

Medium available head duct units

DUCTIMAX 2 - 8 kW



JONIX
pure living



Supervision
GARDA

2 pipes
systems

4 pipes
systems

Centrifugal
fan

Ducted

Performance and compactness in recessed ceiling installations

The DUCTIMAX ducted unit has been conceived for air conditioning interiors where the installation of high-performance medium head units with reduced overall dimensions is required. The range features 12 models with air flows of from 300 to 1200 m³/h. The heat exchanger enables DUCTIMAX to be used under a whole variety of operating conditions. The weight-bearing structure in fact houses a 3- or 4-rows exchanger which can be combined with an additional 1 or 2-rows exchanger (on request) for exceptional performance even with low temperature differentials. The heat exchangers can be optimized for centralized applications such as district cooling. DUCTIMAX is designed for horizontal ceiling installation. The main condensate drip tray is situated inside the structure of the unit and is at a positive pressure relative to the drain outlet to facilitate condensate drainage. A wide range of wall-mounted controllers is available, including controllers of an electromechanical type and microprocessor controllers with display. The use of MYCOMFORT MEDIUM and MYCOMFORT LARGE or EVO enables DUCTIMAX to be connected to GARDA. Heating elements complete with safety devices are available to supplement the hydronic system. The action of the G3 or G4 air filter can be combined with an air ionisation system.

PLUS

- » Multi speed motor
- » Heat exchanger up to 4 rows
- » Reversible water connections
- » ABS centrifugal fans
- » Can be integrated into GARDA
- » Incorporable JONIX sanitizing module



The bearing structure allows to combine a large range of accessories in suction and air delivery in order to obtain the optimized unit configuration.

AVAILABLE VERSIONS

DMXXDOL0...A Units for 2 pipes systems

DMXXDOLL...A Unit for 4-pipe systems equipped with an additional 1-row exchanger for the hot water circuit

Available on request air decontamination system installed on special plenum

DMXXDOLM...A Unit for 4-pipe systems equipped with an additional 2-row exchanger for the hot water circuit
(On request)

MAIN COMPONENTS

Structure

Built from galvanised steel sheet, heat and sound insulated by means of Class 1 self-extinguishing panels. Reduced height to facilitate installation in a horizontal position in a false ceiling. The structure incorporates a drip tray and condensate drain outlet.

Fans

Double suction centrifugal fans made with ABS or aluminium, with statically and dynamically balanced forward-curving blades, directly coupled to the electric motor.

Heat exchanger

High efficiency 3 and 4 rows heat exchanger made with copper piping and aluminium fins blocked to pipings by mechanical expansion, provided with brass manifolds and air vent valve. The heat exchanger usually comes with water connections mounted on the left, but it can be turned by 180°. High-efficiency heat exchangers optimized for district cooling applications are available on request.

Electric motor

Single-phase asynchronous multi-speed electric motor with permanently connected capacitor and thermal protector, mounted on vibration-damping supports.

CONFIGURATOR

The models are completely configurable by selecting the version and the options. To the right is shown an example of configuration.

Version	Field	1	2	3	4	5	6	7	8	9	10	11
DM44		D	I	L	0	1	E	0	0	3	0	A

To verify the compatibility of the options, use the selection software or the price list.

CONFIGURATOR

- 1 Version**
 - D Ducted version
- 2 Motor**
 - 0 3-speed motor
 - 1 7-speed motor
 - I BLDC motor
 - P 6 speed motor
- 3 Main coil hydraulic side**
 - L Water connections on the left side
 - R Water connections on the right
- 4 Additional coil hydraulic side / heating element**
 - O Absent
 - E RE - Electrical heating elements
 - L Water connections on the left side
 - R Water connections on the right
- 5 Valve**
 - O Absent
 - 1 VKS - 3 ways valve - 230 V - ON/OFF - complete hydraulic kit
 - 2 KV - 2 ways valve - 230 V - ON/OFF
 - 3 VKMS - 3 ways valve - 24 V - MODULATING - complete hydraulic kit
 - 4 KVM - 2 ways valve - 24 V - MODULATING
 - 5 VKS24 - 3 way valve - 24 V - ON/OFF - complete hydraulic kit
 - 6 KV24 - 2 way valve - 24 V - ON/OFF
- 6 Control panel**

- 0 Absent
- E EVOBOARD - Circuit board
- G EVOBOARD circuit board + NAVEL Wi-Fi module
- 7 Probes**
 - 0 Absent
 - 1 SA - Remote air probe for MYCOMFORT, LED503 and EVO
 - 2 SW - Water probe for MYCOMFORT, LED503 and EVO
 - 3 SU - Humidity probe for MYCOMFORT and EVO
 - 4 SA+SW - Remote air and water probes for MYCOMFORT, LED503 and EVO
 - 5 SA+SU - Remote air and humidity probes for MYCOMFORT and EVO
 - 6 SA+SU+SW - Remote air, water, humidity probes for MYCOMFORT and EVO
 - B SA - Remote air probe for TED
 - C SW - Water probe for TED
 - D SA + SW - Air and water probes for TED
- 8 Accessories**
 - 0 Absent
 - 5 BH - Auxiliary drip tray
- 9 Filter**
 - 2 G2 Filter
 - 3 G3 filter
- 10 Release**
 - 0 O
 - A A

ACCESSORIES

Elecmecanical control panels

CD	Recess wall-mounted speed switch
CDE	Wall mounted speed selector
TC	Thermostat for minimum water temperature in heating mode (42 °C)
Electronic microprocessor control panels with display	
COB	Finishing plate for LED 503 controller, RAL9005 black
COG	Finishing plate for LED 503 controller, RAL7031 grey
COW	Finishing plate for LED 503 controller, RAL9003 white
DIST	MY COMFORT controller spacer for wall mounting
EVO-2-TOUCH	2.8" touch screen user interface for EVO control
EVOBOARD	Circuit board for EVO control
EVODISP	User interface with display for EVO controller
EYNAVEL	Device for Wi-Fi or Bluetooth communication between EVOBOARD and smartphone
LED503	Recessed wall-mounted electronic display controller LED 503
MCB	MYCOMFORT BASE electronic controller with display
MCLE	Microprocessor control with display MY COMFORT LARGE
MCME	MYCOMFORT MEDIUM electronic controller with display
MCSUE	Humidity sensor for MY COMFORT (medium e large), EVO
MCSWE	Water sensor for MYCOMFORT and EVO controllers

Electronic microprocessor control panels

TED 2T	Electronic controller for AC fan control and one ON/OFF 230 V valve
TED 4T	Electronic controller for AC fan control and two ON/OFF 230 V valves
TED SWA	Water temperature sensor for TED controls

Power interface and regulating louver controllers

KP	Power interface for connecting in parallel up to 4 fun coil units to the one controller
----	---

Electrical heating elements

RE	Heating element with installation kit, relay box and safety devices
----	---

Air inlet and outlet grilles

GA	Aluminium air intake grille, with frame
GM	Aluminium air outlet grille with 2-row fins and subframe

Valves

V2VDF+STD	2-way valves, ON/OFF or MODULATING actuator, 230 V or 24 V power supply, hydraulic kit, for main and additional heat exchanger
-----------	--

Duct unit DUCTIMAX

RATED TECHNICAL DATA 2 PIPES

DUCTIMAX			13			14			23			24		
Speed			min	med	max									
Declared speed			2,5,7			2,5,7			1,5,7			1,5,7		
Rated air flow	(E)	m ³ /h	109	246	276	109	246	276	171	275	341	171	275	341
Available static pressure	(E)	Pa	10	50	63	10	50	63	19	50	77	19	50	77
Power input	(E)	W	24	57	82	24	57	82	34	69	106	34	69	106
Total cooling capacity	(1)(E)	kW	0,92	1,72	1,90	0,95	1,91	2,11	1,27	1,90	2,27	1,36	2,11	2,53
Sensible cooling capacity	(1)(E)	kW	0,61	1,21	1,34	0,63	1,30	1,43	0,89	1,34	1,59	0,93	1,44	1,73
FCEER class	(E)		D											
Water flow	(2)	l/h	160	306	340	167	337	375	222	339	408	239	374	453
Water pressure drop	(2)(E)	kPa	2	5	6	2	7	8	3	6	8	4	8	12
Heating capacity	(3)(E)	kW	0,88	1,81	1,99	0,91	1,98	2,21	1,33	1,98	2,35	1,40	2,20	2,68
FCCOP class	(E)		D											
Water flow	(3)	l/h	153	315	346	158	345	384	231	345	408	244	382	466
Water pressure drop	(3)(E)	kPa	1	4	5	2	6	7	2	5	7	3	7	10
Standard coil - number of rows			3			4			3			4		
Total sound power level	(4)	dB(A)	28	49	52	28	49	52	39	48	54	39	48	54
Inlet + radiated sound power level	(4)(E)	dB(A)	26	47	50	26	47	50	37	46	52	37	46	52
Outlet sound power level	(4)(E)	dB(A)	25	46	49	25	46	49	36	45	51	36	45	51

DUCTIMAX			33			34			43			44		
Speed			min	med	max									
Declared speed			1,6,7			1,6,7			1,4,7			1,4,7		
Rated air flow	(E)	m ³ /h	195	360	402	195	360	402	305	532	652	305	532	652
Available static pressure	(E)	Pa	19	50	63	19	50	63	17	50	75	17	50	75
Power input	(E)	W	34	85	106	34	85	106	76	143	192	76	143	192
Total cooling capacity	(1)(E)	kW	1,44	2,28	2,51	1,57	2,69	2,96	1,92	3,17	3,68	2,29	3,78	4,45
Sensible cooling capacity	(1)(E)	kW	1,01	1,69	1,86	1,07	1,86	2,03	1,42	2,39	2,81	1,57	2,61	3,08
FCEER class	(E)		D			D			E			D		
Water flow	(2)	l/h	252	406	449	274	476	527	343	568	664	407	673	798
Water pressure drop	(2)(E)	kPa	2	5	5	3	7	9	3	8	11	6	14	18
Heating capacity	(3)(E)	kW	1,57	2,70	2,96	1,59	2,80	3,10	2,35	3,71	4,31	2,41	3,95	4,68
FCCOP class	(E)		D											
Water flow	(3)	l/h	272	470	515	276	488	538	408	644	749	419	687	814
Water pressure drop	(3)(E)	kPa	2	5	6	2	6	8	4	9	11	5	12	16
Standard coil - number of rows			3			4			3			4		
Total sound power level	(4)	dB(A)	39	50	54	39	50	54	38	52	58	38	52	58
Inlet + radiated sound power level	(4)(E)	dB(A)	37	48	52	37	48	52	36	50	56	36	50	56
Outlet sound power level	(4)(E)	dB(A)	36	47	51	36	47	51	35	49	55	35	49	55

DUCTIMAX			53			54			63			64		
Speed			min	med	max									
Declared speed			1,6,7			1,6,7			5,6,7			5,6,7		
Rated air flow	(E)	m ³ /h	333	687	760	333	687	760	1050	1163	1289	1050	1163	1289
Available static pressure	(E)	Pa	12	50	61	12	50	61	40	50	60	40	50	60
Power input	(E)	W	76	167	192	76	167	192	235	280	332	235	280	332
Total cooling capacity	(1)(E)	kW	2,22	4,22	4,63	2,44	4,79	5,23	6,15	6,66	7,21	6,91	7,49	8,12
Sensible cooling capacity	(1)(E)	kW	1,60	3,09	3,39	1,70	3,33	3,64	4,51	4,88	5,29	4,83	5,23	5,67
FCEER class	(E)		D											
Water flow	(2)	l/h	394	753	828	432	850	930	1095	1191	1295	1225	1333	1448
Water pressure drop	(2)(E)	kPa	2	7	8	3	10	12	13	16	18	20	23	26
Heating capacity	(3)(E)	kW	2,54	4,76	5,17	2,63	5,03	5,49	6,68	7,22	7,80	7,18	7,80	8,46
FCCOP class	(E)		D											
Water flow	(3)	l/h	442	827	898	457	875	955	1162	1256	1357	1248	1356	1472
Water pressure drop	(3)(E)	kPa	2	7	8	3	9	11	12	14	16	17	20	23
Standard coil - number of rows			3			4			3			4		
Total sound power level	(4)	dB(A)	38	55	58	38	55	58	61	63	69	61	63	69
Inlet + radiated sound power level	(4)(E)	dB(A)	36	53	56	36	53	56	59	61	67	59	61	67
Outlet sound power level	(4)(E)	dB(A)	35	52	55	35	52	55	58	60	66	58	60	66

(1) Water temperature 7°C / 12°C, air temperature dry bulb 27°C, wet bulb 19°C (47% relative humidity) according to EN1397:2015

(2) Water temperature 7°C / 12°C, air temperature dry bulb 27°C, wet bulb 19°C (47% relative humidity)

(3) Water temperature 45°C / 40°C, air temperature 20°C

(4) Sound power measured according to standards ISO 3741 and ISO 3742

(E) EUROVENT certified data

Power supply 230-1-50 (V-ph-Hz)

RATED TECHNICAL DATA 4 PIPES

DUCTIMAX			13			14			23			24		
Speed			min	med	max									
Declared speed			2,5,7			2,5,7			1,5,7			1,5,7		
Rated air flow	(E)	m ³ /h	109	243	270	109	243	270	170	272	336	170	272	336
Available static pressure	(E)	Pa	10	50	63	10	50	63	19	50	77	19	50	77
Power input	(E)	W	24	57	82	24	57	82	34	69	106	34	69	106
Total cooling capacity	(1)(E)	kW	0,92	1,70	1,86	0,95	1,88	2,06	1,26	1,88	2,24	1,35	2,09	2,49
Sensible cooling capacity	(1)(E)	kW	0,61	1,20	1,31	0,63	1,28	1,40	0,88	1,33	1,57	0,92	1,42	1,70
FCEER class	(E)		D											
Water flow	(2)	l/h	160	302	333	167	334	368	221	335	404	238	370	447
Water pressure drop	(2)(E)	kPa	2	5	6	2	7	8	3	6	8	4	8	12
Heating capacity	(3)(E)	kW	1,14	1,93	2,06	1,14	1,93	2,06	1,55	2,07	2,32	1,55	2,07	2,32
FCCOP class	(E)		D											
Water flow	(3)	l/h	100	169	180	100	169	180	136	181	204	136	181	204
Water pressure drop	(3)(E)	kPa	1	2	3	1	2	3	2	3	3	2	3	3
Total sound power level	(4)	dB(A)	28	49	52	28	49	52	39	48	54	39	48	54
Additional coil DF - number of rows			1			1			1			1		
Inlet + radiated sound power level	(4)(E)	dB(A)	26	47	50	26	47	50	37	46	52	37	46	52
Outlet sound power level	(4)(E)	dB(A)	25	46	49	25	46	49	36	45	51	36	45	51

DUCTIMAX			33			34			43			44		
Speed			min	med	max									
Declared speed			1,6,7			1,6,7			1,4,7			1,4,7		
Rated air flow	(E)	m ³ /h	195	357	398	195	357	398	302	524	642	302	524	642
Available static pressure	(E)	Pa	19	50	63	19	50	63	17	50	75	17	50	75
Power input	(E)	W	34	85	106	34	85	106	76	143	192	76	143	192
Total cooling capacity	(1)(E)	kW	1,44	2,26	2,48	1,57	2,67	2,93	1,89	3,13	3,64	2,27	3,73	4,40
Sensible cooling capacity	(1)(E)	kW	1,01	1,68	1,84	1,07	1,84	2,01	1,41	2,35	2,78	1,56	2,57	3,04
FCEER class	(E)		D			D			E			D		
Water flow	(2)	l/h	252	402	445	274	473	522	339	562	656	403	664	788
Water pressure drop	(2)(E)	kPa	2	5	5	3	7	9	3	8	11	6	13	18
Heating capacity	(3)(E)	kW	2,09	3,09	3,29	2,09	3,09	3,29	2,80	3,82	4,24	2,80	3,82	4,24
FCCOP class	(E)		C			C			D			D		
Water flow	(3)	l/h	183	271	288	183	271	288	245	334	371	245	334	371
Water pressure drop	(3)(E)	kPa	2	3	4	2	3	4	3	5	6	3	5	6
Total sound power level	(4)	dB(A)	39	50	54	39	50	54	38	52	58	38	52	58
Additional coil DF - number of rows			1			1			1			1		
Inlet + radiated sound power level	(4)(E)	dB(A)	37	48	52	37	48	52	36	50	56	36	50	56
Outlet sound power level	(4)(E)	dB(A)	36	47	51	37	48	51	35	49	55	35	49	55

DUCTIMAX			53			54			63			64		
Speed			min	med	max									
Declared speed			1,6,7			1,6,7			5,6,7			5,6,7		
Rated air flow	(E)	m ³ /h	333	683	755	333	683	755	1050	1163	1289	1050	1163	1289
Available static pressure	(E)	Pa	12	50	61	12	50	61	40	50	60	40	50	60
Power input	(E)	W	76	167	192	76	167	192	235	280	332	235	280	332
Total cooling capacity	(1)(E)	kW	2,22	4,20	4,60	2,44	4,76	5,20	6,15	6,66	7,21	6,91	7,49	8,12
Sensible cooling capacity	(1)(E)	kW	1,60	3,07	3,36	1,70	3,31	3,62	4,51	4,88	5,29	4,83	5,23	5,67
FCEER class	(E)		D			D			D			D		
Water flow	(2)	l/h	394	749	822	432	846	925	1095	1191	1295	1225	1333	1448
Water pressure drop	(2)(E)	kPa	2	7	8	3	10	12	13	16	18	20	23	26
Heating capacity	(3)(E)	kW	3,40	5,17	5,45	3,40	5,17	5,45	6,42	6,73	7,06	6,42	6,73	7,06
FCCOP class	(E)		D			D			D			D		
Water flow	(3)	l/h	297	452	477	297	452	477	562	590	618	562	590	618
Water pressure drop	(3)(E)	kPa	6	13	14	6	13	14	19	21	22	19	21	22
Total sound power level	(4)	dB(A)	38	55	58	38	55	58	61	63	69	61	63	69
Additional coil DF - number of rows			1			1			1			1		
Inlet + radiated sound power level	(4)(E)	dB(A)	36	53	56	36	53	56	59	61	67	59	61	67
Outlet sound power level	(4)(E)	dB(A)	35	52	55	35	52	55	58	60	66	58	60	66

(1) Water temperature 7°C / 12°C, air temperature dry bulb 27°C, wet bulb 19°C (47% relative humidity) according to EN1397:2015

(2) Water temperature 7°C / 12°C, air temperature dry bulb 27°C, wet bulb 19°C (47% relative humidity)

(3) Water temperature 65°C / 55°C, air temperature 20°C

(4) Sound power measured according to standards ISO 3741 and ISO 3742

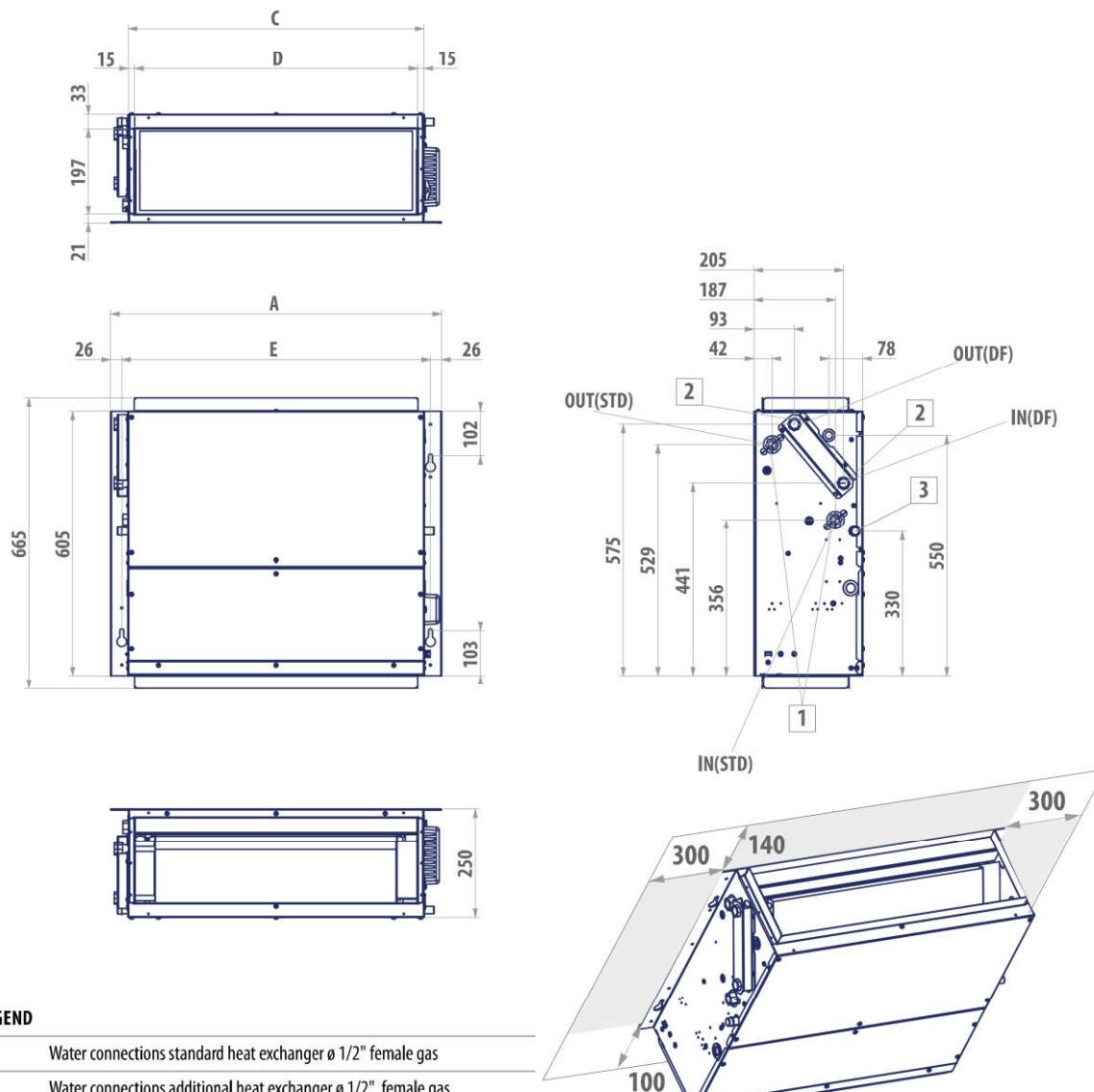
(E) EUROVENT certified data

Power supply 230-1-50 (V-ph-Hz)

Duct unit DUCTIMAX

DIMENSIONAL DRAWINGS

DUCTIMAX 1-4



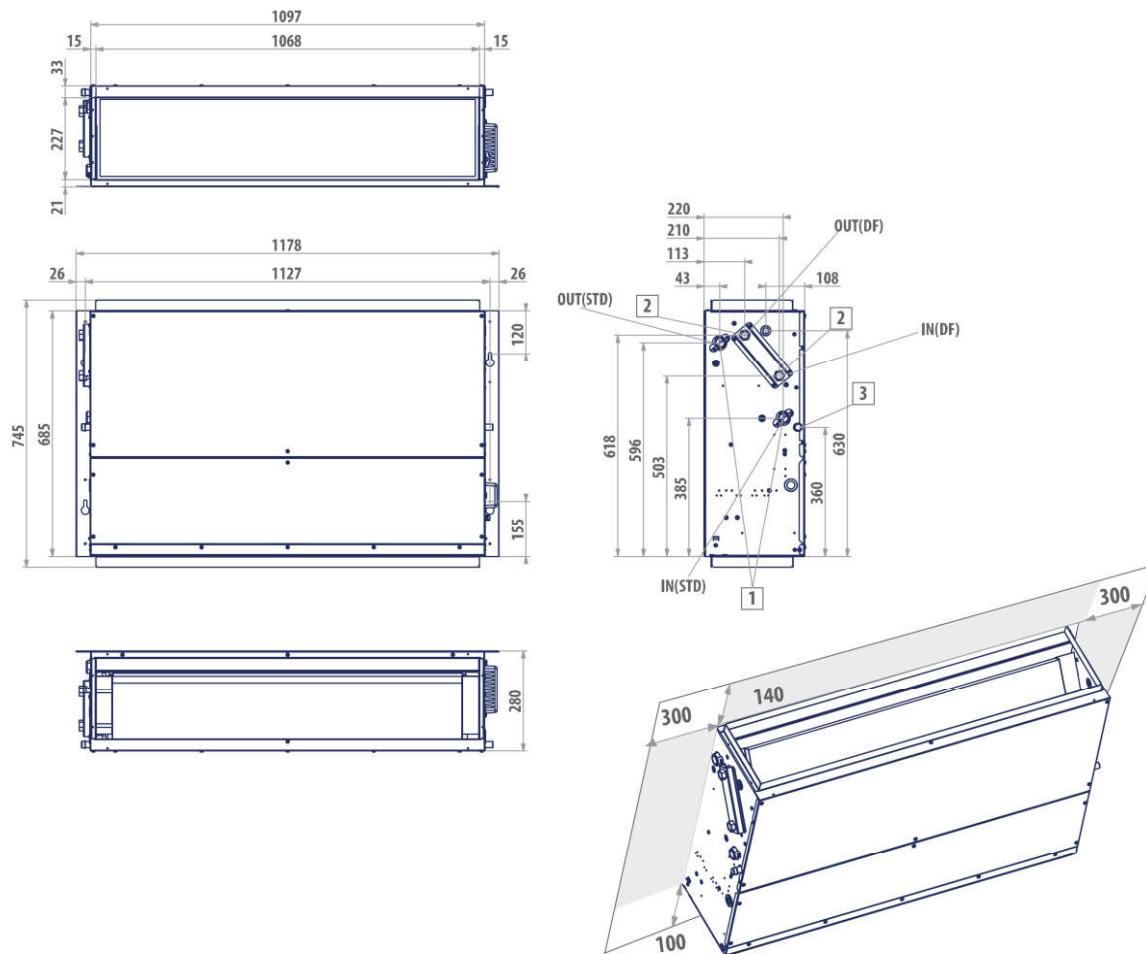
DUCTIMAX	13	14	23	24	33	34	43	44
ON/OFF motor	X	X	X	X	X	X	X	X
Inverter-controlled motor	X	X	X	X	X	X	X	X

x = available

DUCTIMAX	A mm	C mm	D mm	E mm	1 "	3 mm	kg
13 - 14	758	677	648	707	1/2	17	19
23 - 24	758	677	648	707	1/2	17	20
33 - 34	968	887	858	917	1/2	17	25
43 - 44	968	887	858	917	1/2	17	28

DIMENSIONAL DRAWINGS

DUCTIMAX 5-6



LEGEND

- 1** Water connections standard heat exchanger ø 3/4" female gas
- 2** Water connections additional heat exchanger ø 1/2" female gas
- 3** Condensate discharge

DUCTIMAX	53	54	63	64
ON/OFF motor	x	x	x	x
Inverter-controlled motor	x	x	x	x

x = available

DUCTIMAX	1 "	2 "	kg	3 mm
53 - 54	3/4	1/2	33	17
63 - 64	3/4	1/2	39	17