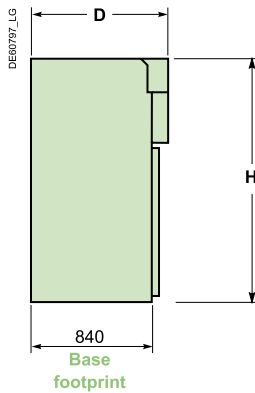

Dimensions and weights for SM6-24	116
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Dimensions and weights for SM6-24

Basic internal arc 12.5 kA 1s, IAC: A-FL



Add to height:

(1) 450 mm for low-voltage enclosures for control/monitoring and protection functions.

To ensure uniform presentation, all units (except GIM and GEM) may be equipped with low-voltage enclosures.

(2) depending on the busbar configuration in the VM6 unit, two types of extension units may be used:

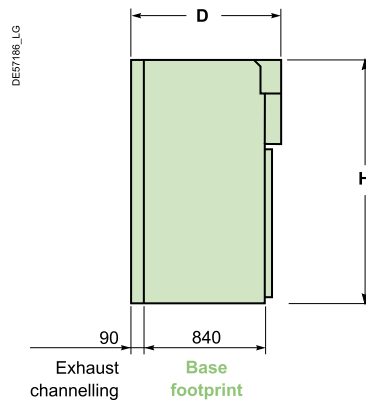
■ to extend a VM6 DM12 or DM23 unit, use an extension unit with a depth of 1060 mm

■ for all other VM6 units, a depth of 920 mm is required.

(3) for the 1250 A unit.

Dimensions and weights

Unit type	Height H (mm)	Width (mm)	Depth D (mm)	Weight (kg)
IM,IMB	1600 (1)	375/500	940	120/130
IMM	1600	750	940	340
IMC	1600 (1)	500	940	200
PM, QM, QMB	1600 (1)	375/500	940	130/150
QMC	1600 (1)	625	940	180
CRM, CVM	2050	750	940	390
DM1-A, DM1-D, DM1-W, DM2, DMVL-A, DMVL-D, DM1-M	1600 (1)	750	1220	400
DM1-S	1600 (1)	750	1220	340
DMV-A, DMV-D	1695 (1)	625	940	340
CM	1600 (1)	375	940	190
CM2	1600 (1)	500	940	210
GBC-A, GBC-B	1600	750	1020	290
NSM-cables, NSM-busbars	2050	750	940	260
GIM	1600	125	840	30
GEM (2)	1600	125	920/1060 (2)	30/35 (2)
GBM	1600	375	940	120
GAM2	1600	375	940	120
GAM	1600	500	1020	160
SM	1600 (1)	375/500 (3)	940	120/150 (3)
TM	1600	375	940	200
DM1-A, DM1-D, DM1-W, DM1-Z (1250 A)	1600	750	1220	420



Advance internal arc 12.5 kA 1s, IAC: A-FLR 16 and 20 kA 1s, IAC: A-FL/A-FLR

Dimensions and weights

Unit type	Height H (mm)	Width (mm)	Depth D (mm)	Weight (kg)
IM,IMB	1600 (1)	375/500	1030	130/140
IMM	1600	750	1030	340
IMC	1600 (1)	500	1030	210
PM, QM, QMB	1600 (1)	375/500	1030	140/160
QMC	1600 (1)	625	1030	190
CVM	2050	750	1030	400
DM1-A, DM1-D, DM1-W, DM2, DMVL-A, DMVL-D, DM1-M	1600 (1)	750	1230	410
DM1-S	1600 (1)	750	1230	350
DMV-A, DMV-D	1695 (1)	625	1115	350
CM	1600 (1)	375	1030	200
CM2	1600 (1)	500	1030	220
GBC-A, GBC-B	1600 (1)	750	1030	300
NSM-cables, NSM-busbars	2050	750	1030	270
GIM	1600	125	930	40
GEM (2)	1600	125	930/1060 (2)	40/45
GBM	1600	375	1030	130
GAM2	1600	375	1030	130
GAM	1600	500	1030	170
SM	1600 (1)	375/500 (3)	1030	130/160
TM	1600	375	1030	210
DM1-A, DM1-D, DM1-W, DM1-Z (1250 A)	1600 (1)	750	1230	430

(1) Add to height 450 mm for low-voltage enclosures for control/monitoring and protection functions. To ensure uniform presentation, all units (except GIM and GEM) may be equipped with low-voltage enclosures.

(2) Depending on the busbar configuration in the VM6 unit, two types of extension units may be used:

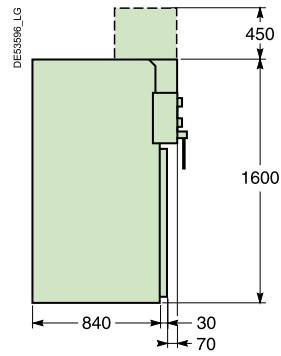
■ to extend a VM6 DM12 or DM23 unit, use an extension unit with a depth of 1060 mm

■ for all other VM6 units, a depth of 930 mm is required.

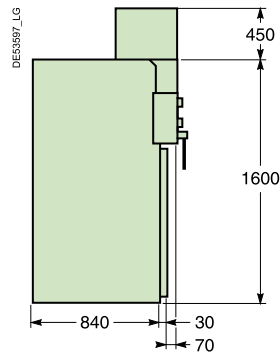
(3) For the 1250 A unit.

Basic internal arc 12.5 kA 1s, IAC: A-FL

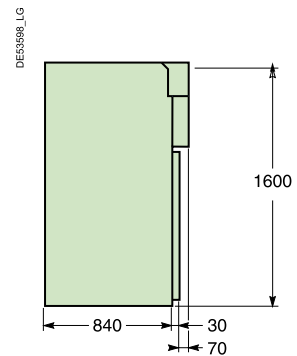
IM, IMB, PM, QM, QMB, SM, IMC, QMC, CM, CM2



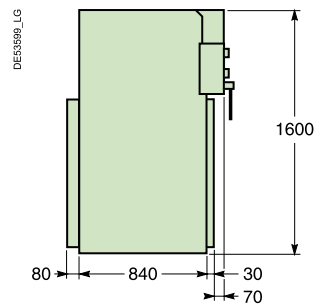
NSM-cables, NSM-busbars, CRM, CVM



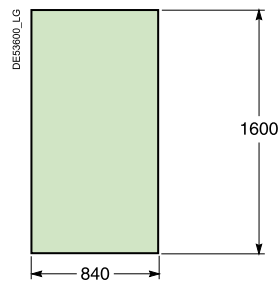
GBM, GAM2



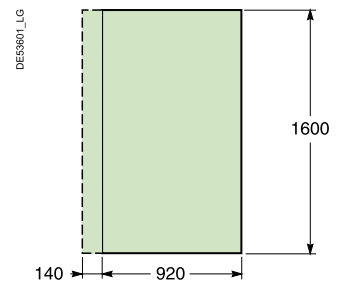
GAM



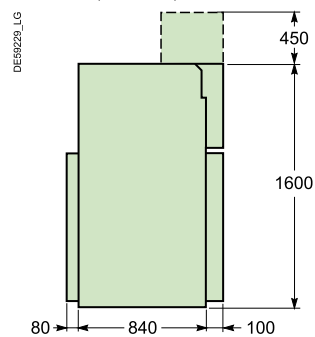
GIM



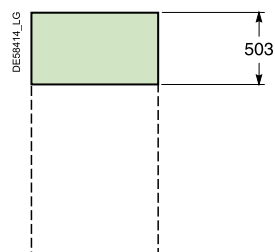
GEM



GBC-A, GBC-B, IMM



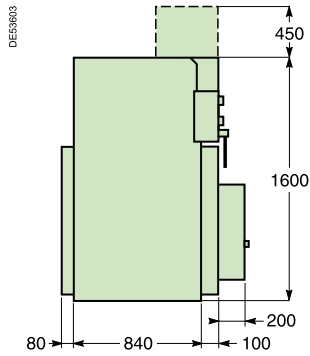
EMB



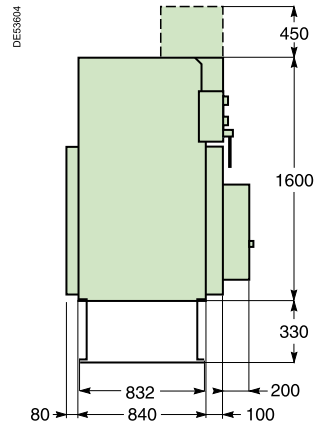
Units dimensions for SM6-24

Basic internal arc
12.5 kA 1s, IAC: A-FL

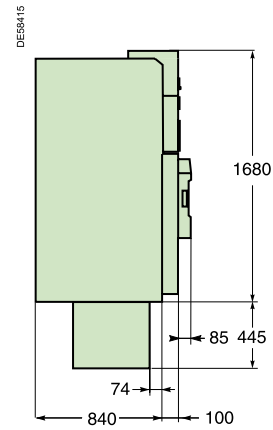
**DMVL-A, DMVL-D, DM1-A, DM1-D, DM1-W, DM1-Z,
DM1-S, DM2 630 A, DM1-M**



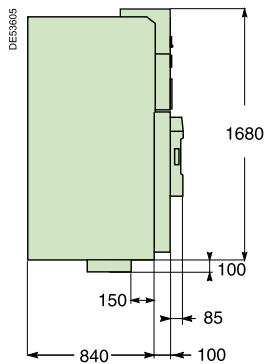
DM1-A, DM1-W 1250 A



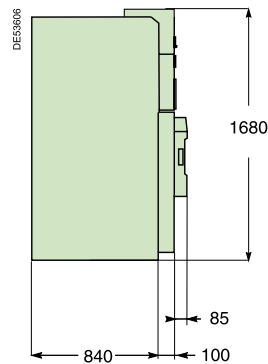
DMV-A 1250 A



DMV-A 630 A



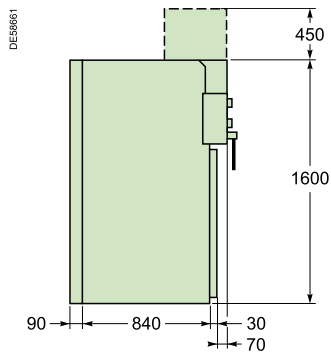
DMV-D



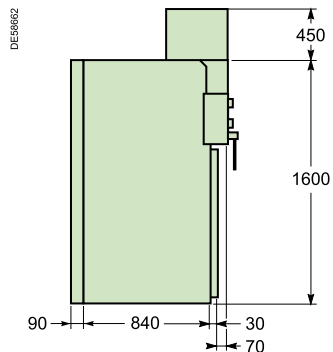
Units dimensions for SM6-24

Advance internal arc
12.5 kA 1s, IAC: A-FLR, 16 and 20 kA 1s,
IAC: A-FL/A-FLR

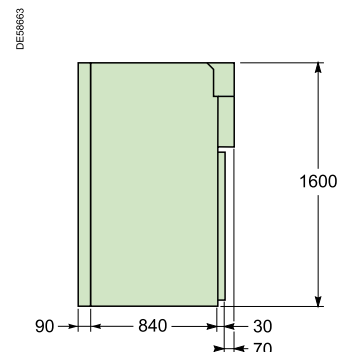
IM, IMB, PM, QM, QMB, SM, IMC, QMC, CM, CM2



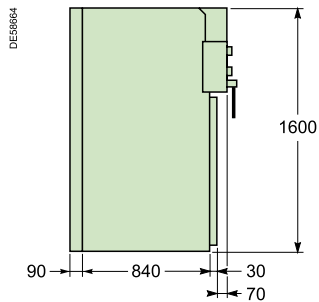
NSM-cables, NSM-busbars, CVM



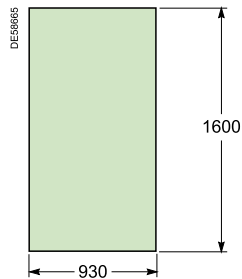
GBM, GAM2



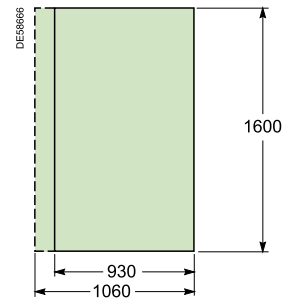
GAM



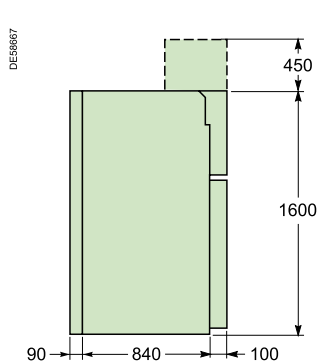
GIM



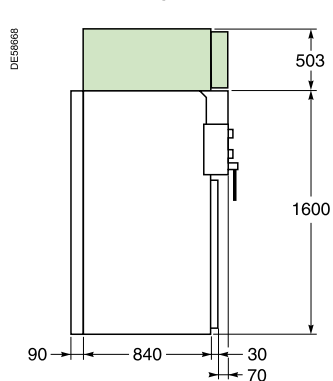
GEM



GBC-A, GBC-B, IMM



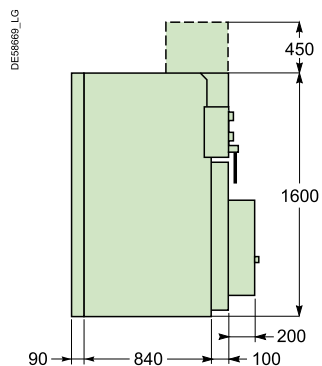
IM with EMB option



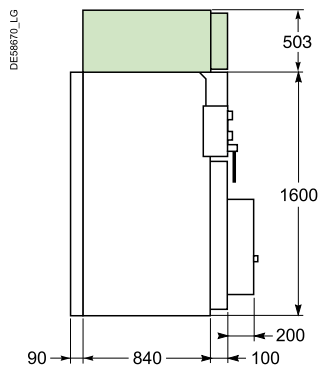
Units dimensions for SM6-24

Advance internal arc
12.5 kA 1s, IAC: A-FLR,
16 and 20 kA 1s, IAC: A-FL/A-FLR

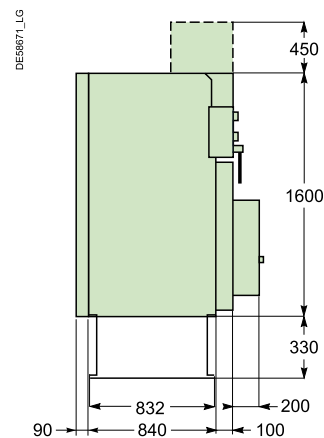
**DMVL-A, DMVL-D, DM1-A, DM1-D, DM1-W, DM1-Z,
DM1-S, DM2 630 A, DM1-M**



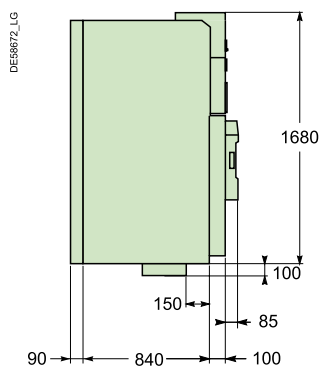
DM1-A 630 A with EMB option



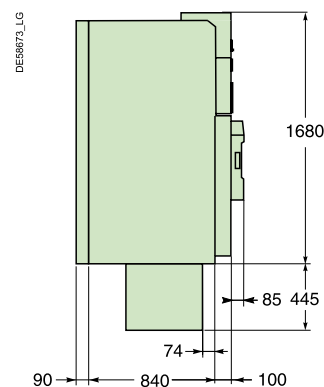
DM1-A, DM1-W 1250 A



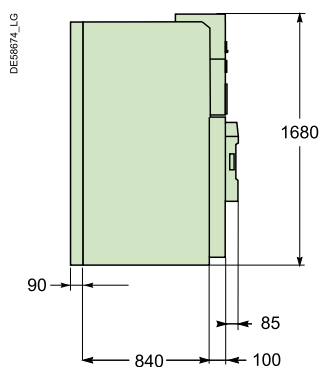
DMV-A 630 A

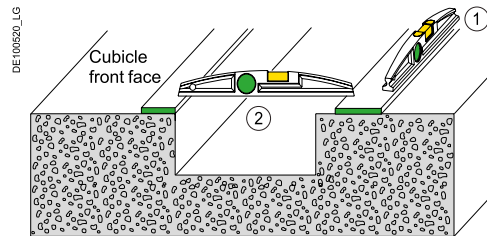


DMV-A 1250 A



DMV-D



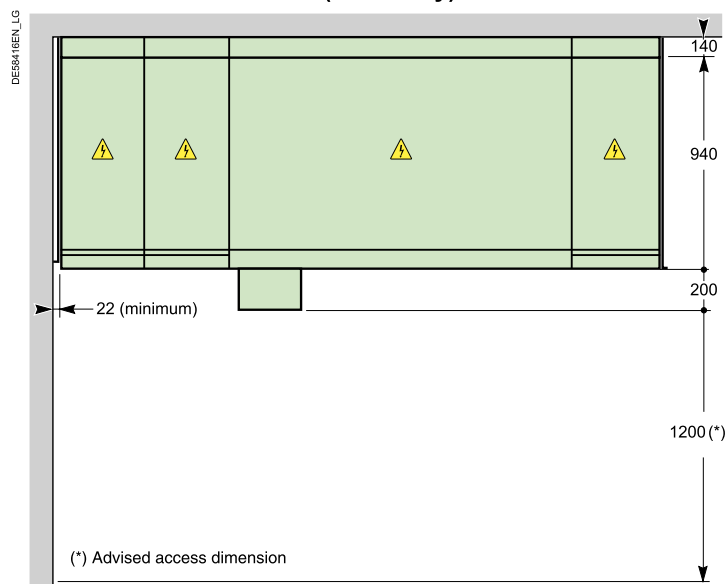


- For switchboards comprising up to three units, the four corners of the switchboard must be secured to the ground with using:
 - M8 bolts (not supplied) screwed into nuts set into the ground using a sealing pistol
 - screw rods grouted into the ground.
- For switchboards comprising more than three units, each unit may be fixed to the ground
- In circuit-breaker or contactor units, fixing devices are installed on the opposite side of the switchgear.

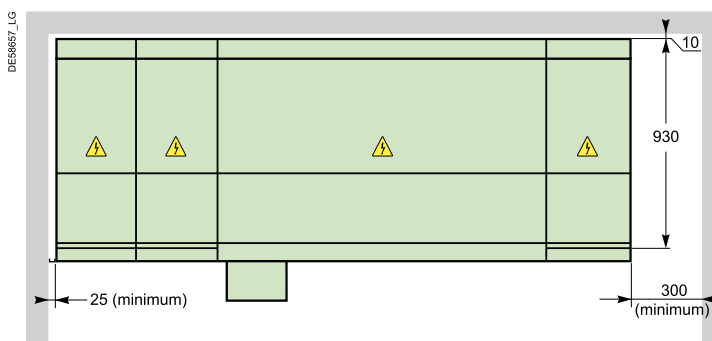
Layout examples for SM6-24

Position of cubicles in a substation

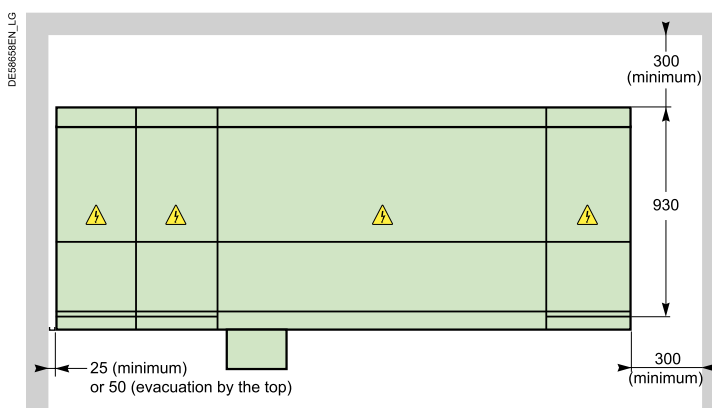
Installation of a switchboard classified IAC 12.5 kA 1s: A-FL Conventional substation (Masonry)



Installation of a switchboard classified IAC 16/20 kA 1s: A-FL with downwards exhaust



Installation of a switchboard classified IAC: A-FLR with downwards exhaust

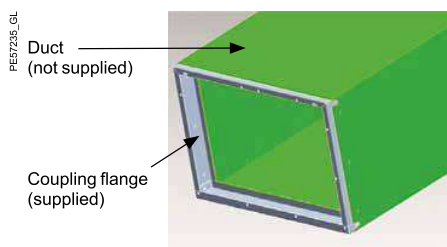


Evacuation duct

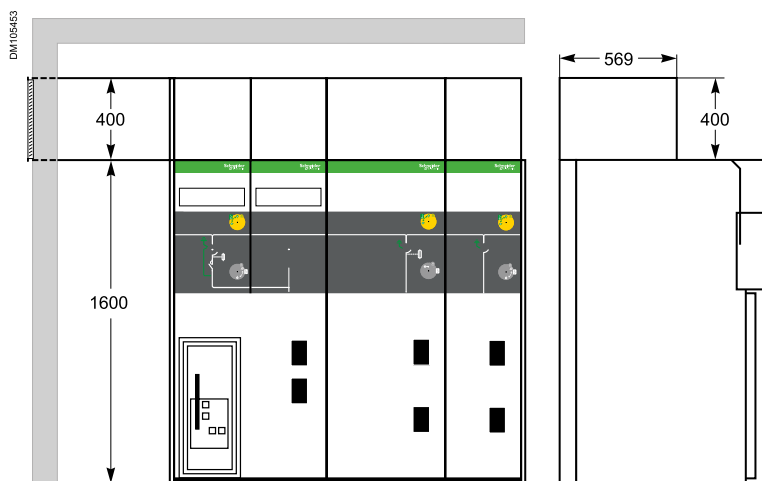
To enable the evacuation of gases by the top, users must install a conduit fixed to the coupling flange at right or left of the switchboard. For IP3X protection performance, a flap must be installed with this coupling flange on the lateral side of the cubicle duct. The end of the duct must block water, dust, moisture, animals, etc. from entering and at the same time enable the evacuation of gases into a dedicated area through a device situated at the outer end of the duct (not supplied).

Evacuation duct example

The evacuation duct must be made of metal sheet of sufficient thickness to withstand pressure and hot gases.



Installation of a switchboard classified IAC: A-FL & A-FLR with upwards exhaust left side (ceiling height ≥ 2150 mm)



Dimensions and weights for SM6-36

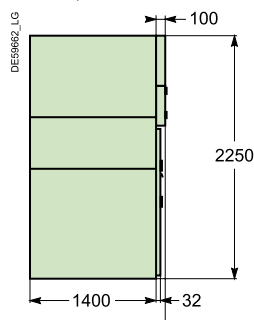
Dimensions and weights

Unit type	Height	Width	Depth (1)	Weight
	(mm)	(mm)	(mm)	(kg)
IM, SM	2250	750	1400 (3)	310
IMC, IMB	2250	750	1400 (2)	420
QM, PM, QMB	2250	750	1400 (3)	330
QMC	2250	1000	1400 (3)	420
DM1-A	2250	1000	1400 (2)	600
DM1-D	2250	1000	1400 (2)	560
GIM	2250	250	1400	90
DM2	2250	1500	1400 (2)	900
CM, CM2	2250	750	1400 (2)	460
GBC-A, GBC-B	2250	750	1400 (3)	420
GBM	2250	750	1400 (3)	260
GAM2	2250	750	1400 (3)	250
GAM	2250	750	1400 (3)	295
GFM	2250	250	1400	100

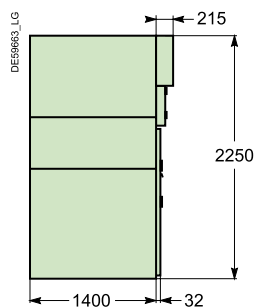
- (1) The depth measures are given for the floor surface.
(2) The depth in these units are 1615 mm with the enlarged low voltage compartment.
(3) The depth in these units are 1500 mm with the standard low voltage compartment.

Dimensions

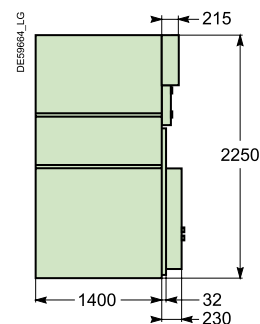
**IM, SM, IMC, QM, PM, IMB,
GBM, GAM, GAM2, GBC-A, GBC-B
QMB, QMC units**



CM, CM2 units

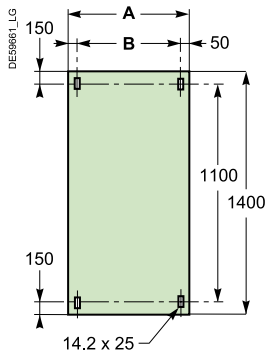


DM1-A, DM1-D, DM2 units



Ground preparation

Units may be installed on ordinary concrete grounds, with or without trenches depending on the type and cross-section of cables.
Required civil works are identical for all units.



Fixing of units

With each other

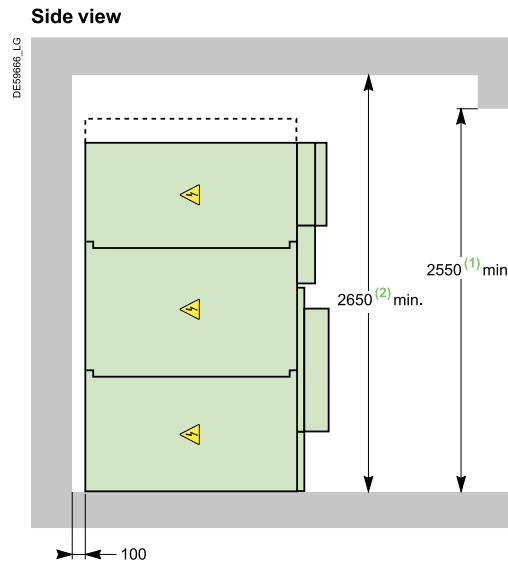
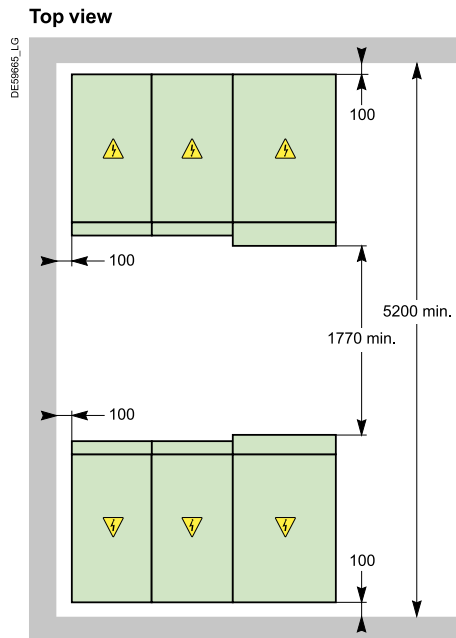
The units are simply bolted together to form the MV switchboard (bolts supplied).
Busbar connections are made using a torque wrench set to 28 mN.

On the ground

- for switchboards comprising up to three units, the four corners of the switchboard must be secured to the ground using:
 - bolts (not supplied) screwed into nuts set into the ground using a sealing pistol
 - screw rods grouted into the ground
- for switchboards comprising more than three units, the number and position of fixing points depends on local criteria (earthquake withstand capacities, etc.)
- position of fixing holes depends on the width of units.

Unit type	A (mm)	B (mm)
IM, IMC, IMB, QM, PM, SM, CM, CM2, TM GBC-A, GBC-B, GBM, GAM2, IMB, GAM, QMB	750	650
DM1-A, DM1-D, QMC	1000	900
DM2	1500	1400
GIM	250	150

Conventional substation (Masonry)



Minimum required dimensions (mm)

⁽¹⁾ In case of upper incoming option: it must be 2730 mm (no internal arc withstand performance available)

⁽²⁾ In case of upper incoming option: it must be 2830 mm (no internal arc withstand performance available)

