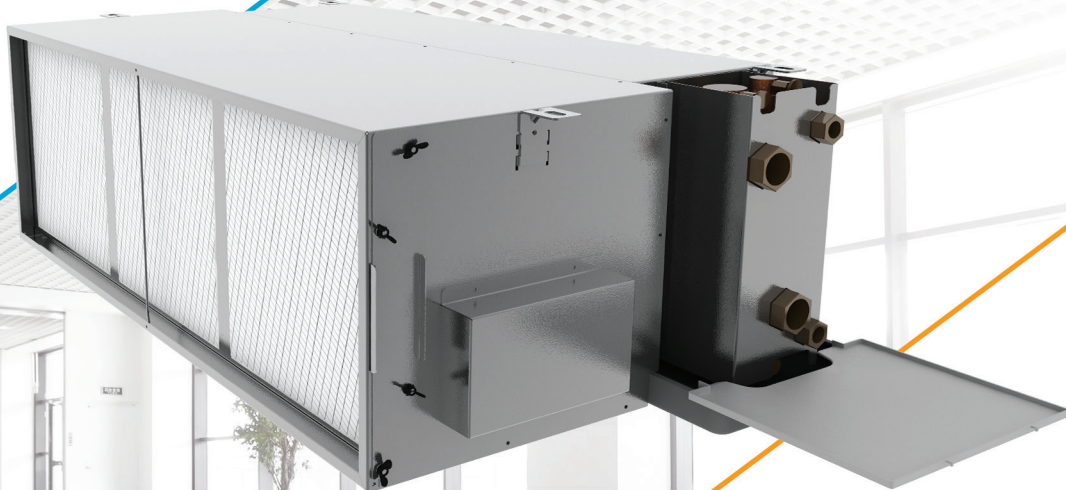


Air Terminal Units

- UNAT Series





ÜNTES®

52
years

UNAT Series

High Pressure Air Terminal Unit

-  Cooling capacity: 9,79 kW - 39,51 kW
-  Heating capacity: 10,43 kW – 101,39 kW

- **Operation up to 150 Pa ESP**
- **Thermally and acoustically insulated unit case**
- **Ideal comfort and indoor air quality for all seasons**
- **Wide and versatile options**
- **Advanced control and electronic control options**
- **Low energy consumption and high comfort**
- **Superior reliability and high quality**
- **Low sound levels**



Structural features

- Made from corrosion resistant galvanized steel with high zinc content.
- High efficiency and silent centrifugal fans (3 speed/ 220-240V / 1 phase / 50Hz).
- Easy maintenance and cleaning due to the G2 synthetic filter provided as standard.
- High efficient coils are made of seamless copper pipes and aluminum fins. Each coil is factory tested to 20 bar pressure. A drain pan against sweating is provided to drain the condensation occurring on the coil.
- The drain pan is enamel-coated and self-insulated with high protection properties.
- Corrosion-resistant, galvanized steel electrical terminal box accommodates electrical cables and connections.
- Specially designed to minimize air bubbles on the coil, there is a droplet sheet that allows condensing water to go to the pan.
- Extension dropper made of ABS material is also available against dripping from the coil valve connections.
- Hydrophobic coated drain pan.
- AC, 3 stages Motor with IP 20 protection class, B class insulation.
- Flexible plenum box connections are available on the suction and supply sides

Electrical Heater Options;

- Special design of electrical heaters which are integrated to coil allows lower surface temperatures with higher capacities.
- All electrical heaters are made of 304 quality Stainless steel and have halogen free cable connections.
- Option have integrated safety thermostat to prevent high surface temperatures which are resettable and already all cable connections are completed.
- Units have contactors (220 – 240 Vac, monophasic, 50 hz) and could be controlled by standard room thermostats.
- All Two pipe UNAT series units (except units with 5 row coil) can be equipped with electrical heaters.

Versions

- **2B** (2 Pipe)
- **4B** (4 Pipe)
- **3R** (3 Rows Coil)
- **4R** (4 Rows Coil)
- **5R** (5 Rows Coil)

Options / Accessories

- Additional Heating Coil
- 2-Way Valve and Motor (Supplied Loose)
- 3-Way Valve and motor (Supplied loose)
- Room Thermostat
- Digital Room Thermostat
- Washable Metal Filter
- Synthetic G3 Filter
- Plenum Box On The Suction and Supply Sides
- Electrical Heater for 2-Pipe systems



UNAT Series		2 PIPES								
		305	405	505	310	410	510	315	415	515
Technical Specifications										
❶ Total Cooling Capacity	kW	9,96	12,14	13,48	12,55	15,26	16,93	15,09	18,18	20,14
❶ Sensible Cooling Capacity	kW	7,40	8,40	8,97	9,20	10,46	11,20	10,87	12,34	13,25
❷ Heating Capacity	kW	22,62	24,88	25,76	27,91	30,77	31,99	32,62	35,96	37,53
❷ Heating Capacity	kW	30,38	33,74	35,16	37,58	41,83	43,75	44,03	48,98	51,48
❸ Electrical Heater Capacity	kW	3,20	3,20	-	3,70	3,70	-	4,10	4,10	-
Airflow (High Speed)	m³/h	1.736	1.695	1651	2.108	2.077	2.039	2.442	2.414	2.384
Airflow (Medium Speed)	m³/h	1.398	1.373	1.347	1.617	1.591	1.563	1.883	1.858	1.831
Dimensions										
Height (H)	mm	335	335	335	385	385	385	385	385	385
Width (W)	mm	1.157	1.157	1.157	1.242	1.242	1.242	1.412	1.412	1.412
Depth (D)	mm	558	558	558	558	558	558	589	589	589
Weight	kg	40,1	42,4	44,7	45,1	48	50,7	52,3	55,6	58,6
Fluid Data										
❶ Water Flowrate (Cooling)	L/h	1.708	2.084	2.313	2.153	2.618	2.905	2.589	3.119	3.456
❶ Water Side Pressure Drop	kPa	15,90	30,4	46	19,6	37,3	56,3	31,1	58	87,4
❷ Water Flowrate (Heating)	L/h	1.945	2.139	2.214	2.399	2.645	2.750	2.805	3.091	3.226
❷ Water Side Pressure Drop	kPa	16,7	26,4	35,2	19,7	31,4	42,1	29,5	47	63,6
Water Content (Cooling)	L	2,71	3,51	4,48	3,62	4,63	5,92	4,11	5,29	6,75
Sound Level (4)										
Sound Pressure Level (High)	dBA	51	51	51,5	53	53	53,5	50	50,5	50,5
Sound Pressure Level (Med)	dBA	45	45	45,5	45	45,5	45,5	43,5	44	44
Sound Pressure Level (Low)	dBA	40	41	41	39	39,5	40	36	36,5	36,5
Installation Data										
Coil In/ Out Diameter (Cooling Coil)	inch	3/4	3/4	1	1	1	1 1/4	1	1	1 1/4
Drain Pipe Diameter	inch	3/4								
Absorbed Power										
Absorbed Power (Cooling) High Speed	W	271	264	258	358	350	344	405	399	393
Absorbed Power (Cooling) Medium Speed	W	224	230	214	265	280	255	288	303	281

UNAT Series		2 PIPES								
		320	420	520	325	425	525	330	430	530
Technical Specifications										
❶ Total Cooling Capacity	kW	21,73	24,91	28,12	27,13	31,16	35,37	29,87	34,55	39,51
❶ Sensible Cooling Capacity	kW	15,57	17,13	18,51	19,33	21,32	23,19	21,47	23,83	26,06
❷ Heating Capacity	kW	46,52	50,55	52,45	57,65	62,79	65,47	64,21	70,47	74,01
❷ Heating Capacity	kW	62,78	68,64	71,76	77,95	85,46	89,82	86,64	95,74	101,39
❸ Electrical Heater Capacity	kW	6,50	6,50	-	7,50	7,50	-	8,20	8,20	-
Airflow (High Speed)	m³/h	3.489	3.416	3.336	4.240	4.191	4.132	4.859	4.796	4.730
Airflow (Medium Speed)	m³/h	2.806	2.760	2.714	3.256	3.212	3.165	3.744	3.687	3.625
Dimensions										
Height (H)	mm	335	335	335	435	435	435	435	435	435
Width (W)	mm	2.143	2.143	2.143	2.143	2.143	2.143	2.143	2.143	2.143
Depth (D)	mm	558	558	558	558	558	558	589	589	589
Weight	kg	80	84,9	88,7	87,7	93,9	101,7	92,4	98,6	106,4
Fluid Data										
❶ Water Flowrate (Cooling)	L/h	3.728	4.274	4.824	4.655	5.346	6.068	5.125	5.927	6.779
❶ Water Side Pressure Drop	kPa	38,1	29,1	75,2	33,9	26	72,8	40,3	31,3	88,7
❷ Water Flowrate (Heating)	L/h	3.999	4.346	4.509	4.956	5.398	5.628	5.520	6.058	6.362
❷ Water Side Pressure Drop	kPa	34,9	24	53,7	30,5	21,1	51,1	37,2	26	64
Water Content (Cooling)	L	5,57	7,19	8,80	7,43	9,58	12,41	7,43	9,58	12,41
Sound Level (4)										
Sound Pressure Level (High)	dBA	54	54	54,5	53,5	53,5	53,5	53	53,5	54
Sound Pressure Level (Med)	dBA	48	48	48,5	46,5	46,5	47	47	47	47,5
Sound Pressure Level (Low)	dBA	43	44	44	39	39	39,5	39,5	39,5	39,5
Installation Data										
Coil In/ Out Diameter (Cooling Coil)	inch	1	1	1 1/4	1	1	1 1/2	1	1	1 1/2
Drain Pipe Diameter	inch					3/4				
Absorbed Power										
Absorbed Power (Cooling) High Speed	W	549	531	521	723	708	697	806	790	776
Absorbed Power (Cooling) Medium Speed	W	450	464	432	534	567	516	573	601	559

* Values in the table above are valid for units with G2 filter and 50 Pa external static pressure.

❶ High speed, room temperature of 27°C DB, 50% RH and 7/12 °C water inlet / outlet temperatures.

❷ High speed, room temperature of 20°C DB and 70/60 °C water inlet / outlet temperatures.

❸ High speed, room temperature of 20°C DB and 90/70 °C water inlet / outlet temperatures.

❹ Sound levels at a distance of 1 meter from the unit and for direction factor Q=1.

❺ All values are based on 230 Volt, 50 Hz electrical supply.

UNAT Series		4 PIPES											
		305	405	310	410	315	415	320	420	325	425	330	430
Technical Specifications													
❶ Total Cooling Capacity	kW	9,79	11,90	12,42	15,04	14,96	18,01	21,40	24,46	26,91	30,81	29,60	34,18
❶ Sensible Cooling Capacity	kW	7,27	8,21	9,09	10,30	10,77	12,21	15,32	16,79	19,15	21,07	21,26	23,56
❷ Heating Capacity	kW	10,43	10,26	13,16	13,01	15,47	15,36	21,74	21,43	27,87	27,62	30,21	29,95
❷ Heating Capacity	kW	13,69	13,46	17,36	17,14	20,46	20,29	28,69	28,25	36,97	36,60	39,99	39,63
Airflow (High Speed)	m³/h	1.695	1.650	2.077	2.038	2.414	2.384	3.414	3.334	4.190	4.130	4.796	4.729
Airflow (Medium Speed)	m³/h	1.373	1.363	1.591	1.591	1.858	1.894	2.760	2.713	3.211	3.164	3.686	3.624
Dimensions													
Height (H)	mm	335	335	385	385	385	385	335	335	435	435	435	435
Width (W)	mm	1.157	1.157	1.242	1.242	1.412	1.412	2.143	2.143	2.143	2.143	2.143	2.143
Depth (D)	mm	558	558	558	558	589	589	558	558	558	558	589	589
Weight	kg	45,3	47,6	51,6	54,5	53,9	63,3	90,5	95,4	100,2	106,4	104,9	111,1
Fluid Data													
❶ Water Flowrate (Cooling)	L/h	1.680	2.042	2.130	2.581	2.567	3.089	3.671	4.196	4.616	5.286	5.078	5.864
❶ Water Side Pressure Drop	kPa	15,4	29,3	19,2	36,3	30,6	57,0	37,1	28,2	33,4	25,5	39,6	30,7
❷ Water Flowrate (Heating)	L/h	897	882	1.132	1.119	1.330	1.320	1.869	1.843	2.396	2.375	2.597	2.575
❷ Water Side Pressure Drop	kPa	30,4	29,5	58,2	56,9	88,1	86,8	65,0	63,3	136,9	134,6	158,9	156,3
Water Content (Cooling)	L	2,71	3,51	3,62	4,63	4,11	5,29	5,57	7,19	7,43	9,58	7,43	9,58
Water Content (Heating)	L	0,92	0,92	1,16	1,16	1,44	1,44	1,84	1,84	2,45	2,45	2,45	2,45
Sound Level (4)													
Sound Pressure Level (High)	dBA	51	51,5	53	53,5	50,5	50,5	54	54,5	53,5	53,5	53,5	54
Sound Pressure Level (Med)	dBA	45	45,5	45,5	45,5	44	44	48	48,5	46,5	47	47	47,5
Sound Pressure Level (Low)	dBA	41	41	39,5	40	36,5	36,5	44	44	39	39,5	39,5	39,5
Installation Data													
Coil In/ Out Diameter (Cooling Coil)	inch	3/4	3/4	1	1	1	1	1	1	1	1	1	1
Coil In/ Out Diameter (Additional Heating Coil)	inch	1/2	1/2	1/2	1/2	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
Drain Pipe Diameter	inch	3/4											
Absorved Power													
Absorbed Power (Cooling) High Speed	W	264	258	350	343	399	393	532	520	708	696	790	776
Absorbed Power (Cooling) Medium Speed	W	220	219	261	276	286	290	443	435	527	519	568	561

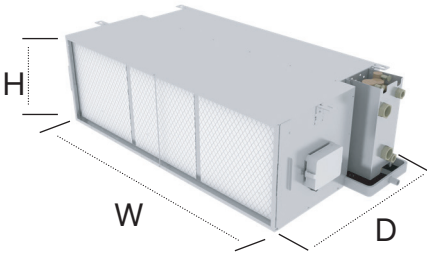
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❸ High speed, room temperature of 20°C DB and 90/70 °C water inlet / outlet temperatures.

❹ Sound levels at a distance of 1 meter from the unit and for direction factor Q=1.



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52
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