

**Dimplex**<sup>®</sup>

Making life comfortable

December 2006

CI/SFB (56)

[www.dimplex.co.uk](http://www.dimplex.co.uk)

# Ascari<sup>®</sup> central heating boiler

Now there's a better alternative altogether



# xcd



“Wherever you go across the country, you’ll find Dimplex space and water heating. In its field, Dimplex leads the world – making life more comfortable, in more ways, in more places, than any other company.”

# implex<sup>®</sup>



## Working Where People Live

Heating is something we tend to take for granted in this country. But how many homes have the right heating? Choosing the right system can be a critical decision. It's not just about what is practical, how it looks is also important.

That's why we've introduced the Ascari<sup>®</sup> electrical boiler. The first system electric boiler and ideal for installations that require a wet central heating system, but where a gas supply is not feasible.

## the UK market leader in electric space and water heating

Wherever you go across the country, you'll find Dimplex electric heating. But it's hardly surprising: after all, as the electric space and water heating market leader Dimplex has been in the business of providing solutions to all sorts of applications for nearly 60 years. Today Dimplex manufactures nearly 400 products – the widest range of electric heating and hot water products in the world, to meet almost any need.

As you'd expect of the market leader, all our products are designed to comply with the relevant standards and are manufactured in industry accredited facilities to the most stringent quality standards, both European and internationally.

As well as ensuring our products are to the highest quality, we also regard our customer support as vital. Our national network of service agents and fully trained customer services team ensure both consumer and trade support all year round.

# introducing Ascari® – full central heating, anywhere

The Ascari is an electric wet central heating system boiler that provides the freedom to install almost anywhere, without the restrictions and costs of flue installations and gas supplies.

Suitable for apartments/flats and remote properties with no natural gas supply, the Ascari is ideal for properties up to 80sqm (depending on insulation of property). It is ideal for new build, but can equally be used as a retrofit system as no special radiators are required.

So whether its in a city centre block, or a country retreat, Ascari will go wherever you go, providing there is mains electricity.



# the Ascari® electric boiler gives you so much more

## Fits where other boilers don't

As the new Dimplex Ascari is electric, it fits anywhere, without the need for flues or holes through to outside walls. And because it's so compact and looks great, it fits neatly on the wall in a kitchen, discreetly in a cupboard, in fact, almost anywhere.

The Dimplex Ascari puts other electric boilers in the shade. With everything cleverly engineered into one cabinet, installation is quick and simple with no major structural work.

## Safe and sound

With Ascari, everything works at the simple flick of a switch. Being electric, it has none of the risks associated with gas boilers such as carbon monoxide poisoning or gas leaks. And operation is virtually silent (38dBA), with no disturbing noises.

## No maintenance costs

As there are no fumes from combustion, the Ascari does not require costly servicing and safety checks. Stainless steel elements and a cast iron exchanger also ensure extensive trouble free operation and minimal servicing. And with its built in electronic regulation that reduces noise and wear and tear on components, the Ascari will go on giving trouble free service for years.

## Simple easy control

The Ascari can be used in conjunction with standard radiators and thermostats and the one touch controls on the boiler are simple to use.

**Because the Ascari® boiler is electric it comes with a host of benefits not available with any gas system.**

### User features

- Compatible with standard radiators or underfloor heating
- No flue
- Stylish design with white steel casing to fit alongside kitchen wall cabinets
- Near silent operation
- No annual service required (5 year check)
- Adjustable water temperature between 21-80°C
- Cast iron engine for thermal stability
- Ideal for well insulated properties of up to 80sqm
- 3 year guarantee on storage tank and 2 years on components
- Low maintenance and no requirement for annual safety check
- Electronic water temperature control for reduced energy consumption and stable climate control

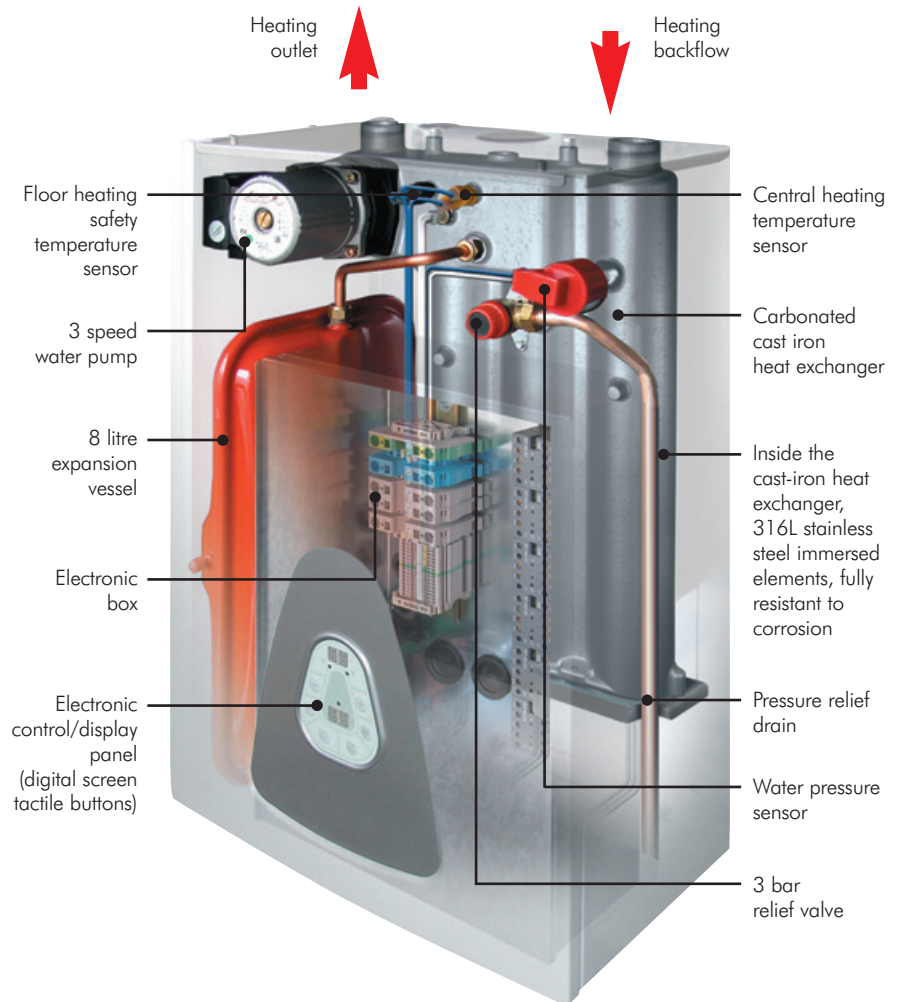
### Technical features

- Maximum power 4-12kW
- Unit can be reduced down to 10, 8, 6 or even 4kW on installation, to fit the heat requirement of the property
- Includes 8 litre expansion vessel; 3bar pressure relief valve and 3-speed pump for quick easy install
- 7-segment digital displays of temperature and pressure
- Graduated power On/Off reduces instantaneous loads
- Frost protection 5°C minimum system temperature
- 5 litre water storage
- Pump protection, prevents pump sticking
- Stainless steel elements
- Maximum operating pressure 2.5 bar
- Top or bottom cable entry



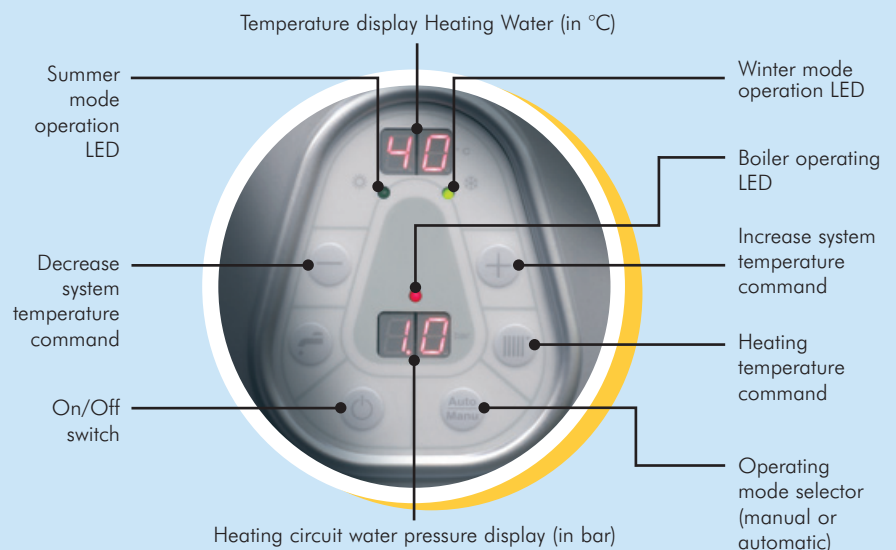
# with Ascari<sup>®</sup> you get the whole lot in one box

**The Ascari is a completely self contained boiler. No need for add-ons, it comes complete in one, ready to mount wall unit.**



## Simple to use controls with digital display

- Intelligent operation for comfort and reduced energy usage.
- System water temperatures can be selected at install or the Ascari can auto adapt to the requirements of the property, adjusting the water temperature to the optimum setting to reduce energy consumption and smooth the property temperature.



# flexible options

The Ascari boiler may be used as a supplement or back-up facility for alternative energy systems (ie. heat pumps, solar or pressurised solid fuel systems).

The Ascari may be used as an additional heat source to raise the water temperature to a higher degree than that provided by the original heat source.

## Parallel Operation

For large properties multiple boilers may be installed in parallel.

## Symbols:

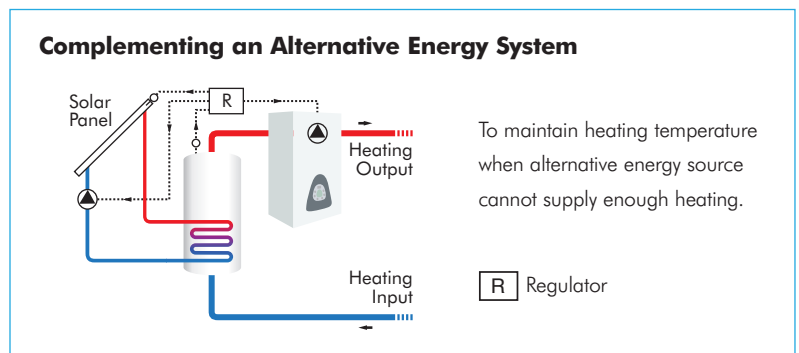
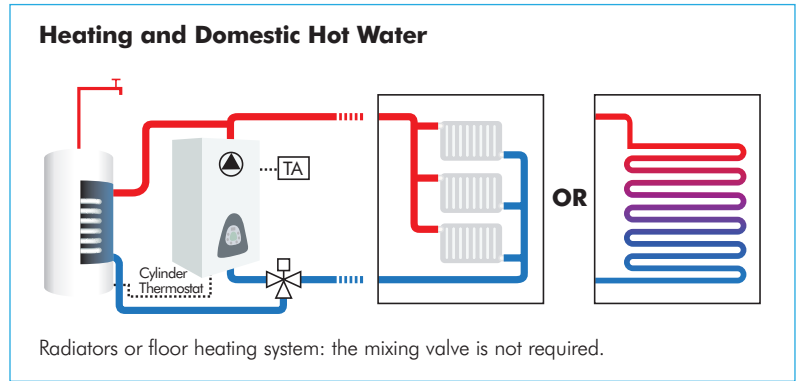
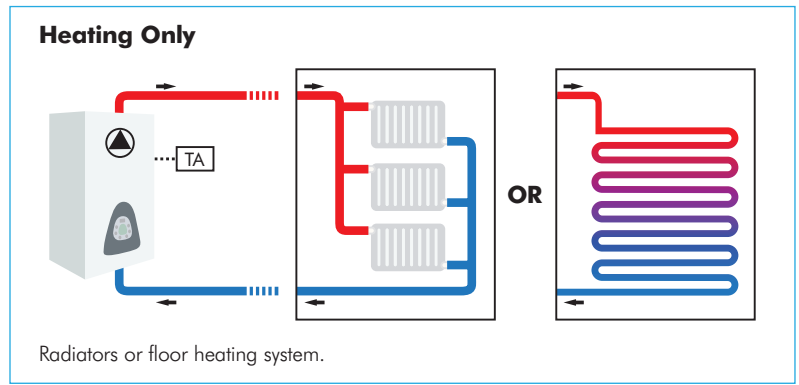


# the complete hot water system too

The Ascari central heating boiler fits simply into a hot water system and because its electric, installation couldn't be easier.

Ascari is suitable for connection to an indirect hot water cylinder, however to improve system efficiency it is recommended that hot water is supplied by a separate direct electric unvented cylinder like the Dimplex SCx range. This reduces cost of installation, improves thermal efficiency and allows the boiler to continually regulate the temperature of the property.

For more information on the SCx range please refer to pages 10 and 11.



# Ascari<sup>®</sup> technical specifications

## Controls

The Ascari boiler has been designed to provide the highest temperature stability and energy consumption possible from an electric boiler. Its 5 litre storage and high thermal mass reduce system cooling, while its electronic temperature and 'auto-adaptability' function keep the room at a stable temperature using the least amount of electrical energy.

The optional outside temperature sensor (Ascari MA12 comfort model only) allows the boiler to quickly adapt to the external temperatures, increasing heat output on cooler days and reducing energy on warmer days, keeping temperature and energy completely under control.

## Running Costs

The Ascari boiler is fitted with an 'auto-adaptability' function that operates the central heating system according to the heat characteristics of the property, minimising energy consumption and running costs.

The Ascari is designed for use with extended hours off-peak tariffs. Please ask your energy supplier for details of optimum tariffs.

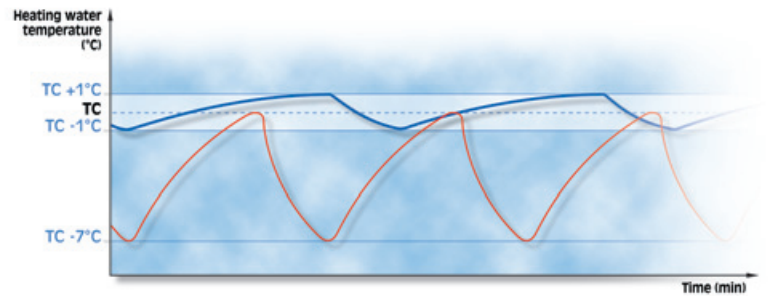
## Filling Loop

The Dimplex Ascari is not fitted with a filling loop. Any filling loop being fitted should comply with the water supply (water fittings) regulations 1999 Section G24.1 and G24.2. A filling loop should be fitted at some point to allow the CH system to be filled.

## Electrical

The Ascari should be permanently connected to the electrical supply through a double linked switch with minimum breaking capacity for the loading. All wiring should be installed to conform to the current edition of the IEE wiring regulations. The Ascari boiler can be controlled from a switched live connection to the boiler from the thermostat and/or programmer.

## Heating Circuit Water Temperature Regulation



TC = Requested temperature



Ascari modulating electronic regulation

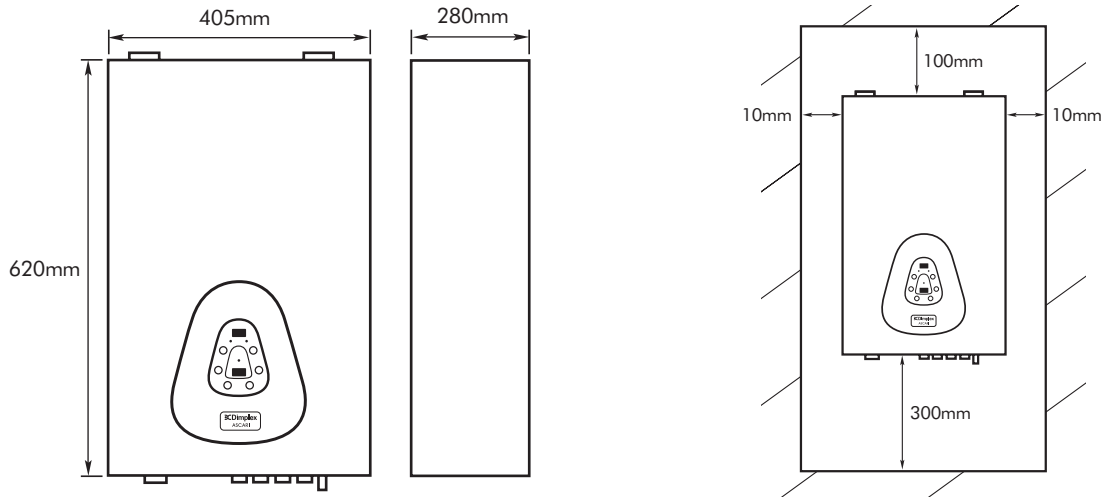


Other regulation

Ascari provides a stable water temperature without continuous power calls.



## Dimensions and Installation Requirements



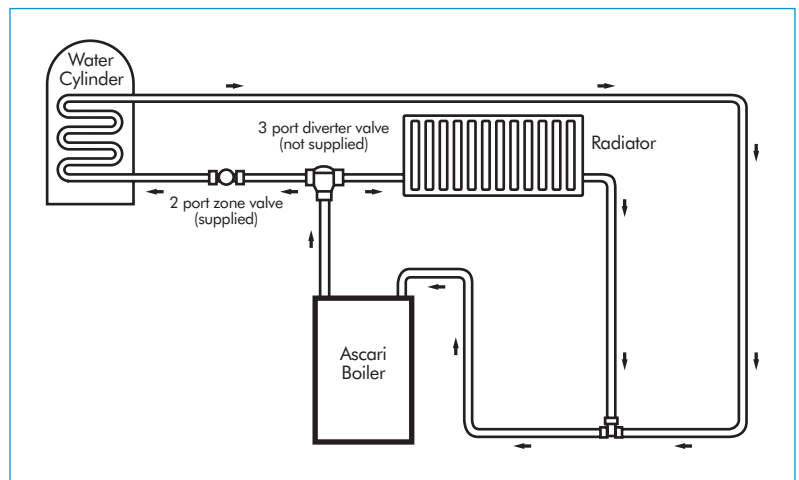
## Technical Data

Model no:	ASCMA12	Nominal pressure:	2bar (0.2MPa)	Maximum flow rate:	2400 litre/h
Output power:	4 – 12kW @230V 50Hz	Maximum pressure:	3bar (0.3MPa)	Weight:	38kg
Power storage:	4	Water temperatures:	21 -80°C	Security class:	IPX1
Water storage:	5 litres	Minimum flow rate:	350 litre/h (when using TRV's bypass radiator must be filled to accommodate the pumps over-run facility)		
Water connections:	1" (26/34)				
Minimum pressure:	0.5bar (0.05MPa)				

## Hot Water Connection

Where a hot water cylinder is to be connected to the boiler, the no-volt contacts of the cylinder thermostat should be rooted to the boiler.

Water sent to the cylinder coil is provided at 80°C independent of the central heating system. To use this function a W-plan system should be used, with no mid position valve operation.



# unvented cylinders

## the SCx water heater range

The Dimplex SCx cylinders supply all the hot water required for the modern home, providing rapid fill baths and invigorating showers to en-suite bathrooms and other domestic appliances at the same time.

### For the User

- Mains pressure hot water
- Fast filling baths
- Powerful invigorating showers
- Simultaneous supply of water to all bathrooms
- No cold water storage tank required, freeing up valuable living space
- Long life low maintenance hot water supply
- Backed by a big name in domestic heating
- Option of a brushed stainless steel outer case

### For the Installer

- Duplex steel inner cylinder with 25 years guarantee
- Internal expansion for quick easy installation
- Tough plastic leather grain external coating resists scratching
- No anode – reduces service requirements
- CFC free foam injected insulation
- 3kW incoloy 825 immersion(s) for longer life
- Light-weight for easy handling to site
- Water inlet diffuser prevents cold and hot water mixing



SCx in standard dove grey with optional immersion cover

SCx in brushed stainless steel (special order)



SCx130i with Ascari



Inlet Diffuser

# SCx technical specifications

## Immersion

3kW @240V 50Hz (permanent connection to supply through a double pole linked isolated switch with minimum breaking capacity of 13A).

## Outer Casing

Dove Grey leather grain plastic coated steel.  
Option of a brushed stainless steel outer case, please contact us for further details.

## Insulation

CFC free 45mm ODP zero fire retardant.

## Water Supply

1.5bar 15 litres per minute minimum,  
16bar maximum.

## Pressure Tests

All tested to 15bar.

## Inner Cylinder

Duplex 2304L 1.4362 EN10088 stainless steel.

## Primary Coil

22mm stainless steel pipe.

## Hot Water Outlet

22mm stainless steel pipe.

## Thermostat

Direct units

– Integral immersion thermostat and cut-out.

Indirect units

– External dual thermostat and cut-out.

## Safety kit

Pressure reducing valve, expansion relief valve; tundish; motorised valve (indirect only) supplied.

## T&P

Factory fitted 7bar 90°C.

## Expansion

Internal air gap

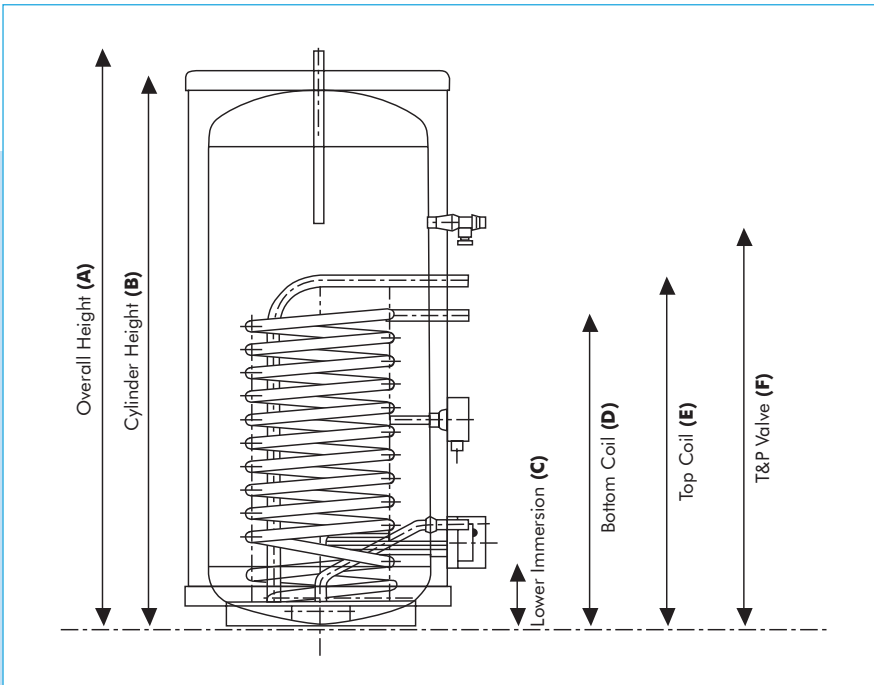
– no additional expansion vessel required.

## Approvals



## Guarantee

25 years for inner cylinder; 2 years on immersion (excluding affects of limescale) and 5 years on other components.



Unvented Cylinder Requirements		
Property	Indirect	Direct
1 bed / 1 shower	SCx80i	SCx130d
2 bed / 1 bath & 1 shower	SCx130i	SCx150d
3 bed / 1 bath & 2 shower	SCx150i	SCx175d
4 bed / 1 bath & 3 shower	SCx175i	SCx215d
4 bed / 1 bath & 3 shower	SCx215i	SCx255d
5 bed / 2 bath & 2 shower	SCx255i	SCx305d
6 bed / 2 bath & 3 shower	SCx305i	SCx305d

Weight (Kg)				
Capacity	Direct empty	Direct Full	Indirect Empty	Indirect Full
80L	27	142	29	143
130L	30	185	32	187
150L	32	207	35	210
175L	37	237	40	240
215L	43	258	48	264
255L	50	305	55	311
305L	59	364	65	370

Coil Size (Indirect Only)	
SCx80i	7kW
SCx130i / SCx150i	14kW
SCx175i / SCx215i	17kW
SCx255i / SCx305i	17kW

Product	Dimensions relative to floor level											Performance		
	Capacity (litres)	Cylinder Diameter (mm)	Overall height (mm) (A)	Cylinder height (mm) (B)	Immersion	Lower Immersion (mm) (C)	Top Immersion (mm)	Bottom Coil (mm) (D)	Top Coil (mm) (E)	T&P Valve (mm) (F)	Cold Inlet (mm)	Heat-up (mins)	Reheat Time (mins)	Heat loss in 24hrs (kw/24hr)
<b>DIRECT</b>														
SCx80d	80	574	681	636	1	188	N/A	-	-	347	230	64	53	1.12
SCx130d	130	574	973	928	2	188	521	-	-	618	230	115	90	1.50
SCx150d	150	574	1101	1056	2	188	640	-	-	737	230	138	104	1.82
SCx175d	175	574	1258	1213	2	188	786	-	-	883	230	167	124	2.10
SCx215d	215	574	1500	1455	2	188	1011	-	-	1108	230	212	153	2.59
SCx255d	255	574	1768	1723	2	188	1259	-	-	1356	230	263	184	2.73
SCx305d	305	574	2044	1999	2	188	1516	-	-	1613	230	313	220	2.88
<b>INDIRECT</b>														
SCx80i	80	574	681	636	1	188	-	283	283	347	230	33	23	1.12
SCx130i	130	574	973	928	1	188	-	483	558	618	230	28	21	1.50
SCx150i	150	574	1101	1056	1	188	-	483	558	737	230	33	24	1.82
SCx175i	175	574	1258	1213	1	188	-	683	758	883	230	27	24	2.10
SCx215i	215	574	1500	1455	1	188	-	683	758	1108	230	35	30	2.59
SCx255i	255	574	1768	1723	1	188	-	683	758	1356	230	42	35	2.73
SCx305i	305	574	2044	1999	1	188	-	683	758	1613	230	50	42	2.88

## After Sales Service

After sales service if required is absolutely no problem with Dimplex – we have a network of appointed Service Agents spread throughout the Country who are qualified and trained to repair or service any of our appliances.

## Bathrooms

Any electrical appliances installed in a bathroom should be fitted by a competent electrician in accordance with the current I.E.E. Regulations.

## Specifications

Dimplex policy is one of continuous improvement; the Company therefore reserves the right to alter specifications without notice. Although every care has been taken in the reproduction of product finishes in this brochure, the colour photographs should be taken only as a guide. The information contained in this brochure is correct at the time of printing. You are advised to consult your Dealer before purchasing.

## Installation Guidance

This brochure is designed to assist you with your choice of Dimplex products and it is not intended as an installation guide. For safety, products should only be installed by a competent person, in accordance with current regulations and the manufacturers instructions. If you require further advice concerning the installation of our products – especially where the installed dimensions may be critical, please contact our customer service department or consult your installer.

## The Dimplex Range

Dimplex offers the widest range of electric space and water heating products in the world – nearly 400 – to meet almost any heating need. In addition to this publication, we have a wide range of brochures for both domestic and commercial applications.

Choose from:



Water heating brochure



Commercial brochure



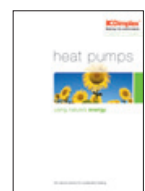
Range brochure



Developers brochure



Building regulations brochure



Heat Pumps brochure



Fires brochure



Portables brochure

## Useful Numbers

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Brochure line: 01489 773063  
Main Reception: 01489 773050  
**Email:** [customer.services@glendimplex.com](mailto:customer.services@glendimplex.com)  
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