

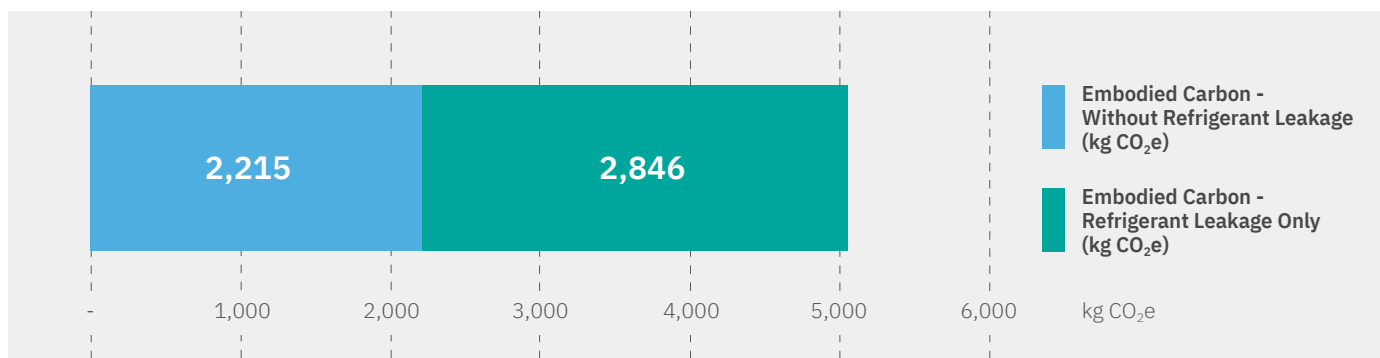
# PUZ-ZM250YKA2

## CIBSE TM65 Embodied Carbon Mid-level Calculation

<b>Assesment Date:</b>	2nd April 2024
<b>Assessor / Organisation:</b>	RI / Mitsubishi Electric LES UK
<b>Contact:</b>	embodied.carbon@meuk.mee.com

<b>Embodied Carbon with 'Mid-level TM65 Calculation' Method (kg CO<sub>2</sub>e) Total:</b>	<b>5,061</b>
---	--------------

Capacities (kW)*	22.5
Embodied Carbon Result per kW (kg CO <sub>2</sub> e/kW):	225



### PUZ-ZM250YKA2 - Product Information

Type of product	<b>Split Type Outdoor Unit</b>
Capacity of equipment (kW)*	<b>22.5</b>
Product weight (kg)	<b>138</b>
Material breakdown for at least 95% of the product weight? (Y/N)	<b>Y</b>
Service life of the product (years)	<b>15</b>
Type of refrigerant	<b>R32</b>
Refrigerant GWP	<b>675</b>
Energy consumption of the factory per unit of product (kWh)	<b>25.14</b>
Location of manufacture	<b>UK</b>
Product Complexity	<b>Category 3: High</b>



\*Nominal cooling capacity conditions as per data book

# PUZ-ZM250YKA2

## CIBSE TM65 Embodied Carbon Mid-level Calculation

### Embodied Carbon Results Breakdown (kg CO<sub>2</sub>e)

A1: Material extraction	1,368
A2: Transport	109
A3: Manufacturing	30
A4: Transport to Site	33
B1: Use	2,754
B3: Repair	155
C1: Deconstruction	92
C2: Transport	2
C3: Waste Processing	7
C4: Disposal	0

### Embodied Carbon Results - without Refrigerant Leakage (kg CO<sub>2</sub>e)

A1-C4 (excluding B1,C1)	1,704
A1-C4 with Buffer Factor (excluding B1, C1)	2,215

### Embodied Carbon Result - Refrigerant Leakage Only (kg CO<sub>2</sub>e)

B1 (Refrigerant leakage during use) + C1 (Refrigerant leakage end of life)	2,846
--	-------

### Assumptions

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



Telephone: 01707 282880  
 email: [embodied.carbon@meuk.mee.com](mailto:embodied.carbon@meuk.mee.com)  
[les.mitsubishielectric.co.uk](http://les.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, Westgate Business Park, Ballymount, Dublin 24, Ireland. Telephone: (01) 419 8800 International code: (003531)

Country of origin: United Kingdom - Italy - Turkey - Japan - Thailand - Malaysia. ©Mitsubishi Electric Europe 2024. 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 June 2024

