

# ELECTRIC BOILER GUIDE



# **About Us**

Innovative heating and hot water specialists. The Electric Heating Company, have developed their product portfolio to accommodate almost any Central Heating and Hot Water requirement. From the comprehensive Comet Electric System Boiler to the space saving SlimJim Electric Flow Boiler our product knowledge and assistance is unrivalled in the heating and hot water industry.

Our products have been designed with both the installer and homeowner in mind and as such all the controls used with our products are contemporary and user friendly. We can

> supply a choice of Boiler Packs for a complete heating & hot water installation.

> > The Electric Boiler, Cylinder and Controls are all included within our exclusive packages.

EHC are renowned for always putting the customer first and have won National customer service awards in recognition of our efforts. From initial enquiry to completed order we believe in focusing our attention on customer care.







The personnel at The Electric Heating Company are approachable, very experienced and committed to ensuring you have the best available options when choosing your products.

Our Products are specified on many Contracts throughout the UK and our customer base includes Social Landlords, Private Landlords, Developers, Homeowners and the general Heating Trade.

In addition to our product catalogues our websites contain Installation & Technical Manuals, Energy Information and a host of relevant details relating to our products. You can also view our informative product videos from the website.

EHC offer an Accredited Heating Contractors scheme that operates throughout the UK. If you would like more information please refer to pages 26 & 27 of this booklet or contact us on the number below.

For more information call us on 01698 820533 for advice, brochures or technical information or visit our website at www.electric-heatingcompany.co.uk

#### Index

FAQ's when installing	
an Electric Boiler	4
Fusion Comet	6
Fusion Comet Direct Cylinder Packages	8
Fusion Comet Indirect Cylinder Packages	10
Fusion Comet Pre-Plumbed Pre-Wired Indirect Cylinder Packages	& 12
SlimJim Electric Flow Boiler	14
SlimJim Direct Cylinder Packages	16
SlimJim Indirect Cylinder Packages	18
SlimJim Pre-Plumbed & Pre-Wired Indirect Cylinder Packages	20
Controls & Packs	22
Direct Unvented Stainless Steel Cylinders	24
Indirect Unvented Stainless Steel Cylinders	25
Accredited Heating Contractors Scheme	26

# FAQ'S When Installing an Electric Boiler

- Electric Boilers are 100% efficient therefore there is no requirement to oversize the appliance
- If an efficient Direct Cylinder is present within the property install the boiler for heating only
- Heat Loss should be calculated in accordance with the latest regulations
- Most 1, 2 & 3 bedroom properties are generally suitable for an Electric Boiler
- Properties with a high hot water demand are better suited to an Indirect Cylinder with an 'S' Plan configuration
- When installing an Electric Boiler always ensure that the incoming electrical supply is sufficient for the boiler output
- To accommodate "Off-Peak" electricity tariffs it is recommended that a programmer with a facility for 3 On/Off periods is installed
- Electric Boilers are suitable for both Volt Free Hard Wired and Wireless Thermostats
- If the property has an electric shower it is advisable that a Shower Flow Sensor or Relay Interrupt is installed to prevent the Electric Boiler and Electric Shower operating at the same time
- Electric Boilers require no mandatory annual maintenance
- Electric Boilers have no flue requirements
- EHC offer 3-Phase Electric Boilers that are suitable for light commercial purposes such as; offices, factory units, pubs. etc.



# **EHC – The Electric Boiler Specialists**

- Installation is quicker than a gas system:
   90% Mechanical & 10% Electrical
- The wiring of an Electric Boiler is the same as an Electric Shower
- Electric Boilers can be used for Open Vented Systems
- Can be used as back-up for Heat Pumps
- Standard radiators and valves can be used with Electric Boilers
- EHC Electric Boilers have a soft start to avoid power surges
- Electric Boilers are almost silent when operating
- Electric Boilers emit no noxious fumes or gases
- Can be used with underfloor heating systems
- EHC only recommend High Efficiency UPM3 Pumps for our Boilers



## **FUSION COMET**



#### **Boiler Features**

- Outputs from 6kW to 14.4kW
- Integral sealed system kit
- Virtually silent in operation
- Can provide central heating only or central heating & hot water with our Twin Channel Heat Pack
- Can be used for underfloor heating
- No Mandatory Maintenance required
- 100% efficient
- Stainless Steel Heat Exchanger
- 2 years Parts & Labour Guarantee
- Removable bottom tray

#### **Electronic Features**

- Low Voltage Control Connections
- 6 Stage Heating
- Integral System Diagnostics
- Easy-Fit Connectors & Sensors
- In-Built Fault Finding Diagnostics
- High Current Thermal Cut-Out
- Vortex Flow Temperature Sensor
- Digital Pressure Gauge

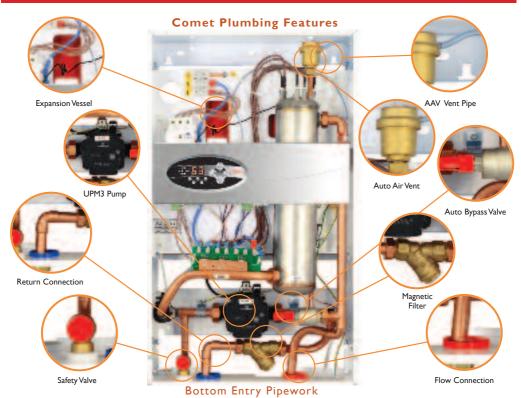
### **Accessories**

Code	Description
EC10001	Single Channel Programmer
EC10002	Twin Channel Programmer
EC10012 EC10011	Room Thermostat 'S' Plan Twin Channel Heat Pack
E10SS/7	Supreme Saver Hot Water Programmer
ESFS15/C	Shower Flow Sensor





# **EHC - The One Stop Shop**



			, ,				
Boiler Range	kW	6kW	9kW	12kW	14.4kW	24kW	
Pipe entry from boilers				Bottor	n entry		
Flow & Return Pipes	mm			2	22		
Min/Max Water Pressure	Bar			0.5/	/3.0		
Expansion Vessel	Ltrs			6	6.0		
Dry weight	Kgs			2	25		
Electricity Supply	VAC		230/240	√ 1ph 50Hz	1	415/240V 3ph 50	OHz
Load/Current	Amp	26.1	39.1	52.2	62.6	3 x 33.4	
Heating output	Btu	20472	30709	40945	49134	81891	
Min/Max Temp Settings	oC.	20/85					
Overheat Protection	<b>°</b> C	100					
Pump included		Yes					
Recommended Pump Settings		Factory Set to Max (adjustable)					
Recommended Diameter of Mains Cable	mm	10	10	16	16	3 x 10	
Protection	Amp	32	45	63	80	3 x 45	
Erp Rating		D	D	D	D	D	7

# FUSION COMET BOILER c/w DIRECT CYLINDER PACKAGES



# **EHC - The One Stop Shop**

### Package Includes

Choice of Comet Boiler	2 Year Warranty
Choice of Direct Unvented Stainless Steel Cylinder	25 Year Warranty
Single Channel Programmer	2 Year Warranty
Wired Room Thermostat	2 Year Warranty
Immersion Hot Water Programmer	5 Year Warranty



Scan to watch this product video

## **Packages Available**

EHC FUSION COMET - DI	RECT CYLINDER PACKAGES	Number of Bedrooms
Code	Description	
EHCCOM9/150	9kW BOILER / 150L CYLINDER	1 or 2
EHCCOM9/180	9kW BOILER / 180L CYLINDER	2
EHCCOM12/150	12kW BOILER / 150L CYLINDER	3
EHCCOM12/180	12kW BOILER / 180L CYLINDER	3
EHCCOM12/210	12kW BOILER / 210L CYLINDER	3 or 4

The property suitability should be taken as a guide only. For a detailed heat loss calculation please consult a qualified heating engineer



# FUSION COMET BOILER c/w INDIRECT CYLINDER PACKAGES



# **EHC – The One Stop Shop**

### Package Includes

Choice of Comet Boiler

2 Year Warranty
Choice of Indirect Unvented Stainless Steel Cylinder

25 Year Warranty
Twin Channel Programmer

2 Year Warranty
Wired Room Thermostat

2 Year Warranty
2 x Zone Valves

2 Year Warranty
Cylinder Thermostat

2 Year Warranty

2 Year Warranty

2 Year Warranty



### **Packages Available**

Scan to watch this product video

EHC FUSION COMET - INDIF	RECT CYLINDER PACKAGES	Number of Bedrooms
Code	Description	
EHCCOM9/150IND	9KW BOILER / 150L CYLINDER	1 or 2
EHCCOM9/180IND	9KW BOILER / 180L CYLINDER	2
EHCCOM12/150IND	12kW BOILER / 150L CYLINDER	3
EHCCOM12/180IND	12kW BOILER / 180L CYLINDER	3
EHCCOM12/210IND	12kW BOILER / 210L CYLINDER	3
EHCCOM15/150IND	14.4kW BOILER / 150L CYLINDER	3 or 4
EHCCOM15/180IND	14.4kW BOILER / 180L CYLINDER	3 or 4
EHCCOM15/210IND	14.4kW BOILER / 210L CYLINDER	3 or 4

The property suitability should be taken as a guide only. For a detailed heat loss calculation please consult a qualified heating engineer



# FUSION COMET BOILER c/w PRE-PLUMBED/WIRED INDIRECT CYLINDER PACKAGES





## **EHC – The One Stop Shop**

### This Cylinder Package is Pre-Plumbed & Pre-Wired

Choice of Comet Boiler

2 Year Warranty
Choice of Indirect Unvented Stainless Steel Cylinder

25 Year Warranty
Twin Channel Programmer

2 Year Warranty
Wired Room Thermostat

2 Year Warranty
2 x Zone Valves

2 Year Warranty
2 Year Warranty
2 Year Warranty
2 Year Warranty

Note: Includes Auto Bypass & Filling Loop



### **Packages Available**

Wiring Centre ——

Scan to watch this product video

2 Year Warranty

EHC FUSION COMET - PRE-F	PLUMBED INDIRECT CYLINDER PACKAGES	Number of Bedrooms
Code	Description	
EHCCOM9/150PPC	9KW BOILER / 150L CYLINDER	1 or 2
EHCCOM9/180PPC	9KW BOILER / 180L CYLINDER	2
EHCCOM12/150PPC	12kW BOILER / 150L CYLINDER	3
EHCCOM12/180PPC	12kW BOILER / 180L CYLINDER	3
EHCCOM12/210PPC	12kW BOILER / 210L CYLINDER	3
EHCCOM15/150PPC	14.4kW BOILER / 150L CYLINDER	3 or 4
EHCCOM15/180PPC	14.4kW BOILER / 180L CYLINDER	3 or 4
EHCCOM15/210PPC	14.4kW BOILER / 210L CYLINDER	3 or 4

The property suitability should be taken as a guide only. For a detailed heat loss calculation please consult a qualified heating engineer



## **SLIMJIM ELECTRIC FLOW BOILER**



Depth - 172mm Weight - 11kg

#### **Boiler Features**

- Outputs from 4kW to 14.4kW
- Virtually silent in operation
- Can provide central heating only or central heating & hot water using our Boiler Heat Packs
- Can be used for underfloor heating
- No Mandatory Maintenance required
- 100% efficient
- Stainless Steel Heat Exchanger
- Includes Run Dry Sensor
- 2 years Parts & Labour Guarantee

### **Accessories For Heating Only**

\*

Code	Description
ECLCSCHP	Single Boiler Pack
EC10001	Single Channel Programmer
EC10012	Room Thermostat
EC10004	8 Litre Robo Kit
EC10005	Auto Air Vent
EC10006/A	High Quality UPM3
	Circulating Pump
EC10007	Lockshield Pump Valves (x2)
* M0235	Magnetic Filter

### **Accessories** For Heating & Hot Water

Code	Description
ECLCTCHP	Twin Boiler Pack
EC10002	Twin Channel
	Programmer
EC10012	Room Thermostat
EC10004	8 Litre Robo Kit
EC10005	Auto Air Vent
EC10006/A	High Quality UPM3
	Circulating Pump
EC10007	Lockshield Pump Valves (x2)
M0235	Magnetic Filter
EC10013	Automatic By-Pass
EC10008	2 Port Zone Valve (x2)
EC10009	Cylinder Stat
EC10010	Wiring Centre





# **EHC - The One Stop Shop**



## **Technical Specification**

Boiler range	kW	4kW	7kW	10kW	12kW	14.4kW
Pipe entry boiler -						
flow				top		
Pipe entry boiler -						
return				bottom		
Central heating						
flow & return						
pipes	mm			22		
Max Pressure	Bar			3.0		
Min Pressure	Bar			0.5		
Min/Max Temp						
Settings	°C	30/80				
Overheat Protection	°C	100				
Safety class				IP22		
Electrical Supply	VAC		230/	240V 1ph	50Hz	
Load current	Amp	17.4	30.9	43.4	52.2	62.6
Recommended						
diameter of						
mains cable	mm	6	10	16	16	16
Heating output	Btu	13648	23884	34121	40945	49134
Protection	Amp	20	40	50	63	80
Erp Rating		D	D	D	D	D



Scan to watch this product video

# SLIMJIM BOILER c/w DIRECT CYLINDER PACKAGES







16

Slimlim

# **EHC - The One Stop Shop**

## Package Includes

SlimJim

Choice of SlimJim Boiler — 2 Year Warranty

Choice of Direct Unvented Stainless Steel Cylinder — 25 Year Warranty

#### PLUS

Code	Description
EC10001	Single Channel Programmer
EC10012	Room Thermostat
EC10004	8 Litre Robo Kit
EC10005	Auto Air Vent
EC10006/A	High Quality UPM3 Circulating Pump
EC10007	Lockshield Pump Valves (x2)
M0235	Magnetic Filter
E10SS/7	Supreme Saver Hot Water Programmer



Scan to watch this product video

## **Packages Available**

EHC SLIMJIM - DIRECT CYLINDER PACKAGES		Number of Bedrooms
Code	Description	
EHCSJ7/120	7kW BOILER / 120L CYLINDER	1
EHCSJ10/120	10kW BOILER / 120L CYLINDER	1 or 2
EHCSJ10/150	10kW BOILER / 150L CYLINDER	1 or 2
EHCSJ10/180	10kW BOILER / 180L CYLINDER	2
EHCSJ12/150	12kW BOILER / 150L CYLINDER	3
EHCSJ12/180	12kW BOILER / 180L CYLINDER	3

The property suitability should be taken as a guide only.

For a detailed heat loss calculation please consult a qualified heating engineer



# SLIMJIM BOILER c/w INDIRECT CYLINDER PACKAGES



SlimJim





## **EHC - The One Stop Shop**

## Package Includes

SlimJim

Choice of SlimJim Boiler — 2 Year Warranty

Choice of Indirect Unvented Stainless Steel Cylinder — 25 Year Warranty

#### **PLUS**

Code	Description
EC10002	Twin Channel Programmer
EC10012	Room Thermostat
EC10004	8 Litre Robo Kit
EC10005	Auto Air Vent
EC10006/A	High Quality UPM3 Circulating Pump
EC10007	Lockshield Pump Valves (x2)
M0235	Magnetic Filter
EC10013	Automatic By-Pass
EC10008	2 Port Zone Valve (x2)
EC10009	Cylinder Stat
EC10010	Wiring Centre



Scan to watch this product video

## **Packages Available**

EHC SLIMJIM - INDIRECT (	Number of Bedrooms	
Code	Description	
EHCSJ10/150IND	10kW BOILER / 150L CYLINDER	1 or 2
EHCSJ10/180IND	10kW BOILER / 180L CYLINDER	2
EHCSJ12/150IND	12kW BOILER / 150L CYLINDER	3
EHCSJ12/180IND	12kW BOILER / 180L CYLINDER	3
EHCSJ12/210IND	12kW BOILER / 210L CYLINDER	3
EHCSJ15/150IND	14.4kW BOILER / 150L CYLINDER	3 or 4
EHCSJ15/180IND	14.4kW BOILER / 180L CYLINDER	3 or 4
EHCSJ15/210IND	14.4kW BOILER / 210L CYLINDER	3 or 4

The property suitability should be taken as a guide only. For a detailed heat loss calculation please consult a qualified heating engineer



# SLIMJIM BOILER c/w PRE-PLUMBED/WIRED INDIRECT CYLINDER PACKAGES



SlimJim

## **EHC – The One Stop Shop**

## This Cylinder Package is Pre-Plumbed & Pre-Wired

Choice of SlimJim Boiler — 2 Year Warranty

Choice of Indirect Unvented Stainless Steel Cylinder — 25 Year Warranty

#### PLUS

)
)

SlimJim



Note: Includes Auto Bypass & Filling Loop

## **Packages Available**

Scan to watch this product video

EHC SLIMJIM - PRE-PLUME	Number of Bedrooms	
Code	Description	
EHCSJ10/150PPC	10kW BOILER / 150L CYLINDER	1 or 2
EHCSJ10/180PPC	10kW BOILER / 180L CYLINDER	2
EHCSJ12/150PPC	12kW BOILER / 150L CYLINDER	3
EHCSJ12/180PPC	12kW BOILER / 180L CYLINDER	3
EHCSJ12/210PPC	12kW BOILER / 210L CYLINDER	3
EHCSJ15/150PPC	14.4kW BOILER / 150L CYLINDER	3 or 4
EHCSJ15/180PPC	14.4kW BOILER / 180L CYLINDER	3 or 4
EHCSJ15/210PPC	14.4kW BOILER / 210L CYLINDER	3 or 4

The property suitability should be taken as a guide only.

For a detailed heat loss calculation please consult a qualified heating engineer



## **CONTROLS & PACKS**

# EHC are acknowledged leaders in the electric heating and hot water industry.

Offering a wide range of wet and dry heating systems and instantaneous and stored water heaters we have a solution for most properties requiring Electric Heating.

The range includes the
Fusion and Slim Jim Electric
Boilers, EHC Electric
Radiators, Unvented
Cylinders, Water Heaters and
Solar Panels.

To complement our core range we also offer a selection of Controls and Packs suitable for most applications.

At EHC we believe that 'simple is best' and as such all our Controls are easy to install and operate and comply with the latest building regulations.

## EC10001 - Single Channel Programmer

- Selection of Modes –
   24 Hours, 5/2 Day & 7 Day
- 2 or 3 ON/OFF Selector
- Preset program settings
- Standard Back Plate



- Selection of Modes 24 Hours, 5/2 Day & 7 Day
- 2 or 3 ON/OFF Selector
- Preset program settings
- · Standard Back Plate



## EC10003 - Three Channel Programmer

- Selection of Modes 24 Hours, 5/2 Day & 7 Day
- 2 or 3 ON/OFF
- · Selector Preset program settings
- Standard Back Plate



#### EC10012 Room Thermostat

- Hard Wired
- Diaphragm Temperature Sensor
- · Ideal for Surface or Pattress Box mounting
- 10°c 30°c Set Point



## EC10014 Wireless Programmer

- Digital Wireless Programmer c/w Stand
- Wireless Receiver
- 24 Hour or 7 Day
- 6 available Programs per Day
- 7°c 35°c Set Point



# E10SS/7 & E10SS/8 - Hot Water Programmer

- Supreme Saver Dip Switch Selector with 10 various Off-Peak Tariff choices
- Suitable for Single, Dual & Twin Immersion Elements
- 7 Day Timer
- 1 & 2 Hour Boost Function
- Standard Back Plate



# **EHC – The One Stop Shop**

#### FC10008 - Zone Valve

- 22mm Port Valve
- · Suitable for 'S' Plan configurations



#### EC10009 - Cylinder Stat

- · Easy fixing and suitable for all Cylinder types
- · Straps and Hooks provided
- 0°c 80°c Set Point



#### EC10013 **Automatic Bypass**

- 22mm Compression fitting
- Pressure Range from 0.05 to 0.5 Bar
- Maximum 16 Bar



#### EC10004 - Robo Kit

- 8 Litre Vessel
- · Mounting Bracket
- Pressure Gauge
- Filling Loop



#### EC10011 **Twin Channel Heatpack**

- Twin Channel Programmer
- Room Thermostat
- · Cylinder Thermostat
- Wiring Centre



#### **ECLCSCHP** SlimJim Single Boiler Pack

· Suitable for Heating only installations

· Single Channel Programmer

- Room
- Thermostat
- 8 Litre Robo Kit
- · Auto Air Vent
- · Magnetic Filter
- Pump & Valves
- · Filling Loop



#### **ECLCTCHP SlimJim Twin Boiler Pack**

- · Suitable for Heating & Hot Water installations
- Twin Channel Programmer
- Room Thermostat
- 8 Litre Robo Kit
- · Auto Air Vent
- Magnetic Filter
- Pump & Valves
- Cylinder Thermostat
- · Wiring Centre
- 2 x 2 Port Zone Valves
- · Auto By-Pass
- Filling Loop



# DIRECT UNVENTED STAINLESS STEEL CYLINDERS



# The following fittings are supplied with our Direct Cylinders:

- Inlet Control Set
- Temperature & Pressure Relief Valve
- 15mm / 22mm Tundish
- Expansion Vessel c/w Wall Mounting Bracket
- 2 x 3kW Immersion Heaters
- Installation & Maintenance Instructions
- Benchmark Logbook

ı	Recommendations based on the guidelines in BS 6700					
	Hot Water Demand	Number of Bedrooms	Indirect units	Direct units		
	1 Standard Bath or Shower	Bedsit or 1 2 or 3	120 120	150 180		
		3 or 4	150	210		
	1 Standard	2 or 3	120	180		
	Bath	3 or 4	150	210		
	1 Standard Bath & En-suite	2 or 3	150	210		
		3 or 4	150	210		
		4 or 5	180	250		
	2 Standard Baths	2 or 3	180	210		
		3 or 4	180	210		
		4 or 5	210	250		
	3 Bathrooms	3 or 4	250	300		
		4 or 5	250	300		
		5 or 6	300	300		

Model No.	CAPACITY (Litres)	HEIGHT (mm)	DIAMETER (mm)	WEIGHT (Kg-EMPTY)	WEIGHT (Kg-FULL)
NDIR90L	90	720	545	17	107
NDIR120L	120	900	545	21	141
NDIR150L	150	1100	545	26	176
NDIR180L	180	1280	545	28	208
NDIR210L	210	1470	545	32	242
NDIR250L	250	1720	545	39	250
NDIR300L	300	1980	545	45	300

## **INDIRECT UNVENTED STAINLESS STEEL CYLINDERS**



### The following fittings are supplied with our Indirect Cylinders:

- Inlet Control Set
- Temperature & Pressure Relief Valve
- 15mm / 22mm Tundish
- Expansion Vessel c/w Wall Mounting Bracket
- 1 x 3kW Immersion Heater On Cylinders 210L & Smaller
- 2 x 3kW Immersion Heaters On Cylinders 250L & Greater
- Two Port Zone Valve
- Dual Thermostat
- Installation & Maintenance Instructions
- Benchmark Logbook

Note: Slimline Direct & Indirect models available (475mm in Diameter)

### 25 Year Warranty

on Direct & Indirect Cylinders

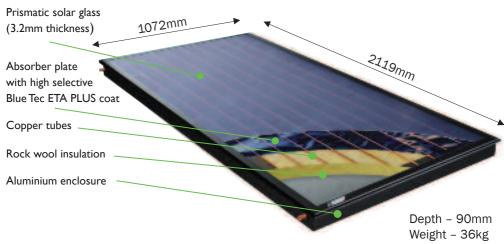






Model No.	CAPACITY (Litres)	HEIGHT (mm)	DIAMETER (mm)	WEIGHT (Kg-EMPTY)	WEIGHT (Kg-FULL)
NIND90L	90	720	545	21	109
NIND120L	120	900	545	25	143
NIND150L	150	1100	545	29	177
NIND180L	180	1280	545	33	211
NIND210L	210	1470	545	37	245
NIND250L	250	1720	545	43	291
NIND300L	300	1980	545	50	347

# FLAT PLATE SOLAR COLLECTOR (HARP ABSORBER)



Technical Data		
Copper absorber thickness (with selective layer - Blue Tec eta plus)	mm	0.2
Collector surface area	m²	2.27
Absorber surface area	m²	2.00
Active surface area of absorber	m²	1.98
Insulation thickness	mm	45
Optical efficiency	%	81.5
Coefficient a1	$W/(m^2K)$	3.49
Coefficient a2	$W/(m^2K^2)$	0.004
Liquid content	litre	1.13
Max. working pressure	bar	6
Diameter of connection pipes	mm	18
Glass thickness	mm	3.2
Absorption coefficient	%	95
Emission coefficient	%	5
Flow: Min - Max	Litre/min	1 - 4

#### **EHC Renewables**

EHC 2.0 Flat Plate Solar Collectors have been developed to provide maximum efficiency, outstanding performance and total reliability which is reflected in the 10 year warranty offered on our panels.

Our flat plate collectors are generally used for heating domestic hot water using our EHC Solar Cylinders however they can also be used in conjunction with existing gas or electric heating systems.

We offer complete Solar Packages for 2 & 3 Solar Panel Installations with a choice of roof mounting brackets.

Contact us for further details of our Solar Direct & Indirect Cylinders.









# **SOLAR THERMAL PACKAGE**







Blantyre Industrial Estate, Blantyre G72 OUP Tel: 01698 820533 Fax: 01698 825697 Email: info@electric-heatingcompany.co.uk www.electric-heatingcompany.co.uk

