



CONNECT AND PROTECT

Engineering support tools

Configurators, dedicated software, and technical documentation
to speed up engineering work.



HOFFMAN

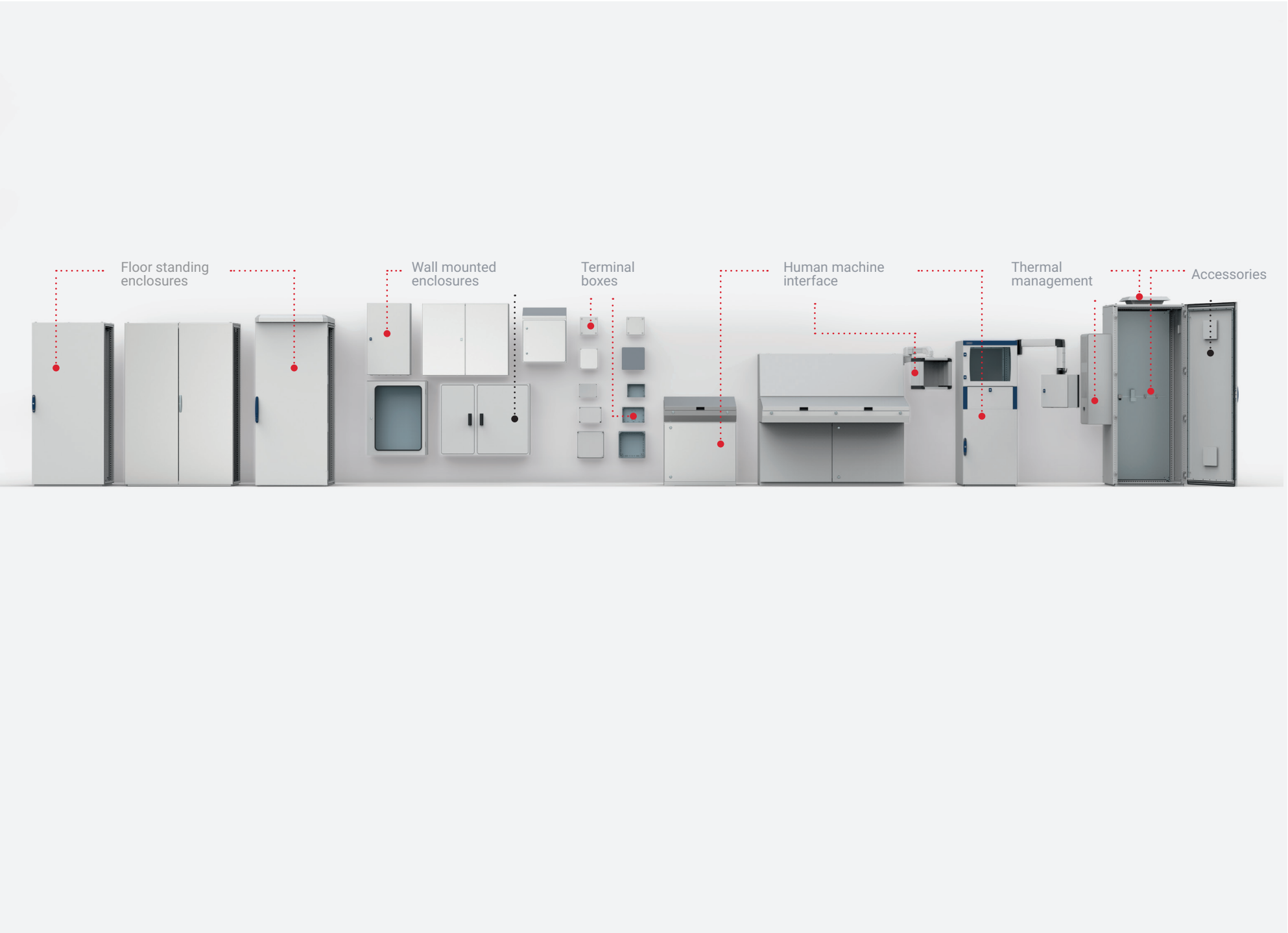


Table of contents

Enclosure solutions for you.....4

Engineering support tools for you.....5

Try nVent HOFFMAN's easy to use product configurator 6

Save time with nVent HOFFMAN's library for EPLAN8

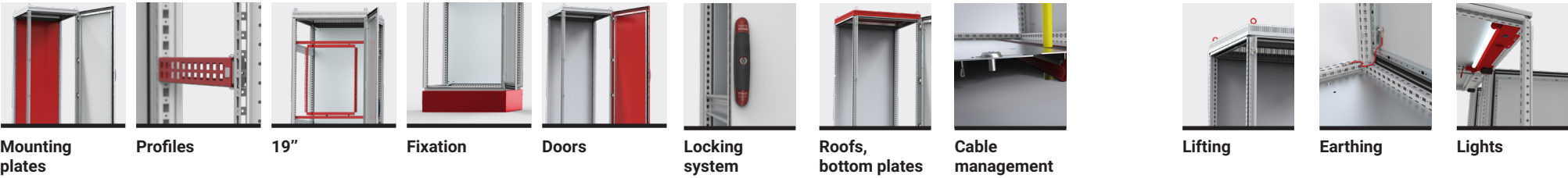
Native drawings are needed for mechanical engineering 10

Use our Thermal Management tool..... 11

Our white papers help you to go deep on specific issues. 12

More guidance for efficient enclosure dealings 13

Unlimited possibilities with a wide product range and engineering support.



Enclosure solutions for you

nVent HOFFMAN's comprehensive standard product offering is developed to be suitable for many different environments and applications.

It includes mild steel and stainless steel wall mounted and floor standing enclosures, consoles, human machine interface, polyester enclosures, aluminium outdoor enclosures, and terminal boxes in mild steel, stainless steel, and plastics, plus thermal and cable management.

Each product line comprises a variety of constructions which, combined with a wide range of accessories, make it possible to create different configurations. All constructions within a product line are designed around one platform, and therefore all accessories can be used for any enclosure in that line regardless of the material. This simplifies engineering and contributes to faster assembly. The enclosures are typically used in many different environments for applications such as power distribution, automation and control, and machines.

Modifications can easily be made

nVent HOFFMAN's Express Customization is available at local service centers across Europe and encompasses machining of standard off-the-shelf products, delivered in a matter of days.

Advanced Customization is done at our factory and includes hole making, threading, cut-outs, increased corrosion resistance, custom colours, printed panels, transparent windows, ventilation louvres, welded studs and more. Competitive lead times are always offered, together with services such as certification and warehousing of modified products.

nVent HOFFMAN focuses on three development drivers

nVent HOFFMAN's development drivers – fast assembly, optimum protection, and appealing design – contribute to delivering optimum enclosures that meet your exact requirements.

- Fast assembly of nVent HOFFMAN's enclosures is easily achieved and saves time for assembly staff. For example, the estimate is that 12 minutes of assembly time can be saved when two combinable enclosures are bayed, compared with traditional designs. Time reduction is achieved when using click-in side panels, click-in baying brackets, or click-in profile systems for a variety of accessories. In most cases, there is no need for any tools or cage nuts.
- Optimum protection is paramount since an enclosure is used to protect the electrical components in it, as well as humans adjacent to the enclosure. nVent HOFFMAN offers high ingress protection thanks to a strong locking system and low water absorption gaskets. One example is the range of standard, combinable enclosures that can be upgraded to IP66. Another example is the 316 stainless steel enclosures that are provided with a silicon gasket to optimize protection in demanding environments.
- Design is important too. Considerations are made to all aspects of form, fit, and function in order to optimize enclosures and accessories to create the best possible user experience, a pleasant feel and visual appeal.



STANDARD products



EXPRESS customization



ADVANCED customization

nVent HOFFMAN's product offering encompasses a comprehensive range of standard products and accessories, with modification possibilities through Express Customization and Advanced Customization.

Engineering support tools for you



The content in this brochure is organized in four parts:

- Configurators**
 - Standard products
 - Customized products
- Electrical engineering**
 - EPLAN P8 2.6 or higher, 2D macros
 - EPLAN Pro Panel, 3D macros

- Mechanical engineering**
 - 100 native drawing formats

- Support**
 - Thermal Management
 - White Papers
 - Animated mounting instructions
 - My Eldon (Customer Zone)

In this brochure you will find an overview of most of the support tools nVent HOFFMAN has to offer for engineering solutions involving enclosures. The purpose is to introduce you to our ambition of making your engineering easy.

Everyone working for nVent HOFFMAN shares common values that can be summarised in a desire to be easy to do business with. This means the best service possible is always provided to ensure delivery of the right product, at the right time and place, at a competitive price.

Being easy to do business with also means providing tools and information on our local websites that help you in your engineering work.

You can access tools such as configurators, drawings in any native format, product data sheets, mounting instructions (also animated), a 2D and 3D library for EPLAN, white papers, and software for thermal management.



Try nVent HOFFMAN’s easy to use product configurator

Our product configurator allows you to specify the exact enclosures you need to host components and equipment.

The configurator is integrated within nVent HOFFMAN’s customer zone, My nVent HOFFMAN and allows for configuration of both standard and customized enclosures and accessories.

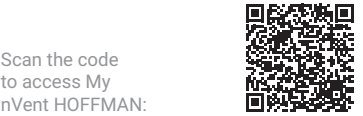
To ensure that no mistakes are made, we have also integrated our manufacturing capabilities and limitations into the configurator. This means only options that can be handled in our manufacturing process are possible to select when you specify a customized enclosure.

The configurator generates quotations quickly and smoothly. The system is smart, so when you try to select an accessory that doesn’t match the enclosure selected, the system will provide the correct item number.

The configurator is easy to use and follows a logical process:

- The enclosure and accessories required are selected in a straightforward configuration sequence, in which customization requirements for finish, mounting facilities, or machining may also be specified.
- Once all details are entered into the system, a proper quotation document will be created with just one click;
- The quoted price includes all specific commercial conditions;
- To place an order, the only step needed is to provide the quotation number generated in the configuration process;
- A repeat order can be easily placed, since a record of every item, including all technical documentation, is saved in the system.

All your quotations created in the system are automatically stored in My nVent HOFFMAN and may be accessed at any time.



Save time with nVent HOFFMAN's library for EPLAN

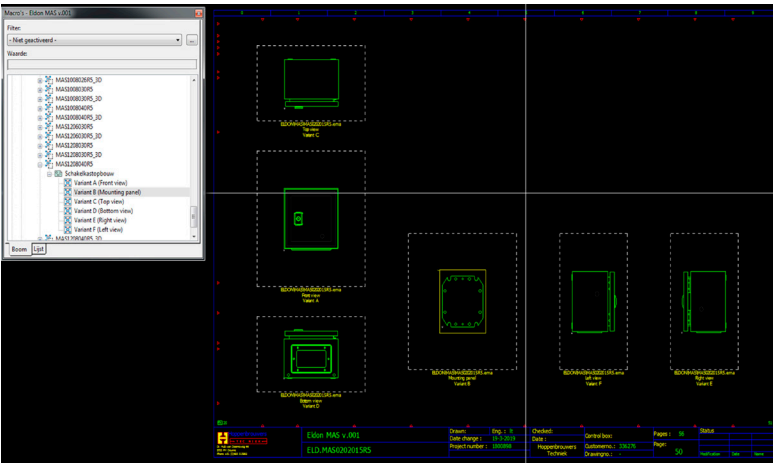
Components such as electronic circuits, digital signal processors, microcontrollers, and PLCs used for control systems are normally placed in an enclosure to protect them in demanding environments.

You probably use CAE, which may include EPLAN. This software application started out as a tool for traditional electrical design, but after the launch of a new add-on, called Pro Panel, electrical and mechanical engineering have been combined.

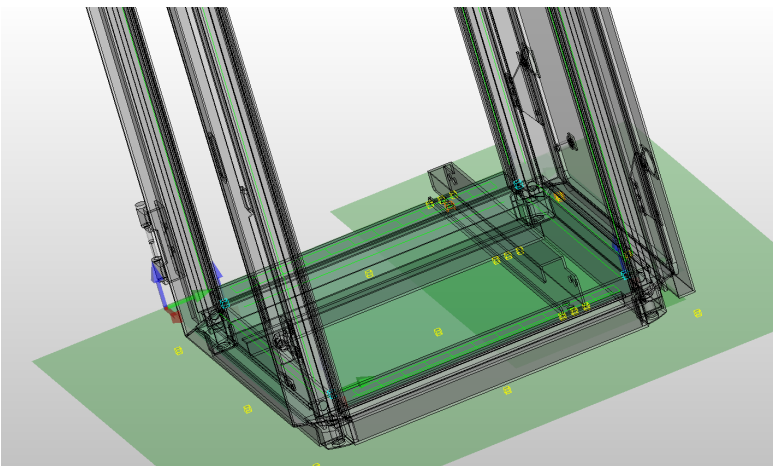
One of many initiatives within nVent HOFFMAN, to help in the engineering process, is the timesaving library for EPLAN. The library includes:

- 2D macros for those working with EPLAN P8 version 2.6 or higher;
- 3D macros for those that work with the Pro Panel add-on;
- A complete Parts Management database with technical information, data sheets, and listings of relevant accessories for each enclosure.

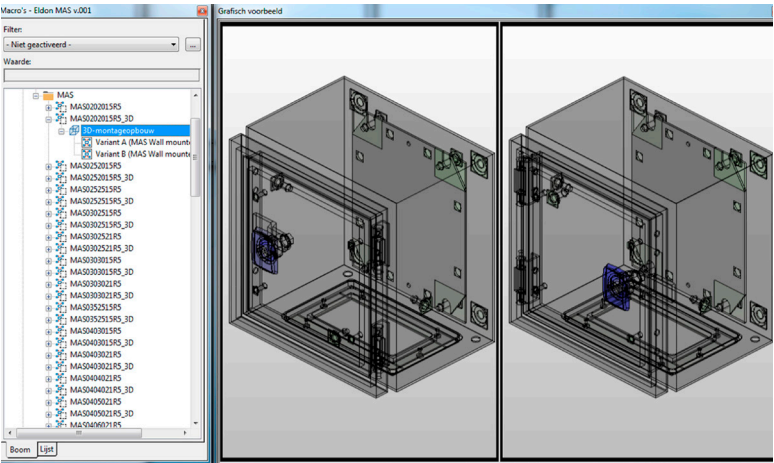
When using this library, you will be able to further increase the productivity of your engineering work. Panel building will also become more efficient.



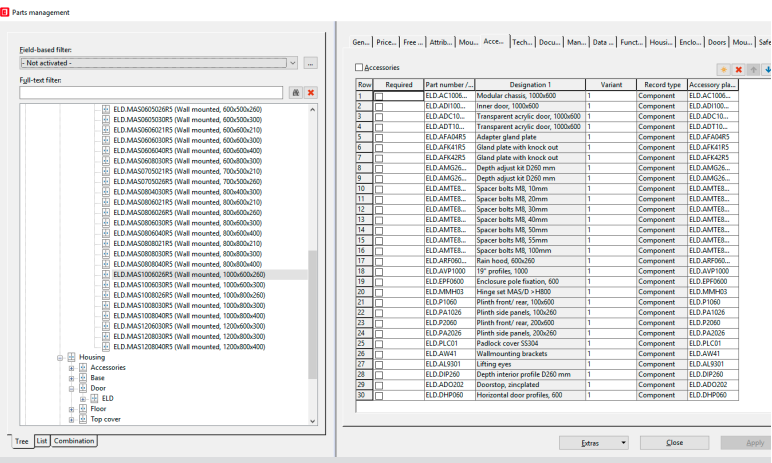
Each enclosure available in 2D is structured in several variants including front, mounting plate, top and bottom, and right and left.



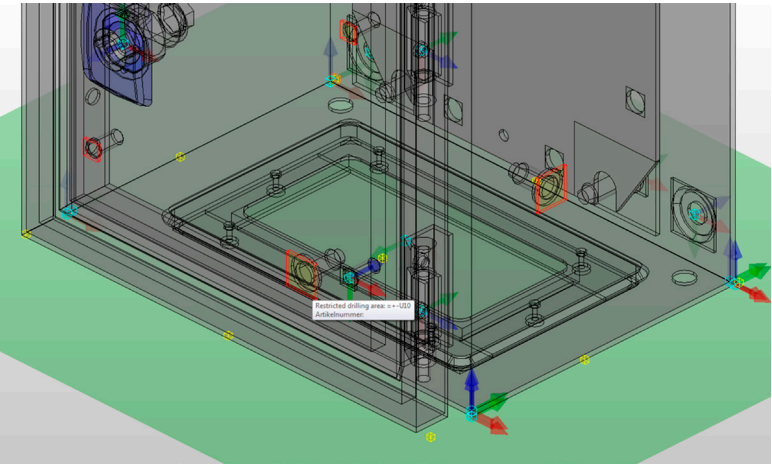
All accessories with a single location snap on to the enclosure automatically. Those with several locations are inserted using a smart grid, which could be placed on the hole pattern of a floor standing frame, for example.



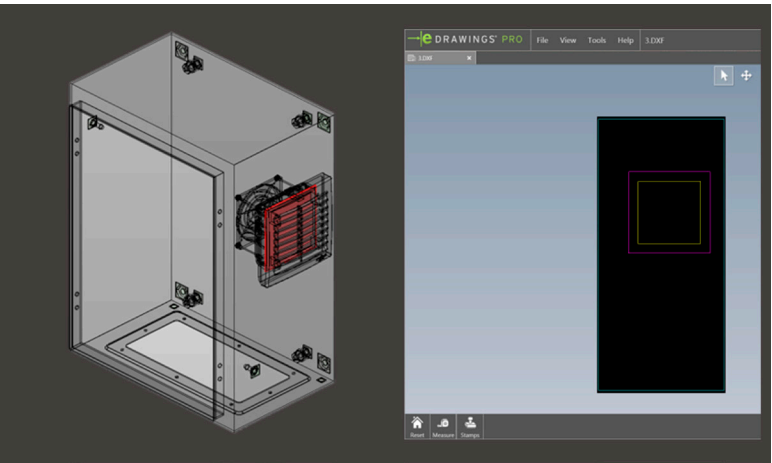
Each 3D macro comes in two variants featuring left and right hinged doors. This saves time since the macros do not need to be reworked if the default door positioning is changed. The 3D macro contains the optimum level of complexity to avoid exposing irrelevant details complicating the work.



Parts Management includes all relevant and reliable data such as article and EAN reference, certifications, data sheets, dimensions and weights, mounting space and more. Accessories are included in Parts Management and are linked to the relevant enclosure.



Restrictions are defined to avoid incompatible machine operations that could potentially cause damage to the product or modification machines.

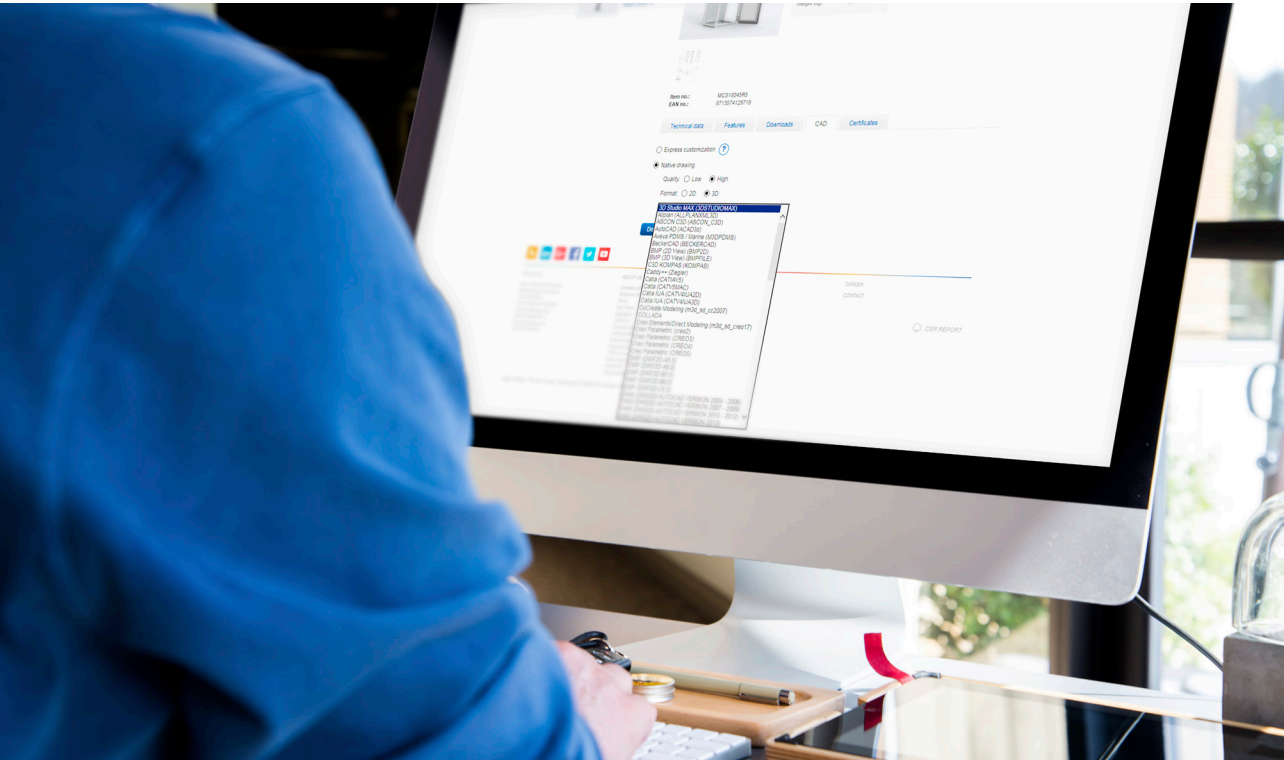


Accessories that require machining on the enclosure include a machine template to reduce time and avoid mistakes. One example is when preparing for mounting of filter fans.

Scan the code to access nVent HOFFMAN's EPLAN page:



Native drawings for mechanical engineering



A native drawing is required when an enclosure needs to be modified or placed in a design drawing of a machine or system. nVent HOFFMAN offers over 100 native formats to make your design work easier.

It is often necessary to create a drawing of a standard enclosure that is to be modified, either by adding accessories and/or parts, or by changing some of the enclosure characteristics. These modifications are normally done by nVent HOFFMAN or, occasionally, by our customers.

The native drawings are ideal both for machine builders when the enclosure will be integrated with the machine design, as well as for engineers that need to place the enclosure in a certain location.

The native drawing can be converted to the desired CAE application, such as AutoCAD Electrical or SEE Electrical.

nVent HOFFMAN offers both low and high complexity drawings to ensure any engineering need is met. To choose a drawing, go to nVent HOFFMAN's website, select the quality you need, then pick the drawing required from a drop-down list that shows all the drawing formats available.

nVent HOFFMAN works with parametric models that can produce any native drawing format in different levels of detail for the CAD applications, where some are shown in the list to the right. We offer over 100 native formats in several versions to meet all your needs. To download a native drawing format, just go to nVent HOFFMAN's eCatalogue and select the item needed.



Use our Thermal Management tool



In dimensioning cooling or heating equipment for electrical enclosures, the tool is used to define a solution that ensures the temperature inside the enclosure does not fall below or exceed the limits required.

The tool calculates climate control requirements including heat dissipation within the enclosure, component by component, and generates solutions for both indoor and outdoor applications.

It recommends an array of temperature or humidity modulating and measuring devices, such as air conditioners, heat exchangers, filter fans, vortex coolers, heaters, thermostats and hygrometers. It takes the size of the enclosure into account, as well as the environmental conditions under which it will operate.

Here are some features:

- 'Save' and 'Load' functionality;
- Improved power data layout presentation;
- Reasons for why a solution cannot be created are detailed;
- The heating results are split into 'Needed to avoid condensation' and 'Needed to maintain the internal temperature above the minimum temperature required';
- Voltage selector for coolers and heaters;
- Accessory selector for Vortex-coolers.

Once the tool has obtained all relevant data and completed calculations, detailed documentation on the required heating and cooling is provided.

- In summary, nVent HOFFMAN's Thermal Management tool will:
- Speed up engineering and dimensioning work;
 - Help avoid over or under dimensioning;
 - Present an optimum thermal management solution for the project at hand;
 - Ensure evaluations generated by the tool are in line with what is required according to IEC-60890 and IEC-61439.

Scan the code to access nVent HOFFMAN's Thermal Management tool:



Our white papers help you to go deep on specific issues

There are quite a few issues that may cause engineers to think twice about enclosure selections and specifications. We have gathered some deeper information on enclosure related subjects in our white papers, which are available on our local websites.

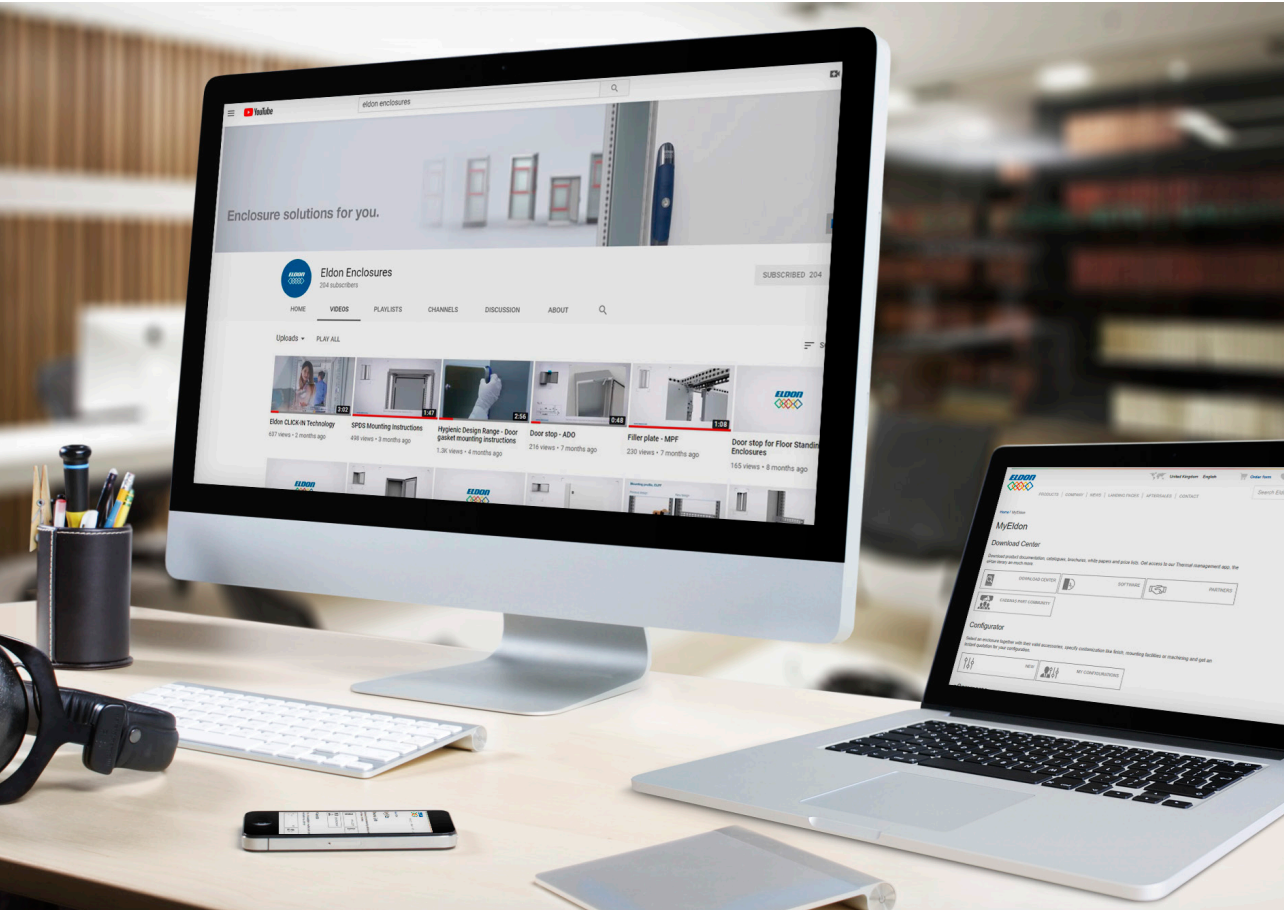
New white papers are published continuously, but you can find some examples in the list below:

- **Earthing:** This paper takes a look at grounding and its role in protecting personnel and equipment, ensuring the integrity of electrical panels;
- **Baying and lifting:** This paper presents the maximum load that can be lifted for stand-alone and bayed enclosures;
- **Earthquake environments:** This paper lists various enclosure configurations and their performance when in seismic zones and environments with extensive vibrations;
- **Loading capacity:** This paper defines the maximum load allowed for the enclosure, including mounting plate, panels, and profiles for floor standing and wall mounted enclosures;
- **Advanced Customization:** All available customization possibilities offered are presented in this paper. Examples include the special dimensions available for each range, plus limitations that exist due to nVent HOFFMAN's manufacturing process or certifications. Customization alternatives described include machining, finish, mounting facilities, assembly, and printed panels;
- **Technical information:** This white paper covers general information on enclosures, such as pros and cons of different materials, degrees of protection according to different standards, the most common certifications, etc.;
- **Calculating heat dissipation:** The difference between the outside and inside temperatures can be calculated for each enclosure by taking the installation into consideration, e.g. stand alone, flush, against the wall, as well as the heat dissipated inside the enclosure. Based on the result you can determine whether active cooling is required. This white paper explains the calculation method and presents tables for each product range. The tables show the maximum heat that can be dissipated inside the enclosure to limit the temperature increase to 20°K;
- **Locking system:** This paper presents nVent HOFFMAN's locking system for floor standing and wall mounted enclosures and how these can be combined with various inserts available at nVent HOFFMAN, or those provided by other companies;
- **Powder paint coating system:** In this white paper you will get to know more about nVent HOFFMAN's standard powder coating process. It describes the level of corrosion resistance achieved, the periodical tests conducted to guarantee consistent quality, and more. Other powder coatings available on request, such as harsh environment powder coating, are also listed and described.

Scan the code to access
nVent HOFFMAN's white
papers.



More guidance for efficient enclosure dealings



‘My Eldon’ is your digital arena with nVent HOFFMAN

nVent HOFFMAN’s customer zone is called My nVent HOFFMAN. It is available through all our local websites and offers excellent functionality and many user-friendly digital tools for both existing and potential customers. You will find a product configurator for standard and customized enclosures there, as well as an array of useful information on nVent HOFFMAN’s enclosures and accessories.

Animated mounting instructions for better assembly work

Clear instructions are helpful for any assembly staff and will contribute to faster, error-free assembly work. We have gathered animated mounting instructions on our YouTube channel under ‘nVent HOFFMAN Animated Mounting Instructions’.

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