

HERITAGE IMPACT STATEMENT.

**In Support of an Application for Listed Building Consent for:
Additional Air Conditioning at Margam Crematorium.**

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Figure 1, Front Façade



Figure 2, Service Installation at Roof With High Parapets



Figure 3, Modernist Detailing Example

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DRAWINGS

Drawing: A1284-01, Location and Site Plan

Drawing A1284-02, Plans and Elevations

Drawing A128403, Equipment Locations

APPENDICES

Appendix 1 MUZ Outdoor AC

Appendix 2 Under Ceiling Cassette AC

Appendix 3 Extract Fan

Appendix 4 Supply AHU

1. Purpose of Statement

The purpose of this statement is to support an Application for Listed Building Consent.

Following extension of the building's office space (Applic. P2019/0179) and upgrading of Cremator equipment (Applic. P2012/0461), operations have highlighted a requirement for additional Air Conditioning Equipment.

This statement outlines the architectural and cultural significance of the existing property within its setting to consider the impact of proposed changes.

2. Planning Policy Statement

This Heritage Statement has been prepared in accordance with:

- Heritage Impact Assessment in Wales – Best Practice Guide
- Conservation Principles for the Sustainable Management of the Historic Environment in Wales
- Managing Change to Listed Buildings in Wales, Welsh Government, Cadw, 2017

3. Designation

Entry Name: Margam Crematorium

Listing Date: 8 February 2017

Grade: II*

Source: Cadw

Source ID: 87732

Building Class: Religious, Ritual and Funerary

ID on this website: 300087732

Location: Located along a service road c600m south from Heol Cae'r- Bont, west of Junction 38 of the M4 motorway.

County: Neath Port Talbot

Community: Margam

Community: Margam

Traditional County: Glamorgan

4. Site Location and Description

The Crematorium is located approximately four miles east of Port Talbot near the Margam Interchange. It is accessible from both the M4 motorway at Junction 38 and A48 trunk road. It is screened from the Motorway to maintain an air of seclusion and tranquillity. The building is several hundred meters from the Entrance at Heolcae'r Bont and accessed along a vehicle/pedestrian driveway that passes Playing Fields and Cemetery to the West and heavy tree planting to the East. Eglwys Nunydd Reservoir is to the South.

Margam Crematorium and Cemetery are set within approximately 6 hectares of grounds and the building is a distance from the nearest residential properties at Heolcae'r-Bont. The facility was opened in 1969 and is managed under the jurisdiction of Neath Port Talbot County Council.

The facades of the Crematorium building are primarily concrete with brown UPVc windows. It wraps around a central courtyard with the main Chapel to the north, the Crematorium area to the west and a covered walkway at the east Courtyard. Roofs are generally flat with the exception of an inverted pitched roof (Butterfly Roof) over the Chapel area.

Reasons for Listing Margam Crematorium in 2017 are noted as:

Included for its special architectural and historic interest as a fine example of a post-war crematorium, which was a new building type of the twentieth century. The building is especially imaginative and creative in responding to the design challenges of the building type, with a plan and layout that skilfully handles the circulation of users through the building and separates its functions, and with a simplicity of design and detail that helps to create a sense of spirituality appropriate to its purpose.

5. Proposal

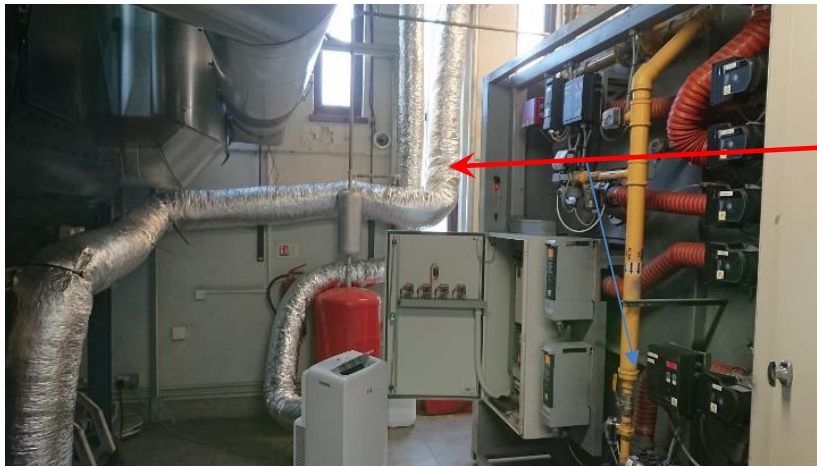
5.1 A new air conditioning system for the Offices requires 5 number indoor AC units and 2 number outdoor AC units connected by ducting and cables. Locations are noted on drawing 1284-03 and identified as Items 1, 2 and 3.

- **Item 1:** The interior units are to be wall mounted at high level.
- **Item 2:** Cables and ducting will be hidden in the office ceiling space before emerging on the higher walls of the Cremation Room. Visually exposed services in the Cremation Room exemplify the modernist intent of the original architecture. Cables and ducting will rise to the high ceiling and connect to exterior units at roof. All penetrations made to accommodate service runs are to be made good and match the existing finishes
- **Item 3:** The outside units (as Appendix 1) are to be fixed against the inner face of high parapet walls on the upper roof. They will be hidden from public view. Penetrations in the roof membrane are to be made watertight with 'top hat' detailing to match the existing.

5.2 A new air condition system for the rear of the Cremation Room requires 2 number indoor AC units and 2 number outdoor AC units connected by ducting and cables. Locations are noted on

drawing 1284-03 and identified as Items 4 and 5. This system will enable the removal of temporary H&S equipment with flexible ducting

- **Item 4:** Outdoor units as Appendix 1. Fixed at ground level with cable and pipes into the Cremation Room through uPVC window panel. This equipment is to be hidden from public view by an existing fenced off M&E area.
- **Item 5:** Indoor air conditioning units as Appendix 2. Under ceiling cassettes connecting to outdoor air conditioning by surface fixed cable and pipe in the Crematorium Room.



Proposed new air conditioning will enable the removal of temporary flexible pipes and floor mounted equipment.

Figure 4, Rear of Crematorium Room

5.3 A new air conditioning system to the front end of the Crematorium Room. Locations are noted on drawing 1284-03 and identified as Items 6 and 7. The purpose of the proposed fans is to relieve intense heat during the operation of the cremators

- **Item 6:** New under ceiling fans at front of Cremation Room connected to Air Handling Unit at roof. Re Appendix 3, Extract Fan
- **Item 7:** Approximate location of Air Handling Unit on roof. Unit model and dimensions as Appendix 4.

6. Access

The proposals do not impact on existing access arrangements

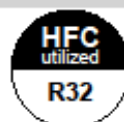
7. Conclusion

The proposal offers a balanced design intent that enables essential improvements to the ongoing operation of the Crematorium that are sensitive to the historic fabric and listed building status.



SPLIT-TYPE AIR CONDITIONERS

OUTDOOR UNIT SERVICE MANUAL

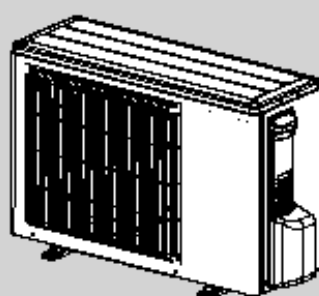


No. OBH767

Models

MUZ-LN25VG	- E1 , ER1 , ET1
MUZ-LN35VG	- E1 , ER1 , ET1
MUZ-LN50VG	- E1 , ER1 , ET1
MUZ-LN60VG	- E1 , ER1 , ET1

Indoor unit service manual
MSZ-LN-VGW/V/B/R Series (OBH766)



MUZ-LN25VG
MUZ-LN35VG

NOTE:
RoHS compliant products have <G> mark on the spec name plate.

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PARTS CATALOG (OBB767)



FUA-A / RZASG-M *Sky Air Advance series*

Unique Daikin unit for high rooms with solid ceilings or false ceilings with a shallow void

- › Combination with Sky Air Advance series ensures good value for money for all types of commercial applications
- › Even rooms with ceilings up to 3.5m can be heated up or cooled down very easily without capacity loss
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FUA-A



RZASG71M

RZASG100-140M



DIII-ADP (optional)

WI-FI ADAPTOR
AVAILABLE AS
AN OPTION

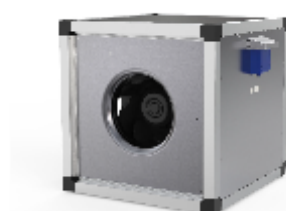
Appendix 3



MUB-CAV/VAV 042 450EC

Article Number: #235432

gan_article_operating_mode: 400V 3~ 50/60Hz - 90° air flow



Powerful centrifugal fans with integrated CAV/VAV sensor-control module

- Integrated sensor-control module
- Easy adjustment of the operation mode if needed
- All sizes pre-wired, pre-adjusted and factory tested
- Acoustic and thermal insulation 30 mm
- Flexible airflow direction due to removable panels
- Indoor and outdoor installation
- Modular system of accessories
- Available with EC motors for 50 and 60Hz

[Find more details in our online catalogue](#)

Technical parameters

Nominal data	
Voltage (nominal)	400 V
Frequency	50; 60 Hz
Phases	3~
Input power	990 W
Input current	1.53 A
Impeller speed	1,554 rpm
Air flow	max 2,064 m³/s
Temperature of transported air	max 60 °C
Max temperature of transported air, when speed controlled	60 °C
Protection/Classification	
Enclosure class, motor	IP55
Insulation class	F
Data according to ErP	
ErP ready	ErP 2016; ErP 2018
Dimensions and weights	
Weight	52 kg
Others	
Motor type	EC

Dimension

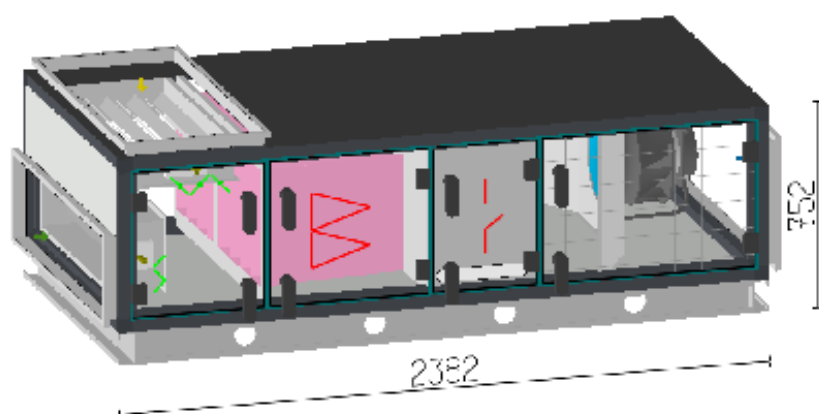
MUB-CAV/VAV 042	nA	nB	nC	nD	E	F
400450500	690	690	590	548	21	776

Appendix 4

Quotation no. Margam Crem
Project Margam Crem
Plant no. Supply AHU/

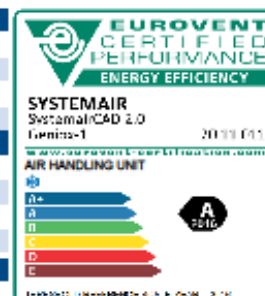
Unit no.: 10
Date 03/07/2023
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Description: Geniox 11.055 - Roof (Polyvinyl chloride roof)
Unit width / Weight: 1182 mm / 330 kg
Delivery: 1 sections; Mounted on 118 mm base frame



Unit			
Unit color Insulation Hygienic	ZincMagnesium 60 mm mineral wool / Density 60 kg/m ³ Standard		
Control system	Access control system		
Power supply Unit	L1 + L2 + L3 + N + PE (3x400V) 50 Hz / 8.9 A		
Sound break out Supply air	53 dB(A) 79 dB(A)		
Supply Air/fan data	Air density 1.205 kg/m ³		
Airflow Face velocity Ext. ip	1.30 m/s 2.48 m/s 150 Pa		
Supply air, Winter Summer	18.5°C / RH 44% 24.5°C / RH 40%		
Filter Stages	F7 - ePM1 60%		
Fan Voltage Rated current RPM	1.35 kW 1x230 V 5.87 A 2163 RPM		
Energy	Dimensioning	Average	Fans (8760 hours)
SFPv *)	0.55 kW/(m ³ /s)	0.55 kW/(m ³ /s)	6291 kWh
Ecodesign approved (2018)	Yes		

*) Values include speed control; SFPv = clean - and SFPc = dimensional-filter pressure drop



Systemair Fans&Spares Ltd.

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info@systemair.co.uk



 systemair

Systemair - Air handling unit design SystemairCAD 2.0 Geniox-1/C2023-06.25.J1 | 03/07/2023