

# NR2-FC-G06-Z

## Air Cooled Chiller with Free Cooling using Scroll Compressors

The **NR2-FC-G06-Z** is our outdoor chiller with integrated free cooling utilising hermetic rotary Scroll compressors, with R454B refrigerant, axial-flow fans, shell and tubes exchanger and electronic expansion valve.

The range is composed of units equipped with four, five and six compressors in multi-circuit configuration. Available in 14 sizes from 354kw to 894kw cooling capacity and operating on R454B low GWP refrigerant making the **NR2-FC-G06-Z** best in class.

The **NR2-FC-G06-Z** is available as four different configurations for noise and efficiency performance (K, SL-K, A, SL-A), with a wide operating range from 5°C to +24°C evaporator leaving water temperatures (ELWT) and ambient temperatures from 48°C to -30°C. The **NR2-FC-G06-Z** can also be fitted with a range of options including Soft Start, energy meters, BEMS interface cards and on-board hydronic kits.

**R454B**



### Key Features & Benefits:

- Best-in-class seasonal efficiency in a compact footprint
- Available in 'No Glycol' versions
- High efficiency scroll compressors providing a multi refrigeration circuit
- EC Fans available as an option for improved efficiency (standard on A version)
- Four different configurations for noise and efficiency performance available (K, SL-K, A, SL-A)
- Lower GWP refrigerant R454B
- Available options include; inbuilt hydronic pumps, energy meters, Refrigerant leak detection, dual power supply and many more
- Microchannel MCHX for condenser coil and Cu/Al for free cooling coil.
- Fast Restart fitted as standard



NR2-FC-G06-Z / A		0384	0414	0434	0462	0494	0524	0554	0594	0624	0685	0746	0836	0866	0926
<b>MECHANICAL COOLING (30°C / 20°C) <sup>1</sup></b>															
COOLING CAPACITY	kW	359.8	388.7	416.7	444.1	471.0	501.6	531.8	569.6	607.7	660.6	699.5	805.6	835.8	895.0
COMPRESSOR POWER INPUT	kW	76.53	79.48	82.67	86.03	89.52	96.89	104.5	108.7	113.1	122.3	137.2	153.4	160.9	176.3
TOTAL POWER INPUT	kW	86.70	91.40	96.30	101.3	106.5	113.9	121.5	127.4	133.5	146.1	161.0	180.6	188.1	203.5
EER	kW/kW	4.15	4.25	4.33	4.38	4.42	4.40	4.38	4.47	4.55	4.52	4.35	4.46	4.44	4.40
<b>TOTAL FREE-COOLING (30°C / 20°C) <sup>2</sup></b>															
TOTAL FREE-COOLING OCCURS AT	°C	10.7	11.3	11.8	12.0	12.3	12.0	11.6	11.7	11.9	12.3	11.9	11.9	11.7	11.1
COOLING CAPACITY	kW	359.8	388.7	416.7	444.1	471.0	501.6	531.8	569.6	607.7	660.6	699.5	805.6	835.8	895.0
TOTAL POWER INPUT	kW	10.20	11.90	13.60	15.30	17.00	17.00	17.00	18.70	20.40	23.80	23.80	27.20	27.20	27.20
EER	kW/kW	35.27	32.66	30.64	29.03	27.71	29.51	31.28	30.46	29.79	27.76	29.39	29.62	30.73	32.90
<b>MECHANICAL COOLING (16°C / 10°C) <sup>3</sup></b>															
COOLING CAPACITY	kW	279.4	301.2	322.3	343.0	363.3	387.2	410.7	439.3	468.1	508.8	540.4	621.3	644.9	691.2
COMPRESSOR POWER INPUT	kW	73.56	76.84	80.32	83.94	87.66	94.65	101.8	106.5	111.3	120.4	133.7	150.3	157.3	171.7
TOTAL POWER INPUT	kW	83.80	88.70	93.90	99.20	104.7	111.6	118.8	125.2	131.7	144.2	157.5	177.5	184.5	198.9
EER	kW/kW	3.33	3.39	3.43	3.45	3.47	3.47	3.45	3.50	3.55	3.52	3.43	3.50	3.49	3.47
<b>TOTAL FREE-COOLING (16°C / 10°C) <sup>4</sup></b>															
TOTAL FREE-COOLING OCCURS AT	°C	2.9	3.5	3.9	4.1	4.3	4.0	3.7	3.8	4.0	4.3	4.0	4.0	3.8	3.3
COOLING CAPACITY	kW	279.4	301.2	322.3	343.0	363.3	387.2	410.7	439.3	468.1	508.8	540.4	621.3	644.9	691.2
TOTAL POWER INPUT	kW	10.20	11.90	13.60	15.30	17.00	17.00	17.00	18.70	20.40	23.80	23.80	27.20	27.20	27.20
EER	kW/kW	27.39	25.31	23.70	22.42	21.37	22.78	24.16	23.49	22.95	21.38	22.71	22.84	23.71	25.41
<b>SEASONAL EFFICIENCY IN COOLING (REG. EU 2016/2281) <sup>8</sup></b>															
PRATED,C	kW	262.2	282.4	301.9	321.3	340.2	362.7	384.8	411.5	438.3	476.3	506.2	581.9	604.1	647.8
SEPR HT		7.20	7.24	7.18	7.16	7.10	7.12	7.24	7.26	7.31	7.33	7.39	7.48	7.40	7.59
<b>ELECTRICAL DATA</b>															
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	400/3/51	400/3/52	400/3/53	400/3/54	400/3/55
MAX F.L.A. <sup>7</sup>	Total A	201	217	233	249	265	280	295	312	329	365	395	445	459	488
<b>EXCHANGERS</b>															
MINIMUM WATER FLOW IN COOLING	Evaporator l/s	6.66	6.66	6.66	8.33	8.33	8.61	8.61	9.44	9.44	9.44	13.69	13.69	13.69	13.69
MINIMUM SYSTEM VOLUME	l	940	1020	1100	1180	1250	1320	1400	1500	1600	1750	1850	2120	2200	2350
<b>REFRIGERANT CIRCUIT</b>															
COMPRESSORS	No.	4	4	4	4	4	4	4	4	4	5	6	6	6	6
CIRCUITS	No.	2	2	2	2	2	2	2	2	2	2	2	2	3	2
THEORETICAL REFRIGERANT CHARGE	kg	36.0	40.5	46.8	58.5	60.3	60.3	63.0	69.3	72.9	75.6	77.4	80.1	80.1	80.1
<b>NOISE LEVELS</b>															
TOTAL SOUND PRESSURE <sup>5</sup>	dB(A)	63	63	64	63	64	64	64	64	65	65	65	65	66	66
TOTAL SOUND POWER LEVEL IN COOLING <sup>6</sup>	dB(A)	95	95	96	96	97	97	97	97	98	98	98	98	99	99
<b>SIZE AND WEIGHT <sup>7</sup></b>															
WIDTH (A)	mm	3905	5080	5080	6255	6255	6255	6255	7430	7430	8605	8605	9780	9780	9780
DEPTH (B)	mm	2260	2260	2260	2260	2260	2260	2260	2260	2260	2260	2260	2260	2260	2260
HEIGHT (H)	mm	2560	2560	2560	2560	2560	2560	2560	2560	2560	2560	2560	2560	2560	2560
OPERATION WEIGHT	kg	3160	3580	3770	4600	4790	4820	4840	5220	5400	6140	6610	7170	7180	7210

**Notes:**

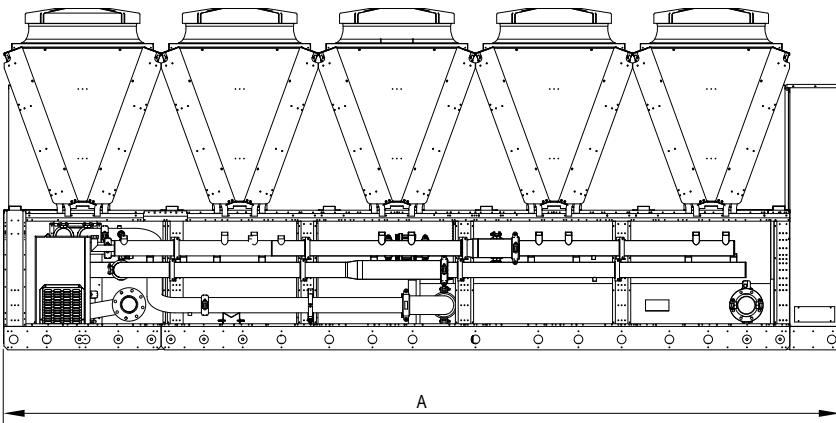
- <sup>1</sup> Gross Value. Plant (side) cooling exchanger water (in/out) 30.00°C/20.00°C; Source (side) heat exchanger air (in) 35.0°C; Ethylene glycol 30%.
- <sup>2</sup> Gross Value. Plant (side) cooling exchanger water (in/out) 30.00°C/20.00°C; Ethylene glycol 30%.
- <sup>3</sup> Gross Values. Plant (side) cooling exchanger water (in/out) 16.00°C/10.00°C; Source (side) heat exchanger air (in) 35.0°C; Ethylene glycol 30%.
- <sup>4</sup> Gross Values. Plant (side) cooling exchanger water (in/out) 16.00°C/10.00°C; Ethylene glycol 30%.
- <sup>5</sup> 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.
- <sup>6</sup> Sound power on the basis of measurements taken in compliance with ISO 9614.
- <sup>7</sup> Unit in standard configuration, without optional accessories.
- <sup>8</sup> Seasonal energy efficiency of high temperature process cooling; REGULATION (EU) N. 2016/2281.

General - Other models are available to suit noise or efficiency (K, SL-K, SL-A) including No Glycol (NG) hydraulic version. Models shown here are high efficiency "A" versions

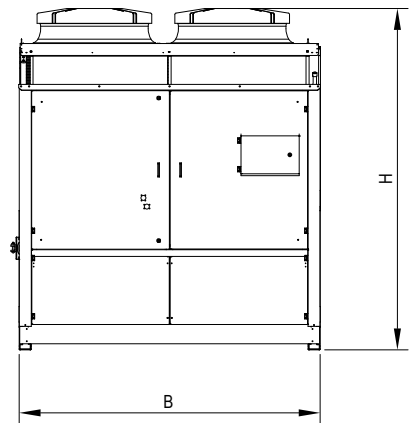
**NR2-FC-G06-Z DIMENSIONS**

All dimensions are in millimetres

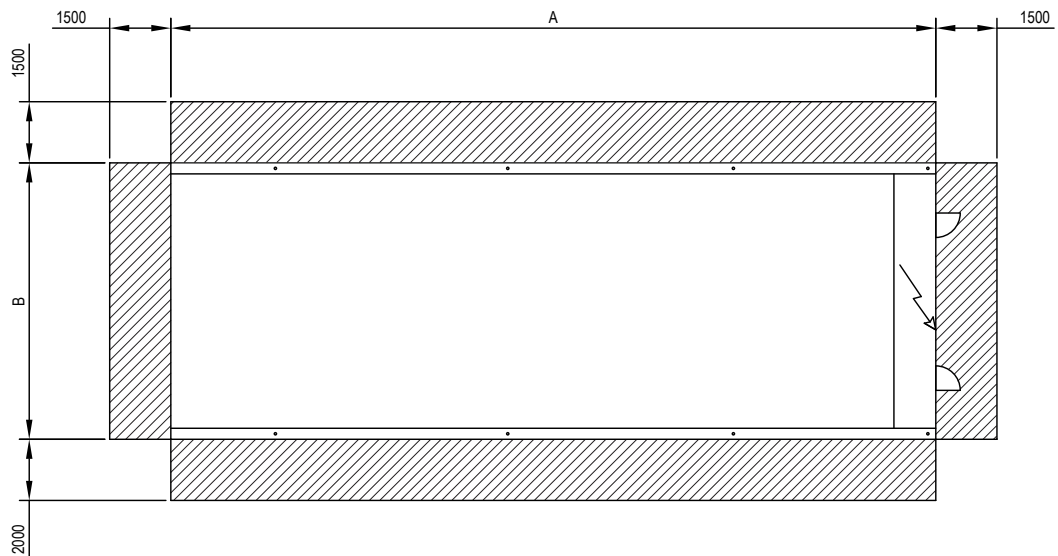
SIDE VIEW



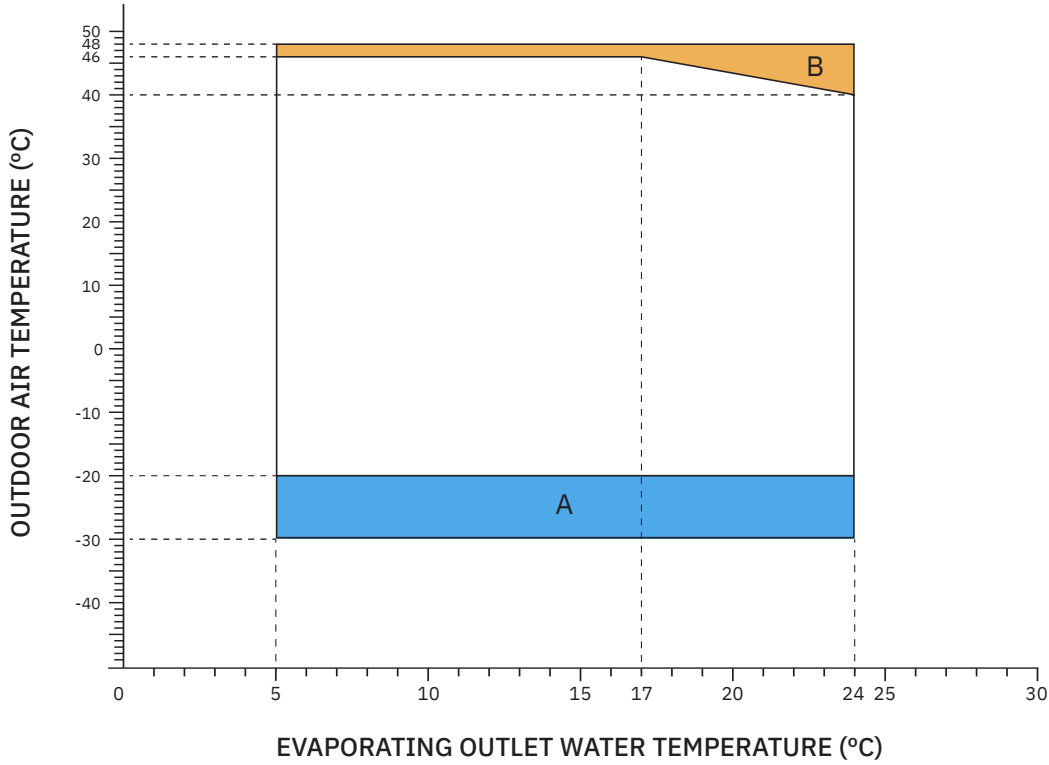
FRONT VIEW



TOP VIEW



**NR2-FC-G06-Z OPERATING ENVELOPES**



- A** Low temperature options required
- B** Outside of operating envelope for some models or unsilenced operations

**Note:** Additional limitations for all models depending on evaporator water outlet temperature and delta T across evaporator.

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.



Telephone: 01707 282880  
email: [air.conditioning@meuk.mee.com](mailto:air.conditioning@meuk.mee.com)  
[les.mitsubishielectric.co.uk](http://les.mitsubishielectric.co.uk)



@meuk\_les @green\_gateway Mitsubishi Electric Living Environmental Systems UK Mitsubishi Electric Cooling and Heating UK mitsubishielectricuk\_les Mitsubishi Electric Living Environmental Systems UK BLOG thehub.mitsubishielectric.co.uk

UNITED KINGDOM Mitsubishi Electric Europe Living Environment Systems Division, Travellers Lane, Hatfield, Hertfordshire, AL10 8XB, England. Telephone: 01707 282880  
IRELAND Mitsubishi Electric Europe, Plunkett House, Grange Castle Business Park, Nangor Road, Dublin 22, Ireland. Telephone: (00353) 1 4198800 Email: [sales.info@meir.mee.com](mailto:sales.info@meir.mee.com) Web: [les.mitsubishielectric.ie](http://les.mitsubishielectric.ie)

Country of origin: United Kingdom - Italy - Turkey - Japan - Thailand - Malaysia. ©Mitsubishi Electric Europe 2025. Mitsubishi and Mitsubishi Electric are trademarks of Mitsubishi Electric Europe B.V. The company reserves the right to make any variation in technical specification to the equipment described, or to withdraw or replace products without prior notification or public announcement. Mitsubishi Electric is constantly developing and improving its products. All descriptions, illustrations, drawings and specifications in this publication present only general particulars and shall not form part of any contract. All goods are supplied subject to the Company's General Conditions of Sale, a copy of which is available on request. Third-party product and brand names may be trademarks or registered trademarks of their respective owners.

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), R290 (GWP:3), R32 (GWP:675), R407C (GWP:1774), R134a (GWP:1430), R513A (GWP:631), R454B (GWP:466), 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. In case of Regulation (EU) No.626/2011 from IPCC 3rd edition, these are as follows. R410A (GWP:1975), R32 (GWP:550), R407C (GWP:1650) or R134a (GWP:1300).

Effective as of February 2025

