMBIENT TEMP	BACKPLATE	OPERATING PERIODS	PROGRAMMING MODE
3(1)A 230Vac	0 ... 50°C	8 pin	3 per day	5/2d - 7d - 24h

Mechanical Room Thermostats

Thermostat



ErP Class I - 1%

*CM2 Combi Stat



PRODUCT CODE	SWITCH RATING	ANTICIPATOR	INDICATOR LIGHT
CM2*	10(3)A 230 & 24Vac	-	-
CM3	10(3)A 230Vac	Yes	Yes
CM3 - 24	12(4)A 24Vac	Yes	Yes
CONTACT TYPE	TEMP RANGE	IP RATING	SWITCHING DIFFERENTIAL
SPDT	5 ... 35°C Limitable	IP20	±1°C

Frost Thermostat



ErP Class I - 1%



PRODUCT CODE	SWITCH RATING	CONTACT TYPE	INDICATOR LIGHT
CMF	10(3)A 230Vac	SPDT	Yes
TEMPERATURE RANGE	TEMP RANGE	IP RATING	SWITCHING DIFFERENTIAL
Limitable	-5 ... 15°C	IP20	±1°C

Tamperproof Thermostat



ErP Class I - 1%



PRODUCT CODE	SWITCH RATING	CONTACT TYPE	INDICATOR LIGHT
CMT	10(3)A 230 & 24Vac	SPDT	-
TEMPERATURE RANGE	TEMP RANGE	IP RATING	SWITCHING DIFFERENTIAL
Limitable	5 ... 35°C	IP20	±1°C

Thermostat with On/Off Switch



ErP Class I - 1%



PRODUCT CODE	SWITCH RATING	ON/OFF SWITCH	INDICATOR LIGHT
CM2S	10(3)A 230 & 24Vac	Yes	-
CM3S	10(3)A 230Vac	Yes	Yes
CONTACT TYPE	TEMP RANGE	IP RATING	SWITCHING DIFFERENTIAL
SPDT	10 ... 30°C	IP20	±1°C

Intermediate Plate



PRODUCT CODE	DIMENSIONS
SMB	95 x 95 mm
FOR USE WITH PRODUCTS	
CM2, CM3, CM3-24, CMF, CMT, CDT2, CDT2-24, CRT2, CDT2P, CRTP2.	

Mechanical Pipe / Cylinder Thermostats

Pipe / Cylinder Thermostat



PRODUCT CODE	SETPOINT ADJUSTMENT	SWITCH RATING	CONTACT TYPE
WRP	External	16(4)A 230Vac	SPDT
WRP-TP	Internal (Tamperproof)	16(4)A 230Vac	SPDT
SENSOR TYPE	TEMP RANGE	IP RATING	SWITCHING DIFFERENTIAL
Gas filled	0 ... 90°C	IP20	±5°C

Immersion Thermostat



PRODUCT CODE	SETPOINT ADJUSTMENT	SWITCH RATING	CONTACT TYPE
WRP-IM	External	16(4)A 230Vac	SPDT
WRP-IM-TP	Internal (Tamperproof)	16(4)A 230Vac	SPDT
SENSOR TYPE	TEMP RANGE	IP RATING	SWITCHING DIFFERENTIAL
Gas filled	0 ... 90°C	IP20	±5°C

Dual Thermostat with Manual Reset



PRODUCT CODE	SETPOINT ADJUSTMENT	SWITCH RATING	SWITCH OUTPUT
DBS	External	16(4)A	SPDT
SENSOR TYPE	HIGH LIMIT STAT	TEMP RANGE	SWITCHING DIFFERENTIAL
Liquid filled	110°C	0 ... 90°C	6±2°C

Outside Frost Thermostat



PRODUCT CODE	DESCRIPTION	SWITCH RATING	TEMP RANGE
C10C2RIYS1	Internal Setpoint Adj.	15(2.5)A 230Vac	-35°C ... 20°C
SWITCH OUTPUT	MAX. AMBIENT TEMP		
SPDT Volt Free	50°C		

Frost Thermostat Controller



PRODUCT CODE	DESCRIPTION	SWITCH RATING	TEMP RANGE
EPH-FSC	Frost stat controller	8A 230Vac	-
SWITCH OUTPUT	MAX. AMBIENT TEMP		
SPDT Volt Free	50°C		

* Saves energy by running the circulating pump without firing the boiler when the outside frost thermostat calls for heat.

Room Thermostats

Surface Mounted Thermostat



NEW

ErP Class IV = 2%

Delay start & On / Off control



PRODUCT CODE	POWER SUPPLY	SWITCH RATING	CONTACT TYPE
CDT2	230Vac ±10%	7A 230Vac	SPDT Volt Free
CDT2-24	24Vac ±10%	7A 24Vac	SPDT Volt Free
SENSOR TYPE	TEMP RANGE	ADJ. SWITCHING DIFFERENTIAL	
NTC100K	5 ... 35°C	0.2 ... 1.0°C	



NEW

ErP Class IV = 2%

Delay start & On / Off control



PRODUCT CODE	POWER SUPPLY	SWITCH RATING	CONTACT TYPE
CRT2	2 x AA Batteries (Incl.)	8A 230Vac	SPDT Volt Free
SENSOR TYPE	TEMP RANGE	ADJ. SWITCHING DIFFERENTIAL	
NTC100K	5 ... 35°C	0.2 ... 1.0°C	

Dial Thermostat with Setback Function



NEW

ErP Class IV = 2%

Delay start & On / Off control



PRODUCT CODE	POWER SUPPLY	SWITCH RATING	CONTACT TYPE
HDT	230Vac ± 10%	7A 230Vac	SPST
HRT	2 x AA Batteries (Incl.)	8A 230Vac	SPST
SENSOR TYPE	TEMP RANGE	ADJ. SWITCHING DIFFERENTIAL	SPECIAL FUNCTION
NTC100K	5 ... 35°C	0 ... 1.0°C	Delay Start / TPI / Setback Function

Recessed Thermostat with Setback Function



NEW

ErP Class IV = 2%

Delay start & On / Off control



PRODUCT CODE	POWER SUPPLY	SWITCH RATING	CONTACT TYPE
RDT	230Vac ± 10%	10 (3)A 230Vac	SPDT
SENSOR TYPE	TEMP RANGE	ADJ. SWITCHING DIFFERENTIAL	SPECIAL FUNCTION
NTC100K	5 ... 35°C	0 ... 1.0°C	Delay Start / TPI / Setback Function

Programmable Room Thermostats

Surface Mounted Programmable Thermostat



ErP Class V = 3% On / Off control



NEW

ErP Class IV = 2% On / Off control



ErP Class V = 3% On / Off control



ErP Class IV = 2% On / Off control



PRODUCT CODE	POWER SUPPLY	SWITCH RATING	CONTACT TYPE
CP4M	230Vac ±10%	8A 230Vac	SPDT Volt Free

SENSOR TYPE	TEMP RANGE	ADJ. SWITCHING DIFFERENTIAL	PROGRAMMING MODE
NTC100K	5 ... 35°C	0.2 ... 1.0°C	5/2d - 7d - 24h

PRODUCT CODE	POWER SUPPLY	SWITCH RATING	CONTACT TYPE
CDTP2	230Vac ±10%	8A 230Vac	SPDT Volt Free

SENSOR TYPE	TEMP RANGE	ADJ. SWITCHING DIFFERENTIAL	PROGRAMMING MODE
NTC100K	5 ... 35°C	0.2 ... 1.0°C	5/2d - 7d - 24h

PRODUCT CODE	POWER SUPPLY	SWITCH RATING	CONTACT TYPE
CP4B	2 x AA Batteries (Incl.)	7A 230Vac	SPDT Volt Free

SENSOR TYPE	TEMP RANGE	ADJ. SWITCHING DIFFERENTIAL	PROGRAMMING MODE
NTC100K	5 ... 35°C	0.2 ... 1.0°C	5/2d - 7d - 24h

PRODUCT CODE	POWER SUPPLY	SWITCH RATING	CONTACT TYPE
CRTP2	2 x AA Batteries (Incl.)	8A 230Vac	SPDT

SENSOR TYPE	TEMP RANGE	ADJ. SWITCHING DIFFERENTIAL	PROGRAMMING MODE
NTC100K	5 ... 35°C	0.2 ... 1.0°C	5/2d - 7d - 24h

Recessed Programmable Thermostat



NEW

ErP Class IV = 2%



PRODUCT CODE	POWER SUPPLY	SWITCH RATING	SWITCH OUTPUT
RDTP	230Vac ±10%	10(3)A 230Vac	SPDT Volt Free

SENSOR TYPE	TEMP RANGE	ADJ. SWITCHING DIFFERENTIAL	SPECIAL FUNCTION
NTC 100K Internal	5...35°C	0 ... 1.0°C	Optimum Start / TPI / Remote Sensor Compatible

ACCESSORIES CODE	DESCRIPTION
NTC 10K	NTC 10K Cable Sensor, 1.5M
NTC Housing	Cable Sensor Housing



CP4

Programmable RF Thermostat

ErP V
Class
+3%

When one thermostat is fitted in conjunction with a modulating boiler

ErP VIII
Class
+5%

When three thermostats are fitted in conjunction with a modulating boiler



PRE-PAIRED
Components

- Boost Function**
- Holiday Mode**
- Battery Operated**
- Keypad Lock**
- Portable or Wall Mounted**



USER FRIENDLY

User centered design is the key of CP4's development. With a large LCD and ergonomically shaped buttons, they are designed for easy use in the dark or for people with impaired vision.



PROGRAMMABLE

Allows flexible control by the users. Options available include 7 day, weekdays/weekend, or 24 hours. You can also choose to boost for 1 hour and a holiday mode is available for when you are away.



CONTEMPORARY

A comfortable and visually friendly interior is important to every home. Our designers have created this new sleek pure white casing, to be versatile and suit all interiors.



OPENTHERM®

Modulate your OpenTherm® boiler for maximum efficiency and minimum impact on our environment.



EASY INSTALLATION

The thermostat & receiver are pre-paired for your installer. As soon as the receiver is wired to your boiler, its ready to go.



COST EFFECTIVE

Reduce your energy bills with time and temperature control of your heating & hot water - anywhere.



MULTI ZONE

Control up to 6 zones via OpenTherm® by adding more thermostats. Hot water control is also possible with addition of CP4-HW-OT to the system.



CONVENIENT

Whether at home or abroad, easy control of your heating system is in the palm of your hand.



CP4i

TS



Smart Thermostat



The CP4i Smart Thermostat is the perfect combination of simplicity and technology. The thermostat, receiver and gateway are pre-paired during production to ensure a quick and easy installation.

With the EMBER App it is possible to have complete control over your heating system anywhere, anytime.



GW03 WIFI Gateway
Dual band 2.4 / 5GHz



VOICE CONTROL

With Alexa or Google Assistant, you can control your heating system, check temperatures, boost zones and much more.



MULTIPLE CONTROL

Control multiple homes and add multiple users at the touch of a button via your smartphone.

EMBER TS SMART HEATING CONTROL - PACK GUIDE



CP4



CP4-HW-OT



GW03



CP4i	1		1
EMBERTS01	1	1	1
EMBERTS02	2		1
EMBERTS03	2	1	1
EMBERTS04	3		1
EMBERTS05	3	1	1
EMBERTS06	4		1
EMBERTS07	4	1	1
EMBERTS08	5		1
EMBERTS09	5	1	1
EMBERTS10	6		1



RF Room / Cylinder Thermostats

Smart Thermostat, Receiver & Gateway TS



ErP Class V = 3%,

ErP Class VIII = 5% (When 3 no. thermostats are fitted in conjunction with a modulating boiler.)



PRODUCT CODE	COMPONENTS	TEMP RANGE	SWITCH OUTPUT
CP4i	RFRP-OT, RF1A-OT & GW03 (Dual band 2.4 / 5GHz)	5 ... 35°C	SPDT Volt Free

SENSOR TYPE	SWITCH RATING	FEATURE	PROGRAMMING MODE
NTC100K	10A 230Vac	Optimum Start & TPI	5/2 Day, 7 Day, 24Hr

Programmable RF Thermostat & Receiver TS

Add a GW03 to upgrade to EMBER App Control (see page 25)



ErP Class V = 3%,

ErP Class VIII = 5% (When 3 no. thermostats are fitted in conjunction with a modulating boiler.)



PRODUCT CODE	COMPONENTS	TEMP RANGE	SWITCH OUTPUT
CP4	RFRP-OT & RF1A-OT	5 ... 35°C	SPDT Volt Free
CP4-HW-OT	RFRP-HW-OT & RF1A-OT	10 ... 90°C	SPDT Volt Free

SENSOR TYPE	SWITCH RATING	FEATURE	PROGRAMMING MODE
NTC100K	10A 230Vac	Optimum Start & TPI	5/2 Day, 7 Day, 24Hr

RF Thermostat & Receiver



ErP Class I = 1%



PRODUCT CODE	COMPONENTS	SWITCH RATING	SWITCH OUTPUT
CombiPack3	RFRA & RF1	10A 230Vac	SPDT Volt Free

SENSOR TYPE	TEMP RANGE	ON/OFF BUTTON
NTC10K	5 ... 35°C	Yes

RF Cylinder Thermostat & Receiver



PRODUCT CODE	COMPONENTS	SWITCH RATING	SWITCH OUTPUT
RFCP	RFCA & RF1	10A 230Vac	SPDT Volt Free

SENSOR TYPE	TEMP RANGE	ON/OFF BUTTON
NTC10K	10 ... 90°C	Yes



EMBER PS Smart Programmer Systems



PS

The EMBER PS Programmer Systems give you full control of your heating system directly from your smartphone or tablet. The system is comprised of wireless RF programmers, thermostats and a WiFi gateway.

With EMBER PS you can control up to 16 zones in a home.

Check out the Pack guide below, whatever the installation requires, EPH have an EMBER pack for you.



EMBER PS SMART HEATING CONTROL - PACK GUIDE



R17-RF
1 Zone
Timeswitch



R27-RF
2 Zone
Programmer



R37-RF
3 Zone
Programmer



R47-RF
4 Zone
Programmer



RFR
Room
Thermostat



RFC
Cylinder
Thermostat



GW01
Gateway



EMBER PS01	1				1		1
EMBER PS01a	1						1
EMBER PS02		1			1		1
EMBER PS03		1			2		1
EMBER PS04		1			1	1	1
EMBER PS04a		1					1
EMBER PS05			1		3		1
EMBER PS06			1		2		1
EMBER PS07			1		1		1
EMBER PS08			1		2	1	1
EMBER PS08a			1				1
EMBER PS09			1			1	1
EMBER PS10				1	4		1
EMBER PS11				1	3		1
EMBER PS12				1	2		1
EMBER PS13				1	1		1
EMBER PS14				1	3	1	1
EMBER PS14a				1			1
EMBER PS15				1	2	1	1
EMBER PS16				1	1	1	1

www.ephcontrols.com/range/ember-ps

RF Programmers

1 Zone Timeswitch PS



For use with: RFR | RFC | EMBER
Programming Mode: 5/2d - 7d - 24h



Add a GW01 to upgrade to EMBER App Control (see page 25)

PRODUCT CODE	NUMBER OF CHANNELS	SWITCH OUTPUT	BACKPLATE TYPE
R17-RF	1	Volt Free SPDT	6 pin

SWITCH RATING	AMBIENT TEMP RANGE	SCREEN DIMENSION	OPERATING PERIODS
3(1)A 230Vac	0 ... 50°C	100 x 35mm	3 per day

2 Zone Programmer PS



For use with: RFR | RFC | EMBER
Programming Mode: 5/2d - 7d - 24h



Add a GW01 to upgrade to EMBER App Control (see page 25)

PRODUCT CODE	NUMBER OF CHANNELS	SWITCH OUTPUT	BACKPLATE TYPE
R27-RF	2	230Vac SPDT	6 pin

SWITCH RATING	MAX AMBIENT TEMP RANGE	SCREEN DIMENSION	OPERATING PERIODS
3(1)A 230Vac	0 ... 50°C	100 x 35mm	3 per day

3 Zone Programmer PS



For use with: RFR | RFC | EMBER
Programming Mode: 5/2d - 7d - 24h



Add a GW01 to upgrade to EMBER App Control (see page 25)

PRODUCT CODE	NUMBER OF CHANNELS	SWITCH OUTPUT	BACKPLATE TYPE
R37-RF	3	230Vac SPDT	8 pin

SWITCH RATING	MAX AMBIENT TEMP RANGE	SCREEN DIMENSION	OPERATING PERIODS
3(1)A 230Vac	0 ... 50°C	100 x 35mm	3 per day

4 Zone Programmer PS



For use with: RFR | RFC | EMBER
Programming Mode: 5/2d - 7d - 24h



Add a GW01 to upgrade to EMBER App Control (see page 25)

PRODUCT CODE	NUMBER OF CHANNELS	SWITCH OUTPUT	BACKPLATE TYPE
R47-RF	4	230Vac SPST	8 pin

SWITCH RATING	MAX AMBIENT TEMP RANGE	SCREEN DIMENSION	OPERATING PERIODS
3(1)A 230Vac	0 ... 50°C	100 x 35mm	3 per day

RF Thermostats & WiFi Gateways

RF Room Thermostat PS



Mounting Type:
wall or free standing



PRODUCT CODE	TYPE	TEMP RANGE	FOR USE WITH
RFR	Room thermostat with boost button	5 ... 35°C	R_7-RF & EMBER
RFRB	Room thermostat with on/off button	5 ... 35°C	R_7-RF & EMBER

RF RANGE	AMBIENT TEMP RANGE	DIMENSIONS	POWER SUPPLY
Max 30m	0 ... 50°C	86 x 86 x 25mm	2 x AAA (incl.)

RF Cylinder Thermostat PS



PRODUCT CODE	TYPE	TEMP RANGE	FOR USE WITH
RFC	Cylinder thermostat with boost button	10 ... 90°C	R_7-RF & EMBER

RF RANGE	AMBIENT TEMP RANGE	DIMENSIONS	POWER SUPPLY
Max 30m	0 ... 50°C	86 x 86 x 25mm	2 x AAA (incl.)



PRODUCT CODE	TYPE	TEMP RANGE	FOR USE WITH
RFCDBS	Cylinder thermostat with Hardwired Hi Limit Thermostat	10 ... 90°C	R_7-RF & EMBER

Specifically for unvented cylinders to comply with Part G regulations.

RF RANGE	AMBIENT TEMP RANGE	DIMENSIONS	POWER SUPPLY
Max 30m	0 ... 50°C	86 x 86 x 25mm	2 x AAA (incl.)

GW01 WiFi Gateway PS



Used to upgrade your programmer to EMBER App Control

PRODUCT CODE	TYPE	FOR USE WITH
GW01	RF/WiFi Interface	EMBER PS

RF RANGE	AMBIENT TEMP RANGE	POWER SUPPLY
Max 10m	0 ... 50°C	230Vac ±10%

GW03 WiFi Gateway TS



Used to upgrade your CP4 to EMBER App Control

PRODUCT CODE	TYPE	FOR USE WITH
GW03	RF/WiFi Interface (Dual band 2.4 / 5GHz)	EMBER TS

RF RANGE	AMBIENT TEMP RANGE	POWER SUPPLY
Max 10m	0 ... 50°C	230Vac ±10%

RF Programmer Packs

EPH Controls' RF Programmer packs provide a 1 - 4 zone solution for RF zoning. All of these products are also WiFi ready, so that they can be controlled via the EMBER heating control app with the addition of the WiFi gateway. This offers a simple and convenient solution to installations, where time and temperature control is required via smart app.

1 Zone RF Programmer Pack PS



Add a GW01 to upgrade to EMBER App Control (see page 25)

PRODUCT CODE	PROGRAMMER	THERMOSTAT	
CWP1E	R17-RF	RFR	(with Boost button)
CWP1EB	R17-RF	RFRB	(with On/Off button)
CWP1EC	R17-RF	RFC	(with Boost button)

2 Zone RF Programmer Pack PS



Add a GW01 to upgrade to EMBER App Control (see page 25)

PRODUCT CODE	PROGRAMMER	THERMOSTAT	
CWP2E	R27-RF	RFR	RFC
CWP2CE	R27-RF	RFR	-
CWP2RE	R27-RF	RFR x 2	-

3 Zone RF Programmer Pack PS



Add a GW01 to upgrade to EMBER App Control (see page 25)

PRODUCT CODE	PROGRAMMER	THERMOSTAT	
CWP3E	R37-RF	RFR x 2	RFC
CWP3CE	R37-RF	RFR x 2	-
CWP3RE	R37-RF	RFR x 3	-

4 Zone RF Programmer Pack PS



Add a GW01 to upgrade to EMBER App Control (see page 25)

PRODUCT CODE	PROGRAMMER	THERMOSTAT	
CWP4E	R47-RF	RFR x 3	RFC
CWP4CE	R47-RF	RFR x 3	-
CWP4RE	R47-RF	RFR x 4	-

TR1 TR2 RF Mains Switch

Ideal for any installation where its not possible to run cables.

The TR1 TR2, 2 Way RF Transceiver Pack is a unique product from EPH Controls, allowing a wireless signal to be sent from one device to the other and back to the original device. This can allow wireless operation of motorised valves which are located in areas where wiring is not possible. This can achieve boiler interlock as well as other applications.



PRE-PAIRED
Components



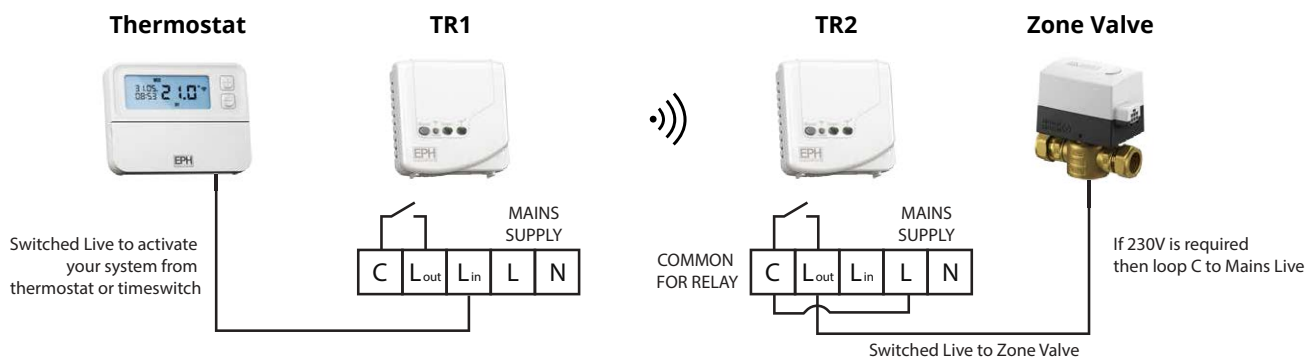
2 Way RF Communication

| Meets Part L Building Regulations

| Save Time and Materials

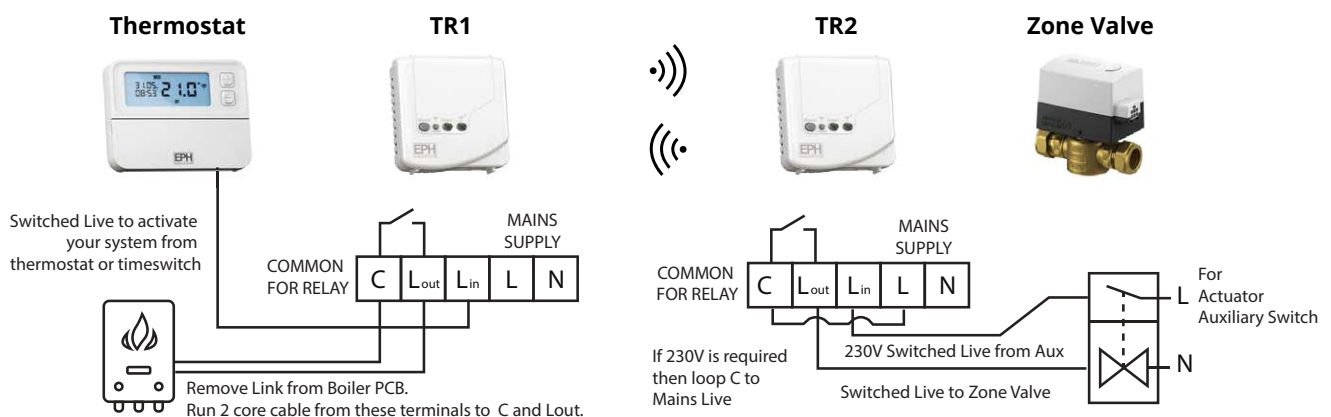
Single Wireless Switch

In this example, a thermostat is connected to the TR1 transceiver. When the thermostat is turned on, an RF signal is sent from TR1 to TR2. This then powers the zone valve.



Double Wireless Switch (Boiler Interlock)

In this example, a thermostat is connected to the TR1 transceiver. When the thermostat is turned on, an RF signal is sent from TR1 to TR2. This then powers the zone valve. When the auxiliary switch on the zone valve closes, 230V is sent to L in. An RF signal is then sent from TR2 to TR1 and this switches the boiler through a volt free contact.



RF Mains Switch



PRODUCT CODE	TYPE	CONTACT RATING	MOUNTING TYPE
TR1TR2	Transceiver	10(3)A 230Vac	Wall
RF RANGE	AMBIENT TEMP RANGE	DIMENSION	POWER SUPPLY
Max 30m	0-50 °C	84 x 84 x 30mm	230Vac ±10%

RF Heating Control Packs

Y Plan RF Heating Control Pack PS



PRODUCT CODE	PROGRAMMER	MOTORISED VALVE	THERMOSTAT		WIRING CENTRE
CR22PRF	R27-RF	B322PF	RFR	RFC	WC2
CR28PRF	R27-RF	B328PF	RFR	RFC	WC2



S Plan RF Heating Control Pack PS



PRODUCT CODE	PROGRAMMER	MOTORISED VALVE	THERMOSTAT		WIRING CENTRE
CR221PRF	R27-RF	V221P x 2	RFR	RFC	WC2
CR222PRF	R27-RF	V222P x 2	RFR	RFC	WC2
CR228PRF	R27-RF	V228P x 2	RFR	RFC	WC2



S Plan RF Unvented Heating Control Pack PS



PRODUCT CODE	PROGRAMMER	MOTORISED VALVE	THERMOSTAT		WIRING CENTRE
CR221PURF	R27-RF	V221P	RFR	-	WC2
CR222PURF	R27-RF	V222P	RFR	-	WC2
CR228PURF	R27-RF	V228P	RFR	-	WC2



S Plan RF Heating Control Pack with Hardwired Cylinder Thermostat PS



PRODUCT CODE	PROGRAMMER	MOTORISED VALVE	THERMOSTAT		WIRING CENTRE
CRF2P-211221	R27-RF	V221P x 2	RFR	WRP	WC2
CRF2P-221221	R27-RF	V222P x 2	RFR	WRP	WC2



2 Zone Combi Zoning RF Control Pack PS



PRODUCT CODE	PROGRAMMER	MOTORISED VALVE	THERMOSTAT		WIRING CENTRE
CRF2P-212201	R27-RF	V221P x 2	RFR x 2	-	WC2
CRF2P-222201	R27-RF	V222P x 2	RFR x 2	-	WC2





3 Zone RF Heating Control Pack PS



PRODUCT CODE	PROGRAMMER	MOTORISED VALVE	THERMOSTAT		WIRING CENTRE
CR3PRF	R37-RF	V221P x 3	RFR x 2	RFC	WC2
CR322PRF	R37-RF	V222P x 3	RFR x 2	RFC	WC2
CR328PRF	R37-RF	V228P x 3	RFR x 2	RFC	WC2

3 Zone RF Unvented Heating Control Pack PS



PRODUCT CODE	PROGRAMMER	MOTORISED VALVE	THERMOSTAT		WIRING CENTRE
CR3PURF	R37-RF	V221P x 2	RFR x 2	-	WC2
CR322PURF	R37-RF	V222P x 2	RFR x 2	-	WC2
CR328PURF	R37-RF	V228P x 2	RFR x 2	-	WC2

3 Zone RF Heating Control Pack with Hardwired Cylinder Thermostat PS



PRODUCT CODE	PROGRAMMER	MOTORISED VALVE	THERMOSTAT		WIRING CENTRE
CRF3P-312221	R37-RF	V221P x 3	RFR x 2	WRP	WC2
CRF3P-322221	R37-RF	V222P x 3	RFR x 2	WRP	WC2

3 Zone Combi Zoning RF Control Pack PS



PRODUCT CODE	PROGRAMMER	MOTORISED VALVE	THERMOSTAT		WIRING CENTRE
CRF3P-313201	R37-RF	V221P x 3	RFR x 3		WC2
CRF3P-323201	R37-RF	V222P x 3	RFR x 3		WC2

4 Zone RF Heating Control Pack PS



PRODUCT CODE	PROGRAMMER	MOTORISED VALVE	THERMOSTAT		WIRING CENTRE
CR4PRF	R47-RF	V221P x 4	RFR x 3	RFC	WC2
CR422PRF	R47-RF	V222P x 4	RFR x 3	RFC	WC2
CR428PRF	R47-RF	V228P x 4	RFR x 3	RFC	WC2

4 Zone RF Unvented Heating Control Pack PS



PRODUCT CODE	PROGRAMMER	MOTORISED VALVE	THERMOSTAT		WIRING CENTRE
CR4PURF	R47-RF	V221P x 3	RFR x 3		WC2
CR422PURF	R47-RF	V222P x 3	RFR x 3		WC2
CR428PURF	R47-RF	V228P x 3	RFR x 3		WC2

Radiator Controls



TRV Single Pack - Chrome Angled



PRODUCT CODE	CONNECTION TYPE	BI DIRECTIONAL
CTRV15C	15mm Compression	Yes
SENSOR TYPE	TEMP RANGE	MAX. DIFFERENTIAL PRESSURE
Liquid filled	7 ... 28°C	0.6bar

TRV Twin Pack - Chrome Angled



PRODUCT CODE	CONNECTION TYPE	BI DIRECTIONAL
EMTRV15C	15mm Compression	Yes
SENSOR TYPE	TEMP RANGE	MAX. DIFFERENTIAL PRESSURE
Liquid filled	7 ... 28°C	0.6bar

TRV Twin Pack - Chrome Straight



PRODUCT CODE	CONNECTION TYPE	BI DIRECTIONAL
SEMTRV15C	15mm Compression	Yes
SENSOR TYPE	TEMP RANGE	MAX. DIFFERENTIAL PRESSURE
Liquid filled	7 ... 28°C	0.6bar

TRV Single Pack - Angled



PRODUCT CODE	CONNECTION TYPE	BI DIRECTIONAL	ACCESSORIES
CTRV10	10mm compression	Yes	-
CTRV15	15mm compression	Yes	1 x 1/2" olive
SENSOR TYPE	TEMP RANGE	MAX. DIFFERENTIAL PRESSURE	
Liquid filled	7 ... 28°C	0.6 bar	

TRV Twin Pack - Angled for 16mm Multi Layer Pipe



PRODUCT CODE	CONNECTION TYPE	BI DIRECTIONAL	ACCESSORIES
EMTRVMLP	16mm multi layer pipe	Yes	-
SENSOR TYPE	TEMP RANGE	MAX. DIFFERENTIAL PRESSURE	
Liquid filled	7 ... 28°C	0.6 bar	

TRV Twin Pack - Angled



PRODUCT CODE	CONNECTION TYPE	BI DIRECTIONAL	ACCESSORIES
EMTRV10	10mm compression	Yes	-
EMTRV15	15mm compression	Yes	2 x 1/2" olives
SENSOR TYPE	TEMP RANGE	MAX. DIFFERENTIAL PRESSURE	
Liquid filled	7 ... 28°C	0.6 bar	

TRV Twin Pack - Angled with Lockshield Drain Off Valve



PRODUCT CODE	CONNECTION TYPE	BI DIRECTIONAL
EMTRV10DOV	10mm compression	Yes
EMTRV15DOV	15mm compression	Yes
SENSOR TYPE	TEMP RANGE	MAX. DIFFERENTIAL PRESSURE
Liquid filled	7 ... 28°C	0.6 bar

TRV Twin Pack - Straight



PRODUCT CODE	CONNECTION TYPE	BI DIRECTIONAL
SEMTRV15	15mm compression	No
SENSOR TYPE	TEMP RANGE	MAX. DIFFERENTIAL PRESSURE
Liquid filled	7 ... 28°C	0.6 bar

Lockshield Valves



PRODUCT CODE	CONNECTION TYPE	BI DIRECTIONAL	DESCRIPTION
LSV10	10mm compression	Yes	Lockshield valve
LSV15	15mm compression	Yes	Lockshield valve
LSVMLP	16mm multilayer pipe	Yes	Lockshield valve
TEMP RANGE		MAX. DIFFERENTIAL PRESSURE	
7 ... 28°C		0.6 bar	

Radiator Controls

Drain Off Valve



BOX QTY
200

PRODUCT CODE	DESCRIPTION	PACK QUANTITY
DOV	15mm Drain off valve	1 piece

Lockshield Drain Off Valve



BOX QTY
50

PRODUCT CODE	DESCRIPTION	PACK QUANTITY
LSDOV10	10mm Lockshield drain off valve	1 piece
LSDOV15	15mm Lockshield drain off valve	1 piece

Push Fit Elbow



BOX QTY
75

PRODUCT CODE	DESCRIPTION	PACK QUANTITY
PFE10	15mm x10mm Push fit elbow	2 pieces

10mm Reducer



BOX QTY
1000

PRODUCT CODE	DESCRIPTION	PACK QUANTITY
RED10	10mm Reducer	20 pieces

TRV Body - 15mm Compression



BOX QTY
50

PRODUCT CODE	CONNECTION TYPE	BI DIRECTIONAL
TRVB15	15mm Compression	Yes

Max. Differential Pressure: 0.6 bar

Thermal Actuator



For use with: TRVB15

BOX QTY
100



PRODUCT CODE	POWER SUPPLY	ACTUATOR TYPE	RUNNING TIME	AUXILIARY SWITCH
TA24	24Vac	Normally Open or Closed	4.5 min	-
TA230	230Vac	Normally Open or Closed	3.5 min	-
TA230S	230Vac	Normally Closed	4.5 min	Yes
MAX. STROKE	AMBIENT TEMP RANGE	SPRING PRESSURE	VALVE CONNECTION	
3.5mm	0 ... 50°C	125N	M30x1.5	

Thermostatic Heads



PRODUCT CODE	CONNECTION TYPE	DESCRIPTION
TRV	M30 x 1.5	Thermostatic head white
TRVCH	M30 x 1.5	Thermostatic head chrome

TEMP RANGE	MAX. DIFFERENTIAL PRESSURE
7 ... 28 °C	0.6 bar

Reduced Mobility Accessory



PRODUCT CODE	DESCRIPTION
RMA	Reduced Mobility Accessory for EPH TRVs

Thermostatic Mixing Valves

Thermostatic Mixing Valves



Point of Use, In Line

PRODUCT CODE	VALVE SIZE	FLOW RATE	MAX STATIC PRESSURE	APPLICATION
TMV15C	15mm	1.1Kvs	10 Bar	Point of Use
TMV22C	22mm	1.1Kvs	10 Bar	Point of Use

SETTING RANGE	HOT & COLD FLOW HIGH PRESSURE	HOT & COLD FLOW LOW PRESSURE	CONNECTION
30...50°C	1.0-5 Bar	0.2-1 Bar	Compression



Complete with 4-in-1 angle inlet connectors incorporating stainless steel mesh strainers, non return valves, 1/4" BSP pressure tapping point and 1/4-turn lever ball valves.



PRODUCT CODE	VALVE SIZE	FLOW RATE	MAX STATIC PRESSURE	APPLICATION
TMV3-Combi-015	15mm	1.5Kvs	10 Bar	Point of Use
TMV3-Combi-022	22mm	1.5Kvs	10 Bar	Point of Use

SETTING RANGE	MEDIA TEMPERATURE	TEMPERATURE STABILITY	CONNECTION
32...49°C	Max. 95°C	±2°C	Compression



Radiator Circuit, Closed Circuit

PRODUCT CODE	VALVE SIZE	FLOW RATE	SETTING RANGE	APPLICATION
TMV-31700600	1 1/4" BSP	4.8Kvs	45 ... 65°C	Radiator Circuit

Underfloor Heating, Closed Circuit

PRODUCT CODE	VALVE SIZE	FLOW RATE	SETTING RANGE	APPLICATION
TMV-31100500	3/4" BSP	1.5Kvs	20 ... 43°C	Underfloor Heating
TMV-31702100	1" BSP	4.5Kvs	20 ... 55°C	Underfloor Heating
TMV-31700500	1 1/4" BSP	4.8Kvs	20 ... 43°C	Underfloor Heating

In Line, Scald Safe

PRODUCT CODE	VALVE SIZE	FLOW RATE	SETTING RANGE	APPLICATION
TMV-31102900	1/2" BSP	1.2Kvs	35 ... 60°C	Potable Water In line
TMV-31100600	3/4" BSP	1.5Kvs	35 ... 60°C	Potable Water In line
TMV-31101000	1" BSP	1.6Kvs	35 ... 60°C	Potable Water In line
TMV-31620200	1" BSP	3.2Kvs	45 ... 65°C	Potable Water In line
TMV-31720100*	1" BSP	3.2Kvs	45 ... 65°C	Potable Water In line



* for Potable water, In line and Solar (Solar rated Max. 120°C)



Create control packs to suit your own specific requirements

Hardwired Control Pack Coding System

CONTROL PACK	PROGRAMMER		MOTORISED VALVES		ROOM STATS		CYLINDER STATS	WIRING CENTRE
CODE	TYPE	-	QTY	MODEL	QTY	MODEL	MODEL	MODEL
C0	0P = None	-	0 = 0	0 = None	0 = 0	0 = None	0 = None	0 = None
C	A1P = A17	-	1 = 1	1 = V221P	1 = 1	1 = RDTP	1 = WRP	1 = WC2
C	A2P = A27-HW	-	2 = 2	2 = V222P	2 = 2	2 = CM2	2 = CDC	2 = WC3
CR	1P = R17	-	3 = 3	3 = V228P	3 = 3	3 = CM3	3 = WRP-IM	3 = WCA
CR	2P = R27-HW	-	4 = 4	4 = V222FP	4 = 4	4 = CDT2	4 = WRP-IM-TP	4 = WCB
CR	3P = R37-HW	-		5 = V228FP		5 = CMT	5 = WRP-TP	5 = WCC
CR	4P = R47	-		6 = B322PF		6 = CRT2	6 = DBS	6 = WCD
CR	5P = R27	-		7 = B328PF		7 = CDTP2	7 = EDBS	
CR	6P = R37	-		8 = DS222P		8 = CRTP2		
						9 = CP4		
						A = CP4M		
						B = CP4B		
						C = HRT		
						D = HDT		
						E = RDT		

RF Control Pack Coding System

CONTROL PACK	PROGRAMMER		MOTORISED VALVES		ROOM STATS		CYLINDER STATS	WIRING CENTRE
CODE	TYPE	-	QTY	MODEL	QTY	MODEL	MODEL	MODEL
C0	0P = None	-	0 = 0	0 = None	0 = 0	0 = None	0 = None	0 = None
CRF	1P = R17-RF	-	1 = 1	1 = V221P	1 = 1	2 = RFR	1 = RFC	1 = WC2
CRF	2P = R27-RF	-	2 = 2	2 = V222P	2 = 2	3 = CM2	2 = WRP	2 = WC3
CRF	3P = R37-RF	-	3 = 3	3 = V228P	3 = 3	4 = CM3	3 = WRP-IM	3 = WCA
CRF	4P = R47-RF	-	4 = 4	4 = V222FP	4 = 4	5 = RFRB	4 = WRP-IM-TP	4 = WCB
				5 = V228FP			5 = WRP-TP	5 = WCC
				6 = B322PF			6 = DBS	6 = WCD
				7 = B328PF			7 = RFCDBS	
				8 = DS222P			8 = EDBS	
							9 = CDC	
							A = CP4-HW-OT	

Iconography

	3 On/Off periods		EMBER App Compatible		Mains operated
	5 year warranty		Frost protection		Max 30M distance
	Battery operated		Indicator light		Motor made in USA
	Cable sensor		Keypad lock		Open Therm
	Detachable actuator		Limitable temperature range		Legionnaires function

Timeswitch / Programmer Compatibility Guide

EPH Controls' range of hardwired programmers offer a comprehensive solution for all zoning requirements with models available from 1 to 4 channels. With market leading functionality such as auto summer winter time, boost, advance and service interval these programmers, offer simple design functionality and are ideally suited to householders.

TIMESWITCHES						
SUPPLIER	PRODUCT	TIME SWITCH	DAYS	MECH	ELEC	SERVICE TIMER EPH REPLACEMENT
DANFOSS	GP103	•	1	•		A17 / R17
DANFOSS	GP103E5	•	5/2		•	A17 / R17
DANFOSS	GP103E7	•	7		•	A17 / R17
DANFOSS	TS715	•	7		•	A17 / R17
DANFOSS	TS715Si	•	7		• •	A17 / R17
DANFOSS	TS975	•	7		•	A17 / R17
DANFOSS	SET 1E	•	1		•	A17 / R17
EPH	A17	•	1-5/2-7		• •	
EPH	R17	•	1-5/2-7		• •	
HONEYWELL	ST6100A1001	•	1		•	A17 / R17
HONEYWELL	ST6100C1009	•	7		•	A17 / R17
HONEYWELL	ST6100S1000	•	1		• •	A17 / R17
HONEYWELL	ST9100A1008	•	1		•	A17 / R17
HONEYWELL	ST9100C1006	•	7		•	A17 / R17
HONEYWELL	ST9100S1007	•	1		• •	A17 / R17
HORSTMANN	425 CORONET	•	1	•		A17 / R17
HORSTMANN	H11	•	1		•	A17 / R17
HORSTMANN	H17	•	7		•	A17 / R17
HORSTMANN	H11XL	•	1		•	A17 / R17
HORSTMANN	H17XL	•	7		•	A17 / R17
HORSTMANN	C11	•	1	•	•	A17 / R17
HORSTMANN	C17	•	7	•	•	A17 / R17
INVENSYS	TEMPUS 1	•	5/2		•	A17 / R17
INVENSYS	TEMPUS 2	•	7		•	A17 / R17
INVENSYS	LP111	•	1		•	A17 / R17
INVENSYS	LP711	•	7		•	A17 / R17
INVENSYS	LP111 Si	•	1		• •	A17 / R17
INVENSYS	LP711 Si	•	7		• •	A17 / R17
INVENSYS	SW.MASTER 3000	•	1	•		A17 / R17
INVENSYS	SM1	•	1	•		A17 / R17
POTTERTON	EP4000	•	1		•	A17 / R17
POTTERTON	EP4002	•	5/2		•	A17 / R17
POTTERTON	EP5002	•	7		•	A17 / R17
POTTERTON	MYSON MEP1C	•			•	A17 / R17
SIEMENS	RWB30E	•	1	•		A17 / R17
SIEMENS	RWB27	•	7		•	A17 / R17
SIEMENS	RWB7	•	7		•	A17 / R17
SUNVIC	SELECT 107	•	7		•	A17 / R17
SUNVIC	SIMPLEX 100	•	1		• •	A17 / R17



A17



A27-HW



R17



R27-HW

PROGRAMMERS							
SUPPLIER	PRODUCT	MINI PROG	FULL PROG	DAYS	MECH	ELEC	SERVICE TIMER EPH REPLACEMENT
DANFOSS	GP102	•		1	•		A27-HW / R27-HW
DANFOSS	GP102E5	•		5/2		•	A27-HW / R27-HW
DANFOSS	GP102E7	•		7		•	A27-HW / R27-HW
DANFOSS	CP715		•	7		•	A27-HW / R27-HW
DANFOSS	FP715		•	7		•	A27-HW / R27-HW
DANFOSS	CP715 Si		•	7		• •	A27-HW / R27-HW
DANFOSS	FP715 Si		•	7		• •	A27-HW / R27-HW
DANFOSS	MK3 3060		•	1	•		A27-HW / R27-HW
DANFOSS	MK3 4033		•	1	•		A27-HW / R27-HW
DANFOSS	FP975		•	7		•	A27-HW / R27-HW
DANFOSS	SET 2E	•		1		•	A27-HW / R27-HW
DANFOSS	SET 3E		•	1		•	A27-HW / R27-HW
DANFOSS	SET 3M		•	1	•		A27-HW / R27-HW
EPH	A27-HW		•	1-5/2-7		• •	
EPH	R27-HW		•	1-5/2-7		• •	
HONEYWELL	ST6200A1009	•		1		•	A27-HW / R27-HW
HONEYWELL	ST6300A1007		•			•	A27-HW / R27-HW
HONEYWELL	ST6300A1015		•	1		•	A27-HW / R27-HW
HONEYWELL	ST6400A1005		•	1		•	A27-HW / R27-HW
HONEYWELL	ST6400C1003		•	7		•	A27-HW / R27-HW
HONEYWELL	ST6400C1052		•	7		•	A27-HW / R27-HW
HONEYWELL	ST6400S1004		•	1		• •	A27-HW / R27-HW
HONEYWELL	ST699B1002		•	1		•	A27-HW / R27-HW
HONEYWELL	ST799A1003		•	7		•	A27-HW / R27-HW
HONEYWELL	ST9400A1002		•	1		•	A27-HW / R27-HW
HONEYWELL	ST9400C1000		•	7		•	A27-HW / R27-HW
HONEYWELL	ST9400S1001		•	1		• •	A27-HW / R27-HW
HONEYWELL	ST9500C1015		•	7		•	A27-HW / R27-HW
HORSTMANN	425 DIADEM		•	1	•		A27-HW / R27-HW
HORSTMANN	425 TIARA		•	1	•		A27-HW / R27-HW
HORSTMANN	H27Z		2	7		•	A27-HW / R27-HW
HORSTMANN	H21		•	1		•	A27-HW / R27-HW
HORSTMANN	H27		•	7		•	A27-HW / R27-HW
HORSTMANN	H21XL		•	1		•	A27-HW / R27-HW
HORSTMANN	H27XL		•	7		•	A27-HW / R27-HW
HORSTMANN	C21		•	1		• •	A27-HW / R27-HW
HORSTMANN	C27		•	7		• •	A27-HW / R27-HW
INVENSYS	TEMPUS 6		•	5/2		•	A27-HW / R27-HW
INVENSYS	TEMPUS 7		•	7		•	A27-HW / R27-HW
INVENSYS	LP112		•	1		•	A27-HW / R27-HW
INVENSYS	LP241		•	1		•	A27-HW / R27-HW
INVENSYS	LP522		•	5/2		•	A27-HW / R27-HW
INVENSYS	LP722		•	7		•	A27-HW / R27-HW
INVENSYS	LP112 Si		•	1		• •	A27-HW / R27-HW
INVENSYS	LP241 Si		•	1		• •	A27-HW / R27-HW
INVENSYS	LP522 Si		•	5/2		• •	A27-HW / R27-HW
INVENSYS	LP722 Si		•	7		• •	A27-HW / R27-HW
INVENSYS	SW.MASTER 400	•		1	•		A27-HW / R27-HW
INVENSYS	SW.MASTER 600		•	1	•		A27-HW / R27-HW
INVENSYS	SW.MASTER 805		•		•		A27-HW / R27-HW
INVENSYS	SM2		•	1	•		A27-HW / R27-HW
POTTERTON	EP6002		•	1		•	A27-HW / R27-HW
POTTERTON	EP2000		•	7		•	A27-HW / R27-HW
POTTERTON	EP2002		•	1		•	A27-HW / R27-HW
POTTERTON	EP3002		•	5/2		•	A27-HW / R27-HW
POTTERTON	MYSON MEP2C		•	7		•	A27-HW / R27-HW
SIEMENS	RWB2E		•		•		A27-HW / R27-HW
SIEMENS	RWB29		•	1		•	A27-HW / R27-HW
SIEMENS	RWB9		•	7		•	A27-HW / R27-HW
SUNVIC	SELECT 207		•	7		•	A27-HW / R27-HW
SUNVIC	SIMPLEX 200		•	1		• •	A27-HW / R27-HW



Commercial Controls



Mixing Valves, Actuators & Controllers

Rotary 3 Port Brass Mixing Valves



4 Port Versions Also Available

PRODUCT CODE	VALVE SIZE	FLOW RATE	CONNECTION TYPE
VRG015	DN15	4.0 Kvs	1/2" Female BSP
VRG020	DN20	6.3 Kvs	3/4" Female BSP
VRG025	DN25	10 Kvs	1" Female BSP
VRG032	DN32	16 Kvs	1 1/4" Female BSP
VRG040	DN40	25 Kvs	1 1/2" Female BSP
VRG050	DN50	40 Kvs	2" Female BSP
ACCESSORIES CODE	DESCRIPTION	FOR PRODUCT CODE	
17006900	Repair Kit	VRG015 (11600600) VRG020 (11600900)	
17006910	Repair Kit	VRG025 (11601100)	
17006920	Repair Kit	VRG032 (11601200) VRG040 (11603400)	
17006950	Repair Kit	VRG050 (11603600)	
17006930	Repair Kit	VRG040 (old model 11601300) VRG050 (old model 11601400)	
TEMPERATURE RANGE	LEAKAGE RATE	PN RATING	MAX PRESSURE DIFFERENCE
-10...110°C	Mixing < 0.05% Diverting < 0.02%	PN10	Mixing 1 Bar Diverting 2 Bar



Rotary 3 Port Cast Iron Mixing Valves



Suitable for Heating / Cooling
4 Port Versions Also Available

PRODUCT CODE	VALVE SIZE	FLOW RATE	CONNECTION TYPE
3F50	DN50	66 Kvs	Flanged
3F65	DN65	100 Kvs	Flanged
3F80	DN80	150 Kvs	Flanged
3F100	DN100	225 Kvs	Flanged
3F125	DN125	310 Kvs	Flanged
3F150	DN150	420 Kvs	Flanged
TEMPERATURE RANGE	LEAKAGE RATE	PN RATING	MAX PRESSURE DIFFERENCE
-10...110°C	1.5%	PN6	DN20...50, 0.5 bar DN65...150, 0.3 bar



Internal Seals for Rotary Cast Iron Valves

PRODUCT CODE	FOR ESBE AND SAUTER VALVES
17000300	Seals only for DN20-65 Cast Iron Valves
17000400	Seals only for DN80-150 Cast Iron Valves

Internal Kits for Rotary Cast Iron Valves



PRODUCT CODE	FOR ESBE VALVE	FOR SAUTER VALVE
17000800-K1C	3G20 - 3G40	MH32R020-040
17001100-K2A-S	3G50	MH32R050F200
17001400-K3A-S	3F65	MH32F065F200



Actuator – Rotary 3 Port Brass Mixing Valves



SPDT=Single Pole Double Throw

* 0(2)-10V / 0(4)-20mA Control Sign

** AUX = premounted auxiliary switch



PRODUCT CODE	POWER SUPPLY	RUN TIME	ACTUATOR TYPE
ARA639	24V=/~ *	15 / 30 / 60 / 120s	Modulating
ARA645	230V~	30s	2-point SPDT
ARA651	230V~	60s	3-point SPDT
ARA652	230V~	60s	3-point SPDT & AUX**
ARA653	24V~	60s	3-point SPDT
ARA654	24V~	60s	3-point SPDT & AUX**
ARA655	230V~	60s	2-point SPDT
ARA659	24V=/~ *	45 / 120s	Modulating
ARA661	230V	120s	3-point SPDT

ACCESSORIES CODE	DESCRIPTION
16000500	Assembly for ARA to VRG valve (Normally included with ARA actuator)
17050600	Knob for ARA actuator

TORQUE	IP RATING	AMBIENT TEMPERATURE
6Nm	IP41	-5 ... 55°C

Actuator – Rotary 3 Port Cast Iron Mixing Valves



Mounts Directly to 3F___ Cast Iron Valves

* 0(2)-10V / 0(4)-20mA Control Signal



PRODUCT CODE	POWER SUPPLY	RUN TIME	ACTUATOR TYPE
93P	24V=/~ *	60s	Modulating
95	230V~	60s	3-point SPDT

ACCESSORIES CODE	DESCRIPTION
16053300	Series 90 Linkage kit for VRG valves

TORQUE	IP RATING	AMBIENT TEMPERATURE
15Nm	IP 54	-15 ... 55°C

Motorised Temperature Controllers



Two parts: actuator unit and flow sensor



PRODUCT CODE	POWER SUPPLY	RUN TIME	TORQUE
CRA115	230V~	30s	6Nm
CRA125	230V / 24V=/~	120s	15Nm

TEMPERATURE RANGE	IP RATING	AMBIENT TEMPERATURE
5 ... 95°C	IP 54	5 ... 55°C

Weather Compensator Actuator



Three parts: actuator unit, outdoor sensor and flow sensor



PRODUCT CODE	POWER SUPPLY	RUN TIME	TORQUE
CRC115	230V~	30s	6Nm
CRC125	230V / 24V=/~	120s	15Nm

TEMPERATURE RANGE	IP RATING	AMBIENT TEMPERATURE
5 ... 95°C	IP41	-5 ... 55°C

Load Valves, Diverter Valves & Solenoid Valves

Load Valves



PRODUCT CODE	CONNECTION	FLOW RATE	OPENING TEMPERATURE °C
VTC-51020100	1" BSP	9 Kvs	50
VTC-51020200	1" BSP	9 Kvs	55
VTC-51020300	1" BSP	9 Kvs	60
VTC-51020400	1" BSP	9 Kvs	70
VTC-51020700	1 1/4" BSP	14 Kvs	55
VTC-51020900	1 1/4" BSP	14 Kvs	70
MAX TEMPERATURE	MAX DIFF PRESSURE	LEAKAGE RATE A-AB	LEAKAGE RATE B-AB
110 °C	100kPA	Max 1% of Kvs	Max 3% of Kvs

Diverter Valves



PRODUCT CODE	CONNECTION	FLOW RATE	MAX. TEMP °C
VZD263-43080800	28mm Compression	6 Kvs	95
MAX TEMPERATURE	MAX DIFF PRESSURE	LEAKAGE RATE A-AB	LEAKAGE RATE B-AB
110 °C	100kPA	Max 1% of Kvs	Max 3% of Kvs

Servo Assisted Solenoid Valves - Normally closed



Suitable for diesel; Connection: Female BSP
Suitable for: Water / Oil / Inert Gas +Diesel

PRODUCT CODE	VALVE SIZE	FLOW RATE	MAX DIFFERENTIAL	MAX. PRESSURE
M23C13	DN10	3.0 Kvs	20 Bar	PN25
M23D13	DN15	3.0 Kvs	20 Bar	PN25
M23E20	DN20	8.4 Kvs	20 Bar	PN25
M23F25	DN25	9.6 Kvs	20 Bar	PN25
M23G35	DN32	25.2 Kvs	10 Bar	PN16
M23H40	DN40	30 Kvs	10 Bar	PN16
M23I50	DN50	37.2 Kvs	10 Bar	PN16
TEMPERATURE RANGE	IP RATING	MINIMUM DIFFERENTIAL PRESSURE		
-10...90°C	IP65	0.1Bar		

Accessories

ACCESSORIES CODE	DESCRIPTION	FOR PRODUCT CODE
1578602	Diaphragm	M23C13 - M23D13
1578603	Diaphragm	M23E20 - M23F25
1578604	Diaphragm	M23G35 - M23H40
1578605	Diaphragm	M23I50



Servo Assisted Solenoid Valves – Normally open



Suitable for diesel
Connection: Female BSP
Suitable for: Water / Oil / Inert Gas +Diesel



PRODUCT CODE	VALVE SIZE	FLOW RATE	MAX DIFFERENTIAL	MAX. PRESSURE
M29D13	DN15	3.0 Kvs	20 Bar	PN25
M29E20	DN20	8.4 Kvs	20 Bar	PN25
M29F25	DN25	9.6 Kvs	20 Bar	PN25
M29G35	DN32	25.2 Kvs	10 Bar	PN16
M29H40	DN40	30 Kvs	10 Bar	PN16
M29I50	DN50	37.2 Kvs	10 Bar	PN16
TEMPERATURE RANGE	IP RATING	MINIMUM DIFFERENTIAL PRESSURE		
-10...90°C	IP65	0.1Bar		

Direct Acting Solenoid Valves



Normally closed; Connection: Female BSP
Suitable for: Water / Oil / Inert Gas +Diesel



PRODUCT CODE	VALVE SIZE	FLOW RATE	MAX DIFFERENTIAL	MAX. PRESSURE
M20D5	DN15	0.6 Kvs	6 Bar	IP65
M20E7	DN20	1.0 Kvs	2.5 Bar	IP65
TEMPERATURE RANGE	IP RATING	MINIMUM DIFFERENTIAL PRESSURE		
-10...140°C	IP65	0Bar		

Coils & Connector



Accessories



PRODUCT CODE	POWER SUPPLY	ACTIVE POWER	FOR PRODUCT CODE
IM21D	12V~	9W	M20 / M23
IM21F	24V~	9W	M20 / M23
IM21H	110...115V~	9W	M20 / M23
IM21M	230V~	9W	M20 / M23
IM22	24V=	12W	M20 / M23
IM22A	12V=	14W	M20 / M23
IM29F	24V~	14W	M29
IM29M	230V~	14W	M29
ACCESSORIES CODE	DESCRIPTION	FOR PRODUCT CODE	
1578501	Connector for coils	IM2_	

Gas Detectors with Fixed Sensor



Optical Alarm: Accoustic Alarm
Relay 2.5(1.2)A



PRODUCT CODE	GAS TYPE	POWER SUPPLY	DETECTOR TYPE
Gamma 652-O/M	Natural Gas	230Vac	Standalone
Gamma 652-O/G	LPG	230Vac	Standalone
Beta 760-CO	Carbon Monoxide	230Vac	Standalone

IP RATING	SOUND LEVEL	ALARM LEVEL
IP42	85 dB	10% LEL

Gas Valve - Normally closed



Auto reset
Fast opening

PRODUCT CODE	VALVE SIZE	CONNECTION	FLOW RATE
AV015FO	DN15	1/2" BSP	11 Kvs
AV020FO	DN20	3/4" BSP	22 Kvs
AV025FO	DN25	1" BSP	23 Kvs
AV032FO	DN32	1 1/4" BSP	56 Kvs
AV040FO	DN40	1 1/2" BSP	68 Kvs
AV050FO	DN50	2" BSP	89 Kvs
AVD65FO	DN65	2 1/2" Flanged	114 Kvs

Accessories

ACCESSORIES CODE	DESCRIPTION
21802429	Connector for Geca gas valves
80521593	Coil for DN32 & DN40 gas valves
80521594	Coil for DN50 gas valves



MAX. PRESSURE	IP RATING	AMBIENT TEMPERATURE	SUPPLY VOLTAGE
360mbar	IP65	-20 ... 60°C	230Vac

Control Units Flammable Gas



PRODUCT CODE	NUMBER OF ZONES	ALARM LEVEL
CTM21	1 Zone	10% & 20% LEL
CTP21	3 Zones	10% & 20% LEL
IP RATING	POWER SUPPLY	CONTACT RATING
IP65	230Vac	3A

Control Units Flammable & Toxic Gas



PRODUCT CODE	NUMBER OF ZONES	ALARM LEVEL
CTP25	3 Zone	0-20% LEL - 0-100% LEL and 300PPM
CTP26	4 Zones	0-20% LEL - 0-100% LEL and 300PPM
IP RATING	POWER SUPPLY	CONTACT RATING
IP65	230Vac	3A

Detectors for Control Units Flammable Gas



PRODUCT CODE	DESCRIPTION	FOR PRODUCT CODE
ST441M	Natural gas detector	CTM21 / CTP21 / CTP25 / CTP26
ST441G	LPG detector	CTM21 / CTP21 / CTP25 / CTP26
IP RATING	POWER SUPPLY	
IP44	12-24V dc from CTP21 / CTM21 / CTP25 / CTP26	

Dectector for Control Units Toxic Gas



PRODUCT CODE	DESCRIPTION	FOR PRODUCT CODE
ST441EC	Carbon Monoxide detector	CTP25 / CTP26
IP RATING	POWER SUPPLY	
IP65	12-24V dc from CTP25 / CTP26	

Accessories



ACCESSORIES	DESCRIPTION
ESB	Emergency Stop Button
SE301A	Accoustic and Visual Siren, Sound 115dB, IP43, Power supply 230Vac

Commercial Thermostats & Switches

Float Switches – Liquid



PRODUCT CODE	CABLE LENGTH	RESISTIVE LOAD	INDUCTIVE LOAD
FLOAT-3	3 m	10A	4A
FLOAT-10	10 m	10A	8A
CABLE	RATED VOLTAGE	MAX WORKING PRESSURE	
3 Core SPDT	250Vac	10 Bar	

Flow Switches – Liquid



PRODUCT CODE	PADDLE SIZES	CASING	INDUCTIVE LOAD
FF82	1" - 8"	Plastic	6A
IP RATING	CONNECTION	SWITCH OUTPUT	
IP54	1"	SPDT	

Immersion Thermostats



* Manual Reset Thermostat

Accessories



PRODUCT CODE	RANGE	CAPILLARY LENGTH	SWITCHING DIFFERENCE
TUC101F003	-10...50°C	1600mm	4°C
TUC105F001	15...95°C	700mm	4°C
TUC307F001*	50...130°C	700mm	20°C

ACCESSORIES CODE	DESCRIPTION
0300360010	Pipe clamp, suitable for pipework from 1/2" - 3"
0368139000	Support coil for sensor
0364432001	Bracket for wall / ducting mounting
0391011100	Brass immersion pocket, 100mm
0391022100	Stainless steel immersion pocket, 100mm

Flow Switches – Air



PRODUCT CODE	SWITCHING DIFFERENCE	SWITCHING RANGE	MAX LOAD
DDL103F001	Approx 0.2mbar	0.2...3 mbar	5 (0.8)A 230V~
DDL105F001	Approx 0.3mbar	0.5...5 mbar	5 (0.8)A 230V~
DDL110F001	Approx 0.5mbar	1...10 mbar	5 (0.8)A 230V~
IP RATING	MAX PRESSURE	AMBIENT TEMPERATURE	
IP54	50mbar	-30 - 85°C	



Unit Valves & Actuators

2 Port Unit Valves, FxF, EPH



PRODUCT CODE	VALVE SIZE	FLOW RATE		
VUA015F200	DN15	1.7 Kvs		
VUA020F200	DN20	2.6 Kvs		
VUA025F200	DN25	4.9 Kvs		
TEMPERATURE RANGE	ACTUATOR CONNECTION	PN RATING	CONNECTION TYPE	
2...110°C	M30x1.5	PN16	Female BSP	

2 Port Unit Valves



PRODUCT CODE	VALVE SIZE	FLOW RATE		
VUL010F340	DN10	0.16 Kvs		
VUL010F330	DN10	0.4 Kvs		
VUL010F310	DN10	1 Kvs		
VUL010F300	DN10	1.6 Kvs		
VUL015F300	DN15	3.5 Kvs		
VUL020F300	DN20	4.5 Kvs		

3 Port Unit Valves



PRODUCT CODE	VALVE SIZE	FLOW RATE		
BUL010F330	DN10	0.4 Kvs		
BUL010F320	DN10	0.63 Kvs		
BUL010F310	DN10	1 Kvs		
BUL010F300	DN10	1.6 Kvs		
BUL015F310	DN15	2.5 Kvs		
BUL015F300	DN15	4 Kvs		
BUL020F300	DN20	5 Kvs		

4 Port Unit Valves



PRODUCT CODE	VALVE SIZE	FLOW RATE		
BUL010F430	DN10	0.4 Kvs		
BUL015F410	DN15	2.5 Kvs		
BUL015F400	DN15	4 Kvs		
BUL020F400	DN20	5 Kvs		
TEMPERATURE RANGE	ACTUATOR CONNECTION	PN RATING	CONNECTION TYPE	
2...120°C	M30x1.5	PN16	Male BSP	

Accessories

ACCESSORIES CODE	DESCRIPTION	FOR PRODUCT CODE
0378133010	1 Threaded sleeve, DN10	BUL010F3..
0378133015	1 Threaded sleeve, DN15	BUL015F3..
0378133020	1 Threaded sleeve, DN20	BUL020F300

Unit Valves & Actuators Continued

Motor Driven Actuators



for VUA, VUL, & BUL Unit Valves

* 0(2)-10V / 0(4)-20mA Control Signal



PRODUCT CODE	POWER SUPPLY	RUN TIME	ACTUATOR TYPE	STROKE (MM)
AXM217F200	230V~	75s	3 Point	6.3
AXM217F202	24V=/~	75s	3 Point	6.3
AXM217SF402	24V=/~ *	60s	Modulating	3.2/4.3/5.5mm

AMBIENT TEMP.	VALVE CONNECTION	CONNECTION TYPE
0 ... 50°C	M30x1.5	Screwed

Thermal Actuators - Spring Return



for VUA, VUL, & BUL Unit Valves

* 0-10V Control Signal



PRODUCT CODE	POWER SUPPLY	RUN TIME	ACTUATOR TYPE	STROKE (MM)
AXT211F110	230V~	210s	Normally Closed	4.5mm
AXT211HF110	230V~	210s	Normally Closed & Aux.	4.5mm
AXT211F210	230V~	210s	Normally Open	4.5mm
AXT211HF210	230V~	210s	Normally Open & Aux.	4.5mm
AXT211F112	24V=/~	270s	Normally Closed	4.5mm
AXT211HF212	24V=/~	270s	Normally Open & Aux.	4.5mm
AXT211F212	24V=/~	270s	Normally Open	4.5mm
AXS215SF122	24V=/~ *	270s	Normally Closed	4.5 / 3mm
AXS215SF222	24V=/~ *	270s	Normally Open	4.5 / 3mm

AMBIENT TEMP.	VALVE CONNECTION	CONNECTION TYPE
0 ... 50°C	M30x1.5	Bayonet Nut



for VUA, VUL, & BUL Unit Valves



PRODUCT CODE	POWER SUPPLY	ACTUATOR TYPE	RUNNING TIME	AUXILIARY SWITCH
TA24	24Vac	Normally Open or Closed	4.5 min	-
TA230	230Vac	Normally Open or Closed	3.5 min	-
TA230S	230Vac	Normally Closed	4.5 min	Yes

MAX. STROKE	AMBIENT TEMP RANGE	SPRING PRESSURE	VALVE CONNECTION
3.5mm	0 ... 50°C	125N	M30x1.5

2 Port Lift & Lay Valves c/w Unions



SAUTER

PRODUCT CODE	VALVE SIZE	FLOW RATE	CONNECTION	CHARACTERISTIC
VUN015F300	DN15	4 Kvs	1/2" Female	Linear
VUN020F300	DN20	6.3 Kvs	3/4" Female	Linear
VUN025F300	DN25	10 Kvs	1" Female	Linear
VUN032F300	DN32	16 Kvs	1 1/4" Female	Linear
VUN040F300	DN40	22 Kvs	1 1/2" Female	Linear
VUN050F200	DN50	40 Kvs	2" Female	Equal %

3 Port Lift & Lay Valves c/w Unions



SAUTER

PRODUCT CODE	VALVE SIZE	FLOW RATE	CONNECTION	CHARACTERISTIC
BUN015F300	DN15	4 Kvs	1/2" Female	Linear
BUN020F300	DN20	6.3 Kvs	3/4" Female	Linear
BUN025F300	DN25	10 Kvs	1" Female	Linear
BUN032F300	DN32	16 Kvs	1 1/4" Female	Linear
BUN040F300	DN40	22 Kvs	1 1/2" Female	Linear
BUN050F200	DN50	40 Kvs	2" Female	Equal %

ACCESSORIES CODE	DESCRIPTION
0361951015	Union for BUN / VUN015
0361951020	Union for BUN / VUN020
0361951025	Union for BUN / VUN025
0361951032	Union for BUN / VUN032
0361951040	Union for BUN / VUN040
0361951050	Union for BUN / VUN050
0378368001	Stuffing box for BUN / VUN015 ... 050

TEMP RANGE	LEAKAGE RATE	PN RATING	NOMINAL STROKE
-15...150°C	≤0.02% of Kvs	PN16	8mm

Actuators



* 0-10V Control Signal

** 0-10V / 4-20mA Control Signal

[1] Spring Return, Normally Closed

[2] Spring Return, Normally Open

SAUTER

PRODUCT CODE	POWER SUPPLY	SPEED 5.5mm	ACTUATOR TYPE	PUSHING FORCE
AVM105F120	230V~	80s	2 / 3 Point	250N
AVM105F122	24V~	80s	2 / 3 Point	250N
AVM105SF132	24V=/~*	20/40/80s	Modulating or 2/3 Pt	250N
AVM115F120	230V~	80s	2 / 3 Point	500N
AVM115SF132	24V=/~*	40s / 80s	Modulating or 2/3 Pt	500N
AVF125SF132	24V~**	40s / 80s	Modulating or 2/3 Pt [1]	500N

IP RATING	AMBIENT TEMPERATURE	MAX STROKE
IP54	-10 ... 55 °C	8mm

Accessories

ACCESSORIES CODE	DESCRIPTION	FOR PRODUCT CODE
0372273001	Siemens adapter VVG / VXG	AVM1.5
0372145001	Auxiliary Contact, single	AVM1.5

Ball valves & Actuators

2 Port Ball Valves



PRODUCT CODE	VALVE SIZE	FLOW RATE	CONNECTION
VKAI015F300	DN15	15 Kvs	1/2" Female
VKAI020F300	DN20	22 Kvs	3/4" Female
VKAI025F300	DN25	22 Kvs	1" Female
VKAI032F300	DN32	35 Kvs	1 1/4" Female
VKAI040F300	DN40	68 Kvs	1 1/2" Female
VKAI050F300	DN50	90 Kvs	2" Female



TEMPERATURE RANGE	LEAKAGE RATE	PN RATING
-10...130°C	0.001% of Kvs	PN40

3 Port Ball Valves



PRODUCT CODE	VALVE SIZE	FLOW RATE	CONNECTION
BKR015F320-FF	DN15	4 Kvs	1/2" Female
BKR020F310-FF	DN20	6.3 Kvs	3/4" Female
BKR025F310-FF	DN25	10 Kvs	1" Female
BKR032F310-FF	DN32	16 Kvs	1 1/4" Female
BKR040F310-FF	DN40	25 Kvs	1 1/2" Female
BKR050F310-FF	DN50	40 Kvs	2" Female



TEMPERATURE RANGE	LEAKAGE RATE	PN RATING
-10...130°C	0.001% of Kvs	PN40

Actuators



for VKR / BKR Ball Valves



PRODUCT CODE	POWER SUPPLY	RUN TIME	ACTUATOR TYPE
AKM105F100	230V~	30s	2 / 3 Point
AKM105F120	230V~	120s	2 / 3 Point
AKM105F122	24V~	120s	2 / 3 Point
AKM105SF132	24V=/~	35/60/120s	Modulating or 2 / 3 Point

TORQUE	AMBIENT TEMPERATURE	IP RATING
4Nm	-10 ... 55 °C	IP 54

Actuators



for VKR / BKR Ball Valves

* 0-10V Control Signal

Accessories



PRODUCT CODE	POWER SUPPLY	RUN TIME	ACTUATOR TYPE
AKM115F120	230V~	120s	2 / 3 Point
AKM115F122	24V~	120s	2 / 3 Point
AKM115SF132	24V=/~ *	35/60/120s	Modulating or 2 / 3 Point

TORQUE	AMBIENT TEMPERATURE	IP RATING
8Nm	-10 ... 55 °C	IP 54

ACCESSORIES CODE	DESCRIPTION	FOR PRODUCT CODE
0510480001	Auxiliary Contact, Single	AKM
0510480002	Auxiliary Contact, Double	AKM
0510420001	Intermediate piece if temperature >100°C	VKR/BKR

Actuators - Spring return



for VKR / BKR Ball Valves

* 0-10V Control Signal



PRODUCT CODE	POWER SUPPLY	CLOSING SPEED	ACTUATOR TYPE
AKF112F120	230V	15s	2 Point
AKF112F122	24V~ / 24..48V=	15s	2 Point

TORQUE	AMBIENT TEMPERATURE	IP RATING
7Nm	-10 ... 55 °C	IP 54

Lift & Lay Valves (Flanged) & Actuators

2 Port Lift & Lay Valves



SAUTER

PRODUCT CODE	VALVE SIZE	FLOW RATE	CONNECTION	PN RATING
VUD050F200	DN50	40 Kvs	2" Flanged	PN6
VUE050F200	DN50	40 Kvs	2" Flanged	PN10 / 16
TEMPERATURE RANGE	LEAKAGE RATE	VALVE CHARACTERISTIC	NOMINAL STROKE	
-10...150°C	≤0.05% of Kvs	Equal Percentage	8mm	

3 Port Lift & Lay Valves



SAUTER

PRODUCT CODE	VALVE SIZE	FLOW RATE	CONNECTION	PN RATING
BUD050F200	DN50	40 Kvs	2" Flanged	PN6
BUE050F200	DN50	40 Kvs	2" Flanged	PN10 / 16
TEMPERATURE RANGE	LEAKAGE RATE	VALVE CHARACTERISTIC	NOMINAL STROKE	
-10...150°C	≤0.05% of Kvs	Equal Percentage	8mm	

Actuators



PRODUCT CODE	POWER SUPPLY	SPEED 8mm	ACTUATOR TYPE	PUSHING FORCE
AVM105F120	230V~	120s	2 / 3 Point	250N
AVM105F122	24V~	120s	2 / 3 Point	250N
AVM105SF132	24V=/~*	30/60/120s	Modulating or 2/3Pt	250N
AVM115F120	230V~	120s	2 / 3 Point	500N
AVM115F122	24V~	120s	2 / 3 Point	500N
AVM115SF132	24V=/~*	60/120s	Modulating or 2/3Pt	500N
AVM321F110	230V~	4/12s/mm	2 / 3 Point	1000N
AVM321F112	24V=/~	4/12s/mm	2 / 3 Point	1000N
AVM321SF132	24V=/~*	4/12s/mm	Modulating or 2/3Pt	1000N
AVF125SF132	24V~**	40s / 80s	Modulating or 2/3Pt [1]	500N

* 0-10V Control Signal

** 0-10V / 4-20mA Control Signal

[1] Spring Return, Normally Closed

[2] Spring Return, Normally Open

*** AVF124 Ambient Temperature 5 ... 60 °C

IP RATING	AMBIENT TEMPERATURE ***	NOMINAL STROKE
IP54	-10 ... 55 °C	8mm

ACCESSORIES CODE	DESCRIPTION	FOR PRODUCT CODE
0372145001	Auxiliary Contact, single	AVM 1.5
0372249001	Intermediate piece if temperature >100°C	AVM1.5/AVF12-B/VUN
0372249002	Intermediate piece if temperature >130°C	AVM1.5/AVF12-B/VUN
0372273001	Siemens VVG / VXG	AVM1.5 Adapter

Accessories

SAUTER

2 Port Lift & Lay Valves, PN6 / PN16, Flanged



PRODUCT CODE	VALVE SIZE	FLOW RATE	CONNECTION	PN RATING	STROKE
VQD065F300	DN65	63 Kvs	2 1/2"	PN6	20mm
VQE065F300	DN65	63 Kvs	2 1/2"	PN16	20mm
VQD080F300	DN80	100Kvs	3"	PN6	20mm
VQE080F300	DN80	100Kvs	3"	PN16	20mm
VQD100F300	DN100	160Kvs	4"	PN6	40mm
VQE100F300	DN100	160Kvs	4"	PN16	40mm
VQE125F300	DN125	220Kvs	5"	PN16	40mm
VQE150F300	DN150	320Kvs	6"	PN16	40mm



TEMPERATURE RANGE	LEAKAGE RATE	VALVE CHARACTERISTIC
-10...150°C	0.001% of Kvs	Equal Percentage

3 Port Lift & Lay Valves, PN6 / PN16, Flanged



PRODUCT CODE	VALVE SIZE	FLOW RATE	CONNECTION	PN RATING	STROKE
BQD065F300	DN65	63 Kvs	2 1/2"	PN6	20mm
BQE065F300	DN65	63 Kvs	2 1/2"	PN16	20mm
BQD080F300	DN80	100Kvs	3"	PN6	20mm
BQE080F300	DN80	100Kvs	3"	PN16	20mm
BQD100F300	DN100	160Kvs	4"	PN6	40mm
BQE100F300	DN100	160Kvs	4"	PN16	40mm
BQE125F300	DN125	220Kvs	5"	PN16	40mm
BQE150F300	DN150	320Kvs	6"	PN16	40mm



TEMPERATURE RANGE	LEAKAGE RATE	VALVE CHARACTERISTIC
-10...150°C	0.001% of Kvs	Equal Percentage

Lift & Lay Valves (Flanged) & Actuators Continued

2 Port Lift & Lay Valves, PN25 / PN16, Flanged



PRODUCT CODE	VALVE SIZE	FLOW RATE	CONNECTION	PN RATING	STROKE
VUG015F304	DN15	4 Kvs	1/2"	PN16/25	20mm
VUG020F304	DN20	6.3 Kvs	3/4"	PN16/25	20mm
VUG025F304	DN25	10 Kvs	1"	PN16/25	20mm
VUG032F304	DN32	16 Kvs	1 1/4"	PN16/25	20mm
VUG040F304	DN40	25 Kvs	1 1/2"	PN16/25	20mm
VUG050F304	DN50	40 Kvs	2"	PN16/25	20mm
VUG065F316	DN65	63 Kvs	2 1/2"	PN16	40mm
VUG080F304	DN80	100Kvs	3"	PN25	40mm
VUG100F304	DN100	160Kvs	4"	PN25	40mm
VUG125F304	DN125	250Kvs	5"	PN25	40mm
VUG150F304	DN150	340Kvs	6"	PN25	40mm



TEMPERATURE RANGE	LEAKAGE RATE	VALVE CHARACTERISTIC
-20...240°C	≤0.05% of Kvs	Equal Percentage

3 Port Lift & Lay Valves, PN25 / PN16, Flanged



PRODUCT CODE	VALVE SIZE	FLOW RATE	CONNECTION	PN RATING	STROKE
BUG015F304	DN15	4 Kvs	1/2"	PN16/25	20mm
BUG020F304	DN20	6.3 Kvs	3/4"	PN16/25	20mm
BUG025F304	DN25	10 Kvs	1"	PN16/25	20mm
BUG032F304	DN32	16 Kvs	1 1/4"	PN16/25	20mm
BUG040F304	DN40	25 Kvs	1 1/2"	PN16/25	20mm
BUG050F304	DN50	40 Kvs	2"	PN16/25	20mm
BUG065F316	DN65	63 Kvs	2 1/2"	PN16	40mm
BUG080F304	DN80	100Kvs	3"	PN25	40mm
BUG100F304	DN100	160Kvs	4"	PN25	40mm



TEMPERATURE RANGE	LEAKAGE RATE	VALVE CHARACTERISTIC
-20...240°C	0.05% of Kvs	Equal Percentage

Actuators with 20mm Stroke



*0-10V / 4-20mA Control Signal
for VQD / BQD / VQE / BQE -DN65-DN80
VUG / BUG -DN15-DN50



PRODUCT CODE	POWER SUPPLY	RUNNING TIME	ACTUATOR TYPE
AVM322F120	230V~	6 or 12 s / mm	2 / 3 Point
AVM322SF132	24V=/~*	4 or 6 s / mm	Modulating or 2/3 Point

AMBIENT TEMPERATURE	IP RATING	NOMINAL STROKE	PUSHING FORCE
-10 ... 55 °C	IP54	20mm	1000N

Actuators with 49mm Stroke



* 0-10V / 4-20mA Control Signal
for VQD / BQD / VQE / BQE -DN100-DN150
VUG / BUG -DN65-DN150
SR=Spring Return

PRODUCT CODE	POWER SUPPLY	RUNNING TIME	ACTUATOR TYPE
AVM234SF132	24V=/~*	2 / 4 / 6 s mm	Modulating or 2/3 Point
AVF234SF132	24V=/~*	2 / 4 / 6 s mm	Modulating or 2/3 Pt/SR

AMBIENT TEMPERATURE	IP RATING	STROKE	PUSHING FORCE
-10 ... 55 °C	IP66	49mm	2500N

Accessories



ACCESSORIES CODE	DESCRIPTION	FOR PRODUCT CODE
0372333001	Auxiliary Contact, Double	AVM234, AVF234
0372336180	Intermediate piece if temperature > 180°C	AVM234, AVF234
0372336240	Intermediate piece if temperature > 240°C	AVM234, AVF234
0372338001	14mm, D38 Adaptor Kit	V/BXD,V/BXE,DN15-50
0372338002	40mm, D60 Adaptor Kit	V/BXD,V/BXE,DN65-150
0372376010	Adaptor / Siemens Valves, 20mm stroke, Ø10mm Spindle	
0372376014	Adaptor / Siemens Valves, 40mm stroke, Ø14mm Spindle	

3 Port Lift & Lay Valves DN200 – DN300



Actuator 230V 0-10V
Other Voltages available on request

PRODUCT CODE	VALVE SIZE	FLOW RATE	PUSHING FORCE	MAX DELTA P
BR423-200	DN200	630 Kvs	12000N	3 Bar
BR423-250	DN250	1000 Kvs	12000N	1.8 Bar
BR423-300	DN300	1500 Kvs	24000N	4.3 Bar

TEMPERATURE RANGE	PN RATING	IP RATING
-15...150°C	PN16	IP65

Butterfly Valves & Actuators

Butterfly Valves



PRODUCT CODE	VALVE SIZE	FLOW RATE	CONNECTION
DEF050F200	DN50	85 Kvs	PN6 /PN16, Flanges
DEF065F200	DN65	215 Kvs	PN6 /PN16, Flanges
DEF080F200	DN80	420 Kvs	PN6 /PN16, Flanges
DEF100F200	DN100	800 Kvs	PN6 /PN16, Flanges
DEF125F200	DN125	1010 Kvs	PN6 /PN16, Flanges
DEF150F200	DN150	2100 Kvs	PN6 /PN16, Flanges
DEF200F200	DN200	4000 Kvs	PN6 /PN16, Flanges
TEMPERATURE RANGE	PN RATING	LEAKAGE RATE	VALVE CHARACTERISTIC
-10...130°C	PN16	<0.0001% of Kvs	Linear



Actuators for DEF Valves



Suitable for DEF25.....100 Valves
* 0(2)-10V / 0(4)-20mA Control Signal



PRODUCT CODE	POWER SUPPLY	RUNNING TIME	ACTUATOR TYPE
ADM322F122	24V=/~	120s / 240s	2/3 Point
ADM322SF122	24V=/~*	30s / 60s	Modulating or 2/3 Point
AMBIENT TEMPERATURE	IP RATING	TORQUE	
-20 ... 55°C	IP54	15Nm	

Accessories

Assembly Kits Also Available to M3R, M4R, MH32, MH42 Valves & Other Suppliers

ACCESSORIES CODE	DESCRIPTION	FOR PRODUCT CODE
0510240014	Assembly Kit	ADM to DEF020 - 065
0510240015	Assembly Kit	ADM to DEF080 - 100



Suitable for DEF25.....200 Valves
* 0-10V / 0-20mA Control Signal



Accessories

PRODUCT CODE	POWER SUPPLY	RUNNING TIME	ACTUATOR TYPE	TORQUE
A44W2F001	230V~	120s	3 Point	30Nm
A44W2F020	24V~	120s	3 Point	30Nm
IP RATING	AMBIENT TEMPERATURE			
IP55	-20 ... 60°C			
ACCESSORIES CODE	DESCRIPTION	FOR PRODUCT CODE		
0370493000	Auxiliary Contact, Double	A44 actuators		
0378110001	Assembly Kit	A44 to DEF025 - 065		
0378111001	Assembly Kit	A44 to DEF080 - 125		
0378112001	Assembly Kit	A44 to DEF150 - 200		

Actuators for DEF Valves, Spring Return



Suitable for DEF25 ... 100 Valves
* 0-10V / 0-20mA Control Signal



Accessories

PRODUCT CODE	POWER SUPPLY	RUNNING TIME	ACTUATOR TYPE
ASF122F120	230V~	90s	2 Point
ASF122F122	24 - 48V= / 24V~	90s	2 Point
ASF122F222	24 - 48V= / 24V~	90s	2 Point & Aux

AMBIENT TEMPERATURE	IP RATING	TORQUE	CLOSING TIME
-32 ... 55°C	IP54	18Nm	15s

ACCESSORIES CODE	DESCRIPTION	FOR PRODUCT CODE
0378113001	Assembly Kit	ASF to DEF025 - 100

3 Port Mixing Valves



PRODUCT CODE	VALVE SIZE	FLOW RATE	CONNECTION
M3R020F200	DN20	6 Kvs	3/4" Female
M3R025F200	DN25	12 Kvs	1" Female
M3R032F200	DN32	18 Kvs	1 1/4" Female
M3R040F200	DN40	26 Kvs	1 1/2" Female
M3R050F200	DN50	40 Kvs	2" Female

TEMPERATURE RANGE	LEAKAGE RATE	PN RATING
2...110°C	<0.1% of Kvs	PN40



Suitable for DEF25.....200 Valves
*0-10V Control Signal



PRODUCT CODE	POWER SUPPLY	RUNNING TIME	ACTUATOR TYPE	TORQUE
ASM124F120	230V~	120s	2 / 3 Point	18Nm
ASM124F122	24V~	120s	2 / 3 Point	18Nm
ASM124SF132	24V=/~ *	60s / 120s	Modulating or 2 / 3 Point	15Nm
ASM134F130	230V~	120s / 240s	2 / 3 Point	30Nm
ASM134SF132	24V=/~ *	120s / 240s	Modulating or 2 / 3 Point	30Nm

IP RATING	AMBIENT TEMPERATURE
IP54	-20 ... 55°C

Accessories

ACCESSORIES CODE	DESCRIPTION	FOR PRODUCT CODE
0361977001	Assembly Kit	ASM to MH32 / 3F65 - 150 ASM to M3R020 - 050
0370990001	Auxiliary Contact, Single	
0370990002	Auxiliary Contact, Double	
0372455001	Assembly Kit	ASM to DEF025 - 065
0372455002	Assembly Kit	ASM to DEF080 - 125
0372455003	Assembly Kit	ASM to DEF150 - 200

Pressure Independent Control Valves & Actuators

PIC Valves, DN10 – DN32 with Measurement Nipples



PRODUCT CODE	VALVE SIZE	FLOW RATE	STROKE (MM)	CONTROL RANGE (MIN MAX ΔP)
VDL010F201	DN10	65...370 l/h	5	14...800 kPa
VDL015F221	DN15	30...200 l/h	2.5	14...800 kPa
VDL015F211	DN15	65...370 l/h	5	14...800 kPa
VDL015F201	DN15	100...575 l/h	2.5	14...800 kPa
VDL020F221	DN20	100...575 l/h	2.5	14...800 kPa
VDL020F211	DN20	160...990 l/h	4	15...800 kPa
VDL020F201	DN20	220...1330 l/h	5	15...800 kPa
VDL025F211	DN25	280...1800 l/h	5.5	8...800 kPa
VDL025F201	DN25	600...3609 l/h	5.5	8...800 kPa
VDL032F201*	DN32	550...4001 l/h	5.5	8...800 kPa



Accessories

* 0361951025 is the only fitting for a VDL032F2.. and brings the connection to DN25.

ACCESSORIES CODE	DESCRIPTION	FOR PRODUCT CODE
0378133010	Threaded Sleeve with cap, nut and flat seal	VDL010F2..
0378133015	Threaded Sleeve with cap, nut and flat seal	VDL015F2..
0378133020	Threaded Sleeve with cap, nut and flat seal	VDL020F2..
0378133025	Threaded Sleeve with cap, nut and flat seal	VDL025F2..
0361951025*	Screw Fitting for male thread with flat seal, DN25	VDL032F2..

Actuators for PIC Valves, DN10 – DN32



Thermal Drive Spring Return
For: VDL010...032
* 0-10V Control Signal
ΔP Max 8.0 Bar for VDL010-032

PRODUCT CODE	POWER SUPPLY	RUNNING TIME	ACTUATOR TYPE	STROKE
AXT211F110	230V~	210s	Spring Return, n/c	4.5mm
AXT211F210	230V~	210s	Spring Return, n/o	4.5mm
AXT211F112	24V=/~	270s	Spring Return, n/c	4.5mm
AXT211F212	24V=/~	270s	Spring Return, n/o	4.5mm
AXS215SF122	24V=/~ *	270s	Spring Return, n/c	4.5 / 3mm
AXS215SF222	24V=/~ *	270s	Spring Return, n/o	4.5 / 3mm

AMBIENT TEMPERATURE	VALVE CONNECTION	CONNECTION TYPE
0 ... 50 °C	M30x1.5	Bayonet



Motor Drive
For: VDL010...032
* 0(2)-10V/0(4)-20mA Control Signal
ΔP Max 8.0 Bar for VDL010-032

PRODUCT CODE	POWER SUPPLY	RUNNING TIME	ACTUATOR TYPE	STROKE
AXM217F200	230V~	75s	3 Point	6.3mm
AXM217F202	24V=/~	75s	3 Point	6.3mm
AXM217SF402	24V=/~ *	60s	Modulating	3.2/4.3/5.5mm

AMBIENT TEMPERATURE	VALVE CONNECTION	CONNECTION TYPE
0 ... 50 °C	M30x1.5	Screwed



PIC Valves, DN40 – DN50 with Measurement Nipples



SAUTER

PRODUCT CODE	VALVE SIZE	FLOW RATE	STROKE (MM)	CONTROL RANGE (MIN MAX ΔP)
VDL040F201	DN40	1370...9500 l/h	15	8...800 kPa
VDL050F201	DN50	1400...11500 l/h	15	8...800 kPa

Actuators for PIC Valves, DN40 – DN50



* 0-10V Control Signal

SAUTER

PRODUCT CODE	POWER SUPPLY	RUNNING TIME	ACTUATOR TYPE	STROKE
AVM215F120R	230V	7.5 s/mm	2 - 3 Point	8...20mm
AVM215SF132R	24V	7.5 / 15 s/mm	Modulating	
AVM215SF132-7	24V	7.5 / 15 s/mm	Modulating	20mm

AMBIENT TEMPERATURE	IP RATING	STROKE	ΔP MAX
-10 ... 55 °C	IP54	8 ... 20mm	4.0 Bar

Accessories

ACCESSORIES CODE	DESCRIPTION	FOR PRODUCT CODE
0510390029	Adapter to fit AVM215	VDL040...050

PIC Valves, DN65 – DN100 with Measurement Nipples



SAUTER

PRODUCT CODE	VALVE SIZE	FLOW RATE	STROKE (MM)	CONTROL RANGE (MIN MAX ΔP)
VDL065F501H	DN65	6.4... 37.7 m³/h	20	30...600 kPa
VDL080F501H	DN80	8.5... 49 m³/h	20	22...600 kPa
VDL100F501H	DN100	14.8... 90.9 m³/h	40	20...600 kPa

TEMPERATURE RANGE	PN RATING	VALVE CHARACTERISTIC
1... 120 °C	PN16	Linear

Actuators for PIC Valves, DN65 – DN150



* 0-10V / 4-20mA Control Signal

SAUTER

PRODUCT CODE	POWER SUPPLY	RUNNING TIME	ACTUATOR TYPE	PUSHING FORCE
AVM234SF132-7	24V=/~ *	2 / 4 / 6 s/mm	Modulating or 2 / 3 Pt	2500N

AMBIENT TEMPERATURE	IP RATING	STROKE
-10 ... 55 °C	IP66	40mm

Pneumatic Damper Actuators



ATEX Rated Actuators

* Ambient Temperature for AK31P1F001 is
-5 ... 60 °C

Accessories

PRODUCT CODE	MAX DAMPER AREA	MAX TORQUE	MAX FORCE	STROKE
AK42PF003	3.0 m ²	10Nm	200N	100 mm

AMBIENT TEMPERATURE*	CONTROL PRESSURE	OPERATING RANGE	IP RATING
-10 ... 70 °C	0...1.2 Bar	0,3...0,9 Bar	IP20

ACCESSORIES CODE	DESCRIPTION	FOR PRODUCT CODE
0274354000	Rod c/w Ball Joint	AK42
0274595000	Fixing Console	AK42
0274593000	Angled Ball Joint	AK42
0274597000	Coupling Piece	AK42
0370059000	Clamp on Lever	AK42



Pneumatic Valve Actuators



ATEX Rated Actuators

PRODUCT CODE	STROKE	USE WITH VALVES PN6/16	USE WITH VALVES PN25 /16
AVP142F001	14mm	V6R / B6R	-
AVP242F001	8mm	VQD/BQD DN15-50	VQE/BQE DN15-50
AVP242F021	14/20/25mm	VQD/BQD DN65-80 VQE/BQE DN65-80	VUG/BUG DN15-50
AVP243F031	20/30/40mm	VQD/BQD DN65-80	VUG/BUG DN65-150
AVP244F021	20mm	VQD/BQD DN65-80	VUG/BUG DN15-50



AMBIENT TEMPERATURE	CONTROL PRESSURE	MAX PRESSURE
-15 ... 50 °C	0...1.2 Bar	1.5Bar

Pneumatic Positioner



for Precise Valve Control

PRODUCT CODE	SETTING RANGE	MAX. AIR CAPACITY	AIR CONSUMPTION
XSP31F001	0.2 ...1.0 bar	1000 l _n /h	30 l _n /h

ACCESSORIES CODE	DESCRIPTION	FOR PRODUCT CODE
0226522002	Assembly kit	AK42
0297935001	Assembly kit	AVP242



Auxiliary Contact



PRODUCT CODE	DESCRIPTION	CONTACT RATING
XAP1F001	2 Contacts: open / closed	10 (2)A, 250V

IP RATING	AMBIENT TEMPERATURE
IP54	-15 ... 50 °C

ACCESSORIES	DESCRIPTION	FOR PRODUCT CODE
0226519003	Assembly kit	AK42

E-P and P-E Converters



* with Pre-Amplifier



PRODUCT CODE	DESCRIPTION	INPUT	OUTPUT	AIR CAPACITY	POWER SUPPLY
XEP10F001	E-P Converter	2-10V	0.2-1 Bar	400 l _n /h	-
XEP110F011	E-P Converter	0-10V	0.2-1 Bar	400 l _n /h	24V=/~ *

SUPPLY PRESSURE	IP RATING
1.3 Bar	IP54

ACCESSORIES	DESCRIPTION	FOR PRODUCT CODE
0274700000	Fixing Bracket	AVP

Combi Thermostats You asked and we have delivered

	CP4B	CP4M	CP4	CP4-HW-OT	CP4 <i>i</i>
					
Wireless			✓	✓	✓
Battery Powered	✓		✓	✓	✓
Hardwired		✓			
Smart / App Control			✓	✓	✓
Boiler Plus Compliant	✓	✓	✓	✓	✓
OpenTherm®	✓	✓	✓	✓	✓
5 Years Warranty	✓	✓	✓	✓	✓
Boost Function	✓	✓	✓	✓	✓
Industry Standard Backplate	✓	✓			

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Standard installation connected via TPi

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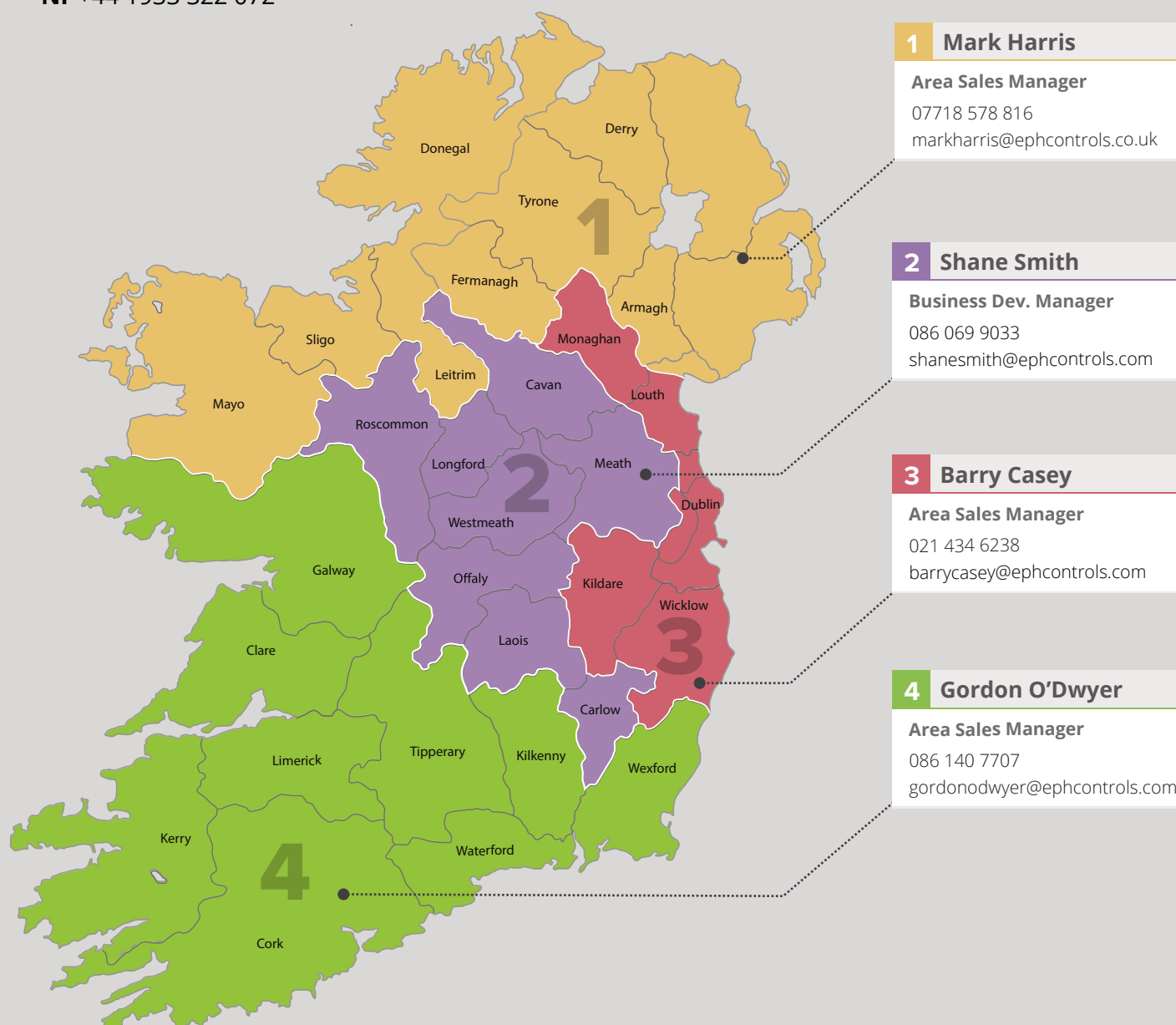
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