

R2 Series High Efficiency Heat Recovery (50-67kW)



The **City Multi R2 Series High Efficiency Heat Recovery** system delivers exceptional seasonal energy performance, providing simultaneous heating and cooling while redistributing surplus heat where it's needed. This advanced heat recovery approach can achieve up to 30% energy savings over conventional systems.

As the only 2-pipe heat recovery solution on the market, the modular City Multi R2 Series simplifies installation and maintenance while offering complete design flexibility for applications such as hotels, offices, and leisure spaces.



Key Features & Benefits:

- **Heat Recovery Operation** - Delivers up to 30% energy savings compared to heat pump systems through advanced heat recovery
- **Lower GWP R32 Refrigerant** - for reduced carbon impact and future-ready legislation compliance
- **Simultaneous Heating & Cooling** - Meets diverse comfort needs across different zones at the same time for optimal occupant satisfaction
- **Unique 2-Pipe System** - Simplifies installation and maintenance while reducing system complexity
- **Ultra-Compact Modular Design** - Smaller unit footprint allows installation in tight spaces without compromising on performance
- **Broad Indoor Unit Compatibility** - Connects to a wide range of unit types and capacities, making it suitable for varied building applications
- **Patented Vertical Flat Tube Heat Exchanger** - Maximises heat exchange efficiency, reducing energy consumption and run costs
- **Reduced Refrigerant Charge** - Uses less refrigerant than the YXM standard efficiency model, lowering embodied carbon and whole-life carbon impact
- **Extended Heating Range (-25°C)** - Ensures reliable heating even in severe winter conditions by maintaining efficient system operation
- **Easy-to-Maintain Safety Feature Options** - For reduced onsite time and costs while supporting occupant peace of mind
- **Enhanced Defrost Technology** - Reduces system downtime during defrost cycles, minimising temperature fluctuations and maintaining reliable indoor heating for consistent occupant comfort
- **Low Noise Operation** - Features a 5-step low noise mode that minimises sound levels for quieter surroundings
- **113m Vertical Height Separation** - Offers generous height allowance between indoor and outdoor units, enabling design flexibility in larger buildings



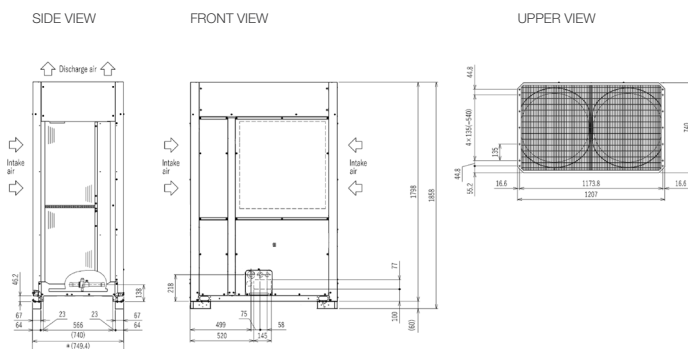
R32



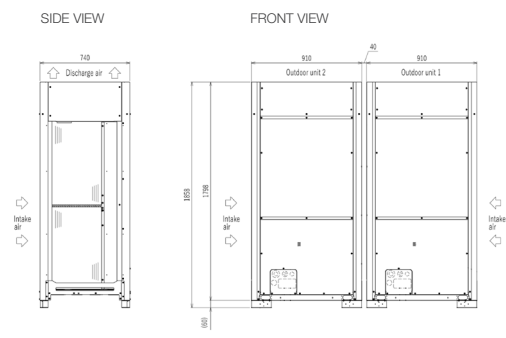
PURY-EM-Y(S)XM-A OUTDOOR UNITS		PURY-EM450YXM-A	PURY-EM450YSXM-A	PURY-EM500YXM-A	PURY-EM500YSXM-A	PURY-EM550YSXM-A	PURY-EM600YSXM-A
CAPACITY (kW)	Heating (nominal max)	56.0	56.5	58.0	63.0	69.0	75.0
	Cooling (nominal)	50.0	50.4	56.0	56.0	61.5	67.0
	High Performance Heating (UK)	52.6	56.5	53.9	63.0	62.1	71.3
	COP Priority Heating (UK)	49.3	54.2	51.0	60.5	66.2	72.0
	Cooling (UK)	44.8	45.1	50.1	50.1	55.0	60.0
POWER INPUT (kW)	Heating (nominal max)	16.37	13.38	17.21	15.40	17.20	19.08
	Cooling (nominal)	14.83	11.72	17.33	13.96	15.33	16.70
	High Performance Heating (UK)	19.15	18.20	20.14	20.94	24.08	26.71
	COP Priority Heating (UK)	17.35	16.19	18.24	18.63	20.81	23.09
	Cooling (UK)	13.64	10.31	16.12	12.28	13.49	14.70
COP / EER (nominal max)		3.42 / 3.37	4.22 / 4.30	3.37 / 3.23	4.09 / 4.01	4.01 / 4.01	3.93 / 4.01
SCOP / SEER		4.45 / 7.82	4.69 / 8.44	4.35 / 7.35	4.68 / 8.24	4.69 / 8.46	4.71 / 8.67
MAX NO. OF CONNECTABLE INDOOR UNITS		33	33	36	36	40	44
MAX CONNECTABLE CAPACITY		50~150% OU Capacity	50~150% OU Capacity	50~150% OU Capacity	50~150% OU Capacity	50~150% OU Capacity	50~150% OU Capacity
AIRFLOW (m³/min)	High	315	170 / 170	315	170 / 170	200 / 170	200 / 200
	Gas	28.58 (1-1/8")	28.58 (1-1/8")	28.58 (1-1/8")	28.58 (1-1/8")	28.58 (1-1/8")	28.58 (1-1/8")
PIPE SIZE mm (in)	Liquid	22.2 (7/8")	22.2 (7/8")	22.2 (7/8")	22.2 (7/8")	22.2 (7/8") / 28.58 (1-1/8") ¹	22.2 (7/8") / 28.58 (1-1/8") ¹
	Heating / Cooling	68.0 / 62.5	61.0 / 60.0	68.5 / 67.0	62.0 / 60.0	64.0 / 62.0	66.0 / 64.0
SOUND PRESSURE LEVEL (dBA) @ 1m		89.0 / 83.0	82.0 / 80.0	91.0 / 87.0	83.0 / 82.0	85.0 / 83.0	87.0 / 84.0
SOUND POWER LEVEL (dBA) @ 100% Capacity		87.0 / 81.0	79.5 / 76.5	88.0 / 85.0	80.0 / 77.0	83.2 / 77.6	85.0 / 80.0
SOUND POWER LEVEL (dBA) @ 90% Capacity		83.0 / 77.0	76.1 / 73.5	84.0 / 81.0	77.0 / 74.0	79.4 / 73.8	81.0 / 76.0
SOUND POWER LEVEL (dBA) @ 75% Capacity		317	272 + 272	317	272 + 272	273 + 272	273 + 273
WEIGHT (kg)		1207	910 + 910	1207	910 + 910	910 + 910	910 + 910
DIMENSIONS (mm)	Width	740	740	740	740	740	740
	Depth	1858	1858	1858	1858	1858	1858
	Height	1858	1858	1858	1858	1858	1858
(1798mm without legs)		380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz	380-415v, 50Hz
ELECTRICAL SUPPLY ²		Three	Three	Three	Three	Three	Three
PHASE ²		8	8	8	8	8	8
STARTING CURRENT (A) ²		26.2 / 23.7 [30.2]	21.4 / 18.7 [21.3 + 21.3]	27.6 / 27.7 [33.3]	24.6 / 22.3 [21.3 + 21.3]	27.5 / 24.5 [21.3 + 26.5]	30.5 / 26.7 [26.5 + 26.5]
NOMINAL SYSTEM RUNNING CURRENT (A) ²		Heating / Cooling [MAX]	Heating / Cooling [MAX]	Heating / Cooling [MAX]	Heating / Cooling [MAX]	Heating / Cooling [MAX]	Heating / Cooling [MAX]
GUARANTEED OPERATING RANGE (°C)		-25~15.5 / -5~52	-25~15.5 / -5~52	-25~15.5 / -5~52	-25~15.5 / -5~52	-25~15.5 / -5~52	-25~15.5 / -5~52
FUSE RATING (MCB sizes BS EN 60947-2) - (A) ²		1 x 32	1 x 25 / 1 x 25	1 x 40	1 x 25 / 1 x 25	1 x 25 / 1 x 32	1 x 32 / 1 x 32
MAINS CABLE No. Cores ²		4 + earth	4 + earth / 4 + earth	4 + earth	4 + earth / 4 + earth	4 + earth	4 + earth / 4 + earth
CHARGE REFRIGERANT (kg) / CO ₂ EQUIVALENT (l) R32 (GWP 675)		6.3 / 4.3	10.6 / 7.2	6.3 / 4.3	10.6 / 7.2	10.6 / 7.2	10.6 / 7.2
MAX ADDITIONAL REFRIGERANT (kg) / CO ₂ EQUIVALENT (l) R32 (GWP 675)		31.6 / 21.3	48.9 / 33.0	31.6 / 21.3	50.7 / 34.2	51.6 / 34.8	52.0 / 35.1

Notes: ErP Lot 6 calculation method to EN14825. *1 If distance from OU to BC controller is greater than 65m. *2 A separate power supply is required for each module. Where more than one figure is quoted there are multiple modules.

PURY-EM450/500YXM-A DIMENSIONS



PURY-EM450/500/550/600YSXM-A DIMENSIONS



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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 August 2026

