

Technical Data Sheet

Compact Stations of Stainless Steel

▪ MCS 1229-24

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Table of contents

1 Product overview	3
Transformer / Nominal Data	3
MV-Compartment.....	3
LV-Compartment.....	3
Options	4
Dimensions	4
Weights.....	4
Product specification.....	4
Basic types	5
2 Technical details	5
MCS 1229-24 Drawings	5
3 Foundation	6
MCS 1229-24 S Installation of S-type (basement stainless steel).....	6
MCS 1229-24 H Installation of H-type (basement concrete)	6
MCS 1229-24 F Installation of F-Type (Above-ground installation).....	7
MCS 1229-24 Lifting plan.....	8
MCS 1229-24 Transport and loading plan.....	8





1 | Product overview

	MCS 1229-24
Application	Local network substation
Metering	Low voltage measurement optional
Operating side	front side
Internal arc fault qualification	IAC-AB 20kA 1s
Temperature class acc. to IEC 62271-202	15
IP Code	IP 34 D
	Optional: IP 44 D
IK Code	10
Wind load	Wind load zone IV [34 m/s]
Snow load S_k [kN/m ²]	2,0
Roof load q_k [kN/m ²]	2,5

Transformer / Nominal Data

Rated Power	Oil distribution transformer
	max. 630 kVA
Load factor transformer at 30°C ambient temperature	0,7
Max. dimensions D x L [mm] at optimum distance to the wall 50mm (min. distance to the wall 20 mm)	852 x 1.373
Nominal voltage	12/24 kV

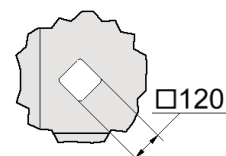
MV-Compartment

Configuration MV-Switchgear	RRT RRL
Max. Height H [mm]	1.519
Metering on MV side	x
Max. number Cable entry system	HSI 150 DFK 3

LV-Compartment

Max. Dimension L x H x D [mm]	993 x 1.521 x 354
Max. number LV HRC strip fuseways	9 (size 1/2/3)
Max. number Cable entry system	HSI 150 DFK 3
	HSI 90 DFK 4

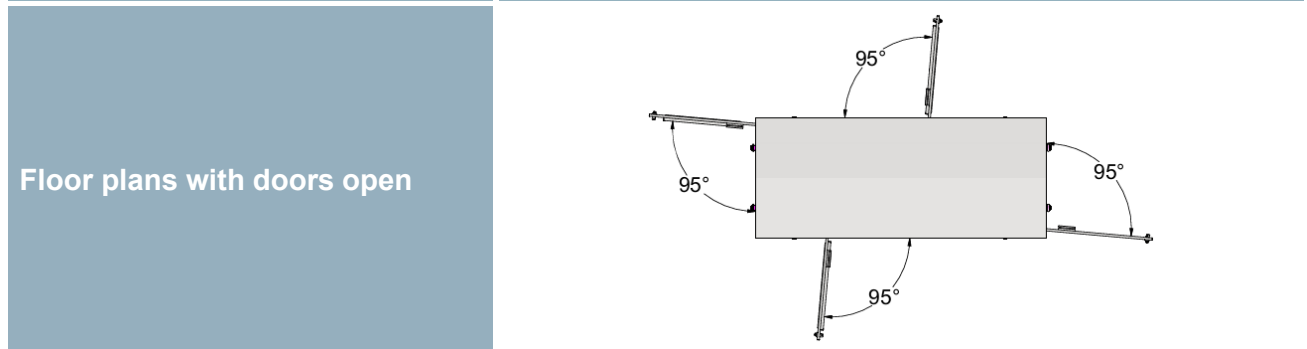
Above ground cable entry for temporary use





MCS 1229-24	
Options	
Lifting equipment (body)	Swivel ring bolts GK10 M24 x 37
Lifting equipment (roof)	Swivel ring bolts GK10 M12 x 23
Equipotential bonding bar	CU/SN 383 x 40 x 5 mounted on isolation supports
Mounting plate for accessories	1000 x 500 for MV-door (e.g. for operating levers)
Above ground cable entry for temporary use	Cable clamp D \varnothing 33-46

Dimensions	
Footprint [m ²]	3,17
Area with doors open [m ²]	16,14
W x L x H [mm]	1.200 x 2.900 x 2.263
W x L Footprint [mm]	1.122 x 2.821
W x L Dimensions with doors open [mm]	approx. 3.221 x 5.010



Weights		
Empty weight [kgs]	S / F	approx. 680
	H	approx. 2.940
Max. permissible total weight [kgs]	S / F	4.400
	H	6.660

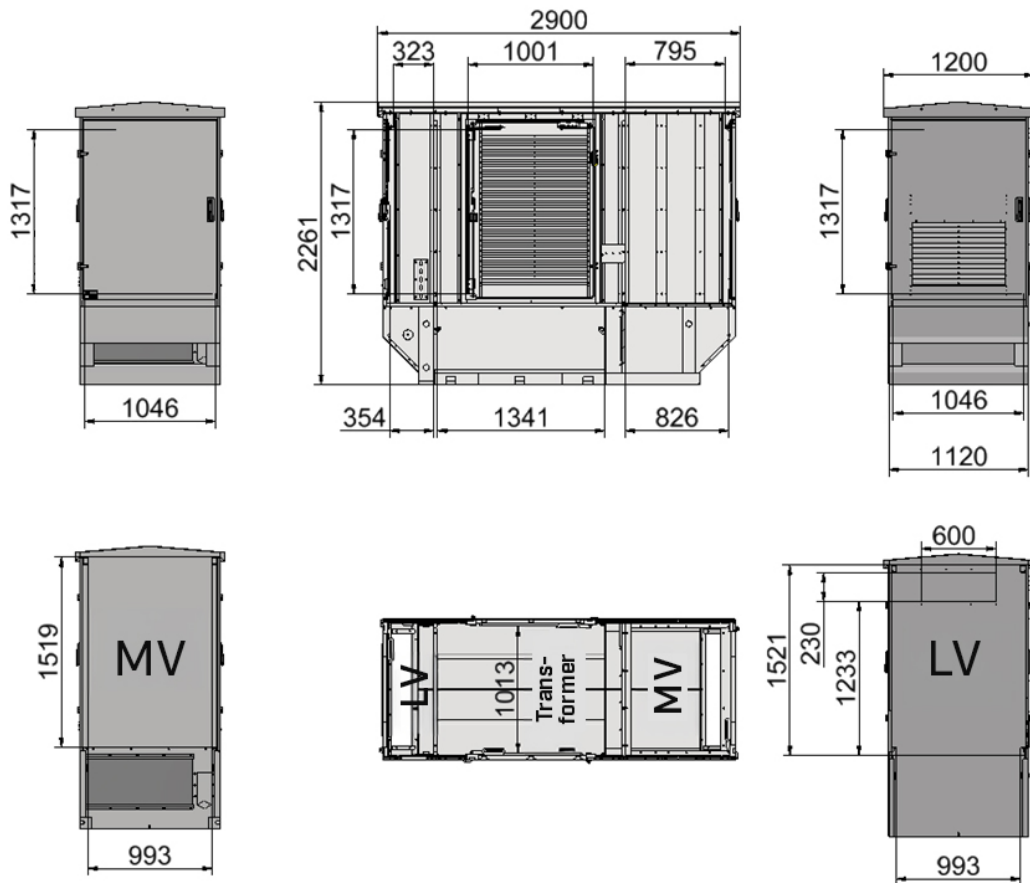
Product specification		
Enclosure	Stainless steel [1.4301], powder coated	
Partition walls	Steel sheet [1.0038], galvanised	
Doors	MV: 1 single door LV: 1 single door with ventilation grille Transf.: 2 single doors with ventilation grille	
Basement / cable cellar	Stainless steel [1.4301], powder coated, Cable entries Hauff-Technik System HSI, integrated oil drip pan acc. to §19 WHG (German Water Resources Act): Volume without transformer: 944 dm ³	
Colour	Standard colour:	RAL 7035 light grey
		RAL 6002 leaf green
		RAL 7016 anthracite grey



		MCS 1229-24
Basic types		
MCS 1229-24	S	Steel-type: Basement made of stainless steel (Standard)
	F	optional: For installation above ground with removable protection cover for incoming and outgoing cables
	H	Hybrid-type: Basement made of concrete

2 | Technical details

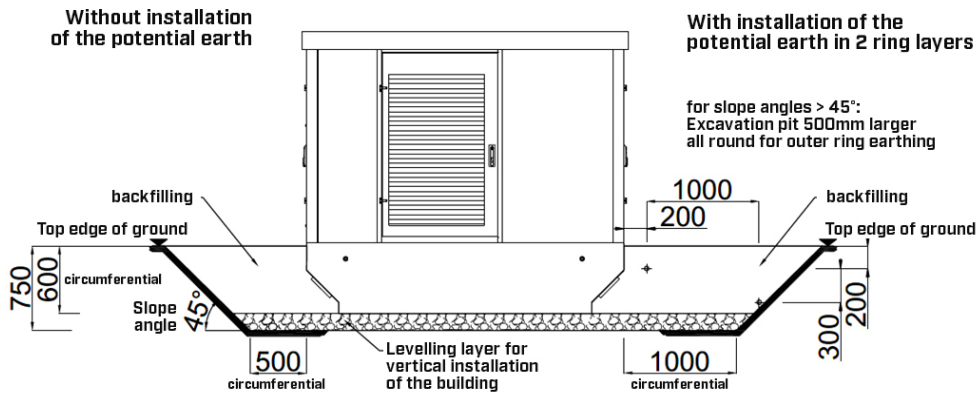
MCS 1229-24 Drawings



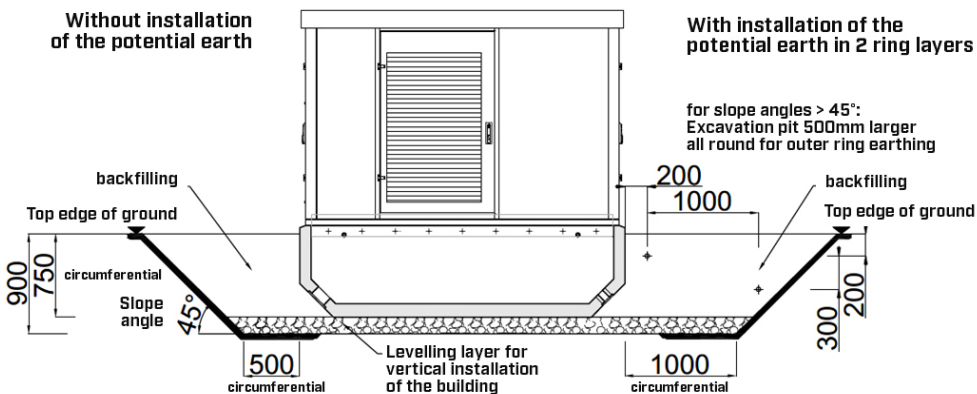


3 | Foundation

MCS 1229-24 S Installation of S-type (basement stainless steel)



MCS 1229-24 H Installation of H-type (basement concrete)



The following must be observed when constructing the excavation pit:

- design the slope angle 45-80° according to DIN 4124 and local soil conditions, plan pit shoring if necessary
- frost-free foundation
- Observe information on the building ground: Bedding modulus min. 20MN/m³
Soil compression ≥ 60 kN/m²
- or: according to individual statics for the location
- Observe information on backfill material: Internal angle of friction ≥ 32,5° , Weights up to 20 kN/m³, Wall friction = 0°;
or: according to individual statics for the location
- Soil drainage required in accordance with DIN 4095:
Drainage of the subsoil must always be carried out in cohesive soils and on slopes, regardless of the type of soil; pressing water / seepage water must be prevented to protect the building structure

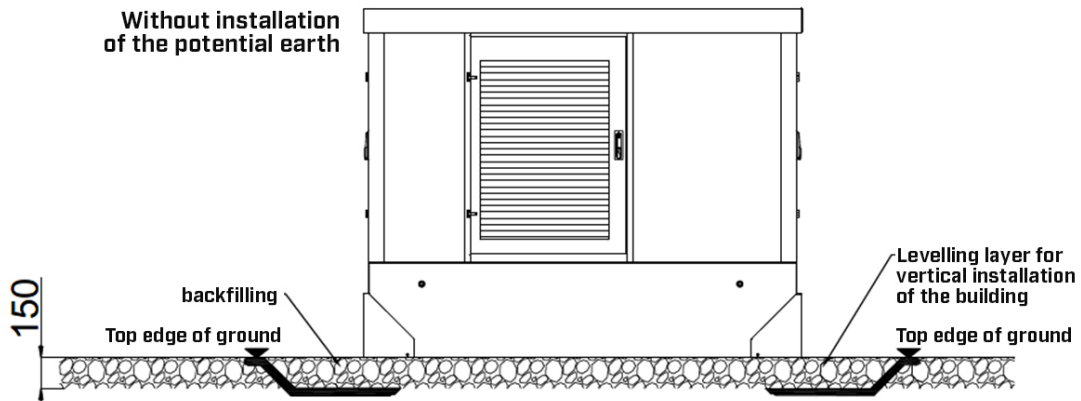
Execution of the levelling layer (Levelling layer level smoothly (!!!)):

- Layer thickness 15 cm:
 1. Gravel at bottom 0-16mm: Thickness 12cm
 2. on top grit 4-6 mm: Thickness 3 cm





MCS 1229-24 F Installation of F-Type (Above-ground installation)



The following must be observed when constructing the excavation pit:

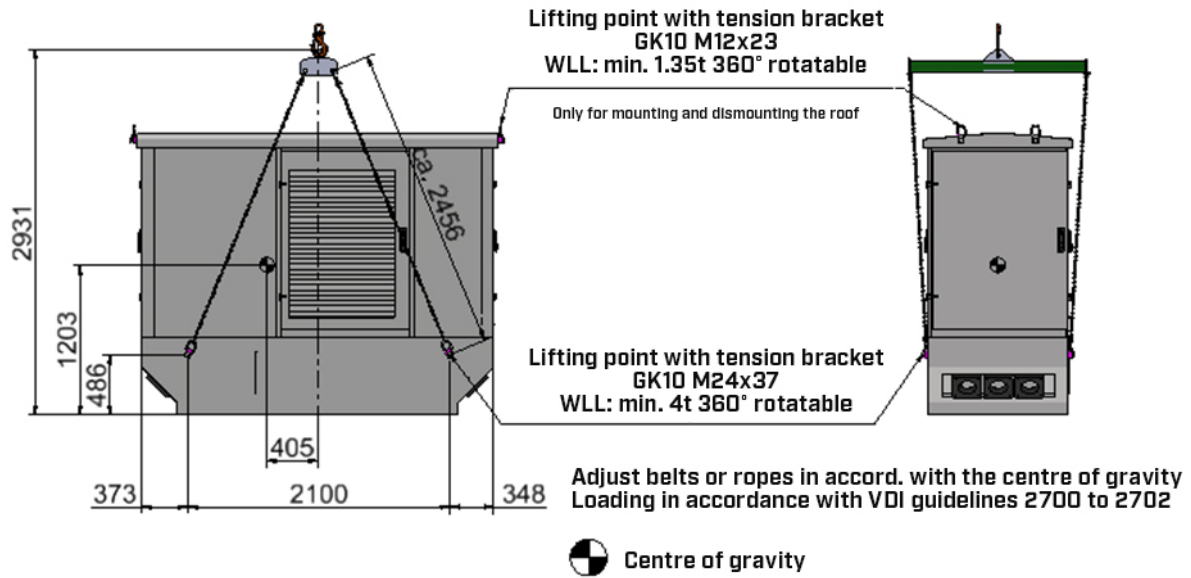
- frost-free foundation
- Observe information on the building ground: Bedding modulus min. 20MN/m^3
Soil compression $\geq 60\text{ kN/m}^2$
- or: according to individual statics for the location
- Observe information on backfill material: Internal angle of friction $\geq 32,5^\circ$, Weights up to 20 kN/m^3 , Wall friction = 0° ;
or: according to individual statics for the location
- Soil drainage required in accordance with DIN 4095:
Drainage of the subsoil must always be carried out in cohesive soils and on slopes, regardless of the type of soil; pressing water / seepage water must be prevented to protect the structure building

Execution of the levelling layer (Levelling layer level smoothly (!!!)):

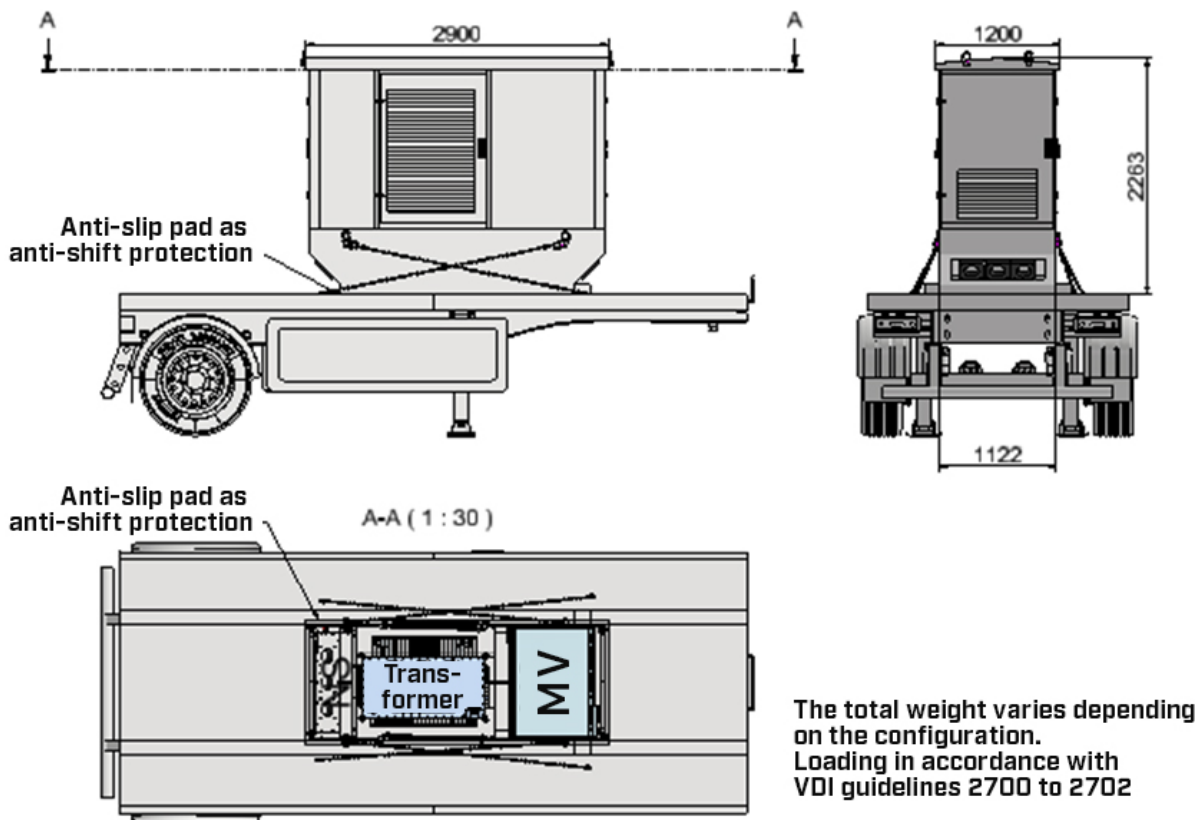
- Layer thickness 15 cm:
 1. Gravel at bottom 0-16mm: Thickness 12cm
 2. On top grit 4-6 mm: Thickness 3 cm



MCS 1229-24 Lifting plan



MCS 1229-24 Transport and loading plan



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