MARSTAIR
REFRIGERATION AND SPECIALIST AIR CONDITIONING

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DXD (H) Concealed Ducted Evaporator

THE DXD(H) SERIES IS A CONCEALED, DUCTED EVAPORATOR DESIGNED FOR HORIZONTAL CEILING VOID APPLICATIONS AND SUPPLIED COMPLETE WITH A DISCHARGE PLENUM AND SPIGOTS. IDEAL FOR PROCESS AND MATERIAL COOLING APPLICATIONS AT LOW TEMPERATURES AND IRREGULAR SHAPED ROOMS WHERE LOW SOUND LEVELS ARE ESSENTIAL.

Designed and manufactured in the UK using high quality components, the DXD(H) is available with cooling duties from 3.5 to 10.4kW.

The DXD(H) exhibits all of the features expected from a modern, high quality evaporator whilst remaining highly competitive and exceptionally flexible.

Specification

- Low sound levels
- De-Ice thermostat
- Easy filter access
- Electronic remote controller (Hard Wired)
- 250mm Spigots
- Cooling down to 10°C at -2.5°C evaporating temperature

Options

- Condensate Pump
- Electric Heating
- LPHW
- Return Air Plemun
- 200mm Spigots
- Fresh Air Inlet
- Return Air Sensor
- Programmable Timer Cable (For wired control)

For further information please contact our Technical Department on 01484 405666

Technical Information - R407C

Performances with thermal expansion valve set at 5°C superheat

	MODEL	AIR ON °C	HUMIDITY % RH	EVAPORATING TEMPERATURE °C											
				-2.5		0		2.5		5		7.5		10	
				TOTAL	SENS	TOTAL	SENS	TOTAL	SENS	TOTAL	SENS	TOTAL	SENS	TOTAL	SENS
LOW FAN SPEED	50	10	70	2.41	1.69	1.83	1.36	1.26	1.03	0.73	0.73	0.37	0.37	-	-
		12.7	70	3.10	2.02	2.48	1.70	1.94	1.38	1.32	1.06	0.75	0.75	0.39	0.39
		15	70	3.73	2.30	3.16	1.98	2.58	1.66	1.96	1.34	1.29	1.03	0.73	0.73
		18	60	4.19	2.70	3.62	2.38	3.05	2.06	2.42	1.75	1.76	1.44	1.15	1.15
		21	50	4.57	3.10	4.01	2.78	3.43	2.47	2.81	2.16	2.15	1.86	1.57	1.57
	60	10	70	2.91	2.02	2.22	1.62	1.51	1.22	0.86	0.86	0.43	0.43	-	-
		12.7	70	3.74	2.42	3.06	2.02	2.35	1.64	1.60	1.25	0.88	0.88	0.46	0.46
		15	70	4.50	2.76	3.82	2.37	3.12	1.98	2.37	1.59	1.56	1.21	0.85	0.85
		18	60	5.06	3.22	4.38	2.84	3.68	2.46	2.94	2.07	2.14	1.69	1.34	1.34
		21	50	5.50	3.69	4.83	3.30	4.14	2.93	3.40	2.55	2.60	2.17	1.82	1.82
	90	10	70	4.80	3.35	3.66	2.69	2.50	2.05	1.43	1.43	0.72	0.72	-	-
		12.7	70	6.18	4.02	5.05	3.36	3.89	2.73	2.64	2.08	1.48	1.48	0.78	0.78
		15	70	7.43	4.58	6.30	3.93	5.14	3.29	3.90	2.66	2.58	2.02	1.42	1.42
		18	60	8.35	5.34	7.23	4.78	6.08	4.09	4.85	3.46	3.52	2.83	2.26	2.26
		21	50	9.10	6.14	7.98	5.50	6.84	4.87	5.61	4.26	4.29	0.43	3.07	3.07
	130	10	70	5.33	3.70	4.06	2.98	2.78	2.26	1.58	1.58	0.79	0.79	-	-
		12.7	70	4.46	4.46	5.60	3.72	4.31	3.02	2.94	2.30	1.63	1.63	0.85	0.85
		15	70	8.25	5.07	6.99	4.34	5.71	3.64	4.34	2.93	2.86	2.22	1.56	1.56
		18	60	9.26	5.92	8.02	5.21	6.74	4.50	5.38	3.82	3.90	3.12	2.48	2.48
		21	50	10.09	6.78	8.85	6.06	7.58	5.38	6.22	4.69	4.76	4.00	3.38	3.38
	150	10	70	6.76	4.69	5.16	3.78	3.52	2.86	2.00	2.00	1.00	1.00	-	-
		12.7	70	8.70	5.65	7.10	4.72	5.47	3.82	3.72	2.91	2.07	2.07	1.08	1.08
		15	70	10.46	6.43	8.87	5.50	7.25	4.62	5.50	3.72	3.63	2.82	1.98	1.98
		18	60	11.75	7.51	10.18	6.61	8.56	5.72	6.82	4.85	4.95	3.96	3.14	3.14
		21	50	-	-	11.23	5.30	9.62	6.83	7.90	5.95	6.04	5.07	4.29	4.29
MEDIUM FAN SPEED	50	10	70	2.51	1.77	1.91	1.42	1.30	1.08	0.77	0.77	0.38	0.38	-	-
		12.7	70	3.23	2.11	2.64	1.78	2.03	1.45	1.38	1.11	0.79	0.79	0.42	0.42
		15	70	3.90	2.41	3.30	2.06	2.70	1.74	2.04	1.41	1.34	1.20	0.76	0.76
		18	60	4.38	2.82	3.78	2.48	3.18	2.17	2.54	1.84	1.84	1.52	1.21	1.21
		21	50	4.77	3.23	4.18	2.91	3.58	2.59	2.94	2.27	2.24	1.94	1.66	1.66
	60	10	70	3.08	2.14	2.35	1.72	1.61	1.30	0.91	0.91	0.46	0.46	-	-
		12.7	70	3.97	2.58	3.24	2.15	2.50	1.74	1.70	1.33	0.94	0.94	0.49	0.49
		15	70	4.77	2.94	4.05	2.51	3.30	2.10	2.51	1.70	1.66	1.29	0.90	0.90
		18	60	5.36	3.42	4.64	3.02	3.90	2.61	3.11	2.21	2.26	1.81	1.43	1.43
		21	50	5.84	3.93	5.12	3.51	4.39	3.12	3.60	2.71	2.75	2.31	1.95	1.95
	90	10	70	5.34	3.74	4.07	3.02	2.78	2.30	1.62	1.62	0.82	0.82	-	-
		12.7	70	6.87	4.49	5.61	3.76	4.32	3.06	2.94	2.35	1.68	1.68	0.87	0.87
		15	70	8.27	5.09	7.01	4.38	5.72	3.69	4.34	2.99	2.86	2.29	1.61	1.61
		18	60	9.30	5.98	8.05	4.47	6.76	4.58	5.38	3.90	3.90	3.19	2.56	2.56
		21	50	10.14	6.86	8.89	6.17	7.61	5.48	6.24	4.80	4.77	4.11	3.49	3.49
	130	10	70	5.88	4.11	4.49	3.30	3.06	2.51	1.76	1.76	0.89	0.89	-	-
		12.7	70	7.57	4.93	6.18	4.14	4.76	3.34	3.24	2.55	1.82	1.82	0.95	0.95
		15	70	9.11	5.61	7.72	4.82	6.30	4.03	4.78	3.27	3.15	2.50	1.75	1.75
		18	60	10.24	6.58	8.86	5.77	5.05	5.02	5.94	4.25	4.30	3.48	2.78	2.78
		21	50	11.15	7.52	9.78	6.74	8.38	6.01	6.87	5.25	5.26	4.49	3.79	3.79
	150	10	70	7.38	5.16	5.62	4.14	3.84	3.14	2.21	2.21	1.11	1.11	-	-
		12.7	70	9.50	6.18	7.75	5.18	5.97	4.19	4.06	3.20	2.29	2.29	1.19	1.19
		15	70	11.42	7.03	9.69	6.04	7.90	5.06	6.00	4.10	3.95	3.13	2.19	2.19
		18	60	-	-	11.11	7.23	9.34	6.29	7.44	5.33	5.40	4.36	3.48	3.48
		21	50	-	-	12.26	8.46	10.50	7.53	8.62	6.57	6.58	5.62	4.74	4.74
HIGH FAN SPEED	50	10	70	2.62	1.84	1.99	1.49	1.36	1.14	0.80	0.80	0.40	0.40	-	-
		12.7	70	3.37	2.21	2.74	1.85	2.11	1.51	1.43	1.16	0.83	0.83	0.43	0.43
		15	70	4.05	2.50	3.43	2.15	2.80	1.82	2.12	1.47	1.40	1.13	0.80	0.80
		18	60	4.55	2.94	3.94	2.60	3.31	2.26	2.55	1.93	1.91	1.59	1.27	1.27
		21	50	4.97	3.38	4.35	3.04	3.73	2.70	3.06	2.38	2.33	2.04	1.74	1.74
	60	10	70	3.26	2.28	2.49	1.82	1.70	1.39	0.98	0.98	0.49	0.49	-	-
		12.7	70	4.20	2.73	3.43	2.28	2.64	1.85	1.80	1.41	1.01	1.01	0.53	0.53
		15	70	5.05	3.10	2.68	2.67	3.50	2.23	2.66	1.80	1.75	1.37	0.97	0.97
		18	60	5.67	3.63	4.91	3.19	4.13	2.78	3.29	2.35	2.39	1.92	1.53	1.53
		21	50	6.18	4.17	5.42	3.74	4.65	3.31	3.81	2.90	2.91	2.46	2.09	2.09
	90	10	70	5.72	4.03	4.36	3.26	2.98	2.50	1.75	1.75	0.88	0.88	-	-
		12.7	70	7.36	4.83	5.68	4.04	4.62	3.30	3.14	2.54	1.82	1.82	0.95	0.95
		15	70	8.86	5.47	7.51	4.72	6.13	3.97	4.65	3.22	3.06	2.47	1.75	1.75
		18	60	9.97	6.43	8.62	5.69	7.25	4.95	5.77	4.22	4.18	3.47	2.78	2.78
		21	50	10.87	7.39	9.53	6.64	8.15	5.92	6.68	5.19	5.10	4.46	3.79	3.79
	130	10	70	6.74	4.74	5.14	3.83	3.50	2.94	2.06	2.06	1.04	1.04	-	-
		12.7	70	8.67	5.70	7.08	4.76	5.45	3.89	3.70	2.99	2.14	2.14	1.12	1.12
		15	70	10.44	6.45	8.85	5.55	7.22	4.67	5.47	3.79	3.60	2.91	2.06	2.06
		18	60	11.74	7.57	10.15	6.67	8.53	5.82	6.79	4.96	4.93	4.09	3.27	3.27
		21	50	12.80	8.70	11.22	7.82	9.60	6.97	7.87	6.10	6.01	5.25	4.46	4.46
	150	10	70	8.28	5.82	6.31	4.70	4.30	3.58	2.53	2.53	1.27	1.27	-	-
		12.7	70	10.66	6.97	8.70	5.84	6.70	4.77	4.55	3.66	2.62	2.62	1.37	1.37
		15	70	-	-	10.87	6.79	8.87	5.74	6.73	4.65	4.43	3.56	2.51	2.51
		18	60	-	-	12.48	8.18	10.49	7.14	0.35	6.07	6.06	5.00	3.99	3.99
		21	50	-	-	-	-	11.80	8.54	9.67	7.47	7.39	6.42	5.45	5.45

Technical Information - R134A

Performances with thermal expansion valve set at 5°C superheat

	MODEL	AIR ON °C	HUMIDITY % RH	EVAPORATING TEMPERATURE °C											
				-2.5		0		2.5		5		7.5		10	
				TOTAL	SENS	TOTAL	SENS	TOTAL	SENS	TOTAL	SENS	TOTAL	SENS	TOTAL	SENS
LOW FAN SPEED	50	10	70	2.42	1.70	1.85	1.37	1.26	1.04	0.73	0.73	0.37	0.37	-	-
		12.7	70	3.12	2.03	2.54	1.70	1.95	1.38	1.33	1.06	0.76	0.76	0.39	0.39
		15	70	3.75	2.31	3.18	1.98	2.59	1.67	1.96	1.35	1.29	1.03	0.73	0.73
		18	60	4.22	2.71	3.65	2.38	3.06	2.07	2.43	1.75	1.76	1.44	1.15	1.15
		21	50	4.60	3.11	4.03	2.79	3.45	2.48	2.82	2.17	2.15	1.86	1.57	1.57
	60	10	70	2.92	2.02	2.23	1.62	1.52	1.23	0.86	0.86	0.43	0.43	-	-
		12.7	70	3.76	2.43	3.07	2.03	2.36	1.65	1.61	1.25	0.88	0.88	0.46	0.46
		15	70	4.52	2.77	3.83	2.38	3.13	1.99	2.38	1.60	1.56	1.21	0.85	0.85
		18	60	5.08	3.24	4.39	2.85	3.70	2.46	2.94	2.07	2.14	1.69	1.34	1.34
		21	50	5.53	3.70	4.85	3.31	4.15	2.94	3.40	2.55	2.60	2.17	1.82	1.82
	90	10	70	4.83	3.37	3.68	2.70	2.51	2.05	1.43	1.43	0.72	0.72	-	-
		12.7	70	6.22	4.04	5.07	3.37	3.90	2.74	2.65	2.08	1.49	1.49	0.78	0.78
		15	70	7.48	4.60	6.34	3.94	5.17	3.30	3.92	2.66	2.58	2.02	1.42	1.42
		18	60	8.40	5.38	7.26	4.73	6.10	4.10	4.86	3.46	3.52	2.83	2.26	2.26
		21	50	9.15	6.16	8.02	5.52	4.46	4.89	5.62	4.27	4.30	3.63	3.07	3.07
	130	10	70	5.36	3.71	4.09	2.98	2.78	2.26	1.58	1.58	0.79	0.79	-	-
		12.7	70	6.90	4.47	5.62	3.75	4.33	3.02	2.94	2.30	1.63	1.63	0.00	0.00
		15	70	8.29	5.10	7.02	4.35	5.74	3.66	4.34	2.94	2.86	2.22	1.56	1.56
		18	60	9.31	5.95	8.06	5.23	6.77	4.52	5.39	3.82	3.91	3.12	2.48	2.48
		21	50	10.14	6.82	8.89	6.09	7.61	5.40	6.24	4.70	4.77	4.00	3.38	3.38
	150	10	70	6.80	4.71	5.18	3.78	3.54	2.87	2.00	2.00	1.00	1.00	-	-
		12.7	70	8.74	5.68	7.14	4.74	5.49	3.83	3.74	2.91	2.07	2.07	1.08	1.08
		15	70	10.52	6.46	8.91	5.53	7.27	4.63	5.52	3.73	3.63	2.82	1.98	1.98
		18	60	11.82	7.55	10.22	6.63	8.58	5.74	6.84	4.86	4.96	3.96	3.14	3.14
		21	50	12.86	8.65	11.28	7.72	9.66	6.85	7.91	5.96	6.05	5.07	4.28	4.28
MEDIUM FAN SPEED	50	10	70	2.53	1.78	1.93	1.43	1.31	1.09	0.77	0.77	0.38	0.38	-	-
		12.7	70	3.26	2.13	2.66	1.78	2.04	1.46	1.38	1.11	0.79	0.79	0.42	0.42
		15	70	3.92	2.42	3.32	2.07	2.70	1.74	2.05	1.42	1.34	1.08	0.76	0.76
		18	60	4.41	2.83	3.81	2.50	3.20	2.18	2.54	1.85	1.84	1.52	1.21	1.21
		21	50	4.81	3.26	4.21	2.92	3.60	2.60	2.94	2.27	2.25	1.95	1.65	1.65
	60	10	70	3.10	2.15	2.36	1.73	1.61	1.31	0.91	0.91	0.46	0.46	-	-
		12.7	70	3.98	2.59	3.26	2.16	2.50	1.75	1.70	1.33	0.94	0.94	0.49	0.49
		15	70	4.80	2.95	4.06	2.52	3.32	2.11	2.51	1.70	1.66	1.29	0.90	0.90
		18	60	5.38	3.44	4.66	3.02	3.92	1.82	3.12	2.22	2.26	1.81	1.43	1.43
		21	50	5.86	3.94	5.14	3.52	4.40	3.13	3.61	2.72	2.76	2.31	1.95	1.95
	90	10	70	5.38	3.77	4.10	3.04	2.79	2.30	1.62	1.62	0.82	0.82	-	-
		12.7	70	6.92	4.51	5.64	3.78	4.34	3.06	2.94	2.36	1.68	1.68	0.87	0.87
		15	70	8.33	5.13	7.06	4.40	5.75	3.70	4.35	2.99	2.86	2.29	1.61	1.61
		18	60	9.36	6.01	8.09	5.30	6.79	4.59	5.40	3.91	3.91	3.19	2.55	2.55
		21	50	10.20	6.90	8.94	6.19	7.64	5.50	6.26	4.81	4.77	4.12	3.49	3.49
	130	10	70	5.92	4.14	4.51	3.31	3.07	2.52	1.77	1.77	0.89	0.89	-	-
		12.7	70	7.62	4.96	6.22	4.15	4.78	3.35	3.25	2.56	1.83	1.83	0.95	0.95
		15	70	9.17	5.64	7.77	4.84	6.34	4.05	4.80	3.28	3.16	2.50	1.75	1.75
		18	60	10.30	6.61	8.90	5.80	7.48	5.04	5.95	4.26	4.31	3.49	2.78	2.78
		21	50	11.22	7.56	9.83	6.78	8.42	6.02	6.89	5.26	5.26	4.49	3.79	3.79
	150	10	70	7.42	5.18	5.66	4.15	3.86	3.15	2.21	2.21	1.11	1.11	-	-
		12.7	70	9.55	6.22	7.79	5.21	5.99	4.20	4.07	3.21	2.29	2.29	1.19	1.19
		15	70	11.49	7.07	9.74	6.06	7.94	5.07	6.02	4.11	3.96	3.13	2.19	2.19
		18	60	12.91	8.26	11.09	7.26	9.38	6.31	7.46	5.34	5.41	4.37	3.48	3.48
		21	50	14.06	9.48	12.33	8.49	10.55	7.53	8.64	6.58	6.59	5.62	4.74	4.74
HIGH FAN SPEED	50	10	70	2.63	1.86	2.01	1.50	1.37	1.14	0.81	0.81	0.40	0.40	-	-
		12.7	70	3.39	2.22	2.77	1.86	2.12	1.51	1.44	1.17	0.83	0.83	0.43	0.43
		15	70	4.08	2.52	3.46	2.17	2.82	1.82	2.13	1.48	1.40	1.13	0.80	0.80
		18	60	4.59	2.96	3.97	2.62	3.33	2.27	2.64	1.93	1.91	1.59	1.27	1.27
		21	50	5.00	3.40	4.38	3.05	3.74	2.71	3.06	2.38	2.34	2.04	1.74	1.74
	60	10	70	3.28	2.29	2.50	1.83	1.70	1.39	0.98	0.98	0.49	0.49	-	-
		12.7	70	4.22	2.74	3.45	2.29	2.65	1.86	1.80	1.42	1.01	1.01	0.53	0.53
		15	70	5.08	3.13	4.30	2.68	3.51	2.24	2.66	1.81	1.75	1.37	0.97	0.97
		18	60	5.71	3.65	4.94	3.21	4.14	2.78	3.30	2.35	2.39	1.93	1.53	1.53
		21	50	6.22	4.18	5.44	3.75	4.66	3.32	3.82	2.90	2.92	2.46	2.09	2.09
	90	10	70	5.76	4.06	4.39	3.27	2.99	2.50	1.76	1.76	0.88	0.88	-	-
		12.7	70	7.42	4.85	6.05	4.06	4.65	3.32	3.15	2.54	1.82	1.82	0.95	0.95
		15	70	8.94	5.51	7.56	4.74	6.16	3.99	4.66	3.23	3.06	2.47	1.75	1.75
		18	60	10.05	6.47	8.68	5.70	7.28	4.97	5.78	4.22	4.18	3.47	2.78	2.78
		21	50	10.95	7.44	9.59	6.67	8.20	5.94	6.70	5.20	5.11	4.46	3.79	3.79
	130	10	70	6.78	4.78	5.17	3.85	3.52	2.95	2.07	2.07	1.04	1.04	-	-
		12.7	70	8.74	5.71	7.12	4.78	5.47	3.90	3.71	3.00	2.14	2.14	1.12	1.12
		15	70	10.52	6.50	8.90	5.58	7.26	4.70	5.49	3.80	3.61	2.91	2.06	2.06
		18	60	11.82	7.62	10.22	6.70	8.58	5.85	6.82	4.97	4.93	4.09	3.26	3.26
		21	50	12.90	8.76	11.30	7.86	9.66	6.99	7.90	6.12	6.02	5.25	4.46	4.46
	150	10	70	8.34	5.86	6.35	4.72	4.33	3.58	2.53	2.53	1.27	1.27	-	-
		12.7	70	10.74	7.01	8.75	5.87	6.73	4.78	4.57	3.67	2.62	2.62	1.37	1.37
		15	70	12.92	7.98	10.94	6.83	8.92	5.76	6.75	4.66	4.44	3.57	2.51	2.51
		18	60	14.53	9.34	12.56	8.23	10.54	7.17	8.38	6.09	6.06	5.00	3.99	3.99
		21	50	15.84	10.73	13.87	9.63	11.86	8.56	9.70	7.49	7.40	6.42	5.44	5.44

Technical Information - R404A

Performances with thermal expansion valve set at 5°C superheat

	MODEL	AIR ON °C	HUMIDITY % RH	EVAPORATING TEMPERATURE °C											
				-2.5		0		2.5		5		7.5		10	
				TOTAL	SENS	TOTAL	SENS	TOTAL	SENS	TOTAL	SENS	TOTAL	SENS	TOTAL	SENS
LOW FAN SPEED	50	10	70	2.38	1.67	1.82	1.35	1.24	1.02	0.73	0.73	0.37	0.37	-	-
		12.7	70	3.06	2.00	2.50	1.68	1.93	1.36	1.31	1.06	0.75	0.75	0.39	0.39
		15	70	3.69	2.27	2.95	1.95	2.55	1.65	1.94	1.34	1.27	1.02	0.72	0.72
		18	60	4.15	2.66	3.59	2.35	3.02	2.05	2.40	1.74	1.74	1.43	1.14	1.14
		21	50	4.52	3.06	3.97	2.76	3.39	2.46	2.78	2.14	2.13	1.84	1.56	1.56
	60	10	70	2.89	2.00	2.20	1.61	1.50	1.22	0.85	0.85	0.42	0.42	-	-
		12.7	70	3.71	2.40	3.03	2.02	2.34	1.63	1.59	1.24	0.88	0.88	0.46	0.46
		15	70	4.46	2.74	3.79	2.35	3.10	1.97	2.35	1.58	1.55	1.20	0.84	0.84
		18	60	5.02	3.21	4.34	2.82	3.66	2.44	2.91	2.06	2.11	1.68	1.34	1.34
		21	50	5.46	3.66	4.79	3.28	4.10	2.91	3.37	2.54	2.58	2.16	1.82	1.82
	90	10	70	4.76	3.33	3.63	2.66	2.48	2.03	1.42	1.42	0.72	0.72	-	-
		12.7	70	6.13	3.99	5.00	3.33	3.85	2.70	2.62	2.06	1.48	1.48	0.77	0.77
		15	70	7.37	4.53	6.25	3.90	5.10	3.26	3.87	2.63	2.55	2.01	1.42	1.42
		18	60	8.28	5.30	7.17	4.67	6.02	4.06	4.80	3.44	3.49	2.82	2.25	2.25
		21	50	9.02	6.09	7.91	5.46	6.78	4.84	5.56	4.24	4.25	3.62	3.06	3.06
	130	10	70	5.29	3.67	4.03	2.95	2.75	2.25	1.57	1.57	0.78	0.78	-	-
		12.7	70	6.80	4.42	5.55	3.69	4.28	2.99	2.91	2.28	1.62	1.62	0.85	0.85
		15	70	8.18	5.03	6.94	4.30	5.66	3.62	4.30	2.91	2.83	2.21	1.56	1.56
		18	60	9.19	5.88	7.95	5.18	6.69	4.48	5.33	3.80	3.87	3.10	2.47	2.47
		21	50	10.01	6.74	8.78	6.02	7.52	5.35	6.18	4.66	4.72	3.98	3.37	3.37
	150	10	70	6.70	4.66	5.12	3.74	3.49	2.85	1.99	1.99	1.00	1.00	-	-
		12.7	70	8.63	5.61	7.05	4.68	5.42	3.80	3.70	2.90	2.06	2.06	1.07	1.07
		15	70	10.38	6.38	8.80	5.46	7.18	4.59	3.86	3.70	3.60	2.81	1.98	1.98
		18	60	11.66	7.46	10.10	6.56	8.49	5.68	6.77	4.82	4.91	3.94	3.14	3.14
		21	50	12.70	8.55	11.14	7.64	9.54	6.79	7.83	5.92	5.99	5.05	4.27	4.27
MEDIUM FAN SPEED	50	10	70	2.48	1.75	1.90	1.42	1.29	1.07	0.76	0.76	0.38	0.38	-	-
		12.7	70	3.20	2.10	2.61	1.76	2.01	1.43	1.37	1.10	0.79	0.79	0.42	0.42
		15	70	3.85	2.38	3.26	2.04	2.66	1.73	2.02	1.40	1.33	1.07	0.76	0.76
		18	60	4.33	2.79	3.74	2.46	3.14	2.15	2.50	1.83	1.82	1.50	1.21	1.21
		21	50	4.72	3.22	4.14	2.89	3.54	2.57	2.90	2.26	2.22	1.94	1.65	1.65
	60	10	70	3.06	2.13	2.34	1.71	1.59	1.30	0.91	0.91	0.46	0.46	-	-
		12.7	70	3.94	2.56	3.22	2.14	2.47	1.74	1.68	1.32	0.94	0.94	0.49	0.49
		15	70	4.74	2.91	4.02	2.49	3.28	2.10	2.49	1.69	1.64	1.28	0.90	0.90
		18	60	5.32	3.40	4.60	2.99	3.87	2.59	3.08	2.20	2.24	1.80	1.43	1.43
		21	50	5.79	3.90	5.08	3.49	4.35	3.10	3.57	2.70	2.73	2.30	1.95	1.95
	90	10	70	5.28	3.71	4.02	3.00	2.74	2.28	1.61	1.61	0.81	0.81	-	-
		12.7	70	6.80	4.45	5.55	3.73	4.27	3.04	2.90	2.34	1.67	1.67	0.87	0.87
		15	70	8.18	5.04	6.94	4.34	5.66	3.66	4.30	2.97	2.82	2.27	1.61	1.61
		18	60	9.20	6.39	7.96	5.22	6.69	4.54	5.33	3.87	3.86	3.17	2.54	2.54
		21	50	10.03	6.80	8.79	6.12	7.53	5.44	6.17	4.77	4.71	4.09	3.47	3.47
	130	10	70	5.82	4.08	4.44	3.27	3.03	2.50	1.76	1.76	0.88	0.88	-	-
		12.7	70	7.50	4.89	6.12	4.10	4.71	3.32	3.21	2.56	1.82	1.82	0.95	0.95
		15	70	9.02	5.56	7.65	4.78	6.25	4.00	4.74	3.26	3.12	2.48	1.74	1.74
		18	60	10.14	6.51	8.78	5.72	7.38	4.98	5.87	4.22	4.26	3.46	2.77	2.77
		21	50	11.06	7.46	9.70	6.70	8.30	5.97	6.81	5.22	5.20	4.46	3.78	3.78
	150	10	70	7.30	5.12	5.58	4.10	3.80	3.13	2.20	2.20	1.10	1.10	-	-
		12.7	70	9.41	6.13	7.68	5.14	5.91	4.16	4.02	3.18	2.28	2.28	1.18	1.18
		15	70	11.32	6.97	9.59	5.98	7.83	5.02	5.94	4.07	3.91	3.11	2.18	2.18
		18	60	12.72	8.17	11.01	7.18	9.26	6.25	7.37	5.29	5.35	4.34	3.47	3.47
		21	50	13.86	9.35	12.16	8.39	10.41	7.47	8.54	6.53	6.52	5.59	4.73	4.73
HIGH FAN SPEED	50	10	70	2.58	1.82	1.97	1.47	1.34	1.14	0.80	0.80	0.40	0.40	-	-
		12.7	70	3.33	2.18	2.71	1.83	2.09	1.50	1.42	1.15	0.83	0.83	0.43	0.43
		15	70	4.00	2.47	3.39	2.14	2.77	1.80	2.10	1.46	1.38	1.12	0.80	0.80
		18	60	4.50	2.90	3.90	2.58	3.27	2.24	2.60	1.91	1.89	1.58	1.26	1.26
		21	50	4.91	3.34	4.30	3.01	3.68	2.68	3.02	2.35	2.30	2.02	1.73	1.73
	60	10	70	3.23	2.26	2.46	1.82	1.68	1.38	0.97	0.97	0.49	0.49	-	-
		12.7	70	4.16	2.71	3.40	2.26	2.62	1.84	1.78	1.40	1.00	1.00	0.52	0.52
		15	70	5.01	3.08	4.25	2.65	3.46	2.22	2.63	1.79	1.74	1.36	0.96	0.96
		18	60	5.62	3.60	4.87	3.17	4.10	2.76	3.26	2.34	2.37	1.91	1.53	1.53
		21	50	6.13	4.14	5.38	3.70	4.61	3.29	3.78	2.88	2.89	2.46	2.08	2.08
	90	10	70	5.65	3.99	4.31	3.22	2.94	2.48	1.74	1.74	0.88	0.88	-	-
		12.7	70	7.28	4.78	5.94	4.00	4.57	3.27	3.10	2.52	1.82	1.82	0.94	0.94
		15	70	8.76	5.42	7.42	4.67	6.06	3.94	4.59	3.19	3.02	2.46	1.74	1.74
		18	60	9.86	6.36	8.52	5.63	7.16	4.90	5.70	4.18	4.13	3.45	2.77	2.77
		21	50	10.74	7.32	9.42	6.58	8.06	5.87	6.60	5.15	5.04	4.43	3.78	3.78
	130	10	70	6.66	4.70	5.07	3.79	3.46	2.92	2.06	2.06	1.03	1.03	-	-
		12.7	70	8.57	5.63	6.99	4.71	5.38	3.86	3.66	2.97	2.14	2.14	1.11	1.11
		15	70	10.32	6.38	8.74	5.50	7.13	4.63	5.41	3.76	3.56	2.89	2.05	2.05
		18	60	11.61	7.50	10.04	6.63	8.43	5.78	6.71	4.92	4.86	4.06	3.26	3.26
		21	50	12.66	8.62	11.10	7.75	9.49	6.90	7.78	6.06	5.94	5.22	4.44	4.44
	150	10	70	8.18	5.77	6.24	4.66	4.26	3.54	2.51	2.51	1.26	1.26	-	-
		12.7	70	10.54	6.90	8.60	5.79	6.62	4.73	4.50	3.64	2.61	2.61	1.36	1.36
		15	70	12.69	7.84	10.75	6.73	8.78	5.69	6.66	4.61	4.38	3.54	2.50	2.50
		18	60	14.27	9.21	12.34	8.11	10.37	7.08	8.26	6.02	5.98	4.97	3.98	3.98
		21	50	15.56	10.58	13.64	9.50	11.67	8.46	9.57	7.42	7.30	6.38	5.42	5.42

Technical Information - R410A

Performances with thermal expansion valve set at 5°C superheat

	MODEL	AIR ON °C	HUMIDITY % RH	EVAPORATING TEMPERATURE °C											
				-2.5		0		2.5		5		7.5		10	
				TOTAL	SENS	TOTAL	SENS	TOTAL	SENS	TOTAL	SENS	TOTAL	SENS	TOTAL	SENS
LOW FAN SPEED	50	10	70	2.56	1.78	1.95	1.42	1.34	1.08	0.75	0.75	0.38	0.38	-	-
		12.7	70	3.30	2.14	2.69	1.79	2.07	1.44	1.42	1.10	0.78	0.78	0.40	0.40
		15	70	3.96	2.43	3.36	2.09	2.74	1.75	2.09	1.41	1.38	1.07	0.74	0.74
		18	60	4.45	2.85	3.86	2.50	3.24	2.17	2.58	1.83	1.88	1.49	1.18	1.18
		21	50	4.85	3.25	4.26	2.91	3.65	2.58	2.99	2.25	2.30	1.92	1.61	1.61
	60	10	70	3.03	2.09	2.32	1.68	1.58	1.26	0.86	0.86	0.43	0.43	-	-
		12.7	70	3.90	2.51	3.19	2.08	2.46	1.70	1.68	1.28	0.88	0.90	0.46	0.46
		15	70	4.69	2.86	3.98	2.46	3.26	2.06	2.47	1.65	1.63	1.24	0.86	0.86
		18	60	5.26	3.35	4.56	2.94	3.84	2.54	3.06	2.14	2.23	1.73	1.36	1.35
		21	50	5.73	3.82	5.03	3.42	4.31	3.02	3.54	2.62	2.72	2.22	1.86	1.86
	90	10	70	5.06	3.50	3.86	2.81	2.64	2.12	1.46	1.46	0.74	0.74	-	-
		12.7	70	6.51	4.22	5.32	3.51	4.10	2.84	2.79	2.15	1.51	1.51	0.78	0.78
		15	70	7.82	4.80	6.64	4.10	5.43	3.44	4.13	2.76	2.73	2.09	1.45	1.45
		18	60	8.78	5.60	7.62	4.92	6.41	4.26	5.11	3.59	3.72	2.93	2.30	2.30
		21	50	9.57	6.40	8.40	5.74	7.20	5.06	5.92	4.42	4.54	3.74	3.13	3.13
	130	10	70	5.58	3.85	4.26	3.09	2.91	2.34	1.61	1.61	0.81	0.81	-	-
		12.7	70	7.18	4.63	5.87	3.88	4.53	3.13	3.09	2.37	1.66	1.66	0.86	0.86
		15	70	8.63	5.30	7.33	4.53	5.99	3.79	4.56	3.04	3.01	2.29	1.58	1.58
		18	60	9.69	6.17	8.39	5.42	7.07	4.68	5.64	3.95	4.10	3.22	2.51	2.51
		21	50	10.54	7.04	9.26	6.30	7.94	5.58	6.53	4.84	5.00	4.11	3.43	3.43
	150	10	70	7.09	4.88	5.42	3.92	3.70	2.96	2.04	2.04	1.02	1.02	-	-
		12.7	70	9.11	5.87	7.45	4.92	5.74	3.97	3.91	3.01	2.10	2.10	1.10	1.10
		15	70	10.95	6.72	9.30	5.75	7.60	4.81	5.78	3.86	3.82	2.90	2.02	2.02
		18	60	12.30	7.82	10.66	6.89	8.97	5.94	7.16	5.02	5.21	4.08	3.19	3.19
		21	50	13.38	8.93	11.75	7.99	10.08	7.07	8.28	6.14	6.34	5.22	4.35	4.35
MEDIUM FAN SPEED	50	10	70	2.69	1.86	2.05	1.50	1.40	1.14	0.79	0.79	0.39	0.39	-	-
		12.7	70	3.46	2.24	2.82	1.88	2.18	1.52	1.48	1.16	0.82	0.82	0.42	0.42
		15	70	4.15	2.55	3.53	2.19	2.88	1.84	2.19	1.48	1.45	1.13	0.78	0.78
		18	60	4.67	2.98	4.04	2.62	3.40	2.28	2.71	1.93	1.98	1.58	1.24	1.24
		21	50	5.09	3.42	4.46	3.06	3.82	2.72	3.14	2.37	2.41	2.02	1.70	1.70
	60	10	70	3.23	2.22	2.47	1.79	1.69	1.35	0.93	0.93	0.46	0.46	-	-
		12.7	70	4.16	2.69	3.40	2.24	2.62	1.81	1.78	1.37	0.96	0.96	0.50	0.50
		15	70	5.00	3.06	4.24	2.62	3.46	2.19	2.64	1.76	1.74	1.33	0.92	0.92
		18	60	5.61	3.57	4.86	3.14	4.09	2.71	3.26	2.29	2.38	1.86	1.46	1.46
		21	50	6.10	4.07	5.36	3.65	4.60	3.22	3.78	2.80	2.90	2.38	1.98	1.98
	90	10	70	5.06	3.50	3.86	2.81	2.64	2.12	1.46	1.46	0.74	0.74	-	-
		12.7	70	6.13	4.03	4.94	3.34	3.71	2.66	2.41	1.97	1.31	1.31	0.58	0.58
		15	70	7.82	4.80	6.64	4.10	5.43	3.44	4.13	2.76	2.73	2.09	1.45	1.45
		18	60	8.78	5.60	7.62	4.92	6.41	4.26	5.11	3.59	3.72	2.93	2.30	2.30
		21	50	9.57	6.40	8.40	5.74	7.20	5.06	5.92	4.42	4.54	3.74	3.13	3.13
	130	10	70	6.22	4.31	4.75	3.45	3.25	2.62	1.81	1.81	0.90	0.90	-	-
		12.7	70	8.00	5.18	6.54	4.32	5.04	3.50	3.43	2.66	1.86	1.86	0.97	0.97
		15	70	9.62	5.90	8.17	5.07	6.67	4.23	5.07	3.42	3.35	2.59	1.78	1.78
		18	60	10.81	6.90	9.36	6.06	7.88	5.25	6.29	4.42	4.58	3.61	2.83	2.83
		21	50	11.76	7.88	10.33	7.06	8.86	6.24	7.27	5.45	5.57	4.63	3.86	3.86
	150	10	70	7.79	5.40	5.95	4.32	4.06	3.27	2.26	2.26	1.13	1.13	-	-
		12.7	70	10.02	6.49	8.19	5.42	6.31	4.38	4.30	3.32	2.34	2.34	1.22	1.22
		15	70	12.05	7.39	10.22	6.34	8.36	5.30	6.35	4.28	4.19	3.24	2.23	2.23
		18	60	13.54	8.62	11.72	7.58	9.86	6.57	7.87	5.54	5.73	4.51	3.54	3.54
		21	50	14.73	9.86	12.94	8.83	11.09	7.81	9.11	6.82	6.98	5.79	4.83	4.83
HIGH FAN SPEED	50	10	70	2.81	1.95	2.14	1.58	1.46	1.20	0.83	0.83	0.42	0.42	-	-
		12.7	70	3.61	2.34	2.95	1.96	2.27	1.59	1.54	1.22	0.86	0.86	0.45	0.45
		15	70	4.34	2.67	3.69	2.29	3.01	1.93	2.29	1.55	1.51	1.18	0.82	0.82
		18	60	4.88	3.12	4.22	2.75	3.55	2.39	2.83	2.02	2.06	1.66	1.30	1.30
		21	50	5.31	3.58	4.66	3.21	4.00	2.85	3.28	2.48	2.51	2.12	1.78	1.78
	60	10	70	3.44	2.38	2.62	1.90	1.79	1.44	0.99	0.99	0.50	0.50	-	-
		12.7	70	4.42	2.86	3.62	2.38	2.78	1.93	1.90	1.46	1.02	1.02	0.54	0.54
		15	70	5.31	3.26	4.51	2.79	3.69	2.34	2.80	1.87	1.85	1.42	0.98	0.98
		18	60	5.97	3.80	5.17	3.34	4.35	2.90	3.47	2.44	2.53	1.98	1.56	1.56
		21	50	6.50	4.34	5.70	3.90	4.89	3.44	4.02	2.99	3.08	2.54	2.13	2.13
	90	10	70	6.14	4.27	4.68	3.44	3.20	2.62	1.81	1.81	0.91	0.91	-	-
		12.7	70	7.90	5.12	6.45	4.30	4.97	3.49	3.38	2.66	1.87	1.87	0.98	0.98
		15	70	9.50	5.85	8.06	5.01	6.58	4.21	5.00	3.40	3.30	2.58	1.80	1.80
		18	60	10.67	6.83	9.24	6.01	7.78	5.22	6.20	4.42	4.50	3.62	2.86	2.86
		21	50	11.62	7.82	10.21	7.02	8.74	6.22	7.18	5.43	5.50	4.63	3.89	3.89
	130	10	70	7.22	5.03	5.51	4.05	3.77	3.08	2.13	2.13	1.07	1.07	-	-
		12.7	70	9.30	6.03	7.59	5.06	5.85	4.10	3.98	3.14	2.21	2.21	1.15	1.15
		15	70	11.18	6.89	9.49	5.89	7.75	4.96	5.89	4.00	3.88	3.04	2.11	2.11
		18	60	12.56	8.04	10.88	7.07	9.15	6.15	7.30	5.21	5.30	4.26	3.35	3.35
		21	50	13.68	9.21	12.01	8.26	10.30	7.32	8.45	6.39	6.46	5.46	4.58	4.58
	150	10	70	7.79	5.40	5.95	4.32	4.06	3.27	2.26	2.26	1.13	1.13	-	-
		12.7	70	10.02	6.49	8.19	5.42	6.31	4.38	4.30	3.32	2.34	2.34	1.22	1.22
		15	70	12.05	7.39	10.22	6.34	8.36	5.30	6.35	4.28	4.19	3.24	2.23	2.23
		18	60	13.54	8.62	11.72	7.58	9.86	6.57	7.87	5.54	5.73	4.51	3.54	3.54
		21	50	14.73	9.86	12.94	8.83	11.09	7.81	9.11	6.82	6.98	5.79	4.83	4.83

Technical Information

Acoustic data and n.r.guide

All sound data ascertained at 30Pa. external resistance Sound Power Level (SWL) dB ref. 10^{-12} W

MODEL	Spd	INLET / CASING RADIATED						DISCHARGE						N.R. GUIDE
		Hz						Hz						
		125	250	500	1k	2k	4k	125	250	500	1k	2k	4k	
DXD(H) 50	1	57.3	52.6	48.6	37.8	32.3	25.7	48.8	45.8	34.6	27.2	15.0	8.5	35
	2	57.4	54.3	49.1	38.0	34.3	26.5	49.7	46.8	35.9	27.8	16.9	9.9	37
	3	58.3	55.5	49.4	39.2	34.9	28.1	50.9	47.4	37.2	28.3	18.7	11.3	40
DXD(H) 60	1	57.3	52.6	48.6	38.1	32.5	26.1	48.8	45.8	35.2	27.7	15.8	8.9	35
	2	57.6	54.4	49.9	39.2	34.9	27.2	50.2	47.1	37.1	28.2	17.4	10.0	37
	3	58.8	56.1	50.8	41.0	36.2	29.9	52.1	48.3	38.8	30.0	20.0	12.1	40
DXD(H) 90	1	57.4	52.8	48.8	38.8	33.0	27.0	48.9	45.9	36.0	28.2	17.0	9.2	35
	2	58.1	54.8	51.5	41.9	36.0	29.6	51.4	47.8	40.0	30.8	19.6	10.1	37
	3	59.2	58.1	54.6	44.4	38.7	33.4	54.5	52.0	43.6	34.4	23.7	14.0	40
DXD(H) 130	1	57.7	53.5	49.6	40.2	34.2	28.2	49.0	46.0	36.4	29.1	17.9	9.7	35
	2	58.3	56.2	53.0	43.1	36.9	31.1	51.7	48.1	40.4	31.0	20.0	10.6	37
	3	59.8	58.4	55.1	45.1	39.0	34.2	54.7	52.2	43.9	34.7	23.9	14.6	40
DXD(H) 150	1	58.2	55.3	51.7	42.5	35.3	30.5	49.1	46.2	36.5	29.5	18.5	10.0	35
	2	59.7	58.4	54.7	44.9	37.8	33.3	51.9	48.2	40.8	31.2	20.1	11.0	37
	3	60.0	58.5	55.2	45.6	39.2	35.4	55.0	52.4	44.1	34.9	24.0	14.8	40

Qualification of N.R. predictions:
The N.R. guide figures quoted on the output data page are intended to show the levels which may be expected in a typical office environment provided the following apply: Room sizes are based on a cooling load of 120W/m2. Units must be correctly mounted onto a solid structure, using drop rods attached to mounting points provided, in a false ceiling not less than 300mm deep, with standard 'T' bar grid and 10mm fibreboard tiles. Rooms should be carpeted, have not more than 20% glazing, or highly reflective surfaces. In open plan areas units should be mounted not less than 6m apart and return-air grilles should not be mounted directly below, or adjacent to unit inlets. 1m of non noise regenerative flexible duct should be fitted to each outlet spigot sized to maintain required N.R. level. i.e. 3m/s at NR35 and 4m/s at NR40.
The foregoing should ensure the 'guide' N.R. levels are met when measured at 1.5m from the nearest grille, provided the grille plenums are correctly sized and insulated.

For accurate assessment please consult our **Technical Sales Department on 01484 405606**.

Air Volume
(Based on 30Pa external resistance)

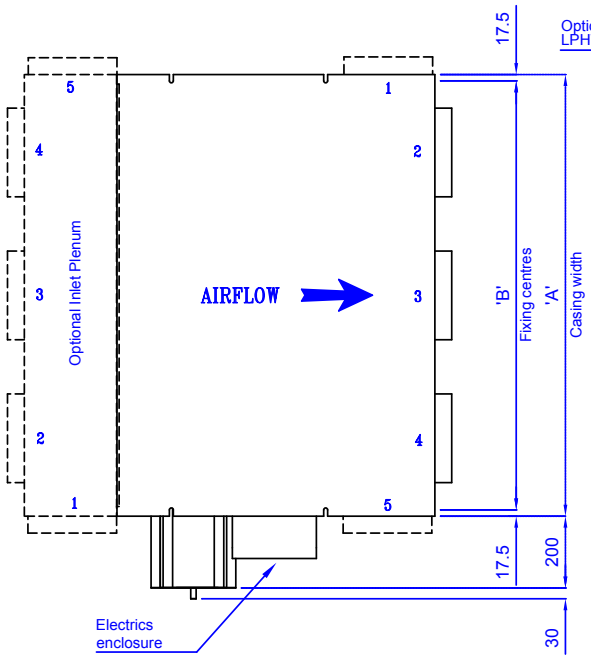
DXD(H)	SPIGOTS FRONT (QTY)	230V MINIMUM SPEED m^3/s	230V MEDIUM SPEED m^3/s	230V MAXIMUM SPEED m^3/s
50	2	0.160	0.170	0.180
60	2	0.180	0.194	0.209
90	3	0.310	0.350	0.372
130	3	0.335	0.382	0.462
150	4	0.425	0.477	0.560

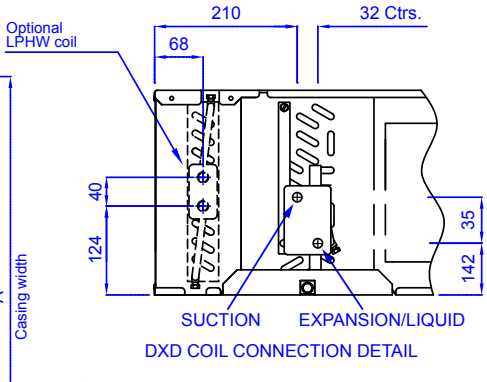
Optional Electric Heating
(factory fit only)

MODEL	ELECTRIC HEATER (kW AT 240V)	ELECTRIC HEATER (kW AT 230V)
50	2.0	1.92
60	2.0	1.92
90	2.0	1.92
130	3.0	2.87
150	4.0	3.84

Unit Dimensions

Standard Units

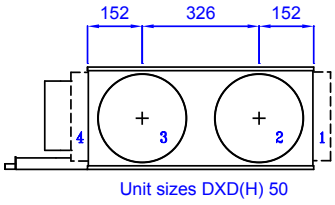




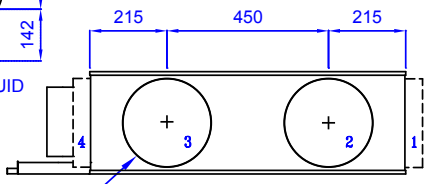
DXD COIL CONNECTION DETAIL

Connections details

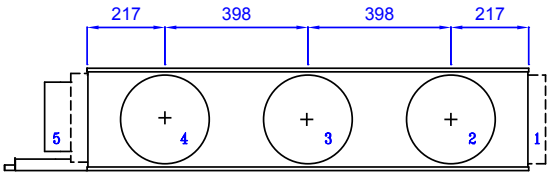
UNIT	SUCT	LIQ
50	1/2"	3/8"
60	5/8"	1/2"
90	3/4"	1/2"
130	3/4"	1/2"
150	3/4"	1/2"



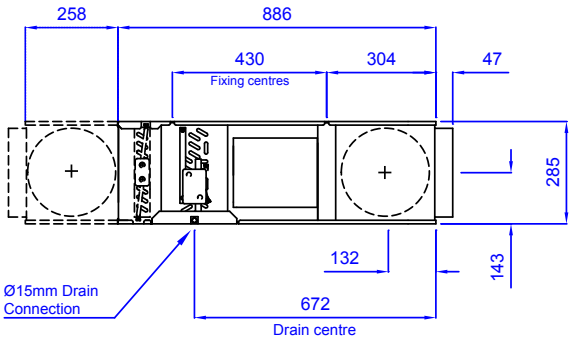
Unit sizes DXD(H) 50

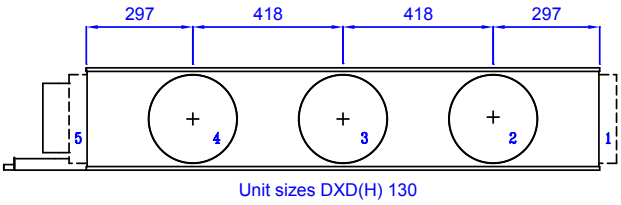


Unit sizes DXD(H) 60

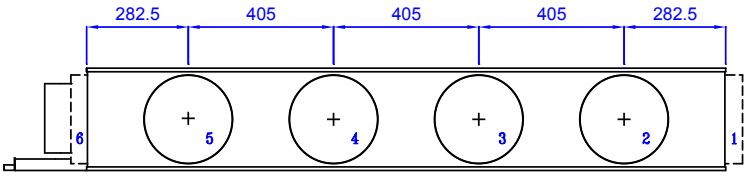


Unit sizes DXD(H) 90





Unit sizes DXD(H) 130



Unit sizes - DXD(H) 150

All handings viewed in direction of airflow
All units supplied as right hand as per illustration above.

N.B. Max airflow per 250mm dia. spigot to maintain NR35 = 150 l/s
Max airflow per 200mm dia. spigot to maintain NR35 = 100 l/s

1. If a front spigot is not to be used then it must be replaced by the corresponding side spigot to allow equal airflow over the coil
2. A maximum of 30pa resistance is allowed (total of inlet and discharge added together)
3. Unit supplied with ALL front spigots fitted

Dimensional Information

Unit Model	Dim 'A'	Dim 'B'	Spigot Options	Weight (approx Kg)	Minimum number of outlets and return air spigots to be used
DXD(H) 50	630	595	2-3	42	2
DXD(H) 60	880	845	2-3	52	2
DXD(H) 90	1230	1195	2-3-4	69	3
DXD(H) 130	1430	1395	2-3-4	86	3
DXD(H) 150	1780	1745	2-3-4-5	103	4

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- 60hz power options
- Motors with rating of up to IP65 and wide fin pitched heat exchangers for extreme dusty environments
- EC/DC motors for saving energy and increased con trol through 0-10V DC inputs
- Volt free relays to suit modern BMS control
- Special heat exchangers i.e. coated, special fin pitches or copper/copper for the harsh coastal environments
- Heat recovery by diverting heat normally rejected through external condensers into usable heat in to either air or water

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