

Compact Enclosures

Features

1.2

Compact Enclosures



The success of Rittal's compact enclosures is based on three key advantages:

1. Rittal's mass-produced quality with triple surface treatment (phosphating, electrophoretic dipcoat-priming and powder coating).
2. Materials, sizes and variants are tailored to all major requirement profiles.
3. Excellent value and virtually unlimited solutions due to Rittal's system accessories.

Built to last – everything is designed with lasting quality: Rittal CM and Rittal CL compact system enclosures – compact enclosures that are fully compatible with TS8 system accessories.

Compact enclosures are available in:

Stainless steel compact enclosures, see page 273.

Ex enclosures, see pages 286 – 288.

EMC enclosures, see pages 289 – 290.



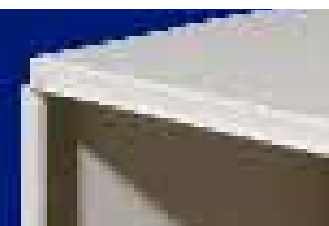
Compact enclosures AE



Perforated mounting strips in the door for fast attachment of support rails, cable conduit holders and covers.



Rear wall with holes, prepared for wall-mounting bracket or direct wall-mounting.



Multi-folded knife-edge channel prevents the ingress of dirt and water when the door is opened.



Grounding conductor connection facilities on the enclosure, door and mounting panel. See system accessories.



Gland plates made from sheet steel for self-assembly may be exchanged for prepunched plates or plastic plates with membranes.



Triple surface treatment: Phosphating, electrophoretic dipcoat priming, powder coating.
Rittal Handbook 31/Enclosure Systems

Compact enclosures AE IP 69K



Ideal for **mounting on vehicles**: Locks, hinges and mounting panels are all secured to resist vibration.

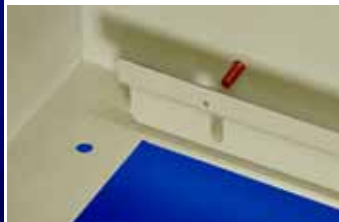


Resistant to high-pressure cleaning: The silicone seal is protected from hose directed water by the labyrinth seal of the door and enclosure flange.



Secure, sealed **wall-mounting** from the outside by press-fitted M8 nuts, either directly or using wall-mounting brackets 1594.000 and 2433.000, see page 905.

Compact enclosures, outdoor



Mounting panels
The enclosure is prepared for the installation of an MDF or sheet steel mounting panel. The MDF version is mounted with mounting brackets.



Roof plate screw-fastened at the correct distance for permanent air circulation. The bonded insulating plate helps prevent the formation of drips.



Plastic **handle**, prepared for the installation of semi-cylinders 40 or 45 mm (1.6 or 1.8") to DIN 18 254.

Compact system enclosures Rittal CM and Rittal CL



Compact medium Rittal CM
The alternative to large enclosures in the AE series, and a replacement for the AK series. See pages 128 – 129.

Compact large Rittal CL
The economical variant of freestanding enclosures ES 5000, see pages 130 – 131.

Fiberglass enclosures KS



C-sections for infinitely variable mounting panel depth adjustment, and to create several mounting levels.



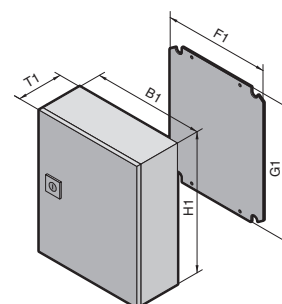
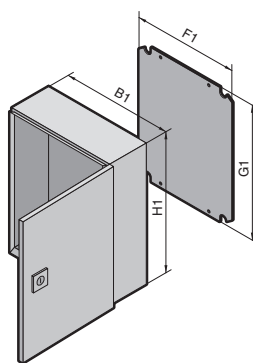
Twin seals on the top and bottom edges of the door in all enclosures, due to the integrated rain protection strip.



Mounting points for threaded inserts in the door and in the rear wall of the enclosure, for simple installation.

Compact Enclosures AE

Height: 300 – 400 mm (11.8 – 15.7"), width: 200 – 600 mm (7.9 – 23.6")



Material:
Sheet steel

Finish:
Enclosure and door:
Dipcoat-primed,
powder-coated on the outside in
textured RAL 7035 (light gray)
Mounting panel: Zinc-plated

Protection ratings:
IP 66 to EN 60 529/10.91,
NEMA Type 12:
(AE 1032.500, AE 1035.500),
NEMA Type 4:
(AE 1030.500, AE 1031.500,
AE 1380.500, AE 1039.500,
AE 1339.500).

Configuration:
Enclosure of unibody
construction, single door,
1 gland plate in the enclosure
base, right hand door hinge,
may be changed to opposite
side (except with AE 1032.500
and AE 1035.600), with one cam
lock, foamed-on door gasket,
mounting panel.

Certifications,
see page 26.

Detailed drawing,
see page 1083.

Height (H1) in mm (inches)	PU	300 (11.8)	300 (11.8)	300 (11.8)	300 (11.8)	300 (11.8)	380 (15.0)	380 (15.0)	380 (15.0)	400 (15.7)
Width (B1) in mm (inches)		200 (7.9)	200 (7.9)	300 (11.8)	380 (15.0)	380 (15.0)	380 (15.0)	600 (23.6)	600 (23.6)	300 (11.8)
Depth (T1) in mm (inches)		120 (4.7)	155 (6.1)	210 (8.3)	155 (6.1)	210 (8.3)	210 (8.3)	210 (8.3)	350 (13.8)	210 (8.3)
Mounting panel height (G1) in mm (inches)		275 (10.8)	275 (10.8)	275 (10.8)	275 (10.8)	275 (10.8)	355 (14.0)	355 (14.0)	355 (14.0)	375 (14.8)
Mounting panel width (F1) in mm (inches)		162 (6.4)	162 (6.4)	254 (10.0)	334 (13.1)	334 (13.1)	334 (13.1)	549 (21.6)	549 (21.6)	254 (10.0)
Mounting panel thickness in mm (ga)		2.0 (14)	2.0 (14)	2.0 (14)	2.0 (14)	2.0 (14)	2.0 (14)	2.5 (12)	2.5 (12)	2.0 (14)
Part No. AE	1	1032.500	1035.500	1033.500	1030.500	1031.500	1380.500	1039.500	1339.500	1034.500
Weight in kg (lb)		4.0 (8.8)	4.5 (9.9)	7.0 (15.4)	7.4 (16.3)	7.5 (16.5)	9.8 (21.6)	15.4 (34.0)	20.0 (44.1)	8.8 (19.4)
Lock systems										

Standard double-bit lock insert may be exchanged for 27 mm (1.1") lock insert, type A, see page 888,
lock cylinder, plastic handles and T handles, type B, see pages 886 – 889.

To order enclosures in textured RAL 7032 (pebble gray) please add extension .600 to the Part no., and for primed enclosures use extension .800.
Delivery times available on request.



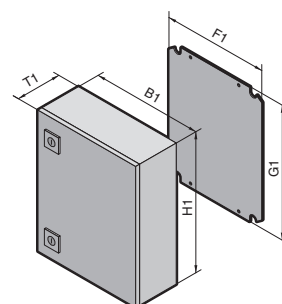
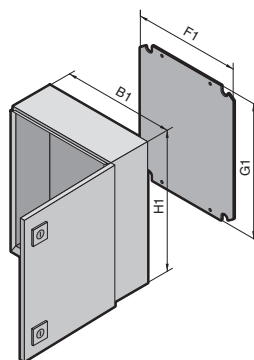
Cable glands
Made from polyamide, brass,
and multi-gasket inserts,
Part no. see pages 972/973.



Dust guard trim
For the gap between the door
and the enclosure,
Part no. see page 899.

Compact Enclosures AE

Height: 500 – 1000 mm (19.7 – 39.4"), width: 380 – 800 mm (15.0 – 31.5")



Material:
Sheet steel

Finish:
Enclosure and door:
Dipcoat-primed,
powder-coated on the outside in
textured RAL 7035 (light gray)
Mounting panel: Zinc-plated

Protection ratings:
IP 66 to EN 60 529/10.91,
NEMA Type 4.

Configuration:
Enclosure of unibody
construction, single door,
1 gland plate in the enclosure
base, right hand door hinge,
may be changed to the opposite
side, with 2 cam locks, foamed-
on door gasket, zinc-plated
mounting panel.

Certifications,
see page 26.

Detailed drawing,
see page 1083.

Compact Enclosures AE
B 1.2

Height (H1) in mm (inches)	PU	500 (19.7)	500 (19.7)	500 (19.7)	600 (23.6)	600 (23.6)	600 (23.6)	600 (23.6)	700 (27.6)
Width (B1) in mm (inches)		400 (15.7)	500 (19.7)	500 (19.7)	380 (15.0)	380 (15.0)	600 (23.6)	600 (23.6)	500 (19.7)
Depth (T1) in mm (inches)		210 (8.3)	210 (8.3)	300 (11.8)	210 (8.3)	350 (13.8)	210 (8.3)	350 (13.8)	250 (9.8)
Mounting panel height (G1) in mm (inches)		475 (18.7)	470 (18.5)	470 (18.5)	570 (22.4)	570 (22.4)	570 (22.4)	570 (22.4)	670 (26.4)
Mounting panel width (F1) in mm (inches)		354 (14.0)	449 (17.7)	449 (17.7)	334 (13.1)	334 (13.1)	549 (21.6)	549 (21.6)	449 (17.7)
Mounting panel thickness in mm (ga)		2.0 (14)	2.5 (12)	2.5 (12)	2.5 (12)	2.5 (12)	2.5 (12)	2.5 (12)	3.0 (11)
Part No. AE	1	1045.500	1050.500	1350.500	1038.500	1338.500	1060.500	1360.500	1057.500
Weight in kg (lb)		13.0 (28.7)	16.8 (37.0)	19.6 (43.2)	15.6 (34.4)	19.4 (42.8)	22.8 (50.3)	28.4 (62.6)	31.2 (68.8)

Height (H1) in mm (inches)	PU	760 (29.9)	760 (29.9)	760 (29.9)	760 (29.9)	800 (31.5)	1000 (39.4)	1000 (39.4)
Width (B1) in mm (inches)		600 (23.6)	600 (23.6)	760 (29.9)	760 (29.9)	600 (23.6)	600 (23.6)	800 (31.5)
Depth (T1) in mm (inches)		210 (8.3)	350 (13.8)	210 (8.3)	300 (11.8)	250 (9.8)	250 (9.8)	300 (11.8)
Mounting panel height (G1) in mm (inches)		730 (28.7)	730 (28.7)	730 (28.7)	730 (28.7)	770 (30.3)	955 (39.2)	955 (39.2)
Mounting panel width (F1) in mm (inches)		549 (21.6)	549 (21.6)	704 (27.7)	704 (27.7)	549 (21.6)	539 (21.2)	739 (29.1)
Mounting panel thickness in mm (ga)		3.0 (11)	3.0 (11)	3.0 (11)	3.0 (11)	3.0 (11)	3.0 (11)	3.0 (11)
Part No. AE	1	1076.500	1376.500	1077.500	1073.500	1058.500	1090.500	1180.500
Weight in kg (lb)		32.1 (70.8)	36.0 (79.4)	40.0 (88.2)	44.5 (98.1)	34.2 (75.4)	50.5 (111.3)	57.0 (125.7)

Lock systems

Standard double-bit lock insert may be exchanged for 27 mm (1.1") lock insert, type A, see page 888, lock cylinder, plastic handles and T handles, type B, see pages 886 – 889.

To order enclosures in textured RAL 7032 (pebble gray) please add extension .600 to the Part no., and for primed enclosures use extension .800 (except 1097.xxx). Delivery times available on request.



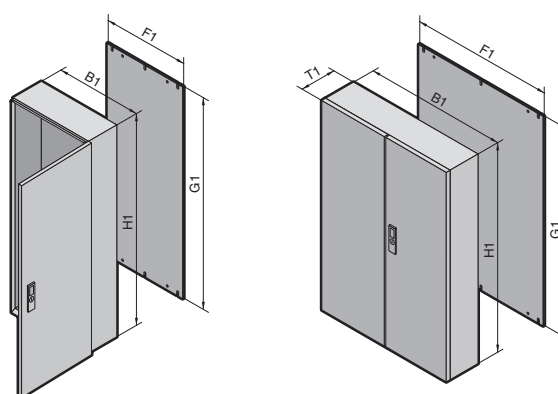
Metal gland plates
Prepunched,
Part no. see page 968.



Plastic print pocket
Screw-fastened,
Part no. see page 897.

Compact Enclosures AE

Height: 760 – 1400 mm (29.9 – 55.1”), width: 600 – 1000 mm (23.6 – 39.5”)



Material:

Sheet steel
Enclosure: 1.5 mm (16 ga)
Door: 2.0 mm (14 ga)
Mounting panel: 3.0 mm (11 ga)

Finish:

Enclosure and door:
Dipcoat-primed,
powder-coated on the outside in
textured RAL 7035 (light gray)
Mounting panel: Zinc-plated

Protection ratings:

IP 55 to EN 60 529/10.91,
NEMA Type 12.
IP 56 to EN 60 529/10.91,
NEMA Type 4 for AE 1260.500
and AE 1280.500.

Configuration:

Enclosure of unibody construction, single door: 1 gland plate (twin-door: 2 gland plates in the enclosure base,
3-point lock system, prepared for use of the Ergoform-S lock system, 2 cam locks for 1100.500, 1130.500, 1110.500, foamed-on door gasket, zinc-plated mounting panel).

Certifications,

see page 26.

Detailed drawing,

see page 1084.



**As an alternative,
can be used:**

Compact system enclosures
Rittal CM, see pages 128 – 129.

Height (H1) in mm (inches)	PU	760 (29.9)	760 (29.9)	1000 (39.4)	1200 (47.2)	1200 (47.2)	1200 (47.2)	1400 (55.1)	Page
Width (B1) in mm (inches)		1000 (39.4)	1000 (39.4)	1000 (39.4)	600 (23.6)	800 (31.5)	1000 (39.4)	1000 (39.4)	
Depth (T1) in mm (inches)		210 (8.3)	300 (11.8)	300 (11.8)	300 (11.8)	300 (11.8)	300 (11.8)	300 (11.8)	
Mounting panel height (G1) in mm (inches)		730 (28.7)	730 (28.7)	955 (37.6)	1155 (45.5)	1155 (45.5)	1155 (45.5)	1355 (53.3)	
Mounting panel width (F1) in mm (inches)		944 (37.2)	944 (37.2)	939 (37.0)	540 (21.3)	740 (29.1)	940 (37.0)	940 (37.0)	
Part No. AE	1	1100.500	1130.500	1110.500	1260.500	1280.500	1213.500	1114.500	
Door(s)		2	2	2	1	1	2	2	
Weight in kg (lb)		52.0 (114.6)	56.0 (123.5)	71.0 (156.5)	55.0 (121.3)	70.0 (154.3)	85.0 (187.4)	97.0 (213.8)	

Accessories

Self-tapping screws		300	2487.000							937
Base/plinth in mm (inches)	Height 100 (3.9)	1	–	–	2801.200	2816.200	2818.200	2801.200	2801.200	843
	Height 200 (7.9)	1	–	–	2802.200	2826.200	2828.200	2802.200	2802.200	843
Stainless steel rain canopy		1	–	2363.000	2363.000	–	2475.000	2363.000	2363.000	899
Plastic cable gland plate		5	2562.000	2562.000	2562.000	2563.000	2563.000	2562.000	2562.000	966
Eyebolts		4	–	–	–	2509.000	2509.000	2509.000	2509.000	904

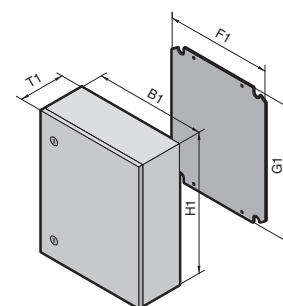
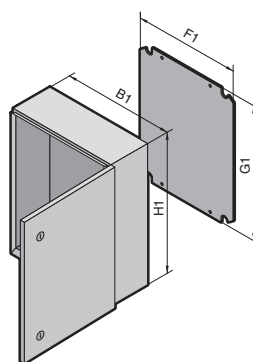
Lock systems

Standard double-bit lock insert may be exchanged for 27 mm (1.1”) lock insert, type A, see page 888 and Ergoform-S lock system (not for 1100.500, 1130.500, 1110.500), see page 885.

To order enclosures in textured RAL 7032 (pebble gray) please add extension .600 to the Part no., and for primed enclosures use extension .800 (except 1097.xxx). Delivery times available on request.

Compact Enclosures AE

Protection category IP 69K



Perfect protection in a tough environment

The compact enclosure AE in IP 69K is the ideal solution when a high protection category and corrosion resistance are needed.

- Resistant to high-pressure cleaning (protection category IP 69K). The interior gasket is protected against hose directed water.
- Ideal for mounting on vehicles: Lock, hinges and mounting panel are all vibration resistant.
- The enclosure and door have an aluminum zinc coating for a high level of corrosion protection.

- Foamed-on silicone gasket, water resistant, with high resistance to temperature and chemicals.
- Prepared to accommodate the door stop 1101.800 and the interior door.
- Wall-mounting

Material:
Sheet steel

Finish:
Enclosure and door:
Aluminum zinc coating,
powder-coated in textured
RAL 7035 (light gray)
Mounting panel: Zinc-plated

Protection ratings:
IP 69K to DIN 40 050-9/5.93

Configuration:
Enclosure of unibody
construction, single door,
door hinge may be changed to
the opposite side by rotating
the enclosure, cam lock with
double-bit insert, other inserts
available on request.



Rittal Service:

Other sizes available on request.
Cutouts and drilled holes to your
specifications.

Detailed drawing,
see page 1086.

Height (H1) in mm (inches)	PU	330 (13.0)	400 (15.7)	650 (25.6)	650 (25.6)	Page
Width (B1) in mm (inches)		230 (9.1)	400 (15.7)	400 (15.7)	650 (25.6)	
Depth (T1) in mm (inches)		155 (6.1)	250 (9.8)	250 (9.8)	250 (9.8)	
Mounting panel height (G1) in mm (inches)		—	355 (14.0)	570 (22.4)	570 (22.4)	
Mounting panel width (F1) in mm (inches)		—	334 (13.1)	334 (13.1)	549 (21.6)	
Mounting panel thickness in mm (ga)		2 (14)	2 (14)	2.5 (12)	2.5 (12)	
Part No. AE	1	1101.010	1101.020	1101.030	1101.040	
Weight in kg (lb)		6.6 (14.6)	13.8 (30.4)	20.0 (44.1)	29.6 (65.3)	
Locks		1	2	2	2	

Accessories						
Interior door	1	1101.910	1101.920	1101.930	1101.940	873
Door stop	1	1101.800	1101.800	1101.800	1101.800	898



Interior door

With 4 (2 for 1101.010) studs for the installation of punched rails 23 x 23 mm (0.9 x 0.9") (may be cut to required length) and universal installation accessories.

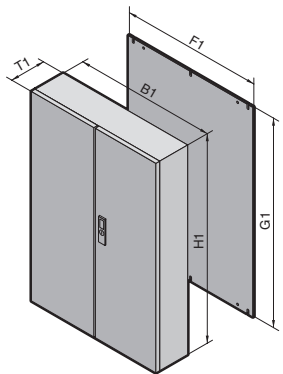
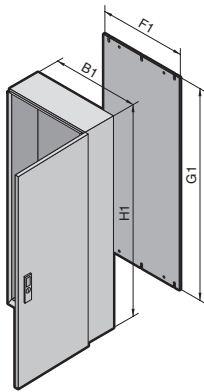


Wall-mounting

Directly from the rear via M8 nut or with wall-mounting bracket, see page 905.

Compact Enclosures AK

Depth: 400 mm (15.7")



Material:

Sheet steel
Enclosure: 1.5 mm (16 ga)
Door(s): 2.0 mm (14 ga)
Mounting panel: 3.0 mm (11 ga)

Finish:

Enclosure and door(s):
Dipcoat-primed, powder-coated
in textured RAL 7035 (light gray)
on the outside
Mounting panel: Zinc-plated

Protection ratings:


IP 55 to EN 60 529/10.91,
NEMA Type12.

Configuration:

Enclosure of unibody
construction, right hand door
hinge, may be changed to
opposite side, AK 1652.500,
AK 1650.500, AK 1647.500:
Lockable door on right,
foamed-on door seal, holes
provided for eyebolts, mounting
panel, two-part gland plates.

Certifications,
see page 27.

Detailed drawing,
see page 1086.

 **As an alternative,
can be used:**

Compact system enclosures
Rittal CM, see pages 128 – 129.

NOTE: Discontinued item, please do not use for new designs.

Height (H1) in mm (inches)	PU	1200 (47.2)	1200 (47.2)	1200 (47.2)	1200 (47.2)	1400 (55.1)	Page
Width (B1) in mm (inches)		600 (23.6)	800 (31.5)	1000 (39.4)	1200 (47.2)	1000 (39.4)	
Depth (T1) in mm (inches)		400 (15.7)	400 (15.7)	400 (15.7)	400 (15.7)	400 (15.7)	
Mounting panel height (G1) in mm (inches)		1125 (44.3)	1125 (44.3)	1125 (44.3)	1125 (44.3)	1325 (52.2)	
Mounting panel width (F1) in mm (inches)		514 (20.2)	714 (28.1)	914 (36.0)	1114 (43.9)	914 (36.0)	
Part No. AK	1	1646.500	1648.500	1650.500	1652.500	1647.500	
Door(s)		1	1	2	2	2	
Weight in kg (lb)		60.0 (132.3)	75.0 (165.4)	88.5 (195.1)	108.0 (238.1)	103.5 (228.2)	

Accessories

Base/plinth in mm (inches)	Height 100 (3.9)	1	2911.200	2901.200	2891.200	2921.200	2891.200	843
	Height 200 (7.9)	1	2912.200	2902.200	2892.200	2922.200	2892.200	843

Lock systems

Standard double-bit lock insert may be exchanged for 27 mm (1.1") lock insert, type A, see page 888,
and Ergoform-S lock system, see page 885.

To order enclosures in textured RAL 7032 (pebble gray) please add extension .600 to the Part no., and for primed enclosures use extension .800.
Delivery times available on request.



Cable gland

Made from polyamide/brass,
and multi-seal inserts,
Part no. see pages 972/973.



Signal pillar LED compact,
Part no. see page 1041.