

CHILLED WATER FAN COIL UNITS

CONCEALED DUCT TYPE



IZCM - SERIES

CEILING CONCEALED TYPE



**SIZES AVAILABLE : 2,600 - 13,920 (COOLING)
3,240 - 16,350 (HEATING)**

This is the most basic fan coil unit because it has no casing except the basic frame, a finned coil, a motor and a blower. So it is widely used in hotels, mansions, villas and luxury houses since it is hidden in the ceiling and cannot be seen and yet quite efficient in air conditioning.

The interior of the frame and the drain pan are adequately insulated against moisture and condensate water. The coil is made of aluminum fins mechanically bonded onto the copper tubes and leak-tested at the factory. The pipe connectors are come complete with the male plumbing connectors.

When designing the ceiling-concealed units our engineers have given importance to the low noise operation. Therefore, our ceiling – concealed units are quite appreciated for low noise operation.

The unit can be with or without the control. Customer may order this unit with our wired control, which can be used with either chilled or hot water.

Technical Specifications

Model	Indoor Unit	IZCM10LPVC/H-CW	IZCM13LPVC/H-CW	IZCM16LPVC/H-CW	IZCM18LPVC/H-CW	IZCM24LPVC/H-CW	IZCM32LPVC/H-CW	IZCM36LPVC/H-CW	IZCM48LPVC/H-CW
Chilled water Cooling	Capacity (Watts)	2,680	3,480	4,530	5,220	6,970	8,710	10,450	13,920
	Water flow rate (l/min)	7.83	10	13	15	20	25	30	40
	Pressure drop (Kpa)	25.90	15.65	17.12	21.26	19.25	46.10	30.98	53.19
Hot water Heating	Capacity (Watts)	3,240	4,540	5,950	6,690	8,770	11,040	12,990	16,350
	Water flow rate (l/min)	7.83	10	13	15	20	25	30	40
	Pressure drop (Kpa)	19.98	13.27	14.50	18.03	16.32	39.17	26.31	45.09
Inlet + Outlet Pipe Connection	Type	Male Water Pipe Thread							
	Diameter Nominal (Inch)	1/2	1/2	1/2	1/2	3/4	3/4	1	1
Drain Connection	Outside Diameter (mm)	26.6	26.6	26.6	26.6	26.6	26.6	26.6	26.6
Evaporator Coil	Face area (m ²)	1.46	0.146	0.146	0.146	0.217	0.328	0.328	0.328
	Row	2	3	3	4	3	2	3	4
	Fin Type/ Fin pitch	V-Waffle/1.58	Louver/ 1.58	Louver/ 1.58	Louver/ 1.81	Louver/ 1.58	Louver/ 1.81	Louver/ 1.81	Louver/ 2.11
	Tube (mm)	ø9.5 Smooth	ø9.5 Smooth	ø9.5 Smooth	ø9.5 Smooth	ø9.5 Smooth	ø9.5 Smooth	ø9.5 Smooth	ø9.5 Smooth
Fan	Type	Double Inlet Centrifugal fan							
	Size Dia. X Length (mm)	127 x 216	127 x 216	142 x 199	142 x 199	142 x 229	142 x 199	142 x 199	142 x 299
	No.	2	2	2	2	2	4	4	4
Fan Motor	Type	Permanent Split Capacitor							
	Power supply (V/Ph/Hz)	220-240/1/50							
	Power Input (W)	49	61	93	93	127	193	193	195
	Running Current (A)	0.22	0.29	0.42	0.42	0.62	0.88	0.88	0.88
	RPM H/M/L	1120/1040/900	1190/1120/1040	1190/1110/1040	1180/1100/1030	1290/1240/1170	1180/1100/1030	1180/1100/1030	1200/1140/1050
Nominal Air Flow Rate	M ³ /H	610	675	880	870	1105	1920	1905	1870
Dimension	H x W x D (mm)	225 x 990 x 451	225 x 990 x 451	225 x 990 x 466	225 x 990 x 466	225 x 1340 x 466	225 x 1835 x 466	225 x 1835 x 466	225 x 1835 x 466
Net weight	Kg	16	17	18	19	24	32	34	36

NOTE: * Cooling capacity is based on 27 °CDB, 19 °CWB indoor temp and 7°C entering water temp at high speed.

** Heating capacity is based on 20°CDB indoor temp and 50°C entering water temp at high speed.

PERFORMANCE DATA



COOLING CAPACITY KW

UNIT MODEL	L / min	PRESS DROP K Pa	ENTERING AIR TEMPERATURE (°C)														
			17 WB			18 WB			19 WB			21 WB			22 WB		
			TOTAL HEAT	SENSIBLE HEAT		TOTAL HEAT	SENSIBLE HEAT		TOTAL HEAT	SENSIBLE HEAT		TOTAL HEAT	SENSIBLE HEAT		TOTAL HEAT	SENSIBLE HEAT	
	23 DB	24 DB		24 DB	25 DB		26 DB	27 DB		28 DB	29 DB		29 DB	30 DB			
IZCM13BPVH-CW	8	10.82	2.77	2.27	2.48	3.09	2.35	2.56	3.42	2.63	2.85	4.19	2.81	3.02	4.61	2.90	3.11
	10	15.65	2.98	2.34	2.55	3.23	2.40	2.61	3.68	2.74	2.95	4.50	2.92	3.13	4.96	3.02	3.23
	12	21.63	3.16	2.43	2.64	3.52	2.52	2.73	3.90	2.81	3.02	4.77	3.02	3.23	5.25	3.11	3.32
	14	28.75	3.29	2.48	2.69	3.66	2.57	2.78	4.06	2.88	3.09	4.97	3.10	3.31	5.47	3.20	3.41
IZCM16BPVH-CW	11	12.70	3.67	2.94	3.21	4.09	3.05	3.31	4.54	3.42	3.69	5.55	3.65	3.92	6.11	3.76	4.03
	13	17.12	3.88	3.03	3.30	4.32	3.13	3.40	4.79	3.52	3.79	5.86	3.76	4.03	6.45	3.88	4.15
	15	22.16	4.08	3.11	3.38	4.54	3.22	3.49	5.04	3.61	3.88	6.16	3.87	4.14	6.78	4.00	4.27
	17	27.33	4.21	3.16	3.43	4.69	3.28	3.55	5.20	3.68	3.95	6.36	3.95	4.21	7.00	4.08	4.35
IZCM18BPVH-CW	13	16.12	4.29	3.21	3.48	4.78	3.33	3.60	5.30	3.73	4.00	6.48	4.01	4.28	7.14	4.15	4.42
	15	21.26	4.47	3.28	3.55	4.98	3.41	3.68	5.52	3.82	4.09	6.76	4.11	4.38	7.44	4.27	4.54
	17	26.77	4.62	3.34	3.61	5.14	3.48	3.75	5.70	3.89	4.16	6.97	4.20	4.47	7.68	4.36	4.63
	19	31.69	4.81	3.42	3.69	5.36	3.57	3.84	5.94	3.99	4.26	7.27	4.31	4.58	8.00	4.48	4.75
IZCM24BPVH-CW	18	15.65	5.80	4.24	4.59	6.46	4.25	4.60	7.15	4.92	5.27	8.75	5.29	5.64	9.64	5.49	5.84
	20	19.25	5.97	4.30	4.65	6.65	4.47	4.82	7.37	5.00	5.35	9.01	5.38	5.73	9.92	5.58	5.93
	22	22.70	6.10	4.36	4.71	6.80	4.54	4.89	7.53	5.07	5.42	9.21	5.45	5.81	10.15	5.67	6.02
	24	24.91	6.23	4.41	4.76	6.94	4.60	4.94	7.69	5.13	5.48	9.41	5.53	5.88	10.36	5.74	6.09
IZCM32BPVH-CW	22	36.89	7.25	5.29	5.74	8.08	5.50	5.95	8.95	6.14	6.59	10.95	6.58	7.03	12.06	6.81	7.25
	25	46.10	7.46	5.36	5.80	8.31	5.57	6.00	9.21	6.23	6.66	11.26	6.67	7.12	12.41	6.91	7.35
	28	57.24	7.65	5.42	5.86	8.52	5.63	6.08	9.44	6.30	6.74	11.55	6.77	7.20	12.72	7.00	7.45
	31	66.96	7.84	5.50	5.95	8.74	5.72	6.17	9.68	6.39	6.83	11.85	6.88	7.32	13.05	7.13	7.58
IZCM36BPVH-CW	26	24.45	8.59	6.71	7.31	9.57	6.95	7.56	10.60	7.80	8.39	12.97	8.34	8.93	14.28	8.61	9.21
	30	30.98	8.95	6.88	7.48	9.97	7.13	7.73	11.05	7.99	8.59	13.52	8.56	9.16	14.89	8.85	9.45
	34	39.42	9.22	6.99	7.59	10.27	7.26	7.86	11.38	8.12	8.72	13.92	8.71	9.31	15.33	9.01	9.61
	38	48.89	9.42	7.10	7.70	10.49	7.36	7.98	11.63	8.25	8.86	14.22	8.85	9.46	15.67	9.16	9.77
IZCM48BPVH-CW	36	43.92	11.72	7.49	8.00	13.05	7.85	8.36	14.46	8.74	9.25	17.69	9.55	10.06	19.49	9.98	10.49
	40	53.19	11.92	7.56	8.07	13.28	7.94	8.45	14.72	8.83	9.34	18.00	9.66	10.17	19.83	10.11	10.62
	44	62.07	12.14	7.66	8.17	13.52	8.04	8.56	14.99	8.95	9.46	18.33	9.81	10.31	20.19	10.20	10.71
	48	72.06	12.35	7.76	8.28	13.76	8.16	8.66	15.25	9.06	9.57	18.65	9.95	10.46	20.54	10.41	10.92

7°C ENTERING WATER TEMP AT HIGH FAN SPEED)

UNIT MODEL	L / min	PRESS DROP KPa	ENTERING AIR TEMPERATURE (°C)														
			17 WB			18 WB			19 WB			21 WB			22 WB		
			TOTAL HEAT	SENSIBLE HEAT		TOTAL HEAT	SENSIBLE HEAT		TOTAL HEAT	SENSIBLE HEAT		TOTAL HEAT	SENSIBLE HEAT		TOTAL HEAT	SENSIBLE HEAT	
	23 DB	24 DB		24 DB	25 DB		26 DB	27 DB		28 DB	29 DB		29 DB	30 DB			
IZCM13BPVH-CW	8	10.82	2.56	2.19	2.40	2.88	2.27	2.48	3.24	2.57	2.78	3.98	2.74	2.95	4.40	2.82	3.03
	10	15.65	2.75	2.26	2.47	3.10	2.35	2.57	3.48	2.66	2.87	4.29	2.84	3.06	4.73	2.94	3.15
	12	21.63	2.91	2.33	2.54	3.28	2.42	2.63	3.69	2.74	2.95	4.54	2.94	3.15	5.01	3.04	3.25
	14	28.75	3.03	2.37	2.59	3.42	2.48	2.69	3.84	2.80	3.01	4.73	3.01	3.22	5.22	3.11	3.32
IZCM16BPVH-CW	11	12.70	3.39	2.83	3.10	3.82	2.94	3.21	4.29	3.33	3.60	5.28	3.55	3.82	5.83	3.67	3.94
	13	17.12	3.58	2.91	3.18	4.03	3.02	3.29	4.53	3.42	3.69	5.57	3.65	3.92	6.15	3.78	4.05
	15	22.16	3.76	2.98	3.25	4.24	3.11	3.37	4.76	3.51	3.78	5.86	3.76	4.03	6.47	3.89	4.16
	17	27.33	3.88	3.03	3.30	4.38	3.15	3.42	4.92	3.57	3.84	6.05	3.83	4.10	6.68	3.96	4.23
IZCM18BPVH-CW	13	16.12	3.96	3.07	3.34	4.46	3.21	3.48	5.01	3.62	3.89	6.16	3.89	4.16	6.80	4.03	4.30
	15	21.26	4.13	3.14	3.41	4.65	3.28	3.55	5.22	3.70	3.97	6.43	3.99	4.26	7.09	4.14	4.41
	17	26.77	4.26	3.20	3.47	4.80	3.34	3.61	5.39	3.77	4.04	6.63	4.07	4.34	7.32	4.22	4.49
	19	31.69	4.44	3.27	3.54	5.00	3.42	3.69	5.62	3.86	4.13	6.91	4.17	4.44	7.63	4.34	4.61
IZCM24BPVH-CW	18	15.65	5.35	4.06	4.41	6.03	4.23	4.58	6.77	4.78	5.13	8.33	5.14	5.49	9.19	5.33	5.67
	20	19.25	5.50	4.11	4.46	6.21	4.30	4.65	6.97	4.84	5.19	8.57	5.22	5.57	9.46	5.41	5.76
	22	22.70	5.63	4.17	4.52	6.35	4.35	4.70	7.12	4.91	5.26	8.77	5.29	5.64	9.68	5.49	5.84
	24	24.91	5.74	4.20	4.55	6.48	4.41	4.76	7.27	4.96	5.31	8.95	5.36	5.72	9.88	5.56	5.91
IZCM32BPVH-CW	22	36.89	6.69	5.08	5.52	7.54	5.29	5.74	8.47	5.97	6.41	10.42	6.40	6.85	11.50	6.61	7.06
	25	46.10	6.88	5.13	5.58	7.76	5.36	5.81	8.71	6.04	6.48	10.72	6.49	6.93	11.83	6.71	7.16
	28	57.24	7.06	5.19	5.64	7.96	5.43	5.86	8.93	6.10	6.54	10.99	6.57	7.00	12.13	6.80	7.24
	31	66.96	7.24	5.27	5.71	8.16	5.50	5.95	9.16	6.20	6.64	11.27	6.67	7.12	12.44	6.92	7.35
IZCM36BPVH-CW	26	24.45	7.92	6.44	7.03	8.93	6.70	7.30	10.03	7.58	8.19	12.34	8.11	8.71	13.62	8.38	8.98
	30	30.98	8.26	6.60	7.20	9.31	6.87	7.48	10.45	7.77	8.37	12.86	8.32	8.92	14.20	8.61	9.21
	34	39.42	8.50	6.70	7.30	9.59	6.99	7.59	10.76	7.88	8.48	13.24	8.45	9.05	14.62	8.75	9.35
	38	48.89	8.69	6.81	7.41	9.80	7.10	7.70	11.00	8.02	8.62	13.53	8.60	9.20	14.94	8.90	9.50
IZCM48BPVH-CW	36	43.92	10.81	7.11	7.62	12.19	7.50	8.02	13.68	8.42	8.93	16.83	9.20	9.72	18.58	9.62	10.13
	40	53.19	11.00	7.17	7.69	12.40	7.58	8.09	13.92	8.51	9.02	17.13	9.32	9.83	18.90	9.73	10.24
	44	62.07	11.20	7.26	7.78	12.63	7.67	8.18	14.18	8.62	9.13	17.44	9.44	9.95	19.25	9.88	10.39
	48	72.06	11.39	7.35	7.86	12.84	7.77	8.28	14.42	8.72	9.24	17.74	9.57	10.08	19.58	10.02	10.52

8°C ENTERING WATER TEMP AT HIGH FAN SPEED)

UNIT MODEL	L / min	PRESS DROP K Pa	ENTERING AIR TEMPERATURE (°C)														
			17 WB			18 WB			19 WB			21 WB			22 WB		
			TOTAL HEAT	SENSIBLE HEAT		TOTAL HEAT	SENSIBLE HEAT		TOTAL HEAT	SENSIBLE HEAT		TOTAL HEAT	SENSIBLE HEAT		TOTAL HEAT	SENSIBLE HEAT	
	23 DB	24 DB		24 DB	25 DB		26 DB	27 DB		28 DB	29 DB		29 DB	30 DB			
IZCM13BPVC-CW	8	10.82	2.31	2.09	2.30	2.64	2.18	2.39	3.00	2.48	2.69	3.77	2.66	2.87	4.20	2.75	2.97
	10	15.65	2.49	2.16	2.37	2.84	2.25	2.46	3.22	2.56	2.77	4.06	2.76	2.98	4.52	2.86	3.08
	12	21.63	2.63	2.21	2.43	3.01	2.32	2.53	3.41	2.63	2.85	4.30	2.85	3.06	4.78	2.96	3.17
	14	28.75	2.74	2.26	2.47	3.13	2.36	2.58	3.55	2.69	2.90	4.48	2.91	3.13	4.98	3.03	3.24
IZCM16BPVC-CW	11	12.70	3.07	2.71	2.98	3.50	2.82	3.09	3.97	3.21	3.48	5.00	3.45	3.72	5.56	3.57	3.84
	13	17.12	3.24	2.77	3.04	3.69	2.89	3.16	4.19	3.29	3.56	5.28	3.55	3.82	5.87	3.68	3.95
	15	22.16	3.40	2.84	3.10	3.88	2.97	3.24	4.41	3.37	3.64	5.55	3.65	3.92	6.17	3.79	4.05
	17	27.33	3.51	2.88	3.15	4.01	3.02	3.29	4.55	3.43	3.70	5.73	3.71	3.98	6.37	3.86	4.13
IZCM18BPVC-CW	13	16.12	3.58	2.92	3.19	4.08	3.06	3.33	4.64	3.48	3.75	5.84	3.77	4.04	6.49	3.92	4.19
	15	21.26	3.73	2.98	3.25	4.26	3.13	3.40	4.83	3.55	3.82	6.09	3.86	4.13	6.77	4.02	4.29
	17	26.77	3.85	3.03	3.30	4.39	3.18	3.45	4.99	3.61	3.88	6.28	3.93	4.21	6.99	4.10	4.37
	19	31.69	4.01	3.09	3.36	4.58	3.25	3.52	5.20	3.69	3.96	6.55	4.04	4.31	7.28	4.21	4.48
IZCM24BPVC-CW	18	15.65	4.83	3.84	4.20	5.52	4.04	4.39	6.26	4.58	4.93	7.89	4.98	5.33	8.77	5.17	5.52
	20	19.25	4.98	3.90	4.25	5.68	4.09	4.44	6.45	4.64	4.99	8.12	5.05	5.40	9.03	5.25	5.60
	22	22.70	5.09	3.95	4.30	5.81	4.15	4.50	6.59	4.70	5.05	8.30	5.12	5.46	9.24	5.33	5.68
	24	24.91	5.20	3.99	4.34	5.93	4.19	4.54	6.73	4.75	5.10	8.47	5.18	5.53	9.43	5.40	5.75
IZCM32BPVC-CW	22	36.89	6.05	4.83	5.28	6.90	5.05	5.49	7.83	5.73	6.17	9.86	6.20	6.65	10.97	6.43	6.88
	25	46.10	6.22	4.87	5.32	7.10	5.12	5.56	8.06	5.80	6.24	10.15	6.29	6.73	11.29	6.52	6.97
	28	57.24	6.38	4.93	5.36	7.28	5.16	5.61	8.27	5.86	6.30	10.41	6.36	6.81	11.58	6.61	7.05
	31	66.96	6.54	4.99	5.44	7.47	5.24	5.69	8.48	5.94	6.39	10.67	6.46	6.90	11.87	6.72	7.17
IZCM36BPVC-CW	26	24.45	7.16	6.14	6.74	8.17	6.42	7.01	9.28	7.30	7.90	11.69	7.88	8.48	13.00	8.16	8.75
	30	30.98	7.47	6.29	6.90	8.52	6.58	7.18	9.67	7.48	8.08	12.18	8.08	8.68	13.55	8.38	8.98
	34	39.42	7.69	6.38	6.98	8.78	6.68	7.28	9.96	7.58	8.18	12.54	8.21	8.81	13.96	8.52	9.12
	38	48.89	7.86	6.47	7.09	8.97	6.77	7.38	10.18	7.70	8.31	12.82	8.33	8.94	14.26	8.65	9.26
IZCM48BPVC-CW	36	43.92	9.77	6.68	7.19	11.15	7.05	7.56	12.66	8.01	8.52	15.94	8.86	9.37	17.74	9.30	9.80
	40	53.19	9.95	6.74	7.26	11.35	7.15	7.65	12.88	8.08	8.59	16.22	8.98	9.49	18.05	9.41	9.91
	44	62.07	10.13	6.82	7.33	11.56	7.24	7.75	13.12	8.18	8.70	16.52	9.07	9.59	18.38	9.53	10.04
	48	72.06	10.30	6.90	7.40	11.75	7.32	7.83	13.35	8.28	8.80	16.80	9.20	9.71	18.69	9.66	10.17

PERFORMANCE DATA

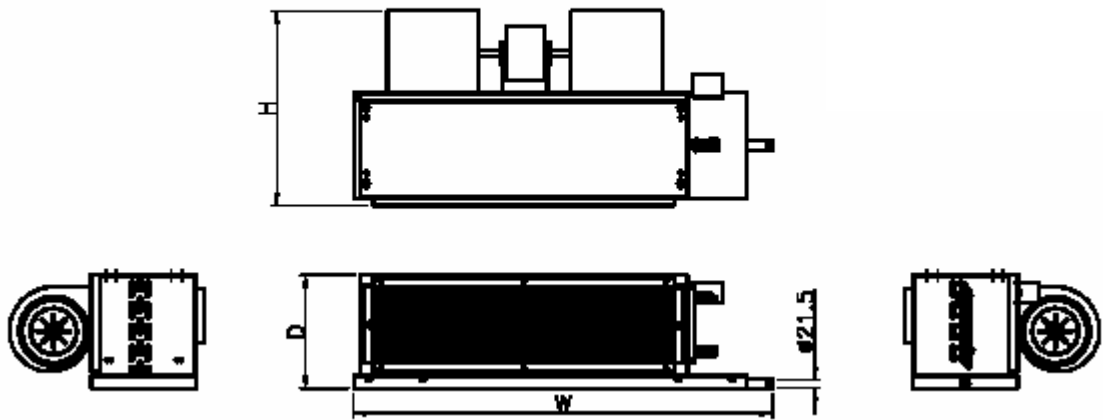
HEATING CAPACITY KW

20°C ENTERING WATER TEMP (AT HIGH FAN SPEED)

UNIT MODEL	L / min	PRESS DROP K Pa	ENTERING WATER TEMPERATURE (°C)								
			40	45	50	55	60	65	70	75	80
IZCM13BPVH-CW	8	9.18	2.90	3.67	4.40	5.12	5.89	6.62	7.35	8.07	8.80
	10	13.27	2.99	3.79	4.54	5.29	6.08	6.83	7.58	8.33	9.08
	12	18.33	3.05	3.86	4.62	5.38	6.20	6.96	7.72	8.48	9.25
	14	24.37	3.10	3.93	4.71	5.48	6.31	7.08	7.86	8.64	9.41
IZCM16BPVH-CW	11	10.76	3.84	4.86	5.82	6.78	7.80	8.76	9.72	10.68	11.65
	13	14.50	3.93	4.97	5.95	6.94	7.98	8.96	9.94	10.93	11.91
	15	18.79	3.99	5.05	6.04	7.04	8.10	9.10	10.09	11.09	12.09
	17	23.16	4.06	5.13	6.15	7.16	8.24	9.25	10.27	11.28	12.29
IZCM18BPVH-CW	13	13.66	4.34	5.49	6.58	7.66	8.82	9.90	10.99	12.07	13.16
	15	18.03	4.41	5.59	6.69	7.79	8.96	10.07	11.17	12.27	13.38
	17	22.72	4.49	5.68	6.80	7.92	9.11	10.23	11.36	12.48	13.60
	19	26.91	4.55	5.75	6.89	8.03	9.23	10.37	11.51	12.64	13.78
IZCM24BPVH-CW	18	13.27	5.72	7.24	8.67	10.10	11.62	13.05	14.47	15.90	17.33
	20	16.32	5.78	7.32	8.77	10.21	11.75	13.20	14.64	16.09	17.54
	22	19.25	5.84	7.39	8.85	10.31	11.86	13.32	14.78	16.23	17.69
	24	22.39	5.89	7.46	8.93	10.40	11.97	13.44	14.91	16.39	17.86
IZCM32BPVH-CW	22	31.27	7.18	9.09	10.89	12.68	14.59	16.39	18.19	19.98	21.78
	25	39.17	7.28	9.22	11.04	12.86	14.79	16.61	18.44	20.26	22.08
	28	48.53	7.35	9.30	11.13	12.97	14.92	16.76	18.59	20.43	22.27
	31	56.81	7.40	9.37	11.22	13.07	15.04	16.89	18.74	20.59	22.44
IZCM36BPVH-CW	26	20.72	8.45	10.70	12.81	14.93	17.17	19.29	21.40	23.51	25.63
	30	26.31	8.57	10.85	12.99	15.14	17.42	19.56	21.70	23.85	25.99
	34	33.40	8.67	10.97	13.14	15.30	17.61	19.77	21.94	24.11	26.27
	38	41.44	8.74	11.06	13.24	15.42	17.75	19.93	22.11	24.30	26.48
IZCM48BPVH-CW	36	37.22	10.73	13.58	16.26	18.94	21.79	24.47	27.15	29.83	32.52
	40	45.09	10.79	13.66	16.35	19.05	21.92	24.62	27.31	30.01	32.71
	44	52.62	10.85	13.74	16.45	19.16	22.05	24.76	27.47	30.19	32.90
	48	61.08	10.91	13.81	16.54	19.27	22.17	24.89	27.62	30.35	33.08

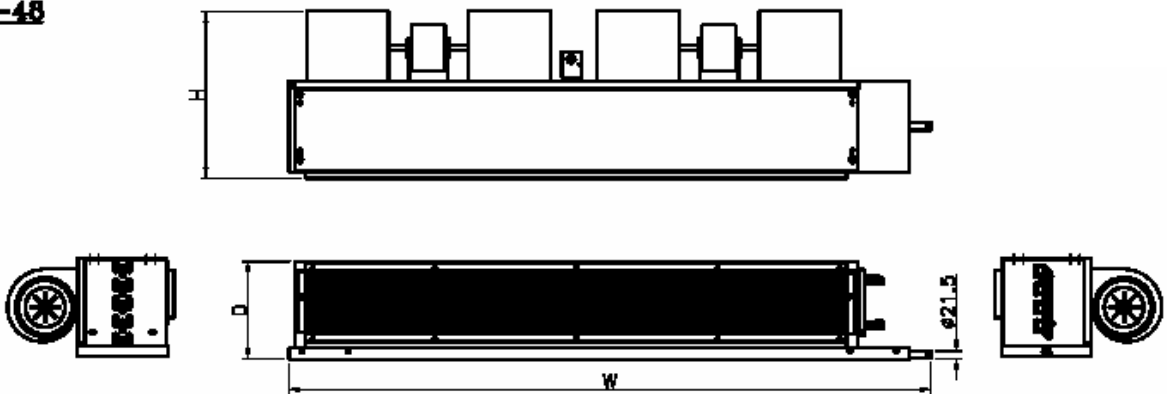
DIMENSION

IZCM WATER COIL



MODEL	DIMENSIONS (mm)		
	H	W	D
IZCM13BPVC/H-CW	225	990	451
IZCM16-18BPVC/H-CW	225	990	466
IZCM24BPVC/H-CW	225	1,340	466

IZCM 36-48



MODEL	DIMENSIONS (mm)		
	A	B	C
IZCM32-48BPVC/H-CW	225	1,835	466

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