

> Insulating industrial boxes:

- ABS for conventional applications (IK07) with the usual constraints,
- polycarbonate for enhanced impact resistance (IK08) and for outdoor applications or applications directly exposed to UV,
- polycarbonate certified UL,
- IP55 rating for all ranges,
- Protection against electrical impacts Class II.

PB500248E55



PB500271-32



Easy to install

3 methods of mounting the box to its support.

PB500273-72



Easy to use

Only one tool is required: a flat screwdriver.

PB500091



Smart

Mounting studs on the cover.

This range can be configured according to your needs

4 different services available:



Assemble to order



Mounting of standard accessories



Painting



Machining

See page 396 for details or consult our web site www.schneider-electric.com

Insulating industrial boxes

Characteristics



Characteristics	Universal boxes with IP66	Equipped button boxes, in ABS with IP54	ABS boxes for buttons, to be equipped
	<ul style="list-style-type: none"> ■ Boxes that can be coupled (exactly the same dimensions) with kit ref. 13934. ■ Locks from box size of 116 x 116 x 62 mm: <ul style="list-style-type: none"> <input type="checkbox"/> cover locking by 4 plastic captive screws with coarse thread outside the sealed area, <input type="checkbox"/> plumbable lock. ■ Locks from box size of 138 x 93 x 72 mm: <ul style="list-style-type: none"> <input type="checkbox"/> the standard screws (flat screwdriver) can be replaced with other standardised screws (page 178). ■ The 4 "legs" of the cover ensure its robustness and perfect support during customisation operations. ■ Adaptable hinges on all the 20- and 40-mm covers (page 180). 		
Material	<ul style="list-style-type: none"> ■ ABS boxes: <ul style="list-style-type: none"> <input type="checkbox"/> glow wire resistance: 650°C according to IEC 60695-2-11 <input type="checkbox"/> usage temperature: -25°C...+60°C <input type="checkbox"/> installation temperature: -15°C...+40°C ■ Polycarbonate boxes: <ul style="list-style-type: none"> <input type="checkbox"/> glow wire resistance: 960°C <input type="checkbox"/> usage temperature: -25°C...+80°C <input type="checkbox"/> installation temperature: -15°C...+60°C 	<ul style="list-style-type: none"> ■ ABS boxes: <ul style="list-style-type: none"> <input type="checkbox"/> glow wire resistance: 650°C according to IEC 60695-2-11 <input type="checkbox"/> usage temperature: -25°C...+60°C <input type="checkbox"/> installation temperature: -15°C...+40°C 	
Colour	<ul style="list-style-type: none"> ■ Body: RAL 7035 grey ■ Cover: RAL 7035 grey or tinted transparent 		
Ingress protection rating	IP66	IP54	-
Mechanical protection rating	<ul style="list-style-type: none"> ■ ABS: IK07 (2J) according to IEC 62262 ■ Polycarbonate: IK08 (2J) according to IEC 62262 	<ul style="list-style-type: none"> ■ ABS: IK07 (2J) according to IEC 62262 	
Standards	IEC 62208		
Certifications	<ul style="list-style-type: none"> ■ IEC 62208 certified by TÜV ■ SEMKO, DEMKO ■ UL 508A: polycarbonate range ■ Product Environmental Profile ■ NEMA 4.4X according to NEMA 250 ■ Class II according to IEC 61140 ■ Self-extinguishing: UL 94-V0 	<ul style="list-style-type: none"> ■ IEC 62208 certified by TÜV ■ SEMKO, DEMKO ■ UL 508A: polycarbonate range ■ Product Environmental Profile ■ NEMA 4.4X according to NEMA 250 and UL 50/50E ■ Class II according to IEC 61140 	
Installation	<p>Mounting the box</p> <ul style="list-style-type: none"> ■ Outside the sealed sensitive volume by the 4 chimneys in the corners from box size of 138 x 93 x 72 mm ■ Through the rear of the box by 2 or 4 elongated holes to be perforated ■ With mounting brackets from box size of 116 x 116 x 62 mm (ref. NSYAEFTB) <p>Outdoor installation: compliant with IEC 62208 regarding type tests specified in §9.12 (resistance to ultra-violet (UV) radiation) and §9.13 (resistance to corrosion). It is always advisable to install a canopy to avoid water stagnation on the upper part of the enclosure</p> <p>Equipment installation</p> <ul style="list-style-type: none"> ■ Studs for mounting the equipment in the body and the cover of the box by means of a Ø 4-mm self-tapping screw (ref. NSYAMFSTB, screw Ø 4 x 10 mm with Pozidriv and slotted head) ■ Option of installing rails, plates (page 181) or other types of supports (card, etc.) ■ Spacers and stand-offs to be installed on the studs, for adjusting the height of the equipment 		
Other characteristics	<ul style="list-style-type: none"> ■ Thermal dissipation: <ul style="list-style-type: none"> <input type="checkbox"/> use a suitable calculation method according to IEC 60890 <input type="checkbox"/> anti-condensation valves available as an accessory, prevent the build-up of moisture inside the box 	<ul style="list-style-type: none"> ■ Thermal dissipation: <ul style="list-style-type: none"> <input type="checkbox"/> use a suitable calculation method according to IEC 60890 <input type="checkbox"/> anti-condensation valves available as an accessory, prevent the build-up of moisture inside the box 	

Insulating industrial boxes

Selection guide



Overall external dimensions			Overall internal dimensions			Body	Cover	Minor pack.	Cover screw	Universal boxes with IP66			
(mm)			(mm)			(mm)	(mm)			ABS IP66 IK07		PC-UL IP66 IK08	
Height	Width	Depth	Height	Width	Depth					Opaque cover	Transparent cover	Opaque cover	Transparent cover
74	74	54	65	65	47	37	10	5	Metal	NSYTBS775	-	NSYTBP775	-
89	89	54	80	80	47	37	10	5	Metal	NSYTBS885	-	NSYTBP885	-
116	74	62	105	65	55	45	10	5	Metal	NSYTBS1176	-	NSYTBP1176	-
		94	105	65	85	45	40	3	Metal	NSYTBS1179H	-	-	-
	116	62	105	105	55	45	10	5	Plastic	NSYTBS11116	-	NSYTBP11116	-
		133	105	105	125	45	80	2	Plastic	NSYTBS111113H	-	-	-
138	93	72	125	80	65	45	20	2	Plastic	NSYTBS1397	NSYTBS1397T	NSYTBP1397	NSYTBP1397T
164	121	87	150	105	80	60	20	2	Plastic	NSYTBS16128	NSYTBS16128T	NSYTBP16128	NSYTBP16128T
192	121	87	175	105	80	60	20	2	Plastic	NSYTBS19128	NSYTBS19128T	NSYTBP19128	NSYTBP19128T
		105	175	105	100	60	40	2	Plastic	NSYTBS191210H	NSYTBS191210HT	NSYTBP191210H	NSYTBP191210HT
	164	87	175	150	80	60	20	1	Plastic	NSYTBS19168	NSYTBS19168T	NSYTBP19168	NSYTBP19168T
		105	175	150	100	60	40	1	Plastic	NSYTBS191610H	NSYTBS191610HT	NSYTBP191610H	NSYTBP191610HT
241	194	87	225	175	80	60	20	1	Plastic	NSYTBS24198	NSYTBS24198T	NSYTBP24198	NSYTBP24198T
		107	225	175	100	80	20	1	Plastic	NSYTBS241910	NSYTBS241910T	NSYTBP241910	NSYTBP241910T
		107	225	175	100	60	40	1	Plastic	NSYTBS241910H	NSYTBS241910HT	NSYTBP241910H	NSYTBP241910HT
		127	225	175	120	80	40	1	Plastic	NSYTBS241912H	NSYTBS241912HT	NSYTBP241912H	NSYTBP241912HT
291	241	88	275	225	80	60	20	1	Plastic	NSYTBS29248	NSYTBS29248T	NSYTBP29248	NSYTBP29248T
		128	275	225	120	100	20	1	Plastic	NSYTBS292412	NSYTBS292412T	NSYTBP292412	NSYTBP292412T
		128	275	225	120	60	60	1	Plastic	NSYTBS292412H	NSYTBS292412HT	NSYTBP292412H	NSYTBP292412HT
		168	275	225	160	100	60	1	Plastic	NSYTBS292416H	NSYTBS292416HT	NSYTBP292416H	NSYTBP292416HT
341	291	128	325	275	120	100	20	1	Plastic	NSYTBS342912	NSYTBS342912T	NSYTBP342912	NSYTBP342912T
		168	325	275	160	100	60	1	Plastic	NSYTBS342916H	NSYTBS342916HT	NSYTBP342916H	NSYTBP342916HT

Insulating industrial boxes

Selection guide



Overall external dimensions (mm)			Overall internal dimensions (mm)			Body (mm)	Cover (mm)	Minor pack.	Boxes equipped with IP54 ABS buttons	ABS button boxes, to be equipped				
Height	Width	Depth	Height	Width	Depth				Function	References	No. of holes	Cover	References	
74	74	83	-	-	-	-	-	1	Emergency switching off	XALEK1702 (1)	-	-	-	
116	74	62	105	65	55	45	10	5	-	-	2	Grey	XALE2	
		62	105	65	55	45	10	5	-	-	3	Grey	XALE3	
		75	-	-	-	-	-	-	1	Start / stop	XALE2141	-	-	-
		75	-	-	-	-	-	-	1	Up / down / stop	XALE3255	-	-	-

(1) Ref. **XALEK1702** houses an emergency switching off palm button with mechanical locking according to standards IEC 60364-5-53 and 60947-5-5.

Button description

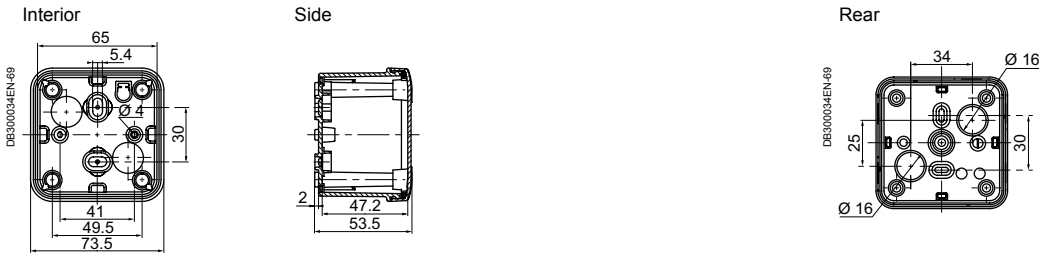
- Emergency switching off function with a red, Ø 40 mm, "turn to unlock" palm button.
- Start / Stop function with 2 push buttons.
- Up / Down / Stop function with 3 push buttons.
- Technical features of the switches:
 - "NC" switch with positive opening manoeuvre according to IEC 60947-5-1 appendix K,
 - mechanical durability of the emergency switch: 0.1 million cycles,
 - mechanical durability of the "NC" and "NO" switches: 5 million cycles,
 - protection against short circuits: 10 A.

Function	Type			Type of push
	"NO"	"NC"	"C / O"	
Emergency switching off	1	1	-	Latching, red
Start/stop				
Start	1	-	-	Flush, green
Stop	-	1	-	Projecting, red
Up / down / stop				
Up	-	-	1	Flush, black
Down	-	-	1	Flush, white
Stop	-	1	-	Projecting, red
	DE300033	DE300033	DE300033	

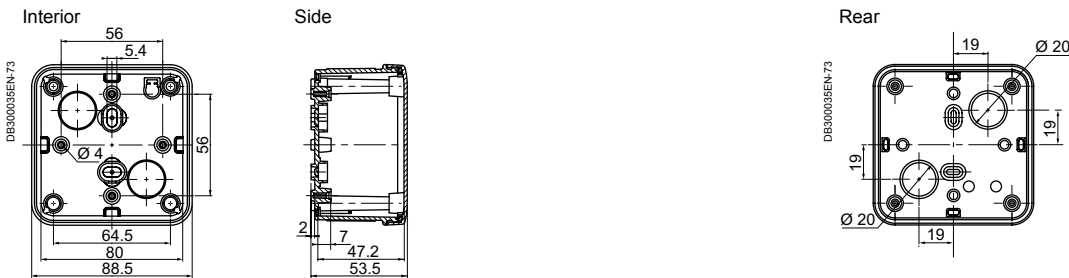
Insulating industrial boxes

Dimensions

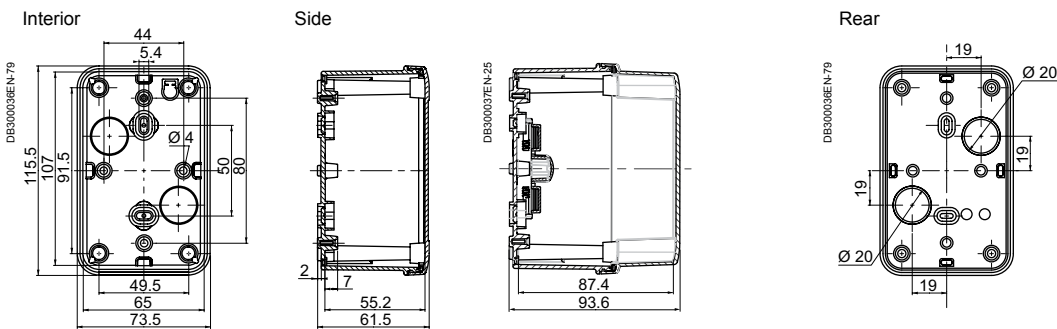
Box of 74 x 74 x 54 mm (external dimensions) NSYTB...775



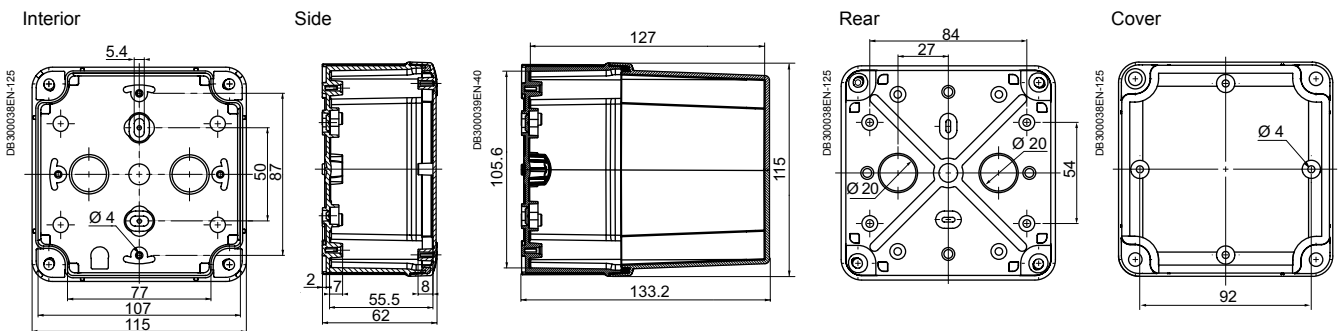
Box of 89 x 89 x 54 mm (external dimensions) NSYTB...885



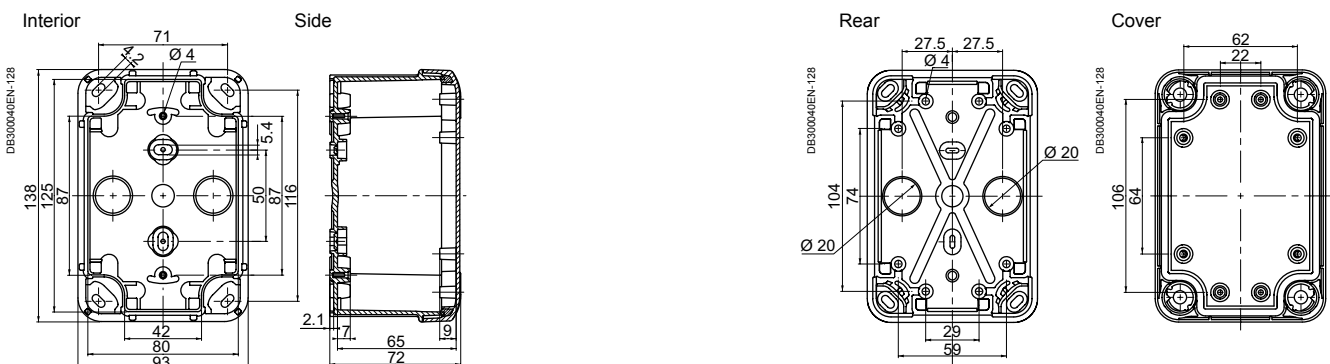
Box of 116 x 74 x 62 or 94 mm (external dimensions) NSYTB...1176 or NSYTB...1179



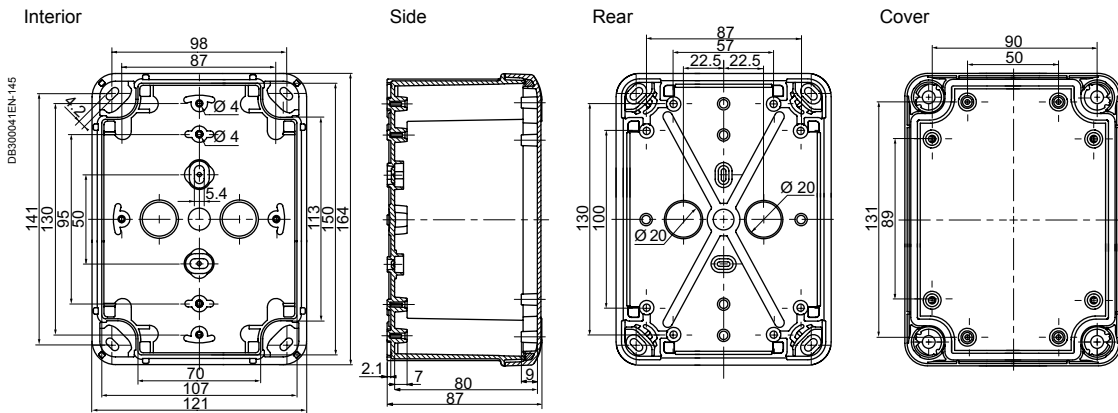
Box of 116 x 116 x 62 or 133 mm (external dimensions) NSYTB...11116 or NSYTB...11113



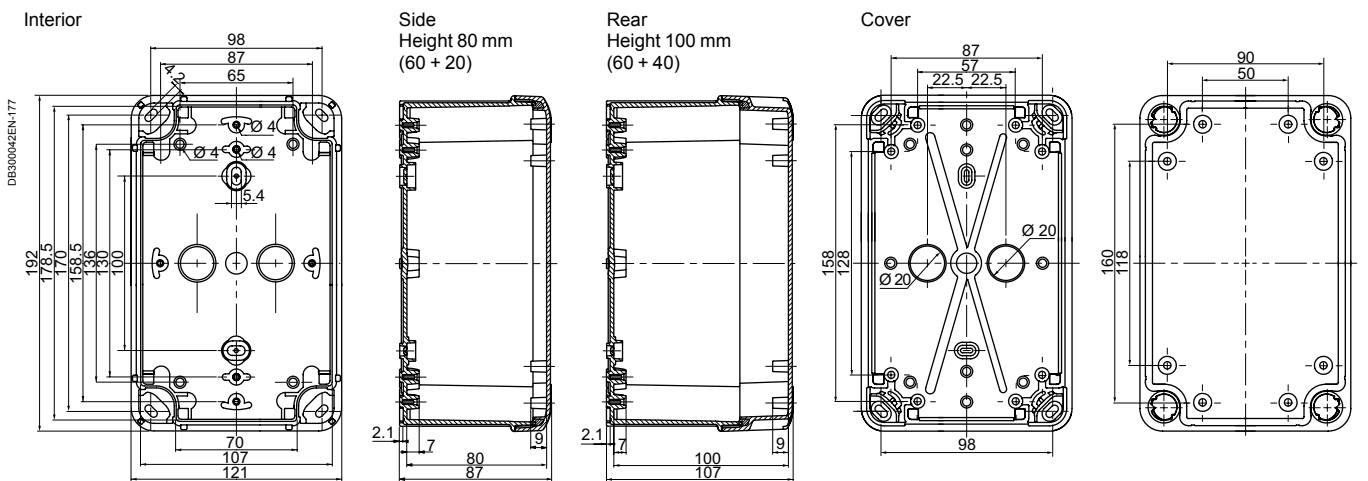
Box of 138 x 93 x 72 mm (external dimensions) NSYTB...1397



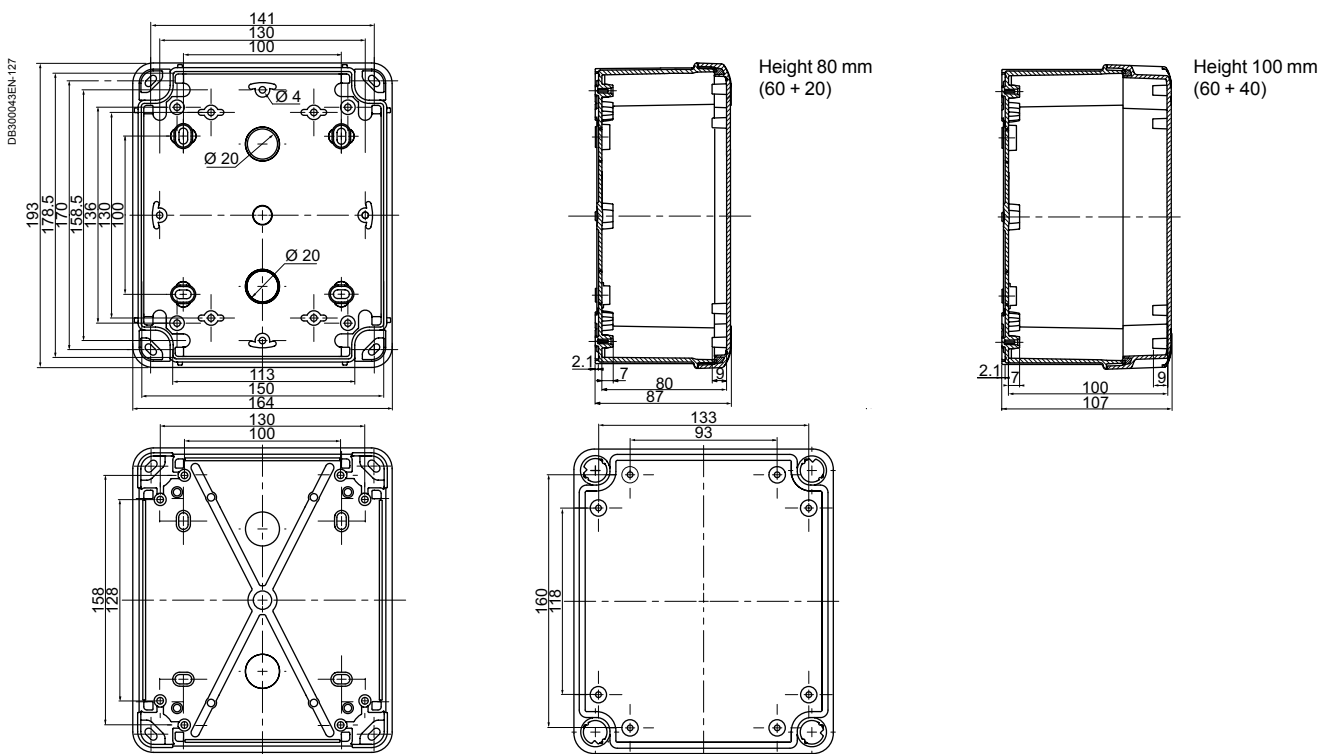
Box of 164 x 121 x 87 mm (external dimensions) NSYTB...16128



Box of 192 x 121 x 87 or 105 mm (external dimensions) NSYTB...19128 or NSYTB...191210



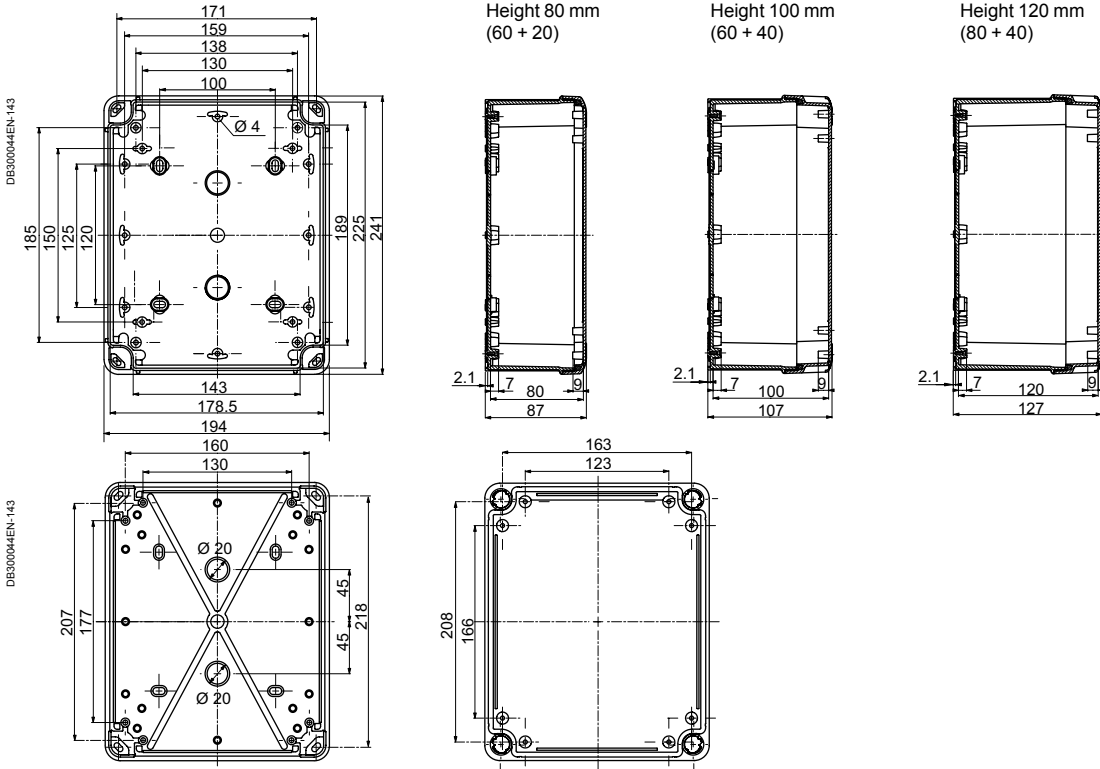
Box of 192 x 164 x 87 or 105 mm (external dimensions) NSYTB...19168 or NSYTB...191610



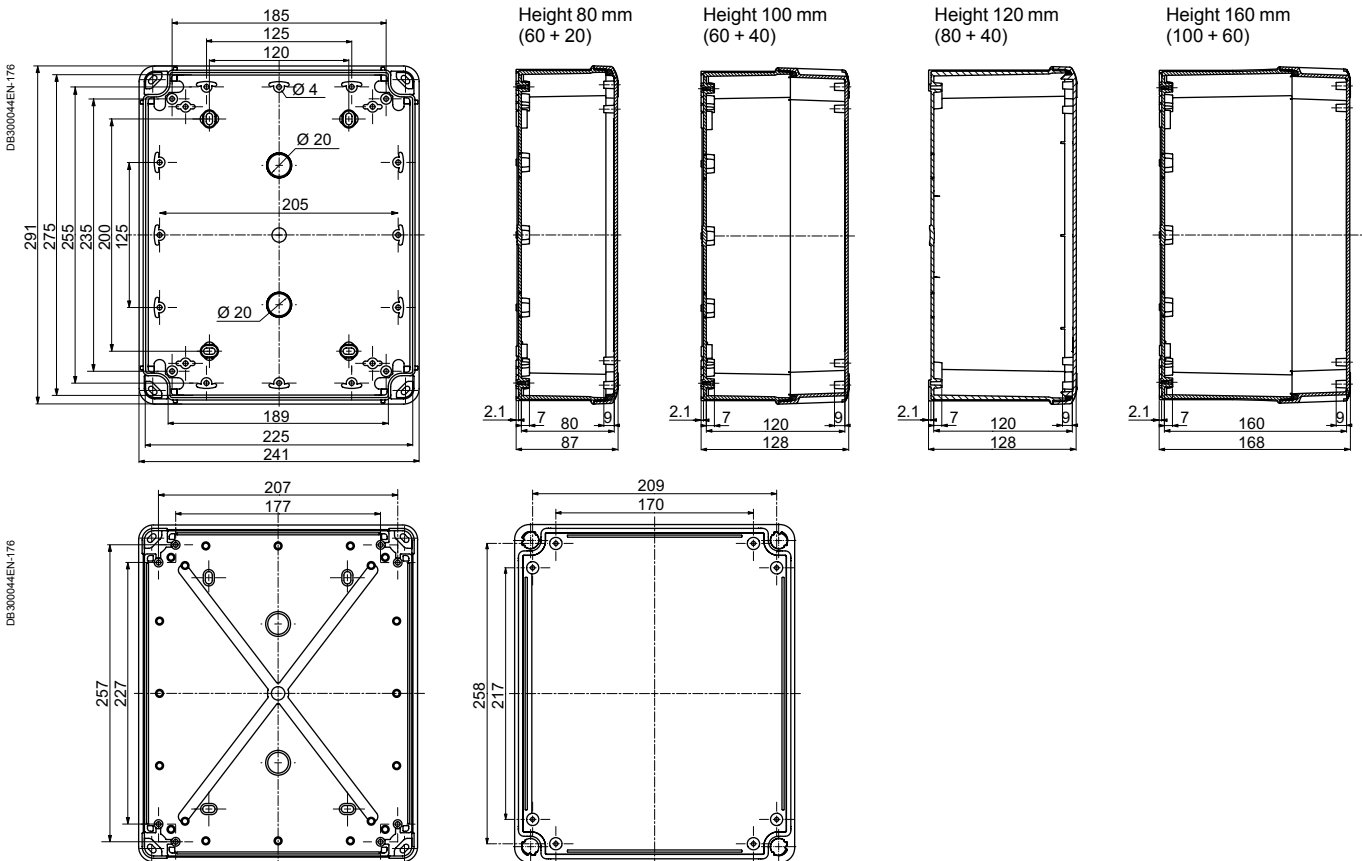
Insulating industrial boxes

Dimensions

Box of 241 x 194 x 87, 107 or 127 mm (external dimensions) NSYTB...24198, NSYTB...241910 or NSYTB...241912



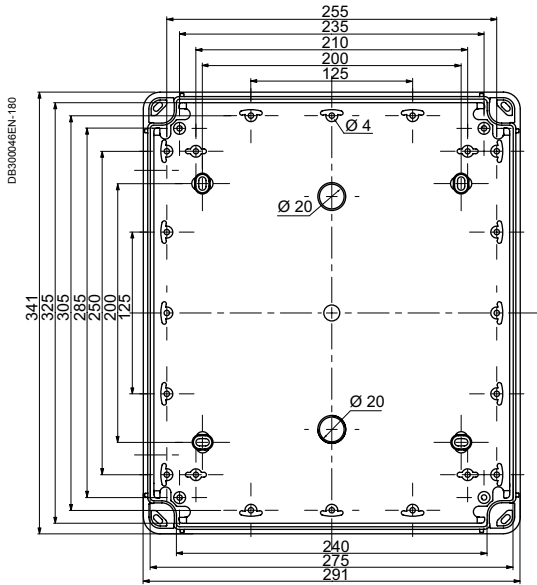
Box of 291 x 241 x 88, 128 or 168 mm (external dimensions) NSYTB...29248, NSYTB...292412 or NSYTB...292416



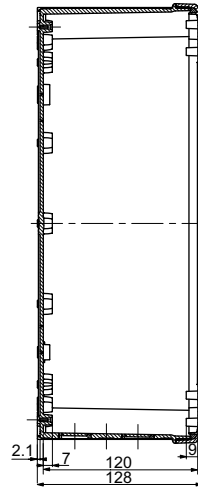
Insulating industrial boxes

Dimensions

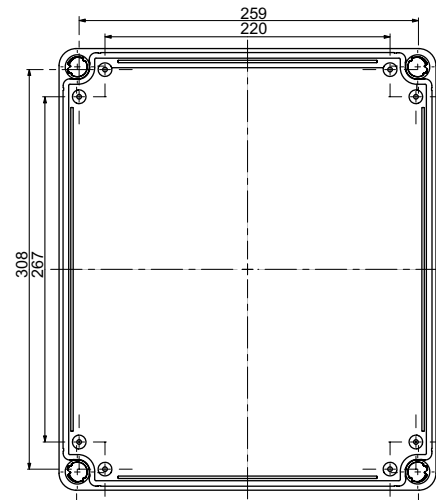
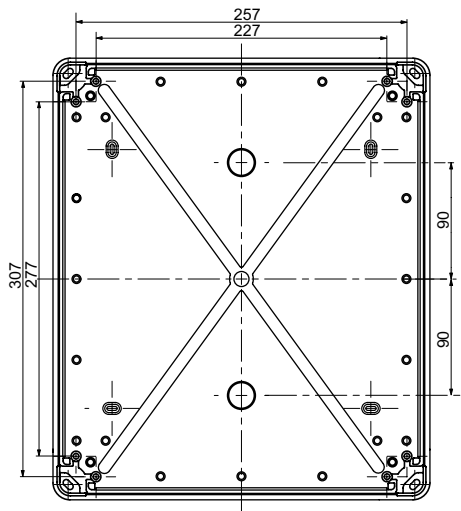
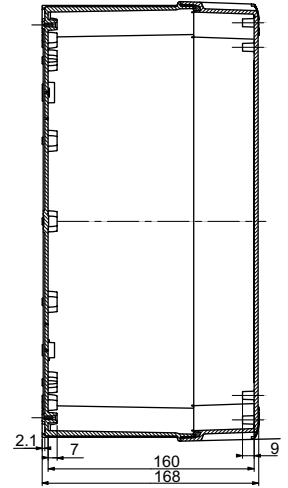
Box of 341 x 291 x 128 or 168 mm (external dimensions) NSYTB...342912 or NSYTB...342916



Height 120 mm
(80 + 40)

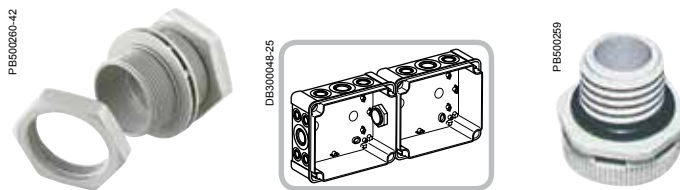


Height 160 mm
(100 + 60)



Insulating industrial boxes

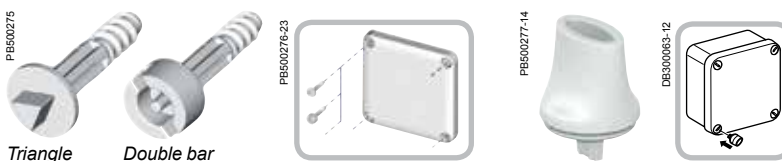
Specific accessories



Characteristics		Coupling kit	Sealed anti-condensation valve		
		The coupling kit allows you to join several boxes with dimensions from 138 x 93 mm.	Controls the pressure to avoid condensation following an internal temperature increase. Applications Protection of equipment for luminaires, industrial control, transportation, pumps, etc.		
Material		Polystyrene 650°	PA6-V2, acrylic co-polymer membrane, water and oil repellent		
Ingress protection rating		IP66	IP68		
Installation		The kit is installed by drilling a hole with Ø 32 mm in the boxes to be coupled	The valve is installed by drilling a hole with Ø 12 mm in the box		
Usage temperature		-	-40...+105°C		
Supply		The kit consists of 2 linking parts, nuts and seals	10 valves, nuts and seals		
Drill Ø	Minor pack.	Reference	Permeability (1)	Pressure difference (2)	References
32 mm	1	13934	-	-	-
M12	10	-	16 litres/h	$\Delta P < 1$ bar	NSYCAG12LPH1
M12	10	-	120 litres/h	$\Delta P < 0.1$ bar	NSYCAG12LPH2

(1) Air flow under $\Delta P = 0.7$ bar.
 (2) Condition for IP68.

Cover accessories



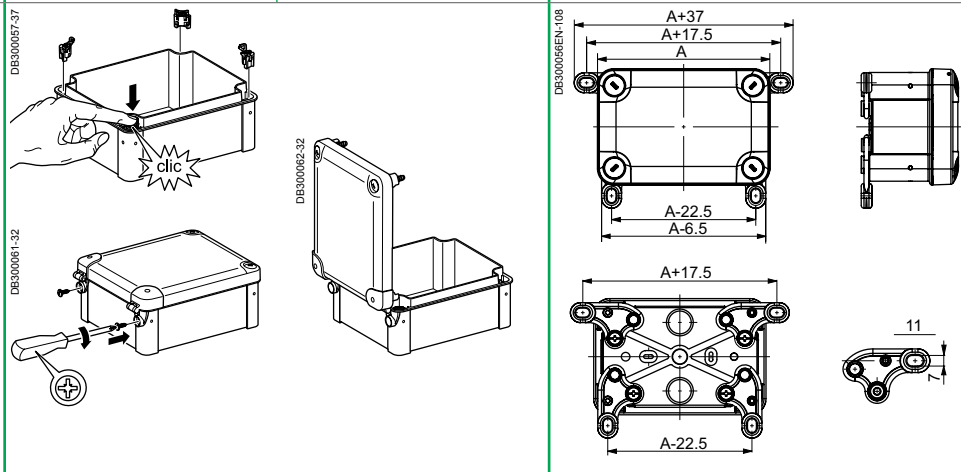
Characteristics			Set of 4 shape screws			Pack of 4 handles		
			<ul style="list-style-type: none"> ■ The Thalassa boxes are delivered as standard with slotted-head screws for flat screwdrivers from 4 to 5.5 mm. ■ With box sizes from 138 x 93 x 72 mm, these screws can be replaced for screws with different standardised heads, to comply with most cases. ■ After removing the standard screw, simply position the new screw by pressing on it. ■ The adapter clips (intermediate parts for tightening the cover on the body of the box) are the same as those for the standard screws. They are not delivered with the shape screws (see drawing on page 180). ■ A single key for opening the boxes as well as the other enclosures of your installation. 			<ul style="list-style-type: none"> ■ The handle (or thumbwheel) allows the screws to be handled without any tools. It is ideally associated with a box equipped with hinges. ■ It snaps onto the head of the standard plastic screw. 		
Type	Minor pack.	Height of the lid (mm)						
		20	40	60				
Triangle	6.5 mm	1	NSYAEDST620TB (1)	-	-	-		
	8 mm	1	NSYAEDST820TB	-	-	-		
Double bar	3 mm	1	NSYAEDSB320TB	-	-	-		
	5 mm	1	NSYAEDSB520TB	-	-	-		
Spare standard plastic screw	1	NSYAEDS20TB	NSYAEDS40TB	NSYAEDS60TB	-	-		
Pack of 4 handles	1	-	-	-	-	NSYAEDKTB		

(1) CNOMO.

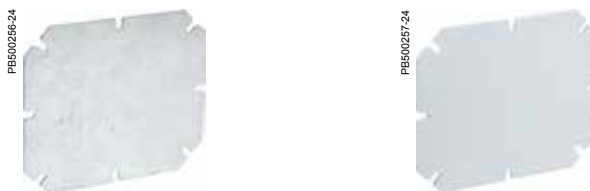
Hinges



Characteristics	Set of 2 hinges	Set of 4 mounting brackets						
Ingress protection rating	IP66	IP66						
Installation	<ul style="list-style-type: none"> The hinges can be adapted to all covers with a height of 20 and 40 mm with dimensions from 138 x 93 mm. The hinge allows the lid to open fully to 200°. 	<ul style="list-style-type: none"> Plastic mounting brackets for installation on boxes with dimensions from 116 x 116 mm. Option of vertical or horizontal installation. 						
Maximum load	Hinged cover: 10 kg/m ²	<ul style="list-style-type: none"> Body: 30 kg/m² Cover: 10 kg/m² 						
Minor pack.	1	1						
Supply	The hinges (2 per set) are delivered with the mountings	4 lugs + screws						
	<table border="1"> <thead> <tr> <th>Height of the lid (mm)</th> <th>References</th> </tr> </thead> <tbody> <tr> <td>20</td> <td>NSYAEDH20TB</td> </tr> <tr> <td>40</td> <td>NSYAEDH40TB</td> </tr> </tbody> </table>	Height of the lid (mm)	References	20	NSYAEDH20TB	40	NSYAEDH40TB	Reference NSYAEFTB
Height of the lid (mm)	References							
20	NSYAEDH20TB							
40	NSYAEDH40TB							



Installation accessories

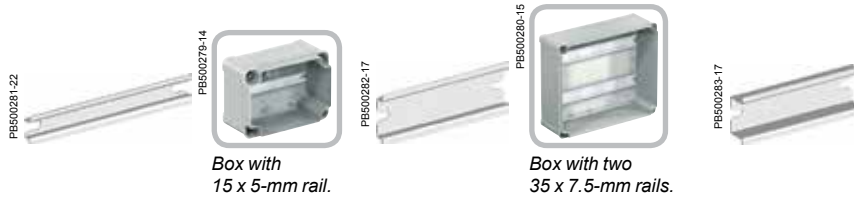


Characteristics					Mounting plates		
					Mounting plates made to adapt to all usage scenarios.		
Material					Galvanised-steel	Insulating polyester plate reinforced with fibreglass, halogen-free: glow wire resistance 750°C.	
Thickness					15/10° mm	25/10° mm	
Installation					<ul style="list-style-type: none"> ■ Mounting by means of Ø 4-mm self-tapping screws, Pozidrive and slotted head, ref. NSYAMFSTB ■ To raise the plate, use the stand-offs ref. NSYAMFET154TB, NSYAMFET204TB, NSYAMFET304TB and the screw NSYAMFESTB ■ To stack several mounting plates, use the spacers, ref. NSYAMFEP154TB, NSYAMFEP204TB, NSYAMFEP304TB and the screw NSYAMFESTB 		
Supply					Plates supplied without screws		
Box (mm)		Dimensions (mm)		Minor pack.	References		
Height	Width	A	B				
192	164	168.5	140	1	NSYAMP1916TB	NSYAMPA1916TB	
241	194	215	168.5	1	NSYAMP2419TB	NSYAMPA2419TB	
291	241	265	215	1	NSYAMP2924TB	NSYAMPA2924TB	
341	291	315	265	1	NSYAMP3429TB	NSYAMPA3429TB	
Accessories					Pack of 100 screws		
Ø 4 x 10 mm					1	NSYAMFSTB	NSYAMFSTB

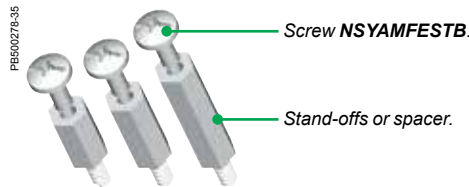
Insulating industrial boxes

Specific accessories

Installation accessories



Characteristics		Rails					
		Symmetric DIN rails. ■ A 15 x 5-mm rail is provided for the compact terminal blocks. ■ To raise the rail, use stand-offs ref. NSYAMFET154TB , NSYAMFET204TB , NSYAMFET304TB and the screw NSYAMFESTB .					
Installation		Mounting of the rails with Ø 4-mm self-tapping screws, (not included), Pozidrive and slotted head, ref. NSYAMFSTB					
Supply		Supplied without screws (except for the 15 x 5 mm rails)					
For boxes with height or width (mm)	15 x 5 mm		35 x 7.5 mm		35 x 15 mm		
	Minor pack.	References	Minor pack.	References	Minor pack.	References	
105	10	NSYAMRD11155TB	10	NSYAMRD11357TB	-	-	
150	10	NSYAMRD16155TB	10	NSYAMRD16357TB	-	-	
175	10	NSYAMRD19155TB	10	NSYAMRD19357TB	-	-	
225	10	NSYAMRD24155TB	10	NSYAMRD24357TB	10	NSYAMRD243515TB	
275	10	NSYAMRD29155TB	10	NSYAMRD29357TB	10	NSYAMRD293515TB	
325	10	NSYAMRD34155TB	10	NSYAMRD34357TB	10	NSYAMRD343515TB	
Accessories		Pack of 100 screws					
Ø 4 x 10 mm		NSYAMFSTB					



Characteristics		Stand-offs	Spacers
		Stand-offs consisting of a Ø 4-mm self-tapping thread at one end (for direct screwing into the rivets of the box) and an M4 tapping on the other end, for direct installation of a card with an M4 screw, ref. NSYAMFESTB , or of a spacer.	Spacer for installation on the stand-offs. M4 thread and tapping.
Material		Steel	Steel
Supply		Set of four M4 self-tapping stand-offs	Set of four M4 spacers
Height (mm)	Minor pack.	References	References
		NSYAMFET154TB	NSYAMFEP154TB
15	1	NSYAMFET204TB	NSYAMFEP204TB
20	1	NSYAMFET304TB	NSYAMFEP304TB
30	1		
Accessories		Screw for stand-offs and spacers	
		M4 x 10 mm screw for mounting cards on the spacers and stand-offs. ■ The plate always at the right level. ■ A single Ø 4-mm screw for mounting any element.	
Supply		Batch of 50 screws	
		References NSYAMFESTB	
		Minor pack. 1	

Cable entries overview



Characteristics	Simple-1	Simple-2	Simple-3	Simple-4	Simple-5
	Mixed membrane entries for enclosure thickness 20/10° - 32/10° mm.	PVC adjustable cone-shaped entries for enclosure thickness 30/10° - 32/10° mm.	Quick cable entries for enclosure thickness 10/10° - 40/10° mm.	PVC adjustable cone-shaped entries for Pg tubes or for enclosure thickness 12/10° - 15/10° mm.	ISO cable gland.
Cable entry material	Soft membrane		Combined		
Cable glands to be fitted	Not applicable				
Installation possibilities	On cable gland plate or directly on enclosure				
Flexibility of the installation	Low				
Reversibility	Medium				
Ingress protection rating	IP55	IP55	IP67	IP55	IP68
Cable retention	Low	Low	Medium	Low	High
Cable diameter (mm)	From 20 to 40	From 18 to 87	From 12 to 50	From 16 to 44	From 12 to 40
Cable Installation time	Fast	Fast	Fast	Fast	Slow
Quantity of cables to be fitted for a given surface	+	+	+	+	+
Cable entries for cables with connectors	No	No	No	No	No
Cut-out dimensions (mm)	Various circular hole diameters according to cable diameter				
External dimensions (mm)	-	From Ø 25 to 98	-	From Ø 25 to 52	From Ø 15 to 46
Certificates	-	-	-	-	-
Flame resistance	750°C	-	750°C	-	750°C
References*					
See page	284	284	285	285	284

* For details, type reference in the search engine of www.schneider-electric.com.

Spare Parts

Accessories bag



Reference
NSYTBPASBS