

Chilled Water Cassette

2 - 11kW



Technical Manual



Innovating and beautiful design, seven different sizes, high control flexibility, easy maintenance: the new Airedale chilled water cassette is the result of an extended technical and design development aimed at achieving the highest level in terms of performance, silent operation and control possibilities.

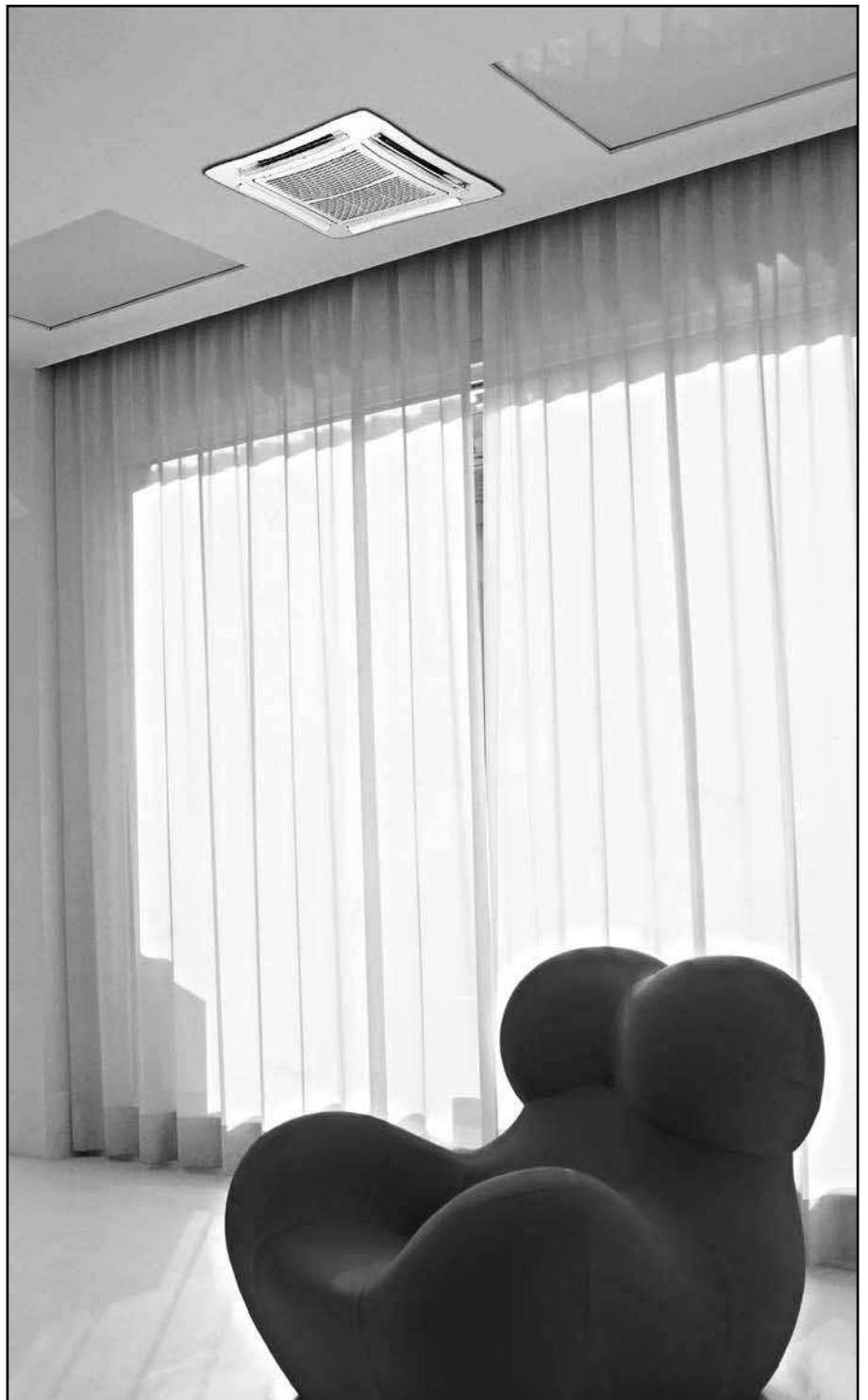
The air diffuser has an highly attractive aesthetical appearance, very innovative, and is also able to offer the best air distribution performance thanks to our extensive modelling and testing. The standard colour is RAL 9003, other colours available on request.

The 4 smaller sizes are designed to fit into 600x600 mm false ceiling standard modules. The 3 bigger sizes have a dimension of 800x800 mm which is the best solution for low sound and for price/performance ratio for these high capacity models.

Every unit can be supplied with 1 battery (2 pipe system) and a possible electric resistance or with 2 batteries (4 pipe system). Each model can have fresh air intake and a remote air diffuser can be connected to the unit.

The condensate pump is integral with the unit, is very quiet and has a maximum head of 650 mm.

In addition to the temperature and speed standard controls, automatic speed selection is also available. More than one unit can be connected to a single control, and the unit control panel can be installed in a position that facilitates the maintenance operation. Every unit can also be operated by the means of an infra-red remote control. The Airedale cassettes can also be connected to the most common automatic building management systems.



INTAKE GRID AND DISTRIBUTION OF THE AIR

Intake grids, frame and adjustable air distribution louvers on each side, made from ABS.

RSNA version : white ABS, RAL 9003

RSNB version : with intake grid, frame and louvers, choice of one colour only

RSNC version : with intake grid and louvers, choice of one colour, plus white ABS frame RAL 9003

RSND version : with louvers, choice of one colour, while the grid and frame are made from ABS, RAL 9003

MD-600 version : metal diffuser painted in RAL 9003 white colour with 600x600 dimension to perfectly fit into the false ceiling standard modules without overlapping parts (800x800 model is not available).

CASING

Made of galvanized steel with inside thermal insulation (closed cell polyethelene 10 mm thick) and outside anti-condensate lining.

CONTROL PANEL

Fitted externally with an easily accessible terminal board.

FAN ASSEMBLY

The fan assembly mounted on anti-vibrating supports is extremely quiet. The single air inlet radial fan is connected to a 6 speed electric motor with single phase 230V/50Hz supply, class B insulation and integrated Klixon thermal contact for motor protection.

The units are supplied with 3 standard speeds connected and it is possible to change them on site if necessary.

HEAT EXCHANGER

Made of copper tubes and aluminium fins bonded onto the tubes for maximum transfer contact. The batteries are with 1, 2 or 3 rows for 2 pipe models and 2+1 rows for 4 pipe models (the heating row is on the inside part of the battery).

For 4 pipe systems two versions are available:

TL 0.4T, TL 1.4T, TL 2.4T, TL 3.4T, TL 4.4T, TL 5.4T, TL 6.4T supply an higher heating capacity.

The heat exchanger is not suitable for use in corrosive atmosphere or in environments where aluminium may be subject to corrosion.

CONDENSATE COLLECTION TRAY

High density ABS polystyrene foam condensate tray, shaped in order to optimize the air diffusion, fire retardant rating B2 to DIN 4102.

AIR FILTER

Synthetic washable filter, easily removable.

CONDENSATE PUMP

Float switch centrifugal pump with 650 mm of maximum head, integral with the unit and wired to the control panel on the outside of the casing.

VALVE SET

Two or three way valves for ON/OFF operation, with pipe mounting kit and thermostatic actuator.

2 pipe units. The following standard rating conditions are used:

COOLING

Entering air temperature: + 27°C d.b., + 19°C w.b.
 Water temperature: + 7/12°C

HEATING

Entering air temperature: + 20°C
 Water temperature: + 50°C
 water flow rate as for the cooling conditions

MODEL		TL 0.2T			TL 1.2T			TL 2.2T			TL 3.2T			TL 4.2T			TL 5.2T			TL 6.2T			
		1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	
Speed																							
Air flow	m ³ /h	310	420	610	310	420	520	320	500	710	430	610	880	630	820	1140	710	970	1500	710	1280	1820	
Cooling total emission	kW	1.27	1.63	1.98	1.84	2.34	2.68	2.25	3.34	4.33	2.94	3.88	5.02	4.21	4.91	6.16	5.31	6.78	9.51	5.31	8.45	11.10	
Cooling sensible emission	kW	1.01	1.32	1.64	1.35	1.75	2.04	1.57	2.39	3.18	2.08	2.81	3.74	3.03	3.58	4.59	3.46	4.48	6.48	3.71	6.09	8.25	
Heating	kW	1.62	2.12	2.64	2.22	2.90	3.35	2.56	3.93	5.23	3.43	4.63	6.17	5.12	6.03	7.77	5.61	7.34	10.71	6.13	10.30	14.00	
Water flow	l/h	219	280	340	316	402	461	387	574	745	506	667	863	724	845	1060	913	1166	1636	913	1453	1909	
ΔP Cooling	kPa	4.5	7.0	10.0	4.9	7.6	9.7	4.6	9.4	15.1	7.5	12.4	19.7	10.9	14.3	21.6	9.4	14.7	26.9	9.4	21.8	35.6	
ΔP Heating	kPa	4.0	6.0	9.0	4.1	6.3	8.2	3.5	7.3	11.4	6.7	11.2	17.7	6.7	9.9	15.1	7.9	12.4	23.0	7.9	18.6	30.6	
Sound power	dB(A)	33	40	49	33	40	45	33	45	53	41	49	59	33	40	48	34	40	53	34	48	58	
Sound pressure *	dB(A)	24	31	40	24	31	36	24	36	44	32	40	50	24	31	39	25	31	44	25	39	49	
Fan	W	25	32	57	25	32	44	25	44	68	32	57	90	33	48	77	42	63	120	42	95	170	
	A	0.11	0.15	0.27	0.11	0.15	0.20	0.11	0.20	0.32	0.15	0.27	0.45	0.15	0.23	0.36	0.18	0.28	0.53	0.18	0.42	0.74	
Water content	l	0.8			1.4			2.1			2.1			3.0			4.0			4.0			
Dimensions	m	575 x 575 x 275															820 x 820 x 303						

4 pipe units. The following standard rating conditions are used:

COOLING

Entering air temperature: + 27°C d.b., + 19°C w.b.
 Water temperature: + 7/12°C

HEATING

Entering air temperature: + 20°C
 Water temperature: + 70/60°C

MODEL		TL 0.4T			TL 1.4T			TL 2.4T			TL 3.4T		
		1	2	3	1	2	3	1	2	3	1	2	3
Speed													
Air flow	m ³ /h	310	420	610	310	420	520	320	500	710	430	610	880
Cooling total emission	kW	1.51	1.96	2.33	1.85	2.36	2.70	1.85	2.65	3.34	2.36	3.02	3.81
Cooling sensible emission	kW	1.15	1.55	1.90	1.34	1.71	1.98	1.34	1.98	2.56	1.75	2.29	2.97
Water flow	l/h	260	337	401	318	406	464	318	456	574	406	519	655
ΔP Cooling	kPa	6.0	10.0	13.5	4.6	6.9	8.8	4.6	8.8	13.4	7.2	11.2	17.0
Heating	kW	1.96	2.54	3.03	2.43	3.02	3.46	2.43	3.46	4.40	3.10	3.97	4.95
Water flow	l/h	169	219	261	209	260	298	209	298	378	267	341	426
ΔP Heating	kPa	6.5	10.5	14.5	5.7	8.5	10.8	5.7	10.8	16.6	8.8	13.8	20.5
Sound power	dB(A)	33	40	50	33	40	45	33	45	53	41	49	59
Sound pressure *	dB(A)	24	31	41	24	31	36	24	36	44	32	40	50
Fan	W	25	32	57	25	32	44	25	44	68	32	57	90
	A	0.11	0.15	0.27	0.11	0.15	0.20	0.11	0.20	0.32	0.15	0.27	0.45
Cooling water content	l	1.0			1.4			1.4			1.4		
Heating water content	l	0.6			0.7			0.7			0.7		
Dimensions	mm	575 x 575 x 275											

MODEL		TL 4.4T			TL 5.4T			TL 6.4T		
		1	2	3	1	2	3	1	2	3
Speed										
Air flow	m ³ /h	630	820	1140	710	970	1500	710	1280	1820
Cooling total emission	kW	4.14	5.03	6.34	4.52	5.66	7.71	4.52	6.93	8.89
Cooling sensible emission	kW	2.96	3.65	4.69	3.25	4.15	5.83	3.25	5.18	6.84
Water flow	l/h	712	865	1090	777	974	1326	777	1192	1529
ΔP Cooling	kPa	8.8	12.5	18.9	10.3	15.4	26.9	10.3	22.1	34.7
Heating	kW	5.91	7.19	9.10	6.45	8.10	11.00	6.45	9.98	12.70
Water flow	l/h	508	618	783	555	697	946	555	858	1092
ΔP Heating	kPa	9.8	14.0	21.4	11.5	17.4	29.9	11.5	25.3	38.8
Sound power	dB(A)	33	40	48	34	40	53	34	48	58
Sound pressure *	dB(A)	24	31	39	25	31	44	25	39	49
Fan	W	33	48	77	42	63	120	42	95	170
	A	0.15	0.23	0.36	0.18	0.28	0.53	0.18	0.42	0.74
Cooling water content	l	3.0			3.0			3.0		
Heating water content	l	1.4			1.4			1.4		
Dimensions	mm	820 x 820 x 303								

* The sound pressure levels apply to the reverberant field of a 100 m³ room and a reverberation time of 0.5 sec.

Cooling capacity of 1 battery units (2 pipe installation)

Entering air temperature: +27°C d.b., +19°C w.b.,

Model	Speed	Air flow m³/h	EWT 5 - LWT 10°C			EWT 7 - LWT 12°C			EWT 9 - LWT 14°C			EWT 12 - LWT 17°C		
			Water flow	Total capacity	Sensible capacity	Water flow	Total capacity	Sensible capacity	Water flow	Total capacity	Sensible capacity	Water flow	Total capacity	Sensible capacity
			l/h	kW	kW	l/h	kW	kW	l/h	kW	kW	l/h	kW	kW
TL 0.2T	High	610	421	2.45	1.83	340	1.98	1.64	254	1.47	1.45	199	1.16	1.16
	Med	420	346	2.01	1.48	280	1.63	1.32	210	1.22	1.16	160	0.93	0.93
	Low	310	269	1.57	1.14	219	1.27	1.01	165	0.96	0.89	123	0.71	0.71
TL 1.2T	High	520	554	3.22	2.22	462	2.68	2.04	362	2.10	1.75	252	1.47	1.47
	Med	420	482	2.80	1.91	403	2.34	1.75	317	1.84	1.50	220	1.28	1.28
	Low	310	417	2.42	1.64	317	1.84	1.35	276	1.61	1.29	188	1.09	1.09
TL 2.2T	High	710	926	5.38	3.64	745	4.33	3.18	617	3.59	2.87	420	2.44	2.44
	Med	500	715	4.15	2.77	575	3.34	2.39	483	2.81	2.18	319	1.86	1.86
	Low	320	508	2.95	1.94	387	2.25	1.57	349	2.03	1.53	225	1.31	1.31
TL 3.2T	High	880	1049	6.10	4.17	863	5.02	3.74	694	4.03	3.29	479	2.79	2.79
	Med	610	835	4.85	3.26	667	3.88	2.81	559	3.25	2.57	376	2.19	2.19
	Low	430	633	3.68	2.44	506	2.94	2.08	430	2.50	1.92	283	1.65	1.65
TL 4.2T	High	1140	1264	7.35	5.00	1060	6.16	4.59	840	4.88	3.95	573	3.33	3.33
	Med	820	1003	5.83	3.92	845	4.91	3.58	674	3.92	3.09	453	2.63	2.63
	Low	630	858	4.99	3.32	722	4.21	3.03	580	3.37	2.62	384	2.23	2.23
TL 5.2T	High	1500	1943	11.30	7.59	1635	9.51	6.48	1301	7.57	5.99	880	5.12	5.12
	Med	970	1374	7.99	5.27	1166	6.78	4.48	939	5.46	4.15	612	3.56	3.56
	Low	710	1070	6.22	4.06	913	5.31	3.46	740	4.30	3.20	434	2.52	2.52
TL 6.2T	High	1820	2277	13.24	9.01	1909	11.10	8.25	1511	8.78	7.11	1044	6.07	6.07
	Med	1280	1722	10.01	6.68	1454	8.45	6.09	1162	6.75	5.27	775	4.51	4.51
	Low	710	1070	6.22	4.06	913	5.31	3.71	740	4.30	3.20	434	2.52	2.52

Heating capacity of 1 battery units (2 pipe installation)

Entering air temperature: +20°C

Model	Speed	Air flow m³/h	EWT 45 - LWT 40°C		EWT 50 - LWT 40°C		EWT 60 - LWT 50°C		EWT 70 - LWT 60°C		EWT 80 - LWT 70°C	
			Water flow	Capacity	Water flow	Capacity	Water flow	Capacity	Water flow	Capacity	Water flow	Capacity
			l/h	kW	l/h	kW	l/h	kW	l/h	kW	l/h	kW
TL 0.2T	High	610	386	2.24	203	2.37	298	3.46	393	4.56	488	5.67
	Med	420	310	1.80	164	1.91	239	2.78	315	3.66	391	4.55
	Low	310	237	1.38	126	1.46	183	2.13	240	2.80	298	3.47
TL 1.2T	High	520	482	2.80	266	3.10	377	4.39	488	5.68	599	6.97
	Med	420	417	2.42	232	2.69	327	3.80	422	4.91	513	5.96
	Low	310	356	2.07	198	2.31	279	3.25	360	4.19	441	5.12
TL 2.2T	High	710	787	4.57	440	5.12	619	7.19	795	9.25	972	11.30
	Med	500	593	3.45	334	3.89	467	5.43	598	6.96	730	8.48
	Low	320	412	2.39	235	2.73	326	3.79	415	4.83	505	5.87
TL 3.2T	High	880	903	5.25	504	5.86	709	8.25	914	10.63	1118	13.00
	Med	610	702	4.08	394	4.58	552	6.42	709	8.25	866	10.07
	Low	430	520	3.02	294	3.42	410	4.77	524	6.10	639	7.43
TL 4.2T	High	1140	1118	6.50	624	7.26	878	10.21	1130	13.14	1383	16.08
	Med	820	865	5.03	486	5.65	681	7.92	874	10.16	1067	12.41
	Low	630	734	4.27	415	4.82	578	6.72	741	8.61	903	10.50
TL 5.2T	High	1500	1683	9.78	951	11.06	1327	15.43	1699	19.76	2071	24.08
	Med	970	1146	6.67	655	7.62	906	10.54	1155	13.43	1403	16.32
	Low	710	876	5.09	505	5.87	694	8.07	882	10.25	1068	12.42
TL 6.2T	High	1820	2015	11.72	1132	13.17	1586	18.45	2037	23.68	2486	28.91
	Med	1280	1471	8.55	834	9.70	1161	13.50	1484	17.26	1807	21.01
	Low	710	876	5.09	505	5.87	694	8.07	882	10.25	1068	12.42

Capacity correction factors for different working conditions.
Multiply the factors by the capacity figures in the 7-12°C table above.

Total capacity				
Water (°C)	Air (°C)	25-18	26-18.5	28-20
7/12 °C	K	0.82	0.89	1.11
10/15 °C	K	0.56	0.63	0.82
14/18 °C	K	0.35	0.41	0.52

Sensible capacity				
Water (°C)	Air (°C)	25-18	26-18.5	28-20
7/12 °C	K	0.9	0.94	1.06
10/15 °C	K	0.72	0.78	0.9
14/18 °C	K	0.5	0.58	0.72

Cooling capacity of 2 battery units (4 pipe installation)

Entering air temperature: +27°C d.b., +19°C w.b.,

Model	Speed	Air flow m³/h	EWT 5 - LWT 10°C			EWT 7 - LWT 12°C			EWT 9 - LWT 14°C			EWT 12 - LWT 17°C		
			Water flow	Total capacity	Sensible capacity	Water flow	Total capacity	Sensible capacity	Water flow	Total capacity	Sensible capacity	Water flow	Total capacity	Sensible capacity
			l/h	kW	kW	l/h	kW	kW	l/h	kW	kW	l/h	kW	kW
TL 0.4T	High	610	490	2.85	2.12	401	2.33	1.90	307	1.78	1.69	239	1.39	1.39
	Med	420	410	2.38	1.73	337	1.96	1.55	260	1.51	1.37	196	1.14	1.14
	Low	310	314	1.82	1.29	260	1.51	1.15	201	1.17	1.02	148	0.86	0.86
TL 1.4T	High	520	569	3.31	2.26	465	2.70	1.98	374	2.18	1.79	260	1.51	1.51
	Med	420	465	2.71	1.83	405	2.36	1.70	309	1.80	1.44	210	1.22	1.22
	Low	310	398	2.31	1.55	318	1.85	1.34	267	1.55	1.22	177	1.03	1.03
TL 2.4T	High	710	718	4.18	2.91	574	3.34	2.56	467	2.72	2.30	330	1.92	1.92
	Med	500	569	3.31	2.26	455	2.65	1.98	374	2.18	1.79	260	1.51	1.51
	Low	320	398	2.31	1.55	318	1.85	1.34	267	1.55	1.22	177	1.03	1.03
TL 3.4T	High	880	791	4.60	3.23	656	3.81	2.97	512	2.98	2.56	366	2.13	2.13
	Med	610	632	3.67	2.53	520	3.02	2.29	413	2.40	2.00	288	1.67	1.67
	Low	430	510	2.97	2.01	405	2.36	1.75	337	1.96	1.59	231	1.35	1.35
TL 4.4T	High	1140	1299	7.55	5.12	1090	6.34	4.69	864	5.02	4.04	586	3.41	3.41
	Med	820	1027	5.97	4.00	866	5.03	3.65	691	4.02	3.15	462	2.68	2.68
	Low	630	842	4.89	3.24	713	4.14	2.96	572	3.33	2.56	374	2.17	2.17
TL 5.4T	High	1500	1588	9.23	6.35	1327	7.71	5.83	1046	6.08	5.02	726	4.22	4.22
	Med	970	1158	6.73	4.53	974	5.66	4.15	775	4.50	3.57	524	3.05	3.05
	Low	710	920	5.35	3.56	778	4.52	3.25	623	3.62	2.81	411	2.39	2.39
TL 6.4T	High	1820	1836	10.67	7.43	1529	8.89	6.84	1199	6.97	5.98	849	4.94	4.94
	Med	1280	1423	8.27	5.64	1191	6.93	5.18	942	5.48	4.46	646	3.75	3.75
	Low	710	920	5.35	3.56	778	4.52	3.25	623	3.62	2.81	411	2.39	2.39

Heating capacity of 2 battery units (4 pipe installation)

Entering air temperature: +20°C

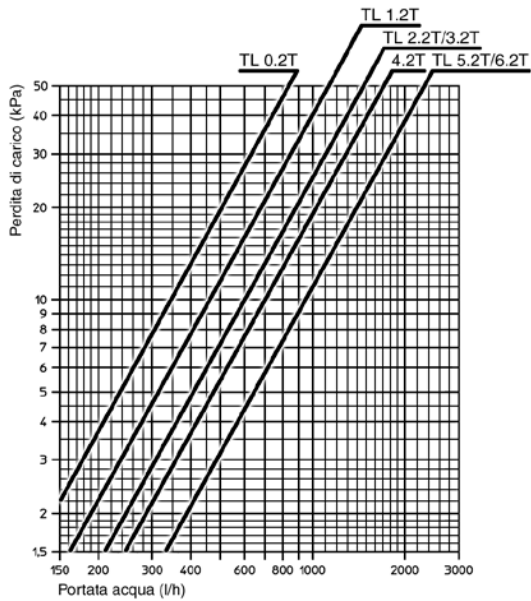
Model	Speed	Air flow m³/h	EWT 45 - LWT 40°C		EWT 50 - LWT 40°C		EWT 60 - LWT 50°C		EWT 70 - LWT 60°C		EWT 80 - LWT 70°C	
			Water flow	Capacity	Water flow	Capacity	Water flow	Capacity	Water flow	Capacity	Water flow	capacity
			l/h	kW	l/h	kW	l/h	kW	l/h	kW	l/h	kW
TL 0.4T	High	610	256	1.49	134	1.56	197	2.29	261	3.03	325	3.78
	Med	420	215	1.25	113	1.31	166	1.93	219	2.54	272	3.17
	Low	310	166	0.96	87	1.01	128	1.49	169	1.96	210	2.44
TL 1.4T	High	520	283	1.65	149	1.73	218	2.54	298	3.46	358	4.17
	Med	420	247	1.44	130	1.51	191	2.22	260	3.02	312	3.63
	Low	310	196	1.14	103	1.20	151	1.76	209	2.43	247	2.87
TL 2.4T	High	710	351	2.04	184	2.14	270	3.14	378	4.40	444	5.17
	Med	500	277	1.61	146	1.69	214	2.48	298	3.46	350	4.07
	Low	320	196	1.14	103	1.20	151	1.76	209	2.43	247	2.87
TL 3.4T	High	880	402	2.34	211	2.45	310	3.60	426	4.95	510	5.93
	Med	610	317	1.84	166	1.94	244	2.84	341	3.97	401	4.67
	Low	430	247	1.44	130	1.51	191	2.22	267	3.10	312	3.63
TL 4.4T	High	1140	771	4.48	410	4.76	596	6.93	783	9.10	970	11.28
	Med	820	609	3.54	324	3.77	471	5.48	618	7.19	766	8.90
	Low	630	501	2.91	267	3.11	388	4.51	508	5.91	629	7.31
TL 5.4T	High	1500	929	5.40	493	5.73	718	8.34	946	11.00	1170	13.60
	Med	970	686	3.99	365	4.25	531	6.17	697	8.10	864	10.04
	Low	710	547	3.18	291	3.39	423	4.92	555	6.45	686	7.98
TL 6.4T	High	1820	1074	6.24	569	6.61	829	9.64	1092	12.70	1353	15.74
	Med	1280	845	4.91	449	5.22	653	7.60	858	9.98	1064	12.37
	Low	710	547	3.18	291	3.39	423	4.92	555	6.45	686	7.98

Capacity correction factors for different working conditions.
Multiply the factors by the capacity figures in the 7-12°C table above.

Total capacity				
Water (°C)	Air (°C)	25-18	26-18.5	28-20
7/12 °C	K	0.82	0.89	1.11
10/15 °C	K	0.56	0.63	0.82
14/18 °C	K	0.35	0.41	0.52

Sensible capacity				
Water (°C)	Air (°C)	25-18	26-18.5	28-20
7/12 °C	K	0.9	0.94	1.06
10/15 °C	K	0.72	0.78	0.9
14/18 °C	K	0.5	0.58	0.72

2 pipe installation

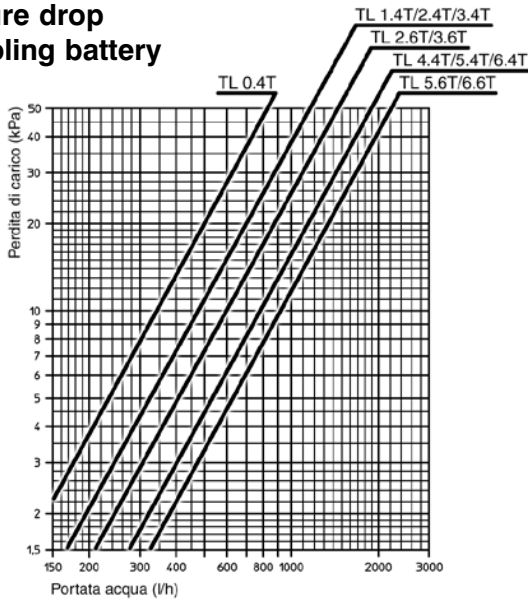


Pressure drop for mean water temperature of 10°C, for different temperatures multiply the pressure drop figure by the K correction factors in the table.

°C	20	30	40	50	60	70	80
K	0.94	0.90	0.86	0.82	0.78	0.74	0.70

4 pipe installation

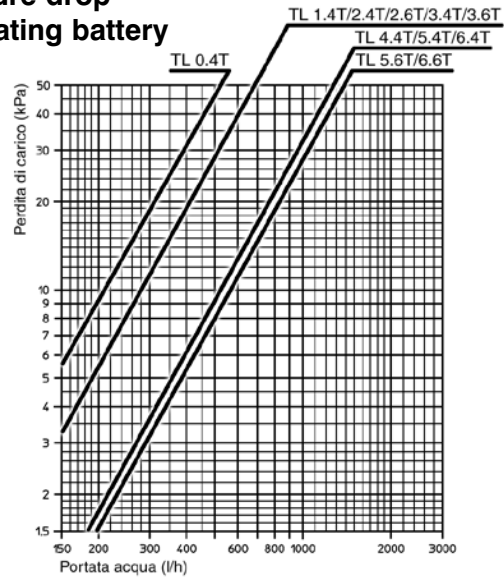
Pressure drop for cooling battery



Pressure drop for mean water temperature of 10°C, for different temperatures multiply the pressure drop figure by the K correction factors in the table.

°C	20	30	40	50	60	70	80
K	0.94	0.90	0.86	0.82	0.78	0.74	0.70

Pressure drop for heating battery



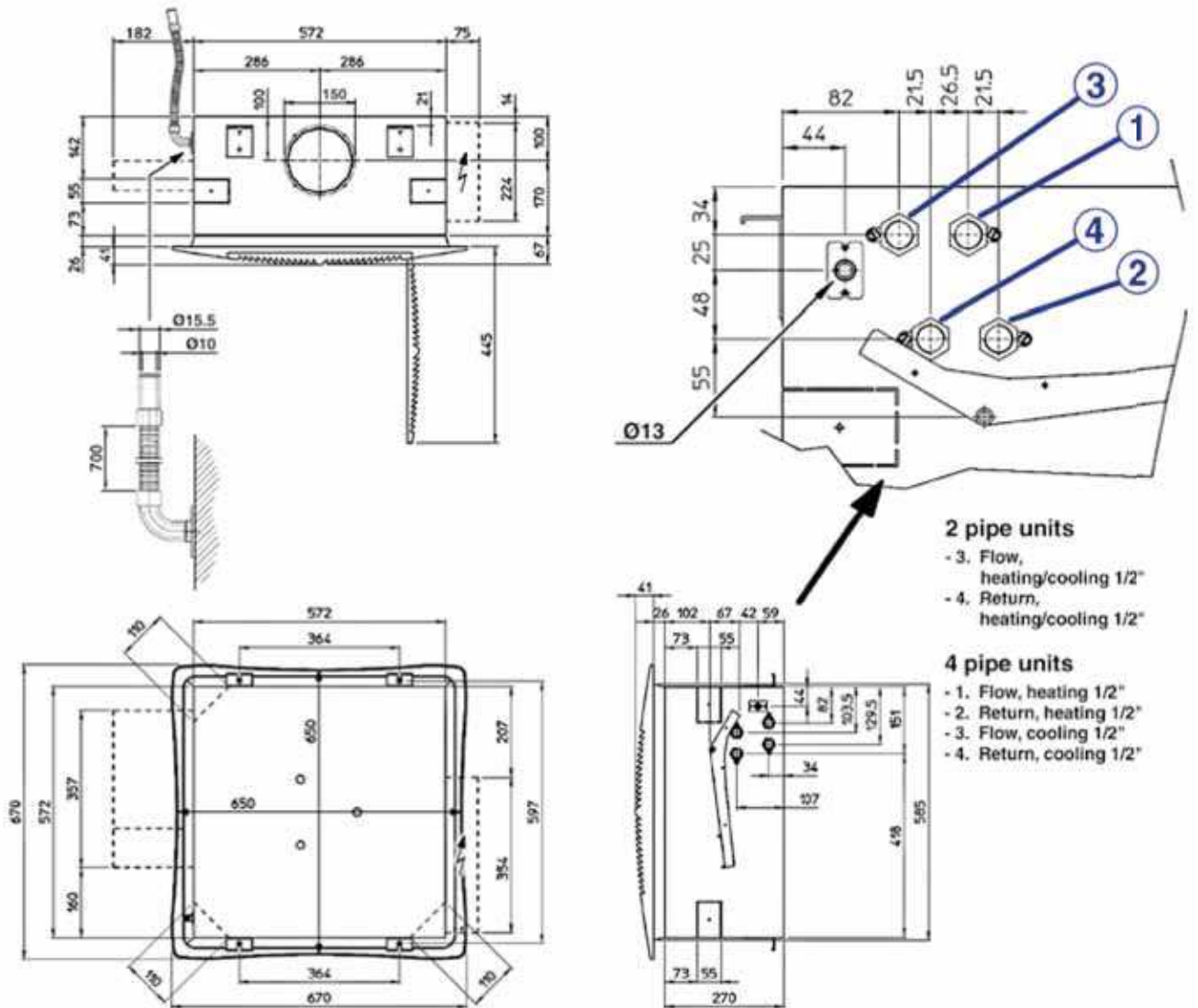
Pressure drop for mean water temperature of 65°C, for different temperatures multiply the pressure drop figure by the K correction factors in the table.

°C	40	50	60	70	80
K	1.14	1.08	1.02	0.96	0.90

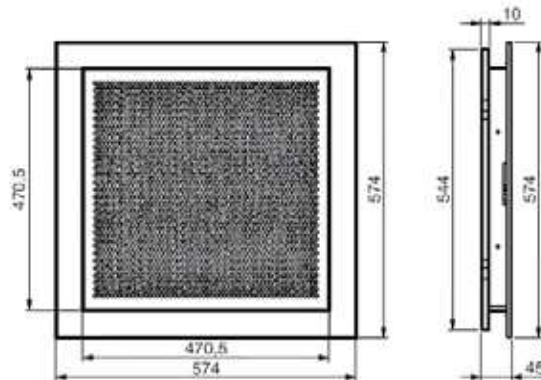
Working conditions

Water flow	MAX. working pressure	MIN. entering water temperature: + 5°C
	8 bar	MAX. entering water temperature: + 80°C
Air flow	Suitable relative humidity	MIN. entering air temperature: 6°C
	15 - 75%	MAX. entering air temperature: 40°C
Supply	Single phase 230V 50Hz	
Installation	MAX. height: See table on page 12	

TL 0.2T-0.4T / TL 1.2T-1.4T / TL 2.2T-2.4T / TL 3.2T-3.4T (Version 600 x 600)

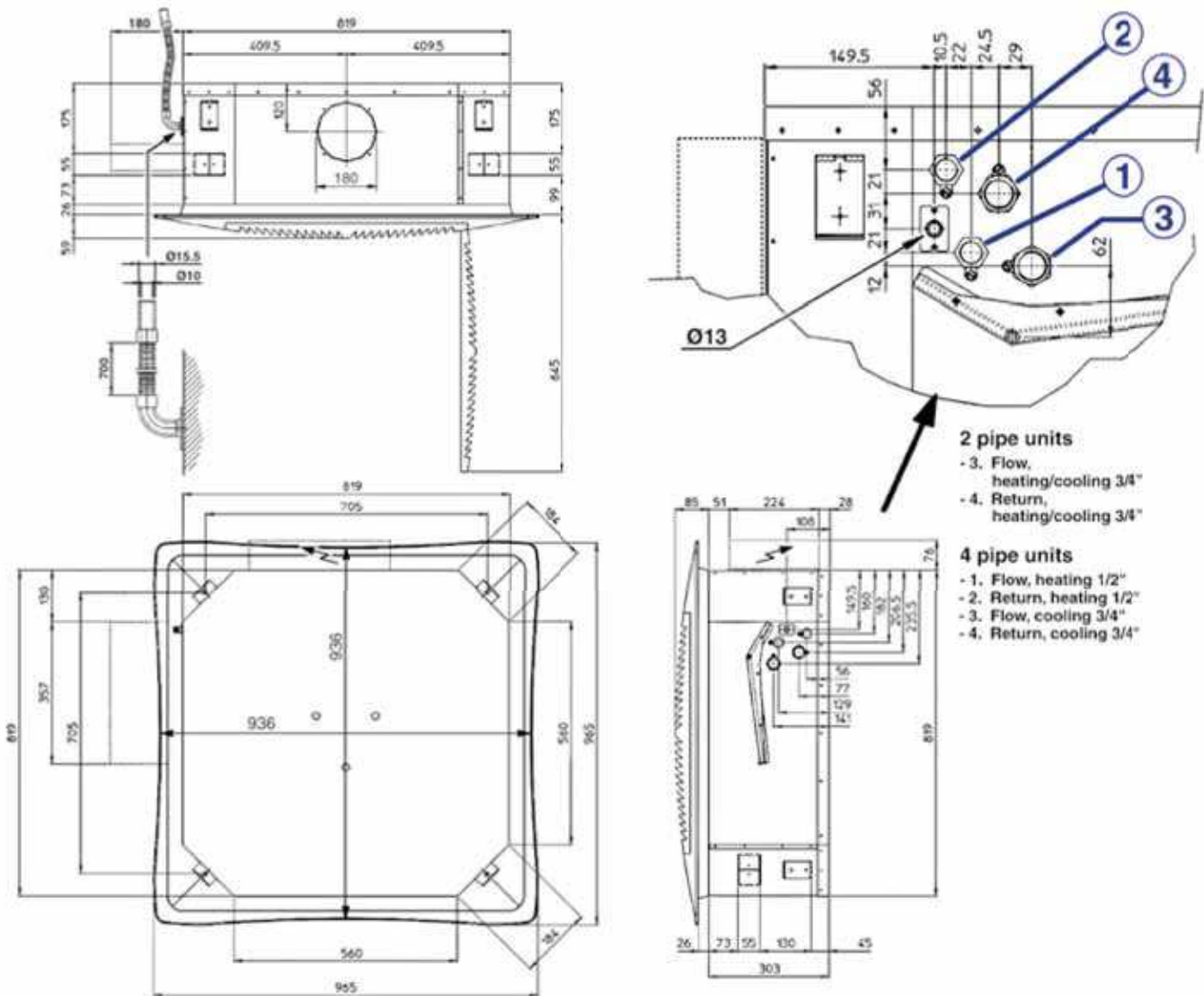


**MD-600
METAL DIFFUSER**

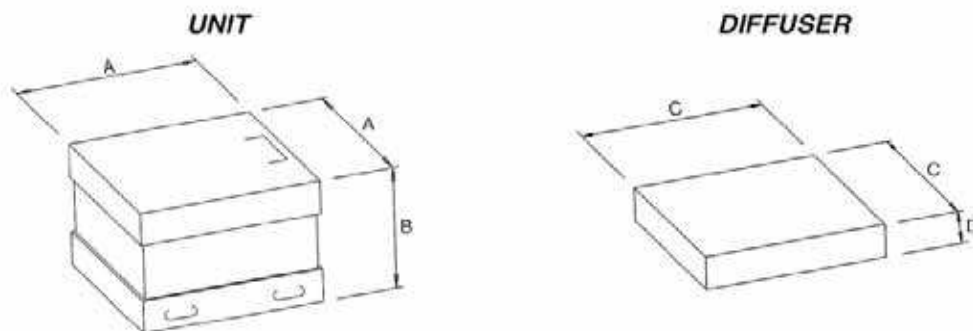


Model	UNIT		DIFFUSER		Packed unit Dimensions			
	Weights packed unit	Weights unpacked unit	Weights packed unit	Weights unpacked unit	A	B	C	D
					mm			
TL 0.2T/1.2T	kg	kg	kg	kg	790	350	750	150
TL 0.4T/1.4T	28	22	6	3				
TL 2.2T/2.4T	30	24						
TL 3.2T/3.4T								

TL 4.2T-4.4T / TL 5.2T-5.4T / TL 6.2T-6.4T (Version 800 x 800)



PACKED UNIT

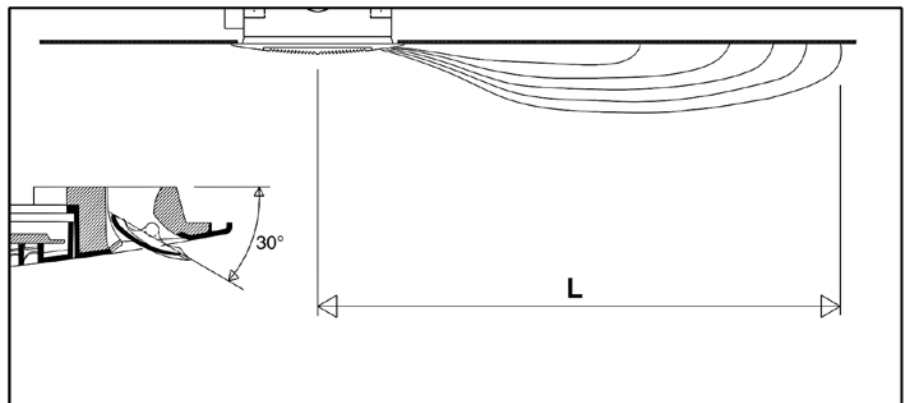


Model	UNIT		DIFFUSER		Packed unit Dimensions			
	Weights packed unit	Weights unpacked unit	Weights packed unit	Weights unpacked unit	A	B	C	D
	kg	kg	kg	kg	mm			
TL 4.2T	44	36	10	6	1050	400	1000	200
TL 4.4T								
TL 5.2T/5.4T	47	39						
TL 6.2T/6.4T								

The air throw indicated in the tables is the maximum value, as it may change significantly in relation to the dimensions of the room in which the appliance is installed and the positioning of the furniture in the room.

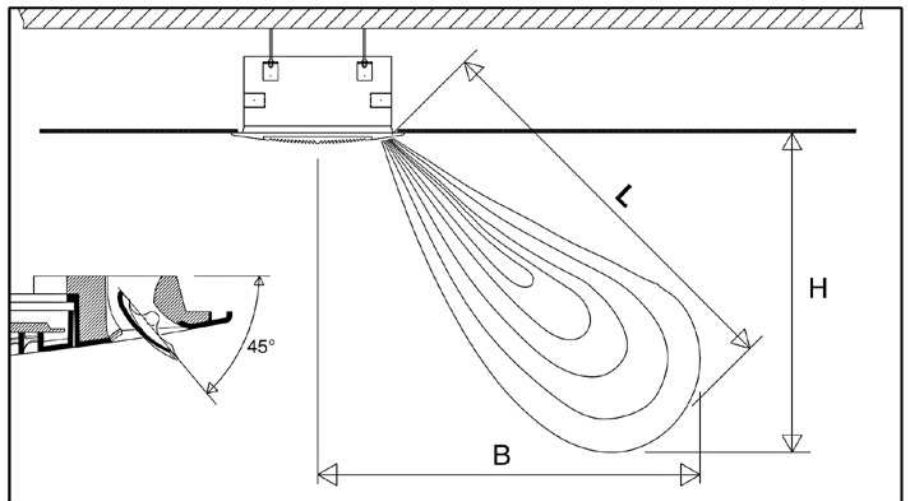
The useful throw **L** refers to the distance between the unit and the point where the air speed is 0.2 m/sec; if the louver has a gradient of 30° (recommended in cooling mode), the so-called “Coanda” effect will occur, illustrated in the first figure, while at a gradient of 45° (recommended in heating mode), there will be a downwards throw, as illustrated in the second figure.

With adjustable air diffusion louvers at 30°



Model		TL 0 - 1			TL 2			TL 3			TL 4			TL 5			TL 6		
Speed		1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
Air throw	L m	3.0	3.5	3.8	3.0	3.8	4.5	3.5	4.2	5.0	3.2	3.7	4.3	3.4	4.0	5.0	3.4	4.6	5.5

With adjustable air diffusion louvers at 45°



Model		TL 0 - 1			TL 2			TL 3			TL 4			TL 5			TL 6		
Speed		1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
Air throw	L m	3.3	3.9	4.2	3.3	4.2	4.8	3.9	4.5	5.2	3.5	4.1	4.8	3.8	4.6	5.4	3.8	5.1	5.8
Height	H m	2.2	2.6	2.8	2.2	2.8	3.2	2.6	3.0	3.4	2.2	2.6	3.0	2.4	2.8	3.4	2.4	3.1	3.6
Distance	B m	2.5	2.9	3.1	2.5	3.1	3.6	2.9	3.4	3.9	2.7	3.2	3.8	3.0	3.6	4.2	3.0	4.0	4.6

NOTE:

For heating attention must be paid to rooms where the floor temperature is particularly low (for example less than 5°C).

In this situation the floor can cool the lower layer of air to a level that stop the uniform diffusion of the hot air coming from the unit, decreasing the throw figures shown in the table.

The cassette is fitted with inlets for fresh air to be mixed with return air inside the unit (Fig. 3).

The fresh air flow is limited to 20% of the total fan coil air flow at medium speed and 100 m³/h for each treated air inlet.

The units feature fresh air inlets on three corners (no inlets on the fourth corner because of the condensate pump inside the unit).

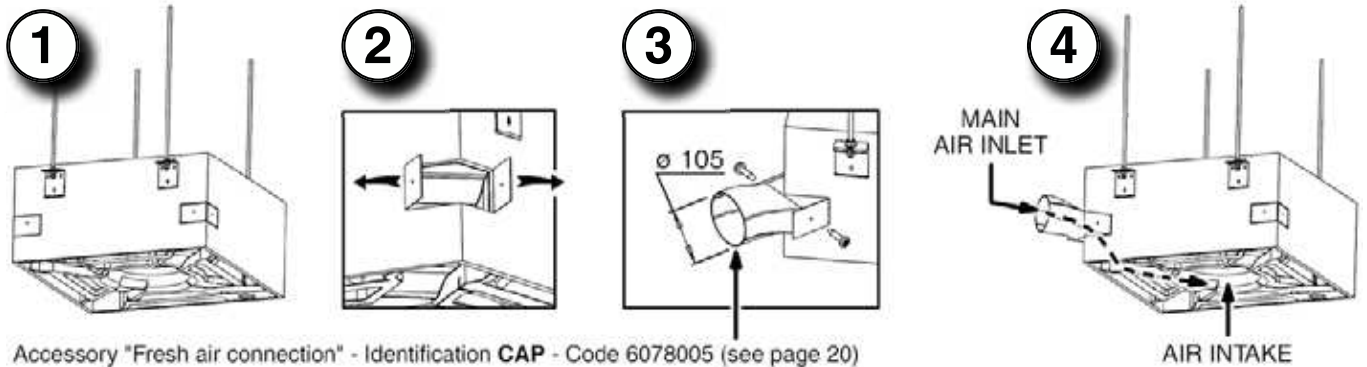
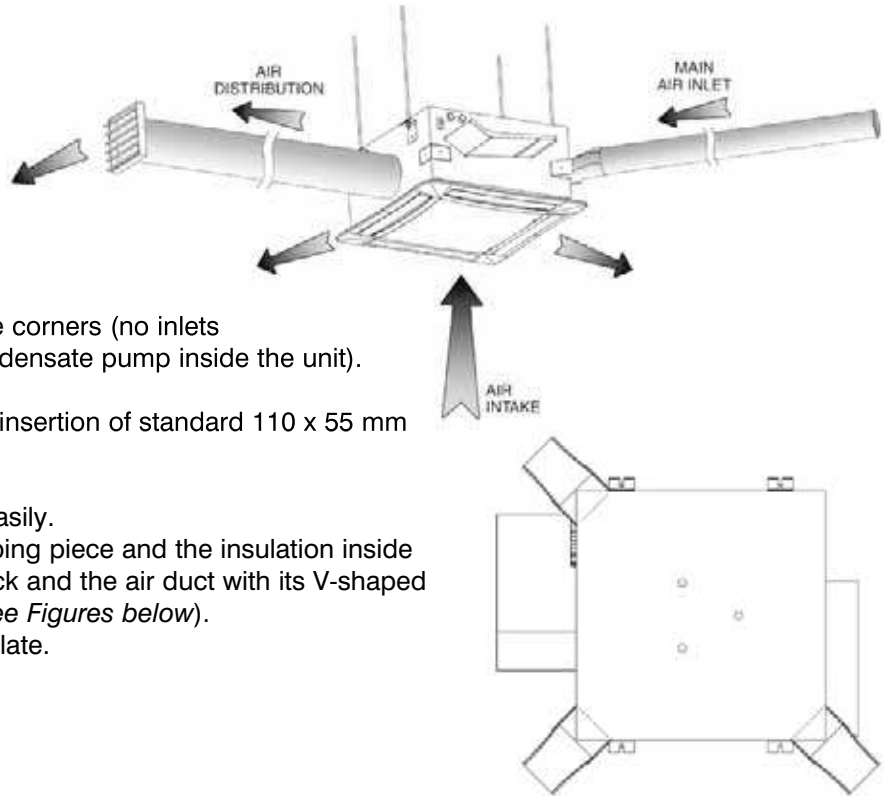
The fresh air inlets are designed for the insertion of standard 110 x 55 mm rectangular ducts.

The air duct is connected quickly and easily.

After removing the fresh air spigot damping piece and the insulation inside the unit, the mounting plate is rolled back and the air duct with its V-shaped section must be pushed into the unit (see Figures below). The duct is then fixed to the mounting plate.

Note:

the fresh air must be filtered.



Accessory "Fresh air connection" - Identification CAP - Code 6078005 (see page 20)

Air distribution

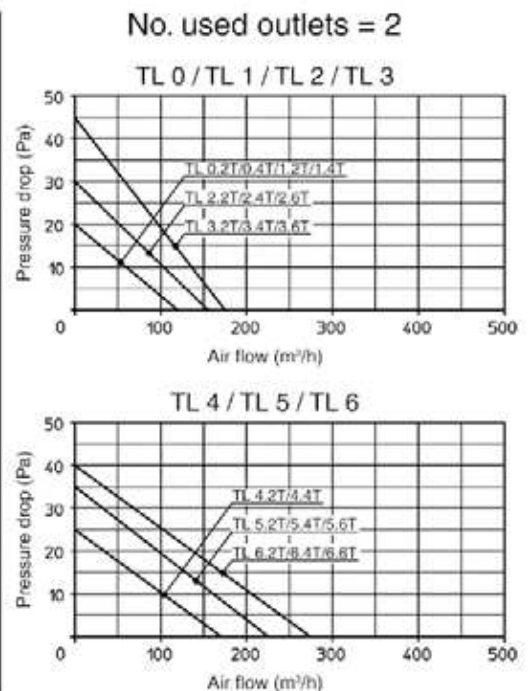
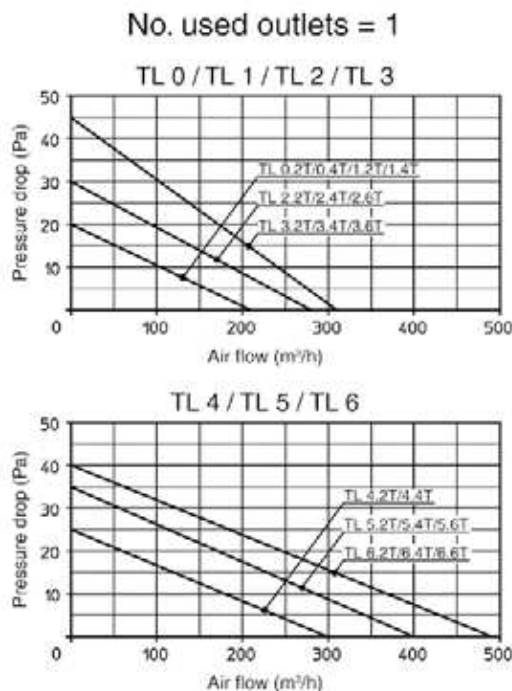
Two air outlets are provided on the side of the unit for connection to separate supply air outlets.

They can be used to supply air from the fan coil unit to distant areas of a room or even to a different room.

The total air flow does not change.

The air flow at high speed depending on the air duct pressure drop is shown in the tables below.

Note: all air ducts must be insulated in order to avoid condensation.

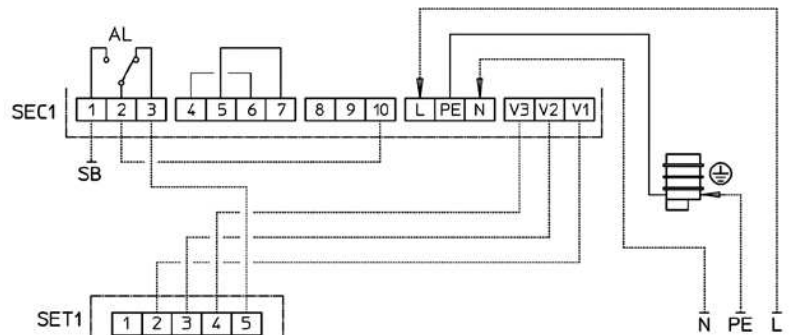
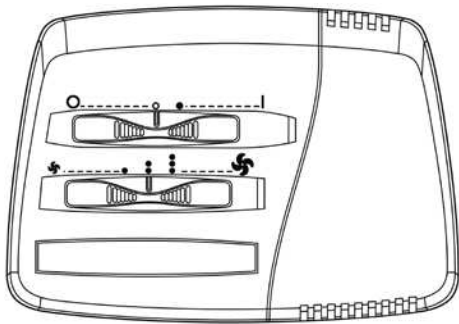




If using the Airedale Cassette fan coils with electronic controllers, the voltage values at the autotransformer terminals must be kept in consideration (transformer return voltages).

These values may reach 500 Vac.

Identification	Code
MO - 3V	9060516

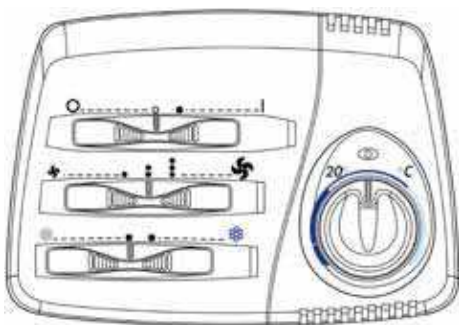


- Manual speed switch, without thermostatic control.
- It can not control the valves.

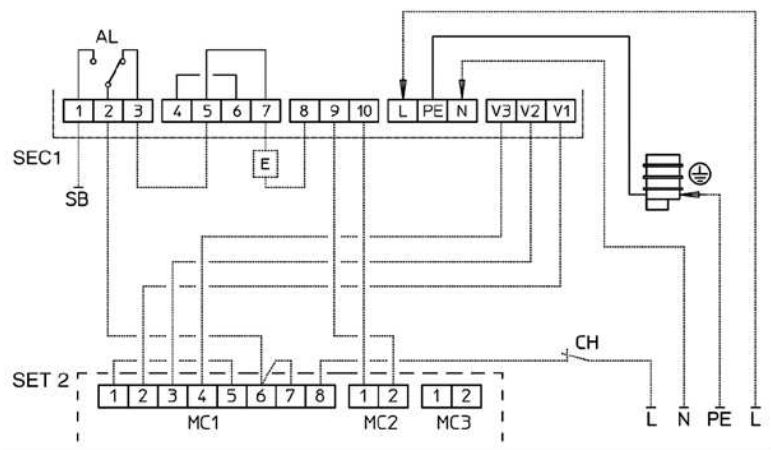
LEGEND

- SEC1** = Airedale electrical board
- SET1** = Control electrical board
- SB** = Alarm contacts
- AL** = Alarm condensate - float switch released

Identification	Code
TMO - T	9060517



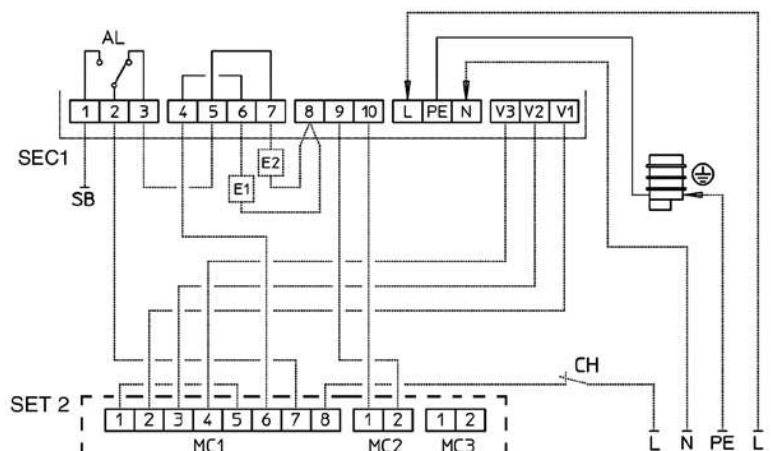
Electric wiring with 1 valve



LEGEND

- SEC1** = Airedale electrical board
- SET1** = Control electrical board
- CH** = Remote Summer/Winter switch
- SB** = Alarm contacts
- E** = Valve set (2 pipe installation)
- E1** = Hot water valve set
- E2** = Chilled water valve set
- AL** = Alarm condensate - float switch released

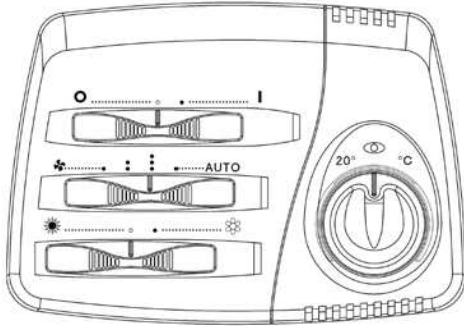
Electric wiring with 2 valves



- Manual speed switch.
- Manual Summer/Winter switch.
- Electronic thermostat for fan control(ON-OFF).
- Electronic thermostat for valve(s) control (ON-OFF) (the fan keeps working).
- It allows control of the low temperature cut-out thermostat (TME).
- It allows control of the chilled water valve (ON-OFF) and the electric resistance in the TL-E version.
- It allows installation of the Summer/Winter switch centralised and remote, or to control it with an automatic change-over fitted on the water pipe (for 2 pipe installations only). The latter case needs the adjustment of the jumper on the control board (see the instruction leaflet supplied with the control).

Identification Code

TMO - T - AU 9060520



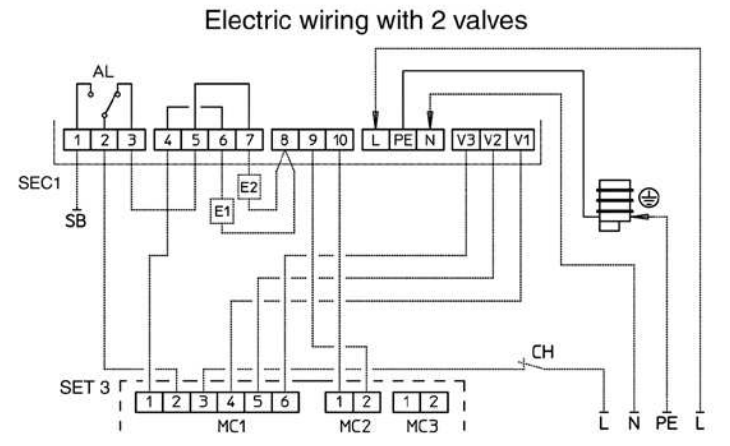
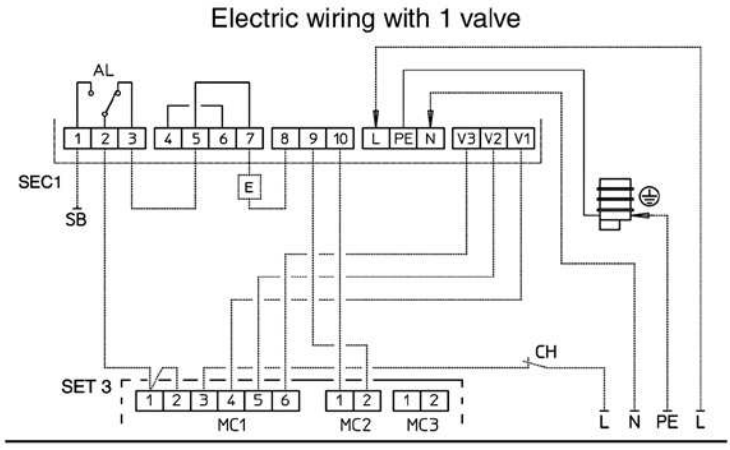
LEGEND

- SEC1 = Airedale electrical board
- SET1 = Control electrical board
- CH = Remote Summer/Winter switch
- SB = Alarm contacts
- E = Valve set (2 pipe installation)
- E1 = Hot water valve set
- E2 = Chilled water valve set
- AL = Alarm condensate - float switch released

Same characteristics as TMO-T, adding:

- Manual or automatic speed switch.
- Electronic thermostat for fan control (ON-OFF).
- Electronic thermostat for valve(s) control (ON-OFF).
- Simultaneous thermostatic control of the valves and fan (ON-OFF).
- It allows installation of the Summer/Winter switch centralised and remote, or to control it with an automatic change-over fitted on the water pipe (for 2 pipe installations only)

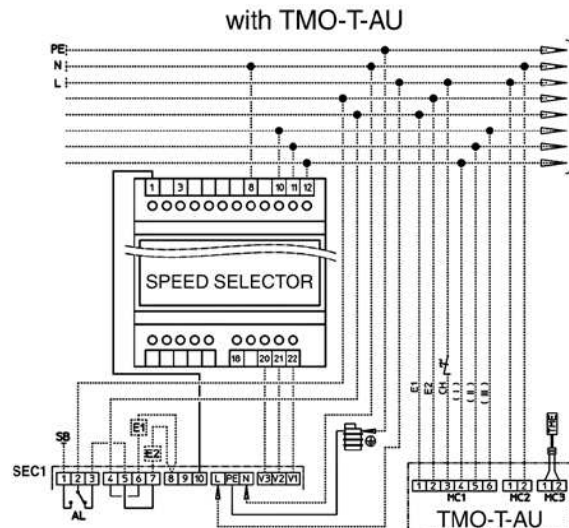
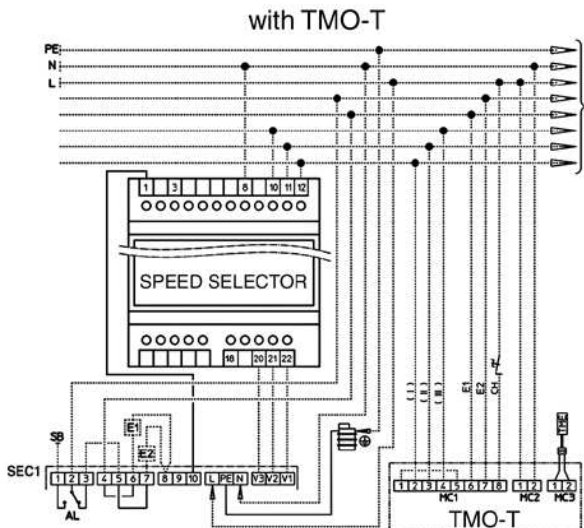
Note: with 4 pipe installations and continuous chilled and hot water supply, it allows the automatic summer/winter change-over in accordance to the room temperature (-1°C = Winter, +1°C = Summer, Dead Zone 2°C).



Identification Code

SEL - S 9079110

- Speed switch (slave).
- It allows to control up to 8 units with only one centralised thermostat using one speed switch for each unit.
- For controls TMO-T and TMO-T-AU.



Identification Code

TMO - DI 9060521

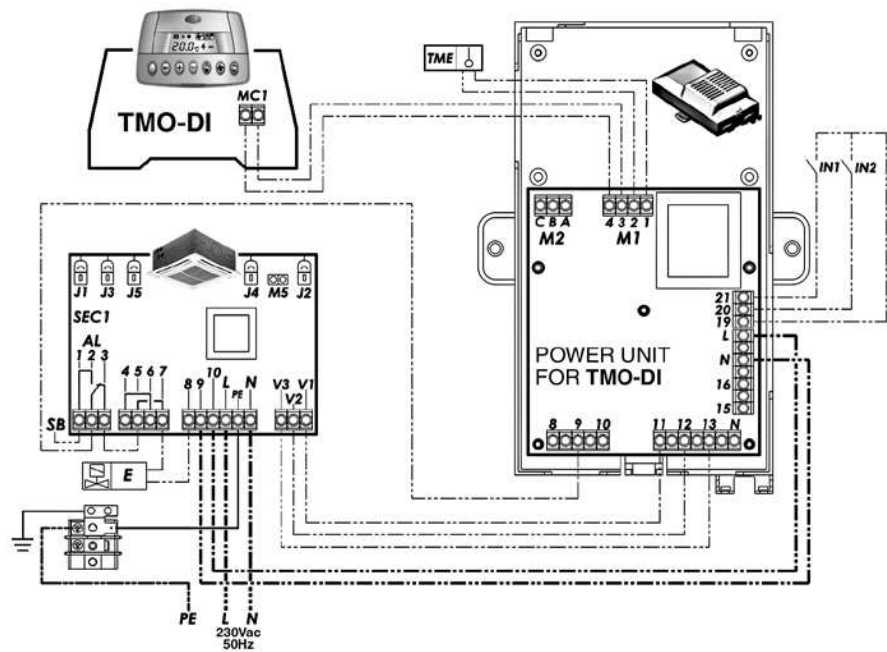


To be installed on the wall or in the electric switch box.

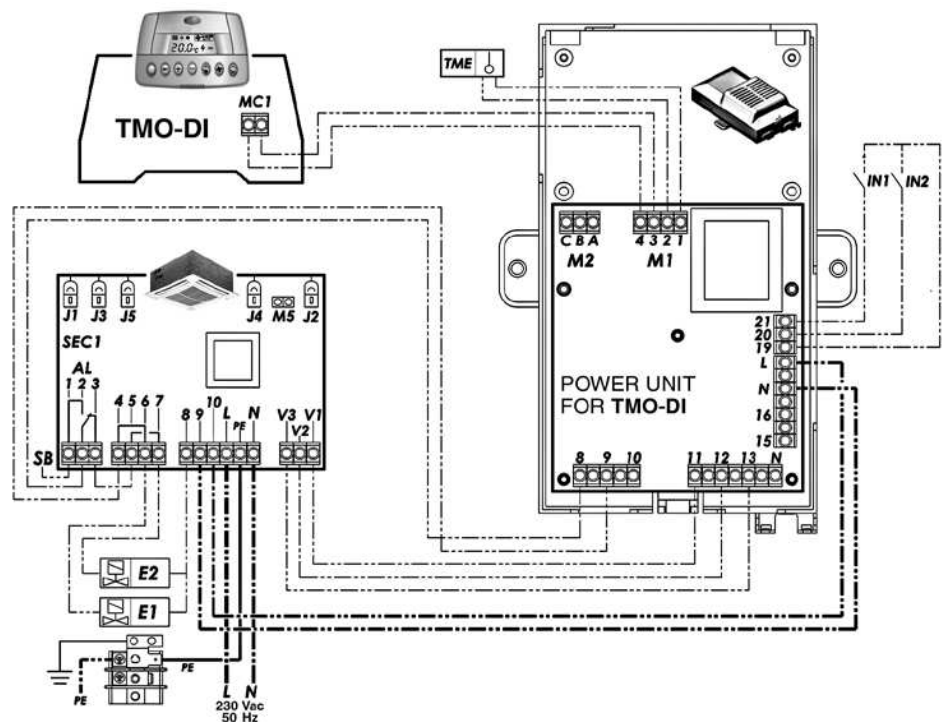
- Manual or automatic speed switch.
- Manual or automatic Summer/Winter switch.
- Electronic thermostat for fan control (ON-OFF).
- Electronic thermostat for valve(s) control (ON-OFF).
- Simultaneous thermostatic control on the valves and fan (ON-OFF).
- It allows control of the low temperature cut-out thermostat TME (not to be used with TL-E models).
- It allows control of the chilled water valve (ON-OFF) and the electric resistance in the TL-E version.
- It allows control of the fan and the heating electric resistance.
- It allows control of up to 10 units with SEL-DI speed switch

Note: with 4 pipe installations and continuous chilled and hot water supply, it allows the automatic summer/winter change-over in accordance to the room temperature (-1°C = Winter, +1°C = Summer, Dead Zone 2°C).

TMO-DI connection with 1 valve



TMO-DI connection with 2 valves



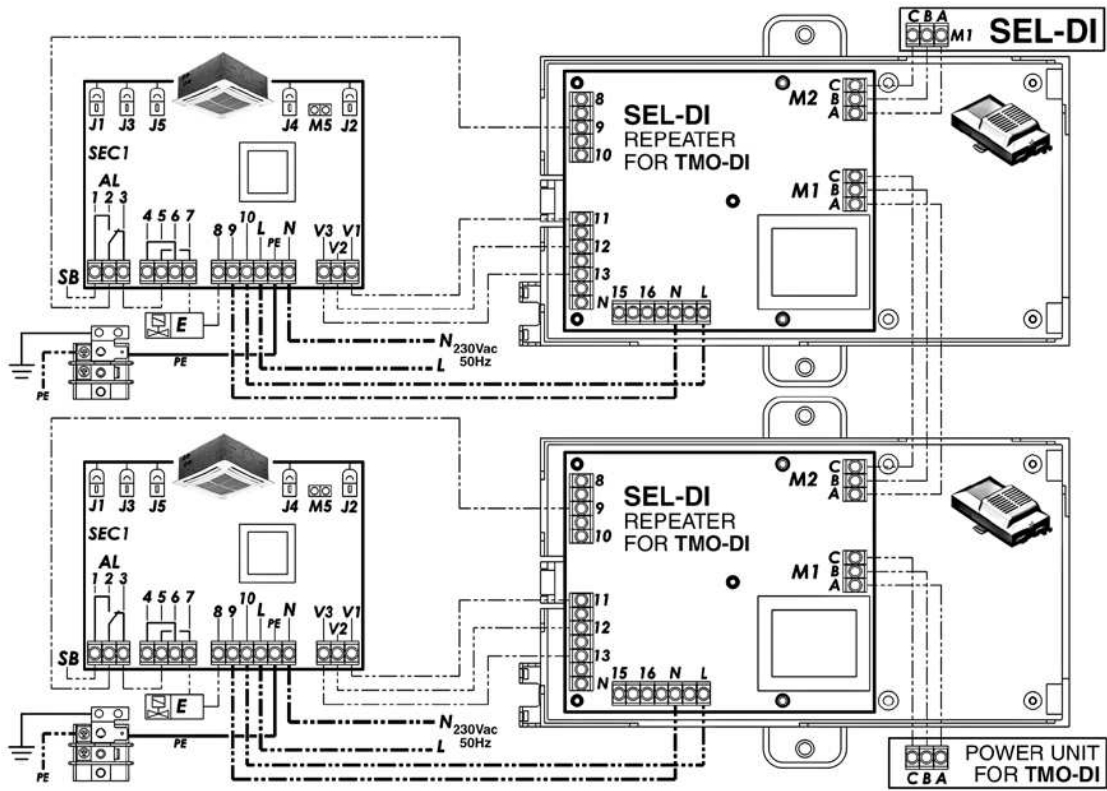
Identification Code

SEL - DI 9060139

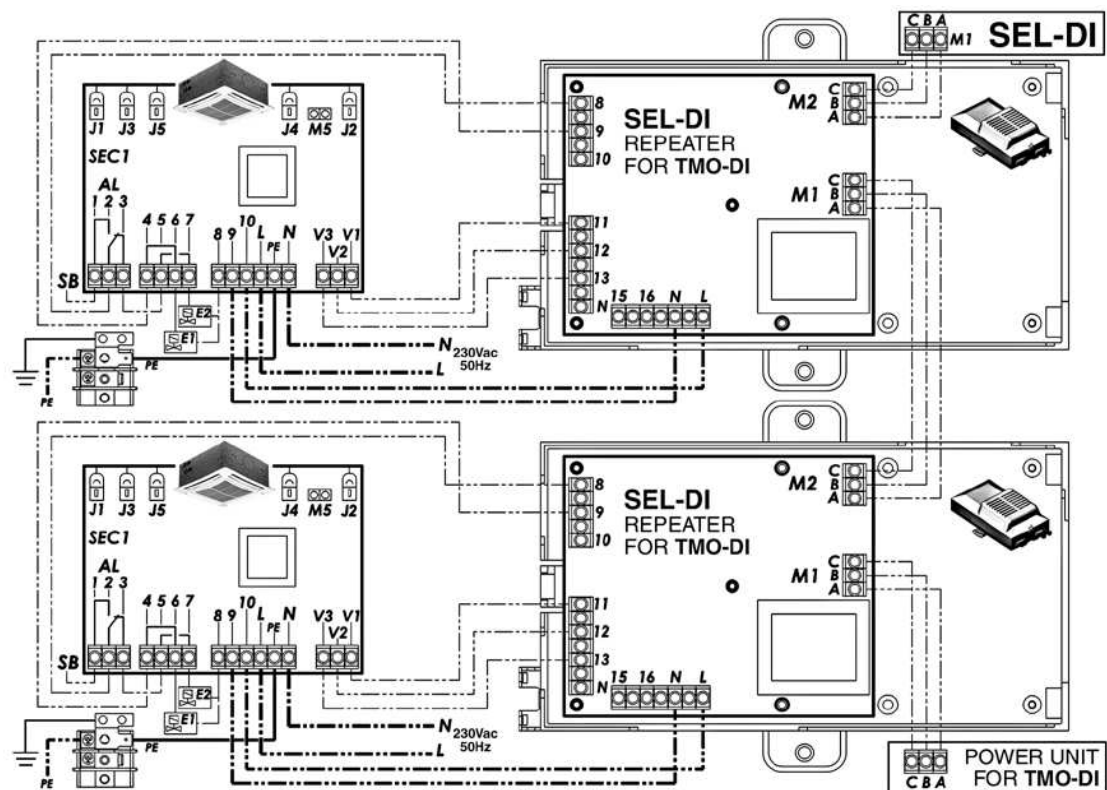
Repeater for TMO-DI

It allows control of up to 10 units with only one TMO-DI centralised thermostat.

SEL-DI connection with 1 valve



SEL-DI connection with 2 valves



LEGEND

- | | |
|--|---|
| SEC1 = Airedale electrical board | R = Slave board |
| TME = L.T.C.O. sensor | SB = Alarm contacts |
| E = Valve set (2 pipe installation) | AL = Alarm condensate - float switch released |
| E1 = Hot water valve set (4 pipe installation) | IN1 = Winter/Summer remote switch |
| E2 = Chilled water valve set (4 pipe installation) | IN2 = Set reduction |

TMO 503 - SV2

The TMO 503-SV2 control is designed to be installed in a series 503 wall box. It is easy to use, it has a big and clear display, and extremely precise. The control is supplied integral with the external frame, but it is possible to use frames of the most known brand on the market (BTicino, Vimar, AVE, Gewiss).

The maximum electric absorption is 200 W.

If the fan coil has an higher absorption or more units are connected to the same control, the speed switch SEL-S must be installed.



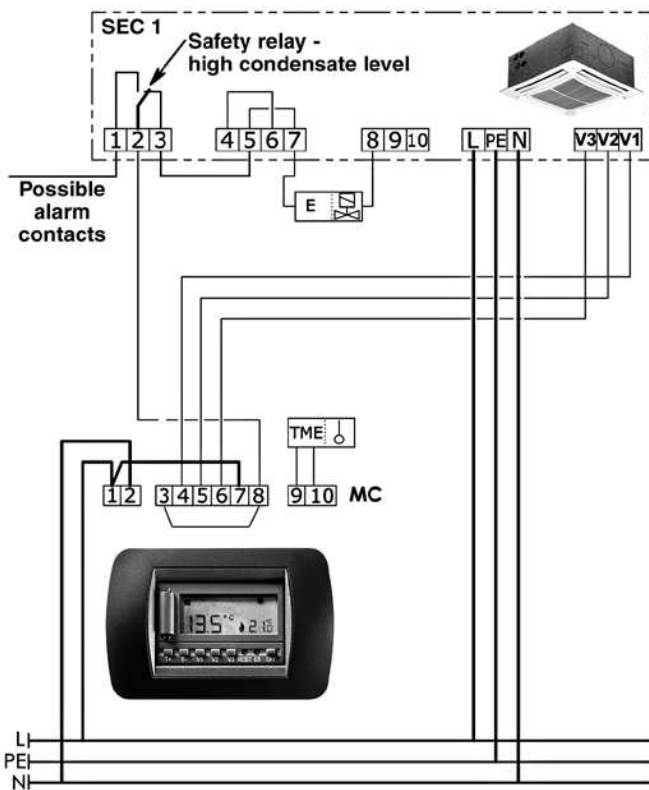
Identification Code

TMO 503 - SV2 9060173

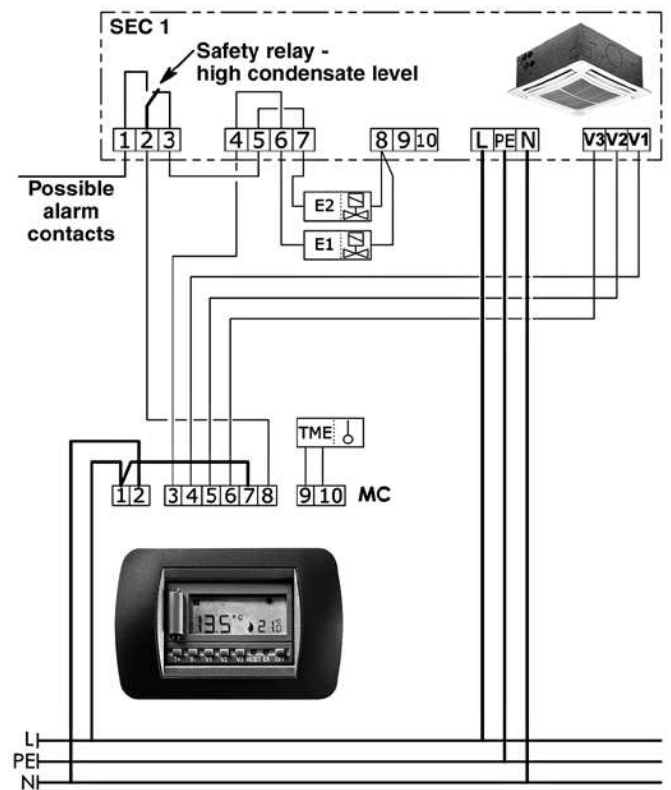
- Manual or automatic speed switch.
- Manual Summer/Winter switch.
- Electronic thermostat for valve(s) control (ON-OFF).
- Simultaneous thermostatic control of the valves and fan (ON-OFF).
- It allows control of the low temperature cut-out thermostat (TME), included with the control.

Note: with 4 pipe installations and continuous chilled and hot water supply, it allows the automatic summer/winter change-over in accordance to the room temperature (-1°C = Winter, +1°C = Summer, Dead Zone 2°C).

2 pipe installation



4 pipe installation



LEGEND

SEC 1 = Airedale electrical board
MC = Control electrical board

M = Fan
E = Water valve

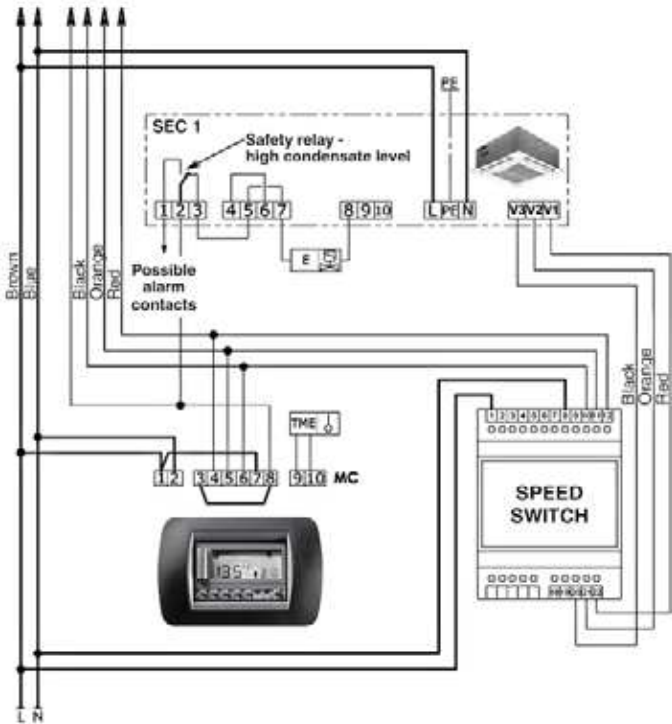
E1 = Warm water valve
E2 = Chilled water valve

TMO 503-SV2 with SEL-S

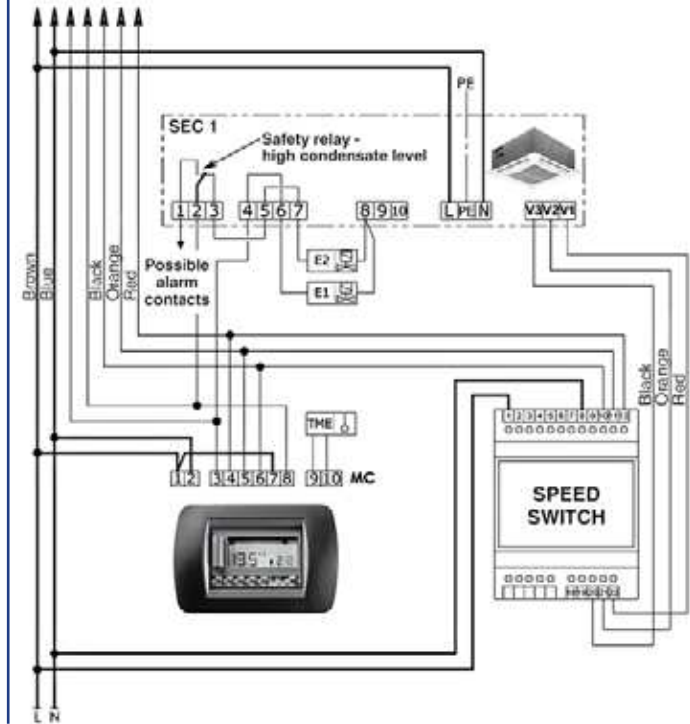
The TMO 503-SV2 control with the SEL-S speed switch can control up to 8 units with only one centralised thermostat (the SEL-S speed switch must be fitted on all the units).

TMO 503-SV2 with SEL-S diagram (Code 9060173 + Code 9079110)

2 pipe installation

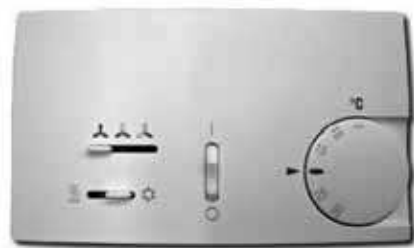


4 pipe installation



Identification Code

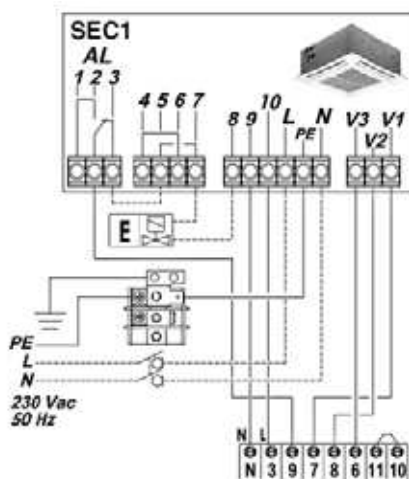
T2T 9060174



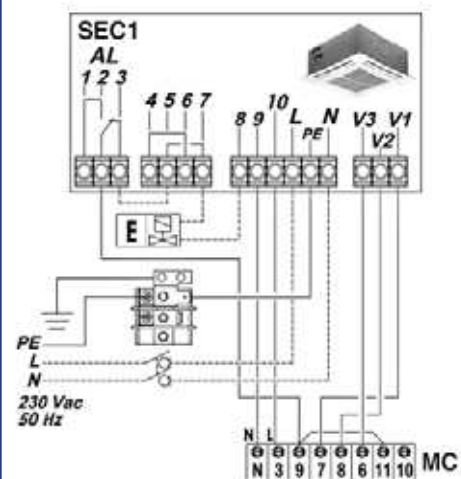
2 pipes units only.

- ON-OFF switch.
- 3 speed switch.
- Manual Summer/Winter switch.
- Thermostatic control on the fan.
- Thermostatic control on the valve and continuous fan operation.
- Simultaneous thermostatic control of the valve and fan.
- Cannot be used with speed switch (slave).

Thermostatic control on the valve and continuous fan operation



Simultaneous thermostatic control of the valve and fan



LEGEND

SEC 1 = Airedale electrical board **M** = Fan **E1** = Warm water valve
MC = Control electrical board **E** = Water valve **E2** = Chilled water valve

TME low temperature cut-out thermostat

Suitable for wall controls only (not infra-red remote control). To be fitted between the coil fins; when connecting the control, the TME probe cable must be separated from the power supply wires. To be used with the following controls: TMO-T, TMO-T-AU, TMO-DI.

Identification	TME
Code	3021091

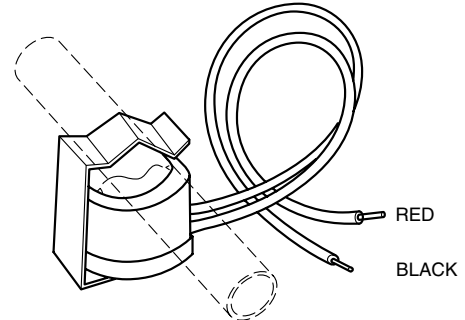


The fan stops when the water temperature is lower than 38°C and it starts the fan when it is higher than 42°C.

Change-Over CH 15-25

Suitable for wall controls only (not for infra-red remote control). Automatic summer/winter switch to be installed in contact with the water circuit (for 2-tube installations only). To be used with the following controls: TMO-T, TMO-T-AU, TMO-DI.

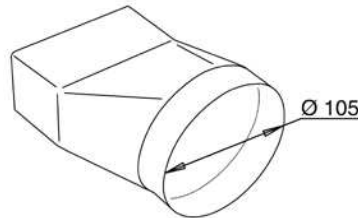
Identification	CH 15-25
Code	9053049



Fresh air connection

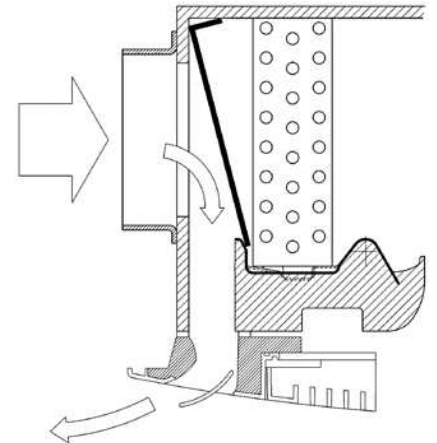
See page 13.

Identification	CAP
Code	6078005



Fresh air kit

This is used to introduce primary air into the environment directly through the diffuser. The kit includes a flow separator to be fitted inside the cassette, and a circular fitting for connection to the flexible system ducting. The flow of air is sent directly to just one of the outlet louvers, without passing through the coil. The air flow of fresh air introduced into the environment depend on the inlet static pressure.



Correlation between flow-rate / static pressure

	TL 0-1-2-3		TL 4-5-6	
	m ³ /h	Pa	m ³ /h	Pa
Model	TL 0-1-2-3	TL 4-5-6		
Identification	PRT 600	PRT 800		
Code	9079230	9079231		
	80	3	160	3
	120	8	200	8
	160	15	300	15
	200	25	400	25
	240	36	500	36

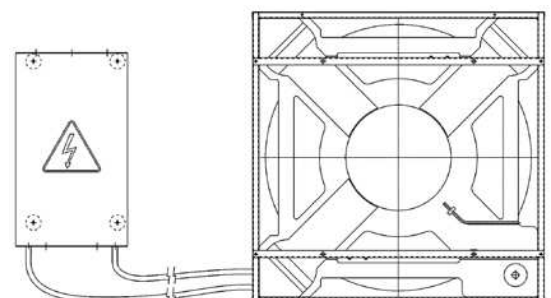
The diameter of the fitting is 150 mm for TL 0 - 1 - 2 - 3 and 180 mm for TL 4 - 5 - 6.

Units with remote electric board

On request the Airedale cassettes are available with electric control panel reachable from below and with the electric board that can be placed in a remote position. In this case the units are supplied with an electronic connecting control panel, fitted to the bottom side on the 4 smallest sizes and to the lateral side on the 3 biggest sizes.

The electronic control panel is connected to the fan motor, to the condensate pump and to the condensate level control. A 6 m wire is also supplied with integral plug-in connections to connect the unit with the remote electric board that can be installed in a suitable and comfortable position, where the power and system connections can be made easily.


This feature is not available for units with electric resistance or infra-red remote control.



ON-OFF valves with thermoelectric actuator

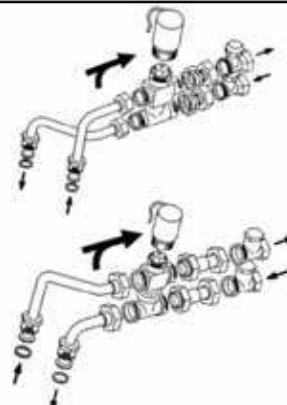
VALVE WITH MICROMETRIC LOCKSHIELD VALVE (WATTS INDUSTRIES - HONEYWELL)

3 ways




TL 0.2-0.4
TL 1.2-1.4
TL 2.2-2.4
TL 3.2-3.4

TL 4.2-4.4
TL 5.2-5.4
TL 6.2-6.4

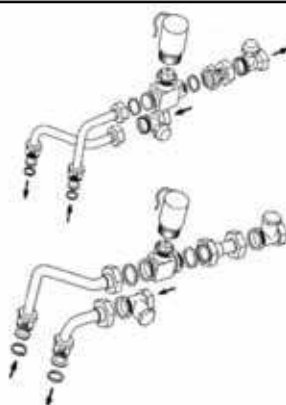


2 ways




TL 0.2-0.4
TL 1.2-1.4
TL 2.2-2.4
TL 3.2-3.4

TL 4.2-4.4
TL 5.2-5.4
TL 6.2-6.4



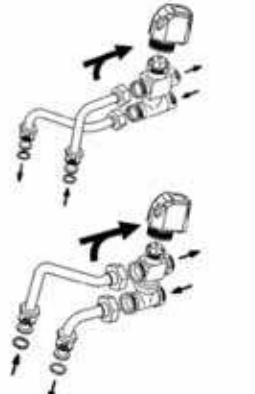
VALVE WITH SIMPLIFIED KIT (JCI)

3 ways




TL 0.2-0.4
TL 1.2-1.4
TL 2.2-2.4
TL 3.2-3.4

TL 4.2-4.4
TL 5.2-5.4
TL 6.2-6.4

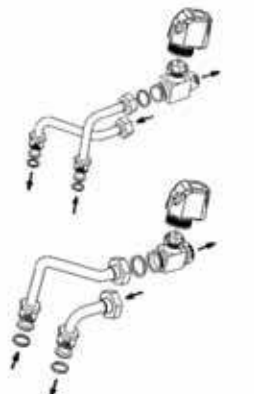


2 ways



TL 0.2-0.4
TL 1.2-1.4
TL 2.2-2.4
TL 3.2-3.4

TL 4.2-4.4
TL 5.2-5.4
TL 6.2-6.4



Technical data:

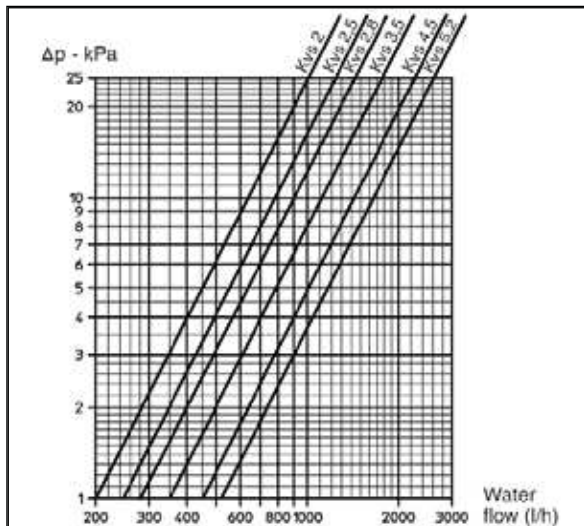
Rated pressure:	16 bar
Max. ambient temperature:	50 °C
Max. water flow temperature:	110 °C
Power:	230 V - 50/60 Hz
Rating:	3 VA
Protection:	IP 43
Travel time:	approx. 3 min.
Max. glycol content of water:	50%

Valves characteristics

Battery type	Model	2 way valves			3 way valves		
		K _{vs} m ³ /h	Δp _{max} kPa *	Valve ** connection	K _{vs} m ³ /h	Δp _{max} kPa *	Valve ** connection
Main	0.2/1.2/2.2/3.2	2.8	50	3/4"	2.5	50	3/4"
	0.4/1.4/2.4/2.6/3.4/3.6						
	4.2/5.2/6.2	5.2	60	1"			
Auxiliary	0.4/1.4/2.4/2.6/3.4/3.6	2.8	50	3/4"	2.5	50	3/4"
	4.4/5.4/5.6/6.4/6.6						

* maximum pressure difference for valve to close ** external thread. flat seal

Valves pressure drop



Valve set, 2 or 3 ways, ON-OFF, with thermoelectric actuator. The set includes connection pipes and holders.

Note: The main battery valve connection is 1/2" (Kvs 2) for TL0 - TL1 - TL2 - TL3 sizes and 3/4" (Kvs 3,5) for TL4 - TL5 - TL6 sizes, the auxiliary battery valve connection is 1/2" (Kvs 2).

Note: The maximum pressure drop across the fully open valve should not exceed 25 kPa for cooling operation and 15 kPa for heating operation.

The Airedale cassettes can be supplied with a micro-processor managing system operated by an infra-red remote control with liquid crystal display.

Integral with the unit is the room temperature probe, the water temperature probe (cut-out thermostat), the infra-red remote control and the electronic board with RS485 communicating connection which can control up to 20 units.

The electronic board is of master/slave mode and the serial communicating connection allows the serial connection; in the master/slave connection of more units, it is recommended to install the infra-red receiver on the master unit.



Control operations:

- Temperature set.
- Fan speed switch with possible automatic speed selection.
- 24 hours on/off program.
- on/off cooling valve control.
- on/off heating valve control.
- Control of the valves only or of the valves and the fan together.
- Valve control of 2 or 4 pipe systems with winter/summer switch on the infra-red control.
- Valve control of 4 pipe systems with automatic heating/cooling mode selection with 2°C dead zone.
- Activating the sensor connected to the T3 contact of the board (non active in the standard configuration), it works like a cut-out thermostat: fitted between the coil fins it stops the fan when the water temperature is lower than 38°C and it starts the fan when the water temperature reaches 42°C.



The electronic board, fitted inside the electrical panel, can manage different control modes so as to best satisfy the requirements of the installation. These modes are selected by suitably positioning the configuration dipswitches, which define the following main functions:

- **2 pipe / 4 pipe system:**
dip switch N.ro 1 = ON/OFF
- Operation **without / with** remote control:
dip switch N.ro 3 = ON/OFF
- Continuous ventilation:
dip switch N.ro 4 = ON
- Close valve and stop fan in cooling (autofan function):
dip swicth N.ro 4 = OFF N.ro 5 = ON N.ro 6 = OFF
- Close valve and stop fan in heating mode (autofan function):
dip swicth N.ro 4 = OFF N.ro 5 = OFF N.ro 6 = OFF
- Close valve and stop fan in both cooling and heating mode (autofan function):
dip swicth N.ro 4 = OFF N.ro 5 = ON N.ro 6 = ON

The autofan function allows the simultaneous on/off control of the water valve and the fan, while at the same time optimising the operation of the unit. When reaching the set point, the controller closes the water valve (valve off) and only 3 minutes later stops the fan, so as to correctly compensate for the valve closing time. To prevent the air probe from measuring an incorrect temperature, when the fan is off the controller runs a number of fan ON cycles to annul the effect of any stratification of the air in the room.

The autofan function can be activated in cooling only mode, in heating only mode or in both operating modes.

In two pipe systems, a water probe can be installed on the supply pipe to the unit upstream of the water valve. Based on the temperature read in this section of the pipe, the device will select either cooling or heating operation.

The electronic board also features a contact for connection to a window switch or remote enabling signal. When the contact is closed, the unit can operate, when the contact is open, the unit stops. The same contact can be used for starting and stopping the unit from an external timer or any other remote switching device.

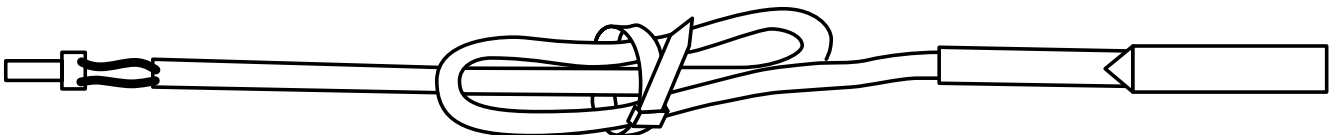
In addition, a series of units can be switched on or off at the same time, by using a flip-flop switch connected to the terminals present on the board.

Sensors that require a 12 volt power supply, for example occupancy sensors, can be connected to other terminals on the electronic board and then to the on/off contacts. The board is able to power external sensors with a maximum current of 60mA.

T2 Change-Over for infra-red remote control (accessory)

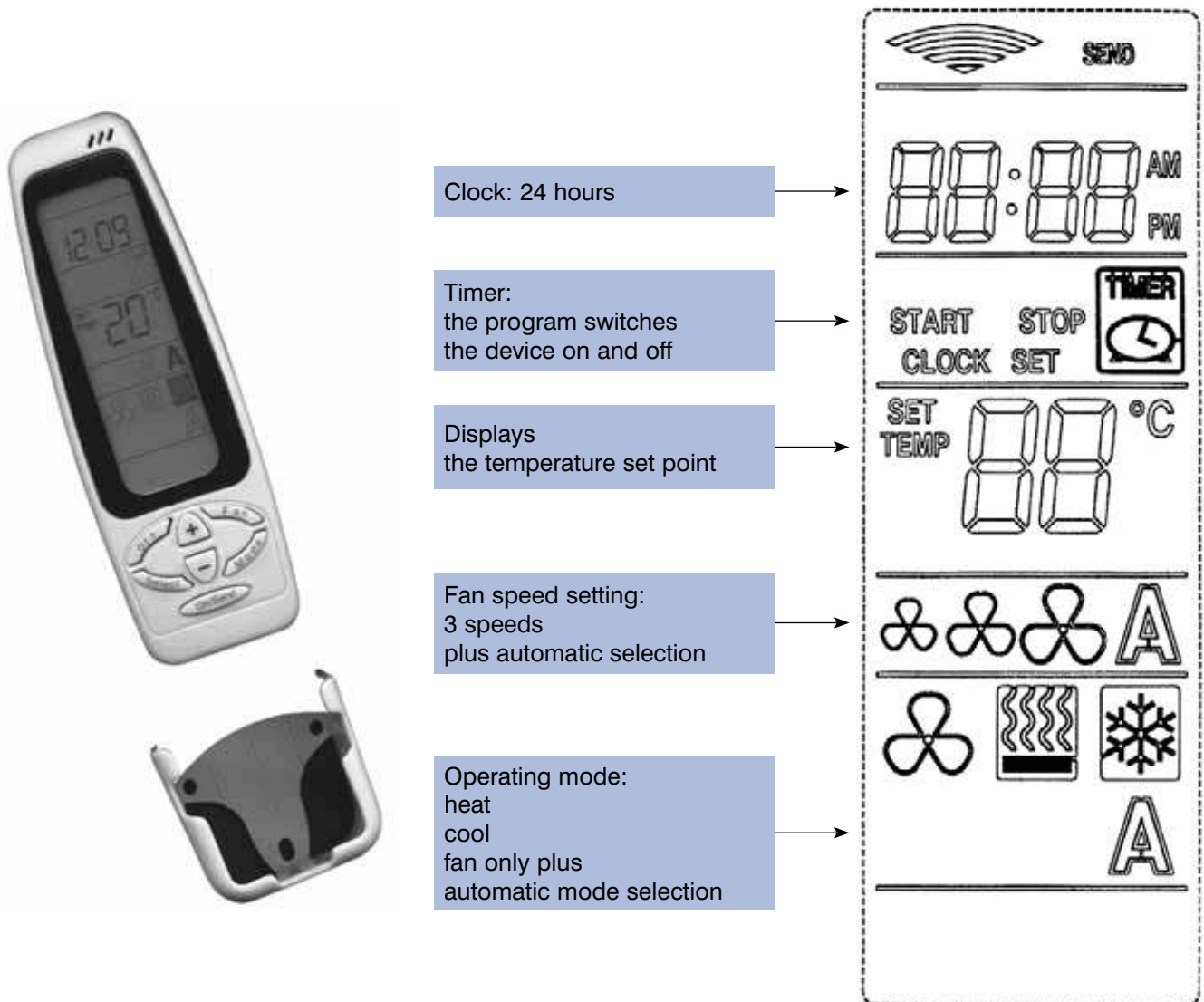
Suitable for units with infra-red remote control only.

The NTC sensor, if connected to the T2 contact of the board, works like a change-over: fitted in contact to the supply pipe it controls automatically the winter/summer switch in accordance to the water temperature.



Identification	T2
Code	9079103

Main functions of the remote control



Timer function:
used to start or stop the unit over a 12 hour period.

Set display:
used to display the temperature set point.

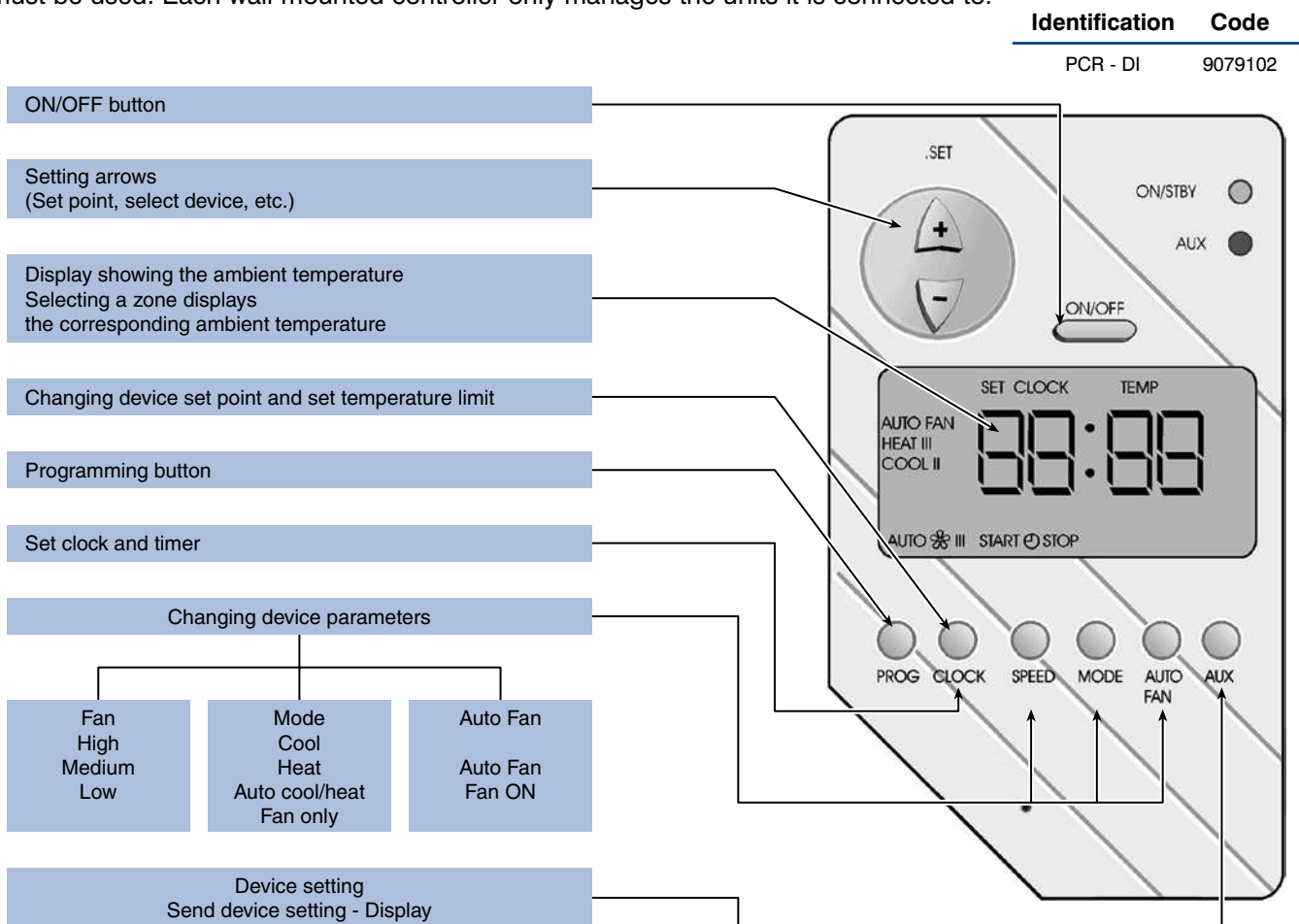
Fan speed setting:
used to select the 3 operating speeds of the fan, or alternatively select automatic control. In the latter case, the fan speed will change automatically based on the ambient temperature reading and the set point. The temperature difference to switch from one speed to the next is 0,7°C.

Operating mode:
used to select the desired operating mode, that is, fan only, cooling, heating or automatic mode selection. Automatic selection allows, in 4 pipe systems, the unit to switch automatically from heating to cooling and vice-versa based on the ambient temperature reading and the set point, with a dead zone of 2°C inside which the unit remains in fan only mode.

Connection of the units in series and centralised management

A group of Airedale cassette units with infra-red remote control microprocessor can be connected via a serial link and can consequently be managed at the same time by just one infra-red remote control. Using the special jumper present on the board, one unit must be configured as the master, and all the others as slaves. It is clear that the remote control must be pointed at the receiver on the master unit. To avoid problems, it is recommended to install and connect the receiver only on the master unit.

Another option available for the serial communication between the units is the possibility to connect up to 60 Airedale cassette units in series (the maximum length of the connection cable must not exceed 800 m) and manage them with just one wall-mounted intelligent PCR-DI controller. The wall-mounted controller can be used to set the operating mode for each individual unit connected, display the operating conditions of each individual unit, and set the on/off time sets for each day of the week. If more than 60 units need to be connected, two or more wall-mounted intelligent controllers must be used. Each wall-mounted controller only manages the units it is connected to.



The PCR-DI control is used to manage a series of cassettes, up to a maximum of 60 units, from one single control point. The PCR-DI control communicates via a serial line with all the units connected, with the possibility of controlling them all together or individually. In fact, the unique address of each individual cassette means that all the units can be called at the same time, or the individual unit called, to perform the following functions:

- display the current operating mode, the fan speed, the set point
- display the room temperature measured on the individual unit
- turn all the units on and off at the same time or alternatively each unit individually
- change the operating mode (fan only, heating, cooling, automatic changeover)
- change the set point

Each function can then be sent to all the units connected, or alternatively to each individual unit. Different set points or operating modes can be set for each individual unit.

The PCR-DI panel can also be used for the time management of the units over the week. Two on times and two off times can be set on the units for each day of the week.

The weekly programming mode can be stopped at any time, returning to the manual setting and then weekly programming mode can subsequently be started again.

Maxinet program for managing a network of IR hydronic terminals

Maxinet is a centralised control system for networks of IR hydronic terminals, based on software that runs on Windows. The Maxinet software offers a practical and economical solution for managing the terminals, with the simple click of the mouse. The main characteristics include simplicity of use, an extremely complete and functional weekly program, and the possibility to access the historical operating data for each individual appliance connected.



The program exploits all the potential of our appliances with remote controls, representing an addition to the latter.

The Maxinet program is a control tool that can be used as a replacement for the remote control, or in parallel, however with the possibility of setting the priority, that is, the settings made using Maxinet can have priority over those made using the remote control.

The program can be used to:

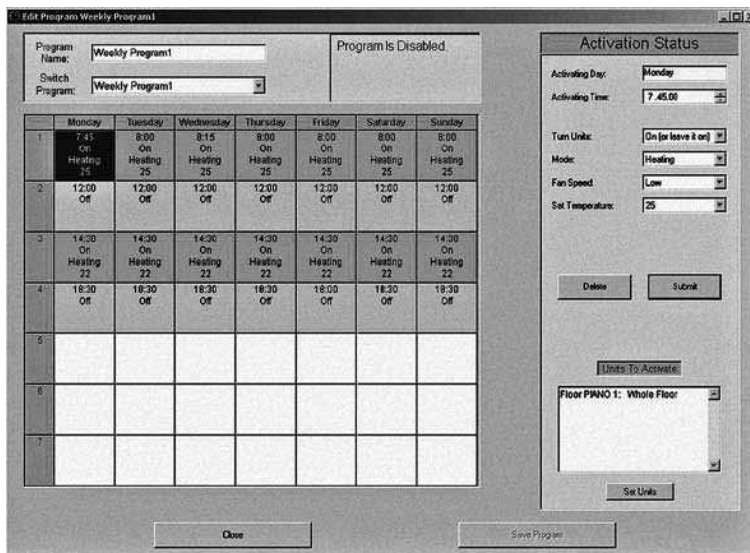
- create uniform logical blocks (groups of units on individual floors, in offices or rooms).
- save weekly programs configured for different types of operation (summer, winter, mid seasons, closing periods etc.); these can then be recalled and activated with a simple click of the mouse. Weekly on/off cycles can be set for individual units or groups of units.
- set the operating conditions for each individual unit or groups of units (operating mode, fan speed, temperature setting).
- set the set point limits for each individual unit or groups of units.
- switch each individual unit or groups of units on or off.

The “Weekly Program” can be used to set the unit operating parameters for each day of the week. Up to 20 different weekly programs can be set.

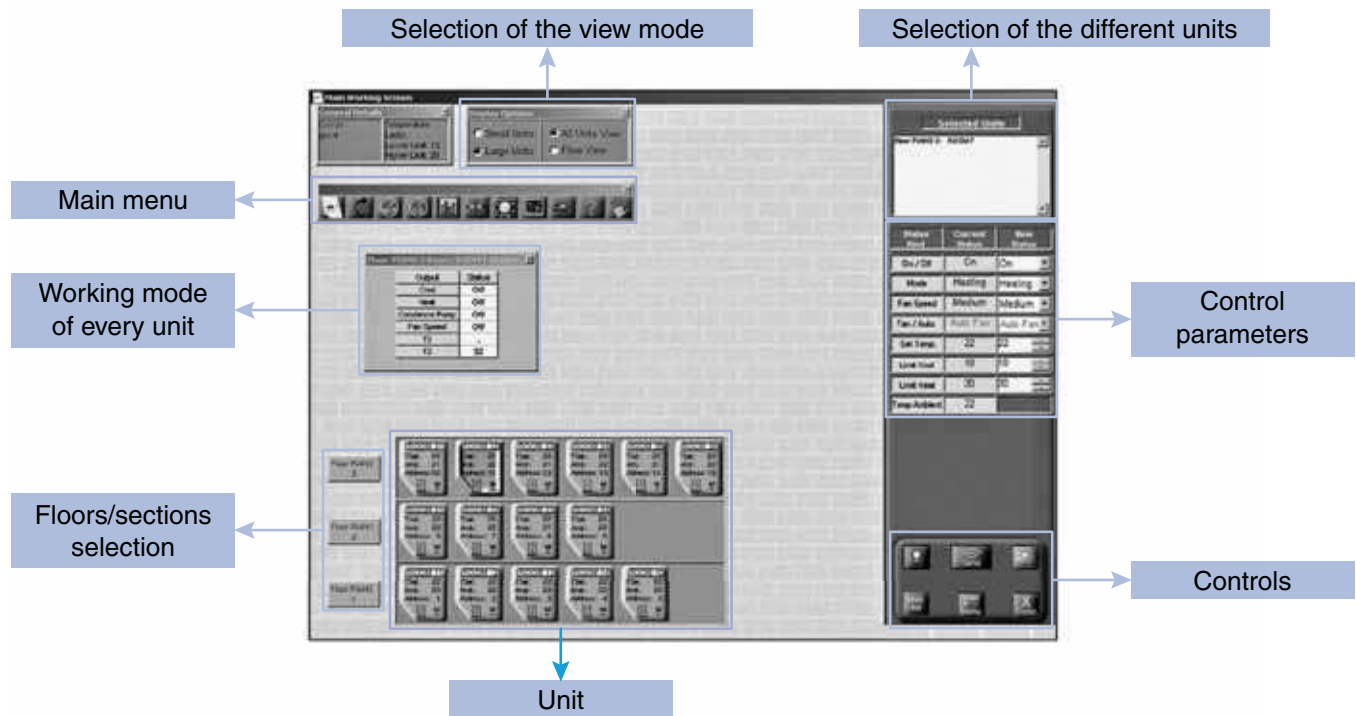
Time bands are available for each day of the week.

The time and the type of operation to be performed by the unit can be set for each band.

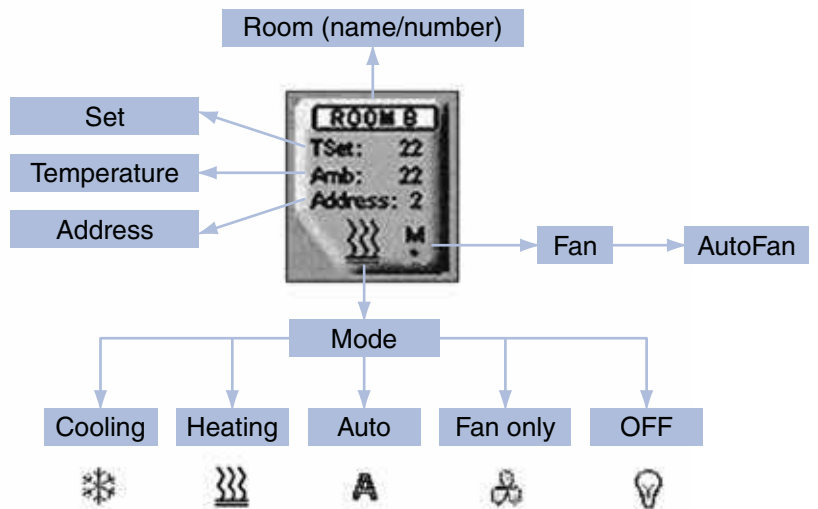
The time and the operating parameters can then be displayed before being sent to the unit and implemented.



One especially useful function of the weekly program is to have the program carry out timed checking routines to identify whether the operating mode or temperature setting have been modified on the terminals, for example using the local remote control. If activated, the routine will reset all the unit operating parameters to the values set in the weekly program.

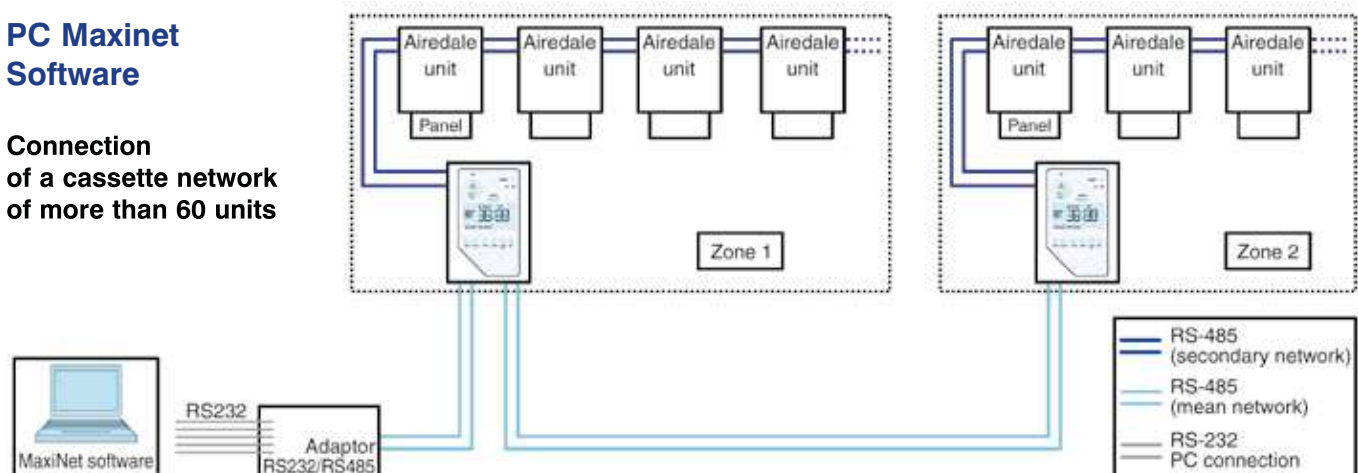


The main program screen can display and interact with the entire network of units. An individual unit, a group of units or the entire network can be called so as to make modifications to the operating mode and the set point. The user can then check the operating status of each individual unit, read the room temperature, the coil temperature and the operating status of the condensate drain pump or any alarms.



PC MaxiNet Software

Connection of a cassette network of more than 60 units



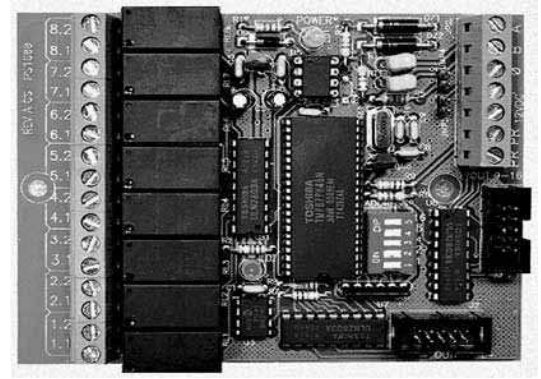
Identification	Code
S08R	9079105

In addition to the air-conditioning units, MaxiNet can also work with general output cards. Each card contains 8 outputs which can be connected to “On / Off” devices.

Inserting a new output card can be done through the regular units setting.

Handling the existing output cards is done through the output cards’ menu, which can be loaded from the working screen’s menu bar. In the menu, choose the “General Outputs Cards” title.

The Out-Put card can be connected in a Maxinet network and controlled by the software. Up to 10 cards can be used.



Identification	Code
ETN +/-3°C	9079106

The ETN +/- 3 is a wall-mounted controller that can be connected to fan coils fitted with the IR electronic board and connected in an RS 485 network managed by the Maxinet supervisor system. The controller allows to adjust the set-temperature by raising or lowering the temperature set, defined with Maxinet, by increments of 1°C in a range of +/- X°C.

The controller features the following functions:

- switch the appliance on and off
- set the fan speed
- set the range of temperature settings (default +/- 3 °C, modifiable on site up to +/- 9°C)
- modify the set point determined by the MaxiNet system by a value of +/- X°C

The Maxinet system can set the operating mode, the set point and all other operating parameters of the unit, as well as display the settings made by the user. The Maxinet system always has priority over the ETN controller. For the correct use of the system, also see the manual for the cassette with remote control and the Maxinet supervision program.



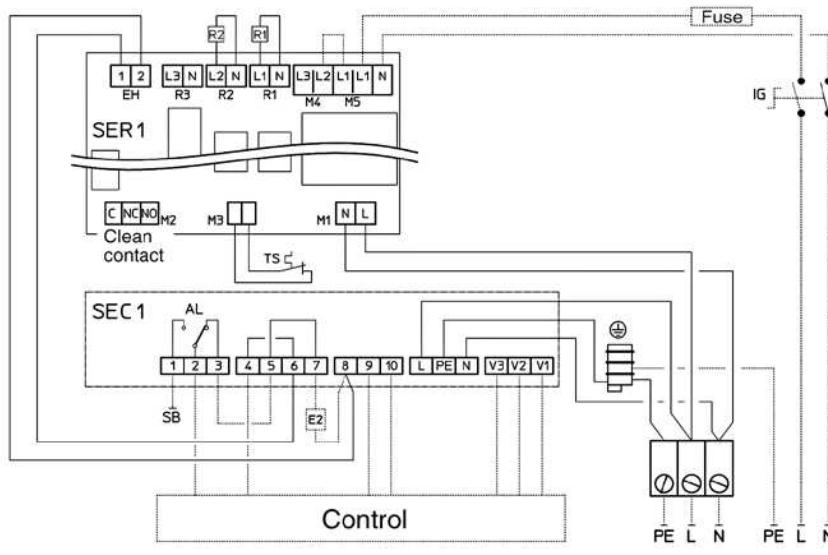
The Airedale 2 pipe models are available with electric resistance that is controlled in place of the heating battery valve. The electric resistance is controlled in place of the hot water valve and not as integration to it. The resistance is hermetically sealed and supplied inside the battery pipes and therefore can be only factory mounted. The electric resistances of the TL 1.2T/2.2T/3.2T units are for single phase 230V supply. The electric resistances of the TL 4.2T/5.2T/6.2T units are for three phase 400V supply. A specific electronic board is fitted in the unit control panel and it is connected to the resistance and to the safety thermostat. When the safety thermostat operates, it keeps open the resistance supply relays on the electronic board. The rearmement is by electric means, cutting off the supply to the unit.

Model	TL 1.2T-E	TL 2.2T-E / TL 3.2T-E	TL 4.2T-E / TL 5.2T-E / TL 6.2T-E
Capacity	1500 Watt	2500 Watt	3000 Watt
Supply	230V ~	230V ~	400V ~
Number and Dia. of connecting wires	3 x 1.5 mm ²	3 x 2.5 mm ²	5 x 1.5 mm ²

Note: the cooling capacity of the units is 95% of the capacity in the tables of page 6.

Electric diagrams

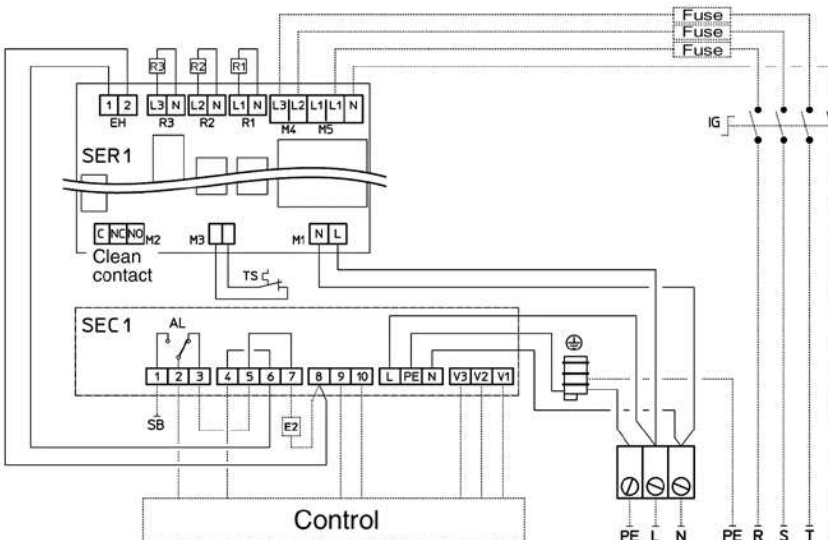
MODELS
TL 1.2T
TL 2.2T
TL 3.2T



LEGEND

- IG = Main switch
- TS = Safety thermostat
- R1 = Resistance 1
- R2 = Resistance 2
- R3 = Resistance 3

MODELS
TL 4.2T
TL 5.2T
TL 6.2T



Cassette unit operating limits with electric coil

Max. ambient temperature for Cassette unit with electric coil in heating mode: 25°C

Introduction

The MCT version has been designed for all environments where false ceilings are not featured or cannot be constructed.

The cover cabinet fits perfectly to the air intake and outlet diffuser, maintaining the appealing design that defines the Airedale series. The water fittings can be turned to point upwards.

The MCT series includes 7 models, with an installation height of up to 5 m, thanks to the highly flexible adjustment of the air distribution louvers.

All the technical specifications described on the previous pages remain the same, while keeping in mind that:

- the MCT series features one coil only (two pipe systems)
- there is no possibility of fresh air intake
- there is no possibility of additional electric resistance

The MCT version features a special casing delivered in separate packaging; this must only be fitted after having installed the Airedale unit and completed the water and electrical connections.

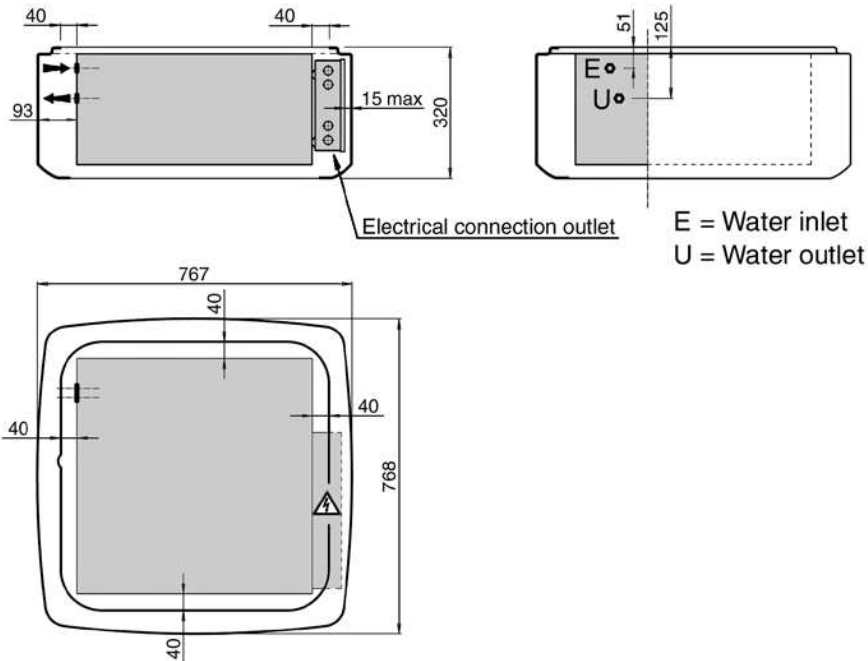


Dimensions and Weights

TL 0.2T-MCT / TL 1.2T-MCT / TL 2.2T-MCT / TL 3.2T-MCT

Casing code: 9079240

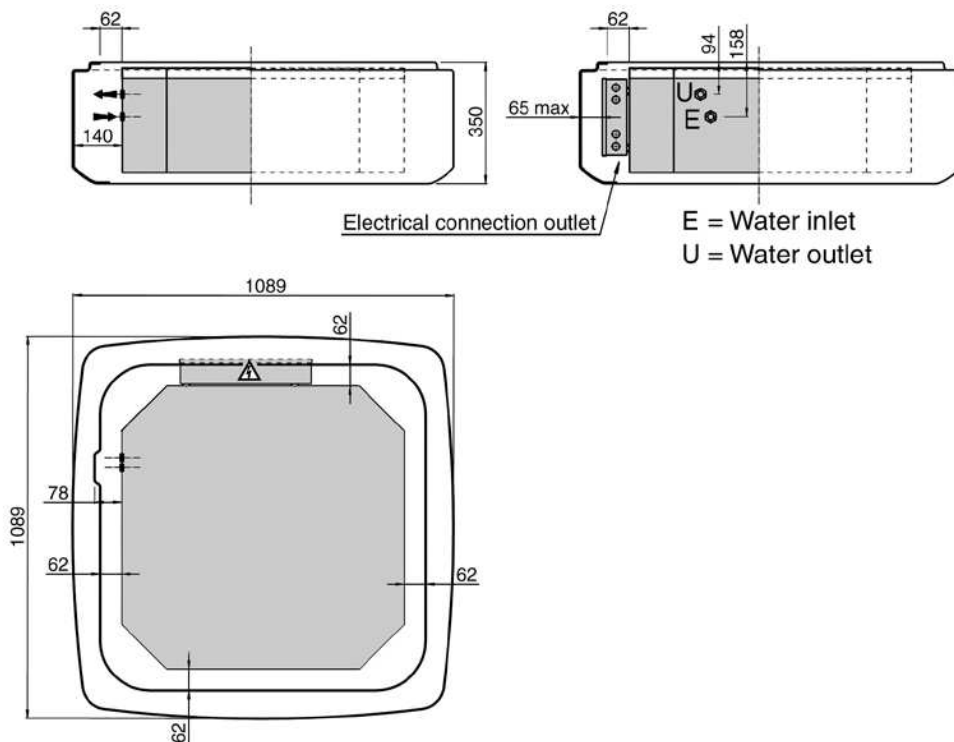
Casing weight: 5 kg (7.5 kg with the packaging)



TL 4.2T-MCT / TL 5.2T-MCT / TL 6.2T-MCT

Casing code: 9079250

Casing weight: 10.5 kg (13.5 kg with the packaging)



Warning: the electrical and water connections must enter the unit from above and must not interfere with the casing.

Assembly diagram



**TL 0.2T-MCT / TL 1.2T-MCT
TL 2.2T-MCT / TL 3.2T-MCT**

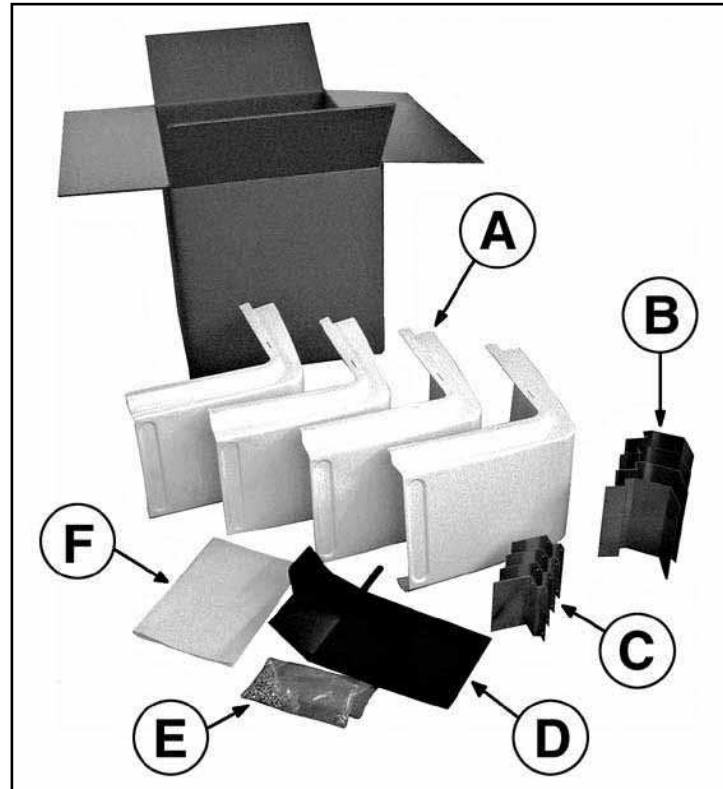
**TL 4.2T-MCT
TL 5.2T-MCT / TL 6.2T-MCT**



Components of the casing:

The casing includes:

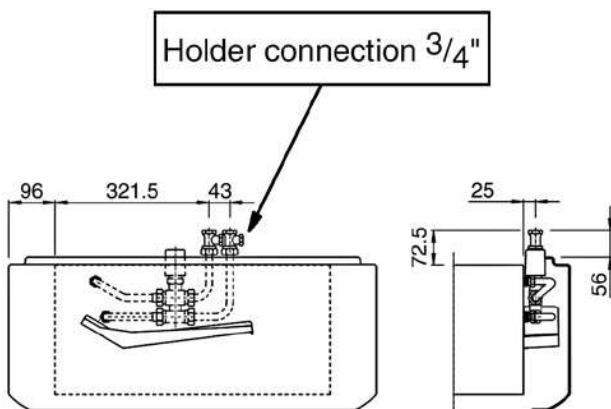
- A – 4 corner covers
- B – 4 bottom brackets
- C – 4 top brackets
- D – Condensate collection tray
- E – Hardware (45 3.9x9.5mm TCX screws)
- F – Instruction sheet



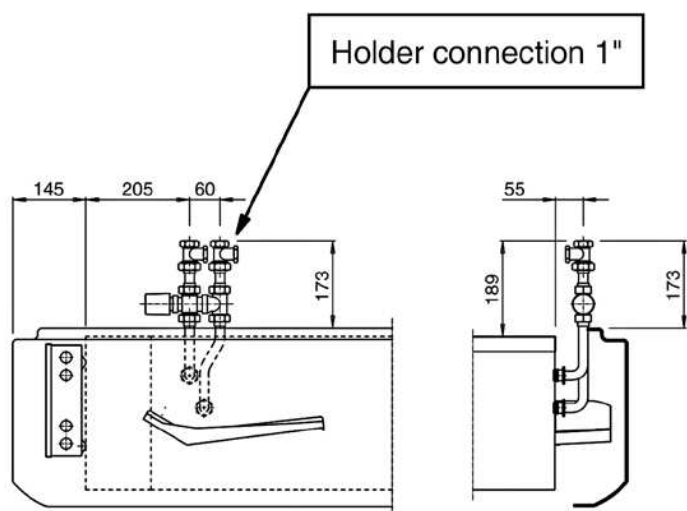
Valve kit

The valve fittings allow the water pipes to be connected from above.

TL 0.2T-MCT / TL 1.2T-MCT
TL 2.2T-MCT / TL 3.2T-MCT
 Code 9079155



TL 4.2T-MCT
TL 5.2T-MCT / TL 6.2T-MCT
 Code 9079156



For the specifications of the valves, see page 21.

The descriptions and illustrations provided in this publication are not binding: the society reserves the right, whilst maintaining the essential characteristics of the types described and illustrated, to make, at any time, without the requirement to promptly update this piece of literature, any changes that it considers useful for the purpose of improvement or for any other manufacturing or commercial requirements.



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