



United Technologies

PRODUCT SELECTION



- Hybrid chilled beam unit & fan coil unit
- Very low energy consumption
- Easy to install in modular suspended ceilings
 - Very low noise levels
 - High indoor air quality
- Main components can be accessed directly via the grille

Hybrid Terminal

36XB



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1 - FUNCTIONS

- The 36XB Hybrid Terminal combines the functional advantages of a chilled beam and a fan coil unit in one single product.
- Connected to the building's fresh air supply, the 36XB Hybrid Terminal makes it possible to provide heating or cooling and fresh air to the room by means of induction, even with the fan unit off, ensuring maximum energy efficiency and silent operation.
- The 36XB Hybrid Terminal fan is only used for very short periods (peak heating or cooling demand), providing a responsive system to maintain the comfort of occupants while reducing energy consumption for 80% of the operating time.
- The 36XB Hybrid Terminal is supplied as standard with a condensate drain pan, making it possible to operate at very low chilled water settings with no risk of condensation forming in the occupied area.
- The 36XB Hybrid Terminal guarantees optimum comfort levels thanks to its LEC low energy fan, used as a booster when the heating or cooling demand increases.
- It makes it possible to counter the negative radiant effects of cold or hot walls and eliminate stratification.
- The range of fresh air flows available makes it possible to use the area as office space or a meeting room.
- The 36XB Hybrid Terminal is available with a changeover, 2-pipe cooling and heating coil, or as a 4-pipe version (by special request) (2 pipes + six-way valves).



2 - FEATURES

2.1 - Flexible configuration

The 36XB Hybrid Terminal consists of:

- a shallow Hybrid Terminal base (< 200 mm) making it possible to mount in suspended ceilings with limited space, making it ideal for refurbishment projects or to improve occupant comfort thanks to increased volume gained by greater usable height inside the suspended ceiling.
- an intake and distribution grille measuring 1200 x 600 mm, which fits perfectly into suspended ceiling tiles. This grille can be customised on request to fit all types of suspended ceiling. The design of the Carrier discharge diffuser ensures excellent distribution of cooling air in the occupied space thanks to the Coanda effect, and excellent heating distribution thanks to high air velocities, to limit the effects of stratification.

2.2 - Low noise levels

In order to further enhance occupant comfort this product range offers especially low noise levels. The 36XB Hybrid Terminal is almost completely silent for 80% of the time, operating as an induction unit without fans.

It is fitted as standard with anti-vibration suspended mounts.

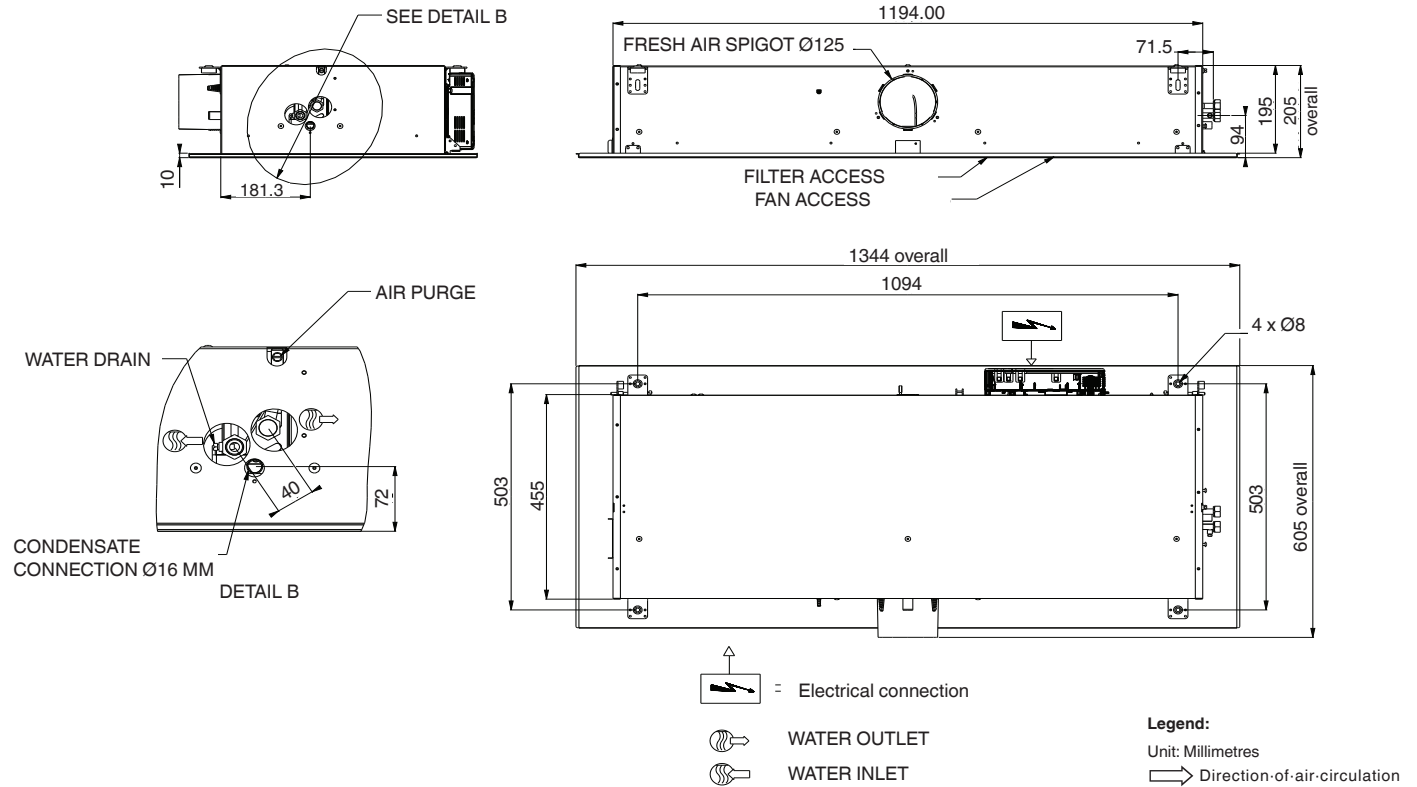
2.3 - Compact design

The height of the condensate drain is optimised. In order to reduce the footprint as far as possible, the 36XB Hybrid Terminal uses high-efficiency heat exchangers with very high cooling capacity/treated air flow ratios.

2.4 - Dimensional drawings (footprint in mm)

NOTE: All drawings shown have the coil connections on the right-hand side. Units with left-hand connections are symmetrical.

Size 1



3 - MAIN MODULES AND COMPONENTS

3.1 - Fan motor assemblies

to determine the wiring of the fan motor.

3.1.1. Low Energy, variable speed, EC fan motor

The 36XB Hybrid Terminal is equipped with a variable speed "LEC" type fan motor controlled by a signal from 0 to 10 volts available with the Carrier "NTC" or "WTC" type electronic control.

The technology of the variable speed LEC (low energy consumption) motors meets all new energy performance objectives

for buildings. This solution improves the performance of the unit, and ensures it meets all new regulations for building energy efficiency. LEC motors provide:

- Greater comfort - the variable speed LEC motor reduces the noise level thanks to ultra-silent air flow variations. With the NTC control, it is possible to limit the maximum fan speed in order to control the sound level to suit the application.
- Maximum flexibility - the air flow is adjusted automatically from 0 to 100%, providing perfect cooling or heating conditions in the room.
- Extended service life - the low energy LEC technology motors run at lower fan motor temperatures which extends their service life.

3.2 - Water coil

- Copper tubes mechanically expanded into aluminium fins.
- 1/2" inlet/outlet female threaded connections
- Air purge valves and drain are standard.
- Operating pressure 1600 kPa.

The two-pipe coil and the condensate pan are directly accessible through the grille, making maintenance quick and easy.

3.3 - One-piece condensate drain pan

The 36XB Hybrid terminal is supplied as standard with a thermally insulated condensate pan for the cooling coil.

Tray with 16 mm external diameter connection.

3.4 - Air filter and access

The Carrier 36XB Hybrid Terminal is fitted with an EU3 non-cleanable filter in compliance with the EN 779 standard, M1 fire resistance rating, metal wire frame.



(Fig. 1)

3.5 - Optional fresh air flow controller

3.5.1 - Constant fresh air flow controller

The 36XB Hybrid Terminal can be fitted with a constant fresh air flow controller, fixed at 8.5 l/s (30 m³/h) or with an adjustable device providing flows from 17 l/s (60 m³/h) to 44 l/s (160 m³/h), allowing control of fresh air consumption. The fresh air feed is located before the water coils.

The 17 l/s (60 m³/h) fresh air controller can be modified on site by moving or removing two plastic restrictors to increase capacity up to a maximum fresh air flow of 44 l/s (160 m³/h).

NOTE: The operation of the 8.5 l/s (30 m³/h) fixed fresh air flow rate controller requires a minimum differential pressure minimum of 50 Pa, and the 17 l/s (60 m³/h) to 44 l/s (160 m³/h) adjustable fresh air controller requires a minimum differential pressure of 70 Pa.

3.5.2 - Variable fresh air controller

The 36XB Hybrid Terminal can be fitted with a 0 to 41l/s (0 to 150 m³/h) variable fresh air controller (available as an option).

This is connected to the Carrier digital control and can control the fresh air inlet flow rate in two ways:

- either a fixed flow rate determined by the installer, that can be reconfigured as desired,
- or according to the CO₂ concentration. In this case it is controlled by a CO₂ sensor which is connected via the Carrier digital control.

NOTE: In the case of the variable fresh air flow rate controller, it is necessary for the upstream pressure in the fresh air duct to be at least 180 Pa.

4 - TECHNICAL SPECIFICATIONS

4.1 - Valve technical specifications (optional)

NOTE: the motor + valve assembly is normally closed.

4.1.1 - Electrothermal actuator

The actuator is the 230 V AC ON/OFF type or with 3-point modulation.

4.1.2 - Two-way valve body

Features of the 1/2" 2-way valve:

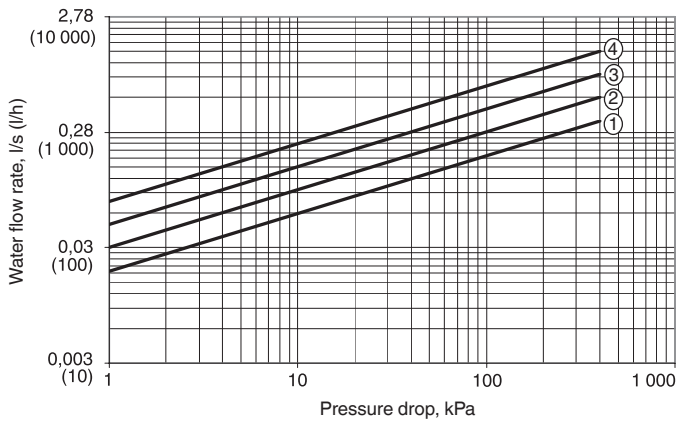
- G1/2" male BSP connection for union nuts
- Straight valve body with arrow indicating direction of flow embossed on valve body.
- DN 15 for 1/2" valve
- Fluid: water and glycol solution (max. 40% glycol)
- Operating range: 2-90°C
- Nominal pressure: PN 16 bar
- Kvs = 1.6

4.1.3 - Three-way valve body (with integral bypass)

Features of the 1/2" 3-way valve:

- G1/2" male BSP connection for union nuts
- Straight valve body with arrow indicating direction of flow embossed on valve body.
- DN 15 for 1/2" valve
- Fluid: water and glycol solution (max. 40% glycol)
- Operating range: 2-90°C
- Nominal pressure: PN 16 bar
- Kvs = 1.6

4.1.4 - Water valve pressure drop



Legend:

- 1 Kvs = 0.63
- 2 Kvs = 1
- 3 Kvs = 1.6 (standard valve)
- 4 Kvs = 2.5

4.2 - Flexible hose technical specifications (optional)

4.2.1 - Materials

- EPDM elastomer pipe
- 304L stainless braid
- Cellular rubber insulation with M1 fire resistance rating (flexible insulation, 9 mm thick).

4.2.2 - Features

- Minimum curve radius: 106 mm
- Ten year guarantee
- The flexible water hoses are suitable for treated or untreated water (max 40% ethylene glycol or propylene glycol mix).
- Maximum hot operating temperature 90°C
- Operating pressure: 16 bar
- 1/2" union nut connections
- Length: approx 1 m

5 - CARRIER CONTROL

The 36XB Hybrid Terminal is supplied as standard with an NTC type Carrier control that is compatible with the Aquasmart system (LON or BACNET compatible CCN or WTC protocol).

		NTC
Control algorithms	On-Off	
	Proportional-integral	X
Valve management	Air flow control only (no valve)	
	On-off actuators	X
	Proportional valves	O
Fan control	Three speeds	X
	Automatic fan speed selection	X
	"LEC" motor control	X
Main functions	Setpoint control	X
	Occupied/unoccupied mode	X
	Frost protection mode	X
	Window contact input	X
	Measurement of water inlet temperature for automatic seasonal changeover (2 pipes)	X
	Automatic change-over (2 coils, no electrical heaters are available)	O
	Manual changeover	X
	Continuous ventilation within dead-band	X
	Intermittent ventilation within dead-band	X
	Unit grouping	X
	Motorised louvre control	X
	On-site configuration	X
	Supply air temperature control	X
	Communication (CCN, LON, BACNET)	X
	Alarm reporting	X
	IAQ control (Indoor Air Quality)	O
Demand control ventilation (DCV)	O	
Free cooling mode	O	
User interface	Digital display	X
	Automatic or manual fan speed control	X
	Operating mode selection	X
	Eco/unoccupied button	X

Legend:

NTC New Terminal Controller
 X Standard function
 O Available as an option

NOTE: For the features and specifications of the Carrier controllers mentioned above, refer to the technical documentation for each controller.

6 - PERFORMANCE OF THE 36XB HYBRID TERMINAL

6.1.1 - Two-pipe water coil

36XB139 Fresh air 30 m³/h - Cooling mode

Water inlet temperature 7°C, leaving water temperature 12°C

Temperature - inlet air °C	Temperature - fresh air °C	EC motor control voltage V	Nozzle pressure drop Pa	EC motor consumption W	Water flow rate l/h	Water pressure drop KPa	Cooling capacity including fresh air W		Cooling capacity without fresh air W		Sound pressure level** dBA*
							Total	(Sensible)	Total	(Sensible)	
27	14	0	9	0	47	1,0	408	310	275	178	18
		2	9	4	75	1,7	569	416	436	283	18
		5	9	6	143	5,0	967	680	834	548	32
		8	9	11	221	11,9	1419	990	1287	857	44
	18	0	9	0	47	1,0	367	270	275	178	18
		2	9	4	75	1,7	528	375	436	283	18
		5	9	6	143	5,0	926	640	834	548	32
		8	9	11	221	11,9	1379	949	1287	857	44
25	14	0	9	0	47	1,0	388	270	275	158	18
		2	9	4	75	1,7	549	364	437	252	18
		5	9	6	143	5,0	947	597	835	485	32
		8	9	11	221	11,9	1400	868	1288	756	44
	18	0	9	0	47	1,0	347	230	275	158	18
		2	9	4	75	1,7	508	323	437	252	18
		5	9	6	143	5,0	906	556	835	485	32
		8	9	11	221	11,9	1359	828	1288	756	44
23	14	0	9	0	47	1,0	367	230	276	138	18
		2	9	4	75	1,7	529	312	437	220	18
		5	9	6	144	5,0	927	514	836	422	32
		8	9	11	221	12,0	1381	746	1289	655	44
	18	0	9	0	47	1,0	327	189	276	138	18
		2	9	4	75	1,7	488	271	437	220	18
		5	9	6	144	5,0	887	473	836	422	32
		8	9	11	221	12,0	1340	706	1289	655	44

Water inlet temperature 15°C, leaving water temperature 18°C

Temperature - inlet air °C	Temperature - fresh air °C	EC motor control voltage V	Nozzle pressure drop Pa	EC motor consumption W	Water flow rate l/h	Water pressure drop KPa	Cooling capacity including fresh air W		Cooling capacity without fresh air W		Sound pressure level** dBA*
							Total	(Sensible)	Total	(Sensible)	
27	14	0	9	0	32	0,6	243	243	110	110	18
		2	9	4	51	0,9	309	309	176	176	18
		5	9	6	98	2,3	473	473	340	340	32
		8	9	11	153	5,7	665	665	532	532	44
	18	0	9	0	32	0,6	202	202	110	110	18
		2	9	4	51	0,9	268	268	176	176	18
		5	9	6	98	2,3	432	432	340	340	32
		8	9	11	153	5,7	624	624	532	532	44
25	14	0	9	0	26	0,5	202	202	90	90	18
		2	9	4	41	0,7	255	255	143	143	18
		5	9	6	79	1,6	388	388	276	276	32
		8	9	11	123	3,7	542	542	430	430	44
	18	0	9	0	26	0,5	162	162	90	90	18
		2	9	4	41	0,7	215	215	143	143	18
		5	9	6	79	1,6	347	347	276	276	32
		8	9	11	123	3,7	501	501	430	430	44
23	14	0	9	0	21	0,4	164	160	72	69	18
		2	9	4	32	0,6	204	200	112	109	18
		5	9	6	61	1,1	304	299	212	207	32
		8	9	11	94	2,2	420	415	328	324	44
	18	0	9	0	21	0,4	123	120	72	69	18
		2	9	4	32	0,6	163	160	112	109	18
		5	9	6	61	1,1	263	258	212	207	32
		8	9	11	94	2,2	379	375	328	324	44

To convert l/h to l/s, divide by 3600.

NOTE: Measurements are based on standard ISO standards.

* The NR sound pressure level is based on a theoretical attenuation of -9dB(A).

** The tolerance is +/-2dB(A).

36XB139 Fresh air 60 m³/h - Cooling mode

Water inlet temperature 7°C, leaving water temperature 12°C

Temperature - inlet air °C	Temperature - fresh air °C	EC motor control voltage V	Nozzle pressure drop Pa	EC motor consumption W	Water flow rate l/h	Water pressure drop KPa	Cooling capacity including fresh air W		Cooling capacity without fresh air W		Sound pressure level** dBA*
							Total	(Sensible)	Total	(Sensible)	
27	14	0	28	0	79	1,8	722	562	457	297	21
		2	28	4	106	2,8	883	668	618	403	21
		5	28	6	165	6,7	1226	899	960	633	32
		8	28	11	233	13,2	1619	1169	1354	904	44
	18	0	28	0	79	1,8	641	481	457	297	21
		2	28	4	106	2,8	802	587	618	403	21
		5	28	6	165	6,7	1144	817	960	633	32
		6	28	11	233	13,2	1537	1088	1354	904	44
25	14	0	28	0	79	1,8	682	488	458	264	21
		2	28	4	106	2,8	843	582	619	358	21
		5	28	6	165	6,7	1186	784	961	560	32
		8	28	11	233	13,2	1580	1021	1355	797	44
	18	0	28	0	79	1,8	600	407	458	264	21
		2	28	4	106	2,8	761	500	619	358	21
		5	28	6	165	6,7	1104	703	961	560	32
		8	28	11	233	13,2	1498	940	1355	797	44
23	14	0	28	0	79	1,8	642	414	458	230	21
		2	28	4	106	2,8	803	495	619	312	21
		5	28	6	165	6,7	1146	670	962	487	32
		8	28	11	233	13,2	1540	873	1357	689	44
	18	0	28	0	79	1,8	560	332	458	230	21
		2	28	4	106	2,8	721	414	619	312	21
		5	28	6	165	6,7	1064	589	962	487	32
		6	28	11	233	13,2	1459	791	1357	689	44

Water inlet temperature 15°C, leaving water temperature 18°C

Temperature - inlet air °C	Temperature - fresh air °C	EC motor control voltage V	Nozzle pressure drop Pa	EC motor consumption W	Water flow rate l/h	Water pressure drop KPa	Cooling capacity including fresh air W		Cooling capacity without fresh air W		Sound pressure level** dBA*
							Total	(Sensible)	Total	(Sensible)	
27	14	0	28	0	53	1,0	450	450	185	165	21
		2	28	4	72	1,4	515	515	250	250	21
		5	26	6	113	3,1	659	659	394	394	32
		6	28	11	161	6,3	826	826	561	561	44
	18	0	28	0	53	1,0	368	368	185	185	21
		2	28	4	72	1,4	433	433	250	250	21
		5	28	6	113	3,1	577	577	394	394	32
		8	28	11	161	6,3	745	745	561	561	44
25	14	0	28	0	43	0,8	375	375	150	150	21
		2	28	4	58	1,1	427	427	203	203	21
		5	28	6	91	2,1	543	543	319	319	32
		8	28	11	130	4,1	677	677	453	453	44
	18	0	28	0	43	0,8	293	293	150	150	21
		2	28	4	56	1,1	345	345	203	203	21
		5	28	6	91	2,1	461	461	319	319	32
		8	28	11	130	4,1	596	596	453	453	44
23	14	0	28	0	34	0,6	301	297	118	114	21
		2	28	4	45	0,8	341	337	157	153	21
		5	28	6	70	1,3	428	423	244	239	32
		8	28	11	99	2,4	529	524	345	341	44
	18	0	28	0	34	0,6	220	216	118	114	21
		2	28	4	45	0,8	259	255	157	153	21
		5	28	6	70	1,3	346	341	244	239	32
		8	28	11	99	2,4	447	443	345	341	44

To convert l/h to l/s, divide by 3600.

NOTE: Measurements are based on standard ISO standards.

* The NR sound pressure level is based on a theoretical attenuation of -9dB(a).

** The tolerance is +/-2dB(A).

36XB139 Fresh air 90 m³/h - Cooling mode

Water inlet temperature 7°C, leaving water temperature 12°C

Temperature - inlet air °C	Temperature - fresh air °C	EC motor control voltage V	Nozzle pressure drop Pa	EC motor consumption W	Water flow rate l/h	Water pressure drop KPa	Cooling capacity including fresh air W		Cooling capacity without fresh air W		Sound pressure level** dBA*
							Total	(Sensible)	Total	(Sensible)	
27	14	0	57	0	111	3,0	1044	820	646	422	29
		2	57	4	138	4,6	1199	924	802	526	29
		5	57	6	193	9,1	1523	1144	1125	746	32
		8	57	11	248	14,9	1841	1364	1443	966	44
	18	0	57	0	111	3,0	922	697	646	422	29
		2	57	4	138	4,6	1077	801	802	526	29
		5	57	6	193	9,1	1401	1022	1125	746	32
		8	57	11	248	14,9	1718	1241	1443	966	44
25	14	0	57	0	111	3,0	984	711	647	374	29
		2	57	4	138	4,7	1139	802	802	466	29
		5	57	6	193	9,1	1463	995	1127	659	32
		8	57	11	248	15,0	1781	1187	1444	851	44
	18	0	57	0	111	3,0	861	588	647	374	29
		2	57	4	138	4,7	1017	680	802	466	29
		5	57	6	193	9,1	1341	873	1127	659	32
		8	57	11	248	15,0	1658	1065	1444	851	44
23	14	0	57	0	111	3,0	923	602	648	326	29
		2	57	4	138	4,7	1078	681	803	405	29
		5	57	6	194	9,2	1403	847	1128	571	32
		8	57	11	248	15,0	1721	1011	1445	735	44
	18	0	57	0	111	3,0	801	479	648	326	29
		2	57	4	138	4,7	956	558	803	405	29
		5	57	6	194	9,2	1281	724	1128	571	32
		8	57	11	248	15,0	1598	888	1445	735	44

Water inlet temperature 15°C, leaving water temperature 18°C

Temperature - inlet air °C	Temperature - fresh air °C	EC motor control voltage V	Nozzle pressure drop Pa	EC motor consumption W	Water flow rate l/h	Water pressure drop KPa	Cooling capacity including fresh air W		Cooling capacity without fresh air W		Sound pressure level** dBA*
							Total	(Sensible)	Total	(Sensible)	
27	14	0	57	0	75	1,5	660	660	262	262	29
		2	57	4	94	2,2	725	725	327	327	29
		5	57	6	133	4,3	861	861	463	463	32
		8	57	11	172	7,2	997	997	599	599	44
	18	0	57	0	75	1,5	537	537	262	262	29
		2	57	4	94	2,2	602	602	327	327	29
		5	57	6	133	4,3	739	739	463	463	32
		8	57	11	172	7,2	875	875	599	599	44
25	14	0	57	0	61	1,1	549	549	212	212	29
		2	57	4	76	1,5	601	601	265	265	29
		5	57	6	108	2,8	711	711	375	375	32
		8	57	11	139	4,7	820	820	483	483	44
	18	0	57	0	61	1,1	426	426	212	212	29
		2	57	4	76	1,5	479	479	265	265	29
		5	57	6	108	2,8	589	589	375	375	32
		8	57	11	139	4,7	698	698	483	483	44
23	14	0	57	0	47	0,9	440	435	164	160	29
		2	57	4	58	1,1	479	474	204	199	29
		5	57	6	82	1,7	562	558	287	282	32
		8	57	11	106	2,7	643	639	368	364	44
	18	0	57	0	47	0,9	317	313	164	160	29
		2	57	4	58	1,1	357	352	204	199	29
		5	57	6	82	1,7	440	435	287	282	32
		8	57	11	106	2,7	521	517	368	364	44

To convert l/h to l/s, divide by 3600.

NOTE: Measurements are based on standard ISO standards.

* The NR sound pressure level is based on a theoretical attenuation of -9dB(A).

** The tolerance is +/-2dB(A).

36XB139 Fresh air 120 m³/h - Cooling mode

Water inlet temperature 7°C, leaving water temperature 12°C

Temperature - inlet air °C	Temperature - fresh air °C	EC motor control voltage V	Nozzle pressure drop Pa	EC motor consumption W	Water flow rate l/h	Water pressure drop KPa	Cooling capacity including fresh air W		Cooling capacity without fresh air W		Sound pressure level** dBA*
							Total	(Sensible)	Total	(Sensible)	
27	14	0	105	0	174	7,4	1546	1201	1016	671	34
		2	105	4	191	8,9	1645	1269	1114	738	34
		5	105	6	230	12,6	1867	1423	1337	892	36
		8	105	11	277	18,2	2145	1618	1614	1088	44
	18	0	105	0	174	7,4	1383	1038	1016	671	34
		2	105	4	191	8,9	1481	1106	1114	738	34
		5	105	6	230	12,8	1704	1259	1337	892	36
		8	105	11	277	10,2	1981	1455	1614	1006	44
25	14	0	105	0	175	7,5	1466	1042	1017	593	34
		2	105	4	192	9,0	1564	1101	1115	652	34
		5	105	6	230	12,9	1787	1235	1338	766	36
		8	105	11	277	18,2	2065	1405	1616	956	44
	18	0	105	0	175	7,5	1302	879	1017	593	34
		2	105	4	192	1,0	1401	938	1115	652	34
		5	105	6	230	12,7	1624	1072	1338	786	36
		8	105	11	277	18,2	1901	1242	1616	956	44
23	14	0	105	0	175	7,5	1365	882	1018	515	34
		2	105	4	192	9,0	1464	933	1116	566	34
		5	105	6	230	12,9	1707	1048	1339	680	36
		8	105	11	278	18,3	1984	1192	1617	825	44
	18	0	105	0	175	7,5	1222	719	1018	515	34
		2	105	4	192	9,0	1320	770	1116	566	34
		5	105	6	230	12,6	1543	884	1339	680	36
		8	105	11	278	18,3	1821	1029	1617	825	44

Water inlet temperature 15°C, leaving water temperature 18°C

Temperature - inlet air °C	Temperature - fresh air °C	EC motor control voltage V	Nozzle pressure drop Pa	EC motor consumption W	Water flow rate l/h	Water pressure drop KPa	Cooling capacity including fresh air W		Cooling capacity without fresh air W		Sound pressure level** dBA*
							Total	(Sensible)	Total	(Sensible)	
27	14	0	105	0	120	3,5	947	947	417	417	34
		2	105	4	132	4,2	989	989	459	459	34
		5	105	6	159	6,2	1084	1084	554	554	36
		8	105	11	194	9,1	1206	1206	675	675	44
	18	0	105	0	120	3,5	784	784	417	417	34
		2	105	4	132	4,2	826	826	459	459	34
		5	105	6	159	6,2	921	921	554	554	36
		8	105	11	194	9,1	1042	1042	675	675	44
25	14	0	105	0	97	2,3	766	786	337	337	34
		2	105	4	106	2,8	820	820	371	371	34
		5	105	6	128	4,0	896	896	447	447	36
		8	105	11	156	6,0	993	993	544	544	44
	18	0	105	0	97	2,3	623	623	337	337	34
		2	105	4	106	2,8	656	656	371	371	34
		5	105	6	128	4,0	733	733	447	447	36
		8	105	11	156	6,0	830	830	544	544	44
23	14	0	105	0	74	1,4	626	621	258	254	34
		2	105	4	82	1,6	651	647	284	279	34
		5	105	6	96	2,4	708	704	341	336	36
		8	105	11	118	3,4	780	776	412	409	44
	18	0	105	0	74	1,4	462	458	258	254	34
		2	105	4	82	1,6	488	483	284	279	34
		5	105	6	98	2,4	545	540	341	336	36
		8	105	11	116	3,4	616	613	412	409	44

To convert l/h to l/s, divide by 3600.

NOTE: Measurements are based on standard ISO standards.

* The NR sound pressure level is based on a theoretical attenuation of -9dB(A).

** The tolerance is +/-2dB(A).

36XB139 Fresh air 30 m³/h - Heating mode

Water inlet temperature 60°C, leaving water temperature 40°C

Temperature - inlet air °C	Temperature - fresh air °C	EC motor control voltage V	Nozzle pressure drop Pa	EC motor consumption W	Water flow rate l/h	Water pressure drop KPa	Heating capacity including fresh air W	Sound pressure level** dBA*
20	20	0	9	0	15	0,1	326	18
		2	9	4	23	0,2	519	18
		5	9	6	43	0,5	992	32
		8	9	11	67	1,1	1525	44

Water inlet temperature 45°C, leaving water temperature 35°C

Temperature - inlet air °C	Temperature - fresh air °C	EC motor control voltage V	Nozzle pressure drop Pa	EC motor consumption W	Water flow rate l/h	Water pressure drop KPa	Heating capacity including fresh air W	Sound pressure level** dBA*
20	20	0	9	0	19	0,2	215	18
		2	9	4	30	0,3	345	18
		5	9	6	58	0,8	662	32
		8	9	11	89	1,9	1023	44

36XB139 Fresh air 60 m³/h - Heating mode

Water inlet temperature 60°C, leaving water temperature 40°C

Temperature - inlet air °C	Temperature - fresh air °C	EC motor control voltage V	Nozzle pressure drop Pa	EC motor consumption W	Water flow rate l/h	Water pressure drop KPa	Heating capacity including fresh air W	Sound pressure level** dBA*
20	20	0	28	0	24	0,2	549	21
		2	28	4	32	0,3	734	21
		5	28	6	50	0,6	1144	32
		8	28	11	70	1,2	1603	44

Water inlet temperature 45°C, leaving water temperature 35°C

Temperature - inlet air °C	Temperature - fresh air °C	EC motor control voltage V	Nozzle pressure drop Pa	EC motor consumption W	Water flow rate l/h	Water pressure drop KPa	Heating capacity including fresh air W	Sound pressure level** dBA*
20	20	0	9	0	30	0,3	346	21
		2	9	4	40	0,4	465	21
		5	9	6	63	1,0	725	32
		8	9	11	89	1,9	1020	44

To convert l/h to l/s, divide by 3600.

NOTE: Measurements are based on standard ISO standards.

* The NR sound pressure level is based on a theoretical attenuation of -9dB(a).

** The tolerance is +/-2dB(A).

36XB139 Fresh air 90 m³/h - Heating mode

Water inlet temperature 60°C, leaving water temperature 40°C

Temperature - inlet air °C	Temperature - fresh air °C	EC motor control voltage V	Nozzle pressure drop Pa	EC motor consumption W	Water flow rate l/h	Water pressure drop KPa	Heating capacity including fresh air W	Sound pressure level** dBA*
20	20	0	57	0	34	0,3	769	29
		2	57	4	42	0,4	958	29
		5	57	6	58	0,8	1337	32
		8	57	11	75	1,3	1706	44

Water inlet temperature 45°C, leaving water temperature 35°C

Temperature - inlet air °C	Temperature - fresh air °C	EC motor control voltage V	Nozzle pressure drop Pa	EC motor consumption W	Water flow rate l/h	Water pressure drop KPa	Heating capacity including fresh air W	Sound pressure level** dBA*
20	20	0	57	0	45	0,5	515	29
		2	57	4	56	0,8	639	29
		5	57	6	78	1,5	896	32
		8	57	11	100	2,4	1147	44

36XB139 Fresh air 120 m³/h - Heating mode

Water inlet temperature 60°C, leaving water temperature 40°C

Temperature - inlet air °C	Temperature - fresh air °C	EC motor control voltage V	Nozzle pressure drop Pa	EC motor consumption W	Water flow rate l/h	Water pressure drop KPa	Heating capacity including fresh air W	Sound pressure level** dBA*
20	20	0	105	0	53	0,7	1209	34
		2	105	4	58	0,8	1324	34
		5	105	6	69	1,2	1563	36
		8	105	11	84	1,7	1909	44

Water inlet temperature 45°C, leaving water temperature 35°C

Temperature - inlet air °C	Temperature - fresh air °C	EC motor control voltage V	Nozzle pressure drop Pa	EC motor consumption W	Water flow rate l/h	Water pressure drop KPa	Heating capacity including fresh air W	Sound pressure level** dBA*
20	20	0	105	0	70	1,2	809	34
		2	105	4	77	1,4	887	34
		5	105	6	92	2,1	1063	36
		8	105	11	112	3,0	1286	44

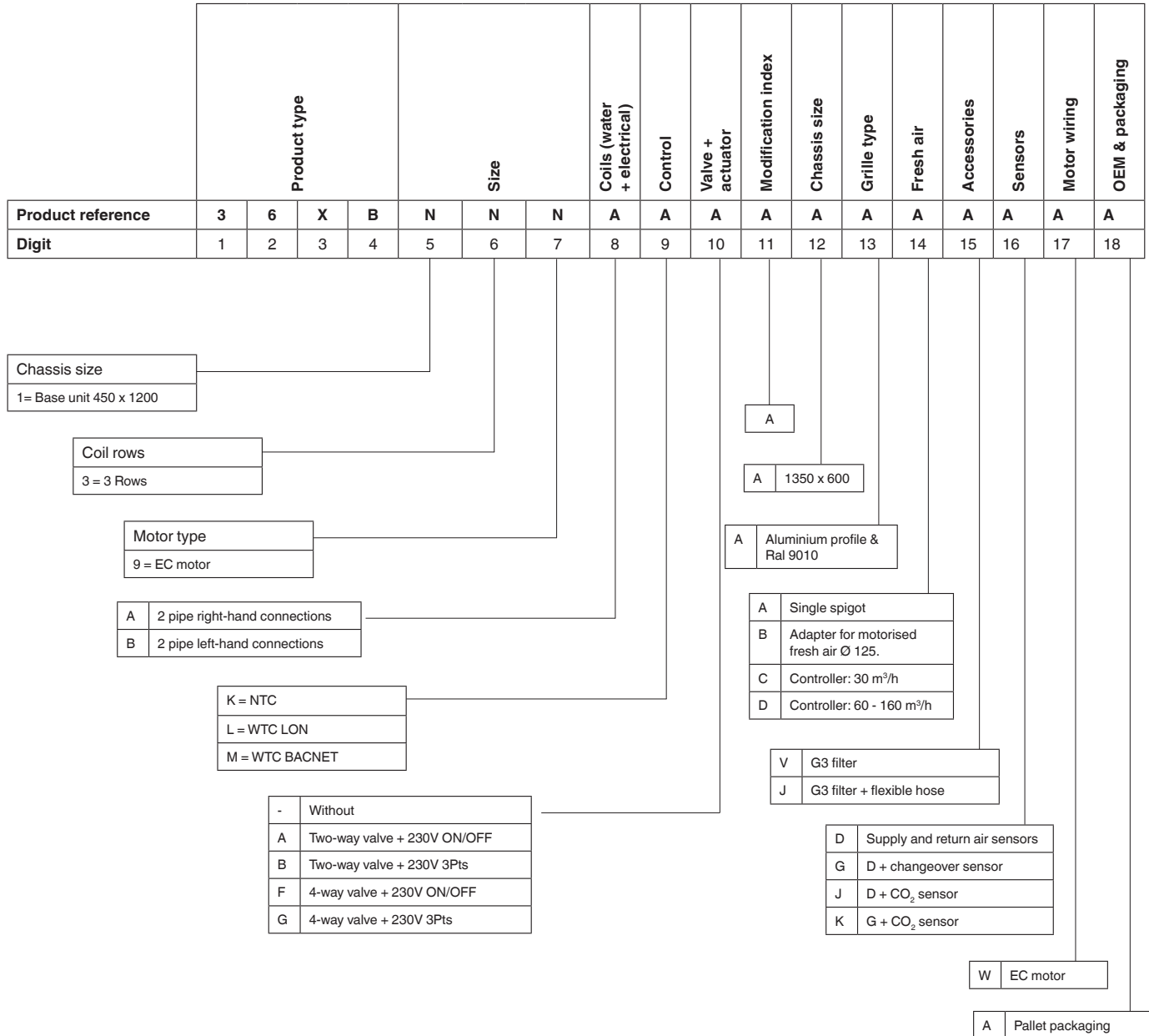
To convert l/h to l/s, divide by 3600.

NOTE: Measurements are based on standard ISO standards.

* **The NR sound pressure level is based on a theoretical attenuation of -9dB(a).**

** **The tolerance is +/-2dB(A).**

7 - CODIFICATION





No. 14225-20, 11.2015 - Replaces No.: 14225-20, 10.2014.
The manufacturer reserves the right to make any changes, without notice.



Quality and Environment
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