

Product Range

Fresh ideas from Searle



GEA Heat Exchangers

GEA Searle

MM A 1 6 2 H - N8 12 D - AL

Range	MM or MX
Module Size	A (1200mm), B (1440mm), C (1800mm)
Bank of fans	1
Fans per bank	1 - 8 (MMA & MXA), 1-6 (MMB & MXB), 1-5 (MMC & MXC)
Coils rows	2, 3, 4
Coil Orientation	H = Horizontal, V = Vertical
Fans type	N8 (800mm), Q8 (800mm), 09 (910mm) N9 (910mm), 99 (990mm)
Motor speed (Poles)	06, 08, 12, 09EC (Max 855rpm)
Power	D = Delta, S = Star, 2 = 2 Speed, Variable speed
Coil material	AL = Copper tubes/ Aluminium fins, AV = Copper tubes/ Vinyl coated aluminium fins CU = Copper tubes/ Copper fins, ET = Copper tubes/ Copper fins electro-tinned Bg = Copper tube/Aluminium fin Blygold coated

Fan Data Table

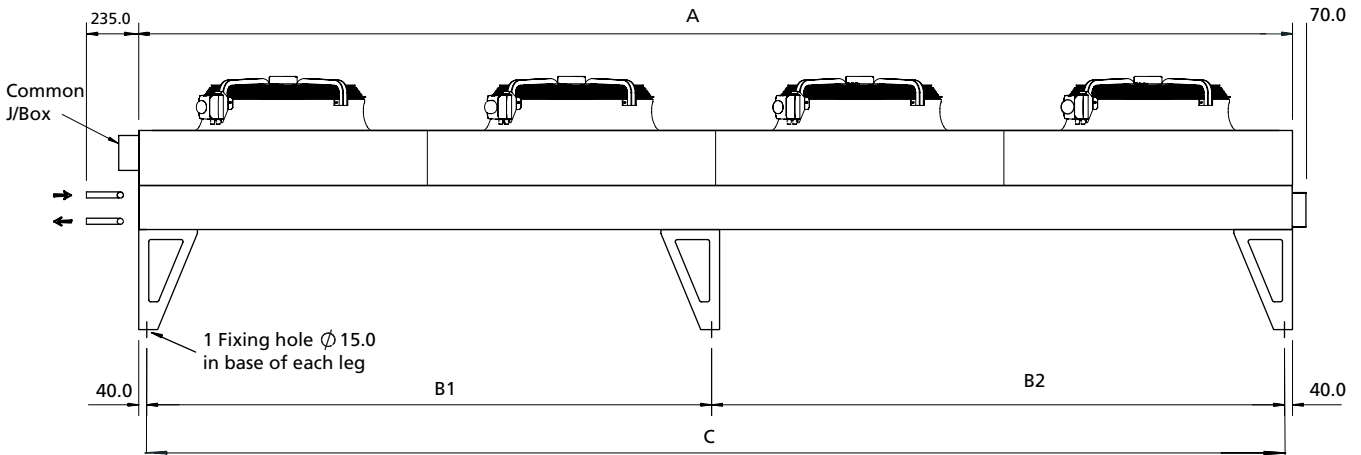
Fan type & Pole	Diameter	Module	Delta			Star		
			Speed (rpm)	FLC (Amp)	SC (Amp)	Speed (rpm)	FLC (Amp)	SC (Amp)
N806 6 Pole	800mm	A,B,C	895	4.3	14	685	2.5	4
N808 8 Pole		A,B,C	665	2.5	6.2	495	1.3	2.2
N812 12 Pole		A,B,C	450	1.2	2.3	350	0.5	0.8
Q812 12 Pole		A,B,C	360	0.75	1	255	0.3	0.5
N906 6 Pole	910mm	A,B,C	870	5.7	19	650	3.3	1.1
09EC EC Technology		A,B,C	Variable 100 - 855	3.1	4.3			

MM/ MX Selection Data

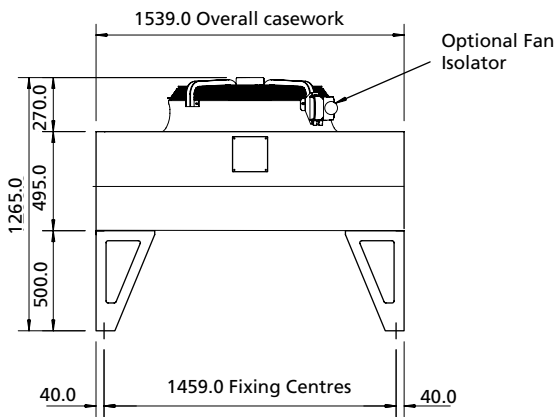
Model	Delta (High Speed)					Star (Low Speed)					Total Surface	Internal Volume	R404A Charge
	Capacity *	Air Volume	Sound level **	Power Input	Energy rating	Capacity *	Air Volume	Sound level **	Power Input	Energy rating			
	R404A & R507A					R404A & R507A							
	kW	m³/s	dB(A)	W	kW	m³/s	dB(A)	W	m²	dm³			
910mm 6 Pole													
MMA112	53.5	7.08	52	2110	E	46.9	5.55	45	1470	D	80	20	6.3
MMB113	74.1	7.00	52	2130	D	63.1	5.38	45	1490	D	143	31	9.8
MMC114	94.4	7.15	52	2100	D	78.4	5.51	45	1480	C	239	48	15.2
MMA122	107.7	14.16	55	4230	E	94.3	11.10	48	2950	D	159	34	10.7
MMB123	149.5	14.01	55	4260	D	126.7	10.76	48	2980	D	286	56	17.7
MMC124	189.3	14.31	55	4200	C	157.2	11.01	48	2960	C	477	93	29.4
MMB133	223.8	21.01	57	6400	D	190.2	16.15	49	4470	D	429	84	26.5
MMC134	283.8	21.46	57	6300	C	234.1	16.52	49	4440	C	715	136	43.0
MMC143	336.2	29.66	58	8190	D	286.7	23.24	51	5800	C	715	136	43.0
MMC144	379.4	28.62	58	8410	C	314.7	22.03	50	5920	C	954	177	55.9
MMB154	419.6	33.49	59	10990	D	345.2	25.08	51	7610	C	954	184	58.1
MMC154	471.9	35.77	59	10500	D	391.9	27.53	51	7400	C	1192	221	69.8
MMB164	502.9	40.19	60	13140	D	411.8	30.09	52	9120	C	1145	217	68.7
MMA174	521.1	43.39	61	16030	D	421.8	31.77	54	10850	D	1113	212	66.9
MMA184	595.5	49.59	62	18320	D	482.1	36.30	55	12400	D	1272	241	76.3
MXA112	67.6	7.78	52	1960	D	59.2	6.21	46	1400	D	119	26	8.2
MXB113	91.4	7.68	52	1990	C	78.3	6.08	46	1420	C	215	44	13.9
MXC114	112.3	7.75	52	1970	C	95.3	6.15	46	1410	C	358	72	22.8
MXA122	136.1	15.57	55	3930	D	118.5	12.43	49	2810	D	239	50	15.8
MXB123	181.2	15.35	55	3980	C	154.1	12.15	48	2840	C	429	84	26.5
MXC124	223.4	15.49	55	3950	C	188.9	12.30	48	2820	C	715	134	42.3
MXB133	272.0	23.03	57	5980	C	231.3	18.23	50	4260	C	644	121	38.2
MXC134	335.2	23.24	57	5930	C	283.4	18.45	50	4240	C	1073	201	63.5
MXC143	400.3	31.71	58	7740	C	337.4	25.45	51	5560	C	1073	200	63.2
MXC144	451.0	30.99	58	7910	C	382.1	24.60	51	5650	C	1431	263	83.1
MXB154	514.2	37.26	58	10200	C	431.7	29.13	51	7240	C	1431	263	83.1
MXC154	561.7	38.74	59	9850	C	476.4	30.75	52	7050	C	1789	328	103.5
MXB164	614.2	44.71	60	12240	C	515.1	34.96	53	8640	C	1717	314	99.3
MXA174	659.5	50.08	61	14700	D	544.6	38.55	53	10360	C	1669	308	97.5
MXA184	753.7	57.24	62	16800	D	622.4	44.05	54	11840	C	1907	352	111.2
800mm 6 Pole													
MMA112	47.9	5.85	48	1560	D	42.5	4.78	44	1070	D	80	20	6.3
MMB113	67.4	5.65	48	1580	D	58.8	4.57	44	1070	C	143	31	9.8
MMC114	86.5	5.67	48	1570	C	73.8	4.55	44	1070	C	239	48	15.2
MMA122	96.2	11.70	51	3130	D	85.3	9.55	47	2140	D	159	34	10.7
MMB123	136.5	11.30	51	3160	D	118.1	9.15	46	2150	C	286	56	17.7
MMC124	173.9	11.34	51	3140	C	148.0	9.10	47	2150	C	477	93	29.4
MMB133	204.4	16.95	53	4750	D	177.4	13.72	48	3230	C	429	84	26.5
MMC134	260.2	17.01	53	4710	C	220.3	13.64	48	3220	C	715	136	43.0
MMC143	305.5	23.83	54	6160	C	262.4	19.12	50	4250	C	715	136	43.0
MMC144	348.4	22.69	54	6280	C	296.3	18.19	49	4300	C	954	177	55.9
MMB154	391.4	26.85	55	8090	C	333.6	21.48	49	5470	C	954	184	58.1
MMC154	432.7	28.36	55	7850	C	369.1	22.74	50	5350	C	1192	221	69.8
MMB164	468.4	32.22	56	9660	C	397.9	25.78	50	6540	C	1145	217	68.7
MMA174	493.2	35.55	57	11620	D	420.1	28.3	51	7700	C	1113	212	66.9
MMA184	563.7	40.63	58	13280	D	480.1	32.4	52	8800	C	1272	241	76.3
MXA112	60.3	6.38	48	1580	D	52.0	5.10	44	1040	C	119	26	8.2
MXB113	82.7	6.16	48	1510	C	70.8	4.91	44	1050	C	215	44	13.9
MXC114	102.9	6.12	48	1500	C	86.5	4.85	44	1050	B	358	72	22.8
MXA122	120.8	12.76	51	3160	D	103.9	10.21	47	2090	C	239	50	15.8
MXB123	163.2	12.32	51	3020	C	139.0	9.82	47	2100	C	429	84	26.5
MXC124	204.3	12.25	51	3010	C	171.5	9.70	47	2100	B	715	134	42.3
MXB133	244.8	18.48	53	4540	C	208.6	14.73	48	3150	C	644	121	38.2
MXC134	306.5	18.37	53	4520	C	257.3	14.55	48	3150	B	1073	201	63.5
MXC143	353.0	25.37	54	5940	C	300.4	20.13	49	4170	B	1073	200	63.2
MXC144	412.7	24.49	54	6020	C	346.4	19.40	49	4200	B	1431	263	83.1
MXB154	471.8	29.52	55	7690	C	399.3	23.52	50	5310	B	1431	263	83.1
MXC154	514.3	30.61	55	7500	C	432.5	24.2	50	5250	B	1789	328	103.5
MXB164	563.6	35.43	56	9180	C	476.6	28.2	52	6360	B	1717	314	99.3
MXA174	604.9	39.70	57	10990	C	512.6	31.8	52	7490	C	1669	308	97.5
MXA184	691.3	45.37	58	12560	C	585.8	36.4	53	8560	C	1907	352	111.2

Note: * Capacity quoted at 15 K DT1 Dew Point, ** Sound level quoted as mean pressure level at 10m

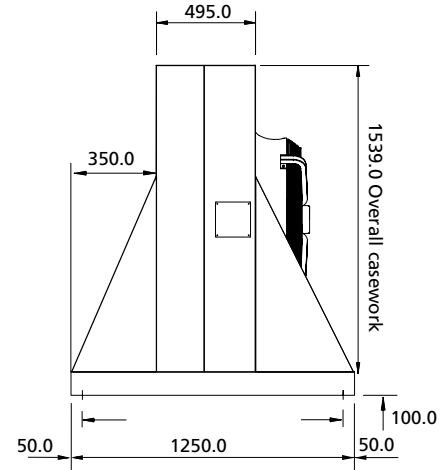
MM/MX Model Drawings



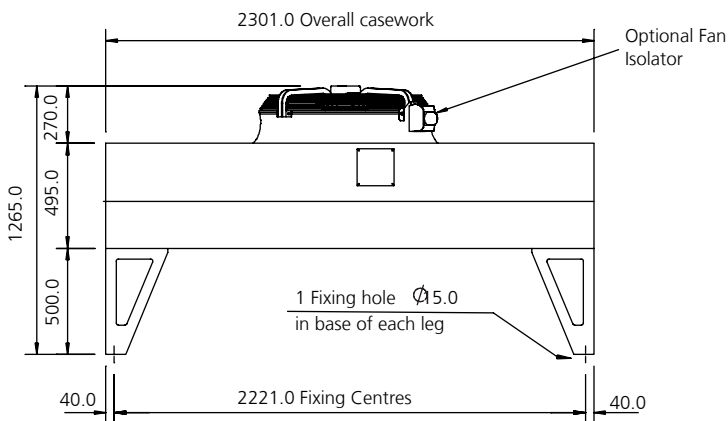
MM Horizontal Unit



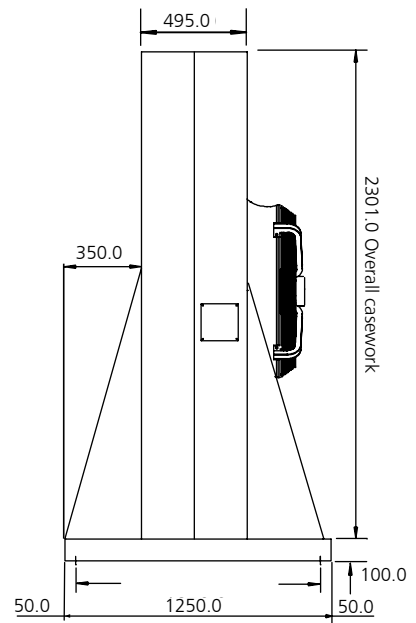
MM Vertical Unit



MX Horizontal Unit



MX Vertical Unit



Notes: All dimensions in mm. Common junction box will vary in size and position depending on the control option required.

Dimensions

Model MM/MX	Fans Per Bank	A	B1	B2	C	MM Total Unit		MX Total Unit	
						Dry Weight		Dry Weight	
						AL	CU	AL	CU
						kg	kg	kg	kg
M_A112	1	1203	—	—	1123	212	244	249	299
M_A113	1	1203	—	—	1123	237	287	278	352
M_A114	1	1203	—	—	1123	261	330	306	405
M_A122	2	2403	—	—	2323	348	414	413	512
M_A123	2	2403	—	—	2323	396	500	470	618
M_A124	2	2403	—	—	2323	444	589	527	725
M_A132	3	3603	—	—	3523	482	583	576	724
M_A133	3	3603	—	—	3523	553	711	661	883
M_A134	3	3603	—	—	3523	623	839	745	1042
M_A142	4	4803	2342	2382	4723	636	768	748	946
M_A143	4	4803	2342	2382	4723	732	939	861	11158
M_A144	4	4803	2342	2382	4723	828	1111	975	1370
M_A152	5	6003	2942	2982	5923	778	942	918	1165
M_A153	5	6003	2942	2982	5923	898	1157	1060	1431
M_A154	5	6003	2942	2982	5923	1017	1370	1201	1695
M_A162	6	7203	3542	3582	7123	909	1107	1073	1370
M_A163	6	7203	3542	3582	7123	1054	1364	1244	1689
M_A164	6	7203	3542	3582	7123	1197	1621	1414	2007
M_A172	7	8403	2341	2381	8323	1053	1284	1243	1589
M_A173	7	8403	2341	2381	8323	1222	1585	1442	1962
M_A174	7	8403	2341	2381	8323	1389	1884	1640	2332
M_A182	8	9603	3541	3581	9523	1194	1458	1409	1805
M_A183	8	9603	3541	3581	9523	1387	1802	1636	2230
M_A184	8	9603	3541	3581	9523	1578	2143	1863	2653
M_B112	1	1443	—	—	1363	249	285	278	337
M_B113	1	1443	—	—	1363	278	339	311	401
M_B114	1	1443	—	—	1363	309	392	346	465
M_B122	2	2883	—	—	2803	400	459	465	584
M_B123	2	2883	—	—	2803	457	557	532	710
M_B124	2	2883	—	—	2803	516	657	600	838
M_B132	3	4323	—	—	4243	549	629	650	828
M_B133	3	4323	—	—	4243	635	775	753	1020
M_B134	3	4323	—	—	4243	720	919	954	1210
M_B142	4	5763	2822	2862	5683	711	816	848	1093
M_B143	4	5763	2822	2862	5683	823	999	983	1329
M_B144	4	5763	2822	2862	5683	938	1189	1120	1594
M_B152	5	7203	3542	3582	7123	869	998	1042	1338
M_B153	5	7203	3542	3582	7123	1009	1234	1211	1656
M_B154	5	7203	3542	3582	7123	1151	1471	1381	1974
M_B162	6	8643	2821	2880	8563	1021	1172	1230	1606
M_B163	6	8643	2821	2880	8563	1189	1723	1434	1967
M_B164	6	8643	2821	2880	8563	1358	2056	1638	2349
M_C112	1	1803	—	—	1723	273	312	314	388
M_C113	1	1803	—	—	1723	309	376	356	467
M_C114	1	1803	—	—	1723	346	440	399	547
M_C122	2	3603	—	—	3523	439	504	536	684
M_C123	2	3603	—	—	3523	508	620	621	843
M_C124	2	3603	—	—	3523	578	737	706	1002
M_C132	3	5403	2642	2682	5323	602	691	776	998
M_C133	3	5403	2642	2682	5323	700	856	902	1236
M_C134	3	5403	2642	2682	5323	799	1021	1030	1475
M_C142	4	7203	3542	3582	7123	781	896	991	1287
M_C143	4	7203	3542	3582	7123	914	1117	1160	1605
M_C144	4	7203	3542	3582	7123	1047	1338	1330	1923
M_C152	5	9003	3541	1840	8923	955	1097	1222	1592
M_C153	5	9003	3541	1840	8923	1119	1370	1433	1989
M_C154	5	9003	3541	1840	8923	1285	1643	1645	2387

Notes:

Total unit dry weight is dependent upon the coil material used (AL = Copper tubes with Aluminium or Vinyl coated aluminium fins, CU = Copper tubes with Copper fins or Copper fins electro-tinned).



MV Condenser

The MV range extends the versatility of Searle's Air cooled condensers into a V-Bank configuration with a combination of 3 coil widths and 3 module lengths, 2 fans wide. The available range has a duty from 36kW to 1088kW.

GEA Searle achieves a close specification match by offering three module length options of 1200mm, 1440mm or 1800mm across three coil width options in the small footprint V-Bank formation. The MV...M has 2 x 1524mm high coils and the MV...L has 2 x 1905mm high coils with 2 fans wide, both sizes offer the choice of 2 to 8 fans in length. Combined with coil sizes from 2 to 4 row coils and multiple standard fan options up to 910mm, this range of V configuration units is comprehensive.

GEA Searle offers an EC fan, a highly efficient and very low noise complete control package. Full details of the EC fan and the best-suited application areas are included at the front of this brochure.

Due to the large number of options only a selection of the range is available in this catalogue, selection is best achieved using the Condenser data tables or the Searle selection software, either on-line at www.searle.co.uk or via the Searle Selection CD.





GEA Heat Exchangers

GEA Searle Ltd

20 Davis Way, Newgate Lane, Fareham, PO14 1AR
Tel. +44 (0) 1329 823344, Fax +44 (0) 1329 821242
sales@searle.co.uk, www.searle.co.uk

We reserve the right to change in whole or part, the specification detailed in this brochure without prior notice and, when necessary to achieve continuous production, to use alternative competitive designs of sub contract components made by various manufacturers.

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