



Saves Your Energy

Polyester cabinets

Ensto Cubo N



Ensto Industrial Solutions

Ensto Industrial Solutions

at your service

We are known in the industry for designing and manufacturing standard and customer-specific enclosing solutions and electromechanical products for demanding industrial environments.

We are professionals in providing customer-specific enclosing solutions targeted at demanding environments. We are a reliable partner with an experienced design department. We keep to schedule and offer excellent customer care. We also have sound knowledge of a wide range of materials.

Our service offering

Our service offering includes the customization of standard enclosures as well as the crea-

tion of tailor-made new enclosing solutions based on the customers' product projects. We also offer assembly services as well as the sourcing of third party components.

We are experts in product design and development and offer totally tailor-made solutions, including smooth technical documentation, 3D modelling and quick prototyping.

Solutions for high demands

Our solutions typically have a high degree of protection (IP66/67). We have also developed solutions meeting IP69K. We work closely with standardizing and testing bodies, with certifying products according to customer needs.

Standard products

Our standard product range includes thermoplastic, polyester, sheet steel and aluminium enclosures and the related accessories. These are supported by a broad selection of terminals and load break switches used by global manufacturers.

Why Ensto

- Highly experienced design department
- Innovative personnel with technical expertise
- Specialists in injection molded customer-specific solutions
- Cost-efficient mold modifications
- Modern production facilities
- Assembly service
- Sourcing of third party components
- Reliable and flexible deliveries with special packaging possibilities

Customer-specific enclosing solutions

Customized enclosing solutions



- Machining such as cutting, drilling and threading according to customer's drawings



- Silk screen printing



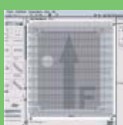
- Color service



- Mechanical assembly



- Customer-specific sizes

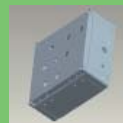


- Offering an online tool for fast configuration and a short lead-time

Tailor-made enclosing solutions



- Feasibility studies



- 3D modelling, prototyping & technical documentation



- Mold sourcing & maintenance



- Manufacturing of customer-specific special tools



- Sub-assembly testing and certification



- Quality documentation and coordination audits

Integration services



- Mechanical assembly



- Electromechanical assembly



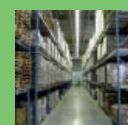
- Hardware and software integrations



- Testing including e.g. environmental and functionality testing



- Sourcing of third party components



- Logistics & quality assurance

Polyester cabinets

for various applications

Ensto Cubo N wall cabinets are created by professionals to provide customer-specific enclosing solution targeted at demanding environments.

The cabinets are made of glass reinforced polyester and are extremely assertive. They can replace stainless steel enclosures in challenging conditions. Cost-effective polyester enclosing solution used is UV resistant, self-extinguishing and halogen free. Cabinets can be used in various environments and applications such as marine & offshore energy, industrial control, water and waste water treatment as well as renewable energy.

Marine & offshore energy – Cabinets are corrosion resistant and do not absorb water. Ensto Cubo N does not require any finishing

or maintenance. It is self-extinguishable and it does not feed the flames.

Industrial control – Ensto Cubo N allows fast and easy fitting for e.g. remotely read electricity meters. This cabinet can take hits up to 20joules with the high impact strength IK10. Wall cabinets are also extremely assertive and with the double isolation they provide an excellent protection against contacts.

Water and waste water treatment – Ensto Cubo N cabinets are corrosion and chemical resistant with high IP66 class. Cabinets are comfortable and easy to handle and install.

Renewable energy – Fiberglass reinforced polyester cabinet is insensitive to outdoor environment. It is resistant to climate changes and has high UV resistant. An integrated protection edge prevents entrance of water while opening the door.



Using internal door with a transparent window is a good solution for the fixing of signal and measurement elements.



Ensto Cubo N wall cabinets IP 66

Sizes 250 x 300 x 140 to 600 x 800 x 300 mm



Ensto Cubo N wall cabinets in brief:

- Available with plain sides or with polycarbonate window
- Available in 7 sizes
- Has superb temperature resistance
- Has sturdy construction and high resistance to corrosion and solvents
- Is suitable for highly demanding environments such as oil refineries and the petrochemical/chemical industries
- Quick fixture guides in the back that permit fitting without drilling
- Built-in protection edge guarantees the possibility to open the door 180° in built-in installations and also prevents entrance of water while opening the door
- Vertical patterns in the interior of the door enables the correct fitting of devices
- Is difficult to machine, for which reason ordering enclosures with ready-made cut-outs is recommended.

Contents of the product package:

- Enclosure base
- Door
- Lock and DIN 3 keys (one for each lock)
- (or 3-point closing with swing handle)

Customising services available for this product:

- Machining
- Prints
- Assembly of components

Further information on our customising services is available on page 2.

Conformity	
Technical information	
Degree of protection:	IP 66
Impact resistance:	IK 10
Flammability rating:	UL 746C 5V
Material	
Base/cover:	Fibreglass reinforced polyester
Lock:	Double bit DIN 3.0 mm
Gasket:	PUR (polyurethane)
Knockout alternatives	
	Plain sides / customer-specific knockouts
Standard colour	
Base:	Grey RAL 7035
Cover:	Grey RAL 7035



Ensto Cubo N wall cabinets have a built-in protection edge which enables opening the door 180° while shielding the cabinet from water entrance. The quick fixture guides in the back of the cabinet permits fittings without drilling.

Product cards with technical drawings can be found at www.ensto.com.

Ensto Cubo N wall cabinets

Ensto Cubo N wall cabinets with plain sides, polyester

PRODUCT CODE	DESCRIPTION	EXTERNAL DIMENSIONS (MM)				INNER DEPTH (MM)	PACKAGE SIZE (PCS)	EAN 13 CODE
		WIDTH	HEIGHT	DEPTH	BASE DEPTH			
NGRP253014		250	300	140			1	6438100123451
NGRP304020		300	400	200			1	6438100123468
NGRP404020		400	400	200			1	6438100123475
NGRP405020		400	500	200			1	6438100123482
NGRP406023		400	600	230			1	6438100123499
NGRP506023		500	600	230			1	6438100123505
NGRP608030		600	800	300			1	6438100123512



NGRP506023

Ensto Cubo N wall cabinets with plain sides, 3-point closing with swing handle / DIN3, polyester

PRODUCT CODE	DESCRIPTION	EXTERNAL DIMENSIONS (MM)				INNER DEPTH (MM)	PACKAGE SIZE (PCS)	EAN 13 CODE
		WIDTH	HEIGHT	DEPTH	BASE DEPTH			
NGRP304020P3SH		300	400	200			1	6438100123581
NGRP404020P3SH		400	400	200			1	6438100123598
NGRP405020P3SH		400	500	200			1	6438100123604
NGRP406023P3SH		400	600	230			1	6438100123611
NGRP506023P3SH		500	600	230			1	6438100123628
NGRP608030P3SH		600	800	300			1	6438100123635



NGRP404020P3SH

Ensto Cubo N wall cabinets with plain sides and polycarbonate window, polyester

PRODUCT CODE	DESCRIPTION	EXTERNAL DIMENSIONS (MM)				INNER DEPTH (MM)	PACKAGE SIZE (PCS)	EAN 13 CODE
		WIDTH	HEIGHT	DEPTH	BASE DEPTH			
NGRW253014		250	300	140			1	6438100123642
NGRW304020		300	400	200			1	6438100123659
NGRW404020		400	400	200			1	6438100123666
NGRW405020		400	500	200			1	6438100123673
NGRW406023		400	600	230			1	6438100123680
NGRW506023		500	600	230			1	6438100123697
NGRW608030		600	800	300			1	6438100123703



NGRW304020

Mounting plates

PRODUCT CODE	DESCRIPTION	DIMENSIONS (MM)	PACKAGE SIZE (PCS)	EAN 13 CODE
Mounting plates, GRP				
NGRMP2530		213 x 268 x 4	1	6438100123833
NGRMP3040		260 x 358 x 4	1	6438100123840
NGRMP4040		360 x 358 x 4	1	6438100123857
NGRMP4050		360 x 458 x 4	1	6438100123864
NGRMP4060		360 x 558 x 4	1	6438100123871
NGRMP5060		460 x 558 x 4	1	6438100123888
NGRMP6080		556 x 754 x 4	1	6438100123895
Mounting plates, galvanized steel				
NMP2530		213 x 268 x 2	1	6438100123970
NMP3040		260 x 358 x 2	1	6438100123987
NMP4040		360 x 358 x 2	1	6438100123994
NMP4050		360 x 458 x 2	1	6438100124007
NMP4060		360 x 558 x 2	1	6438100124014
NMP5060		460 x 558 x 2	1	6438100124021
NMP6080		556 x 754 x 2	1	6438100124038



NGRMP3040



NMP5060

Ensto Cubo N wall cabinets

Other accessories

PRODUCT CODE	DESCRIPTION	DIMENSIONS (MM)	PACKAGE SIZE (PCS)	EAN 13 CODE
Internal door kit, GRP				
NID3040	For 300 x 400 mm wall cabinets	258 x 366	1	6438100124304
NID4040	For 400 x 400 mm wall cabinets	358 x 366	1	6438100124311
NID4050	For 400 x 500 mm wall cabinets	358 x 466	1	6438100124328
NID4060	For 400 x 600 mm wall cabinets	358 x 566	1	6438100124335
NID5060	For 500 x 600 mm wall cabinets	458 x 566	1	6438100124342
NID6080	For 600 x 800 mm wall cabinets	558 x 766	1	6438100124359
Chassi for modular devices, IP20				
NMC3040.24	For 300 x 400 mm wall cabinets, 2 DIN openings for 12 modules	-	1	6438100124366
NMC4040.36	For 400 x 400 mm wall cabinets, 2 DIN openings for 18 modules	-	1	6438100124373
NMC4050.54	For 400 x 500 mm wall cabinets, 3 DIN openings for 18 modules	-	1	6438100124380
NMC4060.54	For 400 x 600 mm wall cabinets, 3 DIN openings for 18 modules	-	1	6438100124397
NMC5060.69	For 500 x 600 mm wall cabinets, 3 DIN openings for 23 modules	-	1	6438100124403
NMC6080.116	For 600 x 800 mm wall cabinets, 4 DIN openings for 29 modules	-	1	6438100124410
Wall mounting lugs				
NFL1	Set of 4 pcs, plastic	-	1	6438100124670
Locks				
NKL1	Key lock with a wrench	-	1	6438100124816
NPD3041	Padlocking accessory, AISI 304	-	1	6438100124854



Chassis for modular devices. The kit includes a metal frame with DIN rails and module cover plates.



Chassi for modular devices, NMC4060.54.



Wall mounting lugs, NFL1.



Key lock with a wrench, NKL1.

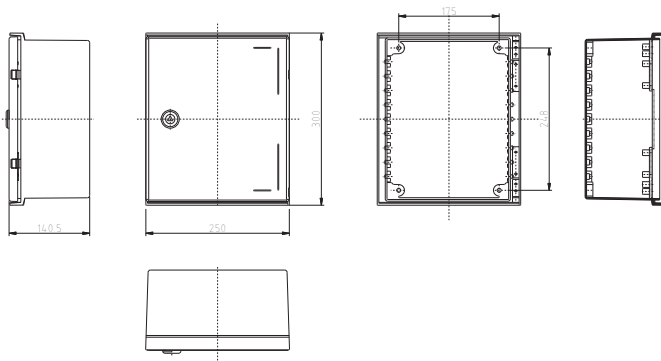


Padlocking accessory, NPD3041.

Technical drawings, Ensto Cubo N

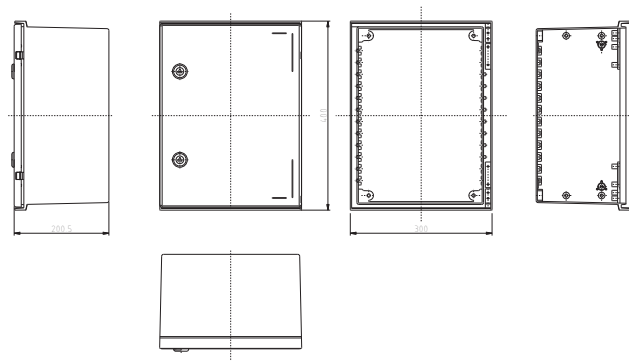
Dimension in mm

Ensto Cubo N 250 x 300 x 140 mm



PRODUCT CODE	DESCRIPTION
NGRP253014	Plain sides, GRP
NGRP253014P3SH	Plain sides, 3-point closing with swing handle, GRP
NGRW253014	Plain sides, PC window: 115 x 220 mm, GRP

Ensto Cubo N 300 x 400 x 200 mm

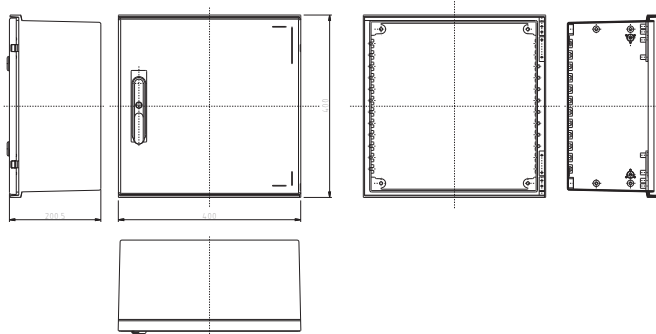


PRODUCT CODE	DESCRIPTION
NGRP304020	Plain sides, GRP
NGRP304020P3SH	Plain sides, 3-point closing with swing handle, GRP
NGRW304020	Plain sides, PC window: 141 x 281 mm, GRP

Technical drawings, Ensto Cubo N

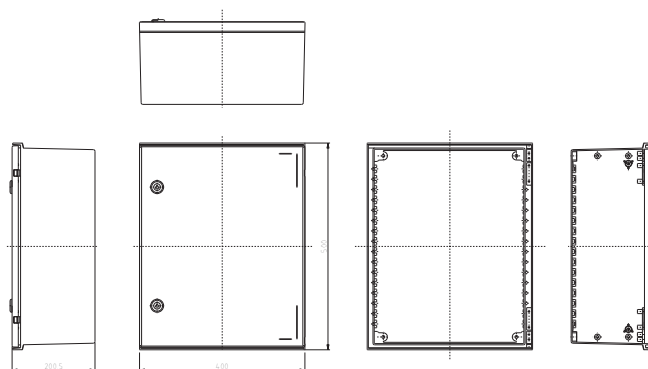
Dimensions in mm

Ensto Cubo N 400 x 400 x 200 mm



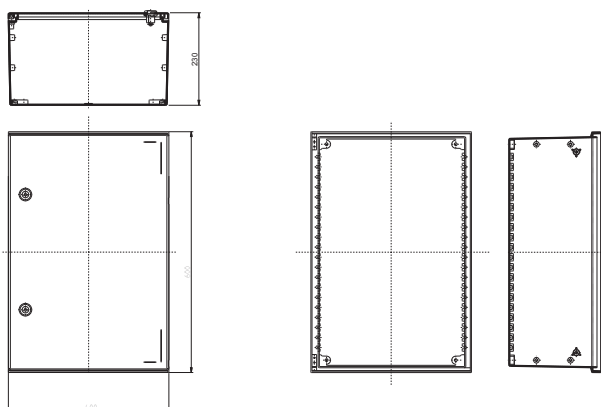
PRODUCT CODE	DESCRIPTION
NGRP404020	Plain sides, GRP
NGRP404020P3SH	Plain sides, 3-point closing with swing handle, GRP
NGRW404020	Plain sides, PC window: 221 x 281 mm, GRP

Ensto Cubo N 400 x 500 x 200 mm



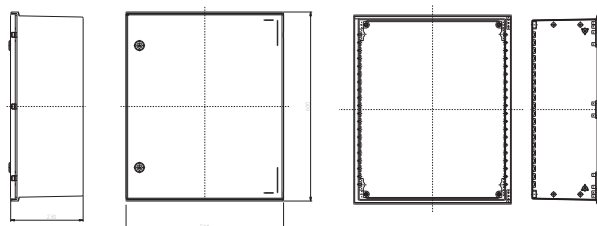
PRODUCT CODE	DESCRIPTION
NGRP405020	Plain sides, GRP
NGRP405020P3SH	Plain sides, 3-point closing with swing handle, GRP
NGRW405020	Plain sides, PC window: 221 x 381 mm, GRP

Ensto Cubo N 400 x 600 x 230 mm



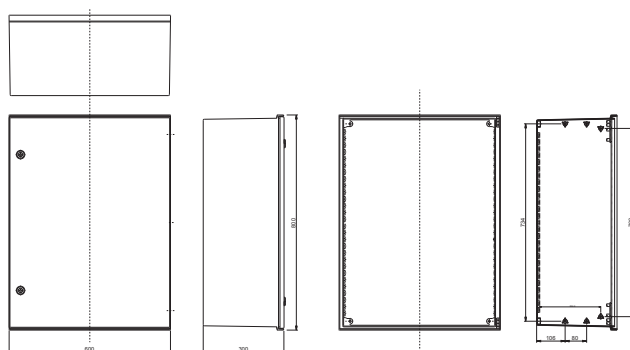
PRODUCT CODE	DESCRIPTION
NGRP406023	Plain sides, GRP
NGRP406023P3SH	Plain sides, 3-point closing with swing handle, GRP
NGRW406023	Plain sides, PC window: 221 x 481 mm, GRP

Ensto Cubo N 500 x 600 x 230 mm



PRODUCT CODE	DESCRIPTION
NGRP506023	Plain sides, GRP
NGRP506023P3SH	Plain sides, 3-point closing with swing handle, GRP
NGRW506023	Plain sides, PC window: 321 x 481 mm, GRP

Ensto Cubo N 600 x 800 x 300 mm



PRODUCT CODE	DESCRIPTION
NGRP608030	Plain sides, GRP
NGRP608030P3SH	Plain sides, 3-point closing with swing handle, GRP
NGRW608030	Plain sides, PC window: 421 x 681 mm, GRP

Legal notice

The information in this brochure is to the best of Ensto's knowledge and belief correct and reliable. We reserve the right to make changes in the specifications, materials and production methods without further notice. Be aware of that you have to evaluate independently the suitability of each product for the intended application. Ensto does not give any assurance of any particular quality or performance. Our responsibilities for the products are set forth in the "Orgalime S 2000 General Conditions for the Supply of Mechanical, Electrical and Electronic Products". The products shall be installed only by a competent person having nationally required knowledge. Ensto is not responsible for its distributors or for any misuse, incorrect installation or ignored national safety or other national provisions.

Copyright Ensto Oy 2011, Ensto™



Saves Your Energy

Ensto Finland Oy
Ensio Miettisen Katu 2, P.O. Box 77
FIN-06101 Porvoo, Finland
enclosure.solutions@ensto.com
www.ensto.com