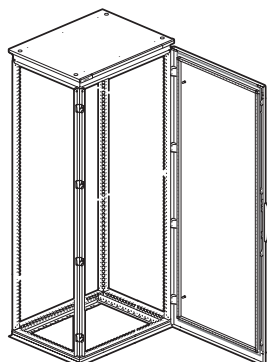


Altis extendable enclosures

Cat. Nos. : 472 00 to 13 - 472 20 to 34 - 472 40 to 63 - 472 65 to 73 - 472 75/76
472 80 to 87 - 473 03 to 07 - 473 09 to 13 - 473 19/20 - 473 24 to
27 - 473 29 to 34 473 39/40 - 473 47 to 50 - 473 52 to 57 - 473 62 to
71 - 473 81 to 87 - 473 91/92



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1. GENERAL CHARACTERISTICS

Metal extendable enclosures

RAL 7035

IP55 - IK10

Heights (mm) : 1200/1400/1600/1800/2000/2200

Widths (mm) : 400/600/800/1000/1200

Depths (mm) : 400/500/600/800

Note : Gland plates, blanking plates, side panels, lifting rings and brackets are to be ordered separately.

1.2 Structure

- Steel structure with 4 vertical upright sections set into 2 welded subassembly frames forming the top and bottom of the enclosure.
- Sections and frames have identical support and fixing faces perforated at a pitch of 25 mm.
- Equipment is fixed using clip nuts with pins.
- The base has built-in slides that make it easier to fit plain plates.
- Enclosures with width 1200 or 1600 require two sets of open-work plates with width 600 or 800 respectively.
- Removable rear panels in 13/10 sheet steel.

1.3 Door

- One or two doors depending on the model :
 - Width ≤ 800 = 1 door
 - Width = 1000 = 1 or 2 doors
 - Width ≥ 1200 = 2 doors
- Optional glazed door.
- Door made of sheet steel with a high yield strength of 15/10 reinforced with a screwed strand holder frame.
- Reversible door; no need to dismantle the connecting rod.
- 180° opening on request.

1.4 Closing

- 4-point closing, double-bar lock housing.
- No central upright for closing of double doors (left-hand door locked down by a 2-point central handle)
- On option, can be fitted with different types (key barrels, lock housings, CNOMO, etc.).

1.5 Finish

- Textured polyester coating 80 µm.
- Conform with enclosure standard NF EN 62208.
- Thermosetting polyester coating applied by electrostatic deposition.
- RAL 7035 (other RAL on request).
- Thickness 80 µm.
- Paintwork can be touched up using either paint aerosols, or touch-up brushes.

2. Range

2.1 Extendable enclosures

Cat. No.	Height (mm)	Width (mm)	Depth (mm)	Weight (kg)	Number of doors
472 00	1200	600	400	59.0	1
472 01	1200	800		69.0	1
472 02	1800	400		56.0	1
472 03	1800	600		71.0	1
472 04	1800	800		84.0	1
472 05	1800	1000 ⁽¹⁾		97.0	1
472 06	1800	1000		101.0	2
472 07	1800	1200		124.0	2
472 08	2000	400		66.0	1
472 09	2000	600		89.0	1
472 10	2000	800		88.0	1
472 11	2000	1000 ⁽¹⁾		103.7	1
472 12	2000	1000		108.5	2
472 13	2000	1200		135.2	2
472 20	1600	600	500	70.4	1
472 21	1600	800		81.0	1
472 22	1600	1200		124.5	2
472 23	1800	400		55.0	1
472 24	1800	600		74.3	1
472 25	1800	800		86.0	1
472 26	1800	1000 ⁽¹⁾		99.3	1
472 27	1800	1200		131.4	2
472 28	2000	400		57.5	1
472 29	2000	600		79.2	1
472 30	2000	800		92.7	1
472 31	2000	1000 ⁽¹⁾		106.0	1
472 32	2000	1000		110.7	2
472 33	2000	1200		138.0	2
472 34	2000	1600		147.0	2

⁽¹⁾ Supplied with door recentring wheel

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71 - 473 81 to 87 - 473 91/92

2. RANGE (cont'd)

2.1 Extendable enclosures (cont'd)

Cat. No.	Height (mm)	Width (mm)	Depth (mm)	Weight (kg)	Number of doors
472 40	1200	600	600	67.6	1
472 41	1200	800		78.4	1
472 42	1400	600		71.5	1
472 43	1400	800		83.3	1
472 44	1600	600		75.4	1
472 45	1600	800		88.2	1
472 46	1800	400		57.0	1
472 47	1800	600		79.3	1
472 48	1800	800		93.1	1
472 49	1800	1000 ⁽¹⁾		106.4	1
472 50	1800	1200		137.4	2
472 51	2000	400		60.1	1
472 52	2000	600		83.19	1
472 53	2000	800		98.0	1
472 54	2000	1000 ⁽¹⁾		112.3	1
472 55	2000	1000		117.0	2
472 56	2000	1200		144.3	2
472 57	2000	1600		150.5	2
472 58	2200	600		87.1	1
472 59	2200	800		102.9	1
472 60	2200	1200		151.2	2
472 80	2000	400	800	63.2	1
472 81	2000	600		86.7	1
472 82	2000	800		102.2	1
472 83	2000	1000 ⁽¹⁾		116.8	1
472 84	2000	1200		150.4	2
472 85	2200	600		90.6	1
472 86	2200	800		107.1	1
472 87	2200	1200		157.3	2

⁽¹⁾ Supplied with door recentring wheel

2. RANGE (cont'd)

2.2 Extendable enclosures with plain plate (not assembled)

Cat. No.	Height (mm)	Width (mm)	Depth (mm)	Weight (kg)	Number of doors
473 03	1800	600	400	99.0	1
473 04	1800	800		120.0	1
473 05	1800	1000 ⁽¹⁾		142.0	1
473 06	1800	1000		146.0	2
473 07	1800	1200		175.0	2
473 09	2000	600		118.0	1
473 10	2000	800		127.0	1
473 11	2000	1000 ⁽¹⁾		152.0	1
473 12	2000	1000		157.0	2
473 13	2000	1200		191.0	2
473 24	1800	600	500	102.0	1
473 25	1800	800		122.0	1
473 26	1800	1000 ⁽¹⁾		145.0	1
473 27	1800	1200		182.0	2
473 29	2000	600		102.0	1
473 30	2000	800		131.0	1
473 31	2000	1000 ⁽¹⁾		155.0	1
473 32	2000	1000		160.0	2
473 33	2000	1200		194.0	2
473 34	2000	1600		230.0	2
473 47	1800	600	600	107.0	1
473 48	1800	800		129.0	1
473 49	1800	1000 ⁽¹⁾		151.0	1
473 50	1800	1200		189.0	2
473 52	2000	600		112.0	1
473 53	2000	800		137.0	1
473 54	2000	1000 ⁽¹⁾		161.0	1
473 55	2000	1000		166.0	2
473 56	2000	1200		201.0	2
473 57	2000	1600		235.0	2
473 81	2000	600	800	117.0	1
473 82	2000	800		141.0	1
473 83	2000	1000 ⁽¹⁾		166.0	1
473 84	2000	1200		207.0	2
473 85	2200	600		125.0	1
473 86	2200	800		150.0	1
473 87	2200	1200		222.0	2

⁽¹⁾ Supplied with door recentring wheel

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2. RANGE (cont'd)

2.3 Extendable enclosures with glazed door

Cat. No.	Height (mm)	Width (mm)	Depth (mm)	Weight (kg)
473 19	2000	600	400	97.2
473 20	2000	800		100.6
473 39	2000	600	500	87.7
473 40	2000	800		105.4
473 62	2000	600	600	91.7
473 63	2000	800		110.4
473 91	2000	600	800	95.2
473 92	2000	800		114.6

2.4 Extendable enclosures with front/rear door

Cat. No.	Height (mm)	Width (mm)	Depth (mm)	Weight (kg)	Number of front/rear doors
473 64	1800	600	600	82.9	1/1
473 65		800		97.0	1/1
473 66	2000	600		87.0	1/1
473 67		800		102.1	1/1
473 68	2000	600	800	90.5	1/1
473 69		800		106.3	1/1
473 70		1000		154.6	1/2
473 71		1200		162.3	2/2

2.5 Set of 2 side panels

For enclosures (mm)		
Cat. Nos.	Height	Depth
472 61	1200	400
472 62	1800	400
472 63	2000	400
472 65	1600	500
472 66	1800	500
472 67	2000	500
472 68	1200	600
472 69	1400	600
472 70	1600	600
472 71	1800	600
472 72	2000	600
472 73	2200	600
472 75	2000	800
472 76	2200	800

3. TECHNICAL CHARACTERISTICS

3.1 Protection index

- IP 55 to IEC EN 60529: protected against dust (no harmful deposit ; also protected against water streams with hose from all directions).
- LCIE report No. 74367-562119
- Nema 12 to standard UL50
- IK10 to IEC EN 62262; protected against mechanical impacts of up to 20 joules.
- Class 1.

3.2 Mechanical strength

- Max. load : 1000 kg/m³
- Max. load on door : 80 kg

Paintwork : - Adhesion (grid-marking) to ISO 2409

- Flexing on a cylindrical mandrel - ISO 1519
- Ericksen drawing - ISO 1520
- Impact resistance 1 kg 50 cm to ISO 6272-1.

3.3 Resistance to climatic conditions

- Use temperatures : + 100° C for 168 hours
+ 150° C for 3 hours
- 40° C
- Resistance to artificial light from a laboratory light source : xenon arc lamp according to ISO 4892-2 method A.
- No loss of adhesion during class O grid-marking tests according to ISO 2409 after a 500-hr exposure period.
- No performance loss during flexural strength tests according to ISO 178 or during Charpy impact strength tests according to ISO 179 after a 500-hr exposure period.

3.4 Corrosion resistance

- Corrosion resistance in artificial atmospheres :
Salt spray test : NSS (neutral salt spray) test according to NF EN ISO 9227.
Rust grade below Ri1 according to ISO 4628-3 and propagation < 6 mm according to ISO 4628-8 after a 500-hr exposure period.
- Corrosion resistance in industrial atmospheres :
Sulphur dioxide test with general moisture condensation according to ISO 6988.
Rust grade below Ri according to ISO 4628-3, standard cliché class 9 Annex A ISO 10289 after a 500-hr exposure period.

3.5 Fire behaviour

- Glow wire 960°C to IEC 60695-2-11
- HCV < 2.1 MJ/m² according to NF EN ISO 1716 (NFP 92521).

3.6 Nuclear decontamination

- According to NFT 30901.
- 82% for fission products
 - 80% for plutonium.

3.7 Resistance to chemical agents

- Thermosetting polyester
Electrostatic deposition
Coating thickness 80 µm

3. TECHNICAL CHARACTERISTICS (cont'd)

3.7 Resistance to chemical agents

Thermosetting polyester

Electrostatic deposition

Coating thickness 80 µm

Aqueous solutions	Cold water		++
	Hot water		+
	Vapour		-
	Salt water 5%		+
	Hydrogen peroxide		-
	Water - washing powder/liquid detergent		+
	Water + surface active agents		+
	Formaldehyde		-
Alcohols	Ethanol		+
	Methanol		+
	Propanol		+
	Butanol		+
Glycols	Ethylene glycol		+
Phenols			-
Cresols			-
Bases	Ammonia		+
	Sodium hydroxide (soda)		+
	Sodium hypochlorite (bleach 12°)		+
	Potassium hydroxide (potash)		+
Strong oxidizing acids	Concentrate acetic acid		+
	Nitric acid 5 %		+
	Sulphuric acid 30 %		+
	Hydrochloric acid 30 %		+
	Perchloric acid 70 %		++
	Hydrofluoric acid 70 %		--
	Chromic acid 50 %		-
	Phosphoric acid 30 %		+
Weak acids	Diluted acetic acid < 25 %		+
	Citric acid		++
	Lactic acid		++
	Formic acid		+
	Uric acid		+
Oils and greases	Animal origin	Lard	++
		Butter, cream	++
	Plant origin	Linseed oil	++
		Peanut/Olive oil	++
		Castor oil	++
		Glycerin	+
		Mineral origin	Paraffin (Vaseline)
	Car engine oil		+
	Silicon oils		++
	Cutting oils		++
Hydraulic oils	+		

3. TECHNICAL CHARACTERISTICS (cont'd)

3.7 Resistance to chemical agents (cont'd)

Hydrocarbons	Lead-free petrol	+
	Gas-oil	++
	Kerosene	++
	White-spirit	++
Chlorinated solvents	Trichloroethylene	--
	Trichloroethane	-
	Perchloroethylene	--
	Methylene chloride	--
	Carbon tetrachloride	--
	Chloroform	-
Aromatic solvents	Benzene	+
	Toluene	-
	Xylene	+
Aliphatic solvents	Hexane	++
	Heptane	++
Fluorinated solvents	Trichlorofluoromethane	--
Ketones	Acetone	-
	Methyl ethyl ketone	-
	Ethylacetate	
Terpenes	Turpentine	

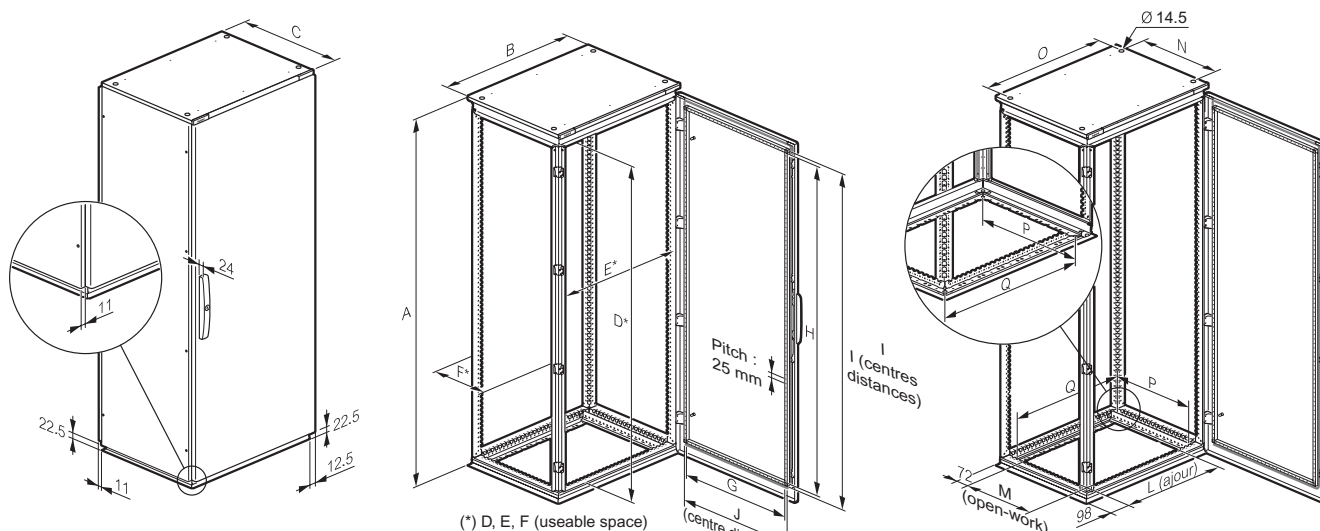
++ : Excellent resistance (permanent exposure)
+ : Satisfactory resistance (long-term exposure)
- : Limited resistance (possibility of brief exposure)
-- : Low resistance (exposure should be avoided)

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4. DIMENSIONS (mm)

4.1 Dimensions of the main components



Cat. Nos.	D, E, F (useable space)	A	B ⁽¹⁾	C ⁽²⁾	D	E	F	G	H	I	J	L	M	N	O	P	Q
472 00	1200 x 600 x 400	1225	599	413	1107	508	308	460	1060	1075	475	403	255	275	536	278	478
472 01	1200 x 800 x 400	1225	799	413	1107	708	308	660	1060	1075	675	603	255	275	736	278	678
472 02	1800 x 400 x 400	1825	399	413	1707	308	308	260	1660	1675	275	203	255	275	336	278	278
472 03 / 473 03	1800 x 600 x 400	1825	599	413	1707	508	308	460	1660	1675	475	403	255	275	536	278	478
472 04 / 473 04	1800 x 800 x 400	1825	799	413	1707	708	308	660	1660	1675	675	603	255	275	736	278	678
472 05 / 473 05	1800 x 1000 x 400	1825	999	413	1707	908	308	860	1660	1675	875	803	255	275	936	278	878
472 06 / 473 06	1800 x 1000 x 400	1825	999	413	1707	908	308	360 x 2	1660	1675	375 x 2	803	255	275	936	278	878
472 07 / 473 07	1800 x 1200 x 400	1825	1199	413	1707	1108	308	460 x 2	1660	1675	475 x 2	403 x 2	255	275	1136	278	1078
472 08	2000 x 400 x 400	2025	399	413	1907	308	308	260	1860	1875	275	203	255	275	336	278	278
472 09 / 473 09 / 473 19	2000 x 600 x 400	2025	599	413	1907	508	308	460	1860	1875	475	403	255	275	536	278	478
472 10 / 473 10 / 473 20	2000 x 800 x 400	2025	799	413	1907	708	308	660	1860	1875	675	603	255	275	736	278	678
472 11 / 473 11	2000 x 1000 x 400	2025	999	413	1907	908	308	860	1860	1875	875	803	255	275	936	278	878
472 12 / 473 12	2000 x 1000 x 400	2025	999	413	1907	908	308	360 x 2	1860	1875	375 x 2	803	255	275	936	278	878
472 13 / 473 13	2000 x 1200 x 400	2025	1199	413	1907	1108	308	460 x 2	1860	1875	475 x 2	403 x 2	255	275	1136	278	1078
472 20	1600 x 600 x 500	1625	599	513	1507	508	408	460	1460	1475	475	403	355	375	536	378	478
472 21	1600 x 800 x 500	1625	799	513	1507	708	408	660	1460	1475	675	603	355	375	736	378	678
472 22	1600 x 1200 x 500	1625	1199	513	1507	1108	408	460 x 2	1460	1475	475 x 2	403 x 2	355	375	1136	378	1078
472 23	1800 x 400 x 500	1825	399	513	1707	308	408	260	1660	1675	275	203	355	375	336	378	278
472 24 / 473 24	1800 x 600 x 500	1825	599	513	1707	508	408	460	1660	1675	475	403	355	375	536	378	478
472 25 / 473 25	1800 x 800 x 500	1825	799	513	1707	708	408	660	1660	1675	675	603	355	375	736	378	678
472 26 / 473 26	1800 x 1000 x 500	1825	999	513	1707	908	408	860	1660	1675	875	803	355	375	936	378	878
472 27 / 473 27	1800 x 1200 x 500	1825	1199	513	1707	1108	408	460 x 2	1660	1675	475 x 2	403 x 2	355	375	1136	378	1078
472 28	2000 x 400 x 500	2025	399	513	1907	308	408	260	1860	1875	275	203	355	375	336	378	278
472 29 / 473 29 / 473 39	2000 x 600 x 500	2025	599	513	1907	508	408	460	1860	1875	475	403	355	375	536	378	478
472 30 / 473 30 / 473 40	2000 x 800 x 500	2025	799	513	1907	708	408	660	1860	1875	675	603	355	375	736	378	678
472 31 / 473 31	2000 x 1000 x 500	2025	999	513	1907	908	408	860	1860	1875	875	803	355	375	936	378	878
472 32 / 473 32	2000 x 1000 x 500	2025	999	513	1907	908	408	360 x 2	1860	1875	375 x 2	803	355	375	936	378	878
472 33 / 473 33	2000 x 1200 x 500	2025	1199	513	1907	1108	408	460 x 2	1860	1875	475 x 2	403 x 2	355	375	1136	378	1078
472 34 / 473 34	2000 x 1600 x 500	2025	1599	513	1907	1508	408	660 x 2	1860	1875	675 x 2	603 x 2	355	375	1536	378	1478
472 40	1200 x 600 x 600	1225	599	613	1107	508	508	460	1060	1075	475	403	455	475	536	478	478
472 41	1200 x 800 x 600	1225	799	613	1107	708	508	660	1060	1075	675	603	455	475	736	478	678
472 42	1400 x 600 x 600	1425	599	613	1307	508	508	460	1260	1275	475	403	455	475	536	478	478
472 43	1400 x 800 x 600	1425	799	613	1307	708	508	660	1260	1275	675	603	455	475	736	478	678
472 44	1600 x 600 x 600	1625	599	613	1507	508	508	460	1460	1475	475	403	455	475	536	478	478
472 45	1600 x 800 x 600	1625	799	613	1507	708	508	660	1460	1475	675	603	455	475	736	478	678
472 46	1800 x 400 x 600	1825	399	613	1707	308	508	260	1660	1675	275	203	455	475	336	478	278
472 47 / 473 47 / 473 64	1800 x 600 x 600	1825	599	613	1707	508	508	460	1660	1675	475	403	455	475	536	478	478
472 48 / 473 48 / 473 65	1800 x 800 x 600	1825	799	613	1707	708	508	660	1660	1675	675	603	455	475	736	478	678
472 49 / 473 49	1800 x 1000 x 600	1825	999	613	1707	908	508	860	1660	1675	875	803	455	475	936	478	878
472 50 / 473 50	1800 x 1200 x 600	1825	1199	613	1707	1108	508	460 x 2	1660	1675	475 x 2	403 x 2	455	475	1136	478	1078
472 51	2000 x 400 x 600	2025	399	613	1907	308	508	260	1860	1875	275	203	455	475	336	478	278
472 52 / 473 52 / 473 62 / 473 66	2000 x 600 x 600	2025	599	613	1907	508	508	460	1860	1875	475	403	455	475	536	478	478
472 53 / 473 53 / 473 63 / 473 67	2000 x 800 x 600	2025	799	613	1907	708	508	660	1860	1875	675	603	455	475	736	478	678
472 54 / 473 54	2000 x 1000 x 600	2025	999	613	1907	908	508	860	1860	1875	875	803	455	475	936	478	878
472 55 / 473 55	2000 x 1000 x 600	2025	999	613	1907	908	508	360 x 2	1860	1875	375 x 2	803	455	475	936	478	878
472 56 / 473 56	2000 x 1200 x 600	2025	1199	613	1907	1108	508	460 x 2	1860	1875	475 x 2	403 x 2	455	475	1136	478	1078
472 57 / 473 57	2000 x 1600 x 600	2025	1599	613	1907	1508	508	660 x 2	1860	1875	675 x 2	603 x 2	455	475	1536	478	1478
472 58	2200 x 600 x 600	2225	599	613	2107	508	508	460	2060	2075	475	403	455	475	536	478	478
472 59	2200 x 800 x 600	2225	799	613	2107	708	508	660	2060	2075	675	603	455	475	736	478	678
472 60	2200 x 1200 x 600	2225	1199	613	2107	1108	508	460 x 2	2060	2075	475 x 2	403 x 2	455	475	1136	478	1078
472 80	2000 x 400 x 800	2025	399	813	1907	308	708	260	1860	1875	275	203	655	675	336	678	278
472 81 / 473 81 / 473 91 / 473 68	2000 x 600 x 800	2025	599	813	1907	508	708	460	1860	1875	475	403	655	675	536	678	478
472 82 / 473 82 / 473 92 / 473 69	2000 x 800 x 800	2025	799	813	1907	708	708	660	1860	1875	675	603	655	675	736	678	678
472 83 / 473 83 / 473 70	2000 x 1000 x 800	2025	999	813	1907	908	708	860	1860	1875	875	803	655	675	936	678	878
472 84 / 473 84 / 473 71	2000 x 1200 x 800	2025	1199	813	1907	1108	708	460 x 2	1860	1875	475 x 2	403 x 2	655	675	1136	678	1078
472 85 / 473 85	2200 x 600 x 800	2225	599	813	2107	508	708	460	2060	2075	475	403	655	675	536	678	478
472 86 / 473 86	2200 x 800 x 800	2225	799	813	2107	708	708	660	2060	2075	675	603	655	675	736	678	678
472 87 / 473 87	2200 x 1200 x 800	2225	1199	813	2107	1108	708	460 x 2	2060	2075	475 x 2	403 x 2	655	675	1136	678	1078

⁽¹⁾ Excluding side panels (+ 16 mm)

⁽²⁾ Overall dimensions (door and rear panel)

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4. DIMENSIONS (mm) (cont'd)

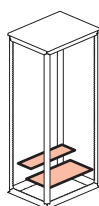
4.2 Dimensions of the window in the glazed doors

Tinted, tempered glass ; window placed centrally

Enclosures	Window	
Cat. Nos.	Height	Width
473 19	1775	375
473 20	1775	575
473 39	1775	375
473 40	1775	575
473 62	1775	375
473 63	1775	575
473 91	1775	375
473 92	1775	575

5. EQUIPMENT

5.1 Gland plates and blanking plates



Depth Width	300	400	500	600	800
400					
600					
800	 Gland plate		 Gland plates + blanking plate		 Gland plates + 1 set of 2 blanking plates

Enclosures with width 1200 or 1600 require two sets with width 600 or 800 respectively.

Plates with brush IP43

(comprising 2 plates with brush seal)

Cat. Nos.	For enclosures (width mm)	For enclosures (depth mm)
481 51	600	300
481 53	800	
481 55	1000	
481 50 ⁽¹⁾	400	≥ 400
481 52 ⁽¹⁾	600	
481 54 ⁽¹⁾	800	
481 56 ⁽¹⁾	1000	

⁽¹⁾ Blanking plate to be ordered separately

5. EQUIPMENT (cont'd)

5.1 Gland plates and blanking plates (cont'd)

Plates with foam seals IP43

Comprising two plates with foam seals 25 x 30 mm

Cat. Nos.	For enclosures (width mm)	For enclosures (depth mm)
481 61	600	300
481 63	800	
481 65	1000	
481 60 ⁽¹⁾	400	≥ 400
481 62 ⁽¹⁾	600	
481 64 ⁽¹⁾	800	
481 66 ⁽¹⁾	1000	

Plates for cable gland IP55

Cat. Nos.	For enclosures (width mm)	For enclosures (depth mm)
481 68	600	300
481 78	800	
481 88	1000	
481 80 ⁽¹⁾	400	≥ 400
481 81 ⁽¹⁾	600	
481 82 ⁽¹⁾	800	
481 83 ⁽¹⁾	1000	

Cabstop plates IP55

Cable entries comprising a cable clamping jaw that ensures mechanical clamping and elastomer seals that ensure leaktightness.

Cat. Nos.	For enclosures (width mm)	For enclosures (depth mm)
481 71	600	300
481 73	800	
481 75	1000	
481 70 ⁽¹⁾	400	≥ 400
481 72 ⁽¹⁾	600	
481 74 ⁽¹⁾	800	
481 76 ⁽¹⁾	1000	

Blanking plates

To be ordered separately; supplements gland plates

Cat. Nos.	For enclosures		Number of plates making up the assembly
	Width (mm)	Depth (mm)	
481 57	400	500	1
481 58	400	600	1
481 59	400	800	2
481 67	600	500	1
481 68	600	600	1
481 69	600	800	2
481 77	800	500	1
481 78	800	600	1
481 79	800	800	2
481 87	1000	500	1
481 88	1000	600	1
481 89	1000	800	2

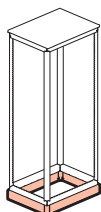
Altis extendable enclosures

Cat. Nos. : 472 00 to 13 - 472 20 to 34 - 472 40 to 63 - 472 65 to 73 - 472 75/76
472 80 to 87 - 473 03 to 07 - 473 09 to 13 - 473 19/20 - 473 24 to
27 - 473 29 to 34 473 39/40 - 473 47 to 50 - 473 52 to 57 - 473 62 to
71 - 473 81 to 87 - 473 91/92

5. EQUIPMENT (cont'd)

5.2 Bases and accessories

- Kit containing bases and set of trap doors



RAL 7012

Opening on 4 sides

Kit comprises 4 corner studs and plain front/rear trap doors.

To be used with plain trap door sets - side / ventilated / brush.

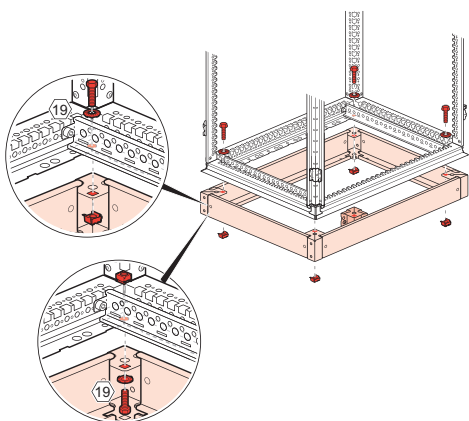
Height 100	Height 200	For enclosures Width (mm)
476 55	476 65	400
476 56	476 66	600
476 57	476 67	800
476 58	476 68	1000
476 59	476 69	1200
476 60	476 70	1600

Set of side plain trap doors (height 100)

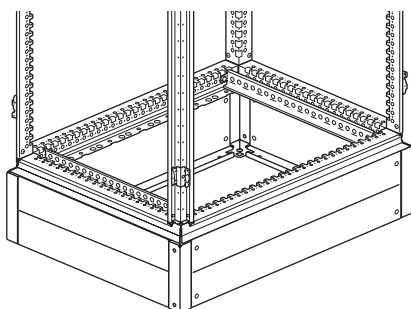
Bases Height 100	Bases Height 200	For enclosures Depth (mm)
476 75	476 85	300
476 76	476 86	400
476 77	476 87	500
476 78	476 88	600
476 79	476 89	800

Note : Make-up : - 2 plain trap doors for base with height 100
- 4 plain trap doors for bases with height 200

Fixing example with set of plain trap doors



Height 100 mm



Height 200 mm

5. EQUIPMENT (cont'd)

5.2 Bases and accessories (cont'd)

Ventilated trap doors (height 100)

	For Altis enclosures Width / Depth (mm)
476 62	600
476 63	800

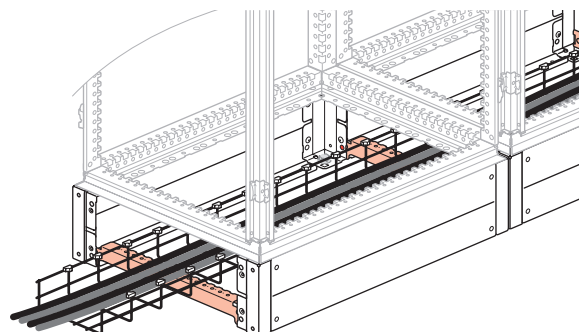
Brush trap doors (height 100)

	For Altis enclosures Width / Depth (mm)
476 72	500
476 73	600
476 74	800

- Connecting crosspiece Cat. Nos 476 91 to 476 94

Fixes between two corner studs.

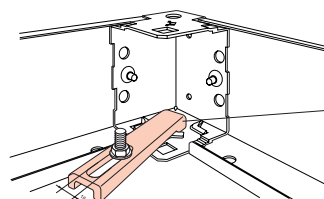
Used to clamp cables between extended enclosure units.



Cat Nos.	For enclosures Depth (mm)
476 91	400
476 92	500
476 93	600
476 94	800

Offset base fixing

Set of 4 zinc coated clamps



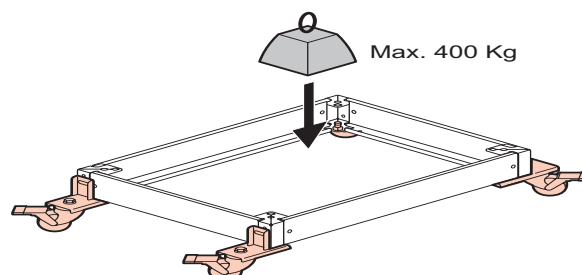
Cat. No. 345 49

Casters Cat. No. 477 00

Set of 4 handling casters with built-in brake.

Fixing to base only.

Supplied with screws.



Altis extendable enclosures

Cat. Nos. : 472 00 to 13 - 472 20 to 34 - 472 40 to 63 - 472 65 to 73 - 472 75/76
472 80 to 87 - 473 03 to 07 - 473 09 to 13 - 473 19/20 - 473 24 to
27 - 473 29 to 34 473 39/40 - 473 47 to 50 - 473 52 to 57 - 473 62 to
71 - 473 81 to 87 - 473 91/92

5. EQUIPMENT (cont'd)

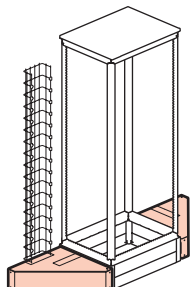
5.3 Connection interface

Protection enabling connection between the base of the enclosure and the cable tray.

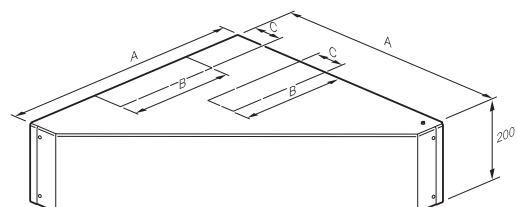
Supplied with brush seal.

Reversible cover with pre-cut-outs.

Height 200 mm



Cat. Nos.	For enclosures (Depth mm)
477 04	400
477 05	500
477 06	600



For enclosures Depth (mm)	Pre-cut-outs		
	A	B	C
400	395	235	120
500	495	335	120
600	595	435	120

Used with cable-guide grids for anchoring strands.

Cat. Nos.	Dimensions
331 28	1100 x 200 x 50 mm
332 34	1400 x 200 x 50 mm
331 34	1800 x 200 x 50 mm

5. EQUIPMENT (cont'd)

5.4 Plates

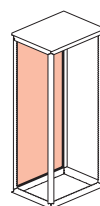
Plain plates

Premarked with pitch 10 mm.

Holes for lifting.

Safe load : 200 kg/m²

Galvanised steel



Cat. Nos.	Height	For enclosures (Width mm)	Weight (kg)
476 00	1200	600	17.5
476 01	1200	800	23.0
476 02	1400	600	20.0
476 03	1400	800	27.0
476 04	1600	600	23.0
476 05	1600	800	30.5
476 06	1600	1000	38.0
476 07	1600	1200	47.0
476 08	1800	400	17.7
476 09	1800	600	25.8
476 10	1800	800	34.0
476 11	1800	1000	43.0
476 12	1800	1200	49.0
476 13	1800	1600	72.0
476 14	2000	400	19.1
476 15	2000	600	27.0
476 16	2000	800	36.8
476 17	2000	1000	46.5
476 18	2000	1200	54.3
476 19	2000	1600	81.0
476 21	2200	600	30.5
476 22	2200	800	40.5
476 24	2200	1200	61.0

Full width plain plates

The plate's useable surface area is equal to the width of the enclosure and ensures

continuous connection between two extended enclosure plates.

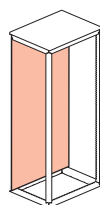
Mounted via the front face of the enclosure.

Premarked with pitch 10 mm.

Holes for lifting.

Safe load: 200 kg/m²

Galvanised steel



Cat. Nos.	Height	For enclosures (Width mm)	Weight (kg)
475 05	1600	800	35
475 06	1600	1000	44
475 07	1600	1200	55
475 08	1800	600	29
475 09	1800	800	40
475 10	1800	1000	51
475 11	1800	1200	58
475 13	2000	600	32
475 14	2000	800	43
475 15	2000	1000	54
475 16	2000	1200	65

Altis extendable enclosures

Cat. Nos. : 472 00 to 13 - 472 20 to 34 - 472 40 to 63 - 472 65 to 73 - 472 75/76
472 80 to 87 - 473 03 to 07 - 473 09 to 13 - 473 19/20 - 473 24 to
27 - 473 29 to 34 473 39/40 - 473 47 to 50 - 473 52 to 57 - 473 62 to
71 - 473 81 to 87 - 473 91/92

5. EQUIPMENT (cont'd)

5.4 Plates (cont'd)

Lina 12.5 plate

Galvanised steel

Holes for placing equipment with no need for plotting.

Automatic squaring:

- Ø 6.5 mm for insulating rivets Cat. No. 366 44 (trunking)

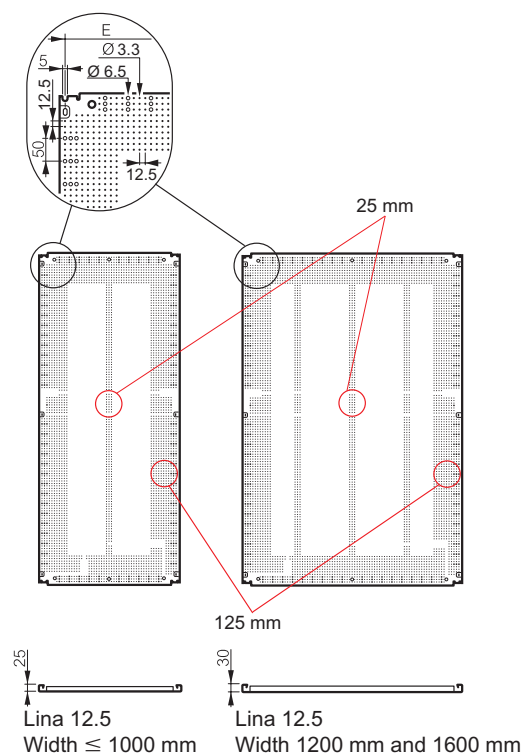
- Ø 3.3 mm for equipment with screws Cat. No. 347 45

Holes for lifting.

Safe load : 200 kg/m²

Cat. Nos.	Height	For enclosures (Width mm)	Weight (kg)
475 25	1600	800	30.0
475 26	1600	1000	37.5
475 27	1600	1200	46.5
475 28	1800	600	25.3
475 29	1800	800	33.5
475 30	1800	1000	42.5
475 31	1800	1200	48.5
475 32	1800	1600	71.5
475 33	2000	600	26.5
475 34	2000	800	36.3
475 35	2000	1000	46.0
475 36	2000	1200	53.8
475 37	2000	1600	80.5

Close-up of perforation dimensions

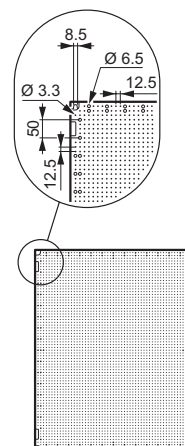


5. EQUIPMENT (cont'd)

5.4 Plates (cont'd)

Lina 12.5 partial plate

Characteristics identical to the Lina 12.5 plate apart from safe load which is 150 kg/m².

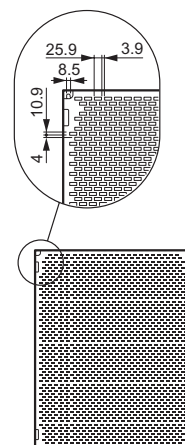


Cat. Nos.	Height	For enclosures (Width mm)	Weight (kg)
481 40	800	800	7.6
481 41	800	1000	9.6
481 42	800	1200	11.4
481 43	1000	800	9.6
481 44	1000	1000	12.0
481 45	1000	1200	14.3

Lina 25 partial plate

Zinc-coated steel

Safe load : 50 kg/m²



Cat. Nos.	Height	For enclosures (Width mm)	Weight (kg)
474 89	800	600	10.9
474 90	800	800	15.2
474 91	800	1000	18.4
474 92	800	1200	23.9
474 93	800	1600	31.5
474 94	1000	600	13.9
474 95	1000	800	16.3
474 96	1000	1000	23.6
474 97	1000	1200	28.3
474 98	1000	1600	37.7
474 85	1200	600	17.0
474 86	1200	800	22.7
474 87	1400	600	19.9
474 88	1400	800	26.5

Note : For enclosures with height 1200 and 1400, the partial plate used covers the enclosure to its full height.

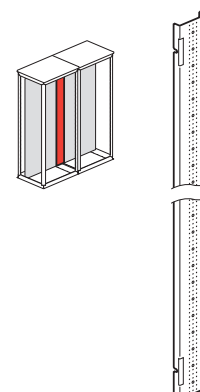
Perforated intermediate plate

For extendable enclosures

Provides unbroken connection between 2 plain plates or Lina 12.5 plates.

Lina 12.5 perforation.

Galvanised steel



Cat. Nos.	For enclosures (Height mm)
476 49	1200
476 50	1400
476 51	1600
476 52	1800
476 53	2000
476 54	2200

Altis extendable enclosures

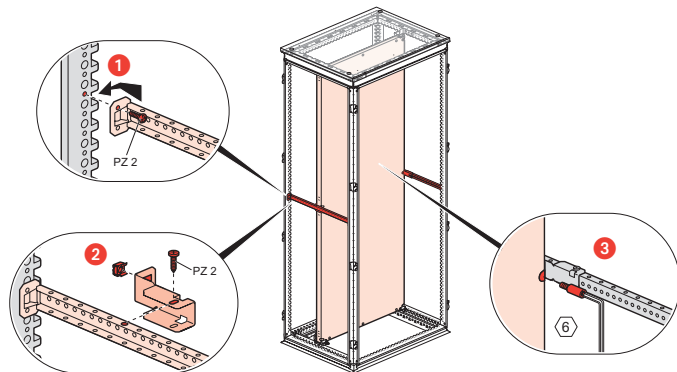
Cat. Nos. : 472 00 to 13 - 472 20 to 34 - 472 40 to 63 - 472 65 to 73 - 472 75/76
472 80 to 87 - 473 03 to 07 - 473 09 to 13 - 473 19/20 - 473 24 to
27 - 473 29 to 34 473 39/40 - 473 47 to 50 - 473 52 to 57 - 473 62 to
71 - 473 81 to 87 - 473 91/92

5. EQUIPMENT (cont'd)

Support bracket Cat. No. 480 21

Set of 2

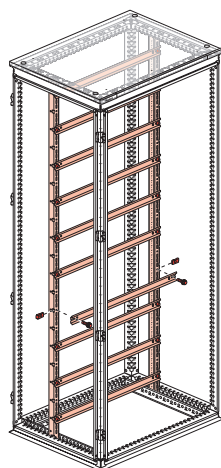
Used to add a fixing point half way up plain plates or Lina 12.5 plates in extendable enclosures with width 1600 mm.
Fixes to the horizontal crosspieces.



Screws

Cat. Nos.	Descriptions	Type of plate
347 46	To be used with screwdriver PZ N3 Self-tapping screw CBL Z 5.5 x 16	Plain plates, full width plain plates, intermediate plates
347 47	Self-boring-tapping screw CBL Z 5.5 x 19	
366 44	Reinforced plastic rivet Ø 6 mm for hole Ø 6.5 mm	
347 45	Screw head H 4.8 mm x 16, self-boring-tapping for Ø 3.3 mm	Lina 12.5 plate
347 50	Screw cover for insulating screw heads 347 45 inside trunking	
364 40	Clip-nuts for M4 screws	Lina 12.5 plate
364 41	Clip-nuts for M5 screws	
364 42	Clip-nuts for M6 screws	

5.5 Upright sections + rails



Cat. Nos.		Upright sections For Lina 25 rails □ or □ or partial plates. Set of 2 galvanized uprights for enclosures Height (mm).
475 50		1200
475 51		1400
475 52		1600
475 53		1800
475 54		2000
475 55		2200
Cat. Nos.		Lina 25 rails for frame Galvanized For enclosures Width (mm)
□	□	
477 24	477 25	400
477 26	477 27	600
477 28	477 29	800
477 30	477 31	1000
477 32	477 33	1200
477 36	477 35	1600

5. EQUIPMENT (cont'd)

5.6 Perforated crosspieces

Set of 2 - galvanized steel

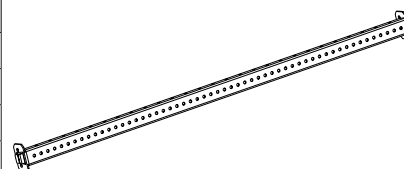
Used to make partial frames in extendable enclosures.

Pre-positioning by attaching prior to final screw fixing.

For multi-purpose crosspieces : perforations for clip-nuts with pitch 25 mm.

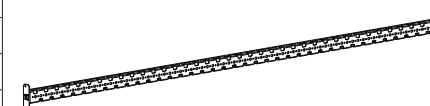
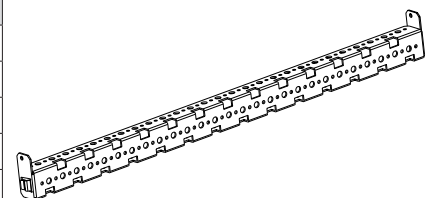
Horizontal crosspieces

Cat. No.	Enclosures w or d (mm)
480 14	400
480 15	500
480 16	600
480 17	800
480 18	1000



Multi-purpose crosspieces

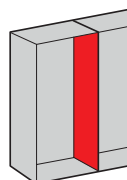
Cat. No.	Enclosures w or d (mm)
480 24	400
480 25	500
480 26	600
480 27	800
480 28	1000
480 29	1200
480 30	1400
480 31	1600
480 32	1800
480 33	2000
480 34	2200



Screws

Cat. Nos.	Descriptions	Type of crosspiece
347 46	To be used with screwdriver PZ N3 Self-tapping screw CBL Z 5.5 x 16	Perforated crosspieces
347 47	Self-boring-tapping screw CBL Z 5.5 x 19	
Clip-nuts supplied without screws, and with pins that ensure bonding continuity.		
477 12	For M6 screws	Multi-purpose crosspieces only
477 13	For M8 screws	

5.7 Separation and insulation partition



Placed vertically to full height between 2 extendable enclosures except when there are full width plain plates.
Supplied with screws and seal.
Galvanized steel.

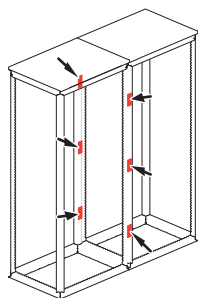
Cat. Nos.	Height	For enclosures Depth (mm)
480 35	1800	400
480 36	1800	500
480 40	2000	400
480 41	2000	500
480 42	2000	600
480 43	2000	800

Altis extendable enclosures

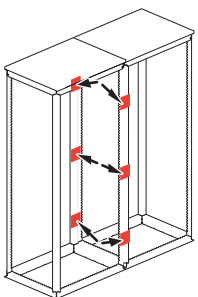
Cat. Nos. : 472 00 to 13 - 472 20 to 34 - 472 40 to 63 - 472 65 to 73 - 472 75/76
472 80 to 87 - 473 03 to 07 - 473 09 to 13 - 473 19/20 - 473 24 to
27 - 473 29 to 34 473 39/40 - 473 47 to 50 - 473 52 to 57 - 473 62 to
71 - 473 81 to 87 - 473 91/92

5. EQUIPMENT (cont'd)

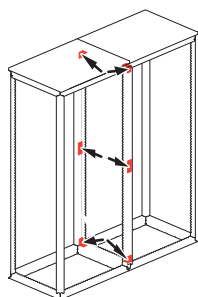
5.8 Enclosure assembly kit



External assembly for a load of 500 kg/m³
Cat. No. 476 81
Tapered pin guaranteeing enclosure alignment
Set comprising :
- 12 assembly components
- 6 supporting rods
- Seal



Internal assembly for a load of 500 kg/m³
Cat. No. 476 82
Set comprising :
- 6 linking lugs
- Seal



Internal assembly for a load of 1000 kg/m³
Cat. No. 476 83
Set comprising :
- 4 brackets
- 2 linking lugs
- Seal

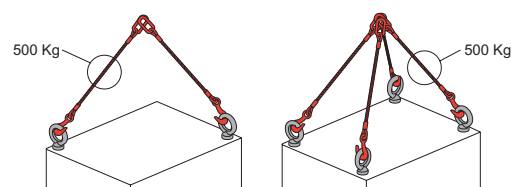
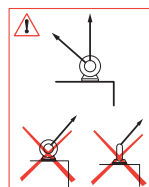
5. EQUIPMENT (cont'd)

5.9 M14 lifting rings

Cat. No. 476 96 : Set of 4 rings for a load of 1000 kg/m³.



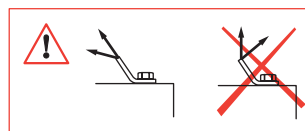
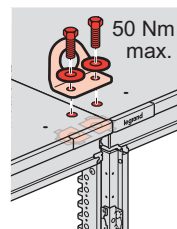
	W (kg)	α (°)	W (kg)
	-	120	750
	500	90	1000
	600	60	1200

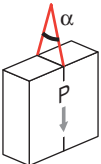
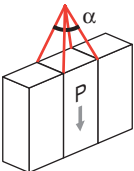


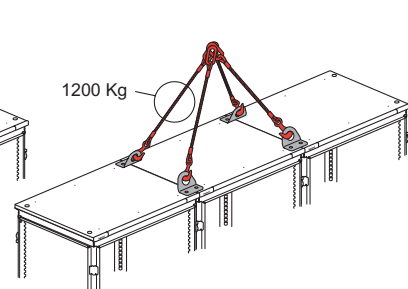
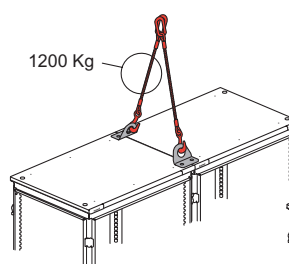
5.10 Lifting corner brackets

Réf. 476 98 : Cat. No. 476 98: Set of 2 corner brackets for a load of 1000 kg/m³.

For balancing the load between 2 enclosures outside lifting.



	Weight (kg)	α (°)
	500	90
	600	60
	750	120
	1000	90
	1200	60



Max. load for Altis enclosures

Lifting mechanisms for Altis enclosures are conform with the regulatory requirements set out in European Directive 89/392 (referred to as the machines directive).

Decrees (92/765, 766, 767) arising from the directive's incorporation into French law set out very strict regulations for maximum safety. Altis enclosures are designed for a maximum load of :

- extendable : 1000 kg/m²
- one-piece : 500 kg/m²

Enclosures must be lifted according to the instructions and in full compliance with safety rules.

Legrand bases are designed to allow enclosures to be wheeled, in compliance with the max. permissible load indicated per m².

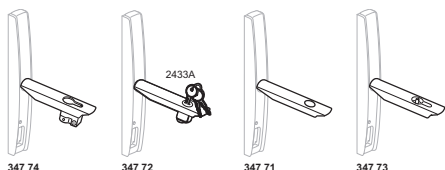
Altis extendable enclosures

Cat. Nos. : 472 00 to 13 - 472 20 to 34 - 472 40 to 63 - 472 65 to 73 - 472 75/76
472 80 to 87 - 473 03 to 07 - 473 09 to 13 - 473 19/20 - 473 24 to
27 - 473 29 to 34 473 39/40 - 473 47 to 50 - 473 52 to 57 - 473 62 to
71 - 473 81 to 87 - 473 91/92

6. ACCESSORIES

6.1 Handles and lock

Cat. Nos	Handles
347 72	2433 A, fitted with a key barrel
347 71	Can be equipped; can take different types of key barrels and lock housings
347 73	CNOMO triangle 6.5 mm
347 74	Without locking, can take a European DIN half-cylinder (30 + 10 mm)



Cat. Nos	Closing
347 75	Closing kit Comprises a base, a double bar mechanism and 2 covers.

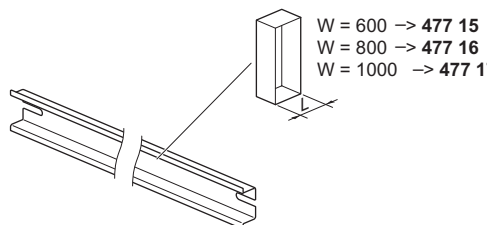


6.2 Door rails / Bracket lugs / Sections for door accessories

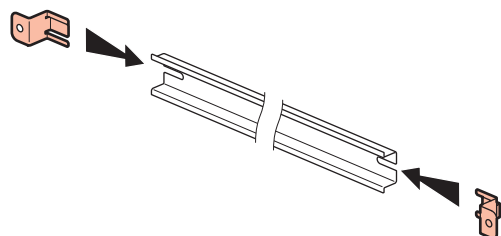
- Door rails

Symmetrical rail (height 15 mm).

To be fixed using bracket lugs Cat. No. 477 18 (to be ordered separately) or directly to the sections Cat. No. 477 19/20/21



- Bracket lugs



Cat. No. 477 18

Set of 2 universal lugs.

Can be adapted to fit any type of symmetrical rail (height 15 mm).

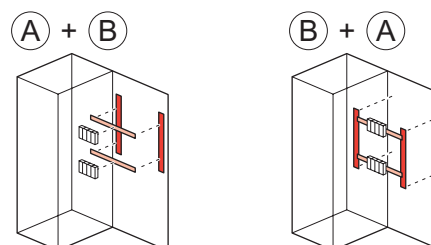
6. ACCESSORIES (cont'd)

Sections for door accessories

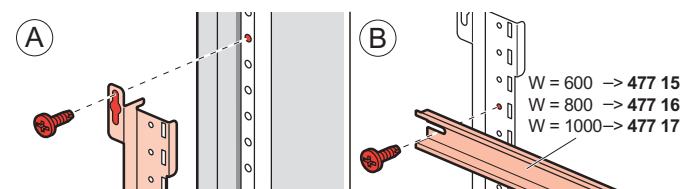
For clamping cables using cable ties or for fixing Lina 25 trunking or rails to doors.

Sections	Length (mm)
477 19	490
477 20	690
477 21	890

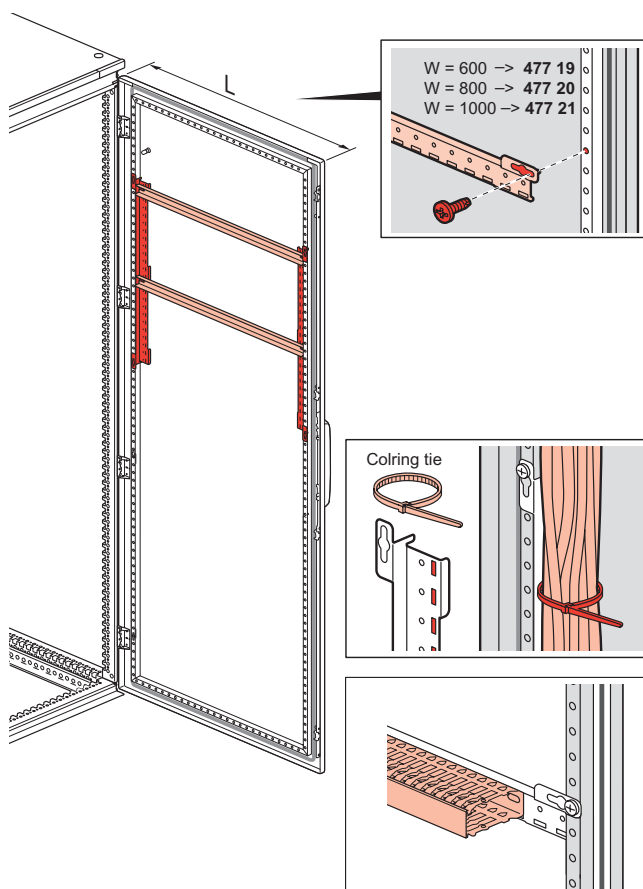
Horizontal or vertical mounting



• Vertical use



• Horizontal use

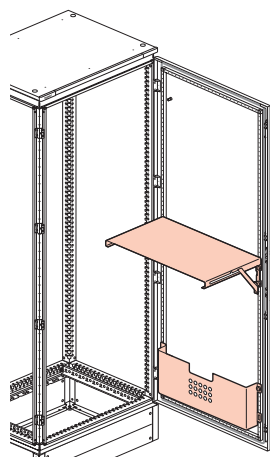


Altis extendable enclosures

Cat. Nos. : 472 00 to 13 - 472 20 to 34 - 472 40 to 63 - 472 65 to 73 - 472 75/76
472 80 to 87 - 473 03 to 07 - 473 09 to 13 - 473 19/20 - 473 24 to
27 - 473 29 to 34 473 39/40 - 473 47 to 50 - 473 52 to 57 - 473 62 to
71 - 473 81 to 87 - 473 91/92

6. ACCESSORIES (cont'd)

6.3 Writing shelf / Pocket for storing drawings



Writing shelves

RAL 7012

Horizontal or vertical positions

Cat. Nos	For doors (Width mm)
477 07	600
477 08	800
477 09	1000

Metal pocket for storing drawings

RAL 7012

Fixing on strand-holder

Takes documents in A3 format

Cat. Nos	For doors (Width mm)	Internal dimensions (mm)		
		Height	Width	Depth
476 45	600/800/1000	275	425	50
476 46	600		450	100
476 47	800		650	100

6.4 Windows for hinged doors

IP 54

Anodized aluminium frame, opens to 120°

Polycarbonate window, thickness 3 mm. Neoprene seal

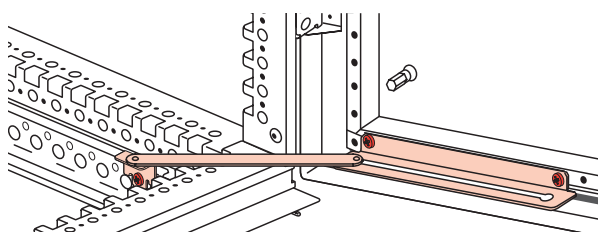
Lock with key 455

Supplied with drilling template

Protects devices, prevents unwanted handling and provides views of front-mounted equipment.

Cat. Nos	External dimensions (mm)			Window dim. (mm)		Useable depth (mm)
	Height	Depth	Width	Height	Depth	
475 45	300	400	50	230	330	42
475 46	400	400	50	330	330	42
475 47	500	500	50	430	430	42
475 48	600	400	50	530	330	42
475 49	600	600	50	530	530	42

6.5 Doorstop



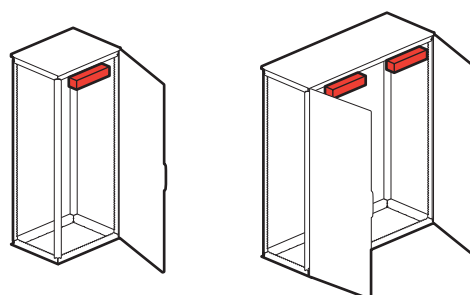
Cat. No. 473 02

Direct fixing to enclosure frame

Stops door at the end of its run (115° max.)

6. ACCESSORIES (cont'd)

6.6 Lighting kits



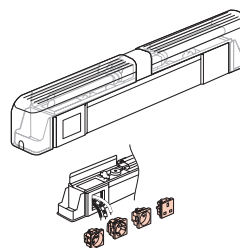
With electronic ballast ensuring a high level of electromagnetic compatibility.

2 x 9 W fluorescent, 4 pins, compact 230 V - 50 Hz..

Door contact 476 28 sold separately.

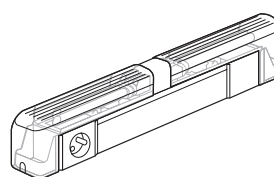
Direct fixing to enclosure frame.

Lug 476 27 (sold separately) used for central mounting in double door enclosures.



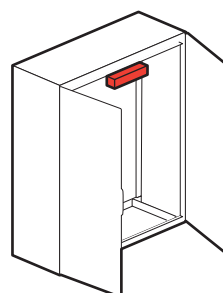
Cat. No. 476 26

Lamp - no pre-wired socket
for taking a Mosaic mechanism



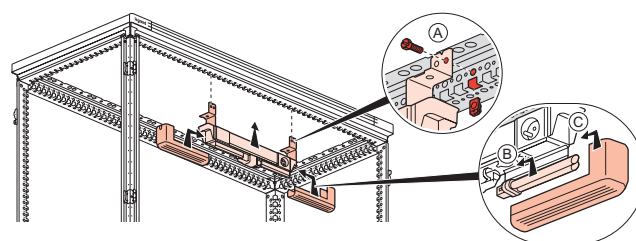
Cat. No. 476 25

Lamp with 2P+E socket
2 separate circuits (1 lamp, 1 socket).



Cat. No. 476 27

Set of 2 lighting kit fixing lugs
for central mounting
in double door enclosures.

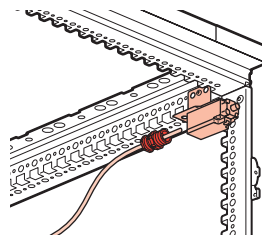


Altis extendable enclosures

Cat. Nos. : 472 00 to 13 - 472 20 to 34 - 472 40 to 63 - 472 65 to 73 - 472 75/76
472 80 to 87 - 473 03 to 07 - 473 09 to 13 - 473 19/20 - 473 24 to
27 - 473 29 to 34 473 39/40 - 473 47 to 50 - 473 52 to 57 - 473 62 to
71 - 473 81 to 87 - 473 91/92

6. ACCESSORIES (cont'd)

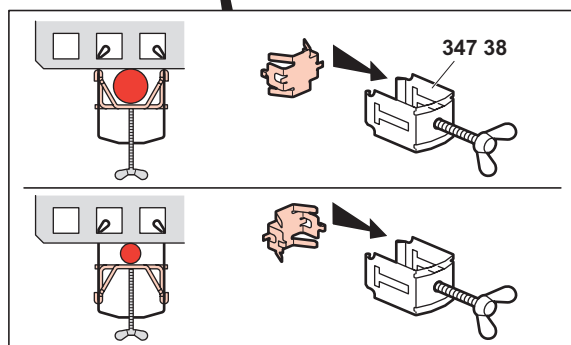
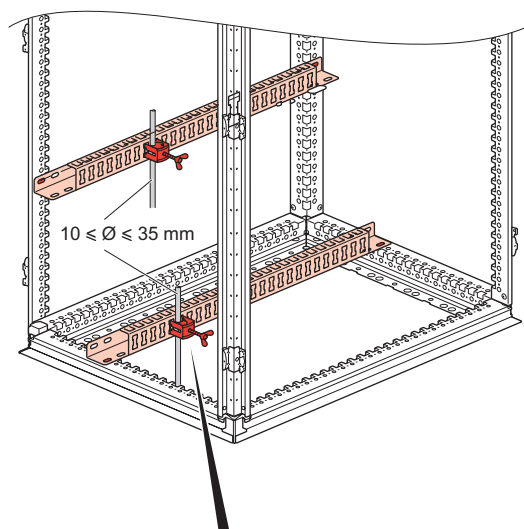
6.7 Door contact



Cat. No. 476 28
6 A - 250 V
1 NC contact - 1 NO contact
For example, can be used to turn the lighting power supply off and on when the door opens.

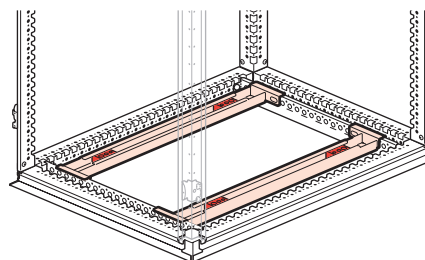
6.8 Stainless steel flange and cable clamping sections

Clamping sections	
Cat. Nos	For enclosures Width (mm)
472 35	600
472 36	800
472 37	1000
472 38	1200
472 39	1600



6. ACCESSORIES (cont'd)

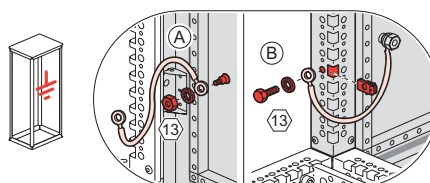
6.9 Set of 2 supports for heavy loads



Fixes directly to the bottom of the enclosure.
Adjustable equipment fixture.
Supplied with fixing system M6, M8, M10.

Cat. Nos	For enclosures (Width mm)	Max. load (kg)
474 75	600	300
474 76	800	
474 77	1000	

6.10 Protective conductor



For equipotential link between the door and the body of the metal enclosures

Grounding strands	Capacity (mm)	Fixing centre distance = (mm)	Hole Ø (mm)
347 95	6	200	8.5
347 96	16	200	8.5
347 97	30	200	8.5

Green/yellow wire	Capacity (mm)	Fixing centre distance = (mm)	Hole Ø (mm)
363 95	6	200	6.5

6.11 Roof spacer

Cat. No. 473 73
Roof spacer for natural ventilation
Height : 13 m
IP 12B

 Lifting not allowed

6. ACCESSORIES (cont'd)

6.12 Paintwork touch-up

Paint aerosols

RAL 7035 Cat. No. 365 97

Beige RAL 7032 Cat. No. 365 98

Touch-up brush

Rust-proof paint 365 91

Protects sheet metal after cutting

RAL 7035

Other colours available on request.

Water-erasable pen

For temporary markings Cat. No. 395 99

7. 19" ACCESSORIES

19" uprights

Cat. No. 472 92

Set of 2 uprights 42 U



19" pivoting frames

RAL 7035, for Altis enclosures with height 1800, 2000 mm
and width 800 mm

Right/left opening. Opening angle 130°

Adjustable depth

Double bar closing

Supplied with fixing accessories

Cat. Nos	Units	Height (mm)	Load strength (kg)
472 96	35	1592	175
472 97	40	1792	200

Telescopic shelves, 1 U

Cat. No. 474 29

Fix directly to the frame of a PC enclosure or an extendable enclosure.

Max. load : 50 kg.