Chiller | Product Information

FX2-G05 /E

Compact Air Cooled Chiller with Screw Compressors

The new generation of customisable screw compressor chillers has arrived with Mitsubishi Electric's range of **FX2** air cooled chillers. The second generation of this chiller family marks considerable developments in seasonal efficiency, footprint, noise, operating envelope and configuration and customisation.

The **FX2-G05 /E** is designed to strike the best balance between footprint and efficiency. This second generation of air cooled chiller is more compact that the first generation making it ideal for refurbishment projects. Larger cooling capacity is achieved by utilising the low GWP refrigerant R513A, which being non-flammable, has an ASHRAE A1 safety class.

The **FX2** is the ultimate configurable screw chiller; available with 2 different levels of noise performance, options for integrated fixed speed or variable speed hydronic pumps, multiple heat exchanger coating options, several refrigerant leak detection options, energy and thermal meters and multiple methods for group controls configuration. With a wide operating envelope, a **FX2** air cooled chiller can be made just the way you need it.

R513A CLIMAVENETA

Key Features & Benefits:

- Compressors using low GWP refrigerant
- Wide operating envelope for comfort and process applications
- EC Fans available as an option
- Variety of low noise versions to match your project requirements
- Exceptionally compact design
- Wide variety of customisations available including factory fitted hydronic pump(s) for fixed or variable waterflow
- Refrigerant leak detection logic that can detect leaks without additional sensors provided as standard
- Heat recovery option available either as partial or total recovery

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FX2-G05 /E			0352	0402	0452	0472	0572	0602	0652	0702	0772	0852	0902	1002	1052	1152	1222	1322	1402
Performance - Cooling Only																			
Gross Value [*1]																			
Total Cooling Capacity		kW	340.3	289.9	444.9	485.0	570.3	619.0	658.9	698.5	756.1	844.7	918.1	1001.0	1061.0	1133.0	1207.0	1311.0	1372.0
Total Power Input		kW	98.7	87.3	128.5	142.9	163.3	178.3	189.4	200.5	222.8	246.7	267.5	289.5	310.9	331.5	352.4	390.1	409.2
EER		kW/kW	3.448	3.321	3.462	3.394	3.492	3.472	3.479	3.484	3.394	3.424	3.432	3.458	3.414	3.418	3.425	3.361	3.353
EN14511 Values [*1 *2]																			
Total Cooling Capacity		kW	339.9	289.5	444.5	484.6	569.8	618.5	658.4	697.9	755.5	844.1	917.4	1000.0	1060.0	1132.0	1206.0	1310.0	1371.0
EER		kW/kW	3.41	3.28	3.43	3.36	3.45	3.44	3.44	3.44	3.36	3.39	3.39	3.41	3.37	3.37	3.38	3.33	3.32
Seasonal Performance [*3]																			
Prated,c		kW	339.9	289.5	444.5	484.6	569.8	618.5	658.4	697.9	755.5	844.1	917.4	1000.0	1060.0	1132.0	1206.0	1310.0	1371.0
SEER			4.63	4.52	4.69	4.66	4.72	4.64	4.66	4.73	4.71	4.71	4.74	4.79	4.72	4.74	4.74	4.66	4.69
Performance ηs		%	182	178	185	183	186	183	183	186	185	185	187	188	186	187	187	183	185
Heat Exchanger in Cooling [*1]																			
Water Flow	User Side	l/s	16.27	13.86	21.27	23.20	27.27	29.60	31.51	33.40	36.16	40.40	43.90	47.88	50.72	54.17	57.73	62.68	65.62
Pressure Drop [*2]	User Side	kPa	26.5	36.3	27.7	32.9	41.4	34.1	38.6	43.4	36.3	40	47.2	61.2	48.7	53.2	59.2	39.7	43.5
Electrical Data																			
Power Supply		V/ph/Hz	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
F.L.A. [*4]	Total	A	236	215	301	301	377	420	448	475	475	531	587	638	688	732	776	776	858
Exchangers																			
Minimum Water Flow	Evaporator	l/s	13.33	8.33	12.50	12.50	15.83	17.50	17.50	17.50	19.17	19.17	19.17	19.17	25.00	25.00	25.00	41.67	41.67
Minimum Water Content	Plant	l	1200	1000	1600	1700	2000	2200	2300	2400	2600	3000	3200	3500	3700	4000	4200	4600	4800
Fans																			
Quantity		No.	6	5	8	8	10	10	11	12	12	13	14	15	16	17	18	18	20
Airflow		m^3/s	31.90	26.58	42.53	42.53	53.17	53.17	58.48	63.80	63.80	69.12	74.43	79.75	85.07	90.38	95.70	95.70	106.33
Refrigerant Circuit																			
Compressors		No.	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Circuits		No.	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Refrigerant			R513A	R1234ze	R513A	R513A	R513A	R513A	R513A	R513A	R513A	R513A	R513A	R513A	R513A	R513A	R513A	R513A	R513A
Theoretical Refrigerant Charge [*5]		kg	65	55	86	94	109	117	126	134	143	160	173	188	200	213	227	244	258
Noise Levels																			
Total Sound Pressure [*6]		dB(A)	66	67	67	67	67	67	68	68	68	68	69	69	70	70	70	70	71
Total Sound Power Level in Cooling [*7]		dB(A)	98	99	99	99	100	100	101	101	101	101	102	102	103	103	103	103	104
Size and Weight [*8]																			
Width (A)		mm	4000	4000	5250	5250	6500	6500	7750	7750	7750	9000	9000	10250	10250	11650	11650	11650	12900
Depth (B)		mm	2260	2260	2260	2260	2260	2260	2260	2260	2260	2260	2260	2260	2260	2260	2260	2260	2260
Height (H)		mm	2640	2640	2640	2640	2640	2640	2640	2640	2640	2640	2640	2640	2640	2640	2640	2640	2640
Operation Weight		kg	3660	3560	4390	4440	5660	5960	6420	6550	6640	7530	8060	8570	8920	9430	9550	10490	11150

Eurovent Certified Data

Notes: 1. Plant (side) cooling exchanger water (in/out) 12°C/7°C; Source (side) heat exchanger air (in) 35°C. 2. Values in compliance with EN14511. 3. Parameter calculated according to [Regulation (EU) N. 2016/2281]. 4. Data valid for standard units without any additional options and only indicative. Safety values to be considered when cabling the unit for power supply and line-protection. Refer to databook. 5. Theoretical - refer to serial plate for actual charge volumes. 6. Average sound pressure level at 10m distance, unit in a free field on a reflective surface; non-binding value calculated from the sound power level. 7. Sound power on the basis of measurement taken in compliance with ISO 9614. Sound power level in cooling, outdoors. 8. Unit in standard configuration, without option accessories.

FX2-G05 /E
Compact Air Cooled Chiller
with Screw Compressors

FX2-G05 /SL-E			0352	0402	0452	0472	0572	0602	0652	0702	0772	0852	0902	1002	1052	1152	1222	1322	1402
Performance - Cooling Only																			
Gross Value *1																			
Total Cooling Capacity		kW	336.3	386.0	439.6	480.9	563.4	610.9	650.6	690.1	748.9	834.3	905.0	987.3	1046.0	1118.0	1191.0	1295.0	1355.0
Total Power Input		kW	97.46	110.70	126.70	142.10	161.20	176.80	187.40	198.10	221.90	245.30	265.50	287.70	309.20	329.80	350.70	390.70	408.00
EER		kW/kW	3.449	3.487	3.470	3.384	3.495	3.455	3.472	3.484	3.375	3.401	3.409	3.432	3.383	3.390	3.396	3.315	3.321
EN14511 Values *1 *2																			
Total Cooling Capacity		kW	335.9	385.6	439.3	480.5	562.9	610.4	650.1	689.5	748.3	833.7	904.3	986.6	1046.0	1117.0	1190.0	1294.0	1354.0
EER		kW/kW	3.42	3.45	3.44	3.35	3.45	3.42	3.43	3.44	3.34	3.37	3.37	3.38	3.34	3.35	3.35	3.28	3.29
Seasonal Performance *3																			
Prated,c		kW	335.9	385.6	439.3	480.5	562.9	610.4	650.1	689.5	748.3	833.7	904.3	986.6	1046.0	1117.0	1190.0	1294.0	1354.0
SEER			4.65	4.66	4.68	4.65	4.73	4.65	4.67	4.75	4.71	4.71	4.74	4.79	4.72	4.74	4.74	4.65	4.69
Performance ηs		%	183	183	184	183	186	183	184	187	186	186	187	189	186	187	187	183	185
Heat Exchanger in Cooling *1																			
Water Flow	User Side	l/s	16.08	18.46	21.02	23.00	26.94	29.21	31.11	33.00	35.81	39.90	43.28	47.22	50.04	53.45	56.95	61.94	64.80
Pressure Drop *2	User Side	kPa	25.9	34.1	27	32.3	40.4	33.2	37.6	42.3	35.6	39	45.9	59.5	47.4	51.8	57.6	38.8	42.4
Electrical Data																			
Power Supply		V/ph/Hz	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
F.L.A. *4	Total	A	236	272	301	301	377	420	448	475	475	531	587	638	688	732	776	776	858
Exchangers																			
Minimum Water Flow	Evaporator	l/s	13.06	13.33	12.50	12.50	15.83	17.50	17.50	17.50	19.17	19.17	19.17	19.17	25.00	25.00	25.00	41.67	41.67
Minimum Water Content	Plant	l	1200	1400	1600	1700	2000	2200	2300	2400	2600	3000	3200	3500	3700	4000	4200	4600	4800
Fans																			
Quantity		No.	6	8	8	8	10	10	11	12	12	13	14	15	16	17	18	18	20
Airflow		m^3/s	28.81	38.41	38.41	38.41	48.02	48.02	52.82	57.62	57.62	62.42	67.22	72.02	76.83	81.63	86.43	86.43	96.03
Refrigerant Circuit																			
Compressors		No.	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Circuits		No.	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Refrigerant			R513A	R513A	R513A	R513A	R513A	R513A	R513A	R513A	R513A	R513A	R513A	R513A	R513A	R513A	R513A	R513A	R513A
Theoretical Refrigerant Charge *5		kg	65	76	86	94	109	117	126	134	143	160	173	188	200	213	227	244	258
Noise Levels																			
Total Sound Pressure *6		dB(A)	56	57	57	57	57	58	58	59	59	59	59	59	60	60	60	60	62
Total Sound Power Level in Cooling *7		dB(A)	88	89	89	89	90	91	91	92	92	92	92	92	93	93	93	93	95
Size and Weight *8																			
Width (A)		mm	4000	5250	5250	5250	6500	6500	7750	7750	7750	9000	9000	10250	10250	11650	11650	11650	12900
Depth (B)		mm	2260	2260	2260	2260	2260	2260	2260	2260	2260	2260	2260	2260	2260	2260	2260	2260	2260
Height (H)		mm	2640	2640	2640	2640	2640	2640	2640	2640	2640	2640	2640	2640	2640	2640	2640	2640	2640
Operation Weight		kg	3930	4540	4660	4720	6200	6500	6960	7100	7190	8120	8690	9210	9560	10080	10200	11140	11810

Eurovent Certified Data

Notes: 1. Plant (side) cooling exchanger water (in/out) 12°C/7°C; Source (side) heat exchanger air (in) 35°C. 2. Values in compliance with EN14511. 3. Parameter calculated according to [Regulation (EU) N. 2016/2281]. 4. Data valid for standard units without any additional options and only indicative. Safety values to be considered when cabling the unit for power supply and line-protection. Refer to databook. 5. Theoretical - refer to serial plate for actual charge volumes. 6. Average sound pressure level at 10m distance, unit in a free field on a reflective surface; non-binding value calculated from the sound power level. 7. Sound power on the basis of measurement taken in compliance with ISO 9614. Sound power level in cooling, outdoors.
8. Unit in standard configuration, without option accessories.

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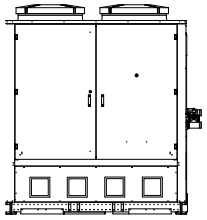
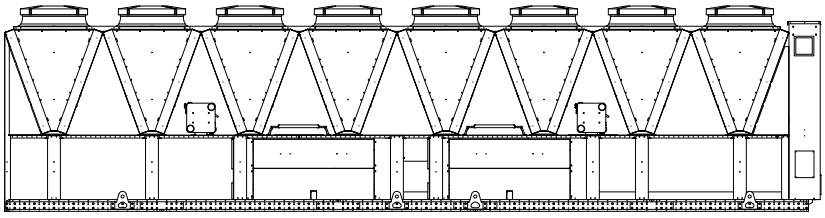
FX2-G05 /E DIMENSIONS AND CLEARANCES

All dimensions are in millimetres.

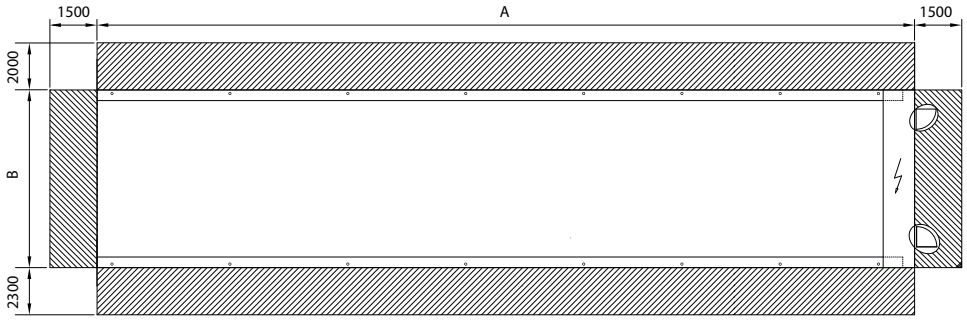
FRONT VIEW



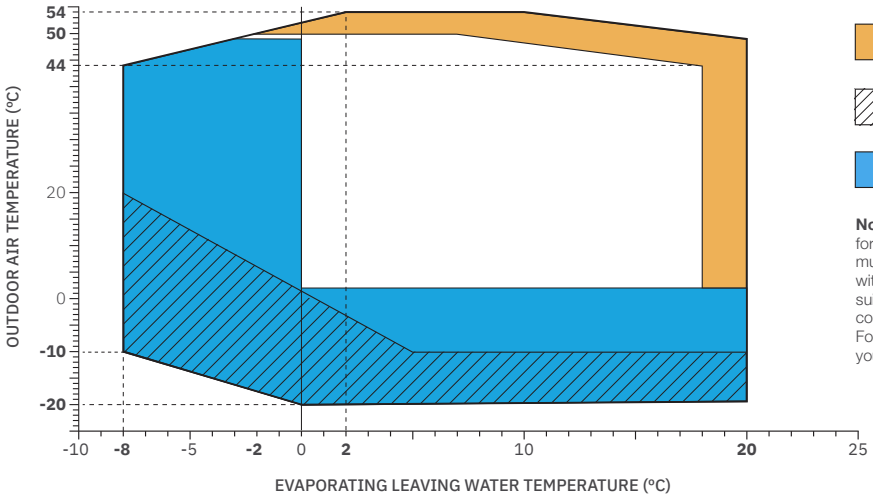
SIDE VIEW



TOP VIEW



FX2-G05 /E OPERATING ENVELOPES



Low noise version (-SL) not at full load. High temperature kit may be required

EC Fans required

Antifreeze and/or negative fluid temperature option(s) required

Note: Operating envelopes shown are indicative and should not be used only for design. Equipment to be used in low or negative ambient temperatures must be fitted with the low ambient options available. Equipment operating with low or negative evaporating leaving water temperature should use suitable type and concentration of glycol or similar. Additional installation considerations may be required at the limits of the operating envelope. For specific recommendations and limits of each model, please contact your local sales representative.

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Changes for the Better

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Note: The fuse rating is for guidance only and please refer to the relevant databook for detailed specification. It is the responsibility of a qualified electrician/electrical engineer to select the correct cable size and fuse rating based on current regulation and site specific conditions. Mitsubishi Electric's air conditioning equipment and heat pump systems contain a fluorinated greenhouse gas, R410A (GWP:2088), R32 (GWP:675), R407C (GWP:1774), R134a (GWP:1430), R513A (GWP:631), R454B (GWP:466), R515B (GWP:292), R454C (GWP:148), R1234ze (GWP:7) or R1234yf (GWP:4). *These GWP values are based on Regulation (EU) No 517/2014 from IPCC 4th edition. Mitsubishi Electric's air conditioning equipment and heat pump systems contain a hydrocarbon, R290 (GWP:0.02). *These GWP values are based on IPCC 6th edition.

Effective as of December 2025

Green Gateway greengateway.mitsubishielectric.co.uk