ABM 600x600 & 1200x600 Active Beam Range

Introduction

The active beam ABM 600 is compact ceiling mounted unit for heating and cooling. With the supply of primary air through nozzles, secondary room air is induced through a heat exchanger. The heat exchanger can be supplied with cold or hot water, for chilling or warming, and three different nozzles can be specified to give different characteristic.

The ABM unit is available in the module dimension of 600x600 and 1200x600 is suitable for many standard ceilings. These can be supplied in 2, 3 or 4 way blow configuration to incorporation into many situations.

Product Description

ABM600 Active Beam

Application

Cooling and heating of spaces
Easy installation in 600mm standard ceiling systems.

Finishes

Front Plate: PPM 9010 as standard, other colours available on request
Plenum Box: Zintec
Heat Exchanger: Copper / Aluminium

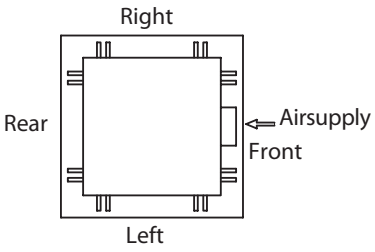
Features

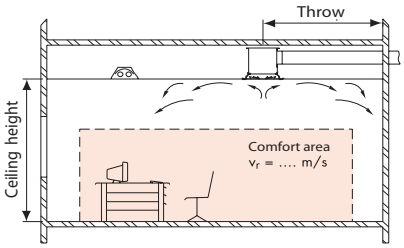
High heating and cooling capacity
Low weight
Mixing supplied air with room air (induction)
Heat exchanger easily accessible through an opening front plate

Options

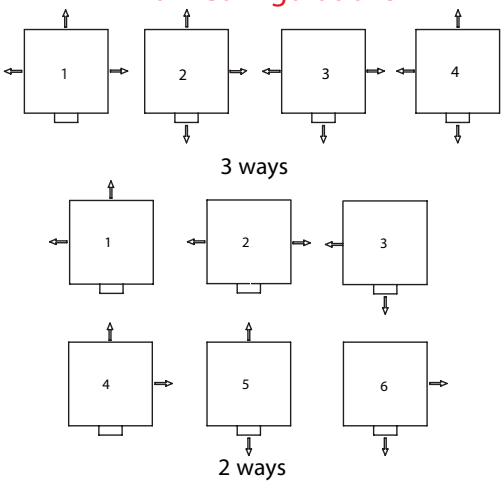
- Thermally Lined Plenum Box
- Low Profile Plenum Chamber
- Choice of Duct Connection Sizes
- 1, 2, 3 or 4 way blow
- Flow direction control vanes

Water Connection Side

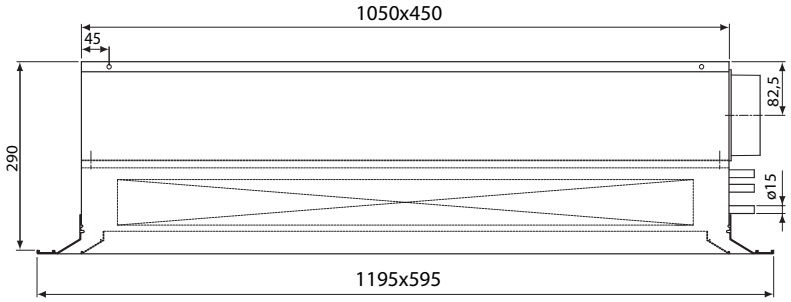


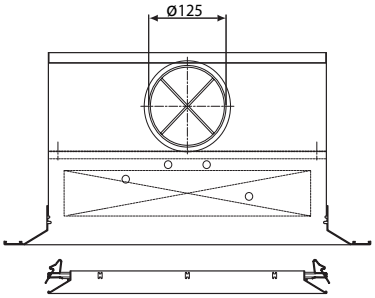


Throw Configurations

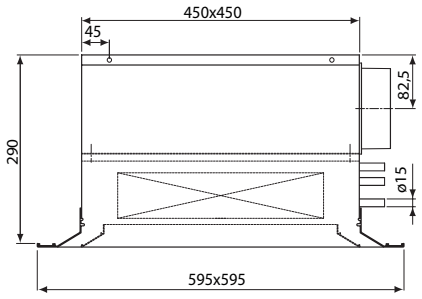


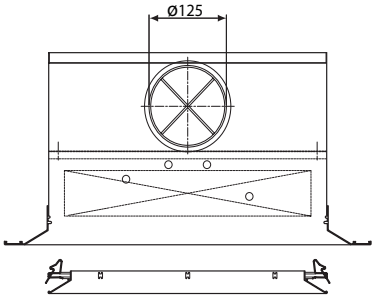
ABM 1200x600mm





ABM 600x600mm





Order Example

ABM 600x600-B-3-2-V/PPM9010

- Type
- Nozzle Type
- Number of Extract Directions
- Extract Directions
- Water Connection V(Front),L(Left),A(Rear),R(Right)
- Finish

WATERLOO

ABM 600x600mm Unit Selection Data

320mm Heat Exchanger - 4 way blow

AIRSIDE DATA								WATERSIDE DATA								
Supply Air Quantity Primary		Static Pressure Loss	Cooling Throw	Heating Throw	Sound Level Lw A (Sound power - 8dB)	Air Cooling capacity Room to Air ΔT		Water Quantity		Cooling at Various Room to mean Water ΔT				Heating at Various Room to mean Water ΔT		
						ΔT=8	ΔT=10			Pressure Loss	ΔT=8,5	ΔT=9,5	ΔT=11	Pressure Loss	ΔT=20	ΔT=30
l/s	m3/h	Pa	m		dB(A)	Watts		l/h	l/s	kPa	Watts			kPa	Watts	
Nozzle B -20																
8.3	30	44	1.1	1.3	25	82	103	70	0.02	0.7	146	157	192	0.4	422	588
								100	0.028	1.4	173	186	227	0.9	497	692
								130	0.036	2.2	195	210	256	1.5	558	778
9.7	35	60	1.3	1.5	28	96	120	70	0.02	0.7	181	196	239	0.4	453	631
								100	0.028	1.4	216	233	285	0.9	534	744
								130	0.036	2.2	244	263	321	1.5	601	837
11.1	40	77	1.5	1.7	30	110	137	70	0.02	0.7	225	243	298	0.4	481	670
								100	0.028	1.4	268	289	354	0.9	569	792
								130	0.036	2.2	303	328	400	1.5	640	892
Nozzle C-20																
13.9	50	36	1.2	1.4	<20	137	171	70	0.02	0.7	160	173	212	0.4	468	651
								100	0.028	1.4	191	206	252	0.9	552	789
								130	0.036	2.2	216	233	284	1.5	621	865
16.7	60	51	1.5	1.7	21	164	205	70	0.02	0.7	219	227	249	0.4	506	705
								100	0.028	1.4	252	261	295	0.9	599	835
								130	0.036	2.2	280	293	335	1.5	676	941
19.4	70	69	1.7	2.0	25	192	240	70	0.02	0.7	230	249	305	0.4	541	753
								100	0.028	1.4	276	298	364	0.9	642	894
								130	0.036	2.2	313	338	413	1.5	725	1009
Nozzle D-20																
22.2	80	47	1.5	1.7	27	219	274	70	0.02	0.7	186	201	245	0.4	501	698
								100	0.028	1.4	222	239	293	0.9	593	827
								130	0.036	2.2	251	271	332	1.5	669	932
25.0	90	59	1.7	2.0	31	246	308	70	0.02	0.7	211	229	278	0.4	528	735
								100	0.028	1.4	252	272	332	0.9	628	872
								130	0.036	2.2	285	308	376	1.5	707	984
30.6	110	88	2.1	2.5	37	301	376	70	0.02	0.7	261	282	345	0.4	576	802
								100	0.028	1.4	314	338	414	0.9	685	954
								130	0.036	2.2	356	385	470	1.5	775	1080
36.1	130	122	2.6	3.0	43	356	445	70	0.02	0.7	314	339	415	0.4	618	861
								100	0.028	1.4	378	409	499	0.9	738	1027
								130	0.036	2.2	431	465	569	1.5	836	1164

ABM 1200x600mm Unit Selection Data

1050mm Heat Exchanger - 4 way blow

AIRSIDE DATA								WATERSIDE DATA								
Supply Air Quantity Primary		Static Pressure Loss	Cooling Throw	Heating Throw	Sound Level Lw A (Sound power - 8dB)	Air Cooling capacity Room to Air △T		Water Quantity		Cooling at Various Room to mean Water △T				Heating at Various Room to mean Water △T		
						△T=8	△T=10			Pressure Loss	△T=8,5	△T=9,5	△T=11	Pressure Loss	△T=20	△T=30
l/s	m3/h	Pa	m		dB(A)	Watts		l/h	l/s	kPa	Watts			kPa	Watts	
Nozzle B																
16.7	60	54	1.7/0.3	2.0/0.4	21	164	205	50	0.014	1.0	251	270	330	0.7	726	1011
								100	0.028	2.4	283	305	372	1.5	815	1135
								150	0.042	4.0	292	315	384	2.1	837	1167
19.4	70	74	1.9/0.4	2.2/0.5	22	192	240	50	0.014	1.0	312	337	411	0.7	779	1085
								100	0.028	2.4	332	359	439	1.5	822	1146
								150	0.042	4.0	322	347	424	2.1	793	1105
22.2	80	94	2.0/0.6	2.4/0.7	24	219	274	50	0.014	1.0	320	345	423	0.7	683	951
								100	0.028	2.4	351	379	464	1.5	745	1038
								150	0.042	4.0	379	410	500	2.1	800	1115
Nozzle C																
27.8	100	66	1.5/0.7	1.8/0.8	26	274	342	50	0.014	1.0	337	363	445	0.7	983	1367
								100	0.028	2.4	400	433	529	1.5	1159	1657
								150	0.042	4.0	388	419	511	2.1	1118	1557
33.3	120	96	2.4/0.9	2.8/1.1	30	328	410	50	0.014	1.0	403	418	458	0.7	931	1297
								100	0.028	2.4	463	480	543	1.5	1102	1536
								150	0.042	4.0	482	504	576	2.1	1163	1619
38.9	140	129	3.4/1.0	4.0/1.2	34	383	479	50	0.014	1.0	424	458	561	0.7	995	1386
								100	0.028	2.4	508	548	670	1.5	1181	1645
								150	0.042	4.0	544	588	719	2.1	1262	1756
Nozzle D																
41.7	150	72	2.3/1.2	2.7/1.4	37	410	513	50	0.014	1.0	363	392	478	0.7	977	1361
								100	0.028	2.4	432	466	571	1.5	1156	1613
								150	0.042	4.0	432	466	571	2.1	1151	1603
47.2	170	93	2.5/1.3	2.9/1.5	40	465	581	50	0.014	1.0	388	421	512	0.7	972	1352
								100	0.028	2.4	464	500	611	1.5	1156	1604
								150	0.042	4.0	525	567	692	2.1	1301	1811
52.8	190	115	3.0/1.5	3.5/1.8	43	519	649	50	0.014	1.0	396	429	524	0.7	876	1219
								100	0.028	2.4	477	514	629	1.5	1041	1450
								150	0.042	4.0	549	593	724	2.1	1194	1663
58.3	210	144	3.4/1.8	4.0/2.1	46	574	718	50	0.014	1.0	409	441	540	0.7	803	1119
								100	0.028	2.4	507	548	669	1.5	989	1376
								150	0.042	4.0	603	651	797	2.1	1170	1630

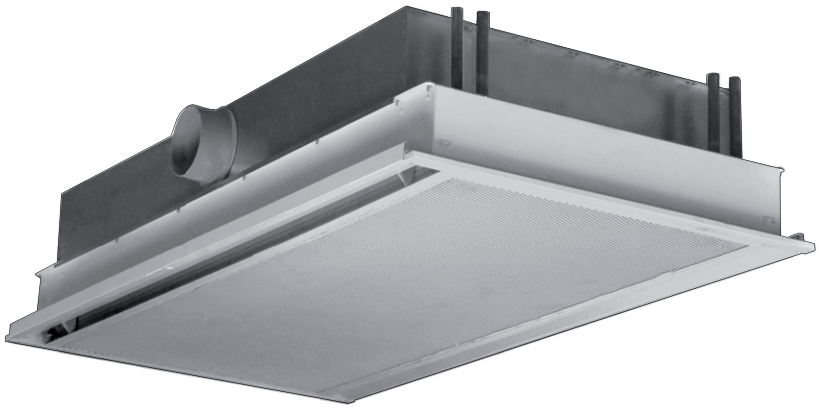
ABM 600 S Active Chilled Beam

Introduction

The ABM 600 S is a 1200 mm long 2 way Active Chilled Beam that is an addition to the well known ABM 600 range. It has been specifically designed for use as a tile replacement module in the conventional 2 way mode of operation. It comprises a single coil which utilises the maximum available space to provide high cooling performance throughout the operating range.

Dimensions

595 mm x 1195 mm actual



Application

Cooling and heating of spaces. Easy installation in many standard ceiling systems.

Finishes

Front Plate: PPM 9010 as standard, other colours available on request.

Plenum Box: Zintec

Heat Exchanger: Copper / Aluminium.

Features

- High heating and cooling capacity.
- Low weight
- Mixing supplied air with room air (induction).
- Heat exchanger easily accessible through an optional opening front plate.

Options

- Hinged Front Plate for Additional Access
- Thermally Lined Plenum Box
- Low Profile Plenum Chamber
- Choice of Duct Connection Sizes
- Luminaires, Sprinkler Apertures and P.A integration
- Wide range of Finishes
- Many Facia Styles (linear or perforated)
- Left or Right Hand Water Connections
- Vertical or Horizontal Water Connections
- Side or End Entry Plenum Chambers

Order Example

ABM 600 S-1195-B-L/PPM9010

Type
Length of Unit
Nozzle Type
Water Connection Left or Right Hand Side
Finish

ABM 600 S Unit Selection Data

980mm Heat Exchanger - 2 way blow

AIRSIDE DATA								WATERSIDE DATA								
Supply Air Quantity Primary		Static Pressure Loss	Cooling Throw	Heating Throw	Sound Level Lw A (Sound power - 8dB)	Air Cooling capacity Room to Air ΔT		Water Quantity		Cooling at Various Room to mean Water ΔT				Heating at Various Room to mean Water ΔT		
						ΔT=8	ΔT=10			Pressure Loss	ΔT=8,5	ΔT=9,5	ΔT=11	Pressure Loss	ΔT=20	ΔT=30
l/s	m3/h	Pa	m		dB(A)	Watts		l/h	l/s	kPa	Watts			kPa	Watts	
Nozzle A - 15																
6.9	25	80	0.3	0.3	20	66	83	100	0.028	0.9	394	432	485	2.6	575	861
								150	0.042	3.2	396	437	500	8.6	653	980
								200	0.056	6.5	403	444	505	17.6	714	1069
8.3	30	106	0.6	0.7	20	80	100	100	0.028	0.9	443	489	552	2.6	639	958
								150	0.042	3.2	453	502	580	8.6	728	1091
								200	0.056	6.5	468	519	595	17.6	796	1196
9.7	35	150	0.9	1.1	21	93	116	100	0.028	0.9	490	546	630	2.6	694	1043
								150	0.042	3.2	511	570	657	8.6	793	1188
								200	0.056	6.5	533	594	685	17.6	1068	1305
Nozzle B - 15																
9.7	35	47	0.9	1.1	20	107	133	100	0.028	0.9	398	464	548	2.6	657	985
								150	0.042	3.2	413	482	570	8.6	748	1121
								200	0.056	6.5	432	498	582	17.6	820	1229
12.5	45	77	1.1	1.3	21	133	167	100	0.028	0.9	448	508	600	2.6	732	1098
								150	0.042	3.2	463	521	608	8.6	835	1253
								200	0.056	6.5	479	535	619	17.6	919	1376
15.3	55	116	1.4	1.7	24	160	200	100	0.028	0.9	553	616	711	2.6	803	1203
								150	0.042	3.2	564	650	753	8.6	919	1377
								200	0.056	6.5	592	682	784	17.6	1010	1515
Nozzle C - 15																
15.3	55	45	1.1	1.3	22	160	200	100	0.028	0.9	478	563	702	2.6	754	1132
								150	0.042	3.2	493	580	722	8.6	861	1293
								200	0.056	6.5	505	596	748	17.6	947	1421
18.1	65	66	1.3	1.6	24	186	233	100	0.028	0.9	525	619	769	2.6	804	1208
								150	0.042	3.2	551	660	812	8.6	922	1383
								200	0.056	6.5	580	711	868	17.6	1014	1521
20.8	75	89	1.6	1.8	28	213	266	100	0.028	0.9	623	702	821	2.6	854	1280
								150	0.042	3.2	665	754	856	8.6	979	1467
								200	0.056	6.5	696	785	921	17.6	1078	1617
23.6	85	112	1.8	2.1	30	240	300	100	0.028	0.9	736	821	916	2.6	899	1348
								150	0.042	3.2	784	866	955	8.6	1032	1547
								200	0.056	6.5	816	915	1014	17.6	1139	1706