



Heat Recovery Unit (Landlord's) – Technical Submittal (TSM)

Project: Angel Meadows, Plots 2 & 3
Project No: MC1120
TSM No: MC1120/TSM011
Revision: B
Date: 22nd November 2019

Revision Notes:

- 1) Units removed; where AHUs are now being installed.

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CARBONCONSULTANTS



ameon

Building Services Engineering

Heat Recovery Units (Landlord's) Technical Submittal



Project Angel Meadows, Plots 2 & 3
Project No. MC1120
Tech Submittal No. MC1120/TSM011
Revision B
Date 12/11/2019

Ref	Building	Location	Serving	Manufacturer	Model	Description	Air Vol (l/s)	ESP (Pa)	Max SFP (W/l/s)	Weight (kg)	Width (mm)	Depth (mm)	Height (mm)
HRU/01	2	GF - Refuse Store	B1 + GF Landlord Areas	Mitsubishi	LGH-200RVX-E-1	LGH-200RVX-E-1 LOSSNAY HEAT EXCHANGER	439	222	1.53	110.00	1144	1231	808
HRU/02	3	GF - Refuse Store	B1 + GF Landlord Areas	Mitsubishi	LGH-150RVX-E-1	LGH-150RVX-E-1 LOSSNAY HEAT EXCHANGER	372	283	0.99	98.00	1144	1004	808

- Notes:**
- 1) Each Mitsubishi unit to have local PZ-61DR-E control and interfaced wih BMS to provide 'Fault' indication.
 - 2) Floor Standing AHUs to have standalone controls panel interfaced with BMs to provide common 'Fault' indication.
 - 3) Units are supplied with 2 standard (G3) filters (1 supply, 1 extract) that can be washed up to 4 times
 - 4) Units to be suspended from slab, utilising ceiling suspension fixtures. Detail appended.
 - 5)



The **LGH-RVX-E** is designed to supply fresh air into any commercial building whilst simultaneously extracting stale air. The Lossnay units also recover valuable heat energy for maximum efficiency, with total heat exchange.

Key Features

- Clean, fresh air
- Energy efficient heat recovery
- Can be used in conjunction with Mr Slim and City Multi for highly efficient and effective operation

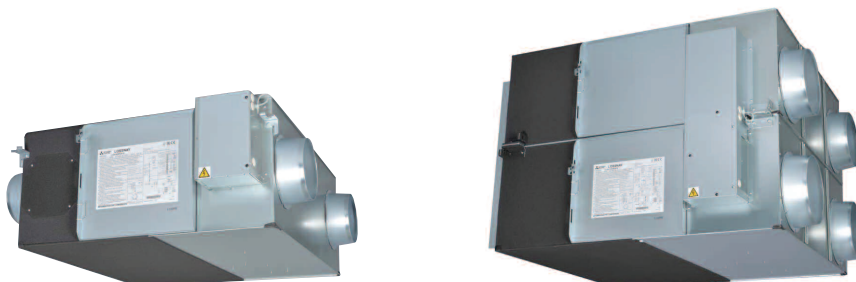


Ventilation

Product Information

LGH-RVX-E Commercial Lossnay

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COMMERCIAL MODELS			LGH15RVX-E	LGH25RVX-E	LGH35RVX-E	LGH50RVX-E	LGH65RVX-E	LGH80RVX-E	LGH100RVX-E	LGH150RVX-E	LGH200RVX-E
ELECTRICAL POWER SUPPLY			220-240V, 50Hz	220-240V, 50Hz	220-240V, 50Hz	220-240V, 50Hz	220-240V, 50Hz	220-240V, 50Hz	220-240V, 50Hz	220-240V, 50Hz	220-240V, 50Hz
RUNNING CURRENT (A)	SP1		0.10	0.10	0.12	0.13	0.15	0.15	0.17	0.29	0.33
	SP2		0.15	0.16	0.26	0.26	0.39	0.36	0.50	0.70	0.88
	SP3		0.24	0.28	0.54	0.59	0.90	0.83	1.20	1.75	2.20
	SP4		0.40	0.48	0.98	1.15	1.65	1.82	2.50	3.71	4.88
INPUT POWER (W)	SP1		7	8	11	12	15	18	21	38	42
	SP2		14	16	31	32	49	60	75	123	153
	SP3		28	33	70	78	131	151	200	311	400
	SP4		49	62	140	165	252	335	420	670	850
AIRFLOW (m³/h)²	SP1		38	63	88	125	163	200	250	375	500
	SP2		75	125	175	250	325	400	500	750	1000
	SP3		113	188	263	375	488	600	750	1125	1500
	SP4		150	250	350	500	650	800	1000	1500	2000
AIRFLOW (l/s)²	SP1		10	17	24	35	45	56	69	104	139
	SP2		21	35	49	69	90	111	139	208	278
	SP3		31	52	73	104	135	167	208	313	417
	SP4		42	69	97	139	181	222	278	417	556
SPECIFIC FAN POWER (W/(l/s))	SP1		0.70	0.47	0.46	0.34	0.33	0.32	0.30	0.37	0.30
	SP2		0.67	0.46	0.63	0.46	0.54	0.54	0.54	0.59	0.55
	SP3		0.90	0.63	0.96	0.75	0.97	0.90	0.96	0.99	0.96
	SP4		1.17	0.90	1.44	1.19	1.39	1.51	1.51	1.61	1.53
EXTERNAL STATIC PRESSURE (Pa)	SP1		6	5	10	8	8	10	11	11	10
	SP2		24	21	40	30	30	38	43	44	38
	SP3		54	48	90	68	68	85	96	98	84
	SP4		95	85	160	120	120	150	170	175	150
SOUND PRESSURE LEVEL (dBA)	SP1		17	17	17	18	18	18	18	18	18
	SP2		19	20	20	19	22	23	23	24	28
	SP3		24	22	28	28	29	30	31	32	36
	SP4		28	27	32	34	34.5	34.5	37	39	40
TEMPERATURE EXCHANGE EFFICIENCY (%)	SP1		84	86	88.5	87	86	85	89.5	85	89.5
	SP2		83	82	86	83.5	84	84	86.5	84	86.5
	SP3		81	80	82.5	81	81	82.5	83	82.5	83
	SP4		80	79	80	78	77	79	80	80	80
ENTHALPY EXCHANGE EFFICIENCY (%)	Heating	SP1	79	83	83.5	82.5	82	81	87	81	87
		SP2	78	76	78.5	75	76	78	78	78	78
		SP3	75.5	72	74	71	71	73.5	74	73.5	74
		SP4	73	69.5	71.5	69	68.5	71	72.5	72	72.5
	Cooling	SP1	79	83	82	82	81	81	85.5	81	85.5
		SP2	78	74.5	78	72.5	74	78	77	78	77
		SP3	74.5	70	73	68	69.5	72.5	73	72.5	73
		SP4	71	68	71	66.5	66	70	71	70.5	71
WEIGHT (kg)			20	23	30	33	38	48	54	98	110
DIMENSIONS (mm) Width x Depth x Height			780 x 610 x 289	780 x 735 x 289	888 x 874 x 331	888 x 1016 x 331	908 x 954 x 404	1144 x 1004 x 404	1144 x 1231 x 404	1144 x 1004 x 808	1144 x 1231 x 808
DUCT SIZE (mm)			100	150	150	200	200	250	250	(SA,RA) 250 (OAE) 270 x 700	(SA,RA) 250 (OAE) 270 x 700
STANDARD FILTER ^{*1}			EU-G3	EU-G3	EU-G3	EU-G3	EU-G3	EU-G3	EU-G3	EU-G3	EU-G3
FUSE RATING (BS88) – HRC (A)			6	6	6	6	6	6	6	10	10

Notes: Running Current, Input Power and Recovery Efficiency are based on the above airflow rate, power supply 240v, 50Hz. Sound Pressure Level measured at 1.5m under the centre of panel.

*1: EU-F7 filter available as optional parts. *2: Airflow tested to Japan industrial standard JIS B 8628. SP1, SP2, SP3 & SP4 relate to the fan speeds of the Lossnay RVX units i.e. fanspeed 1, 2, 3 & 4.

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Effective as of September 2017

2-5. LOSSNAY remote controller for LGH-RVX-E [PZ-61DR-E]

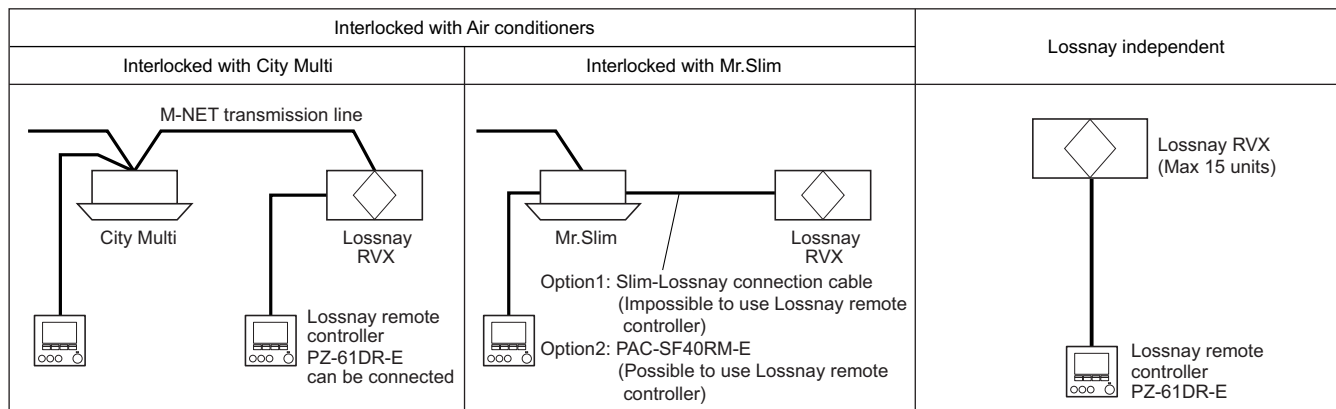


■ Functions

Function (Communicating mode)	PZ-61DR-E
Fan speed selection	4 fan speeds
Ventilation mode selection	Energy recovery/Bypass/Auto
Night-purge (time)	Any time selectable
Night-purge (fan speed)	Selectable from 4 fan speeds
Dip-switch setting and function setting from RC	Yes
Bypass temp. free setting	Yes
Heater-On temp. free setting	Yes
Fan power up after installation	Yes
0 - 10VDC external input	Yes
ON/OFF timer	Yes
Auto-Off timer	Yes
Weekly timer	Yes
Operation restrictions (ON/OFF, Ventilation mode, fan speed)	Yes
Operation restrictions (Fan speed skip setting)	Yes
Screen contrast adjustment	Yes
Language selection	Yes (8 languages)
Initializing remote controller	Yes
Filter cleaning sign	Yes
Lossnay core cleaning sign	Yes
Error indication	Yes
Error history	Yes
OA/RA/SA temp. display	Yes

- Stand-alone LOSSNAY operation is possible by commands from a centralized controller or LOSSNAY remote controller.
(AE-200E is a centralized controller that supports LOSSNAY operation.)
- The LOSSNAY remote controller is capable of changing the air flow and vent modes.
- All the wiring is cross-wiring that uses non-polar two wire system signal cables.
 - * It is possible to use a LOSSNAY remote controller for LOSSNAY unit that is interlocked with other indoor units.
 - * It is not possible to connect to LGH-RX5-E.

■ System example



■ External dimension

