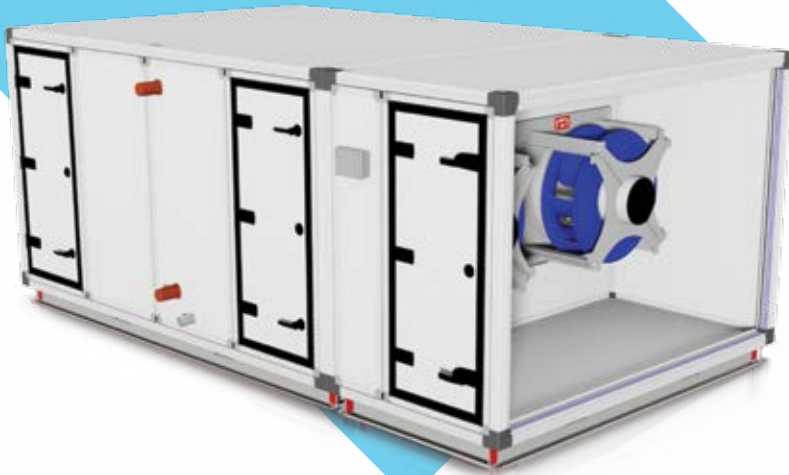


# MODUtherm

Modular Air Handling Units with EC fan motors.  
Up to 19,000 Litres/Sec.



MODUtherm® fully integrates multiple technologies to minimise energy consumption and deliver reliable, trouble-free performance. Their modular design and construction reduces overall unit dimensions making them ideal for plant rooms with limited space. The high quality range features state-of-the-art high efficiency EC plug fans and the latest airtight casing construction.

MODUtherm's innovative design incorporates EC fans that operate in parallel and are mounted adjacent to each other on an internal wall. The design provides inherent fan redundancy and will continue to operate even if there is a fault with one fan. The fans can be controlled by MODBUS or 0-10V signal and run independently or integrated into most building management systems.

The units are constructed with 50mm thick insulated panels that are fitted with the revolutionary AHU CLIP 'n' LOCK fastening system. This airtight system includes a synthetic cord and aluminium capping that give the unit a strong, rigid structure and allows the panels to be removed easily for maintenance and cleaning. AHU CLIP 'n' LOCK also provides a high thermal performance which reduces condensation and minimises energy loss. The high quality modular casing construction achieves both the highest degree of air tightness, rating "L1", and the highest resistance to condensation, rating "TB1", as defined in BS EN 1886:2007.

## Features

- High quality double skin Colorbond 50mm polyurethane panel construction that complies with National Construction Code insulation specification J5.2
- Panels have zero ozone depleting potential (0% ODP)
- High efficiency EC plug fans with integrated speed control, current overload and motor phase protection, reverse polarity, locked rotor protection and soft starting
- EC plug fan motors exceed EU's minimum level of efficiency for electric motors (IE4)
- To minimise on-site installation time fan motors are pre-wired to a junction box
- Chilled water cooling coils available with 3, 4, 5, 6, 8 or 10 rows and 315, 394 or 472 fins per metre
- Hot water heating coils available with 1 or 2 rows and 315, 394 or 472 fins per metre
- Cooling and heating coil separation with access door also available
- Matching filter plenums are available
- Upper and lower condensate tray manufactured from quality 304 grade stainless steel (316 grade stainless steel option also available)

## Construction

Units incorporate the unique AHU CLIP 'n' LOCK system where the removable casing panels clip into a continuous aluminium locking strip with an EPDM closed cell foam underseal. The locking strip is secured into position with a continuous synthetic cord, forming an airtight seal. MODUtherm units include a modular, thermally broken aluminium frame construction with double skin, 50mm thick polyurethane-filled panels. The unit case has a Class L1 leakage rating and TB1 thermal bridging rating. Casing construction complies with National Construction Code insulation specification J5.2 (all areas except for alpine areas).

Each unit is complete with a lift-off access panel on the coil pipe side. Access to the fan section and filter plenum is by hinged door. The upper and lower condensate trays are of a non-ponding design manufactured from grade 304 stainless steel.

Units incorporate multiple, high efficiency EC plug type fans mounted adjacent to each other on an internal wall. The number of fans vary depending on the model.

Unique AHU  
Clip 'n' Lock System



## Fans

- EC motors are 3 phase 415V 50-60Hz
- Bearings are sealed for life ball type
- Integrated EC controller provides infinite speed control
- IP54-rated

## Internal Thermal Protection

Integral thermal overload protection is supplied as standard. Protection will not prevent fans from functioning in fire mode as required by AS/NZS1668.1:2015

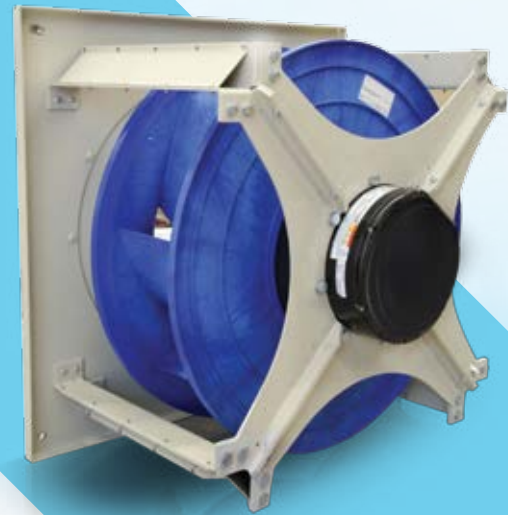
## Suggested Specification

The Air Handling Units shall be of the MODUtherm series as designed by Fantech and be of the model numbers shown on the schedule/drawing.

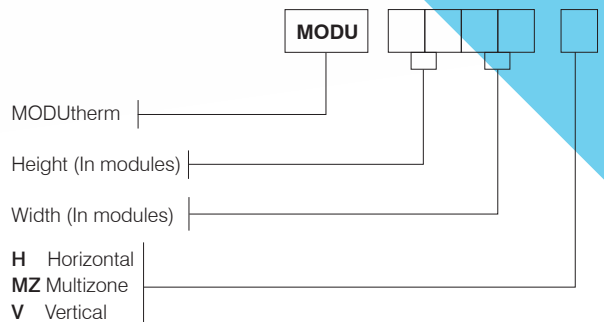
Units shall incorporate a modular, thermally broken, aluminium frame construction with double skin, 50mm thick, polyurethane filled panels that achieve the highest degree of air tightness, rating "L1", and the highest resistance to condensation, rating "TB1", as defined in BS EN 1886:2007. Panels shall also comply with the National Construction Code insulation specification J5.2 and have zero ozone depleting potential (0 % ODP).

Unit casings shall incorporate AHU CLIP 'n' LOCK removable panels that are sealed airtight by the use of a continuous clip in aluminium locking strip with a continuous EPDM closed cell foam underseal. The panels are locked into the strip with a continuous synthetic cord. The panels shall be removable without the need to remove screws or fasteners. Cooling and heating capacities and external static pressures shall be as shown on the schedule.

Units shall incorporate multiple EC plug fans operating in parallel with motors exceeding EU's minimum efficiency level (IE4) and complying with IP54 protection. Fans shall be pre-wired to an external terminal box.



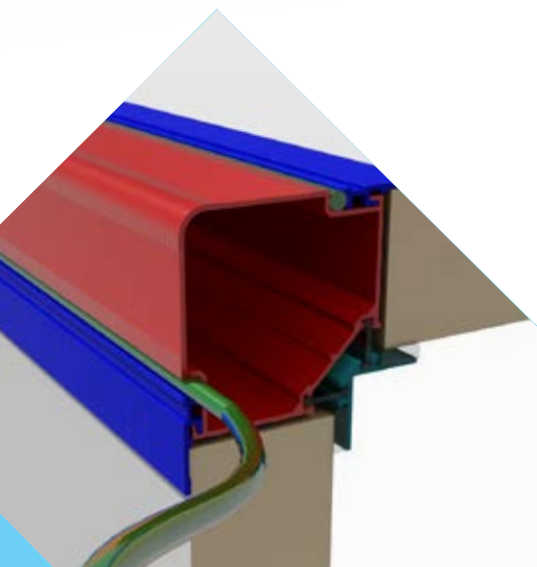
## How to order



Select unit based on air flow.

Fantech to complete selection with customer, based on the required cooling coil and heating coil data.

One Module = 305mm



# Ancillary Equipment

Available for the MODUtherm & MINItherm Units

## Magnehelic® Differential Pressure Gauges

Magnehelic's easy to read gauges measure filter resistance, air velocity and pressure drop in a range of applications with high accuracy. They feature a mirrored overlay as standard in order to eliminate any parallax error when taking measurements.

- IP67 for protection against dust and water ingress
- Certified with 6 point calibration



## AHU Lights

Lights wired to individual switches on the exterior of Air Handling Unit. These robust lights come with Polypropylene base mount, glass diffuser and are protected with an external wire frame.

- IP44 for protection against water ingress
- 8W compact fluorescent bulb equivalent to 40W incandescent



## Polycarbonate Viewports

Clear Polycarbonate double viewport is mounted to the AHU door allowing internal components to be viewed without the need to shut down unit during operation.

- 220mm diameter viewport with rubber gasket seals
- Flush mounted to the inside wall



## Weatherproof Roof

Sheet metal roof allows protection from the weather. Includes 90° ridges to help clear water.

- Made from 0.8mm powder coated sheet metal
- Support frame angled away from the access side of the air handling unit





## Technical Data

Model Number	Air Flow	External Static Pressure	Total Cooling Capacity	Sensible Cooling Capacity	Heating Capacity	Coil Quantity	No. of Fans	Absorbed Power	Fan Speed	Motor Power	Motor Full Load Current
	L/s	Pa	kW	kW	kW			kW	rps	kW	Amps
MODU0202H / MZ / V	597	450	17.3	11.4	11.8	Single	1	0.74	2888	0.8	3.7
MODU0203H / MZ / V	984	450	30.5	19.7	21.1	Single	1	1.26	2884	2.5	3.8
MODU0204H / MZ / V	1372	450	42.2	27.4	30.3	Single	1	1.65	2110	2.4	3.7
MODU0303H / MZ / V	1600	450	49.5	32.0	34.3	Single	1	1.94	2246	2.4	3.7
MODU0205H / MZ / V	1759	450	53.6	34.9	39.4	Single	1	2.17	2348	2.4	3.7
MODU0304H / MZ / V	2230	450	68.7	44.5	49.2	Single	1	2.68	1708	5.4	8.2
MODU0305H / MZ / V	2860	450	87.2	56.7	60.3	Single	1	3.58	1917	5.4	8.2
MODU0404H / MZ / V	3086	450	95.0	61.6	68.1	Single	1	3.58	1563	5.0	7.7
MODU0306H / MZ / V	3490	450	104.2	68.2	74.7	Single	1	4.11	1653	5.0	7.7
MODU0405H / MZ / V	3958	450	120.6	78.4	88.6	Single	2	2.38 x 2	1635	5.4 x 2	8.24 x 2
MODU0307H / MZ / V	4116	450	125.4	81.6	90.8	Single	2	2.47 x 2	1656	5.4 x 2	8.24 x 2
MODU0406H / MZ / V	4829	450	151.7	97.7	103.4	Single	2	2.91 x 2	1767	5.4 x 2	8.24 x 2
MODU0505H / MZ / V	4841	450	147.5	95.9	102.1	Dual	3	2.92 x 3	1551.0	5.4 x 3	8.24 x 3
MODU0407H / MZ / V	5701	450	173.7	113.0	125.8	Single	2	3.29 x 2	1517	5.0 x 2	7.68 x 2
MODU0506H / MZ / V	5907	450	176.3	115.4	126.5	Dual	2	3.42 x 2	1538	5.0 x 2	7.68 x 2
MODU0408H / MZ / V	6572	450	203.4	131.6	145.0	Single	2	3.83 x 2	1605	5.0 x 2	7.68 x 2
MODU0507H / MZ / V	6973	450	208.1	136.2	149.3	Dual	3	2.8 x 3	1738	5.4 x 3	8.24 x 3
MODU0606H / MZ	6980	450	208.3	136.4	149.5	Dual	3	2.8 x 3	1739	5.4 x 3	8.24 x 3
MODU0508H / MZ / V	8039	450	248.8	161.0	177.4	Dual	4	2.42 x 4	1643	5.4 x 4	8.24 x 4
MODU0607H / MZ	8239	450	251.1	163.3	181.8	Dual	3	3.17 x 3	1498	5.0 x 3	7.68 x 3
MODU0509H / MZ	9104	450	274.6	179.2	203.8	Dual	3	3.52 x 3	1554	5.0 x 3	7.68 x 3
MODU0608H / MZ	9499	450	294.0	190.2	209.6	Dual	3	3.68 x 3	1580	5.0 x 3	7.68 x 3
MODU0707H / MZ	9815	450	299.1	194.5	216.6	Dual	4	2.84 x 4	1446	5.0 x 4	7.68 x 4
MODU0609H / MZ	10759	450	324.5	211.8	240.9	Dual	4	3.11 x 4	1488	5.0 x 4	7.68 x 4
MODU0708H / MZ	11316	450	339.5	221.9	249.7	Dual	4	3.26 x 4	1513	5.0 x 4	7.68 x 4
MODU0610H / MZ	12018	450	370.0	239.9	273.0	Dual	4	3.48 x 4	1548	5.0 x 4	7.68 x 4
MODU0709H / MZ	12817	450	386.6	252.3	287.0	Dual	4	3.72 x 4	1588	5.0 x 4	7.68 x 4
MODU0710H / MZ	14317	450	367.8	244.8	325.2	Dual	5	3.3 x 5	1520	5.0 x 5	7.68 x 5
MODU0711H / MZ	15818	450	447.3	298.3	359.3	Dual	6	3.04 x 6	1478	5.0 x 6	7.68 x 6
MODU0712H / MZ	17318	450	497.8	330.2	393.4	Dual	6	3.33 x 6	1524	5.0 x 6	7.68 x 6
MODU0713H / MZ	18819	450	543.9	360.0	433.6	Dual	6	3.64 x 6	1574	5.0 x 6	7.68 x 6

Air flow and coil performance are at 2.5m/s coil face velocity.  
Cooling capacities are based on 8 row 472fin/m coils with entering air conditions of 26/19°C and water temperatures of 6/12 °C.  
Heating capacities are based on 1 row 394fin/m coils with entering air at 12°C and water temperatures of 80/65 °C.  
Absorbed power, motor power and current (per fan x no of fans).  
H = Horizontal MODUtherm, MZ = Multizone MODUtherm, V = Vertical MODUtherm.



# MODUtherm

## Acoustic Data

Model Number	Air Flow	External Static Pressure	Sound Power Spectrum dB*								
	L/s	Pa		63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
MODU0202H / MZ / V	597	450	InDuct	71	66	76	74	75	74	69	65
			Breakout	60	52	58	54	52	44	36	32
MODU0203H / MZ / V	984	450	InDuct	70	70	80	78	82	80	75	72
			Breakout	59	56	63	58	58	50	41	38
MODU0204H / MZ / V	1372	450	InDuct	68	67	78	76	78	75	71	69
			Breakout	57	54	61	56	54	44	37	35
MODU0303H / MZ / V	1600	450	InDuct	69	68	82	78	80	77	73	74
			Breakout	58	54	64	57	56	46	38	40
MODU0205H / MZ / V	1759	450	InDuct	71	70	83	79	82	80	74	77
			Breakout	60	56	66	59	57	49	39	43
MODU0304H / MZ / V	2230	450	InDuct	74	79	85	83	81	77	73	68
			Breakout	63	65	68	64	56	46	38	33
MODU0305H / MZ / V	2860	450	InDuct	76	83	80	78	77	73	70	64
			Breakout	65	69	63	58	52	42	35	28
MODU0404H / MZ / V	3086	450	InDuct	74	82	87	84	81	76	74	71
			Breakout	63	68	70	64	56	44	38	35
MODU0306H / MZ / V	3490	450	InDuct	73	80	81	79	78	74	70	65
			Breakout	62	67	64	59	52	42	35	29
MODU0405H / MZ / V	3958	450	InDuct	76	83	86	84	82	78	74	69
			Breakout	65	69	69	64	56	46	39	33
MODU0307H / MZ / V	4116	450	InDuct	77	83	86	84	83	79	75	70
			Breakout	66	69	70	64	57	47	39	34
MODU0406H / MZ / V	4829	450	InDuct	76	87	83	83	81	77	73	69
			Breakout	65	73	66	63	55	44	37	33
MODU0505H / MZ / V	4841	450	InDuct	77	85	84	81	81	77	73	67
			Breakout	66	70	66	61	54	44	37	31
MODU0407H / MZ / V	5701	450	InDuct	76	86	87	86	83	78	76	72
			Breakout	66	72	70	65	56	45	39	35
MODU0506H / MZ / V	5907	450	InDuct	77	86	88	86	84	78	76	72
			Breakout	65	71	71	65	57	45	39	36
MODU0408H / MZ / V	6572	450	InDuct	78	85	93	88	86	79	78	76
			Breakout	67	71	76	68	59	47	42	39
MODU0507H / MZ / V	6973	450	InDuct	79	84	91	88	86	82	78	74
			Breakout	68	69	74	67	59	49	41	36
MODU0606H / MZ	6980	450	InDuct	79	84	91	88	86	82	78	74
			Breakout	68	69	74	67	59	49	41	36
MODU0508H / MZ / V	8039	450	InDuct	79	86	89	87	86	82	78	72
			Breakout	68	72	72	66	58	48	40	35
MODU0607H / MZ	8239	450	InDuct	78	88	87	86	84	79	76	72
			Breakout	67	74	70	65	56	46	39	35
MODU0509H / MZ	9104	450	InDuct	78	87	91	88	86	80	78	75
			Breakout	67	73	74	67	58	46	41	37
MODU0608H / MZ	9499	450	InDuct	79	86	93	89	86	80	79	76
			Breakout	68	72	76	67	59	47	41	38
MODU0707H / MZ	9815	450	InDuct	81	88	96	91	89	82	81	79
			Breakout	70	73	79	70	61	48	43	41
MODU0609H / MZ	10759	450	InDuct	79	90	88	88	85	81	78	73
			Breakout	68	76	71	66	57	47	40	36
MODU0708H / MZ	11316	450	InDuct	79	89	89	88	86	81	78	74
			Breakout	68	75	73	66	58	47	40	37
MODU0610H / MZ	12018	450	InDuct	80	88	92	90	87	81	79	76
			Breakout	69	74	76	67	59	47	41	38
MODU0709H / MZ	12817	450	InDuct	81	88	95	91	88	82	81	78
			Breakout	70	74	79	69	60	48	43	40
MODU0710H / MZ	14317	450	InDuct	80	90	91	90	87	82	80	76
			Breakout	69	76	74	67	59	47	41	37
MODU0711H / MZ	15818	450	InDuct	82	90	96	92	90	84	82	79
			Breakout	71	76	79	70	61	49	44	41
MODU0712H / MZ	17318	450	InDuct	83	89	97	94	91	85	84	82
			Breakout	73	75	80	71	62	50	45	43
MODU0713H / MZ	18819	450	InDuct	82	90	96	92	89	84	82	79
			Breakout	71	76	79	69	60	49	43	40

\* Sound power includes multiple fans where applicable.

H = Horizontal MODUtherm, MZ = Multizone MODUtherm, V = Vertical MODUtherm.



# Performance Data Heating Coil

Model Number	Air Flow	Heating Coil	Air On DB	Air Off DB	Total Capacity	Water Flow	Entering/ Leaving water temp	Water Pressure Drop	Air Pressure Drop
	L/s	Rows / (Fins/m)	°C	°C	kW	L/s	°C	kPa	Pa
MODU0202H / MZ / V	597	1 / 394	12	28.2	11.8	0.2	80 / 65	1	18.0
MODU0203H / MZ / V	984	1 / 394	12	29.5	21.1	0.4	80 / 65	3	18.0
MODU0204H / MZ / V	1372	1 / 394	12	30.1	30.3	0.5	80 / 65	7	18.0
MODU0303H / MZ / V	1600	1 / 394	12	29.5	34.3	0.6	80 / 65	3	18.0
MODU0205H / MZ / V	1759	1 / 394	12	30.3	39.4	0.7	80 / 65	13	18.0
MODU0304H / MZ / V	2230	1 / 394	12	30.1	49.2	0.8	80 / 65	8	18.0
MODU0305H / MZ / V	2860	1 / 394	12	29.3	60.3	1.0	80 / 65	2	18.0
MODU0404H / MZ / V	3086	1 / 394	12	30.1	68.1	1.1	80 / 65	7	18.0
MODU0306H / MZ / V	3490	1 / 394	12	29.5	74.7	1.2	80 / 65	3	18.0
MODU0405H / MZ / V	3958	1 / 394	12	30.3	88.6	1.5	80 / 65	13	18.0
MODU0307H / MZ / V	4116	1 / 394	12	30.1	90.8	1.5	80 / 65	5	18.0
MODU0406H / MZ / V	4829	1 / 394	12	29.5	103.4	1.7	80 / 65	3	18.0
MODU0505H / MZ / V	4841	1 / 394	12	29.3	102.1	1.7	80 / 65	2	18.0
MODU0407H / MZ / V	5701	1 / 394	12	30.1	125.8	2.1	80 / 65	5	18.0
MODU0506H / MZ / V	5907	1 / 394	12	29.5	126.5	2.1	80 / 65	3	18.0
MODU0408H / MZ / V	6572	1 / 394	12	30.1	145.0	2.4	80 / 65	7	18.0
MODU0507H / MZ / V	6973	1 / 394	12	29.5	149.3	2.5	80 / 65	3	18.0
MODU0606H / MZ	6980	1 / 394	12	29.5	149.5	2.5	80 / 65	3	18.0
MODU0508H / MZ / V	8039	1 / 394	12	30.1	177.4	2.9	80 / 65	7	18.0
MODU0607H / MZ	8239	1 / 394	12	30.1	181.8	3.0	80 / 65	5	18.0
MODU0509H / MZ	9104	1 / 394	12	30.3	203.8	3.3	80 / 65	10	18.0
MODU0608H / MZ	9499	1 / 394	12	30.1	209.6	3.4	80 / 65	7	18.0
MODU0707H / MZ	9815	1 / 394	12	30.1	216.6	3.6	80 / 65	5	18.0
MODU0609H / MZ	10759	1 / 394	12	30.3	240.9	4.0	80 / 65	10	18.0
MODU0708H / MZ	11316	1 / 394	12	30.1	249.7	4.1	80 / 65	7	18.0
MODU0610H / MZ	12018	1 / 394	12	30.6	273.0	4.5	80 / 65	14	18.0
MODU0709H / MZ	12817	1 / 394	12	30.3	287.0	4.7	80 / 65	11	18.0
MODU0710H / MZ	14317	1 / 394	12	30.6	325.2	5.3	80 / 65	14	18.0
MODU0711H / MZ	15818	1 / 394	12	30.6	359.3	5.9	80 / 65	19	18.0
MODU0712H / MZ	17318	1 / 394	12	30.6	393.4	6.5	80 / 65	24	18.0
MODU0713H / MZ	18819	1 / 394	12	30.9	433.6	7.1	80 / 65	30	18.0

Air flow and coil performance are at 2.5m/s coil face velocity.  
H = Horizontal MODUtherm, MZ = Multizone MODUtherm, V = Vertical MODUtherm.

# Performance Data Cooling Coil

# MODUtherm



Model Number	Air Flow	Cooling Coil	Air On DB / WB	Air Off DB / WB	Total Capacity	Sensible Capacity	Water Flow	Entering / Leaving water temp	Water Pressure Drop	Air Pressure Drop
	L/s	Rows / (Fins/m)	°C	°C	kW	kW	L/s	°C	kPa	Pa
MODU0202H / MZ / V	597	8 / 472	23 / 17	10.1 / 10.1	13.1	9.4	0.5	6 / 12	7	253
		8 / 472	26 / 19	10.3 / 10.3	17.3	11.4	0.7	6 / 12	11	253
		8 / 472	35 / 24	10.8 / 10.7	29.5	17.7	1.2	6 / 12	28	253
MODU0203H / MZ / V	984	8 / 472	23 / 17	9.4 / 9.3	23.6	16.4	0.9	6 / 12	27	253
		8 / 472	26 / 19	9.6 / 9.6	30.5	19.7	1.2	6 / 12	41	253
		8 / 472	35 / 24	10.7 / 10.6	48.9	29.3	1.9	6 / 12	35	253
MODU0204H / MZ / V	1372	8 / 472	23 / 17	9.4 / 9.3	32.9	22.8	1.3	6 / 12	22	253
		8 / 472	26 / 19	9.7 / 9.6	42.2	27.4	1.7	6 / 12	34	253
		8 / 472	35 / 24	11.5 / 11.4	65.0	39.5	2.6	6 / 12	17	253
MODU0303H / MZ / V	1600	8 / 472	23 / 17	9.4 / 9.3	38.4	26.6	1.5	6 / 12	26	253
		8 / 472	26 / 19	9.6 / 9.6	49.5	32.0	2.0	6 / 12	41	253
		6 / 472	35 / 24	11.5 / 11.4	75.8	46.0	3.0	6 / 12	16	253
MODU0205H / MZ / V	1759	8 / 472	23 / 17	9.3 / 9.3	42.7	29.5	1.7	6 / 12	41	253
		8 / 472	26 / 19	9.8 / 9.7	53.6	34.9	2.1	6 / 12	30	253
		6 / 472	35 / 24	10.9 / 10.9	86.1	51.7	3.4	6 / 12	32	253
MODU0304H / MZ / V	2230	8 / 472	23 / 17	9.4 / 9.3	53.5	37.1	2.1	6 / 12	23	254
		8 / 472	26 / 19	9.7 / 9.6	68.7	44.5	2.7	6 / 12	35	254
		8 / 472	35 / 24	11.5 / 11.4	105.7	64.1	4.2	6 / 12	16	254
MODU0305H / MZ / V	2860	8 / 472	23 / 17	9.3 / 9.3	69.4	47.9	2.8	6 / 12	42	254
		8 / 472	26 / 19	9.8 / 9.7	87.2	56.7	3.5	6 / 12	29	254
		8 / 472	35 / 24	10.9 / 10.9	140.0	84.1	5.6	6 / 12	30	254
MODU0404H / MZ / V	3086	8 / 472	23 / 17	9.4 / 9.3	74.1	51.3	2.9	6 / 12	21	253
		8 / 472	26 / 19	9.7 / 9.6	95.0	61.6	3.8	6 / 12	33	253
		8 / 472	35 / 24	11.5 / 11.4	146.2	88.7	5.8	6 / 12	15	253
MODU0306H / MZ / V	3490	8 / 472	23 / 17	9.4 / 9.3	83.8	58.0	3.3	6 / 12	32	254
		8 / 472	26 / 19	10.0 / 10.0	104.2	68.2	4.1	6 / 12	20	254
		8 / 472	35 / 24	11.1 / 11.1	168.8	101.8	6.7	6 / 12	33	254
MODU0405H / MZ / V	3958	8 / 472	23 / 17	9.3 / 9.3	96.0	66.3	3.8	6 / 12	40	253
		8 / 472	26 / 19	9.8 / 9.7	120.6	78.4	4.8	6 / 12	28	253
		8 / 472	35 / 24	10.9 / 10.9	193.8	116.4	7.7	6 / 12	28	253
MODU0307H / MZ / V	4116	8 / 472	23 / 17	9.2 / 9.2	100.9	69.4	4.0	6 / 12	49	253
		8 / 472	26 / 19	9.8 / 9.7	125.4	81.6	5.0	6 / 12	30	253
		8 / 472	35 / 24	12.3 / 12.2	185.1	114.3	7.3	6 / 12	27	253
MODU0406H / MZ / V	4829	8 / 472	23 / 17	9.4 / 9.3	115.9	80.3	4.6	6 / 12	31	253
		8 / 472	26 / 19	9.4 / 9.4	151.7	97.7	6.0	6 / 12	49	253
		8 / 472	35 / 24	11.0 / 10.9	235.8	141.8	9.4	6 / 12	30	253
MODU0505H / MZ / V	4841	8 / 472	23 / 17	9.3 / 9.3	117.4	81.1	4.7	6 / 12	42	254
		8 / 472	26 / 19	9.8 / 9.7	147.5	95.9	5.9	6 / 12	28	254
		6 / 472	35 / 24	10.9 / 10.9	237.0	142.4	9.4	6 / 12	26	254
MODU0407H / MZ / V	5701	8 / 472	23 / 17	9.2 / 9.2	139.8	96.1	5.5	6 / 12	48	253
		8 / 472	26 / 19	9.8 / 9.7	173.7	113.0	6.9	6 / 12	28	253
		6 / 472	35 / 24	10.8 / 10.7	281.2	168.6	11.2	6 / 12	45	253
MODU0506H / MZ / V	5907	8 / 472	23 / 17	9.4 / 9.3	141.8	98.2	5.6	6 / 12	31	254
		8 / 472	26 / 19	10.0 / 10.0	176.3	115.4	7.0	6 / 12	17	254
		8 / 472	35 / 24	11.1 / 11.1	285.6	172.2	11.3	6 / 12	28	254
MODU0408H / MZ / V	6572	8 / 472	23 / 17	9.4 / 9.3	157.8	109.3	6.3	6 / 12	26	253
		8 / 472	26 / 19	9.6 / 9.6	203.4	131.6	8.1	6 / 12	41	253
		8 / 472	35 / 24	12.0 / 11.9	301.9	185.0	12.0	6 / 12	32	253



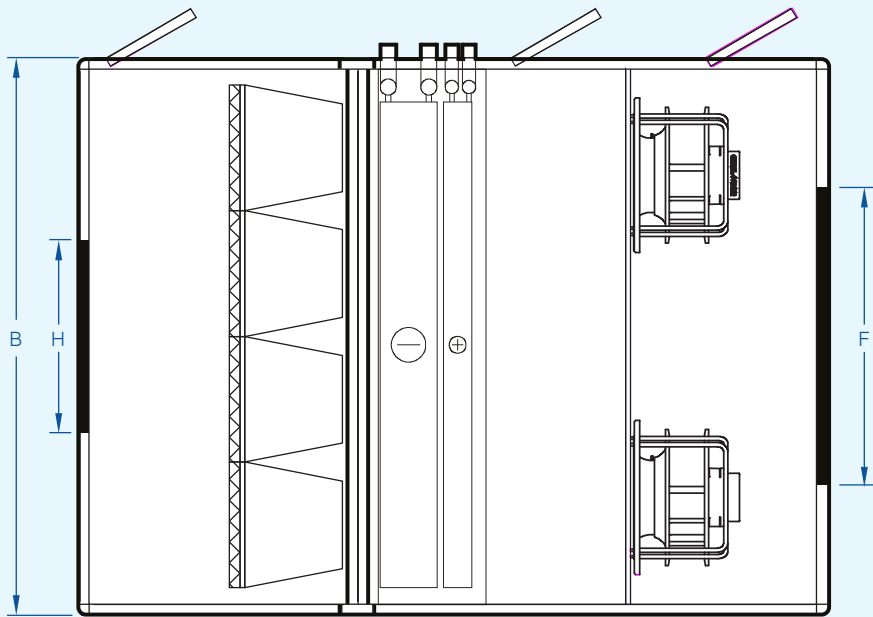
# Performance Data Cooling Coil

Model Number	Air Flow	Cooling Coil	Air On DB / WB	Air Off DB / WB	Total Capacity	Sensible Capacity	Water Flow	Entering / Leaving water temp	Water Pressure Drop	Air Pressure Drop
	L/s	Rows / (Fins/m)	°C	°C	kW	kW	L/s	°C	kPa	Pa
MODU0507H/MZ/V	6973	8 / 472	23 / 17	9.4 / 9.3	167.4	115.9	6.6	6 / 12	32	253
		8 / 472	26 / 19	10.0 / 10.0	208.1	136.2	8.3	6 / 12	20	253
		8 / 472	35 / 24	11.0 / 10.9	340.6	204.7	13.5	6 / 12	34	253
MODU0606H/MZ	6980	8 / 472	23 / 17	9.4 / 9.3	167.5	116.0	6.7	6 / 12	32	254
		8 / 472	26 / 19	10.0 / 10.0	208.3	136.4	8.3	6 / 12	20	254
		8 / 472	35 / 24	11.1 / 11.1	337.5	203.5	13.4	6 / 12	33	254
MODU0508H/MZ/V	8039	8 / 472	23 / 17	9.4 / 9.3	193.0	133.6	7.7	6 / 12	25	254
		8 / 472	26 / 19	9.6 / 9.6	248.8	161.0	9.9	6 / 12	39	254
		8 / 472	35 / 24	12.0 / 11.9	369.3	226.3	14.7	6 / 12	28	254
MODU0607H/MZ	8239	6 / 472	23 / 17	9.2 / 9.2	202.0	138.9	8.0	6 / 12	49	254
		8 / 472	26 / 19	9.8 / 9.7	251.1	163.3	10.0	6 / 12	30	254
		8 / 472	35 / 24	12.3 / 12.2	370.5	228.8	14.7	6 / 12	27	254
MODU0509H/MZ	9104	6 / 472	23 / 17	9.4 / 9.3	218.5	151.3	8.7	6 / 12	34	254
		8 / 472	26 / 19	9.9 / 9.8	274.6	179.2	10.9	6 / 12	32	254
		8 / 472	35 / 24	11.6 / 11.6	427.0	259.9	16.9	6 / 12	38	254
MODU0608H/MZ	9499	8 / 472	23 / 17	9.4 / 9.3	228.0	157.9	9.1	6 / 12	28	254
		8 / 472	26 / 19	9.6 / 9.6	294.0	190.2	11.7	6 / 12	44	254
		8 / 472	35 / 24	12.0 / 11.9	436.4	267.4	17.3	6 / 12	38	254
MODU0707H/MZ	9815	8 / 472	23 / 17	9.6 / 9.5	230.6	160.9	9.2	6 / 12	22	253
		8 / 472	26 / 19	9.8 / 9.7	299.1	194.5	11.9	6 / 12	35	253
		8 / 472	35 / 24	11.8 / 11.7	456.1	278.5	18.1	6 / 12	41	254
MODU0609H/MZ	10759	8 / 472	23 / 17	9.3 / 9.3	261.0	180.2	10.4	6 / 12	38	254
		8 / 472	26 / 19	9.9 / 9.8	324.5	211.8	12.9	6 / 12	37	254
		8 / 472	35 / 24	11.6 / 11.6	504.6	307.2	20.0	6 / 12	51	254
MODU0708H/MZ	11316	8 / 472	23 / 17	9.4 / 9.3	271.6	188.1	10.8	6 / 12	32	253
		8 / 472	26 / 19	9.9 / 9.9	339.5	221.9	13.5	6 / 12	34	253
		8 / 472	35 / 24	12.0 / 11.9	520.4	318.9	20.6	6 / 12	52	254
MODU0610H/MZ	12018	8 / 472	23 / 17	9.3 / 9.2	292.3	201.5	11.6	6 / 12	50	254
		8 / 472	26 / 19	9.7 / 9.6	370.0	239.9	14.7	6 / 12	50	254
		6 / 472	35 / 24	13.24 / 13.00	511.40	319.45	20.3	6 / 12	57	190
MODU0709H/MZ	12817	8 / 472	23 / 17	9.3 / 9.3	310.9	214.6	12.3	6 / 12	43	253
		8 / 472	26 / 19	9.9 / 9.8	386.6	252.3	15.3	6 / 12	45	253
		6 / 472	35 / 24	13.55 / 13.30	533.54	336.18	21.2	6 / 12	59	190
MODU0710H/MZ	14317	8 / 472	23 / 17	9.4 / 9.3	343.7	238.0	13.6	6 / 12	38	253
		8 / 472	26 / 19	10.8 / 10.7	395.8	266.2	15.7	6 / 12	31	253
		6 / 394	35 / 24	14.50 / 14.06	561.35	358.98	21.2	6 / 12.3	60	155
MODU0711H/MZ	15818	8 / 472	23 / 17	9.4 / 9.3	379.7	262.9	15.1	6 / 12	47	253
		8 / 472	26 / 19	10.6 / 10.5	447.3	298.3	17.7	6 / 12	40	253
		6 / 315	35 / 24	15.85 / 15.08	566.59	370.49	21.1	6 / 12.4	60	128
MODU0712H/MZ	17318	8 / 472	23 / 17	9.3 / 9.3	378.1	271.3	15.0	6 / 12	29	253
		8 / 472	26 / 19	10.4 / 10.4	497.8	330.2	19.8	6 / 12	50	253
		6 / 315	35 / 24	15.99 / 15.22	611.95	402.53	20.8	6 / 13	59	128
MODU0713H/MZ	18819	8 / 472	23 / 17	9.3 / 9.2	413.3	296.0	16.4	6 / 12	35	253
		8 / 472	26 / 19	10.3 / 10.3	543.9	360.0	21.6	6 / 12	60	253
		6 / 315	35 / 24	16.29 / 15.51	646.75	430.66	20.8	6 / 13.4	60	128

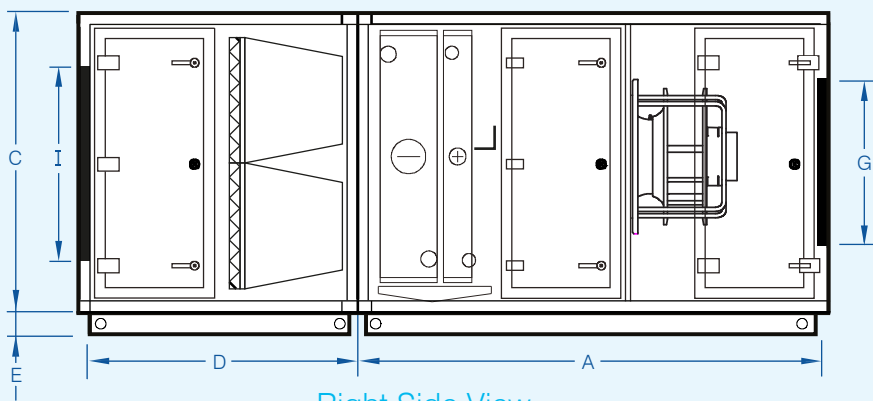


# MODUtherm

## Dimensional Drawing Horizontal Series



Top View



Right Side View

\* Dimension for EC fans on drawing are for fan arrangement only.  
 EC plug fans selected on above drawing.  
 Belt driven or AC plug fans to be selected on request.  
 Fan box dimensions to be longer for belt driven and AC plug fans.  
 All dimensions in mm.



## Dimensional Data Horizontal Series



Model Number	Length	Width	Height	FPL Length	Base Height	S/A Opening*		R/A Opening <sup>#</sup>		Weight
	A	B	C	D	E	F	G	H	I	kg
MODU0202H	2230	810	810	1315	100	350	600	250	550	311
MODU0203H	2230	1115	810	1315	100	655	600	555	550	383
MODU0204H	2230	1420	810	1315	100	960	600	860	550	462
MODU0205H	2230	1725	810	1315	100	1265	600	1165	550	510
MODU0303H	2230	1115	1115	1315	100	655	905	555	855	491
MODU0304H	2230	1420	1115	1315	100	960	905	860	855	604
MODU0305H	2230	1725	1115	1315	100	1265	905	1165	855	690
MODU0306H	2230	2030	1115	1315	100	1570	905	1470	855	726
MODU0307H	2230	2335	1115	1315	100	1875	905	1775	855	814
MODU0404H	2230	1420	1420	1315	100	960	1210	860	1160	704
MODU0405H	2230	1725	1420	1315	100	1265	1210	1165	1160	848
MODU0406H	2230	2030	1420	1315	100	1570	1210	1470	1160	946
MODU0407H	2230	2335	1420	1315	100	1875	1210	1775	1160	1056
MODU0408H	2230	2640	1420	1315	100	2180	1210	2080	1160	1158
MODU0505H	2230	1725	1725	1315	100	1265	1515	1165	1465	1487
MODU0506H	2230	2030	1725	1315	100	1570	1515	1470	1465	1541
MODU0507H	2230	2335	1725	1315	100	1875	1515	1775	1465	1225
MODU0508H	2230	2640	1725	1315	100	2180	1515	2080	1465	1283
MODU0509H	2230	2945	1725	1315	100	2485	1515	2385	1465	1378
MODU0606H	2230	2030	2030	1315	100	1570	1820	1470	1770	1222
MODU0607H	2230	2335	2030	1315	100	1875	1820	1775	1770	1405
MODU0608H	2230	2640	2030	1315	100	2180	1820	2080	1770	1536
MODU0609H	2230	2945	2030	1315	100	2485	1820	2385	1770	1669
MODU0610H	2230	3250	2030	1315	100	2790	1820	2690	1770	1837
MODU0707H	2230	2335	2335	1315	100	1875	2125	1775	2075	1681
MODU0708H	2230	2640	2335	1315	100	2180	2125	2080	2075	1746
MODU0709H	2230	2945	2335	1315	100	2485	2125	2385	2075	1897
MODU0710H	2230	3250	2335	1315	100	2790	2125	2690	2075	2046
MODU0711H	2230	3555	2335	1315	100	3095	2125	2995	2075	2267
MODU0712H	2230	3860	2335	1315	100	3400	2125	3300	2075	2415
MODU0713H	1620	4165	2335	1925	100	3705	2125	3605	2075	2574

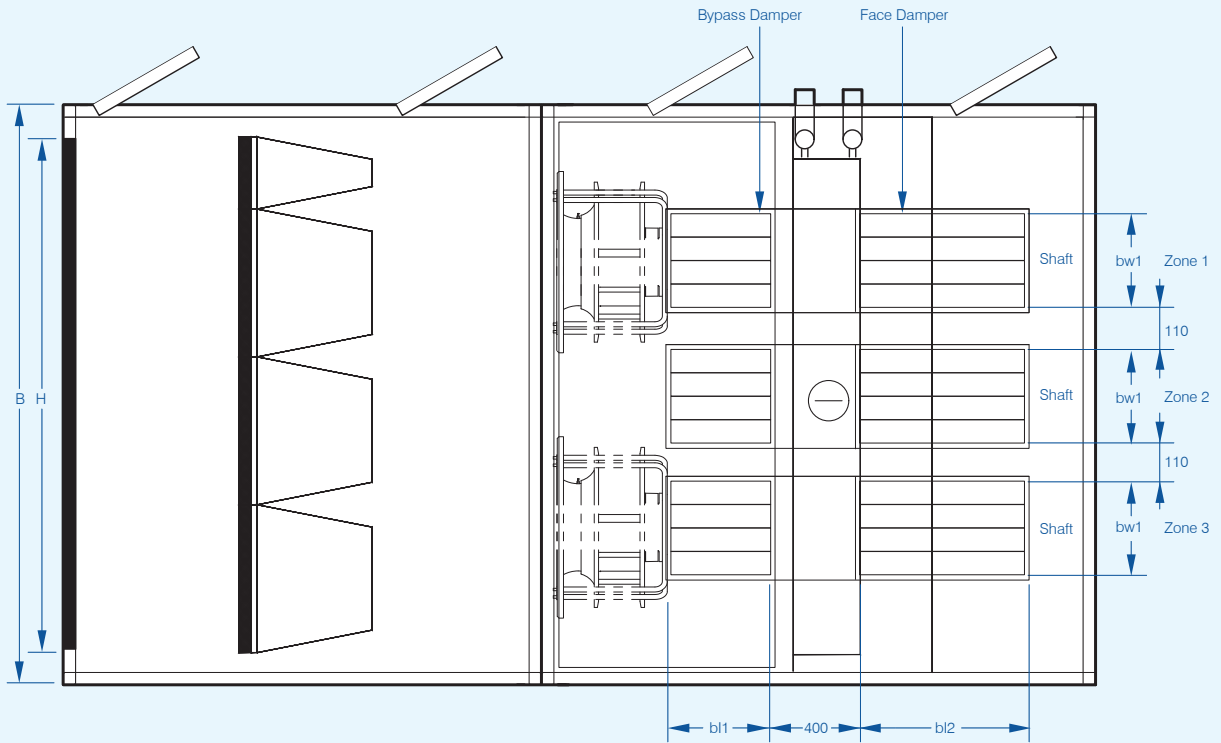
All dimensions in mm.

Weights are an approximation only.

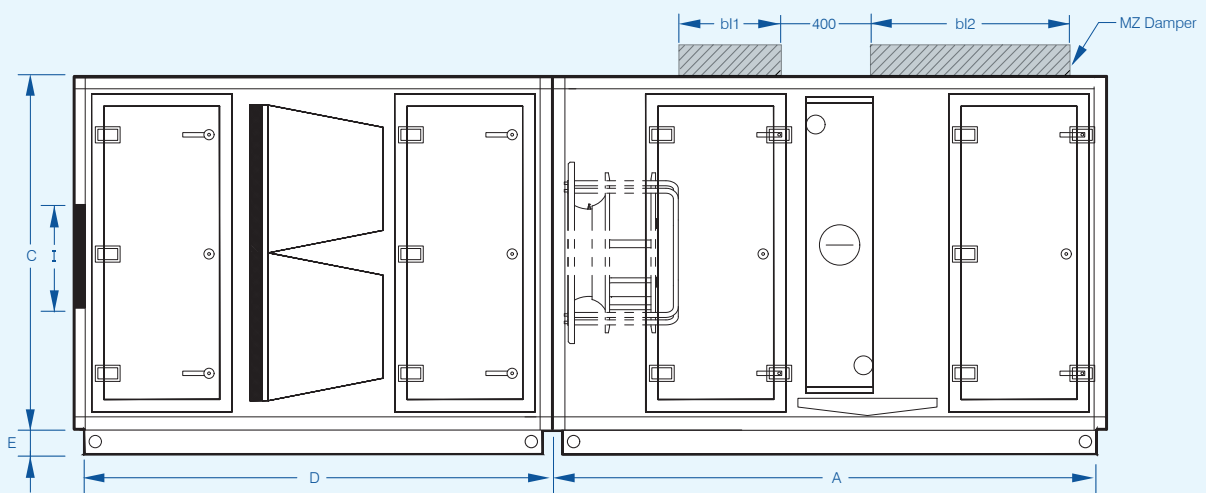
\* S/A Opening = Outlet # R/A Opening = Inlet.

# MODUtherm

## Dimensional Drawing Multizone Series



Top View



Right View

\* Dimension for EC fans on drawing are for fan arrangement only.  
EC plug fans selected on above drawing.  
Belt driven or AC plug fans to be selected on request.  
Fan box dimensions to be longer for belt driven and AC plug fans.  
All dimensions in mm.



## Dimensional Data Multizone Series



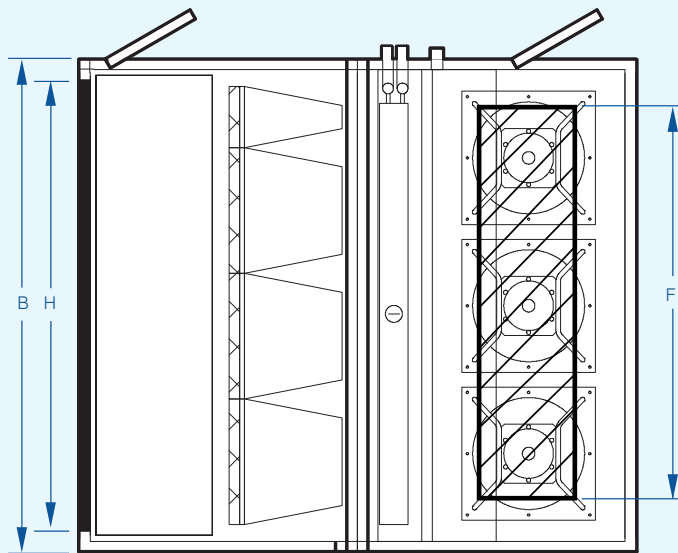
Model Number	Length	Width	Height	FPL Length	Base Height	Supply Air				Return Air		Weight
						BYPASS DAMPER (Zone 1,2,3)		FACE DAMPER (Zone 1,2,3)		R/A Opening *		
						Blade Length (bl1)	Blade Width (bw1)	Blade Length (bl2)	Blade Width (bw1)	H	I	
A	B	C	D	E								
MODU0202MZ	2230	810	810	1925	100.0	-	-	-	-	250	550	436
MODU0203MZ	2230	1115	810	1925	100.0	160.0	210	300	210.0	555	550	508
MODU0204MZ	2230	1420	810	1925	100.0	220.0	210	450	210.0	860	550	587
MODU0205MZ	2230	1725	810	1925	100.0	300.0	210	550	210.0	1165	550	635
MODU0303MZ	2230	1115	1115	1925	100.0	250.0	210	500	210.0	555	855	616
MODU0304MZ	2230	1420	1115	1925	100.0	250.0	310	500	310.0	860	855	729
MODU0305MZ	2230	1725	1115	1925	100.0	300.0	310	600	310.0	1165	855	865
MODU0306MZ	2230	2030	1115	1925	100.0	300.0	410	550	410.0	1470	855	901
MODU0307MZ	2230	2335	1115	1925	100.0	350.0	410	650	410.0	1775	855	989
MODU0404MZ	2230	1420	1420	1925	100.0	350.0	310	650	310.0	860	1160	879
MODU0405MZ	2230	1725	1420	1925	100.0	320.0	410	650	410.0	1165	1160	1023
MODU0406MZ	2230	2030	1420	1925	100.0	300.0	510	600	510.0	1470	1160	1121
MODU0407MZ	2230	2335	1420	1925	100.0	370.0	510	700	510.0	1775	1160	1306
MODU0408MZ	2230	2640	1420	1925	100.0	350.0	610	700	610.0	2080	1160	1408
MODU0505MZ	2230	1725	1725	1925	100.0	400.0	410	750	410.0	1165	1465	1737
MODU0506MZ	2230	2030	1725	1925	100.0	380.0	510	750	510.0	1470	1465	1791
MODU0507MZ	2230	2335	1725	1925	100.0	450.0	510	800	510.0	1775	1465	1475
MODU0508MZ	2230	2640	1725	1925	100.0	450.0	610	800	610.0	2080	1465	1533
MODU0509MZ	2230	2945	1725	1925	100.0	450.0	710	820	710.0	2385	1465	1628
MODU0606MZ	2230	2030	2030	1925	100.0	450.0	510	820	510.0	1470	1770	1522
MODU0607MZ	2230	2335	2030	1925	100.0	450.0	610	820	610.0	1775	1770	1705
MODU0608MZ	2230	2640	2030	1925	100.0	450.0	710	820	710.0	2080	1770	1836
MODU0609MZ	2230	2945	2030	1925	100.0	450.0	810	820	810.0	2385	1770	1969
MODU0610MZ	2230	3250	2030	1925	100.0	450.0	910	820	910.0	2690	1770	2137
MODU0707MZ	2230	2335	2335	1925	100.0	520.0	610	820	610.0	1775	2075	1981
MODU0708MZ	2230	2640	2335	1925	100.0	500.0	710	820	710.0	2080	2075	2096
MODU0709MZ	2230	2945	2335	1925	100.0	500.0	810	820	810.0	2385	2075	2247
MODU0710MZ	2230	3250	2335	1925	100.0	500.0	910	820	910.0	2690	2075	2396
MODU0711MZ	2230	3555	2335	1925	100.0	500.0	1010	820	1010.0	2995	2075	2617
MODU0712MZ	2230	3860	2335	1925	100.0	500.0	1110	820	1110.0	3300	2075	2815
MODU0713MZ	2230	4165	2335	1925	100.0	550.0	1210	820	1210.0	3605	2075	2974

All dimensions in mm.  
Sizing of multizone damper based on 3 zones. Check damper sizing for suitability. Damper sizing to be 5 m/s coil on & 10 m/s coil off side.  
Equal air flow on each zones. Typical arrangement for 3 Zone AHU.  
Weights are an approximation only \* R/A Opening = Inlet.

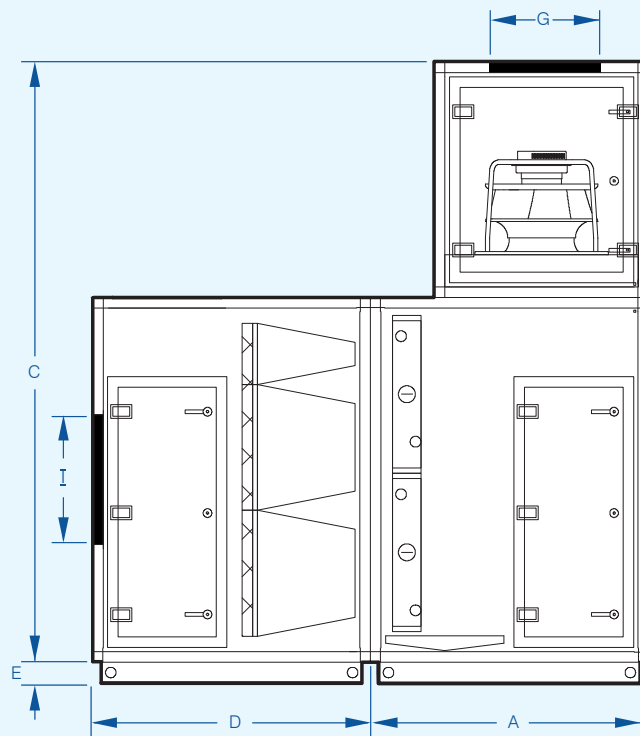


# MODUtherm

## Dimensional Drawing Vertical Series



Top View



Rig View

\* Dimension for EC fans on drawing are for fan arrangement only.  
EC plug fans selected on above drawing.  
Belt driven or AC plug fans to be selected on request.  
Fan box dimensions to be longer for belt driven and AC plug fans.  
All dimensions in mm.



## Dimensional Data Vertical Series



Model Number	Length	Width	Height	FPL Length	Base Height	S/A Opening*		R/A Opening#		Weight
	A	B	C	D	E	F	G	H	I	kg
MODU0202V	1315	810	1620	1315	100	300	650	250	550	311
MODU0203V	1315	1115	1620	1315	100	605	650	555	550	383
MODU0204V	1315	1420	1620	1315	100	910	650	860	550	462
MODU0205V	1315	1725	1620	1315	100	1215	650	1165	550	510
MODU0303V	1315	1115	2230	1315	100	605	650	555	855	491
MODU0304V	1315	1420	2230	1315	100	910	650	860	855	604
MODU0305V	1315	1725	2230	1315	100	1215	650	1165	855	690
MODU0306V	1315	2030	2230	1315	100	1520	650	1470	855	726
MODU0307V	1315	2335	2230	1315	100	1825	650	1775	855	814
MODU0404V	1315	1420	2535	1315	100	910	650	860	1160	704
MODU0405V	1315	1725	2535	1315	100	1215	650	1165	1160	848
MODU0406V	1315	2030	2535	1315	100	1520	650	1470	1160	946
MODU0407V	1315	2335	2535	1315	100	1825	650	1775	1160	1056
MODU0408V	1315	2640	2535	1315	100	2130	650	2080	1160	1158
MODU0505V	1315	1725	2840	1315	100	1215	650	1165	1465	1487
MODU0506V	1315	2030	2840	1315	100	1520	650	1470	1465	1541
MODU0507V	1315	2335	2840	1315	100	1825	650	1775	1465	1225
MODU0508V	1315	2640	2840	1315	100	2130	650	2080	1465	1283

All dimensions in mm.  
Weights are an approximation only.  
\* S/A Opening = Outlet # R/A Opening = Inlet.