Modular Insulated Distribution System - VMS

User manual

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Introduction

The Modular Insulated Distribution System - VMS consists of 5 standard dimensions (H x W from 320 x 220mm up to 640 x 440mm) in one depth 180mm with the possibility to add depth extension frames for each size with 75mm depth
The system can be provided as loose components or factory assembled.
Designed for wall mounting or floor standing installation
Modular coupling possibilities in width and height.

Standards: EN/IEC 61439-2
EN/IEC 60529
EN/IEC 62262

Dimensions and Technical Specifications

Type Designation	: VMS
Type of material	: Glass fiber reinforced Polycarbonate
Method of fixing	: Wall, floor
Intended location	: Indoor & Limited Outdoor
Degree of protection	
IP-code	: Up to IP65
IK-code	: Up to IK07

Shipping, Packing and Lifting

1) A knife or a pair of scissors should be used to cut the non-metallic packing of the enclosure. Be aware not to damage the enclosure itself by opening the packaging with a sharp tool.

2) Check the enclosure for any kind of damage as soon as it is unpacked. If found damaged, immediately contact the manufacturer at the numbers mentioned in 'contact details' section.

3) The company cannot be held responsible for any damage caused due to improper storing.

CAUTION:
Improper storing can cause damage to the enclosure.
Do not stack one enclosure over another while storing or during transportation.

4) Use a pallet truck for transportation of the enclosure. It is advised to unpack the pedestal only at the time of final installation.

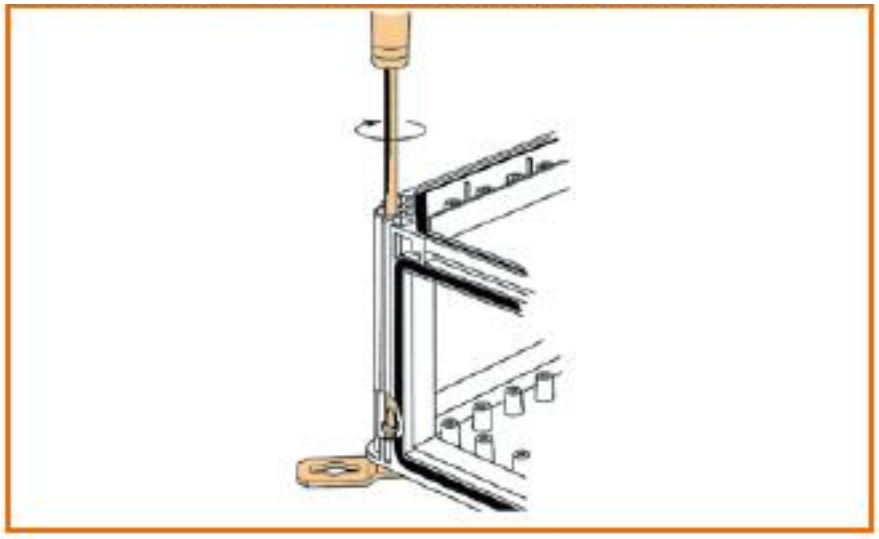
Installation

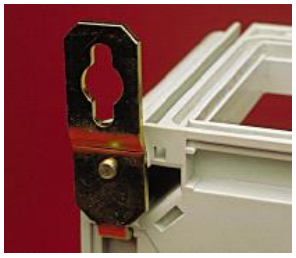
The enclosure is a modular type distribution system, designed for wall mounting or floor standing for use indoor and outdoor (with limited exposure to UV radiation).
The enclosure is designed with covers that can be opened by authorized operating personnel only.

Procedure for installing the enclosure on a wall:

- Remove any obstruction, dirt etc. from the location.
- Make sure the floor- and wall surface is levelled
- The enclosure can be mounted on a wall by using brackets (up to 5 enclosures) or a supporting frame. The brackets can be positioned 0°, 45°, 90°, screw through the base corner holes.

Installation of the mounting brackets:





Installation of the supporting frame:

Wall mounting of small units can be made using stainless steel fixing brackets. For mounting and handling of units of more than five enclosures, a supporting frame is compulsory.

- The supporting frame consists of at least two horizontal C-profiles (= the length of the assembly width) and a number of two vertical C-profiles (equal to the number of vertical sections +1).

If the unit height is greater than 1000 mm, three horizontal C-profiles will be used.

r than the height of the assembled panel.
hould be mounted simultaneously.

Horizontal and vertical C-profiles of the first row of enclosures are assembled together by clamping brackets and sliding nuts. The next clamping brackets are mounted on the horizontal profile.

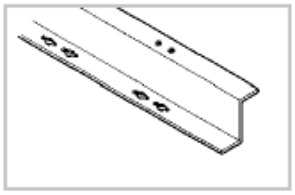
The first row of enclosures is then mounted on the vertical profiles with the clamping plates.

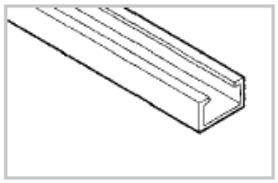
Following rows are then assembled the same way.

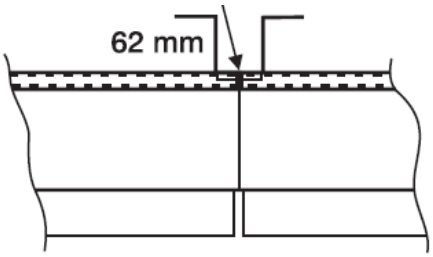
Frame and enclosure assemblies are mounted simultaneously.

Installation on the floor/wall:

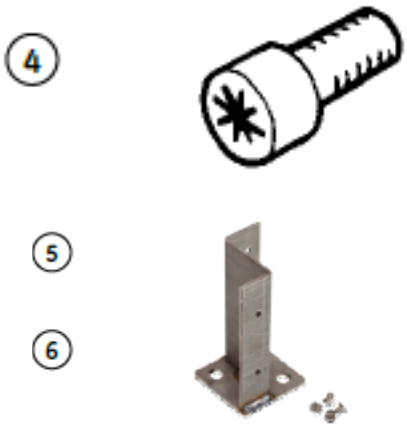
Floor/wall mounting can be performed by using the vertical Z-profiles ① at each partition/extension.

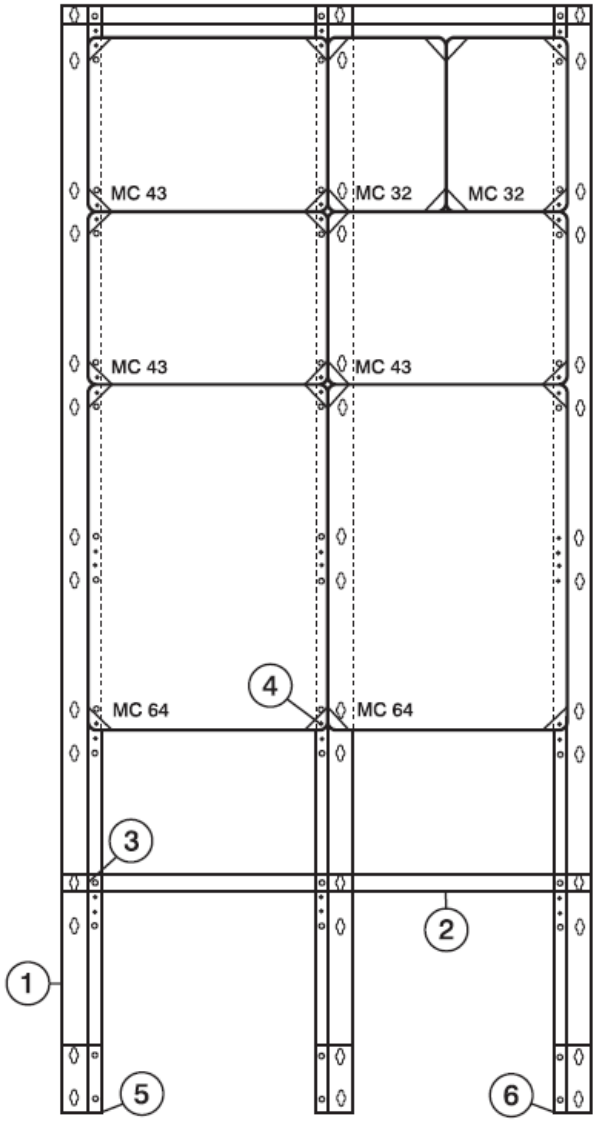






The Z-profiles are bolted together by means of 2 C-profiles ② and sliding nuts + M8 bolts ③ for fixation. The VMS boxes can be mounted directly on the front of the Z-profiles by means of M5 x 16 Torx screws ④. The Z-profiles can be mounted on the floor using the stand supports ⑤ + ⑥.





Working with the distribution system

In general, all operations of switches and breakers can be performed in front of the covers. In cases where feeder switches are located behind the covers (or for replacement of fuses) the cover should be opened.

Opening the covers:

1. Unlock the cover(s). Use an appropriate screwdriver that matches the cover screws.

2. Remove the cover(s).

3. Feeder switches can be operated / Fuses can be replaced

In cases where access to the busbar system is required, additionally the cover plates can be removed by using a slotted screw driver

The protective space is now accessible and all necessary service and administrating operations can be performed.

Maintenance

Maintenance intervals:
The maintenance intervals depend on the intensity of use of the switchgear installed in the switchboard and can be either preventive or repair work, but should always be in accordance with local regulations and standards (i.e. NEN3140).

Attention:
Observe all relevant operating instructions of the electrical components as well as local requirements, regulations and standards (i.e. NEN3140).

Inspection interval:
A visual inspection as well as a control of mechanical functions (e.g. interlocks etc.) of the assembly should be done every 4 years as a minimum.
An interval of <= 1 year is recommended.

The following checklist can be applied as a guideline during inspection.

#	Inspection / corrective action
1	inspection of service conditions
2	(visual) inspection of the assembly
3	inspection of the ventilation openings clean ventilation openings / change dust filters
4	inspection of measures to achieve IP rating, no ingress of condensation. Unused gland opening
5	inspection of cables & glanding's
6	inspection on the effects of pollution, clean with dry piece of cloth or use vacuum cleaner / do not use high pressure air!
7	inspection for damages
8	inspection on the effects of corrosion, repair failures on surface / make dry if necessary
9	inspection of sub-assemblies & electrical components maintenance in accordance with relevant component manuals
10	inspection of connectors & terminals
11	check correct protection of electrical components & cables, change fuses if necessary (decoloring, correctly placed)
12	check settings of electrical components (e.g. overload & short circuit protection) correct settings according the documentation of the electrical component. Test Residual Current (earth leakage) devices.
13	inspection of plug-in contacts remove old grease, put new grease on
14	inspection of measures against electrical shock (PE conductor, PE connections) check insulation resistance (earth resistance /dielectric testing).
15	check torque values for electrical connections (see torque values for electrical connections), μΩ testing of busbar system

GE Odink & Koenderink shall not be responsible for any undesirable situation arising due to the above-mentioned reasons or improper or no maintenance, cleaning or inspection as specified in this manual.

WARNINGS, CAUTIONS, NOTES

WARNING 

Warning notices are used to emphasize that hazardous voltage, currents, or other conditions that could cause personal injury are present in this equipment or may be associated with its use.

Warning notices are also used for situations in which inattention or lack of equipment or knowledge could cause either personal injury or damage to equipment.

CAUTION 

Caution notices are used for situations in which equipment might be damaged if care is not taken.

NOTE 

Notes call attention to information that is especially significant to understanding and operating the equipment.

This document is based on information available at the time of its publication. While efforts have been made to ensure accuracy, the information contained herein does not cover all details or variations in hardware and software, nor does it provide for every possible contingency in connection with installation, operation, and maintenance. Features may be described herein that are not present in all hardware and software systems. GE assumes no obligation of notice to holders of this document with respect to changes subsequently made.

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Contact

Please make sure that you have the Nominal Plate data before calling the service numbers: