

# TM65

## Mid-level Report



QC1: Switched Controller For Infra-Red Lamps/ Mounting Plate / 2M Lead (Hot Gantry)

Assessment Date 02/10/2025

Manufacturer CED Fabrications


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**Metrics**

Embodied Carbon

154 kgCO2e

Embodied Carbon Footprint



Material

Manufacture

Transport

Refrigerant

Waste

Disposal

Product Information	
Capacity of equipment/size (kW; m3; litres; etc.)	N/A
Product weight (kg)	3 kg
Material % breakdown for at least 95% of the product weight? (Y/N)	Y
Product service life (years)	10
If refrigerant based, type of refrigerant used and GWP	N/A
Refrigerant charge (kg)	N/A
Energy consumption of the factory* per unit of product	4 kWh
Location of manufacture*	N/A
Product complexity category	3

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Embodied carbon results (kg CO2e) – breakdown	
A1: Material extraction	100 kgCO2e
A2: Transport	3 kgCO2e
A3: Manufacturing	4 kgCO2e
A4: Transport to site	0.12 kgCO2e
A5: Construction	N/A
B1: Refrigerant leakage during use	0 kgCO2e
B2: Maintenance (if information given by manufacturer)	N/A
B3: Repair	11 kgCO2e
B4: Replacement	N/A
B5: Refurbishment	N/A
B6: Operational energy	N/A
B7: Operational water	N/A
C1: Refrigerant leakage when decommissioning	0 kgCO2e
C2: Transport	0.04 kgCO2e
C3: Waste processing	1 kgCO2e
C4: Disposal	0.02 kgCO2e
Embodied carbon results (kg CO2e) – without refrigerant leakage	
A1–C4 without buffer factor (excluding B1, C1)	119 kgCO2e
A1–C4 with buffer factor (excluding B1, C1)	154 kgCO2e
Embodied carbon result (kg CO2e) – refrigerant leakage only	
B1 (refrigerant leakage during use) + C1 (refrigerant leakage at end of life)	N/A
Embodied carbon result with 'mid-level' calculation method – total	
Result of 'mid-level' calculation method	154 kgCO2e
Assumptions	
A1: Material carbon coefficient source	CIBSE TM65, Table 2.1
B1: Refrigerant annual leakage rate (%)	N/A
C1: Refrigerant end of life recovery rate (%)	N/A
B3: Materials replaced as part of repair (%)	10
C4: Percentage of product going to landfill (%)	55

# Bill of Materials

Component name	Manufacturer name	Quantity
QC1 - REMOTE QUARTZ CONTROLLER DIMMER (OPTION FOR HEATED GANTRIES)	CED Fabrications	2