

hurlcon hydronic heating

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**Hurlcon
Fan
Convectors**



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hurlcon hydronic heating

Versatility is the key word...

surrounding the heating and cooling functions that can be achieved by installing a Hurlcon fan coil convector system. Whatever the application, be it office, school, motel or hospital, there is a Hurlcon unit that will suit your needs in a commercial environment. Our range of convector systems, designed for free-air discharge and short length ducting, is the culmination of over 20 years experience in the field of

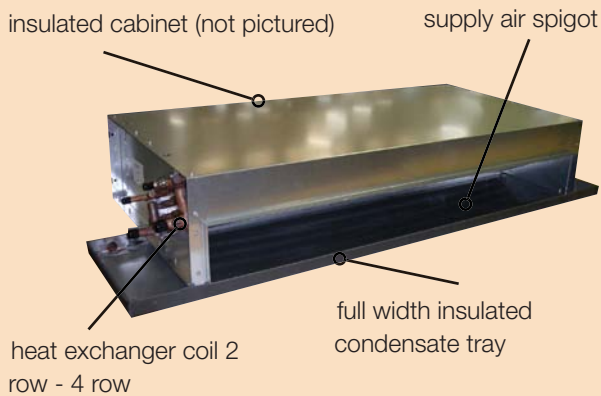
hot and chilled water heat transfer equipment. Each Hurlcon unit has a three speed fan, with provision made for internal valving and thermostatic controls. The ceiling and console models have a three speed fan control switch inbuilt.

How to choose a unit for your requirements

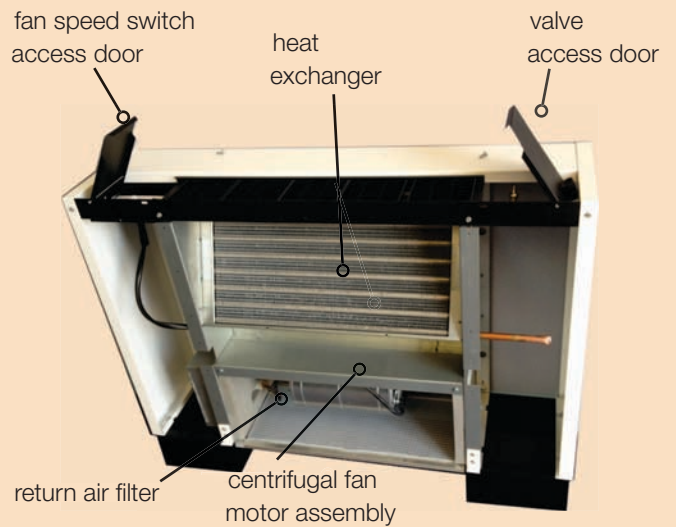
- 1 SELECT HEATING REQUIREMENT OR COOLING REQUIREMENT AND CAPACITY*
- 2 SELECT TYPE:
CONSOLE, CEILING OR HIDEAWAY

- 3 SELECT SIZE:
REQUIRED CHOICE OF FOUR SIZES
- 4 SEE DETAILED SPECIFICATIONS

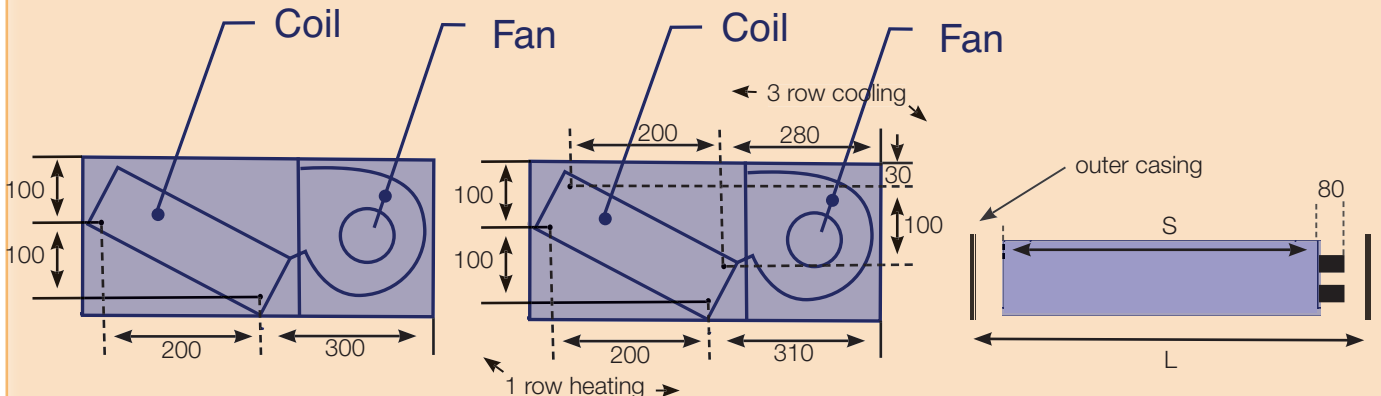
Hideaway horizontal type



Console model RH



Coil dimensions



NOTE: Dimensions are nominal and will vary slightly according to coil circuits refer to unit drawings on page 3

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1 HEATING OR COOLING REQUIREMENT AND CAPACITY

Heating Capacities Standard Water

Coil 2 row - 472 fins per metre.

Conditions:

entering air	18°C
entering water	82°C
leaving water	71°C



Model	Fan Speed	Output kW	Air Flow l/s	Water	
				Flow l/s	pd kPa
150/2	High	6.7	155	0.15	16.7
	Med	6.2	135	0.13	12.6
	Low	4.9	100	0.11	8.5
300/2	High	11.9	275	0.26	7.6
	Med	10.1	240	0.22	5.7
	Low	7.5	160	0.16	3.4
450/2	High	18.8	410	0.41	24.8
	Med	15.6	350	0.34	17.9
	Low	12.4	250	0.27	11.8
600/2	High	23.9	550	0.52	7.0
	Med	19.1	440	0.42	4.6
	Low	14.8	300	0.32	2.9

Cooling & Heating Capacities

Coil 4 row (3 cooling/1 heating) - 472 fins per metre.

Conditions:	cooling	heating
entering air	26DB°C	19WB°C
entering water	7°C	82°C
leaving water	14°C	71°C

Model	Fan Speed	Output kW		Air Flow l/s	Water	
		Total	Sen		Flow l/s	pd kPa
150/3/1	Cooling High	2.4	1.2	125	0.08	10.2
	Heating High	3.2		125	0.07	2.0
	Heating Med	2.8		110	0.06	1.8
	Heating Low	2.5		82	0.05	1.4
300/3/1	Cooling High	3.9	3.1	250	0.14	4.5
	Heating High	5.0		250	0.11	6.6
	Heating Med	4.4		200	0.1	5.3
	Heating Low	2.5		160	0.05	4.5
450/3/1	Cooling High	6.2	5.0	380	0.2	4.8
	Heating High	8.8		380	0.19	3.6
	Heating Med	7.5		325	0.16	3.0
	Heating Low	5.8		230	0.13	1.8
600/3/1	Cooling High	8.5	6.6	475	0.28	10.3
	Heating High	11.8		475	0.26	8.0
	Heating Med	9.4		380	0.2	5.5
	Heating Low	7.4		270	0.16	3.5

2 CONSOLE CEILING & HIDEAWAY MODELS

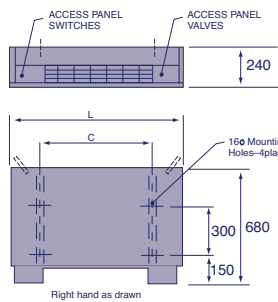
CONSOLE MODEL



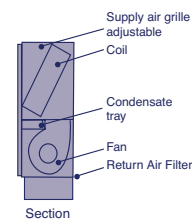
This is a floor mounted unit that has particular application in any large domestic area, especially in old style homes that have high ceilings. It is equally suitable for use in school classrooms or hospital wards and offices.

3 SELECT A SIZE

CONSOLE MODEL



Model	150	300	450	600
L	900	1100	1500	1800
C	530	730	1130	1430

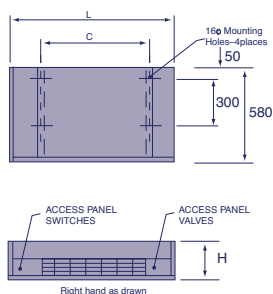


CEILING MODEL

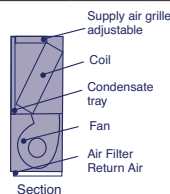


Installation of a ceiling unit can be made wherever there is lack of wall space or a need for the unit to be out of reach for safety. Giving a good distribution of output, this model is also ideally suitable for large situations such as libraries, lecture theatres and laboratories. This unit can be either directly mounted to or hung from the ceiling.

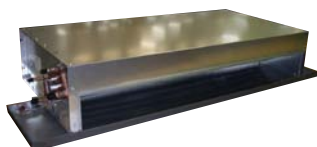
CEILING MODEL



Model	150	300	450	600
L	900	1100	1500	1800
C	530	730	1130	1430
H	Heating Units		240	
	Heating Units		260	

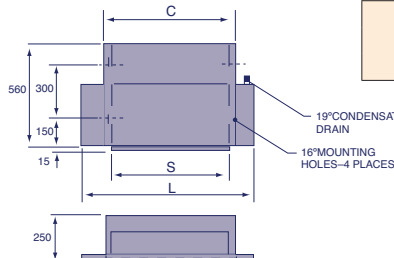


HIDEAWAY MODEL

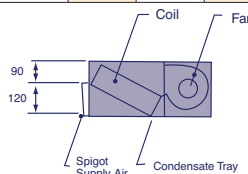


Here again for appearance sake, this unit is designed for installing either in the ceiling or under the floor in most commercial situations. Fully self contained in a simple galvanised box, the unit can be custom installed to allow for close proximity ducting as required.

HIDEAWAY MODEL - HORIZONTAL STYLE ALSO AVAILABLE IN VERTICAL STYLE



Model	150	300	450	600
S	500	700	1100	1400
L	800	1100	1400	1700
C	530	730	1130	1430



4 DETAILED SPECIFICATIONS

SERIES EC - CONSOLE & CEILING UNITS

A range of high performance, low noise level, hot and/or chilled water fan convectors suitable for floor mounting or ceiling mounted applications. Of similar cross section, the units are available in four lengths giving a wide range of heating and cooling capacities.

Also available as a HIDE-AWAY unit for use in concealed locations with short length ductwork only.

FAN DATA

Air quantities shown are with a two row coil as fitted to a standard console or ceiling model with a return air filter and supply air grilles, the air quantity for a four row coil is as shown in the "Cooling & Heating Capacities" chart on page 3.

Air Quantities				Fans & Motors		
Model	Fan Speed			# Fans	# Motors	Input Watts
	High	Med	Low			
150	155	135	100	1	1	200
300	275	240	160	2	2	400
450	410	350	250	3	3	600
600	550	440	300	4	4	800

POWER SUPPLY

240 volts single phase, 50 hertz, capacitor start/run motor. The fan is dynamically balanced for maximum efficiency. Units are not suitable for operating with steam or very high temperature water.

BASE UNIT

All units have a purpose-designed Galfam steel casing, well engineered to give reliable performance for many years. All major components are positively mounted to prevent the development, or transmission of noise. All serviceable components are readily accessible for cleaning purposes. Cooling models are fitted with an insulated condensation tray to cover the coil, the return bends, headers and any normal valve assembly fitted within the unit. All units are supplied insulated for noise and condensation with acoustic foam. Please specify handling when ordering.

CABINET

The console and ceiling mounted units are fitted with an attractive steel cabinet, powder coated in Dulux Horizon White, with contrasting black fittings. Standard fittings are adjustable supply air grilles, access hinged doors to the fan speed control switch and water side control valves. On the console model a plinth is fitted at the base of the unit.

HEAT EXCHANGER COILS

The heat exchanger coil has a primary surface of 12.7mm diameter copper tubes. The secondary surfaces are aluminium ripple fins at 472 fins per meter spacing, giving high heat transfer. The fins are mechanically bonded to the copper tube to give a positive heat conduction from tube to fin. Two coil configurations are available for heating and/or cooling systems.

COIL 1: Heating two rows with two pipe connections

COIL 2: Heating plus cooling, one row heating plus three rows cooling with four pipe connections.

Coil connections are as follows, being plain copper tails outside diameter in mm.

Model	150	300	450	600
Coil 1	15	20	20	20
Coil 2 - Heat	15	15	15	15
Coil 2 - Cool	15	20	20	20

Refer coil dimension drawings page 2 for pipe positions.

WATER SIDE OPTIONS

Standard connection to all coils are plain copper tails. Factory fitted valves are available at additional cost (see below).

CONDENSATION TRAYS

Condensate trays are fitted to all cooling models. Ceiling hung units have horizontal condensate tray drains and console units have vertical condensate tray drains. All drains are 20mm diameter copper tube, no "S" or "P" traps are included.

CONTROL VALVE OPTIONS

Automatic non-electric thermostatic control valves can be installed within the cabinet of all models giving accurate and responsive heating control. Please refer to our technical department for full details on the Oventrop thermostatic valve system.

ELECTRICAL CONTROLS

Units come standard with a 3 pin plug. Field wiring for electrical connection is to a terminal strip mounted internally on the opposite side to the plumbing (console, ceiling units only). Standard electrical fan control is a four position rotary speed control switch. The switches give three fan speeds plus off, and is accessible from the top hinged door mounted next to the supply air grille. Please refer to the wiring diagrams for full details. Electrical installation to the terminal strip should comply to the local regulations and should be of good electrical practices. For heating units only an optional low water temperature cut out switch (LTC) can be fitted to stop the fan when

4 DETAILED SPECIFICATIONS

the flow water temperature falls below 40 degrees Celsius, the fan will restart when the water temperature rises above this temperature.

FILTERS

An aluminium framed lint stopping Saran net filter is supplied mounted in the return air. The filter is able to be readily removed for periodic cleaning.

PHYSICAL DIMENSIONS

Please refer to page 2 for all relevant details. Approximate weights (four row coil) and coil water content.

Model	Console Weight (kg)	Hideaway Weight (kg)	Coil Water Content	
			4 row	2 row
150/3/1	28	19	1.8	1.0
300/3/1	35	26	2.6	1.2
450/3/1	49	40	4.3	2.1
600/3/1	58	49	5.5	2.7

GUIDE SPECIFICATIONS

Units shall be model, Ceiling/Console/Hideaway type fan coil units as indicated on the plans and specifications.

COOLING CAPACITY

of the units shall be _____ kWatts total and _____ kWatts Sensible or greater at conditions of CDB _____ CWB entering air temperature and with a chilled water flow temperature of C at a flow rate of _____ l/s Number of rows of coil 3.

HEATING CAPACITY

of the units shall be _____ kWatts or greater at a condition of _____ degrees C entering air , temperature and with a hot water flow rate of _____ l/s. Number of rows of coil: 1 Row Coil, Standard Hot Water Heating integral with Cooling coil, 4 Pipe Convections, 2 Row Coil Standard Hot Water Heating.

BASIC UNIT

shall be complete with water coil, one or more centrifugal fans and of heavy galvanised steel construction. Units for cooling shall be fitted with a condensate tray. Horizontal unit height shall not exceed 240mm. The fan and motor assembly shall be easily removable for servicing. The coils to be constructed of aluminium fins mechanically bonded to 12.7 mm diameter tube with plain copper connections. Coils to be leak tested to 1,000 kpa air pressure.

MOTORS

Shall be 3 speed single phase capacitor type with ball bearings.

FANS

shall be centrifugal, double inlet forward curved type.

EXPOSED CABINETS

shall be constructed of interchangeable panels, coated in Dulux Horizon White powder coat finish. The cabinet front panel shall be removable to allow easy installation and service to all major components. Console units shall be fitted with a plinth and ceiling units with back panels. Access to valves and speed controls are to be through hinged access doors adjacent to the adjustable supply air grilles.

FILTERS

All exposed cabinet units to be fitted with Saran net filter medium, fitted in aluminium frames.

WARRANTY GUIDE

1 year warranty against manufacturing defects



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ASTRALPOOL 

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