High-head thermal ventilating units with EC motor

UTN i 4 - 18 kW

JONIX pure living

Inverter Technology

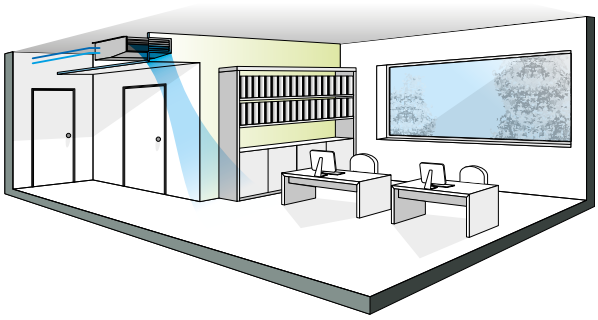
EC motor | Supervision GARDA | 2 pipes systems | 4 pipes systems | Centrifugal fan | Ducted

High efficiency and low noise emissions for ducted applications

The thermal ventilating units of the UTN i range with inverter motors and cooling capacities of 4 to 18 kW represent an evolution of the UTN series: keeping in pace with current legislation on energy savings and equipment efficiency and the most recent technological developments in the realm of electric motors, Galletti offers ducted units equipped with inverter-controlled permanent magnet EC motors. This solution makes it possible to reduce electricity consumption by up to 70% compared to a traditional asynchronous motor and at the same time offers the possibility of achieving a precise regulation of air flow, thanks to its ability to vary the number of fan revolutions in a continuous and efficient manner. The particular features which characterize the UTN series, namely, the height of 280 mm to enable the units to be accommodated in false ceilings, flexibility of installation and connection to air ducts and wide selection of accessories, are maintained to ensure the same standards of quality. Moreover, the availability of heat exchangers with a large number of rows makes it possible to use a low-temperature thermal carrier fluid in the heating mode, which means further energy savings.

PLUS

- » Permanent magnet EC motor
- » Low electricity consumption
- » Easy setup of ventilation section
- » Reduced height across the entire range (280 mm)
- » Vertical and horizontal installation
- » Wide range of available accessories
- » High flexibility of installation
- » Incorporable JONIX sanitizing module



Comfort and quiet operation
Thanks to the possibility of regulating the rotation speed of the motor with high precision, UTN i is well-suited to interiors where keeping noise levels low is a must.
Available on request air decontamination system installed on special plenum.

AVAILABLE VERSIONS

UTXXXIL0...0A Thermal ventilating unit suitable for 2-pipe systems
UTXXXILL...0A Thermal ventilating unit suitable for 4-pipe systems (2 heat exchangers)

UTXXXIL0...02 The version with double panelling is made with pre-painted sheet steel insulated with class 0 fire-resistant rockwool **(On request)**

MAIN COMPONENTS

Structure
Made of galvanized sheet steel insulated with sound-deadening, heat-insulating, self-extinguishing closed-cell material to reduce noise emissions and prevent the formation of condensate on the outside surface.

Heat exchanger
It is composed of copper tubing and aluminium fins fixed by expansion.
Water connections are reversible
An additional exchanger is available for installing the unit in 4-pipe systems.

Fan
The aluminium fans are of the centrifugal type, with double suction and staggered blades to reduce noise emissions. They are statically and dynamically balanced to minimize the stresses transmitted to the motor shaft.

EC electric motor
Permanent magnet motor The unit is equipped with an inverter board to control the motor, that makes it possible to precisely set the maximum rotation speed of the motor (control signal 0-10 V).

Condensate collection and drainage system
It consists of two insulated galvanized sheet steel trays designed for horizontal and vertical installation.

Filter module
The air filter, made of regenerable acrylic fibre, is available as an accessory in filtration classes G2 or G4.

ACCESSORIES

Electronic microprocessor control panels with display	
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
MCLE	Microprocessor control with display MY COMFORT LARGE
MCSUE	Humidity sensor for MY COMFORT (medium e large), EVO
MCSWE	Water sensor for MYCOMFORT and EVO controllers
Electronic microprocessor control panels	
TED 10	Electronic controller for EC fan equipped with inverter and ON/OFF valves 230 V
TED SWA	Water temperature sensor for TED controls
Power interface and regulating louver controllers	
CSD	Recess mounted controller for opening and closing the SM motor-driven regulating louver
Auxiliary water drip trays, insulating shell, condensate drainage pump	
KSC	Condensate drainage pump kit
Electrical heating elements	
RE	Heating element with installation kit, relay box and safety devices
Air inlet and outlet grilles	
GM	Aluminium air outlet grille with 2-row fins and subframe
GR	Air intake grille with subframe
GRF	Air intake grille with subframe and filter
External air intake louvers	
PA90	Motor-driven external air intake louver
Valves	
V2VDF+STD	2-way valves, ON/OFF or MUDULATING actuator, 230 V or 24 V power supply, hydraulic kit, for main and additional heat exchanger
V2VSTD	2-way valve, ON/OFF or MODULATING actuator, 230 V or 24 V power supply, hydraulic kit, for main heat exchanger
V3VDF	3-way valves, ON/OFF or MODULATING actuator, 230 V or 24 V power supply, hydraulic kit, for additional heat exchanger
V3VSTD	2-way valves, ON/OFF or MODULATING actuator, 230 V or 24 V power supply, hydraulic kit, for main heat exchanger
VPIC	2-way valves pressure independent, ON/OFF or MODULATING actuator, 230 V or 24 V power supply, hydraulic kit, for main heat exchanger
Plenum, air intake modules, air inlet and outlet connectors and cabinets	
G90	90° connection for intake/delivery
MAF	Air intake module with G2 air filter
MAFO	Air intake module with G4 air filter
PCOC	Junction panel with rectangular duct
PCOF	Junction panel with flexible circular duct Ø 200
Flexible ducts - caps	
TFA	Not insulated flexible ducts, Ø 200 mm (6 m lenght undivisible)
TFM	Insulated flexible ducts, Ø 200 mm (6 m lenght undivisible)
TP	Plastic cap Ø 200 mm
Air inlet and outlet plenum box	
CA	Air Inlet plenum box with double row grille
CAF	Air Inlet plenum box with double row grille 300 x 600 mm and filter G2
CM	Insulated air outlet plenum box with grille
Accessories	
UYBP	Hot water post-heating exchanger kit
VRCH	Auxiliary water drip tray for horizontal installation units
VRCV	Auxiliary water drip tray for vertical installation units
Vibration-damping couplings	
GA	Vibration-damping coupling
GAT	Heat-resistant vibration-damping coupling
Sanitisation system	
JONIX - mic	Sanitizing module JONIX™ (ducted installation)
JONIX - pln	Sanitizing module JONIX™ (installation on plenum)

RATED TECHNICAL DATA 2 PIPES

UTN i			8A			8D			12A			12D		
Speed			min	med	max	min	med	max	min	med	max	min	med	max
Control voltage	(E)	V	6,00	7,80	8,90	6,00	7,80	8,90	7,10	8,00	8,80	7,10	8,00	8,80
Rated air flow	(E)	m^3/h	532	692	791	534	700	802	1000	1107	1203	1019	1134	1238
Available static pressure	(E)	Pa	30	50	65	29	50	65	41	50	59	40	50	59
Power input	(E)	W	40	73	112	40	73	112	102	125	152	102	125	170
Total cooling capacity	(1)(E)	kW	3,38	4,20	4,65	2,83	3,47	3,80	5,78	6,25	6,65	5,22	5,65	6,01
Sensible cooling capacity	(1)(E)	kW	2,54	3,19	3,56	2,19	2,70	2,98	4,35	4,73	5,04	3,90	4,20	4,47
FCEER class	(E)			B			C			C			C	
Water flow	(2)	l/h	582	723	801	487	598	654	995	1076	1145	899	973	1035
Water pressure drop	(2)(E)	kPa	8	12	14	10	14	17	15	17	19	18	21	24
Heating capacity	(3)(E)	kW	3,55	4,36	4,83	3,04	3,69	4,05	6,29	6,80	7,26	5,59	6,03	6,42
FCCOP class				B			B			C			C	
Water flow	(3)	l/h	611	751	832	523	635	697	1083	1171	1250	963	1038	1106
Water pressure drop	(3)(E)	kPa	7	11	13	9	13	15	14	17	18	17	19	22
Standard coil - number of rows				4			3			4			3	
Total sound power level	(4)	dB(A)	54	61	66	54	61	66	61	63	69	59	63	69
Inlet + radiated sound power level	(4)(E)	dB(A)	52	59	64	52	59	64	56	60	66	56	60	66
Outlet sound power level	(4)(E)	dB(A)	51	58	63	51	58	63	59	59	65	55	59	65

UTN i			16A			16D			22A			22D		
Speed			min	med	max	min	med	max	min	med	max	min	med	max
Control voltage	(E)	V	6,70	7,70	8,90	6,70	7,70	8,90	6,40	8,10	9,60	6,40	8,20	9,80
Rated air flow	(E)	m^3/h	1198	1371	1581	1207	1384	1606	1438	1819	2218	1485	1898	2380
Available static pressure	(E)	Pa	38	50	66	38	50	67	31	50	75	30	50	78
Power input	(E)	W	124	170	248	124	170	248	135	210	285	140	220	305
Total cooling capacity	(1)(E)	kW	6,84	7,62	8,49	6,20	6,84	7,57	9,43	11,5	13,6	8,64	10,4	12,2
Sensible cooling capacity	(1)(E)	kW	5,40	6,07	6,83	5,01	5,60	6,29	6,99	8,65	10,3	6,58	8,07	9,66
FCEER class	(E)			C			C			B			C	
Water flow	(2)	l/h	1178	1312	1462	1068	1178	1304	1644	2010	2366	1509	1827	2163
Water pressure drop	(2)(E)	kPa	11	13	16	17	20	24	12	17	22	15	21	29
Heating capacity	(3)(E)	kW	7,28	8,04	8,93	6,47	7,11	7,88	9,73	11,7	13,7	9,06	10,8	12,7
FCCOP class				C			C			B			C	
Water flow	(3)	l/h	1254	1384	1538	1114	1224	1357	1689	2039	2380	1573	1884	2209
Water pressure drop	(3)(E)	kPa	10	12	14	15	17	21	10	14	19	14	19	25
Standard coil - number of rows				4			3			4			3	
Total sound power level	(4)	dB(A)	62	67	72	62	67	72	60	67	74	60	67	74
Inlet + radiated sound power level	(4)(E)	dB(A)	60	64	70	60	64	70	58	65	72	58	65	72
Outlet sound power level	(4)(E)	dB(A)	58	63	69	58	63	69	57	64	71	57	64	71

(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)

NOTE: The dimensional drawings of the UTN i inverter units are the same of the UTN ON/OFF version. They are reported from page 116

RATED TECHNICAL DATA 2 PIPES

UTN i			30A			30D		
Speed			min	med	max	min	med	max
Control voltage	(E)	V	6,20	7,70	9,30	6,20	7,80	9,30
Rated air flow	(E)	m^3/h	2073	2604	3175	2092	2641	3206
Available static pressure	(E)	Pa	32	50	74	31	50	74
Power input	(E)	W	190	300	500	190	300	500
Total cooling capacity	(1)(E)	kW	13,6	16,2	18,5	12,3	14,6	16,7
Sensible cooling capacity	(1)(E)	kW	10,1	12,2	14,3	9,29	11,2	13,0
FCEER class	(E)		B			C		
Water flow	(2)	l/h	2365	2823	3270	2145	2561	2953
Water pressure drop	(2)(E)	kPa	27	37	48	21	29	37
Heating capacity	(3)(E)	kW	13,7	16,4	19,1	12,7	15,1	17,3
FCCOP class			B			C		
Water flow	(3)	l/h	2389	2852	3311	2203	2617	3008
Water pressure drop	(3)(E)	kPa	23	32	41	18	25	31
Standard coil - number of rows			5			4		
Total sound power level	(4)	dB(A)	69	73	78	69	73	78
Inlet + radiated sound power level	(4)(E)	dB(A)	67	71	76	67	71	76
Outlet sound power level	(4)(E)	dB(A)	66	70	75	66	70	75

(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)

NOTE: The dimensional drawings of the UTN i inverter units are the same of the UTN ON/OFF version. They are reported from page 116

RATED TECHNICAL DATA 4 PIPES

UTN i			8A			8D			12A			12D		
Speed			min	med	max	min	med	max	min	med	max	min	med	max
Control voltage	(E)	V	6,00	7,80	8,90	6,00	7,80	8,90	7,10	8,00	8,80	7,10	8,00	8,80
Rated air flow DF	(E)	m^3/h	529	686	783	531	694	793	985	1088	1182	1005	1115	1211
Available static pressure DF	(E)	Pa	39	50	65	29	50	65	41	50	59	41	50	59
Power input DF	(E)	W	40	73	112	45	73	112	102	125	152	102	125	152
Total cooling capacity DF	(1)(E)	kW	3,36	4,17	4,61	2,82	3,44	3,76	5,71	6,17	6,55	5,17	5,58	5,91
Sensible cooling capacity DF	(1)(E)	kW	2,52	3,17	3,53	2,18	2,68	2,95	4,30	4,66	4,97	3,84	4,15	4,39
FCEER class DF	(E)			C			B			C			C	
Water flow DF	(2)	l/h	579	718	794	486	592	647	983	1062	1128	890	961	1018
Water pressure drop DF	(2)(E)	kPa	8	12	14	10	14	17	15	17	19	18	21	23
FCCOP class DF	(E)			C			B			B			C	
Heating capacity DF	(3)(E)	kW	3,23	3,66	3,89	3,23	3,68	3,91	5,21	5,45	5,65	5,25	5,51	5,72
Water flow DF	(3)	l/h	278	315	355	278	317	337	449	469	486	452	474	492
Water pressure drop DF	(3)(E)	kPa	5	6	7	5	6	7	10	11	12	12	13	14
Additional coil DF - number of rows				1			1			1			1	
Total sound power level DF	(4)	dB(A)	54	61	66	54	61	66	61	64	69	59	63	69
Inlet + radiated sound power level DF	(4)(E)	dB(A)	52	59	64	52	59	64	56	60	66	56	60	66
Outlet sound power level DF	(4)(E)	dB(A)	51	58	63	51	58	63	55	59	65	55	59	65

UTN i			16A			16D			22A			22D		
Speed			min	med	max	min	med	max	min	med	max	min	med	max
Control voltage	(E)	V	6,70	7,70	8,90	6,70	7,70	8,90	6,40	8,10	9,60	6,40	8,20	9,80
Rated air flow DF	(E)	m^3/h	1184	1349	1550	1214	1393	1666	1425	1795	2182	1466	1871	2328
Available static pressure DF	(E)	Pa	38	50	66	38	50	66	31	50	75	30	50	78
Power input DF	(E)	W	124	170	248	124	170	248	138	210	305	144	220	317
Total cooling capacity DF	(1)(E)	kW	6,77	7,52	8,35	6,14	6,75	7,46	9,35	11,3	13,3	8,56	10,3	12,1
Sensible cooling capacity DF	(1)(E)	kW	5,34	5,98	6,71	4,96	5,52	6,19	6,94	8,55	10,1	6,51	7,98	9,50
FCEER class DF	(E)			C			C			B			C	
Water flow DF	(2)	l/h	1166	1295	1438	1057	1162	1285	1631	1987	2336	1493	1808	2130
Water pressure drop DF	(2)(E)	kPa	10	13	15	16	19	23	12	16	22	15	21	28
FCCOP class DF	(E)			C			C			B			B	
Heating capacity DF	(3)(E)	kW	7,00	7,44	7,94	7,02	7,47	7,99	10,6	12,3	13,9	10,9	12,6	14,4
Water flow DF	(3)	l/h	602	641	684	604	643	688	11	12	14	950	1105	13
Water pressure drop DF	(3)(E)	kPa	20	22	25	22	24	27	6	8	10	6	8	10
Additional coil DF - number of rows				1			1			2			2	
Total sound power level DF	(4)	dB(A)	62	67	72	62	67	72	60	67	74	60	67	74
Inlet + radiated sound power level DF	(4)(E)	dB(A)	60	64	70	60	64	70	58	65	72	58	65	72
Outlet sound power level DF	(4)(E)	dB(A)	58	63	69	58	63	69	57	64	71	57	64	71

(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)

NOTE: The dimensional drawings of the UTN i inverter units are the same of the UTN ON/OFF version. They are reported from page 116

RATED TECHNICAL DATA 4 PIPES

UTN i			30A			30D		
Speed			min	med	max	min	med	max
Control voltage	(E)	V	6,20	7,70	8,90	6,20	7,80	8,90
Rated air flow DF	(E)	m^3/h	2065	2590	3155	2084	2626	3186
Available static pressure DF	(E)	Pa	32	50	74	31	50	74
Power input DF	(E)	W	221	345	441	223	350	452
Total cooling capacity DF	(1)(E)	kW	13,6	16,0	18,6	12,2	14,5	16,6
Sensible cooling capacity DF	(1)(E)	kW	9,99	12,0	14,3	9,23	11,1	13,0
FCEER class DF	(E)		C			C		
Water flow DF	(2)	l/h	2358	2811	3254	2138	2550	2940
Water pressure drop DF	(2)(E)	kPa	27	37	48	21	28	36
FCCOP class DF	(E)		C					
Heating capacity DF	(3)(E)	kW	14,8	17,0	19,2	14,9	17,2	19,3
Water flow DF	(3)	l/h	1295	1490	1680	1302	1503	1690
Water pressure drop DF	(3)(E)	kPa	13	16	20	11	17	21
Additional coil DF - number of rows			2			2		
Total sound power level DF	(4)	dB(A)	69	73	78	69	73	78
Inlet + radiated sound power level DF	(4)(E)	dB(A)	67	71	76	67	71	76
Outlet sound power level DF	(4)(E)	dB(A)	66	70	75	66	70	75

(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
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