

Spacial™ Steel Enclosures

Metal enclosures and boxes



From our small boxes to large modular floor-standing enclosures, with the Spacial range you can find the optimal fit for your applications. Our extensive range of easy-to-use accessories helps you save time during your projects.

Select between steel or stainless steel to better suit the installation environment. In our stainless-steel offer you can find the optimal solution where cleanliness or protection in highly corrosive environments are required.

Steel: Indoor non-clean industrial environment

The environment in industrial plants can subject electric and electronic components to dust, splashing oil, and impacts. Such environments require a range of enclosures that are suited to harsh conditions yet are easy to install.

- **Universal range**, for industry.
- **EMC (electromagnetic compatibility) range**, against electromagnetic disturbances (treated with Aluzinc).

304L - 316L stainless steel: Demanding industrial environment

Food and beverage, pharmaceutical, petrochemical, and infrastructure industries have particularly demanding hygiene and corrosion resistance requirements. Our Spacial range is available in two grades of stainless steel:

- **304L stainless steel**, for resistance to corrosion and ease of cleaning (often used in food production environments).
- **316L stainless steel, also known as "marine stainless steel,"** for very high resistance to corrosion (used in saline or chlorinated environments).
- **Range of ATEX enclosures**, for potentially explosive atmospheres.

Product family names:

Spacial S3DC: *Steel wall-mounting enclosures*

Spacial SM: *Compact metal enclosures*

Spacial SF: *Modular metal enclosures*

Spacial S3X: *Stainless-steel wall-mounting enclosures*

Spacial SMX: *Stainless-steel monobloc floor-standing enclosures*

Spacial SFX: *Stainless-steel modular enclosures*

Thalassa™ Polyester Enclosures

Insulated enclosures and boxes

Without the right protection, harsh environments can expose your installation to chemicals or other substances.

Developed to help protect your equipment in outdoor applications or harsh conditions, our Thalassa offer ranges from boxes to floor-standing enclosures made from fiberglass reinforced polyester.

Our Thalassa industrial boxes in ABS or polycarbonate are strong, easy to install, and designed to be used in highly demanding environments.

Insulating polyester and plastic materials (ABS, polycarbonate): Outdoor infrastructures and severe industrial environments

Outdoor infrastructures and electrical installations are exposed to direct sunlight, rain, saline mist, extreme temperatures, oil splashes, chemical and corrosive agents, and are in contact with the public.

- **Universal range**, for industry.
- **Range of ATEX enclosures**, for potentially explosive atmospheres.

Product family names:

Thalassa PLM: *Polyester wall-mounting enclosures*

Thalassa PLA: *Polyester floor-standing enclosures*



ClimaSys™ Thermal Management System
Thermal Management



Preserving and keeping the right temperature inside your enclosure is vital for maximizing the average service life of your installed devices. With our ClimaSys offer you can find the right solution, be it ventilation, cooling or heating, including control units for temperature, humidity and much more.

Product family names:

- ClimaSys CV: *Ventilation systems*
- ClimaSys CR: *Insulated resistance heaters*
- ClimaSys CC: *Thermal control*

Our Software Suite

Spacial.pro

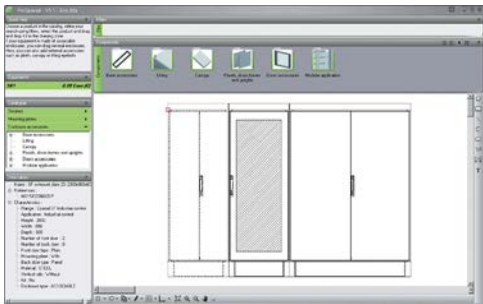
Spacial.pro allows you to make switchboard proposals based on the standard Spacial™ offer. A full project with several sets of switchboards is quoted in minutes, with automatic creation of the bill of material and 2D drawings for front and side views.

ProClima

Calculate the right choice for your thermal management requirements, according to the environment and the electrical/electronic devices installed inside the enclosure.

Spacial.ref and Thalassa.ref

These digital rules assist you in selecting the appropriate components for your application from our extensive product range. The tool automates product and accessory selection to help save you time and money.



NEMA and UL Enclosure Ratings

Table 28.1: NEMA and UL Enclosure and Component Ratings

Enclosures		Type of protection [1]												
		1	2	3	3R	3S	4	4X	5	6	6P	12	12K	13
Steel wall-mounting enclosures	S3DC	•	•	• [2]	• [2]		• [2]	• [2]				• [3]	• [3]	• [3]
	CRN	•	• [2]	• [2]	• [2]		• [2]		• [2]			•		•
Stainless-steel wall-mounting enclosures	S3X	•	• [2]	• [2]	• [2]		• [2]	• [2]	• [2]			•	• [3]	• [2]
Steel floor-standing enclosures	SM	•	• [2]	• [2]	• [2]		• [2]		• [2]			•	•	• [2]
Steel modular enclosures	SF	•										•	•	
Stainless-steel floor-standing enclosures	SMX	•	• [2]	• [2]	• [2]		• [2]	• [2]	• [2]			•	•	• [2]
Stainless-steel modular enclosures	SFX	•										•	•	
Thermoplastic boxes	TBS - TBP	•		•		•	•	•						
Polyester modular boxes	PLS	•	•	•	•	•	•	•				•		•
Polyester wall-mounting enclosures	PLM	•	•	•	•	•	•	•				•		•
Polyester floor-standing enclosures	PLA	•	•	• [2]	• [2]		• [2]	• [2]	• [2]			•		•

Components		Type of protection [1]												
		1	2	3	3R	3S	4	4X	5	6	6P	12	12K	13
Ventilation system	CV													
Thermal regulation system	CC											•	•	

UL Listing

Table 28.2: UL File Numbers for Enclosures

Standard Enclosure Type	UL File Number
NSYSM	E103582
NSYSF	E80264
NSYSMX	E103582
NSYSFX	UL Certification pending
NSYSCRN	E103582
NSYSCRNG	E80264
NSYS3DC	E80264
NSYS3X	E103582
NSYSPLA	E103582
NSYSPLM	E103582

[1] In some ranges the classification depends on the model and version. The detailed protection types are indicated in the UL certifications.

[2] 1 door
[3] 2 doors

Ventilation Systems with Filters

Specially recommended for installations in which the ambient temperature is lower than the desired temperature inside the enclosure, a high protection rating is required: IP54 or IP55, and the surrounding environment is relatively clean, allowing air to enter the enclosure.



- 38 to 850 m³/h.
- Five input voltages: AC: 400/440 V, 230 V, 115 V (50/60 Hz), DC: 48 V and 24 V.
- Broad range of accessories (filters, IP55 and EMC covers, anti-vandalism kit).
- **UL Listing:** E80264

Table 28.8: Ventilation Systems with Filters

Fan flow rate (50 Hz)			Voltage	Catalog Number					
Free with filter	With 1 outlet grill	With 2 outlet grills		Fan with filter RAL 7035	Outlet grill	Color kit RAL 7032	IP55	IP55 stainless steel	EMC
38	25	33	230 V	NSYCVF38M230PF	NSYCAG92LPF	NSYCAG92LPC	—	—	—
38	27	35	115 V	NSYCVF38M115PF					
58	39	47	24 Vdc	NSYCVF38M24DPF					
44	34	41	48 Vdc	NSYCVF38M48DPF	NSYCAG125LPF	NSYCAG125LPC	NSYCAP125LZF	NSYCAG125LXF	NSYCAG125SLE
85	63	71	230 V	NSYCVF85M230PF					
79	65	73	115 V	NSYCVF85M115PF					
80	57	77	24 Vdc	NSYCVF85M24DPF	NSYCAG223LPF	NSYCAG223LPC	NSYCAP223LZF	NSYCAG223LXF	NSYCAP223LE
79	59	68	48 Vdc	NSYCVF85M48DPF					
165	153	161	230 V	NSYCVF165M230PF					
164	153	161	115 V	NSYCVF165M115PF	NSYCAG291LPF	NSYCAG291LPC	NSYCAP291LZF	NSYCAG291LXF	NSYCAP291LE
188	171	179	24 Vdc	NSYCVF165M24DPF					
193	171	179	48 Vdc	NSYCVF165M48DPF					
302	260	268	230 V	NSYCVF300M230PF	NSYCAG291LPC	NSYCAG291LPC	NSYCAP291LZF	NSYCAG291LXF	NSYCAP291LE
302	263	271	115 V	NSYCVF300M115PF					
262	221	229	24 Vdc	NSYCVF300M24DPF					
247	210	218	48 Vdc	NSYCVF300M48DPF	NSYCAG291LPC	NSYCAG291LPC	NSYCAP291LZF	NSYCAG291LXF	NSYCAP291LE
562	473	481	230 V	NSYCVF560M230PF					
582	485	494	115 V	NSYCVF560M115PF					
838	718	728	230 V	NSYCVF850M230PF	NSYCAG291LPC	NSYCAG291LPC	NSYCAP291LZF	NSYCAG291LXF	NSYCAP291LE
983	843	854	115 V	NSYCVF850M115PF					
931	798	809	400/440 V	NSYCVF850M400PF					