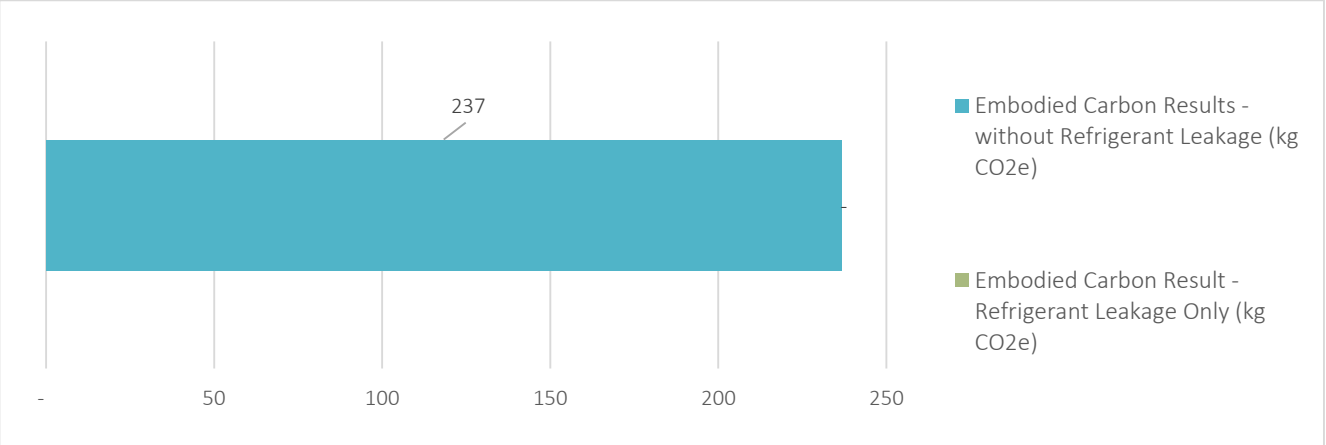
TM65 Embodied Carbon Mid-level Calculation

PKFY-MS10_15_20_25VLM2

General Information	
Date of assessment	02/04/2026
Name of assessor and organisation	RI/Mitsubishi Electric
Contact details of assessor	embodied.carbon@meuk.mee.com

Embodied Carbon Result with 'Mid-level TM65 Calculation' Method (kg CO_2e) - Total	
Result (kgCO_2e) - Total	237

Embodied Carbon Result per kW (kg CO_2e/kW)	Capacity [kW]	
Result (kgCO_2e/kW)	1.2	197.16
	1.7	139.18
	2.2	107.54
	2.8	84.50



Product Information	
Type of product	VRF Indoor Unit
Capacity of equipment [kW]*	1.2/1.7/2.2/2.8
Product weight (kg)	11.00
Material breakdown for at least 95% of the product weight? (Y/N)	Y
Service life of the product (years)	15
Type of refrigerant	R32
Refrigerant GWP	675
Energy consumption of the factory per unit of product [kW]	14.26
Location of manufacture	Asia
Product Complexity	Category 3: High

*Nominal cooling capacity conditions as per data book

TM65 Embodied Carbon Mid-level Calculation

PKFY-MS10_15_20_25VLM2

Embodied Carbon Results Breakdown (kg CO_2e)	
A1: Material extraction	87
A2: Transport	9
A3: Manufacturing	55
A4: Transport to Site	3
B1: Use	-
B3: Repair	17
C1: Deconstruction	-
C2: Transport	0
C3: Waste Processing	12
C4: Disposal	0

Embodied Carbon Results - without Refrigerant Leakage (kg CO_2e)	
A1-C4 (excluding B1,C1)	182
A1-C4 with Buffer Factor (excluding B1, C1)	237

Embodied Carbon Result - Refrigerant Leakage Only (kg CO_2e)	
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 (%)	6
C1: Refrigerant end of life recovery rate (%)	97
B3: Materials replaced as part of repair (%)	10% (TM65 Assumption)
C4: Percentage of product going to landfill (%)	30

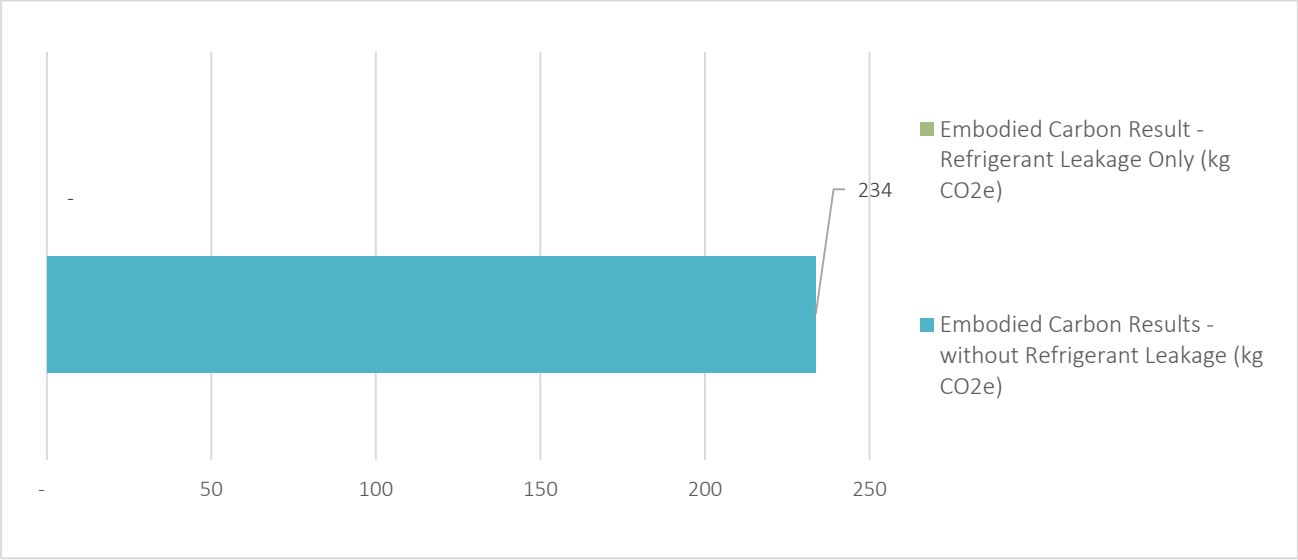
TM65 Embodied Carbon Mid-level Calculation

PKFY-MS32VLM2

General Information	
Date of assessment	02/04/2026
Name of assessor and organisation	RI/Mitsubishi Electric
Contact details of assessor	embodied.carbon@meuk.mee.com

Embodied Carbon Result with 'Mid-level TM65 Calculation' Method (kg CO_2e) - Total	
Result (kgCO_2e) - Total	234

Embodied Carbon Result per kW (kg CO_2e/kW)	
Result (kgCO_2e/kW)	64.91



Product Information	
Type of product	VRF Indoor Unit
Capacity of equipment [kW]*	3.60
Product weight (kg)	11.00
Material breakdown for at least 95% of the product weight? (Y/N)	Y
Service life of the product (years)	15
Type of refrigerant	R32
Refrigerant GWP	675
Energy consumption of the factory per unit of product [kW]	14.26
Location of manufacture	Asia
Product Complexity	Category 3: High

*Nominal cooling capacity conditions as per data book

TM65 Embodied Carbon Mid-level Calculation

PKFY-MS32VLM2

Embodied Carbon Results Breakdown (kg CO_2e)	
A1: Material extraction	85
A2: Transport	9
A3: Manufacturing	55
A4: Transport to Site	3
B1: Use	-
B3: Repair	16
C1: Deconstruction	-
C2: Transport	0
C3: Waste Processing	12
C4: Disposal	0.0

Embodied Carbon Results - without Refrigerant Leakage (kg CO_2e)	
A1-C4 (excluding B1,C1)	180
A1-C4 with Buffer Factor (excluding B1, C1)	234

Embodied Carbon Result - Refrigerant Leakage Only (kg CO_2e)	
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 (%)	6
C1: Refrigerant end of life recovery rate (%)	97
B3: Materials replaced as part of repair (%)	10% (TM65 Assumption)
C4: Percentage of product going to landfill (%)	30

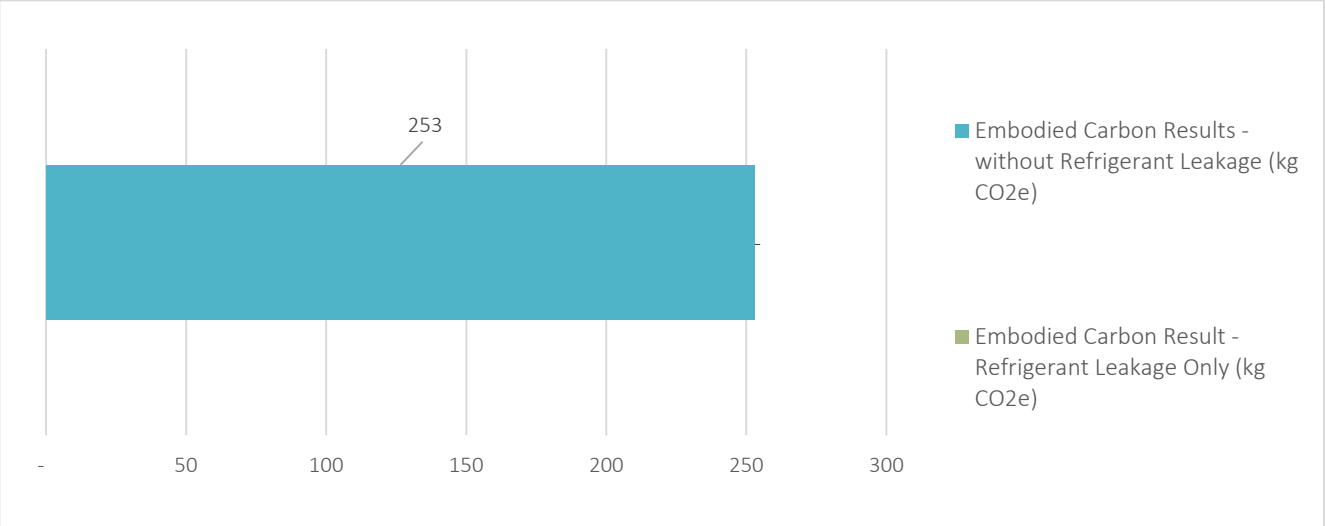
TM65 Embodied Carbon Mid-level Calculation

PKFY-MS40_50VLM2-E

General Information	
Date of assessment	07/04/2026
Name of assessor and organisation	RI/Mitsubishi Electric
Contact details of assessor	embodied.carbon@meuk.mee.com

Embodied Carbon Result with 'Mid-level TM65 Calculation' Method (kg CO_2e) - Total	
Result (kgCO_2e) - Total	253

Embodied Carbon Result per kW (kg CO_2e/kW)	Capacity [kW]	
Result (kgCO_2e/kW)	4.5	56.25
	5.6	45.20



Product Information	
Type of product	VRF Indoor Unit
Capacity of equipment [kW]*	4.5/5.6
Product weight (kg)	13.00
Material breakdown for at least 95% of the product weight? (Y/N)	Y
Service life of the product (years)	15
Type of refrigerant	R32
Refrigerant GWP	675
Energy consumption of the factory per unit of product [kW]	14.26
Location of manufacture	Asia
Product Complexity	Category 3: High

*Nominal cooling capacity conditions as per data book

TM65 Embodied Carbon Mid-level Calculation

PKFY-MS40_50VLM2-E

Embodied Carbon Results Breakdown (kg CO_2e)	
A1: Material extraction	96.51
A2: Transport	10.30
A3: Manufacturing	54.89
A4: Transport to Site	3.12
B1: Use	-
B3: Repair	17.70
C1: Deconstruction	-
C2: Transport	0.17
C3: Waste Processing	11.98
C4: Disposal	0.03

Embodied Carbon Results - without Refrigerant Leakage (kg CO_2e)	
A1-C4 (excluding B1,C1)	195
A1-C4 with Buffer Factor (excluding B1, C1)	253

Embodied Carbon Result - Refrigerant Leakage Only (kg CO_2e)	
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 (%)	6
C1: Refrigerant end of life recovery rate (%)	97
B3: Materials replaced as part of repair (%)	10% (TM65 Assumption)
C4: Percentage of product going to landfill (%)	30

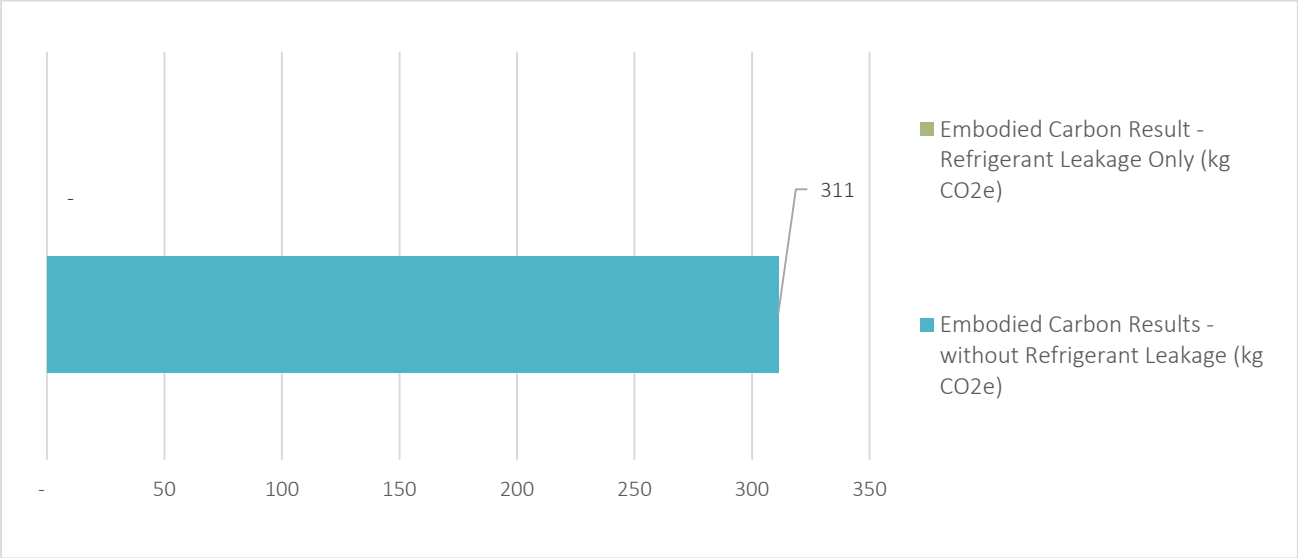
TM65 Embodied Carbon Mid-level Calculation

PKFY-MS63VKM2-E

General Information	
Date of assessment	07/04/2026
Name of assessor and organisation	RI/Mitsubishi Electric
Contact details of assessor	embodied.carbon@meuk.mee.com

Embodied Carbon Result with 'Mid-level TM65 Calculation' Method (kg CO_2e) - Total	
Result (kgCO_2e) - Total	311

Embodied Carbon Result per kW (kg CO_2e/kW)	
Result (kgCO_2e/kW)	43.83



Product Information	
Type of product	VRF Indoor Unit
Capacity of equipment [kW]*	7.10
Product weight (kg)	21.00
Material breakdown for at least 95% of the product weight? (Y/N)	Y
Service life of the product (years)	15
Type of refrigerant	R32
Refrigerant GWP	675
Energy consumption of the factory per unit of product [kW]	14.26
Location of manufacture	Asia
Product Complexity	Category 3: High

*Nominal cooling capacity conditions as per data book

TM65 Embodied Carbon Mid-level Calculation

PKFY-MS63VKM2-E

Embodied Carbon Results Breakdown (kg CO_2e)	
A1: Material extraction	129
A2: Transport	17
A3: Manufacturing	55
A4: Transport to Site	5
B1: Use	-
B3: Repair	22
C1: Deconstruction	-
C2: Transport	0
C3: Waste Processing	12
C4: Disposal	0.1

Embodied Carbon Results - without Refrigerant Leakage (kg CO_2e)	
A1-C4 (excluding B1,C1)	239
A1-C4 with Buffer Factor (excluding B1, C1)	311

Embodied Carbon Result - Refrigerant Leakage Only (kg CO_2e)	
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 (%)	6
C1: Refrigerant end of life recovery rate (%)	97
B3: Materials replaced as part of repair (%)	10% (TM65 Assumption)
C4: Percentage of product going to landfill (%)	30