

# MSZ-LN25VG2

### CIBSE TM65 Embodied Carbon Mid-level Calculation

**Embodied Carbon Result with Assesment Date:** 17th June 2021 'Mid-level TM65 Calculation' Assessor / **Method Total:** Organisation: Mitsubishi Electric **169** (kg CO<sub>2</sub>e) **Contact:** embodied.carbon@meuk.mee.com **Embodied Carbon Results** without Refrigerant Leakage (kg CO<sub>2</sub>e) 169 **Embodied Carbon Results -**Refrigerant Leakage Only (kg CO<sub>2</sub>e) 100 120 140 180 20 40 60 80 160 kg CO<sub>2</sub>e

### **MSZ-LN25 - Product Information**

Type of product	Split Type Indoor
Capacity of equipment (kW)	2
Product weight (kg)	15.5
Material breakdown for at least 95% of the product weight? (Y/N)	Υ
Service life of the product (years)	15
Type of refrigerant	R32
Refrigerant GWP	675
Energy consumption of the factory per unit of product (kWh)	0.0026
Location of manufacture	Asia
Product Complexity	Category 3: High





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Embodied Carbon Results Breakdown (kg CO <sub>2</sub> e)	
A1: Material extraction	101
A2: Transport	12
A3: Manufacturing	0.47
A4: Transport to Site	4
B1: Use	-
B3: Repair	12
C1: Deconstruction	-
C2: Transport	0.2
C3: Waste Processing	0
C4: Disposal	0.04

Embodied Carbon Results - Without Reingerant Leakage (kg CO <sub>2</sub> e)	
A1-C4 (excluding B1,C1)	130
A1-C4 with Buffer Factor (excluding B1, C1)	169

### Embodied Carbon Result - Refrigerant Leakage Only (kg CO2e)

B1 (Refrigerant leakage during use) + C1 (Refrigerant leakage end of life)

Assumptions	
A1: Material carbon coefficient source	TM65 Table 2.1 & The ICE Database
B1: Refrigerant annual leakage rate (%)	4 (TM65 Assumption)
C1: Refrigerant end of life recovery rate (%)	98 (TM65 Assumption)
B3: Materials replaced as part of repair (%)	10 (TM65 Assumption)
C4: Percentage of product going to landfill (%)	30 (TM65 Assumption)



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Note: The fuse rating is for guidance only. 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-631), R454B (GWP-631), R410A (GWP-1304), R513A (GWP-631), R407C (GWP-1650), R407C (GWP-1650) or R134a (GWP-1300).

Effective as of July 2021







