



■ Cabinet Solutions

AirSTREAM Wiring System

7600020.1000

LCIS-RS24DC-S-1U

www.lycag.com

EN 60947-5-1

A1/A2

AC15

DC13

24V

250V/3A

24V/1A



HW-1.0

EE002

FT LYCAG024Y
24VDC
3A
250VAC
250VDC
63JA250V-5E3
40785 H
1514R CHINA

① ② ③ ④ ⑤ ⑥

Welcome to LÜTZE

Cable Solutions



Connectivity Solutions



Cabinet Solutions



Control Solutions



Transportation Solutions



Components and power electronics are becoming increasingly smaller and more efficient, therefore a larger amount of components are being installed in smaller enclosure spaces. Thus, increasing the amount of heat inside the control cabinet.

LÜTZE's **AirSTREAM** concept is just the answer you are after. Thanks to 'intelligent air control' and the **AirBLOWER** fan system, hotspots are prevented and an even climate is maintained in the control cabinet – achieving energy savings of up to 23%.

LÜTZE engineers have devised highly efficient instruments, software tools and intelligent accessories for designing control cabinets and thermal simulations. For instance, the **AirTEMP** thermal analysis tool can be used to detect thermal problems and overheating components in advance. This results in highly efficient control cabinet with less machine downtime and ensuring a longer service life of the electronic components.

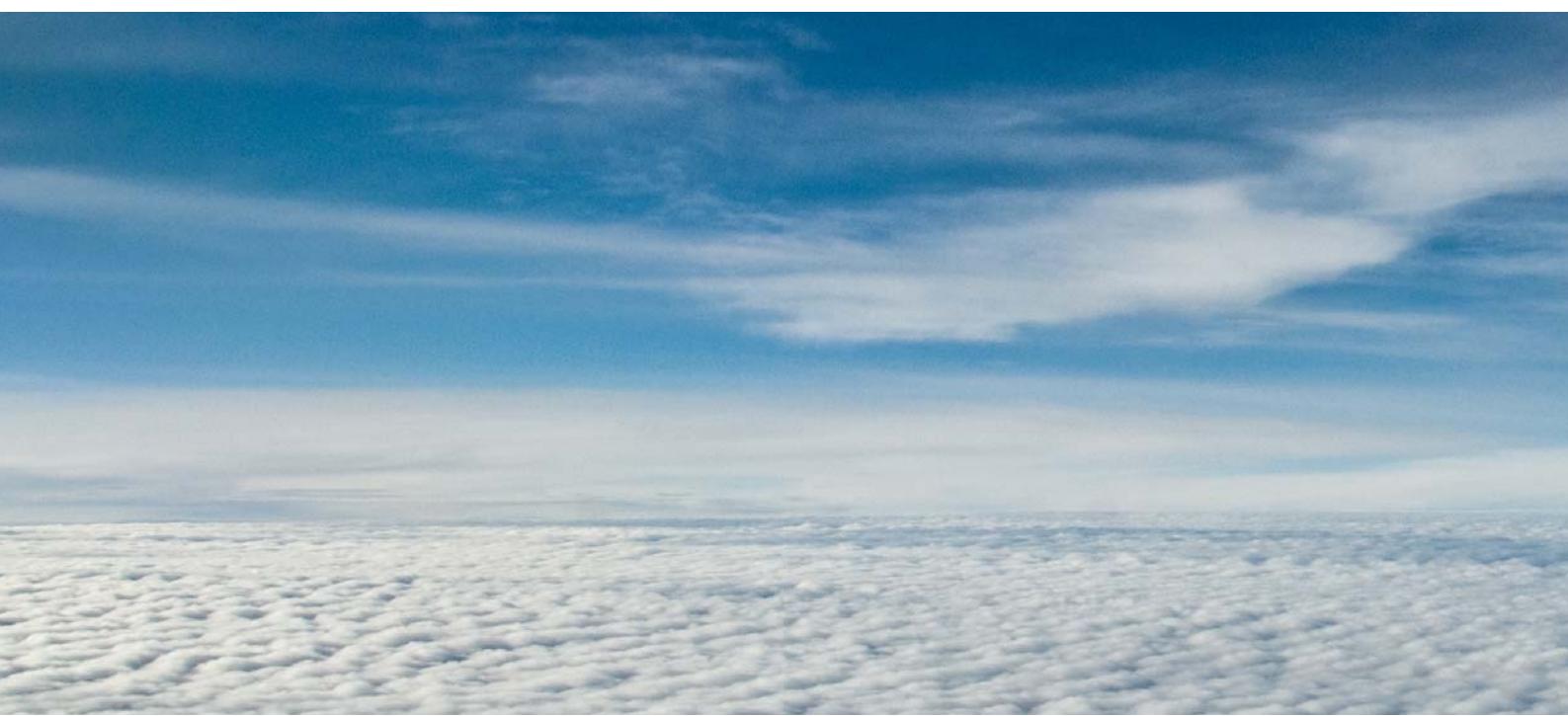
This **AirSTREAM** catalogue not only provides you with all necessary technical information about the individual components of the LÜTZE system, but also valuable information about the modularity, installation and wiring.

SkyBLUE
LÜTZE

Sustainability at LÜTZE:
<http://www.lutze.com/skyblue/>



Business Management: Sustainable and forward-looking



The future is blue

Sustainable enterprise means thinking and planning ahead, understanding and embedding the belief that long lasting success is more important than short-term profit maximisation.

This is an attitude that has existed within LÜTZE for quite some time. Economic and environmental responsibilities complement each other well and are reflected in the sustainable management and

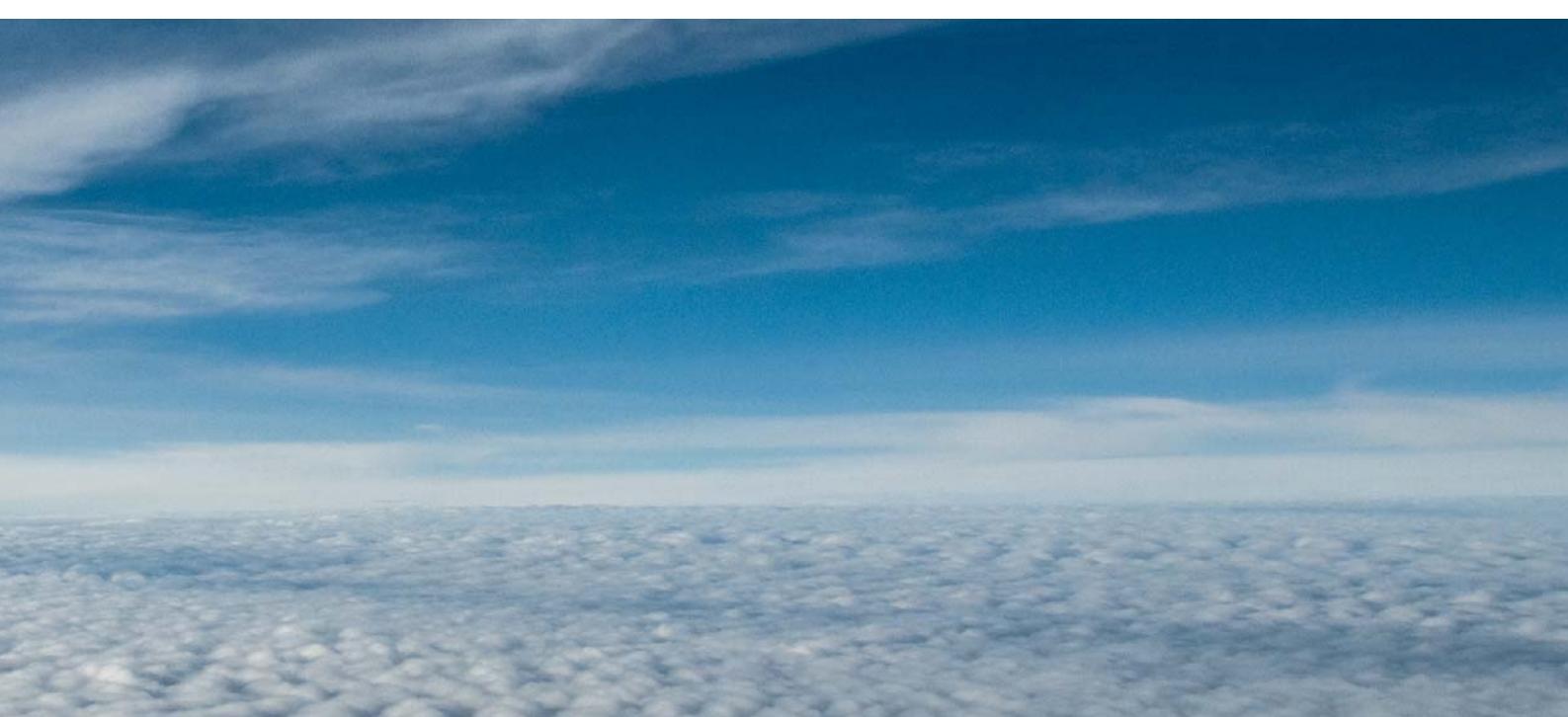
product policy - and from now in the **SkyBLUE** campaign.

We manufacture our products in a resourceful and energy-conscious manner. We use long lasting, environmentally-friendly materials. And our products, in turn, help our customers save energy and resources. Good for everyone: for us, for the environment, for our customers a win-win-win situation.

ard-looking

„The competitiveness of our industry and of its suppliers depends quite substantially on how we succeed in developing practical results. The results that we produce together today, are our competitive advantages in the future.“

*Udo LÜTZE,
Member of the Executive Committee of
the Green Carbody Innovation Alliance*



Goods with real value

The value of a product or a solution from LÜTZE is determined by its sustainable qualities as well. Every innovation is only as successful in the future if it has a long-term positive effect. Therefore, we provide long lasting as well as highly efficient components.

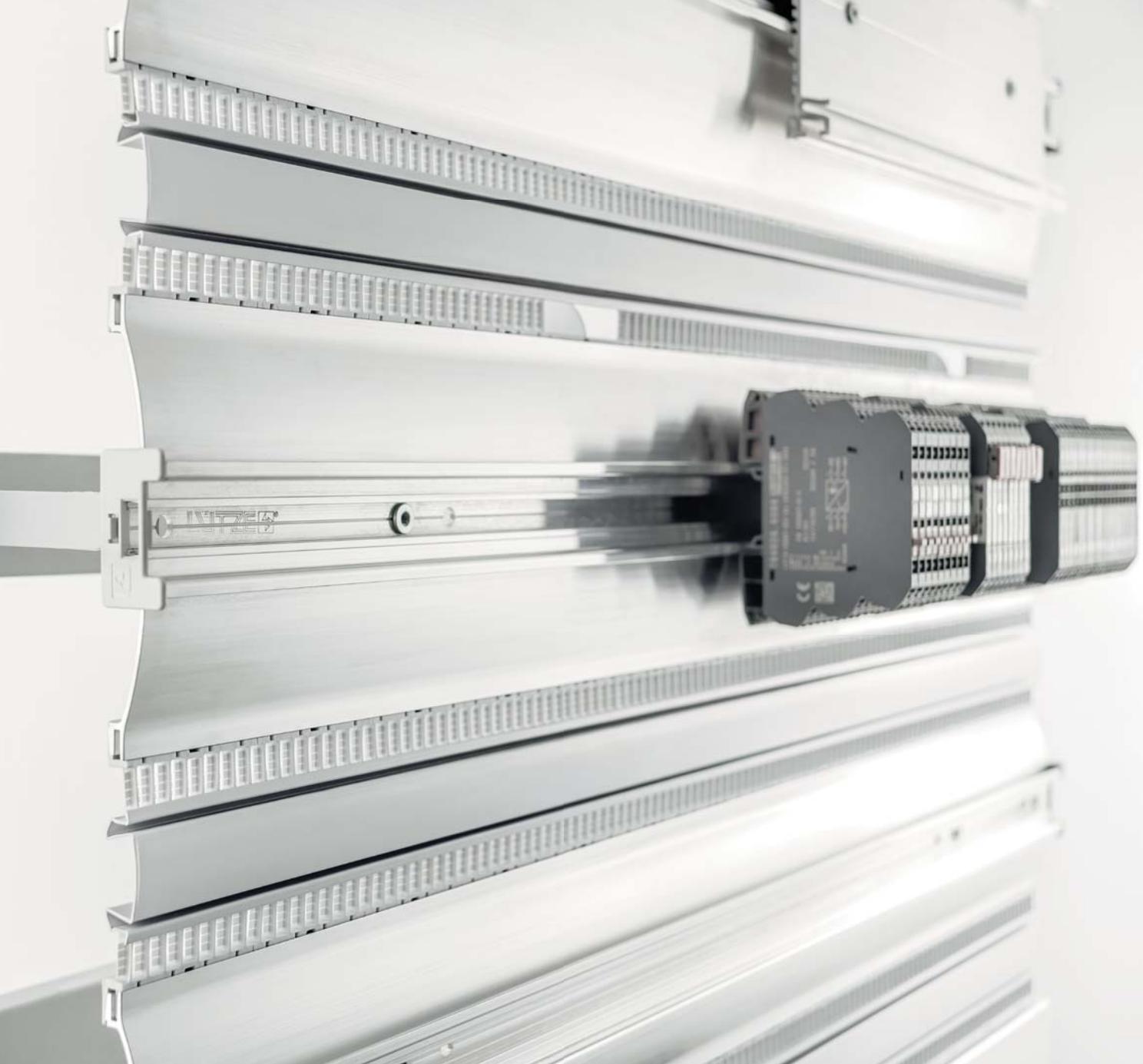
We are incorporating the necessary knowledge and manufacturing competence in numerous joint projects with the objective of improving energy efficiency and

sustainable technologies and industries. Thus, LÜTZE provides answers and demonstrates how to handle resources responsibly, with our environment and our future in mind.



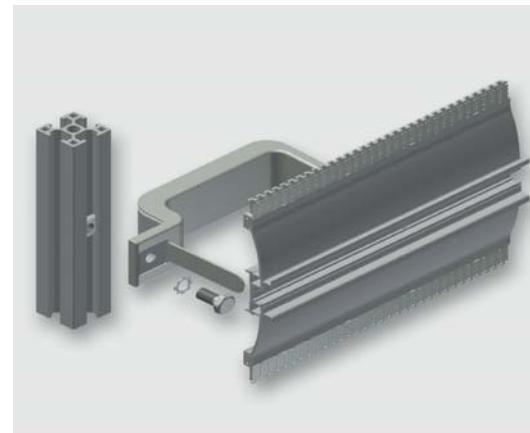
Partner of the Engineering Industry Sustainability Initiative

RoHS



Mounting: The modular system

The **AiSTREAM** frame by LÜTZE comprises of modules that can be individually adapted to the user's application requirements.



Module Variations

Standard modules and variations Example 800 mm cabinet



Standard			
Frame width C (mm)	Rail length A (mm)	Frame depth D (mm)	Wiring space B (cm²)
750	700	120	85

Standard module: The best module for wiring space and wiring comfort. Maximum wiring space for the 85cm² bracket and with easy attachment of single conductors in the wiring space because of the clearance between rail length and frame width.



Option 1			
Frame width C (mm)	Rail length A (mm)	Frame depth D (mm)	Wiring space B (cm²)
700	700	120	85

Option 1: The best module for available wiring space and installation positioning with respect to the front door of the control cabinet. Maximum wiring space. For the 85 cm² bracket and mounting position in the control cabinet. The frame width can be mounted directly to the back of the control cabinet.



Option 2			
Frame width C (mm)	Rail length A (mm)	Frame depth D (mm)	Wiring space B (cm²)
750	700	90	55

Option 2: The best module for wiring space and installation positioning. Maximum wiring space for the 55 cm² bracket and very simple attachment of the individual wires in the wiring space thanks to clearance between rail length and frame width. This type of installation is made possible by the lower installation height of the modules, which has a clearance of about 30 mm from the front door of the control cabinet.



Option 3			
Frame width C (mm)	Rail length A (mm)	Frame depth D (mm)	Wiring space B (cm²)
700	700	90	55

Option 3: The best module for wiring space and installation positioning with respect to the front door of the control cabinet. Maximum wiring space for the 55 cm² bracket. This frame can be mounted directly to the back of the control cabinet. This means that a larger installation depth compared to Option 1 can be achieved, about 30 mm more compared to the front door of the control cabinet.

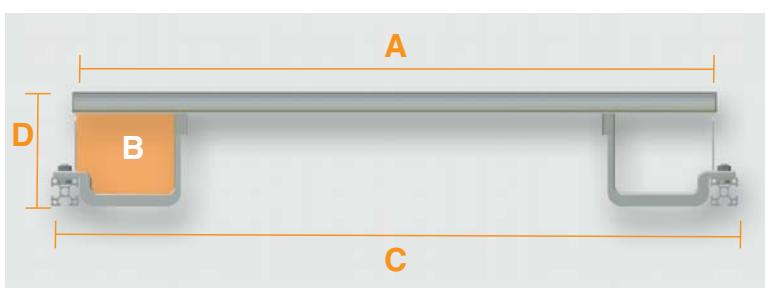
Legend:

Standard: Rail length + 50 mm = Frame width with wiring space 85 cm²

Option 1: Rail length = Frame width with wiring space 85 cm²

Option 2: Rail length + 50 mm = Frame width with wiring space 55 cm²

Option 3: Rail length = Frame width with wiring space 55 cm²



Legend

A = Rail length

B = Wiring space

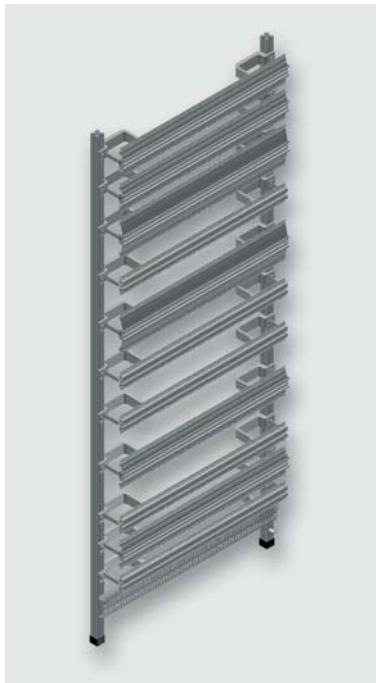
C = Frame width

D = Frame depth

Wiring Frames

Wiring frames for network cabinets

Cabinet height 2000 mm and 1800 mm

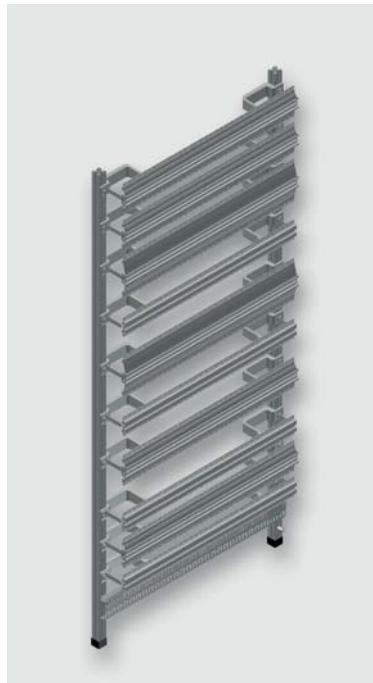


2000 mm

Configuration is suitable for network specific components.

Network Cabinet

Cabinet width (mm)	Part-No.
600	381004F0000
800	381005F0000
1000	381006F0000
1200	381007F0000



1800 mm

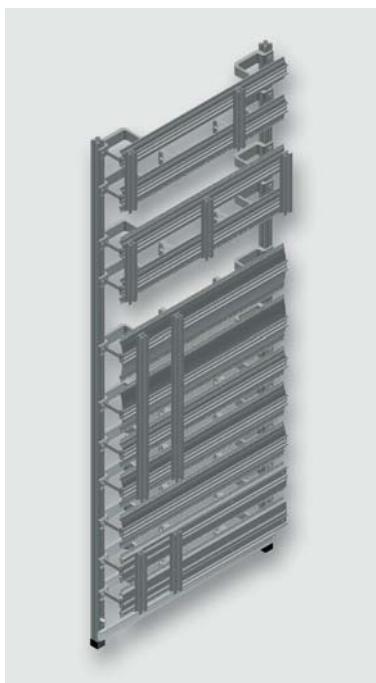
Configuration is suitable for network specific components.

Network Cabinet

Cabinet width (mm)	Part-No.
600	381000F0000
800	381001F0000
1000	381002F0000
1200	381003F0000

Wiring frames for power distribution cabinets

Cabinet height 2000 mm and 1800 mm



2000 mm

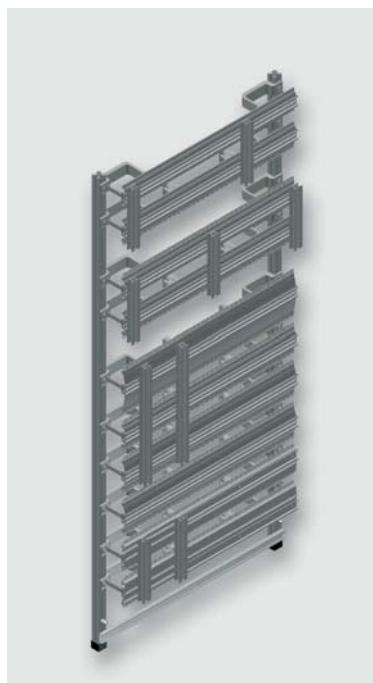
Conductor rails are at the top of the frame.

I/O modules and circuit breakers in the middle of the frame.

Mounting of terminals at the bottom of the frame. The cables are secured by cable clamps.

Distribution Cabinet

Cabinet width (mm)	Part-No.
600	381012F0000
800	381013F0000
1000	381014F0000
1200	381015F0000



1800 mm

Conductor rails are at the top of the frame.

I/O modules and circuit breakers in the middle of the frame.

Mounting of terminals at the bottom of the frame. The cables are secured by cable clamps.

Distribution Cabinet

Cabinet width (mm)	Part-No.
600	381008F0000
800	381009F0000
1000	381010F0000
1200	381011F0000

Wiring Frames

Wiring frames for PLC cabinets

Cabinet height 2000 mm and 1800 mm



2000 mm

PLCs are at the top of the frame.

Relays, contactors and fuses are in the middle of the frame.

Bottom: Mounting of clamps. The EMC shield rail is used for the large-scale termination of cable shields.

Resource Cabinet

Cabinet	Part-No.
width (mm)	
600	381028F0000
800	381029F0000
1000	381030F0000
1200	381031F0000



1800 mm

PLCs are at the top of the frame.

Relays, contactors and fuses are in the middle of the frame.

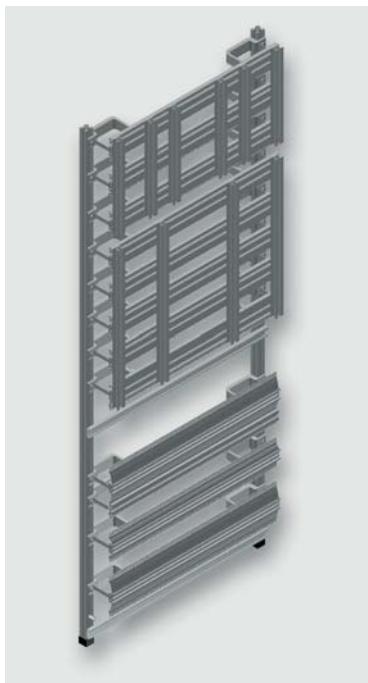
Bottom: Mounting of clamps. The EMC shield rail is used for the large-scale termination of cable shields.

Resource Cabinet

Cabinet	Part-No.
width (mm)	
600	381024F0000
800	381025F0000
1000	381026F0000
1200	381027F0000

Wiring frames for drive cabinets

Cabinet height 2000 mm and 1800 mm



2000 mm

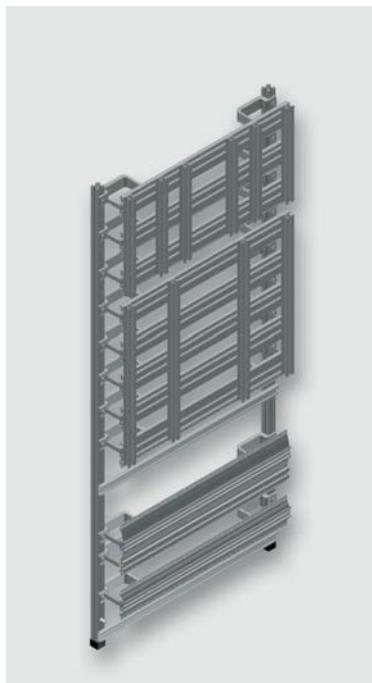
Line filters are at the top of the frame.

Frequency converters, load disconnectors and I/O modules are in the middle of the frame.

Mounting of terminals and fuses at the bottom. The EMC shield rail is used for the large termination of cable shields.

Drive Cabinet

Cabinet	Part-No.
width (mm)	
600	381036F0000
800	381037F0000
1000	381038F0000
1200	381039F0000



1800 mm

Line filters are at the top of the frame.

Frequency converter, load disconnectors and I/O modules are in the middle of the frame.

Mounting of terminals and fuses at the bottom. The EMC shield rail is used for the large termination of cable shields.

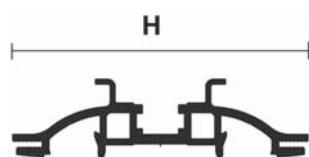
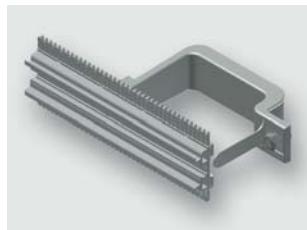
Drive Cabinet

Cabinet	Part-No.
width (mm)	
600	381032F0000
800	381033F0000
1000	381034F0000
1200	381035F0000

Standard Module

Standard module, pre-assembled from rail type HS and mounting bracket

HS040



Properties

DIN rail HS module profile:

The standard module HS is used for mounting of components which are suitable for mounting on DIN rails. The module contains a rail with a 7,5 mm high and 35 mm wide DIN rail with screw channel, standard combs, two mounting brackets with insulation and edge protection.

The HS module is available with a rail widths of 40 and 160 mm.

Technical data

Material	Aluminum
Surface	Bright
H	40 mm

Part-No.	Type	Design	Rail height mm	Rail length mm	Frame width mm	Wiring space cm ²
380100M0012	A*	HS040 0500-0550 BI15-085	Standard	40	500	550
380100M0004	A*	HS040 0500-0500 BI15-085	Option 1	40	500	500
380100M0008	A*	HS040 0500-0550 BI15-055	Option 2	40	500	550
380100M0000	A*	HS040 0500-0500 BI15-055	Option 3	40	500	55
380100M0013	A*	HS040 0700-0750 BI15-085	Standard	40	700	750
380100M0005	A*	HS040 0700-0700 BI15-085	Option 1	40	700	700
380100M0009	A*	HS040 0700-0750 BI15-055	Option 2	40	700	750
380100M0001	A*	HS040 0700-0700 BI15-055	Option 3	40	700	700
380100M0014	A*	HS040 0900-0950 BI15-085	Standard	40	900	950
380100M0006	A*	HS040 0900-0900 BI15-085	Option 1	40	900	900
380100M0010	A*	HS040 0900-0950 BI15-055	Option 2	40	900	950
380100M0002	A*	HS040 0900-0900 BI15-055	Option 3	40	900	900
380100M0015	A*	HS040 1100-1150 BI15-085	Standard	40	1100	1150
380100M0007	A*	HS040 1100-1100 BI15-085	Option 1	40	1100	1100
380100M0011	A*	HS040 1100-1150 BI15-055	Option 2	40	1100	1150
380100M0003	A*	HS040 1100-1100 BI15-055	Option 3	40	1100	1100

Standard: Rail length + 50 mm = Frame width with wiring space 85 cm²

Option 1: Rail length = Frame width with wiring space 85 cm²

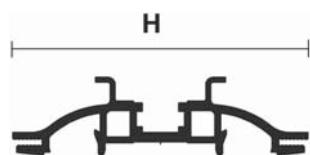
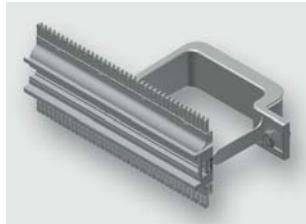
Option 2: Rail length + 50 mm = Frame width with wiring space 55 cm²

Option 3: Rail length = Frame width with wiring space 55 cm²

Standard Module

Standard module, pre-assembled from rail type HS and mounting bracket

HS060



Properties

DIN rail HS module profile:

The standard module HS is used for mounting of components which are suitable for mounting on DIN rails. The module contains a rail with a 7,5 mm high and 35 mm wide DIN rail with screw channel, standard combs, two mounting brackets with insulation and edge protection.

The HS module is available with a rail widths of 40 and 160 mm.

Technical data

Material	Aluminum
Surface	Bright
H	60 mm

Part-No.	Type	Design	Rail height mm	Rail length mm	Frame width mm	Wiring space cm ²
380101M0012	A*	HS060 0500-0550 BI30-085	Standard	60	500	550
380101M0004	A*	HS060 0500-0500 BI30-085	Option 1	60	500	500
380101M0008	A*	HS060 0500-0550 BI30-055	Option 2	60	500	550
380101M0000	A*	HS060 0500-0500 BI30-055	Option 3	60	500	55
380101M0013	A*	HS060 0700-0750 BI30-085	Standard	60	700	750
380101M0005	A*	HS060 0700-0700 BI30-085	Option 1	60	700	700
380101M0009	A*	HS060 0700-0750 BI30-055	Option 2	60	700	750
380101M0001	A*	HS060 0700-0700 BI30-055	Option 3	60	700	55
380101M0014	A*	HS060 0900-0950 BI30-085	Standard	60	900	950
380101M0006	A*	HS060 0900-0900 BI30-085	Option 1	60	900	900
380101M0010	A*	HS060 0900-0950 BI30-055	Option 2	60	900	950
380101M0002	A*	HS060 0900-0900 BI30-055	Option 3	60	900	55
380101M0015	A*	HS060 1100-1150 BI30-085	Standard	60	1100	1150
380101M0007	A*	HS060 1100-1100 BI30-085	Option 1	60	1100	1100
380101M0011	A*	HS060 1100-1150 BI30-055	Option 2	60	1100	1150
380101M0003	A*	HS060 1100-1100 BI30-055	Option 3	60	1100	55

Standard: Rail length + 50 mm = Frame width with wiring space 85 cm²

Option 1: Rail length = Frame width with wiring space 85 cm²

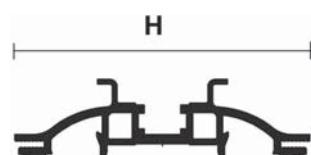
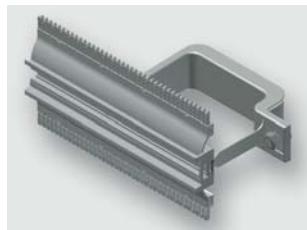
Option 2: Rail length + 50 mm = Frame width with wiring space 55 cm²

Option 3: Rail length = Frame width with wiring space 55 cm²

Standard Module

Standard module, pre-assembled from rail type HS and mounting bracket

HS080



Properties

DIN rail HS module profile:

The standard module HS is used for mounting of components which are suitable for mounting on DIN rails. The module contains a rail with a 7,5 mm high and 35 mm wide DIN rail with screw channel, standard combs, two mounting brackets with insulation and edge protection.

The HS module is available with a rail widths of 40 and 160 mm.

Technical data

Material	Aluminum
Surface	Bright
H	80 mm

Part-No.	Type	Design	Rail height mm	Rail length mm	Frame width mm	Wiring space cm ²
380102M0012	A*	HS080 0500-0550 BI30-085	Standard	80	500	550
380102M0004	A*	HS080 0500-0500 BI30-085	Option 1	80	500	500
380102M0008	A*	HS080 0500-0550 BI30-055	Option 2	80	500	550
380102M0000	A*	HS080 0500-0500 BI30-055	Option 3	80	500	55
380102M0013	A*	HS080 0700-0750 BI30-085	Standard	80	700	750
380102M0005	A*	HS080 0700-0700 BI30-085	Option 1	80	700	700
380102M0009	A*	HS080 0700-0750 BI30-055	Option 2	80	700	750
380102M0001	A*	HS080 0700-0700 BI30-055	Option 3	80	700	700
380102M0014	A*	HS080 0900-0950 BI30-085	Standard	80	900	950
380102M0006	A*	HS080 0900-0900 BI30-085	Option 1	80	900	900
380102M0010	A*	HS080 0900-0950 BI30-055	Option 2	80	900	950
380102M0002	A*	HS080 0900-0900 BI30-055	Option 3	80	900	900
380102M0015	A*	HS080 1100-1150 BI30-085	Standard	80	1100	1150
380102M0007	A*	HS080 1100-1100 BI30-085	Option 1	80	1100	1100
380102M0011	A*	HS080 1100-1150 BI30-055	Option 2	80	1100	1150
380102M0003	A*	HS080 1100-1100 BI30-055	Option 3	80	1100	1100

Standard: Rail length + 50 mm = Frame width with wiring space 85 cm²

Option 1: Rail length = Frame width with wiring space 85 cm²

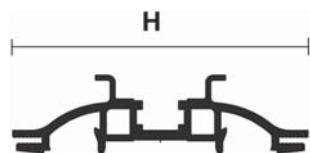
Option 2: Rail length + 50 mm = Frame width with wiring space 55 cm²

Option 3: Rail length = Frame width with wiring space 55 cm²

Standard Module

Standard module, pre-assembled from rail type HS and mounting bracket

HS100



Properties

DIN rail HS module profile:

The standard module HS is used for mounting of components which are suitable for mounting on DIN rails. The module contains a rail with a 7,5 mm high and 35 mm wide DIN rail with screw channel, standard combs, two mounting brackets with insulation and edge protection.

The HS module is available with a rail widths of 40 and 160 mm.

Technical data

Material	Aluminum
Surface	Bright
H	100 mm

Part-No.	Type	Design	Rail height mm	Rail length mm	Frame width mm	Wiring space cm ²
380103M0012	A*	HS100 0500-0550 BI30-085	Standard	100	500	550
380103M0004	A*	HS100 0500-0500 BI30-085	Option 1	100	500	500
380103M0008	A*	HS100 0500-0550 BI30-055	Option 2	100	500	550
380103M0000	A*	HS100 0500-0500 BI30-055	Option 3	100	500	55
380103M0013	A*	HS100 0700-0750 BI30-085	Standard	100	700	750
380103M0005	A*	HS100 0700-0700 BI30-085	Option 1	100	700	700
380103M0009	A*	HS100 0700-0750 BI30-055	Option 2	100	700	750
380103M0001	A*	HS100 0700-0700 BI30-055	Option 3	100	700	55
380103M0014	A*	HS100 0900-0950 BI30-085	Standard	100	900	950
380103M0006	A*	HS100 0900-0900 BI30-085	Option 1	100	900	900
380103M0010	A*	HS100 0900-0950 BI30-055	Option 2	100	900	950
380103M0002	A*	HS100 0900-0900 BI30-055	Option 3	100	900	55
380103M0015	A*	HS100 1100-1150 BI30-085	Standard	100	1100	1150
380103M0007	A*	HS100 1100-1100 BI30-085	Option 1	100	1100	1100
380103M0011	A*	HS100 1100-1150 BI30-055	Option 2	100	1100	1150
380103M0003	A*	HS100 1100-1100 BI30-055	Option 3	100	1100	55

Standard: Rail length + 50 mm = Frame width with wiring space 85 cm²

Option 1: Rail length = Frame width with wiring space 85 cm²

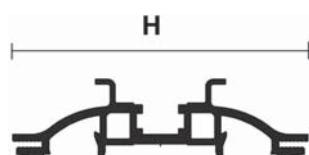
Option 2: Rail length + 50 mm = Frame width with wiring space 55 cm²

Option 3: Rail length = Frame width with wiring space 55 cm²

Standard Module

Standard module, pre-assembled from rail type HS and mounting bracket

HS120



Properties

DIN rail HS module profile:

The standard module HS is used for mounting of components which are suitable for mounting on DIN rails. The module contains a rail with a 7,5 mm high and 35 mm wide DIN rail with screw channel, standard combs, two mounting brackets with insulation and edge protection.

The HS module is available with a rail widths of 40 and 160 mm.

Technical data

Material	Aluminum
Surface	Bright
H	120 mm

Part-No.	Type	Design	Rail height mm	Rail length mm	Frame width mm	Wiring space cm ²
380104M0012	A*	HS120 0500-0550 Bi30-085	Standard	120	500	550
380104M0004	A*	HS120 0500-0500 Bi30-085	Option 1	120	500	500
380104M0008	A*	HS120 0500-0550 Bi30-055	Option 2	120	500	550
380104M0000	A*	HS120 0500-0500 Bi30-055	Option 3	120	500	55
380104M0013	A*	HS120 0700-0750 Bi30-085	Standard	120	700	750
380104M0005	A*	HS120 0700-0700 Bi30-085	Option 1	120	700	700
380104M0009	A*	HS120 0700-0750 Bi30-055	Option 2	120	700	750
380104M0001	A*	HS120 0700-0700 Bi30-055	Option 3	120	700	700
380104M0014	A*	HS120 0900-0950 Bi30-085	Standard	120	900	950
380104M0006	A*	HS120 0900-0900 Bi30-085	Option 1	120	900	900
380104M0002	A*	HS120 0900-0900 Bi30-055	Option 3	120	900	900
380104M0003	A*	HS120 1100-1100 Bi30-055	Option 3	120	1100	1100
380104M0007	A*	HS120 1100-1100 Bi30-085	Option 1	120	1100	1100
380104M0010	A*	HS120 0900-0950 Bi30-055	Option 2	120	900	950
380104M0011	A*	HS120 1100-1150 Bi30-055	Option 2	120	1100	1150
380104M0015	A*	HS120 1100-1150 Bi30-085	Standard	120	1100	1150
						85

Standard: Rail length + 50 mm = Frame width with wiring space 85 cm²

Option 1: Rail length = Frame width with wiring space 85 cm²

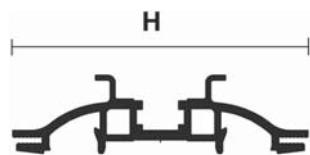
Option 2: Rail length + 50 mm = Frame width with wiring space 55 cm²

Option 3: Rail length = Frame width with wiring space 55 cm²

Standard Module

Standard module, pre-assembled from rail type HS and mounting bracket

HS140



Properties

DIN rail HS module profile:

The standard module HS is used for mounting of components which are suitable for mounting on DIN rails. The module contains a rail with a 7,5 mm high and 35 mm wide DIN rail with screw channel, standard combs, two mounting brackets with insulation and edge protection.

The HS module is available with a rail widths of 40 and 160 mm.

Technical data

Material	Aluminum
Surface	Bright
H	140 mm

Part-No.	Type	Design	Rail height mm	Rail length mm	Frame width mm	Wiring space cm ²
380105M0012	A*	HS140 0500-0550 BI30-085	Standard	140	500	550
380105M0004	A*	HS140 0500-0500 BI30-085	Option 1	140	500	500
380105M0008	A*	HS140 0500-0550 BI30-055	Option 2	140	500	550
380105M0000	A*	HS140 0500-0500 BI30-055	Option 3	140	500	55
380105M0013	A*	HS140 0700-0750 BI30-085	Standard	140	700	750
380105M0005	A*	HS140 0700-0700 BI30-085	Option 1	140	700	700
380105M0009	A*	HS140 0700-0750 BI30-055	Option 2	140	700	750
380105M0001	A*	HS140 0700-0700 BI30-055	Option 3	140	700	55
380105M0014	A*	HS140 0900-0950 BI30-085	Standard	140	900	950
380105M0006	A*	HS140 0900-0900 BI30-085	Option 1	140	900	900
380105M0010	A*	HS140 0900-0950 BI30-055	Option 2	140	900	950
380105M0002	A*	HS140 0900-0900 BI30-055	Option 3	140	900	55
380105M0015	A*	HS140 1100-1150 BI30-085	Standard	140	1100	1150
380105M0007	A*	HS140 1100-1100 BI30-085	Option 1	140	1100	110
380105M0011	A*	HS140 1100-1150 BI30-055	Option 2	140	1100	1150
380105M0003	A*	HS140 1100-1100 BI30-055	Option 3	140	1100	55

Standard: Rail length + 50 mm = Frame width with wiring space 85 cm²

Option 1: Rail length = Frame width with wiring space 85 cm²

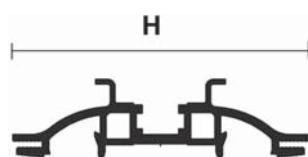
Option 2: Rail length + 50 mm = Frame width with wiring space 55 cm²

Option 3: Rail length = Frame width with wiring space 55 cm²

Standard Module

Standard module, pre-assembled from rail type HS and mounting bracket

HS160



Properties

DIN rail HS module profile:

The standard module HS is used for mounting of components which are suitable for mounting on DIN rails. The module contains a rail with a 7,5 mm high and 35 mm wide DIN rail with screw channel, standard combs, two mounting brackets with insulation and edge protection.

The HS module is available with a rail widths of 40 and 160 mm.

Technical data

Material	Aluminum
Surface	Bright
H	160 mm

Part-No.	Type	Design	Rail height mm	Rail length mm	Frame width mm	Wiring space cm ²
380106M0012	A*	HS160 0500-0550 BI30-085	Standard	160	500	550
380106M0004	A*	HS160 0500-0500 BI30-085	Option 1	160	500	500
380106M0008	A*	HS160 0500-0550 BI30-055	Option 2	160	500	550
380106M0000	A*	HS160 0500-0500 BI30-055	Option 3	160	500	55
380106M0013	A*	HS160 0700-0750 BI30-085	Standard	160	700	750
380106M0005	A*	HS160 0700-0700 BI30-085	Option 1	160	700	700
380106M0009	A*	HS160 0700-0750 BI30-055	Option 2	160	700	750
380106M0001	A*	HS160 0700-0700 BI30-055	Option 3	160	700	700
380106M0014	A*	HS160 0900-0950 BI30-085	Standard	160	900	950
380106M0006	A*	HS160 0900-0900 BI30-085	Option 1	160	900	900
380106M0010	A*	HS160 0900-0950 BI30-055	Option 2	160	900	950
380106M0002	A*	HS160 0900-0900 BI30-055	Option 3	160	900	900
380106M0015	A*	HS160 1100-1150 BI30-085	Standard	160	1100	1150
380106M0007	A*	HS160 1100-1100 BI30-085	Option 1	160	1100	1100
380106M0011	A*	HS160 1100-1150 BI30-055	Option 2	160	1100	1150
380106M0003	A*	HS160 1100-1100 BI30-055	Option 3	160	1100	1100

Standard: Rail length + 50 mm = Frame width with wiring space 85 cm²

Option 1: Rail length = Frame width with wiring space 85 cm²

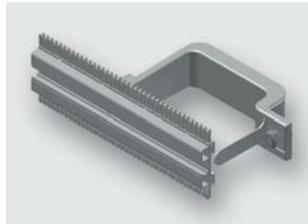
Option 2: Rail length + 50 mm = Frame width with wiring space 55 cm²

Option 3: Rail length = Frame width with wiring space 55 cm²

Standard Module

Standard module, pre-assembled from rail type MS and mounting bracket

MS040



Properties

Installation rail MS module

The standard module MS is used for mounting of components with screw channel on a flat surface. The module contains a symmetrically arranged screw channel, standard combs, two mounting brackets with insulation and edge protection. The MS module is available with a rail widths of 40 and 180 mm.

Technical data

Material	Aluminum
Surface	Bright
H	40 mm

Part-No.	Type	Design	Rail height mm	Rail length mm	Frame width mm	Wiring space cm ²
380120M0012	A*	MS040 0500-0550 BI15-085	Standard	40	500	550
380120M0004	A*	MS040 0500-0500 BI15-085	Option 1	40	500	85
380120M0008	A*	MS040 0500-0550 BI15-055	Option 2	40	500	55
380120M0000	A*	MS040 0500-0500 BI15-055	Option 3	40	500	55
380120M0013	A*	MS040 0700-0750 BI15-085	Standard	40	700	750
380120M0005	A*	MS040 0700-0700 BI15-085	Option 1	40	700	85
380120M0009	A*	MS040 0700-0750 BI15-055	Option 2	40	700	55
380120M0001	A*	MS040 0700-0700 BI15-055	Option 3	40	700	55
380120M0014	A*	MS040 0900-0950 BI15-085	Standard	40	900	950
380120M0006	A*	MS040 0900-0900 BI15-085	Option 1	40	900	85
380120M0010	A*	MS040 0900-0950 BI15-055	Option 2	40	900	55
380120M0002	A*	MS040 0900-0900 BI15-055	Option 3	40	900	55
380120M0015	A*	MS040 1100-1150 BI15-085	Standard	40	1100	1150
380120M0007	A*	MS040 1100-1100 BI15-085	Option 1	40	1100	85
380120M0011	A*	MS040 1100-1150 BI15-055	Option 2	40	1100	1150
380120M0003	A*	MS040 1100-1100 BI15-055	Option 3	40	1100	55

Standard: Rail length + 50 mm = Frame width with wiring space 85 cm²

Option 1: Rail length = Frame width with wiring space 85 cm²

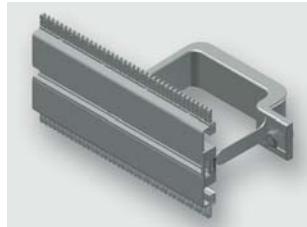
Option 2: Rail length + 50 mm = Frame width with wiring space 55 cm²

Option 3: Rail length = Frame width with wiring space 55 cm²

Standard Module

Standard module, pre-assembled from rail type MS and mounting bracket

MS080



Properties

Installation rail MS module

The standard module MS is used for mounting of components with screw channel on a flat surface. The module contains a symmetrically arranged screw channel, standard combs, two mounting brackets with insulation and edge protection. The MS module is available with a rail widths of 40 and 180 mm.

Technical data

Material	Aluminum
Surface	Bright
H	80 mm

Part-No.	Type	Design	Rail height mm	Rail length mm	Frame width mm	Wiring space cm ²
380122M0012	A*	MS080 0500-0550 BI30-085	Standard	80	500	550
380122M0004	A*	MS080 0500-0500 BI30-085	Option 1	80	500	500
380122M0008	A*	MS080 0500-0550 BI30-055	Option 2	80	500	550
380122M0000	A*	MS080 0500-0500 BI30-055	Option 3	80	500	55
380122M0013	A*	MS080 0700-0750 BI30-085	Standard	80	700	750
380122M0005	A*	MS080 0700-0700 BI30-085	Option 1	80	700	700
380122M0009	A*	MS080 0700-0750 BI30-055	Option 2	80	700	750
380122M0001	A*	MS080 0700-0700 BI30-055	Option 3	80	700	700
380122M0014	A*	MS080 0900-0950 BI30-085	Standard	80	900	950
380122M0006	A*	MS080 0900-0900 BI30-085	Option 1	80	900	900
380122M0010	A*	MS080 0900-0950 BI30-055	Option 2	80	900	950
380122M0002	A*	MS080 0900-0900 BI30-055	Option 3	80	900	900
380122M0015	A*	MS080 1100-1150 BI30-085	Standard	80	1100	1150
380122M0007	A*	MS080 1100-1100 BI30-085	Option 1	80	1100	1100
380122M0011	A*	MS080 1100-1150 BI30-055	Option 2	80	1100	1150
380122M0003	A*	MS080 1100-1100 BI30-055	Option 3	80	1100	1100

Standard: Rail length + 50 mm = Frame width with wiring space 85 cm²

Option 1: Rail length = Frame width with wiring space 85 cm²

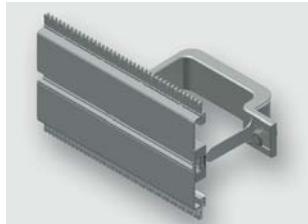
Option 2: Rail length + 50 mm = Frame width with wiring space 55 cm²

Option 3: Rail length = Frame width with wiring space 55 cm²

Standard Module

Standard module, pre-assembled from rail type MS and mounting bracket

MS100



Properties

Installation rail MS module

The standard module MS is used for mounting of components with screw channel on a flat surface. The module contains a symmetrically arranged screw channel, standard combs, two mounting brackets with insulation and edge protection. The MS module is available with a rail widths of 40 and 180 mm.

Technical data

Material	Aluminum
Surface	Bright
H	100 mm

Part-No.	Type	Design	Rail height mm	Rail length mm	Frame width mm	Wiring space cm ²
380123M0012	A*	MS100 0500-0550 BI30-085	Standard	100	500	550
380123M0004	A*	MS100 0500-0500 BI30-085	Option 1	100	500	85
380123M0008	A*	MS100 0500-0550 BI30-055	Option 2	100	500	55
380123M0000	A*	MS100 0500-0500 BI30-055	Option 3	100	500	55
380123M0013	A*	MS100 0700-0750 BI30-085	Standard	100	700	750
380123M0005	A*	MS100 0700-0700 BI30-085	Option 1	100	700	85
380123M0009	A*	MS100 0700-0750 BI30-055	Option 2	100	700	55
380123M0001	A*	MS100 0700-0700 BI30-055	Option 3	100	700	55
380123M0014	A*	MS100 0900-0950 BI30-085	Standard	100	900	950
380123M0006	A*	MS100 0900-0900 BI30-085	Option 1	100	900	85
380123M0010	A*	MS100 0900-0950 BI30-055	Option 2	100	900	55
380123M0002	A*	MS100 0900-0900 BI30-055	Option 3	100	900	55
380123M0015	A*	MS100 1100-1150 BI30-085	Standard	100	1100	1150
380123M0007	A*	MS100 1100-1100 BI30-085	Option 1	100	1100	85
380123M0011	A*	MS100 1100-1150 BI30-055	Option 2	100	1100	1150
380123M0003	A*	MS100 1100-1100 BI30-055	Option 3	100	1100	55

Standard: Rail length + 50 mm = Frame width with wiring space 85 cm²

Option 1: Rail length = Frame width with wiring space 85 cm²

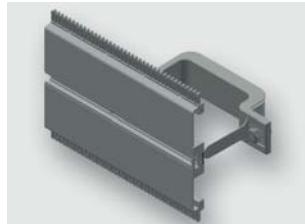
Option 2: Rail length + 50 mm = Frame width with wiring space 55 cm²

Option 3: Rail length = Frame width with wiring space 55 cm²

Standard Module

Standard module, pre-assembled from rail type MS and mounting bracket

MS120



Properties

Installation rail MS module

The standard module MS is used for mounting of components with screw channel on a flat surface. The module contains a symmetrically arranged screw channel, standard combs, two mounting brackets with insulation and edge protection. The MS module is available with a rail widths of 40 and 180 mm.

Technical data

Material	Aluminum
Surface	Bright
H	120 mm

Part-No.	Type	Design	Rail height mm	Rail length mm	Frame width mm	Wiring space cm ²
380124M0012	A*	MS120 0500-0550 BI30-085	Standard	120	500	550
380124M0004	A*	MS120 0500-0500 BI30-085	Option 1	120	500	500
380124M0008	A*	MS120 0500-0550 BI30-055	Option 2	120	500	550
380124M0000	A*	MS120 0500-0500 BI30-055	Option 3	120	500	55
380124M0013	A*	MS120 0700-0750 BI30-085	Standard	120	700	750
380124M0005	A*	MS120 0700-0700 BI30-085	Option 1	120	700	700
380124M0009	A*	MS120 0700-0750 BI30-055	Option 2	120	700	750
380124M0001	A*	MS120 0700-0700 BI30-055	Option 3	120	700	700
380124M0014	A*	MS120 0900-0950 BI30-085	Standard	120	900	950
380124M0006	A*	MS120 0900-0900 BI30-085	Option 1	120	900	900
380124M0010	A*	MS120 0900-0950 BI30-055	Option 2	120	900	950
380124M0002	A*	MS120 0900-0900 BI30-055	Option 3	120	900	900
380124M0015	A*	MS120 1100-1150 BI30-085	Standard	120	1100	1150
380124M0007	A*	MS120 1100-1100 BI30-085	Option 1	120	1100	1100
380124M0011	A*	MS120 1100-1150 BI30-055	Option 2	120	1100	1150
380124M0003	A*	MS120 1100-1100 BI30-055	Option 3	120	1100	1100

Standard: Rail length + 50 mm = Frame width with wiring space 85 cm²

Option 1: Rail length = Frame width with wiring space 85 cm²

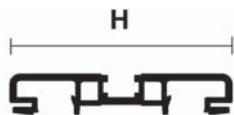
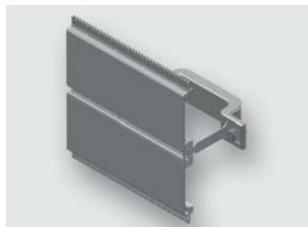
Option 2: Rail length + 50 mm = Frame width with wiring space 55 cm²

Option 3: Rail length = Frame width with wiring space 55 cm²

Standard Module

Standard module, pre-assembled from rail type MS and mounting bracket

MS180



Properties

Installation rail MS module

The standard module MS is used for mounting of components with screw channel on a flat surface. The module contains a symmetrically arranged screw channel, standard combs, two mounting brackets with insulation and edge protection. The MS module is available with a rail widths of 40 and 180 mm.

Technical data

Material	Aluminum
Surface	Bright
H	180 mm

Part-No.	Type	Design	Rail height mm	Rail length mm	Frame width mm	Wiring space cm ²
380127M0012	A*	MS180 0500-0550 BI30-085	Standard	180	500	550
380127M0004	A*	MS180 0500-0500 BI30-085	Option 1	180	500	85
380127M0008	A*	MS180 0500-0550 BI30-055	Option 2	180	500	55
380127M0000	A*	MS180 0500-0500 BI30-055	Option 3	180	500	55
380127M0013	A*	MS180 0700-0750 BI30-085	Standard	180	700	750
380127M0005	A*	MS180 0700-0700 BI30-085	Option 1	180	700	85
380127M0009	A*	MS180 0700-0750 BI30-055	Option 2	180	700	55
380127M0001	A*	MS180 0700-0700 BI30-055	Option 3	180	700	55
380127M0014	A*	MS180 0900-0950 BI30-085	Standard	180	900	950
380127M0006	A*	MS180 0900-0900 BI30-085	Option 1	180	900	85
380127M0010	A*	MS180 0900-0950 BI30-055	Option 2	180	900	55
380127M0002	A*	MS180 0900-0900 BI30-055	Option 3	180	900	55
380127M0015	A*	MS180 1100-1150 BI30-085	Standard	180	1100	1150
380127M0007	A*	MS180 1100-1100 BI30-085	Option 1	180	1100	85
380127M0011	A*	MS180 1100-1150 BI30-055	Option 2	180	1100	1150
380127M0003	A*	MS180 1100-1100 BI30-055	Option 3	180	1100	55

Standard: Rail length + 50 mm = Frame width with wiring space 85 cm²

Option 1: Rail length = Frame width with wiring space 85 cm²

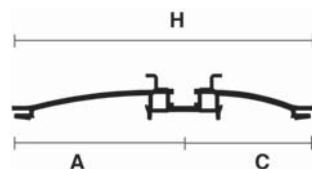
Option 2: Rail length + 50 mm = Frame width with wiring space 55 cm²

Option 3: Rail length = Frame width with wiring space 55 cm²

Standard Module

Standard module, pre-assembled from rail type HA and mounting bracket

HA140



Properties

Hat profiles rails asymmetrical HA module:

The standard module HA is used for mounting of components where DIN rail mountings are not symmetrical to the chassis. The module contains a 7,5 mm high and 35 mm wide DIN rail with screw channel, standard combs, two mounting brackets with insulation and edge protection.

The HA module is available with a rail widths of 140 and 160 mm.

Technical data

Material	Aluminum
Surface	Bright
H	140 mm
A	80 mm
C	60 mm

Part-No.	Type	Design	Rail height mm	Rail length mm	Frame width mm	Wiring space cm ²
380140M0012	A*	HA140 0500-0550 BI30-085	Standard	140	500	550
380140M0004	A*	HA140 0500-0500 BI30-085	Option 1	140	500	500
380140M0008	A*	HA140 0500-0550 BI30-055	Option 2	140	500	550
380140M0000	A*	HA140 0500-0500 BI30-055	Option 3	140	500	55
380140M0013	A*	HA140 0700-0750 BI30-085	Standard	140	700	750
380140M0005	A*	HA140 0700-0700 BI30-085	Option 1	140	700	700
380140M0009	A*	HA140 0700-0750 BI30-055	Option 2	140	700	750
380140M0001	A*	HA140 0700-0700 BI30-055	Option 3	140	700	55
380140M0014	A*	HA140 0900-0950 BI30-085	Standard	140	900	950
380140M0006	A*	HA140 0900-0900 BI30-085	Option 1	140	900	900
380140M0010	A*	HA140 0900-0950 BI30-055	Option 2	140	900	950
380140M0002	A*	HA140 0900-0900 BI30-055	Option 3	140	900	55
380140M0015	A*	HA140 1100-1150 BI30-085	Standard	140	1100	1150
380140M0007	A*	HA140 1100-1100 BI30-085	Option 1	140	1100	1100
380140M0011	A*	HA140 1100-1150 BI30-055	Option 2	140	1100	1150
380140M0003	A*	HA140 1100-1100 BI30-055	Option 3	140	1100	55

Standard: Rail length + 50 mm = Frame width with wiring space 85 cm²

Option 1: Rail length = Frame width with wiring space 85 cm²

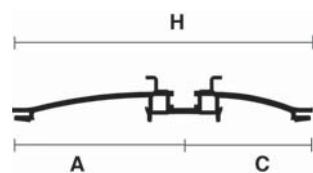
Option 2: Rail length + 50 mm = Frame width with wiring space 55 cm²

Option 3: Rail length = Frame width with wiring space 55 cm²

Standard Module

Standard module, pre-assembled from rail type HA and mounting bracket

HA160



Properties

Hat profiles rails asymmetrical HA module:

The standard module HA is used for mounting of components where DIN rail mountings are not symmetrical to the chassis. The module contains a 7.5 mm high and 35 mm wide DIN rail with screw channel, standard combs, two mounting brackets with insulation and edge protection.

The HA module is available with a rail widths of 140 and 160 mm.

Technical data

Material	Aluminum
Surface	Bright
H	160 mm
A	90 mm
C	70 mm

Part-No.	Type	Design	Rail height mm	Rail length mm	Frame width mm	Wiring space cm ²
380141M0012	A*	HA160 0500-0550 BI30-085	Standard	160	500	550
380141M0004	A*	HA160 0500-0550 BI30-085	Option 1	160	500	550
380141M0008	A*	HA160 0500-0550 BI30-055	Option 2	160	500	550
380141M0000	A*	HA160 0500-0550 BI30-055	Option 3	160	500	550
380141M0013	A*	HA160 0700-0750 BI30-085	Standard	160	700	750
380141M0005	A*	HA160 0700-0750 BI30-085	Option 1	160	700	700
380141M0009	A*	HA160 0700-0750 BI30-055	Option 2	160	700	750
380141M0001	A*	HA160 0700-0750 BI30-055	Option 3	160	700	700
380141M0014	A*	HA160 0900-0950 BI30-085	Standard	160	900	950
380141M0006	A*	HA160 0900-0950 BI30-085	Option 1	160	900	900
380141M0010	A*	HA160 0900-0950 BI30-055	Option 2	160	900	950
380141M0002	A*	HA160 0900-0950 BI30-055	Option 3	160	900	900
380141M0015	A*	HA160 1100-1150 BI30-085	Standard	160	1100	1150
380141M0007	A*	HA160 1100-1150 BI30-085	Option 1	160	1100	1100
380141M0011	A*	HA160 1100-1150 BI30-055	Option 2	160	1100	1150
380141M0003	A*	HA160 1100-1150 BI30-055	Option 3	160	1100	1100

Standard: Rail length + 50 mm = Frame width with wiring space 85 cm²

Option 1: Rail length = Frame width with wiring space 85 cm²

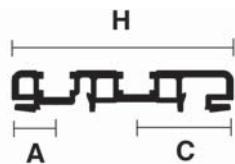
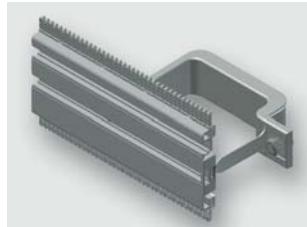
Option 2: Rail length + 50 mm = Frame width with wiring space 55 cm²

Option 3: Rail length = Frame width with wiring space 55 cm²

Standard Module

Standard module, pre-assembled from rail type MA and mounting bracket

MA080



Properties

Installation rail asymmetrical MA module:

The standard module MA is used for mounting of components without DIN rails. The module contains a flat rail with two asymmetrically arranged screw channels, standard combs, two mounting brackets with insulation and edge protection. The MA module is available with a rail width of 80 mm.

Technical data

Material	Aluminum
Surface	Bright
H	80 mm
A	16 mm
C	35 mm

Part-No.	Type	Design	Rail height mm	Rail length mm	Frame width mm	Wiring space cm ²
380160M0012	A*	MA080 0500-0550 BI30-085	Standard	80	500	550
380160M0004	A*	MA080 0500-0500 BI30-085	Option 1	80	500	500
380160M0008	A*	MA080 0500-0550 BI30-055	Option 2	80	500	550
380160M0000	A*	MA080 0500-0500 BI30-055	Option 3	80	500	55
380160M0013	A*	MA080 0700-0750 BI30-085	Standard	80	700	750
380160M0005	A*	MA080 0700-0700 BI30-085	Option 1	80	700	700
380160M0009	A*	MA080 0700-0750 BI30-055	Option 2	80	700	750
380160M0001	A*	MA080 0700-0700 BI30-055	Option 3	80	700	700
380160M0014	A*	MA080 0900-0950 BI30-085	Standard	80	900	950
380160M0006	A*	MA080 0900-0900 BI30-085	Option 1	80	900	900
380160M0010	A*	MA080 0900-0950 BI30-055	Option 2	80	900	950
380160M0002	A*	MA080 0900-0900 BI30-055	Option 3	80	900	900
380160M0015	A*	MA080 1100-1150 BI30-085	Standard	80	1100	1150
380160M0007	A*	MA080 1100-1100 BI30-085	Option 1	80	1100	1100
380160M0011	A*	MA080 1100-1150 BI30-055	Option 2	80	1100	1150
380160M0003	A*	MA080 1100-1100 BI30-055	Option 3	80	1100	1100

Standard: Rail length + 50 mm = Frame width with wiring space 85 cm²

Option 1: Rail length = Frame width with wiring space 85 cm²

Option 2: Rail length + 50 mm = Frame width with wiring space 55 cm²

Option 3: Rail length = Frame width with wiring space 55 cm²

Individual Materials

Rail in 10-rail set and brackets in a set of 20

Rail set, 10 rail variant



Properties

The rail set contains 10 rails including edge protection, combs, boreholes and LÜTZE embossing. Depending on the rail type and installation depth, brackets can be used for mounting.

Brackets and mounting material is not included in the set.

Technical data

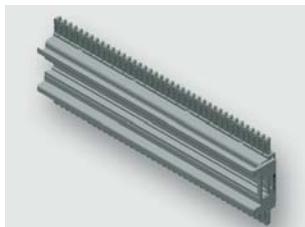
Material Surface	Aluminum Bright
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Part-No.	Type	Module type	Application	Rail height mm	Rail length mm	Wiring space cm ²	PU piece
380100R0012	A*	HS040 0500	HS040	40	500		10
380100R0013	A*	HS040 0700	HS040	40	700		10
380100R0014	A*	HS040 0900	HS040	40	900		10
380100R0015	A*	HS040 1100	HS040	40	1100		10
380101R0012	A*	HS060 0500	HS060	60	500		10
380101R0013	A*	HS060 0700	HS060	60	700		10
380101R0014	A*	HS060 0900	HS060	60	900		10
380101R0015	A*	HS060 1100	HS060	60	1100		10
380102R0012	A*	HS080 0500	HS080	80	500		10
380102R0013	A*	HS080 0700	HS080	80	700		10
380102R0014	A*	HS080 0900	HS080	80	900		10
380102R0015	A*	HS080 1100	HS080	80	1100		10
380103R0012	A*	HS100 0500	HS100	100	500		10
380103R0013	A*	HS100 0700	HS100	100	700		10
380103R0014	A*	HS100 0900	HS100	100	900		10
380103R0015	A*	HS100 1100	HS100	100	1100		10
380104R0012	A*	HS120 0500	HS120	120	500		10
380104R0013	A*	HS120 0700	HS120	120	700		10
380104R0014	A*	HS120 0900	HS120	120	900		10
380104R0015	A*	HS120 1100	HS120	120	1100		10
380105R0012	A*	HS140 0500	HS140	140	500		10
380105R0013	A*	HS140 0700	HS140	140	700		10
380105R0014	A*	HS140 0900	HS140	140	900		10
380105R0015	A*	HS140 1100	HS140	140	1100		10
380106R0012	A*	HS160 0500	HS160	160	500		10
380106R0013	A*	HS160 0700	HS160	160	700		10
380106R0014	A*	HS160 0900	HS160	160	900		10
380106R0015	A*	HS160 1100	HS160	160	1100		10
380140R0012	A*	HA140 0500	HA140	140	500		10
380140R0013	A*	HA140 0700	HA140	140	700		10
380140R0014	A*	HA140 0900	HA140	140	900		10
380140R0015	A*	HA140 1100	HA140	140	1100		10
380141R0012	A*	HA160 0500	HA160	160	500		10
380141R0013	A*	HA160 0700	HA160	160	700		10
380141R0014	A*	HA160 0900	HA160	160	900		10
380141R0015	A*	HA160 1100	HA160	160	1100		10

Individual Materials

Rail in 10-rail set and brackets in a set of 20

Rail set, 10 rail variant



Properties

The rail set contains 10 rails including edge protection, combs, boreholes and LÜTZE embossing. Depending on the rail type and installation depth, brackets can be used for mounting.

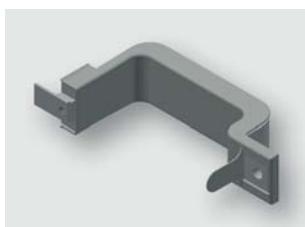
Brackets and mounting material is not included in the set.

Technical data

Material	Aluminum
Surface	Bright

Part-No.	Type	Module type	Application	Rail height mm	Rail length mm	Wiring space cm ²	PU piece
380120R0012	A*	MS040 0500	MS040	40	500		10
380120R0013	A*	MS040 0700	MS040	40	700		10
380120R0014	A*	MS040 0900	MS040	40	900		10
380120R0015	A*	MS040 1100	MS040	40	1100		10
380122R0012	A*	MS080 0500	MS080	80	500		10
380122R0013	A*	MS080 0700	MS080	80	700		10
380122R0014	A*	MS080 0900	MS080	80	900		10
380122R0015	A*	MS080 1100	MS080	80	1100		10
380123R0012	A*	MS100 0500	MS100	100	500		10
380123R0013	A*	MS100 0700	MS100	100	700		10
380123R0014	A*	MS100 0900	MS100	100	900		10
380123R0015	A*	MS100 1100	MS100	100	1100		10
380124R0012	A*	MS120 0500	MS120	120	500		10
380124R0013	A*	MS120 0700	MS120	120	700		10
380124R0014	A*	MS120 0900	MS120	120	900		10
380124R0015	A*	MS120 1100	MS120	120	1100		10
380127R0012	A*	MS180 0500	MS180	180	500		10
380127R0013	A*	MS180 0700	MS180	180	700		10
380127R0014	A*	MS180 0900	MS180	180	900		10
380127R0015	A*	MS180 1100	MS180	180	1100		10
380160R0012	A*	MA080 0500	MA080	80	500		10
380160R0013	A*	MA080 0700	MA080	80	700		10
380160R0014	A*	MA080 0900	MA080	80	900		10
380160R0015	A*	MA080 1100	MA080	80	1100		10

Bracket for rail set



Properties

The bracket set contains 20 brackets including a plastic cover.

A differentiation is made between the wiring surfaces 55 cm² and 85 cm².

The brackets are attached to the rails with flat head screws M6 x 10. GLM 8 (slide nuts), FZ 48,4 (spring toothed lock washers) and an M8 x 14 (hex screw) are required to attach the brackets to the VPSym (carrier rail). Screws are not included in the set.

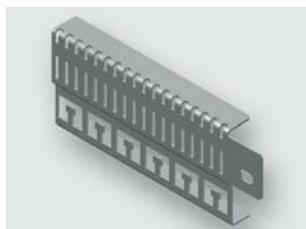
Technical data

Material	Aluminum
Surface	Bright

Part-No.	Type	Module type	Application	Rail height mm	Rail length mm	Wiring space cm ²	PU piece
380220.0020	A*	BI 30-085	85-model (all rails apart from MS/HS040)			85	20
380214.0020	A*	BI 30-055	55-model (all rails apart from MS/HS040)			55	20
380208.0020	A*	BI 15-085	85-model (only HS/MS040 rail)			85	20
380202.0020	A*	BI 15-055	55-model (only HS/MS040 rail)			55	20

Special Modules

EMC-Module



Properties

The EMC module is screwed to the module VPSym. In the contact area stripped shields are connected over a large area with metallic clips or metal cable ties. Cable ties can be used to provide support and strain relief to the clamped cables.

Technical data

Material	Steel
Surface	galvanised

Part-No.	Type	Frame width mm	Rail height mm
380582M0000	S* EMV 1 0500	500	75
380582M0001	S* EMV 1 0700	700	75
380582M0002	S* EMV 1 0900	900	75
380582M0003	S* EMV 1 1100	1100	75
380582M0004	S* EMV 1 0550	550	75
380582M0005	S* EMV 1 0750	750	75
380582M0006	S* EMV 1 0950	950	75
380582M0007	S* EMV 1 1150	1150	75

Cable Clamp Module (C-Rail)



Properties

The Cable clamp module is screwed directly onto the VPSym module. It helps to support cables and cable clamps.

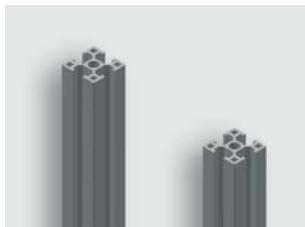
Technical data

Material	Steel
Surface	galvanised

Part-No.	Type	Frame width mm	Rail height mm
380583M0000	S* CS 1 0500	500	34
380583M0001	S* CS 1 0700	700	34
380583M0002	S* CS 1 0900	900	34
380583M0003	S* CS 1 1100	1100	34
380583M0004	S* CS 1 0550	550	34
380583M0005	S* CS 1 0750	750	34
380583M0006	S* CS 1 0950	950	34
380583M0007	S* CS 1 1150	1150	34

Mounting Rail Module

VPSym module



Properties

The VPSym module serves as a mounting rail for the rail module of the AirSTREAM. The module consists of two rails, a grounding screw and caps.

Technical data

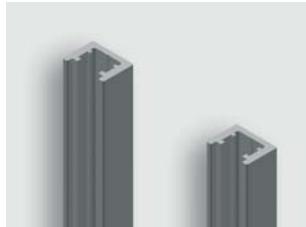
Material	Aluminum
Surface	Bright

Part-No.	Type	Length mm	Width mm	Cabinet height mm	
380556M0000	A*	VPSym Set 900	900	30	973
380557M0000	A*	VPSym Set 1080	1080	30	1200
380558M0000	A*	VPSym Set 1280	1280	30	1400
380559M0000	A*	VPSym Set 1480	1480	30	1600
380562M0000	A*	VPSym Set 1680	1680	30	1800
380563M0000	A*	VPSym Set 1880	1880	30	2000
380565M0000	A*	VPSym Set 2080	2080	30	2200

Mounting Accessories

Adapter rail module

RG020



Properties

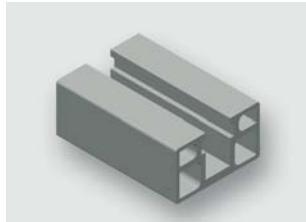
Adapter rail module RG020 for easy vertical mounting of components via screw channel. RG rails with lengths of 80 mm, 100 mm and 120 mm have a central bore and can be mounted in the screw channel easily. RG020 consists of two rails of equal length. For installation glide nuts, glide nut retainer and screws as accessories are needed.

Technical data

Material	Aluminum
Surface	Bright
Rail width	20 mm
Rail height	15 mm

Part-No.	Type	Length mm	PU piece	
380180M0000 A*	RG020 0080	Module RG020 080	80	1
380180M0001 A*	RG020 0100	Module RG020 100	100	1
380180M0002 A*	RG020 0120	Module RG020 120	120	1
380180M0005 A*	RG020 0250	Module RG020 250	250	1
380180M0007 A*	RG020 0500	Module RG020 500	500	1
380180.1000 A*	RG 020	RG020 1000mm	1000	1
380180.2000 A*	RG 020	RG020 2000mm	2000	1

RG035 (hollow chamber profile)



Properties

Adapter rail module RG035 for easy vertical mounting of components via screw channel. RG rails with length of 100 mm have a central bore and can be mounted in the screw channel easily. RG035 consists of two rails of equal length. Due to the larger contact area of RG35 rails a better EMC connection of the mounted components is given.

For installation glide nuts, glide nut retainer and screws as accessories are needed.

Technical data

Material	Aluminum
Surface	Bright
Rail width	35 mm
Rail height	20 mm

Part-No.	Type	Length mm	PU piece	
380182M0001 A*	RG035 0100	Module RG035 100	100	1
380182M0003 A*	RG035 0210	Module RG035 210	210	1
380182M0004 A*	RG035 0220	Module RG035 220	220	1
380182M0005 A*	RG035 0250	Module RG035 250	250	1
380182M0006 A*	RG035 0350	Module RG035 350	350	1
380182M0007 A*	RG035 0500	Module RG035 500	500	1
380182M0008 A*	RG035 0580	Module RG035 580	580	1
380182M0009 A*	RG035 0610	Module RG035 610	610	1
380182.1000 A*	RG035	RG035 1000mm	1000	1
380182.2000 A*	RG035	RG035 2000mm	2000	1

Mounting Accessories

Module mounting

Hexagonal bolt

**Properties**

M8 × 16 hexagonal bolts for fastening of rail modules on VPSym-Module.

Technical data

Material Surface	Steel galvanised
---------------------	---------------------

Part-No.	Type	PU piece
330907.0100	S* Schraube, Sechsk., M8x14	100

Toothed disc

**Properties**

M8 Toothed lock washers for screw fastenings.

Technical data

Material Surface	Steel galvanised
---------------------	---------------------

Part-No.	Type	PU piece
330903.0100	S* Federzahnscheibe FZ 8,4	100

Sliding nut

**Properties**

Sliding nuts for use in the sliding nut channel of the **AirSTREAM** rail modules.

Technical data

Material Surface	Steel bright galvanised Punched edges bare/natural
---------------------	--

Part-No.	Type	PU piece
330944.0100	S* GLEITMUTTER GL M8	100

Mounting Accessories

Module mounting

Fastening set



Properties

Mounting kit for attaching an RG rail to a module.

Technical data

Material	Steel
Surface	galvanised

Part-No.	Type	PU piece
332969.0001	S* BSRG M6 HS/HA	1
332964.0001	S* BSRG M6 MS/MA	1

Fastening set



Properties

Mounting kit for attaching a rail module on support rail VPSym
Mounting kit comprising:
2 x hex screws M8x16
2 x spring toothed lock washer M8
2 x nuts M8

Technical data

Material	Steel
Surface	galvanised

Part-No.	Type	PU piece
330907.0001	S* BSM M8	1

Fastening set



Properties

Mounting kit for attaching a EMC or CS module on mounting rail VPSym
Mounting kit comprising:
2 x flat head screws M8x10
2 x spring toothed lock washer M8
2 x sliding nuts M8
2 x sliding nut cage

Technical data

Material	Steel
Surface	galvanised

Part-No.	Type	PU piece
345633.0001	S* BS EMV CS M8	1

Mounting Accessories

Module mounting

Side supports



Properties

Component as base (DIN rail height).

Technical data

Material	Aluminum
Surface	Bright electrically conductive
Height	7 mm

Part-No.	Type	PU piece
346364.0010	A* STÜTZER CST 7 -SET	10

Grounding kit



Properties

Grounding kit

Technical data

Part-No.	Type	PU piece
331805	A* ES 8	1

Special sliding nut



Properties

Special slide nuts with a hat for use on the RG035 rail and MS/MA rails. Guarantees a continuous surface to mounting of components. The gap in the sliding nut channel is closed by the hat contour.

Technical data

Material	Aluminum
Surface	Bright electrically conductive
Width	13.0 mm
Depth	13.0 mm
Height	6 mm

Part-No.	Type	PU piece
380270.0100	S* Sondergleitmutter GLS M4	100
380272.0100	S* Sondergleitmutter GLS M6	100
380273.0100	S* Sondergleitmutter GLS M8	100

Mounting Accessories

Module mounting

Sliding nut



Properties

Sliding nuts for use in the sliding nut channel of the AirSTREAM rail modules. GL M6 is used to attach the RG rails.

Technical data

Material	Steel
Surface	bright galvanised Punched edges bare/natural
Width	13.0 mm
Depth	13.0 mm
Height	3.95 mm

Part-No.	Type	PU piece
330940.0100	S* GLEITMUTTER GL M3	100
330941.0100	S* GLEITMUTTER GL M4	100
330942.0100	S* GLEITMUTTER GL M5	100
330943.0100	S* GLEITMUTTER GL M6	100
330944.0100	S* GLEITMUTTER GL M8	100

Sliding nut cage



Properties

The sliding nut cage keeps the sliding nuts in their respective positions, even in vertical applications.

Technical data

Material	POM 9021M
Surface	smooth
Color	grey

Part-No.	Type	PU piece
331023.0100	S* GMK	100

Bolt



Properties

The flat screw head disappears into the base of the slot of the RG rails and therefore does not obstruct the sliding nuts above in the sliding nut channel.

Technical data

Material	Steel
Surface	galvanised
Thread	M6

Part-No.	Type	PU piece
332968.0100	S* Schraube, Flachk., M6x12	100
332969.0100	S* Schraube, Flachk., M6x16	100
332964.0100	S* Schraube, Flachk., M6x10	100
345628.0100	S* Schraube, Flachk., M8x10	100

Mounting Accessories

Adapting bracket

Adapter bracket for frame width x00 mm

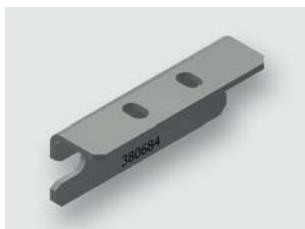


Properties

Adapter bracket for mounting of an AirSTREAM frame with a frame width of 500, 700, 900 and 1100 mm into a Rittal TS and Lohmeier RS standard cabinet with a cabinet width of 600, 800, 1000, 1200 mm.
The mounting kit contains all screws required to connect all 6 adapter brackets to the control cabinet and the LSC AirSTREAM frame.

Part-No.	Type	for frame width mm		PU piece
380681	S* ADWS-0001 RB = x00mm	500 700 900 1100	ADWS Rittal-Lohmeier (Set)	1

Adapter bracket for frame width x00 mm – rearmost mounting position between control cabinet rails



Properties

Adapter bracket for mounting of an AirSTREAM frame with a frame width of 500, 700, 900 and 1100 mm into a Rittal TS8 standard cabinet with a cabinet width of 600, 800, 1000, 1200 mm.
It is attached to the rearmost mounting position between the cabinet rails. The mounting kit contains all screws required to connect all 6 adapter brackets to the control cabinet and the LSC AirSTREAM frame.

Part-No.	Type	for frame width mm		PU piece
380685	S* ADWS-0003 RB = x00mm	500 700 900 1100	ADWS Rittal (Set)	1

Adapter bracket for frame width x00 mm – rearmost mounting position between control cabinet rails



Properties

Adapter bracket for mounting of an AirSTREAM frame with a frame width of x00 into a Rittal TS8 standard cabinet with a cabinet width of 600, 800, 1000, 1200 mm.
It is attached to the rearmost assembly position between the cabinet rails. The mounting kit contains all screws required to connect all 6 adapter brackets to the control cabinet and the LSC AirSTREAM frame.

Part-No.	Type	for frame width mm		PU piece
347552	S* ADWS-0003 RB = x00mm	500 700 900 1100	ADWS Rittal (Set)	1

* S Article from stock
A Available with a lead time
R Available on request

Mounting Accessories

Adapting bracket

Adapter bracket for frame width x50 mm



Properties

Adapter bracket for mounting of an **AirSTREAM** frame with a frame width of 550, 750, 950 and 1150 mm into a Rittal TS and Lohmeier RS standard cabinet with a cabinet width of 600, 800, 1000, 1200 mm.
The mounting kit contains all screws required to connect all 6 adapter brackets to the control cabinet and the **AirSTREAM** frame.

Part-No.	Type	for frame width mm	PU piece
380683	S* ADWS-0002 RB = x50mm	550 750 950 1150	ADWS Rittal-Lohmeier (Set) 1

Universal bracket



Properties

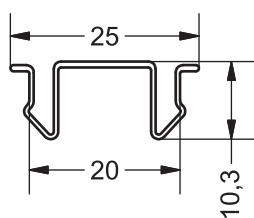
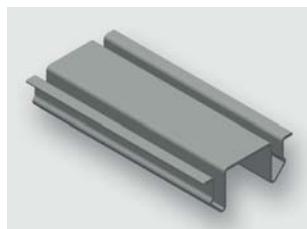
Universal bracket for mounting of an **AirSTREAM** frame in widths of 500 – 1150 mm in special cabinets and cabinets that differ from Rittal/ Lohmeier. The installation position depends on the frame width and control cabinet. The set includes 6 adapter brackets with screws.

Part-No.	Type	for frame width mm	PU piece
380693	S* ADWS-0008	500 550 700 750 900 950 1100 1150	1

Wiring Accessories

Comb cover

Comb cover



Properties

Comb cover for closing the spaces between the comb profiles.

Technical data

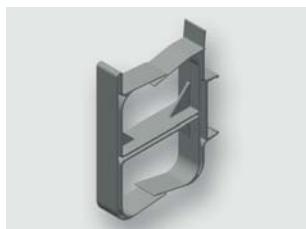
Material	PC+ABS (halogen-free)
Surface	smooth
Halogen free according to	VDE 0472-815
Flammability rating	UL 94 V0

Part-No.	Type	for frame width mm	Length mm	Color	PU piece
380800.2000	S* KD040	2000 mm	2000 mm	grey RAL 7035	10
380810.2000	S* KD050	2000 mm	2000 mm	grey RAL 7035	10
380811.2000	S* KD050 blue	2000 mm	2000 mm	blue RAL 5010	10
380820.2000	S* KD060	2000 mm	2000 mm	grey RAL 7035	10
380840.2000	S* KD080	2000 mm	2000 mm	grey RAL 7035	10
380860.2000	S* KD100	2000 mm	2000 mm	grey RAL 7035	10

Wiring Accessories

Wire management – wire holder

Wire holder D



Properties

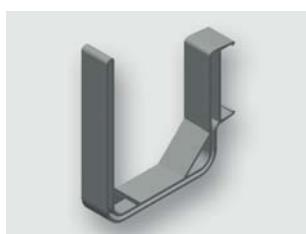
Wire holder to fix assembled wires on the backside of the rail module.

Technical data

Material	PA 6.6
Surface	smooth
Halogen free according to	VDE 0472-815
Flammability rating	UL 94 V0

Part-No.	Type	PU piece
380260.0010	S* D2K055-DD Set	10

Wire holder U



Properties

Wire holder to fix assembled wires on the backside of the rail module.

Technical data

Material	PA 6.6
Surface	smooth
Halogen free according to	VDE 0472-815
Flammability rating	UL 94 V0

Part-No.	Type	PU piece
380263.0010	S* D2K055-U SET	10

Adapter set for wire holder



Properties

To attach the wire holders via an adapter to MS040 and HS040 bars. One mounting kit is required for a 500 mm wide bar set (10 bars) in, and two sets respectively are required for sets with widths of 700, 900 and 1100 mm.

The set contains:

- 10 adapters,
- 10 × GL M6,
- 10 × flat head screws M6 × 10.

Technical data

Material	PA 6.6
Surface	smooth
Halogen free according to	VDE 0472-815
Flammability rating	UL 94 HB

Part-No.	Type	PU piece
347837.0010	A* DRAHTHALTER SET	10

Wiring Accessories

Wiring strips

Wiring comb with 8 cavities for larger wire cross-sections up to 10 mm².



Properties

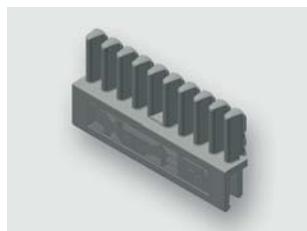
Standard comb which is attached to all rail modules ex-works. Comb for secure wiring of cables from 0.75 mm² to 10 mm². This optional comb can be simply replaced by the standard 50 mm grid.

Technical data

Material	PA 6.6
Surface	smooth
Halogen free according to	VDE 0472-815
Flammability rating	UL 94 V0

Part-No.	Type	PU piece
380244.0100	S* K050-8-SH 0,75mm,-6mm,	Comb 8 cavities 100

Wiring comb with 10 cavities for larger wire cross-sections up to 4 mm².



Properties

Optional comb with 10 cavities for secure wiring of cables up to 4 mm². This optional comb can be simply replaced by the standard 50 mm grid.

Technical data

Material	PA 6.6
Surface	smooth
Halogen free according to	VDE 0472-815
Flammability rating	UL 94 V0

Part-No.	Type	PU piece
380242.0100	S* K050-10	Comb 10 cavities 100

Wiring comb with 3 cavities



Properties

Optional comb with 3 cavities for wiring of larger cables. This optional comb can be simply replaced by the standard 50 mm grid.

Technical data

Material	PA 6.6
Surface	smooth
Halogen free according to	VDE 0472-815
Flammability rating	UL 94 V0

Part-No.	Type	PU piece
380241.0010	S* K050-3	Comb 3 cavities 10
380241.0100	S* K050-3	Comb 3 cavities 100

* S Article from stock
A Available with a lead time
R Available on request

Wiring Accessories

Wiring strips

Wiring comb with 2 cavities



Properties

Optional comb with 2 chambers for $18 \times 1 \text{ mm}^2$. For use with parts, e.g. control units, that are connected with many individual wires.
This optional comb can be simply replaced by the standard 50 mm grid.

Technical data

Material	PA 6.6
Surface	smooth
Halogen free according to	VDE 0472-815
Flammability rating	UL 94 V0

Part-No.	Type	PU piece
380245.0010	S* K050-2	Comb 2 cavities
380245.0100	S* K050-2	Comb 2 cavities

Edge protection for HS/HA modules



Properties

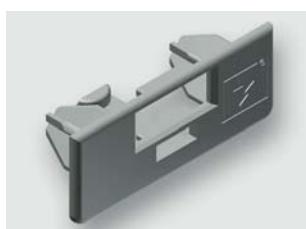
Edge protection for the DIN rails to prevent injury on the sharp edges of the hat profiles.
Sliding nuts can be fed in through the recess in the edge protector.
As standard, the rail modules are equipped with edge protectors.

Technical data

Material	PA 6.6
Surface	smooth
Halogen free according to	VDE 0472-815
Flammability rating	UL 94 V0

Part-No.	Type	PU piece
380090.0010	S* KHS-040-200 Set	Edge protection for HS/HA module 040-200

Edge protection for MS/MA modules



Properties

Edge protection for the assembly rails to prevent injury on the sharp edges. Sliding nuts can be fed in through the recess in the edge protector.
As standard, the rail modules are equipped with edge protectors.

Technical data

Material	PA 6.6
Surface	smooth
Halogen free according to	VDE 0472-815
Flammability rating	UL 94 V0

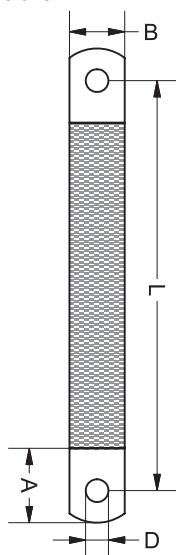
Part-No.	Type	PU piece
380091.0010	S* KMS-060-200 Set	Edge protection for MS/MA module 040-200

EMC Accessories · Ribbon Cable Grounding Device

**Grounding strip, copper braiding, tin-plated
Single wire Cu ETP UNI 5649-71, similar to DIN 72333**



Dimensions



Description	Part-No.	Type	PU
both ends drilled, cold pressed			
Cross-section surface	10 mm ²	346109.0010 S*	EMVMB 10/300/M6 10
	10 mm ²	346112.0010 S*	EMVMB 10/200/6 10
	16 mm ²	346123.0010 S*	EMVMB 16/100/6 10
	16 mm ²	346110.0010 S*	EMVMB 16/300/8 10
Technical data			
Wire conductors	346109.0010	346112.0010	346123.0010
		0.15 mm ²	346110.0010
A		22 mm	25 mm
B		12.0 mm	15.0 mm
D		6.5 mm	8.5 mm
L	300 mm	200 mm	100 mm
Weight		0.100 kg/m	0.160 kg/m
Approvals	—	cULus	—
General			
Amperage range	See standards table		
Cable construction	—	individual strands braided cross-section rectangular	—
Storage temperature range	-30 °C ... +90 °C		
Operation temperature range	5 °C ... +105 °C		
Accessories			
Grounding set	331805	ES 8	1
Grounding set	331816	ES 6	1

Comments
D= hole diameter
A= sleeve length
B= width
L= distance of hole

Other lengths are available on request

EMC Accessories · Ribbon Cable Earthing Device

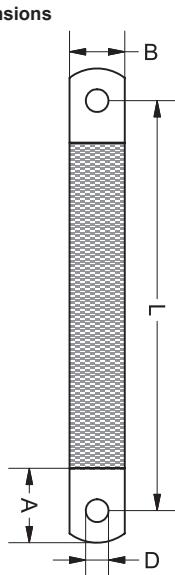
**Grounding strip, copper braiding, tin-plated
Single wire Cu ETP UNI 5649-71, similar to DIN 72333**



Description	Part-No.	Type	PU
both ends drilled, cold pressed			
Cross-section surface	16 mm ²	346113.0010 S*	EMVMB 16/200/8 10
	16 mm ²	346114.0010 S*	EMVMB 16/500/8 10
25 mm ²	346111.0010 S*	EMVMB 25/300/10 10	
25 mm ²	346116.0010 S*	EMVMB 25/200/10 10	
Technical data			
Wire conductors	346113.0010	346114.0010	346111.0010 346116.0010
A			0.15 mm ²
B		15.0 mm	23.0 mm
D		8.5 mm	10.5 mm
L	200 mm	500 mm	300 mm 200 mm
Weight		0.160 kg/m	0.250 kg/m
Approvals			
General			
Amperage range		See standards table	
Cable construction		—	
Storage temperature range		-30 °C ... +90 °C	
Operation temperature range		5 °C ... +105 °C	
Accessories			
Grounding set	331805	ES 8	1
Grounding set	331816	ES 6	1

Comments
D= hole diameter
A= sleeve length
B= width
L= distance of hole

Other lengths are available on request



* S Article from stock
A Available with a lead time
R Available on request

EMC Accessories · Spring Shield Clamp

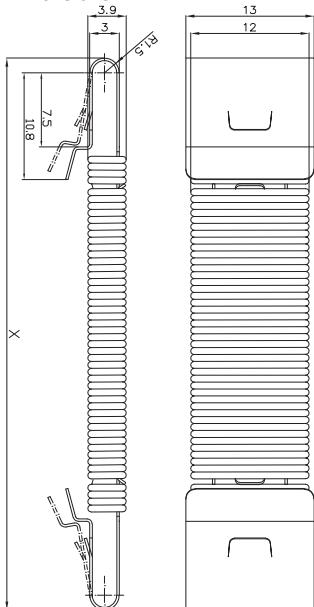
Spring shield clamp

Shield connection for large-diameter cables



Description	Part-No.	Type	PU
Spring shield clamp			
	330071.0010	S* EMVFSK 1	10
	330072.0010	S* EMVFSK 2	10
	330073.0010	S* EMVFSK 3	10
Technical data	330071.0010	330072.0010	330073.0010
For cable diameter	12 – 20 mm	20 – 30 mm	30 – 50 mm
Length	42 mm	55 mm	74 mm
Weight	0.300 kg/100 units	0.500 kg/100 units	0.700 kg/100 units
Tensile strength		1000 N/mm ²	
General			
Material		Sheet steel	
Color		Bright	
Operation temperature range		0 °C ... +60 °C	

Dimensions

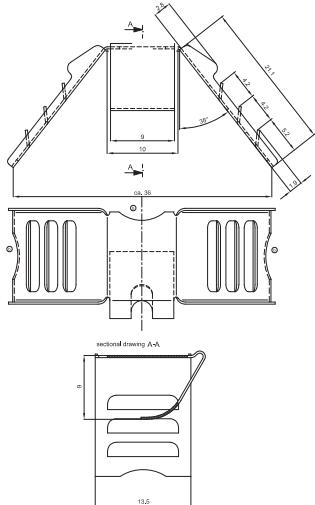


EMC Accessories · Shield Clamp

Shield clamp



Dimensions



Description	Part-No.	Type	PU
Shield clamp	330089.0100 S*	EMVSK 12	100
Technical data	330089.0100		
For cable diameter	0 – 12 mm		
Weight	0.250 kg/100 units		
General			
Material	Sheet steel		
Material thickness	0.3 mm		
Surface	smooth burr-free		
Color	Bright		
Operation temperature range	0 °C ... +60 °C		
Accessories	Part-No.	Type	PU
Special pliers	346732	ZSD	1

* S Article from stock
A Available with a lead time
R Available on request

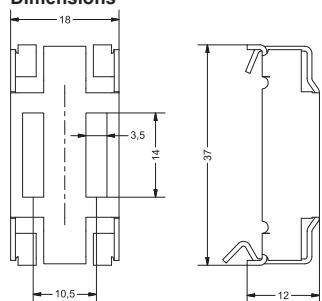
EMC Accessories · Snap-on Element

Snap-on element for snapping onto DIN rail for attaching a screening clamp



Description	Part-No.	Type	PU
Snap-on element			
Length	18.00 mm	330088.0010 S* EMVRE H 1	10
Technical data			330088.0010
Weight	0.700 kg/100 units		
General			
Material	Sheet steel		
Surface	Bright		
Operation temperature range	-20 °C ... +60 °C		
Comments			
Suitable for all crosspieces and DIN profile TS35			
Application example			

Dimensions

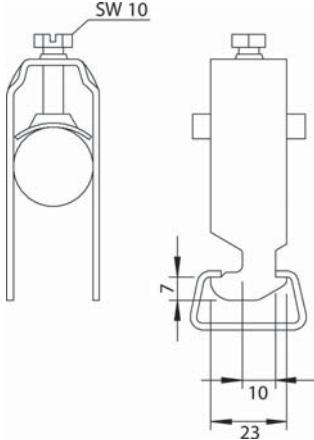


EMC Accessories · Cable Clip

Cable clamp



Dimensions



Description	Part-No.	Type	PU		
Cable clamp					
For cable diameter					
8 – 12 mm	331000.0010	S*	Kabelschelle KS 0		
12 – 16 mm	331001.0010	S*	Kabelschelle KS 1		
16 – 22 mm	331002.0010	S*	Kabelschelle KS 2		
34 – 40 mm	331003.0010	S*	Kabelschelle KS 3		
52 – 58 mm	331004.0010	S*	Kabelschelle KS 4		
22 – 28 mm	331005.0010	S*	Kabelschelle KS 5		
28 – 34 mm	331006.0010	S*	Kabelschelle KS 6		
40 – 46 mm	331007.0010	S*	Kabelschelle KS 7		
46 – 52 mm	331008.0010	S*	Kabelschelle KS 8		
Technical data					
Thread	KS 0	KS 1	KS 2		
			M6		
General					
Material	Steel				
Surface	galvanised				
Operation temperature range	0 °C ... +60 °C				
Hexagon screw	slotted				
Weight (kg/100 pieces)	3.00	3.20	3.50		
	6.80	6.00	6.20		
	7.70	10.80	11.80		
Accessories					
can be used on Lütze rails	333156	Type			
		SCS 1178			
Comments					
Sold only with counter-shell, polypropylene plastic					

* S Article from stock
A Available with a lead time
R Available on request



AirBLOWER

The **AirBLOWER** is an accessory for the **AirSTREAM** wiring system for fast and reliable thermal control of the climate inside the cabinet. The use of an **AirBLOWER** ensures that hotspots inside the control cabinet are avoided.



Standard temperatures in the control cabinet

The **AirBLOWER** balances out the temperature layers in the control cabinet. As shown in this example, this means that the control cabinet temperature can be decreased by 10 K in certain circumstances.

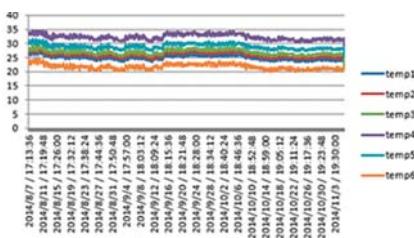


The new LÜTZE **AirBLOWER** for the **AirSTREAM** wiring system balances out the air layers in the control cabinet and achieves optimum heat dissipation.

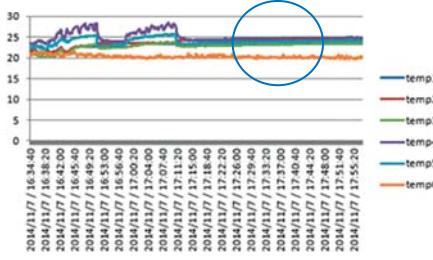
Your advantages:

- More efficient than conventional cooling options
- Simple handling
- Temperatures can be recorded individually

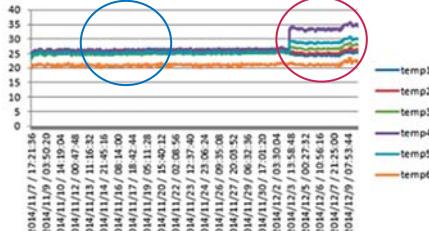
Temperature layering without circulation



Intermittent circulation



10°K temperature increase without circulation flow



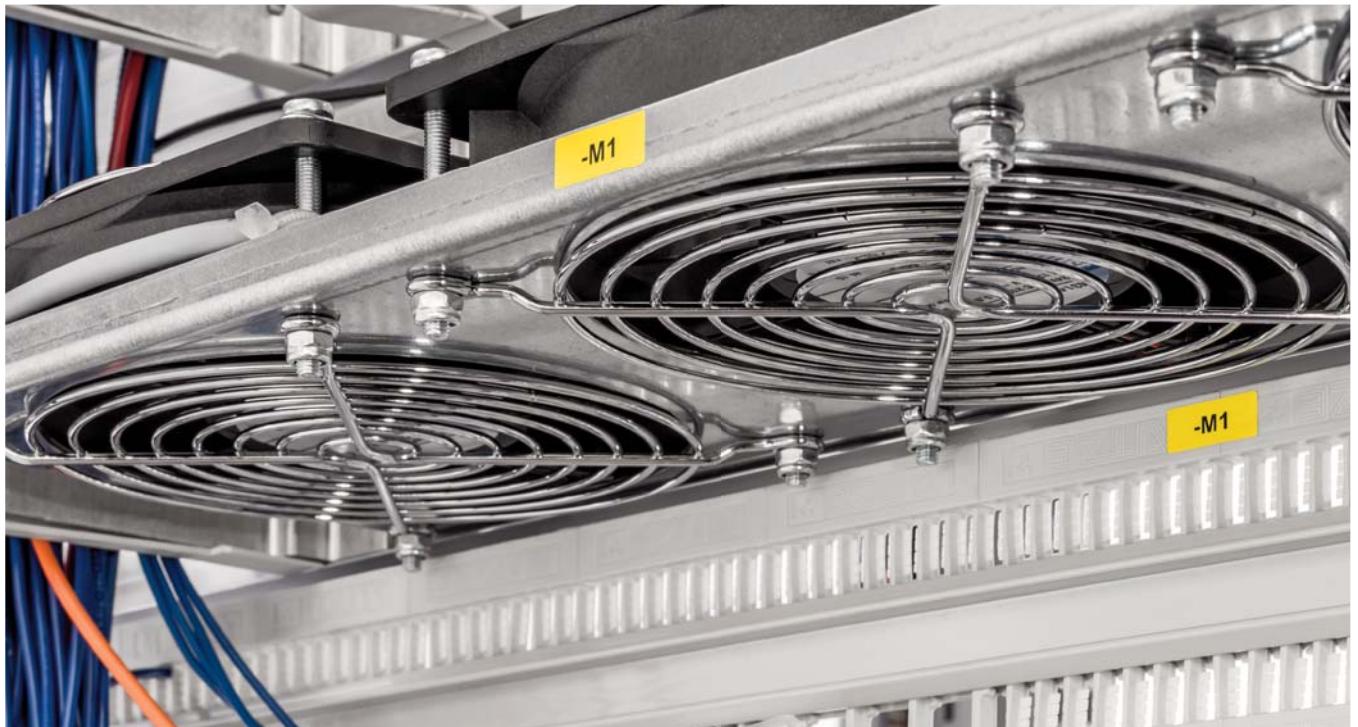
- Temperature layers without circulation
- Original temperature layers

Video: The improved design for better air circulation in the **AirSTREAM** system ensures a better ambient temperature in the control cabinet.

<http://bit.ly/2Evro6f>



The AirBLOWER for a better climate



In this variation of the accessory, the **AirBLOWER** is screwed to an HS 60 bar. The **AirBLOWER** can be screwed tightly into the designated holes with four M6 screws. This version of the fan can be used for cabinets with a width of 800 mm.

The installation depth should be taken into consideration as the **AirBLOWER** cannot be used with all frame options.



The hook-in **AirBLOWER** can be easily mounted onto the wiring frame from the front without tools. The adapter is hooked into the groove instead of a comb segment and the **AirBLOWER** is attached to the module with a snap fastener. In addition, this snap fastener is secured with a cable tie to prevent unexpected opening. The screwed variant of **AirBLOWER** has also been subjected to a vibration-shock test according to EN 61587.

The control unit controls and information

The DIN rail mountable control unit controls the **AirBLOWER** and can be configured to operate the fans.

Technical data for the **AirBLOWER** fan bench:

- 24 V DC power supply
- Durability at 40° 62500 h
- Current consumption approx. 700mA
- Temperature range -40 °C to +75 °C

Technical data for the **AirBLOWER** control unit LCOS-AB-I:

- -25 °C to 70 °C
- IP20
- LED status indicator
- 24 V power supply
- 24 V connection for fan module
- Floating outputs for error message
(Standard - broken wire, excessive temperature (45°C +/- 5K)
- can be configured freely) e.g. temperature unit
- Current control of the connected fan bench
- Connection for 3 PT100
(pre-set to 35°C +/- 5K switchpoint for fan
module, can be freely configured)
- Communication via IO link
- Configured via FDT/DTM



The AirBLADE eliminates the hot spots

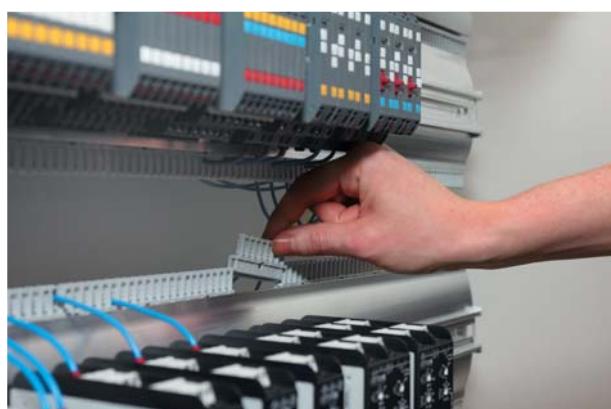


AirBLADES are like comb segments in a 50mm grid and can be easily replaced (Step 1-2). Hot spots are reduced thanks to the precise ventilation. However, bear in mind that sensitive components need to be protected and should not be placed in hot spot areas. If the components on each side are given enough space, the air can flow freely past the parts.

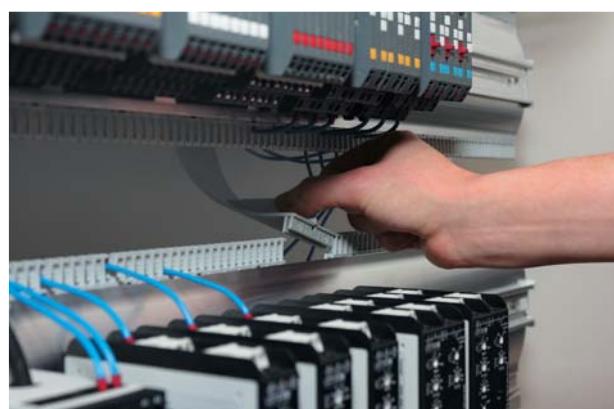
Attention:

It is important to use a suitable number of Airblades as too many Airblades reduce the wiring area and can interrupt the air circulation.

Instructions to use the AirBLADE



Step 1: Release the comb unit



Step 2: Insert the AirBLADE

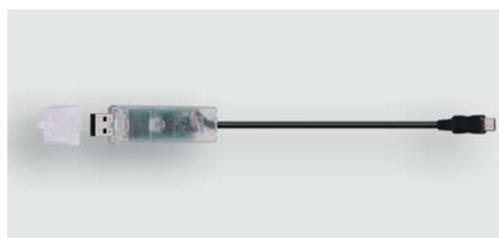
The PT 100 reacts at increased temperatures

Preferably, the PT 100 temperature sensor should be positioned in a hotspot area so that the hotspot can be monitored. The PT 100 is attached with a cable tie to a 3-fold comb below the part that is most sensitive to temperature. If the temperature limit is exceeded, the **AirBLOWER** is activated and cold air is sent into the control cabinet with an active cooling body. The cooling current is distributed to the precise area by using an **AirBLADE**. 3 temperature sensors can be connected via the control unit.



Technical specifications

- Cable temperature sensor with PVC cable
- Sensor: PT 100 (DIN EN 60751)
- Connection cable: 2m PVC (2x0.25mm²)



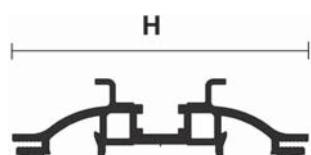
Service cable for configuring the control unit of the **AirBLOWER**

Technical specifications

- USB to micro-USB with electronics
- Length 1.70 m
- Cable type: PVC

Special Modules

AirBLOWER Modul



Properties

Article numbers contain a finished **AirSTREAM** module including an **AirBLOWER** fan bench.

The **AirBLOWER** is enclosed separately with the module.

AirBLOWER comprising 3 DC 24 V axial fans for mounting to **AirSTREAM**. Supplies a flow of air to the control cabinet in case of over-temperature, controlled by the control unit LCOS-AB-I.

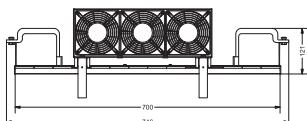
Technical data

Material	Aluminum
Surface	Bright
H	60 mm

Part-No.	Type	Design	Rail height mm	Rail length mm	Frame width mm	Wiring space cm ²
380101M2013	A*	HS 060 0700-0750 BI30-085	Standard	60	700	750
380101M2009	A*	HS 060 0700-0750 BI30-055	Option 2	60	700	750
380101M2014	A*	HS 060 0900-0950 BI30-085	Standard	60	900	950
380101M2010	A*	HS 060 0900-0950 BI30-055	Option 2	60	900	950
380101M2015	A*	HS 060 1100-1150 BI30-085	Standard	60	1100	1150
380101M2011	A*	HS 060 1100-1150 BI30-055	Option 2	60	1100	1150

Mounting Accessories

AirBLOWER (hooked-in variant)



Properties

AirBLOWER comprising 3 DC 24 V axial fans for mounting to **AirSTREAM**. Supplies a flow of air to the control cabinet in case of over-temperature, controlled by the control unit LCOS-AB-I.
The mounting kit must be ordered separately.

Part-No.	Type	PU piece
777000.1011 S* AirBLOWER	AirBLOWER fan bench	1

Adapter

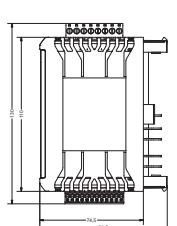


Properties

For attaching the **AirBLOWER** to the **AirSTREAM**.

Part-No.	Type	PU piece
780994.0000 S* AirBLOWER Adapter	Attachment set for AirBLOWER	1

Control unit for AirBLOWER



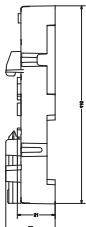
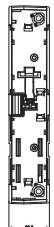
Properties

To control the **AirBLOWER**.

Part-No.	Type	PU piece
777000.0011 S* LCOS-AB-I	Control unit of the AirBLOWER with screw terminal	1
777100.0011 S* LCOS-AB-I	Control unit of the AirBLOWER with spring terminal	1

Mounting Accessories

Base for control unit



Properties

Function carrier 22.5 mm, can be expanded with modules, with PE direct contact

Part-No.	Type	PU piece
780331.225.1	A* LCOS-FT-PE-225-00-03-1	Base for control unit

Temperature sensor for control unit



Properties

Temperature sensor for controlling the control unit.

Part-No.	Type	PU piece
773900.0001	S* PT100 Element	Set of 3 PT100 for the control unit

USB data cable



Properties

For manual data input.

Part-No.	Type	PU piece
750894	S* LCON ZB USB	USB data cable for parameterization

Mounting Accessories

AirBLADE



Properties

AirBLADEs serve to direct the current of air within the control cabinet. They can be used in a 50 mm spacing increments instead of a comb to direct air flow from the back of the AirSTREAM frame to the front in order to circulate air directly around devices.

Technical data

Material	PA 6.6
Surface	smooth
Halogen free according to	VDE 0472-815
Flammability rating	UL 94 V0

Part-No.	Type	PU piece
380281.0010	S* AirBLADE 85 Set	AirBLADE

10

* S Article from stock
A Available with a lead time
R Available on request

How to replace combs

All comb segments are in a 50mm grid.

Combs can simply be released and replaced with a screwdriver (Fig. 1). Different combs can be used depending on requirements.

Removing comb teeth with a wire cutter is no longer necessary. This prevents sharp edges from being created that may damage wires when the teeth are removed.

Wiring is tidy and well organized. This greatly simplifies subsequent wiring.

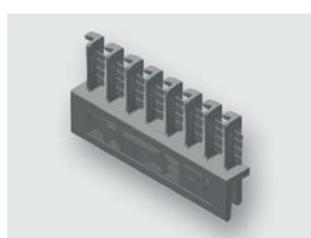


Step 1: Release the combs with a screwdriver

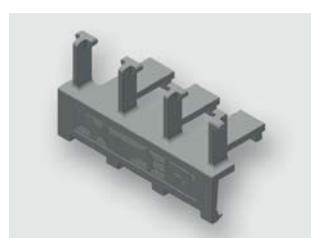


Step 2: Easier removal and insertion of the combs

Various comb variants



8-fold comb standard
application for cross-sections
up to 10 mm²



3-fold comb for cross-sections
greater than 10 mm² and data
cables



10-fold comb additional
comb



2-fold comb for control
systems
18 x 1 mm²

Wiring from the front

The **AirSTREAM** system offers a brand-new experience of wiring. The system not only has a much easier wiring system, but also can save a great deal of time.

- **Time saving through straightforward wiring.** The components can be easily reached by hand
→ easily reachable connection terminals
- **Cables/wires do not have to be fixed by in the cable duct** because the wiring behind the bar falls downward and is held in position
- **No risk of injury during wiring!** The modules (bar types) each have edge protection and the comb segments have been rounded and designed for flexibility.



By comparison:
Subplate - obstructed by ducts



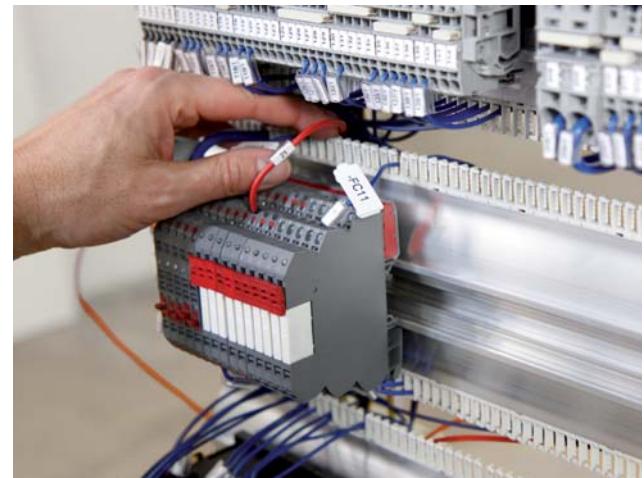
By comparison:
AirSTREAM - good connection option

The wiring in the AirSTREAM ...

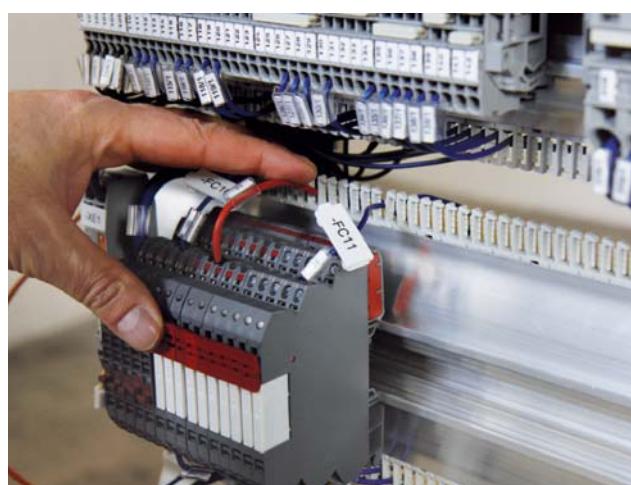
With the **AirSTREAM** wiring system, the wiring is installed exclusively from the front because the cables are laid from front to back. The following shows how the wire can be laid step by step over the brackets.



Step 1:
Connecting the wires to the components

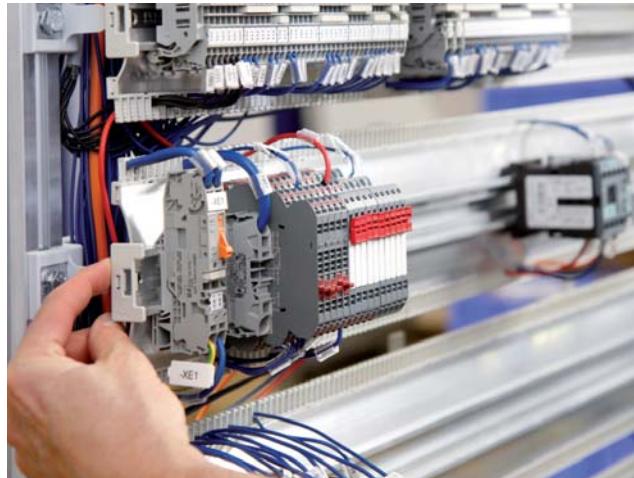


Step 2:
Installing the wires via the comb segment

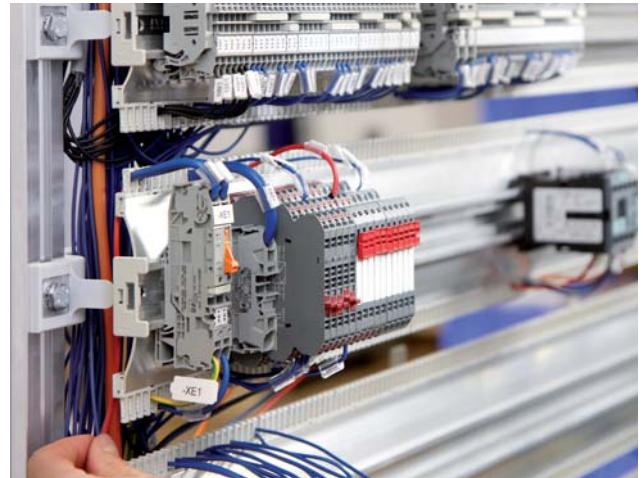


Installed wires in the comb segment

...is all installed from the front!



Step 3:
Depending on requirements, the wires are laid from top to bottom across the bracket



Step 4:
The plastic slats allow the cables to be inserted easily and prevents them from slipping out
The plastic cover prevents direct contact between cables and aluminium



Step 5:
The cable is fed in the corresponding order to the right or left to the component and can be connected again

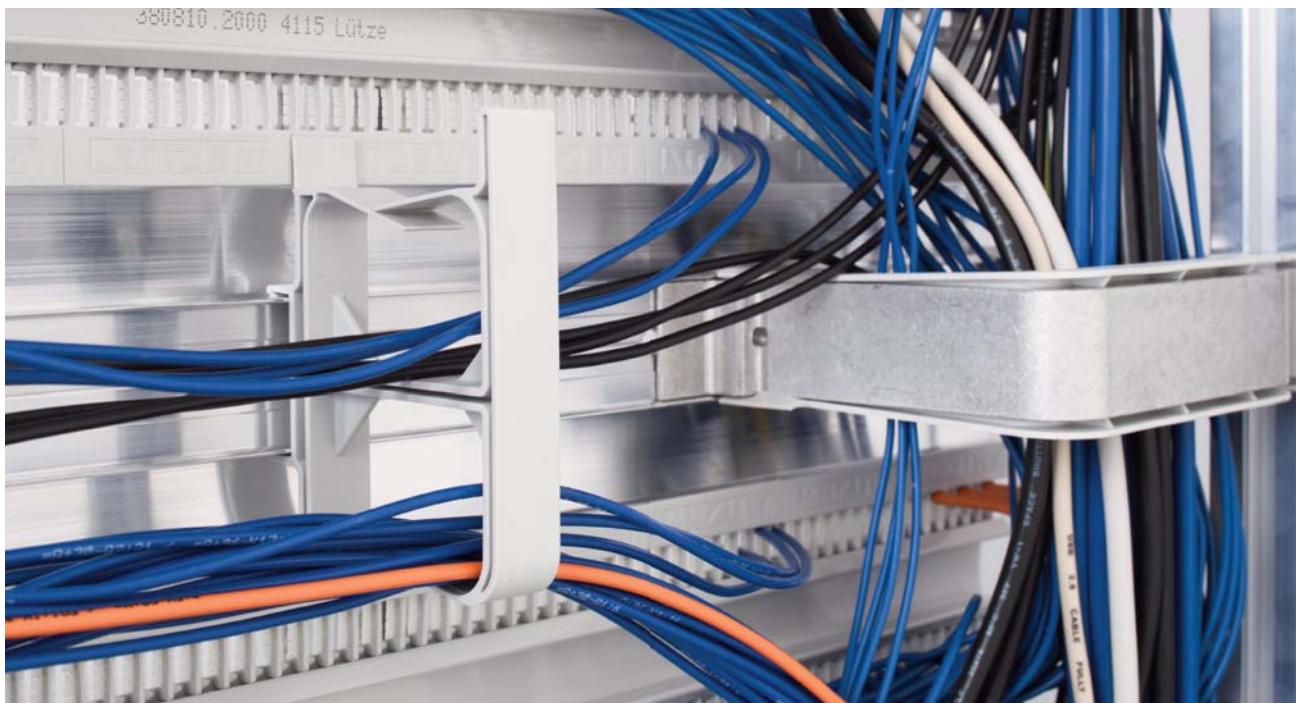
Advantages:

- **Reduction of hot spots**
The cables hang loosely at the rear, which means that they are better ventilated as they are no longer enclosed inside a cable duct
- **Rewiring possible**
Pulling the cables makes tracing easier
- **Replace comb segments**
The comb segments can be replaced very easily depending on the number or cross-sections

The wire holder prevents X-wiring

The X-wiring is eliminated thanks to the use of wire holders. The wires are held on every level.

Here the wiring is also installed from the front. The wire holders should be positioned before the wiring process is commenced. Due to this careful separation of the individual wires on the module level, the wiring not only looks clean, but it also helps to track the wires during troubleshooting and rewiring. In the application area, the cabinets often stand against the wall or are integrated into the machine because access from the front is guaranteed. This means that the shielded rear wall is not a problem.

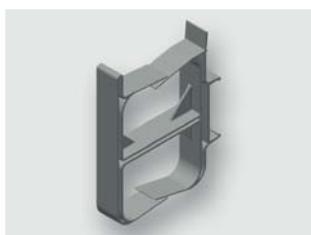


Wire holders are clipped in place on the rail on the rear side of the rail module profile (illustration on left).

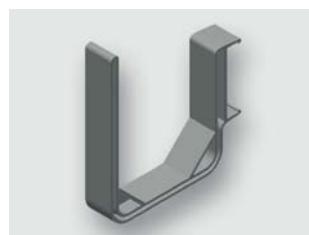
We recommend the following number of wire holders for the following bar widths:

- 500 mm/ 700 mm length – 1 wire holder per bar
- 900 mm/ 1100 mm length – 2 wire holder per bar

Distinctions are made between two types; U and D-wire holder. The respective holder can be selected depending on the application scope.



D - wire holder for holding the wires from the bottom and top



U - wire holder for holding the wires from the top

Comb lids close gaps to the wiring space

The AirSTREAM design has a clear and tidy appearance. Therefore, various widths of comb lids are inserted between the modules.

Using lids closes the gaps between the modules and facilitates targeted air guidance in the frame.

Also, the wires are secured in the comb segment because the lid prevents them from slipping out.

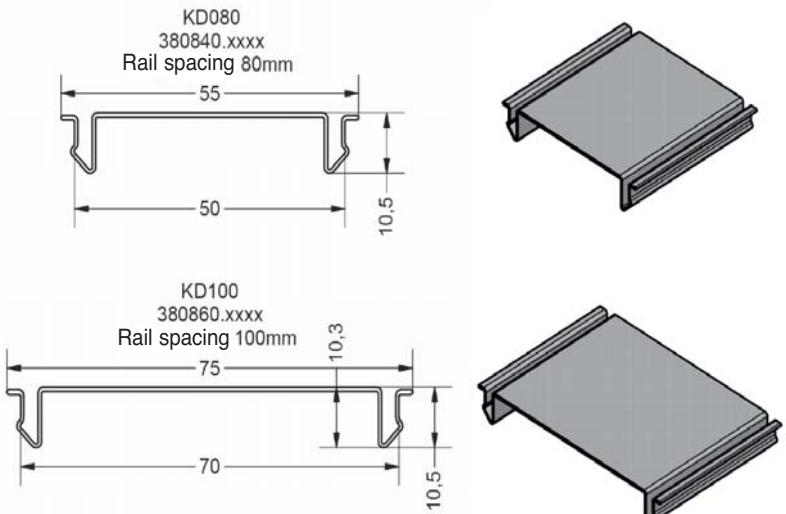
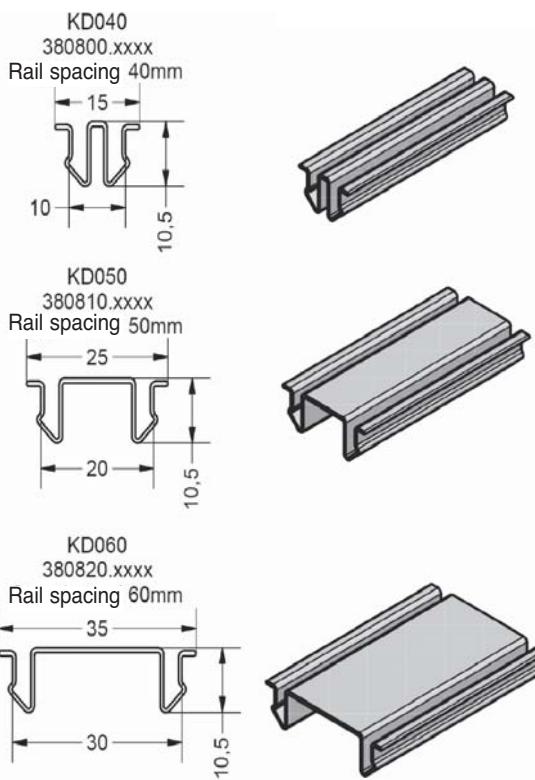
All plastics are halogen-free and UL Recognized.

The lid name number is not identical to the clear dimensions, but is the lid clearance including the comb segments of the upper and lower side of the bar.

Example KD 050:

- Clear distance 20 mm between comb segments
- 2 x comb segment, each 15 mm

As the bars only state the width of the aluminium, it is simpler to state the plastic part in one size. This makes it much easier to calculate the frame structure.



Technical data:

Material: PC+ABS (halogen free)
Brand class: UL94 V0
Colour: RAL 7035

Modification and expansion...

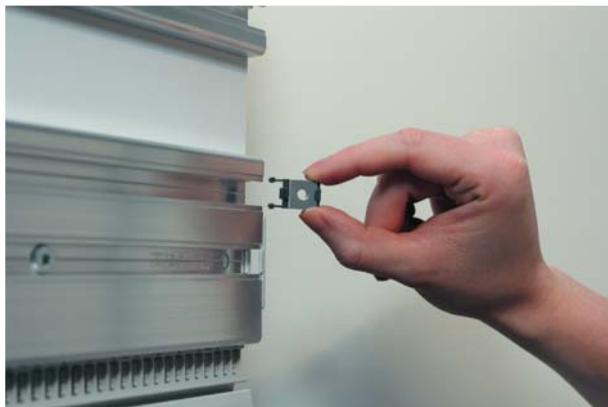
The AirSTREAM wiring frame can be wired directly and fitted with components so that the high flexibility of conversions is guaranteed.

- **No mechanical work when retrofitting or converting!** By using sliding nuts (threads M3-M8) flexible conversion and retrofitting is possible at any time.
- **Converter / main switch / transformer / etc.,** components that are not snapped but screwed to the DIN rail profile can be screwed directly into the sliding nut channel or to a switch bridge
- **In the case of greater loads, the manoeuvring bars should be attached to several bars to distribute the weight.**
- **The switch bridges can be fastened to all types of bridges.** Depending on the size of the components and weight, several bridges can be used.

Example:

Attachment of an adapter for a bus bar system. Groove distance (sliding nut channel) should be planned in advance when planning the frame. This allows for fast attachment of the components.

Here, two MA 080 modules were used with the groove-groove distance of 75 mm.



Step 1: Sliding nut pieces (with thread M3-M8) can be simply slipped into the sliding nut channel with a sliding nut cage.



Step 2: The sliding nut cages prevent the sliding nuts from slipping out. Place the sliding nuts into both grooves.



Step 3: If both slide nuts have been placed in the desired location, the component can be mounted.



Step 4: Align components if necessary and simply attach.

...with no mechanical effort!



Variant 1: If hat profile bars are built over (Type HS / HA) on assembly bars (Type MS / MA), CST 7 supports can be used to balance out the height.



Variant 2: Installed manoeuvring bars (RG) 020
The length of the manoeuvring bars are adapted to the size of the components.



Fig. 1: Master switch to RG 035.



Fig. 2: Converter to RG 035.

Depending on the application, over building is possible directly into the groove or over the RG bridges quickly and easily.

- There are two different types of RG bars.
- RG 020 with a height of 15 mm and a width of 20 mm
- RG 035 with a height of 20 mm and a width of 35 mm



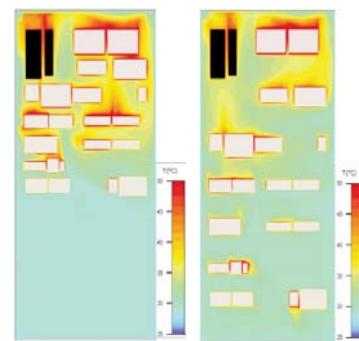
Two units to prevent hotspots: AirTEMP and Online configurator

AirTEMP - differentiated thermal simulation for the control cabinet

AirTEMP allows precise and differentiated analysis of the heat development and distribution in the control cabinet.

AirSTREAM planning with the Online configurator

Using the web-based control cabinet configurator, the user can configure and send an enquiry for an AirSTREAM frame.



Heat calculation in the control cabinet

AirTEMP: Control cabinet heat analysis for everyone

The **AirBLOWER** is an accessory for the **AirSTREAM** wiring frame for fast and reliable climate stabilization inside the control cabinet. The use of an **AirBLOWER** ensures that hotspots inside the control cabinet are avoided.

AirTEMP is an online simulation software that helps you plan thermally optimized control cabinet projects. **AirTEMP** enables an analysis of the heat build-up and distribution in the control cabinet more precisely than ever before!

At the end of the simulation the set parameters can be saved and printed. The calculated temperature results can be used for construction verification according to DIN 61439.



Step 1: Define the installation site



Step 2: Enter the control cabinet dimensions



Step 3: Information about the loss output and ambient parameters



Step 4: Calculation and differentiated presentation of the control cabinet's internal temperature

Test your control cabinet!

AirTEMP: Control cabinet heat analysis for the control cabinet: airtemp.luetze.com

AirSTREAM Online configurator: Efficient and user-friendly

Just 5 steps to design an **AirSTREAM** frame

Using the web-based control cabinet configurator for the **AirSTREAM** wiring system, the user can design a complete frame in a few steps.

The final file can be further processed in any CAD program. The **AirSTREAM** configurator is available for use online at www.luetze.com. No additional software on the PC is required.

High-speed online control cabinet planning



1. Recognizing the problem



- Hot spots and/or high-energy costs due to air conditioning
- Machine downtimes
- Inconsistent control cabinet climate and cold short-circuits

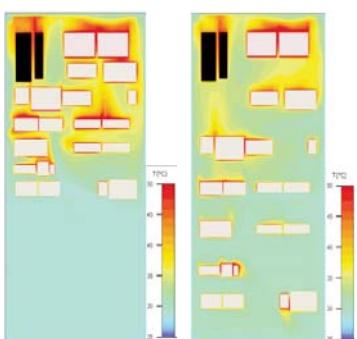
2. Discover differences



- **AirTEMP** thermal simulation with different wiring types and cooling systems

The entire system
AirSTREAM offers

3. Optimize



- Improved thermal arrangement of the components
- Component density
- Component placement

System by LÜTZE overview



6. Find a solution



- Longer lifecycle of the electrical components
- Power savings thanks to reduced energy requirements of the air conditioning
- Fewer machine downtimes
- Higher energy efficiency

5. Plan the control cabinet



- Use of the free *AirSTREAM* online configurator

4. Climate stability inside the control cabinet



- The use of the *AirBLOWER*
- Intelligent air guidance thanks to *AirBLADES*

Certificates

TÜV certification

- Shock/Vibration test acc. to EN 61587



Germanischer Lloyd



Type approval DIN EN 61439

- 96 h salt mist acc. to DIN ISO 9227:2012
- Resistance to short circuits
- Contact resistors < 0.1 Ohm

UL Recognized

- Halogen-free plastics
- Material satisfies the UL 94 requirement



Kesternich tested

- Contact resistors according to DIN EN 61439
- Corrosion-resistance at 120 test cycles (sulphur dioxide)

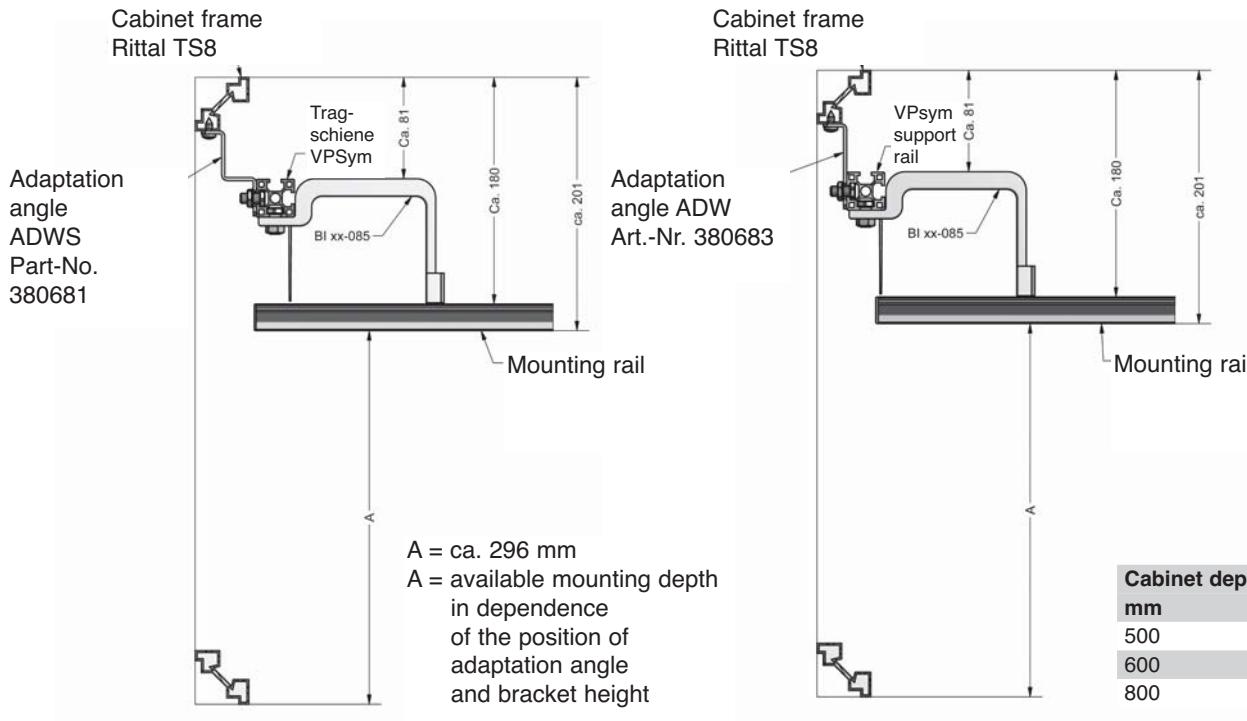


No CCC certification necessary

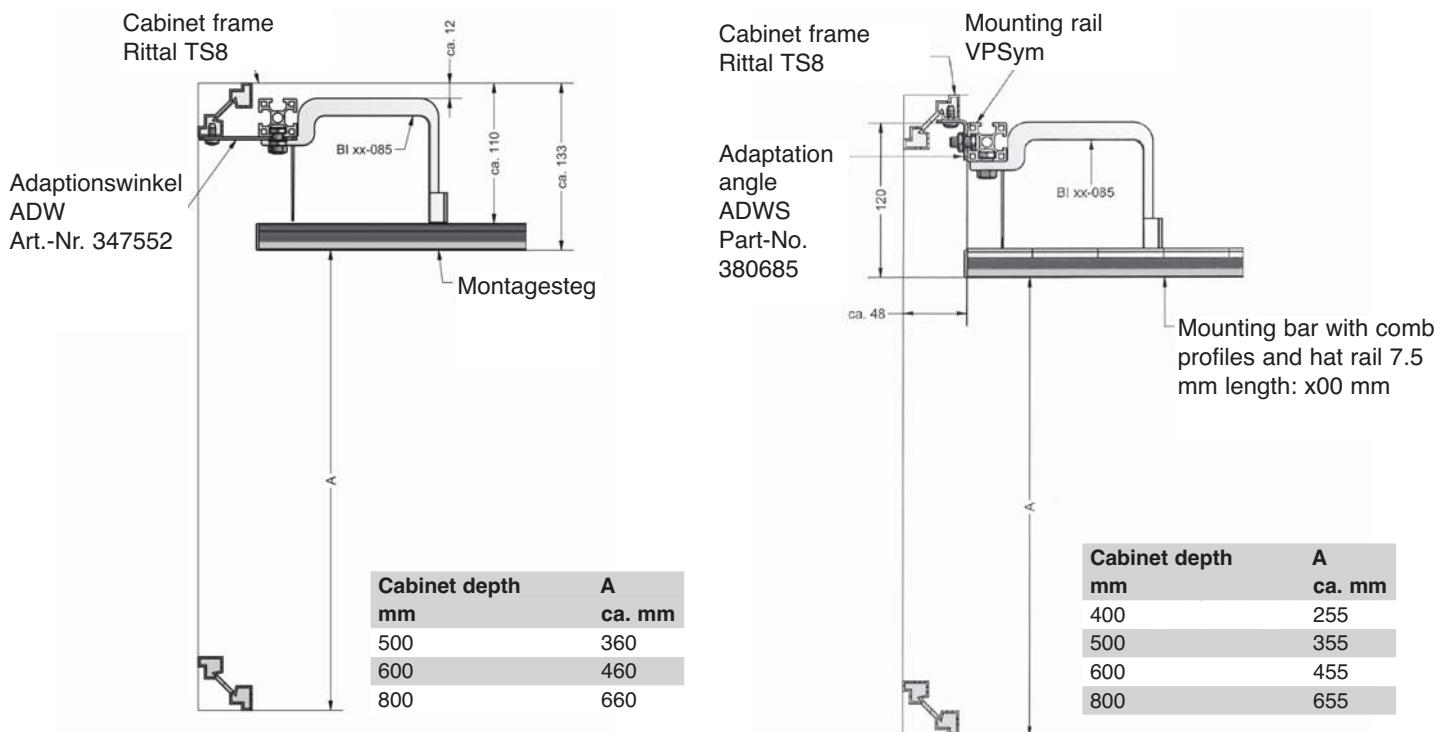
Mounting - Dimensions

Installation Dimensions for Rittal TS8/Lohmeier ADWS 380681/380683

The installation depth is reduced from 30 mm if a 55-model bracket is used.



Installation Dimensions for Rittal TS8 - Installation Dimensions for Rittal TS8 - rearmost position ADWS 347552 rearmost position ADWS 380685



Technical information

Current capacity of the AirSTREAM profiles

For all AirSTREAM profiles:

Material Al Mg Si 0,5 F 25

Conductance in S 24

Type	Cross-section in mm ²	Type	Cross-section in mm ²
VPSym	342	RG 020	138
		RG 035	180
HS 040	231	B15-055	150
HS 060	276	B15-085	150
HS 080	308	B30-055	150
HS 100	351	B30-085	150
HS 120	390		
HS 160	468		
MS 040	202		
MS 080	349		
MS 100	389		
HA 140	433		
HA 160	477		
MA 080	385		

Tightening torques for threaded connections

Tightening torques for threaded connections	Nm
Hexagonal bolts with M8 nut	10
U bolt M6	8

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Cable Solutions

High flexing cables for industrial applications

Connectivity Solutions

Industrial Ethernet, assembled cables, Actuator Sensor Interface, connectors and suppression technology

Cabinet Solutions

AirSTREAM complete system for thermally optimized and space-saving cabinet wiring

Control Solutions

Industrial Power Supplies and electronic current control for Industrial Internet of Things. Infrastructure for industrial networks, signal converter, relays and modular electronics housing

Transportation Solutions

Solutions for the demanding Railway Sector, for example control technology, Interface solutions and signalling

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