



**SEW**  
**EURODRIVE**

## Addendum to the Operating Instructions



Drive and Application Controller  
**MOVIPRO® – Accessories**



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## 1 General information

### 1.1 About this documentation

**The current version of the documentation is the original.**

This documentation is an integral part of the product. The documentation is written for all employees who assemble, install, start up, and service this product.

Make sure this documentation is accessible and legible. Ensure that persons responsible for the machinery and its operation as well as persons who work on the product independently have read through the documentation carefully and understood it. If you are unclear about any of the information in this documentation or require further information, contact SEW-EURODRIVE.

### 1.2 Other applicable documentation

This documentation supplements the operating instructions of the product. Use this document only in connection with the operating instructions.

Always use the latest edition of documentations and software.

The SEW-EURODRIVE website ([www.sew-eurodrive.com](http://www.sew-eurodrive.com)) provides a wide selection of documents for download in various languages. If required, you can also order printed and bound copies of the documentation from SEW-EURODRIVE.

### 1.3 Structure of the safety notes

#### 1.3.1 Meaning of signal words

The following table shows the grading and meaning of the signal words for safety notes.

Signal word	Meaning	Consequences if disregarded
<b>▲ DANGER</b>	Imminent hazard	Severe or fatal injuries
<b>▲ WARNING</b>	Possible dangerous situation	Severe or fatal injuries
<b>▲ CAUTION</b>	Possible dangerous situation	Minor injuries
<b>NOTICE</b>	Possible damage to property	Damage to the product or its environment
<b>INFORMATION</b>	Useful information or tip: Simplifies handling of the product.	



### 1.3.2 Structure of section-related safety notes

Section-related safety notes do not apply to a specific action but to several actions pertaining to one subject. The hazard symbols used either indicate a general hazard or a specific hazard.

This is the formal structure of a safety note for a specific section:



#### **SIGNAL WORD**

Type and source of hazard.

Possible consequence(s) if disregarded.

- Measure(s) to prevent the hazard.

### Meaning of the hazard symbols

The hazard symbols in the safety notes have the following meaning:

Hazard symbol	Meaning
	General hazard
	Warning of dangerous electrical voltage
	Warning of hot surfaces
	Warning of risk of crushing
	Warning of suspended load
	Warning of automatic restart

### 1.3.3 Structure of embedded safety notes

Embedded safety notes are directly integrated into the instructions just before the description of the dangerous action.

This is the formal structure of an embedded safety note:

**⚠ SIGNAL WORD** Type and source of hazard. Possible consequence(s) if disregarded. Measure(s) to prevent the hazard.

**1.4 Rights to claim under limited warranty**

Read the information in this documentation. This is essential for fault-free operation and fulfillment of any rights to claim under limited warranty. Read the documentation before you start working with the product.

**1.5 Exclusion of liability**

Read the information in this documentation, otherwise safe operation is impossible. You must comply with the information contained in this documentation to achieve the specified product characteristics and performance features. SEW-EURODRIVE assumes no liability for injury to persons or damage to equipment or property resulting from non-observance of these operating instructions. In such cases, SEW-EURODRIVE assumes no liability for defects.

**1.6 Product names and trademarks**

The brands and product names in this documentation are trademarks or registered trademarks of their respective titleholders.

**1.7 Copyright notice**

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## 2 Interface box

### 2.1 Scope of functions

The interface box allows for the following functions:

- Connection to the AC 400 V supply system
- Connection to the DC 24 V backup voltage
- DC 24 V supply of the MOVIPRO® device via the integrated power supply of the device
- Connected voltages are looped through
- Disconnect the MOVIPRO® device from the supply system by using the maintenance switch of the interface box

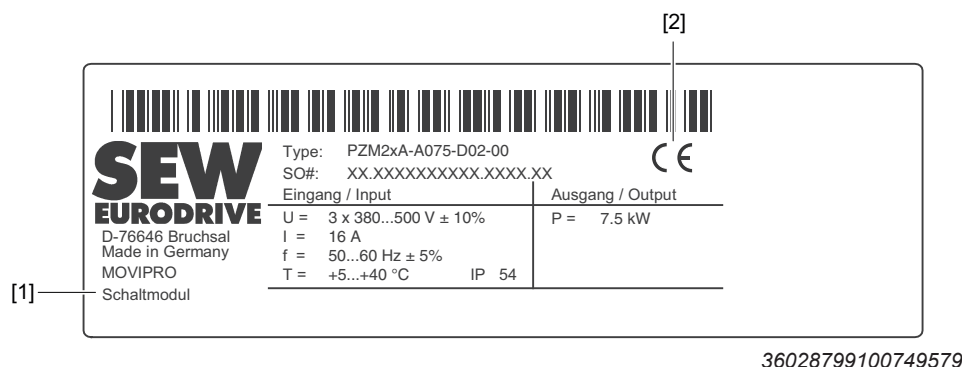
### 2.2 Type designation

The type designation contains the following data:

<b>PZM2xA</b>	MOVIPRO® interface box	
-		
<b>A...</b>	Maximum power:	
	022	2.2 kW
	040	4 kW
	075	7.5 kW
	150	15 kW
	220	22 kW
-		
<b>...-00</b>	Switch type/design:	
	D02-00	Disconnection switch up to 16 A
	D03-00	Disconnection switch up to 32 A
	D04-00	Disconnection switch up to 42 A
	M13-00	Line and device protection up to 5 A
	M14-00	Line and device protection up to 9 A
	M16-00	Line and device protection up to 15 A

### 2.3 Nameplate

The nameplate lists information about the device type of the interface box. The following figure shows an example of a nameplate:



[1] Product name

[2] CE marking

Depending on the design, the following information is listed on the nameplate:

Value	Specification
Type	Type designation
SO#	Production number
U	Voltage
I	Maximum current carrying capacity
f	Frequency
T	Ambient temperature
IP	Degree of protection
P	Maximum switching capacity

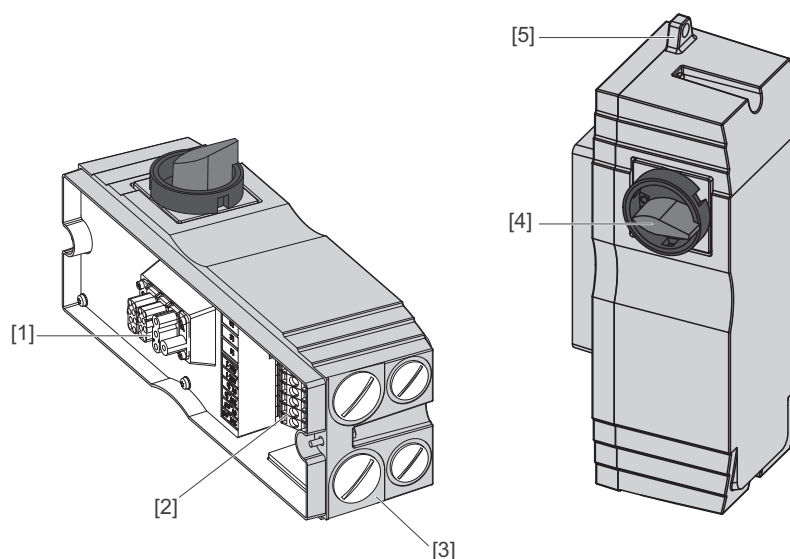
### 2.4 Interface box assignment

The following table shows the assignment of the interface boxes to the different MOVIPRO® device powers:

Interface box	Part number	2.2 kW	4 kW	7.5 kW	11 kW	15 kW	22 kW
PZM2xA-A075-D02-00	18250149	•	•	•			
PZM2xA-A150-D03-00	18250157	•	•	•	•	•	
PZM2xA-A220-D04-00	28218264	•	•	•	•	•	•
PZM2xA-A022-M13-00	18250238	•					
PZM2xA-A040-M14-00	18250165		•				
PZM2xA-A075-M16-00	18250173			•			

## 2.5 Device overview

The following figure provides an overview of the most important parts of the interface box:



9007201302901515

- [1] MOVIPRO® connection (Han® 10 B, female)
- [2] Power input terminal strip X1
- [3] Front panel connectors
- [4] Maintenance switch
- [5] Suspension device (for storing the interface box during a MOVIPRO® device replacement, for example)

## 2.6 Maintenance switch



### ⚠ WARNING

Electric shock due to dangerous voltages present in the interface box.

Severe or fatal injuries.

- Disconnect the MOVIPRO® from the voltage supply before you perform any work on the device.
- Observe a minimum switch-off time of 10 minutes after disconnecting the supply voltage.

### NOTICE

Increased wear of the switch contacts.

Destruction of the switch contacts.

- Do not operate the maintenance switch under load.

### INFORMATION



If MOVIPRO® has a valid approval, the motor is supplied with current as soon as the maintenance switch is set to position 1.

The maintenance switch is used to interrupt the AC 400 V voltage supply to the interface box. The maintenance switch can be secured with 3 locks. If the maintenance switch is in position 0, the MOVIPRO® is disconnected from the AC 400 V voltage supply.

Depending on the device type, the interface boxes are equipped with different maintenance switches:

- D.. disconnection switch
- M.. line and device protection

### 2.6.1 D.. disconnection switch

The following disconnection switches are possible, depending on the device's power rating:

Power	Short designation	Description
Up to 7.5 kW	D02	Disconnection switch up to 16 A
Up to 15 kW	D03	Disconnection switch up to 32 A
Up to 22 kW	D04	Disconnection switch up to 42 A

### 2.6.2 M.. line and device protection

The following line and device protection is possible depending on the power:

Power	Short designation	Description
Up to 2.2 kW	M13	Line and device protection up to 5 A
Up to 4 kW	M14	Line and device protection up to 9 A
Up to 7.5 kW	M16	Line and device protection up to 15 A



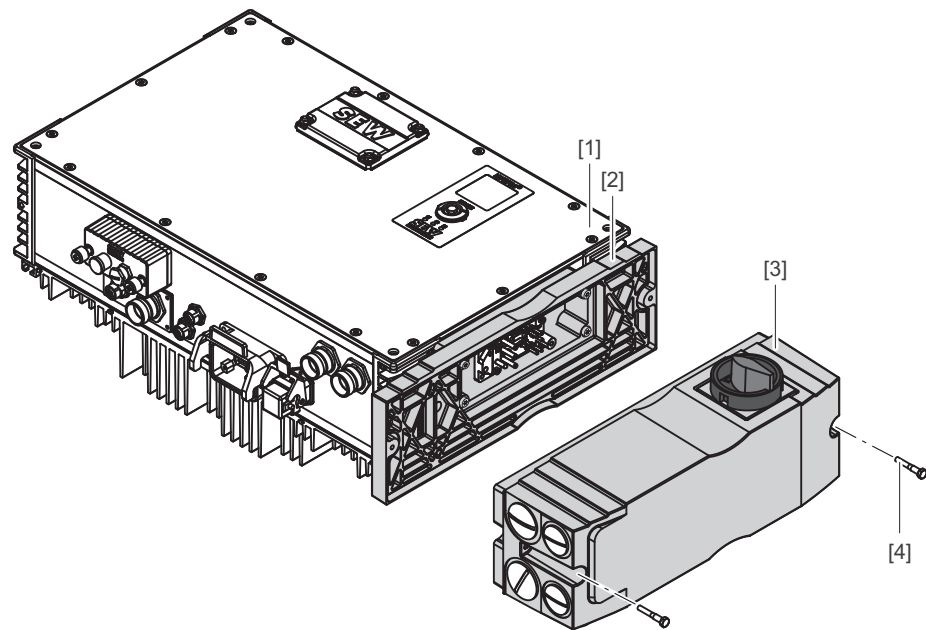
## 2.7 Mechanical installation

### 2.7.1 Minimum clearance

During installation, observe the minimum required clearances for connecting cables and plug connectors, as well as for handling the actuating elements. Consult the MOVIPRO® device's operating instructions in the "Mechanical installation" chapter and the dimension drawing to obtain the dimensions for the required minimum clearances.

### 2.7.2 Mounting

Mount the interface box on the right side of the MOVIPRO®.



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- |     |                      |     |                    |
|-----|----------------------|-----|--------------------|
| [1] | MOVIPRO®             | [3] | Interface box      |
| [2] | Interface box flange | [4] | M5 × 30 SW8 screws |

Proceed as follows:

1. Connect the required connections to the front panel on the interface box, e.g. AC 400 V supply line and DC 24 V backup voltage.
2. Connect the plug connector of the interface box to the plug connector of MOVIPRO®.
3. Attach the interface box to MOVIPRO® by tightening the two M5 × 30 screws with a tightening torque of 1.6 Nm – 1.8 Nm.

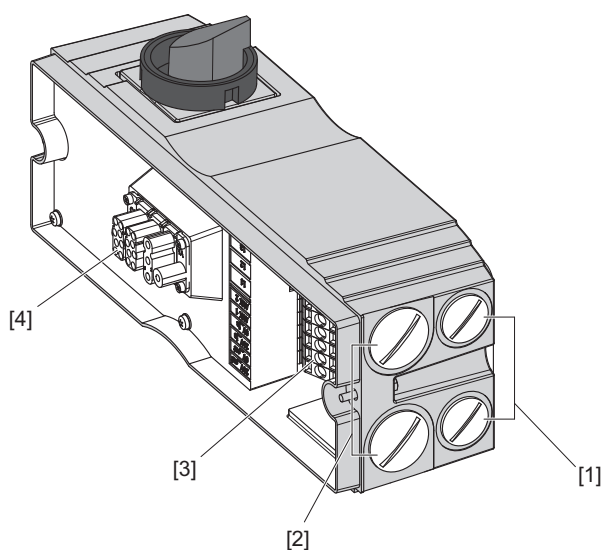
## 2.8 Electrical installation

### 2.8.1 Cable routing

Observe the following when routing the cables:

- Use suitable cables to connect power supply and communication.
- Route power cables and signal cables in separate cable ducts.
- Maintain the greatest possible distance between power cables and signal cables.
- Avoid using long cables running parallel to one another.

### 2.8.2 Interface box connections

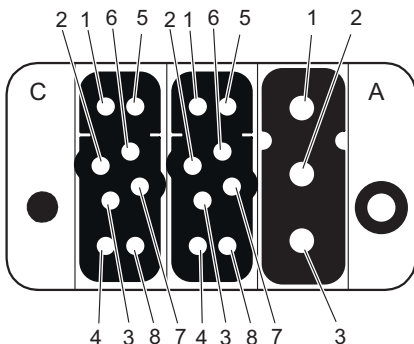


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- [1] Covers of the screw fitting holes (M25 × 1.5)<sup>1)</sup>
- [2] Covers of the screw fitting holes (M32 × 1.5)<sup>1)</sup>
- [3] Terminal strip, power input
- [4] Connection to MOVIPRO® (Han® 10 B, female)

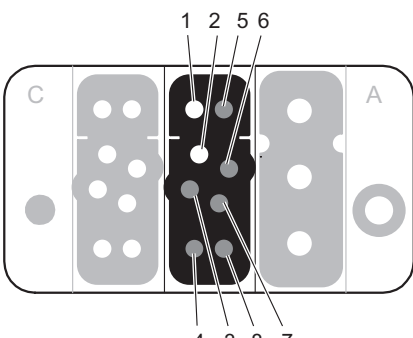
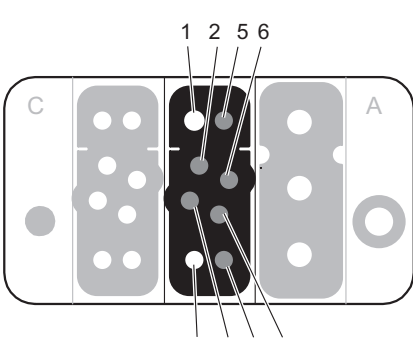
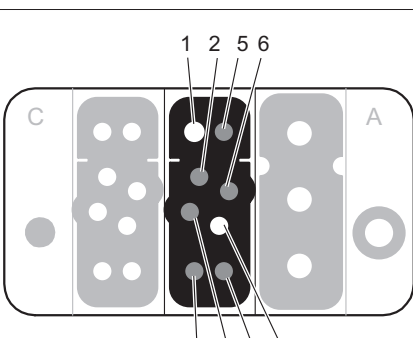
1) The screw fittings are not included in the scope of delivery.

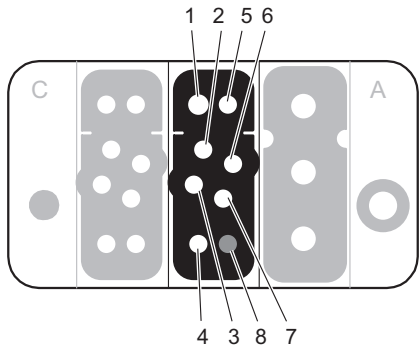
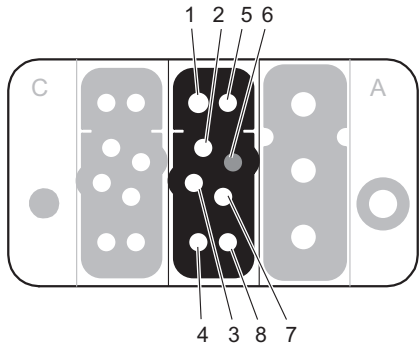
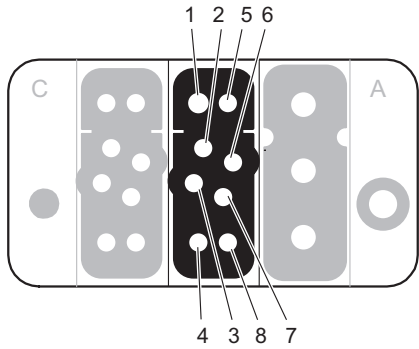
## 2.8.3 Connection to MOVIPRO®

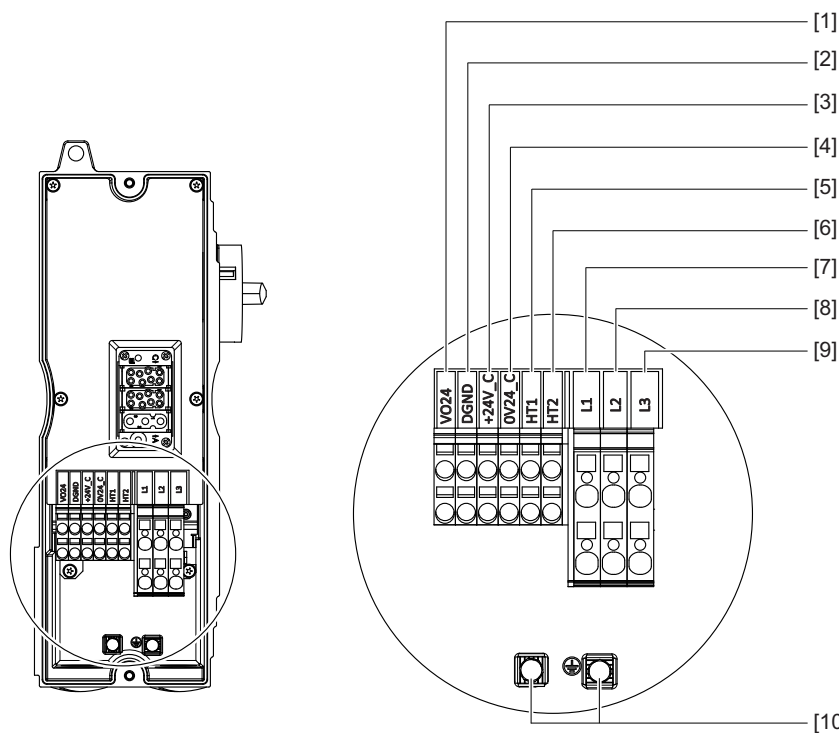
Function		
<ul style="list-style-type: none"> <li>AC 400 V device supply output</li> <li>DC 24 V output and input</li> <li>With signal contact for maintenance switch</li> </ul>		
Connection type		
Han-Modular® 10 B, female		
Connection image		
		
[a] Han®-C module, female		
No.	Name	Function
1	L1	Supply system phase 1
2	L2	Supply system phase 2
3	L3	Supply system phase 3
[b] Han®-EE module, female		
Coding of the device power, see chapter "Coding" (→ 14)		
[c] Han®-EE module, female		
No.	Name	Function
1	+24V_C	DC 24 V input – backup voltage
2	SC	Signal contact for maintenance switch
3	VO24	DC 24 V output
4	n.c.	Not connected
5	0V24_C	0V24 reference potential – backup voltage
6	n.c.	Not connected
7	GND	Reference potential
8	n.c.	Not connected
Hinged frame		
No.	Name	Function
–	PE	PE connection

**Coding**

The following table shows the assignment of the different codings to the respective interface boxes and the corresponding MOVIPRO® devices:

Interface box	Interface box – coding of the connections	MOVIPRO®
PZM2xA-A022-M13-00		2.2 kW
PZM2xA-A040-M14-00		4 kW
PZM2xA-A075-M16-00		7.5 kW

Interface box	Interface box – coding of the connections	MOVIPRO®
PZM2xA-A075-D02-00		2.2 kW 4 kW 7.5 kW
PZM2xA-A150-D03-00		2.2 kW 4 kW 7.5 kW 11 kW 15 kW
PZM2xA-A220-D04-00		2.2 kW 4 kW 7.5 kW 11 kW 15 kW 22 kW

**2.8.4 X1 terminal strip of the interface box**


27021599719541387

Terminal strip X1 (power input terminal strip)			Terminal cross section
	Name	Function	
[1]	VO24	DC 24 V output	0.2 – 6 mm <sup>2</sup>
[2]	GND	Reference potential/DC 24 V output	
[3]	+24V_C	DC 24 V input	
[4]	0V24_C	0V24 reference potential – input	
[5]	HT1	Auxiliary terminal for additional voltage levels (without internal function)	0.2 – 10 mm <sup>2</sup>
[6]	HT2	Auxiliary terminal for additional voltage levels (without internal function)	
[7]	L1	Supply system phase 1	
[8]	L2	Supply system phase 2	
[9]	L3	Supply system phase 3	
[10]	PE	PE connection	



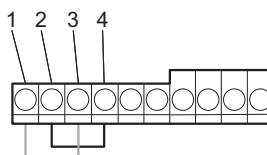
### 2.8.5 DC 24 V supply

The MOVIPRO® is equipped with a DC 24 V output that can be used to supply the MOVIPRO® from the DC link.

To use the DC 24 V supply from the DC link, you must jumper the following terminals in the interface box:

- 1 with 3
- 2 with 4

The following figure shows the wiring for using the DC 24 V supply from the DC link:



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## INFORMATION

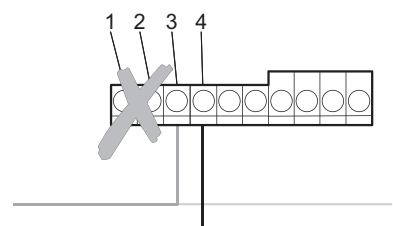


If you use an external DC 24 V backup voltage, do not connect terminals 1 and 2.

To use an external DC 24 V backup voltage, connect it to the following terminals:

- 3
- 4

The following figure shows the wiring for using an external DC 24 V supply:



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## 2.9 Technical data

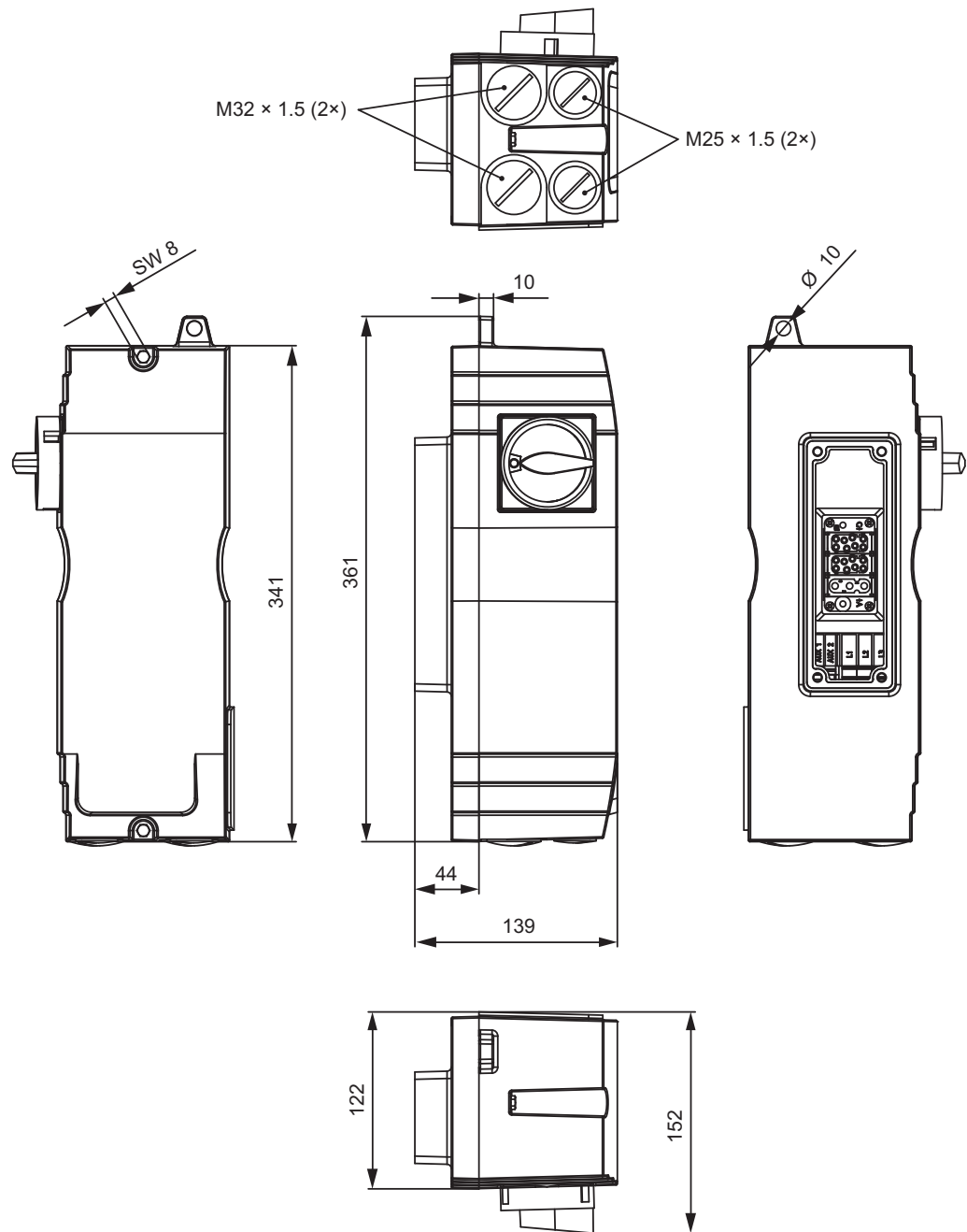
### 2.9.1 Basic device

Interface box						
Description	PZM2xA-A022-M13-00	PZM2xA-A040-M14-00	PZM2xA-A075-M16-00	PZM2xA-A075-D02-00	PZM2xA-A150-D03-00	PZM2xA-A220-D04-00
	2.2 kW	4 kW	7.5 kW	7.5 kW	15 kW	22 kW
	with line and device protection			with disconnection switch		
Ambient temperature	+5 – +40 °C (non-condensing, no moisture condensation)					
Derating Ambient temperature $\vartheta_{amb}$	$P_N$ reduction: 3% $I_N$ per K Up to a max. of 60 °C					
Climate class	EN 60721-3-3, class 3K3					
Storage temperature $\vartheta_L$	-25 – +70 °C					
Degree of protection	IP20, IP54 (in assembled state)					
Mass	2.5 kg					
Dimensions W × H × D	139 mm × 116 mm × 341 mm					
Device output to MOVIPRO®						
Nominal current	5 A	9 A	15 A	16 A	32 A	42 A
Integrated device protection	5 A	9 A	15 A	–	–	–
Maximum switching capacity (IEC, AC 3)	2.2 kW	4 kW	7.5 kW	7.5 kW	15 kW	22 kW
Device input						
Line voltage $V_{line}$	3 AC 380 V – 500 V					
Line frequency $f_{line}$	50 – 60 Hz ±5%					
Terminal cross section power supply	2.5 mm <sup>2</sup> – 10 mm <sup>2</sup> (flexible with conductor end sleeve)					
24 V terminal cross section	1.5 mm <sup>2</sup> – 6 mm <sup>2</sup> (flexible with conductor end sleeve)					
Maximum permitted back-up fuse (gL characteristics)	>60 A			35 A <sup>1)</sup>	50 A <sup>1)</sup>	

1) For UL-compliant installation, also observe the maximum permitted fuse for the connected MOVIPRO®. Always adhere to the smaller value.

### 2.9.2 Dimension drawing

The dimension drawing shows the mechanical dimensions in mm:



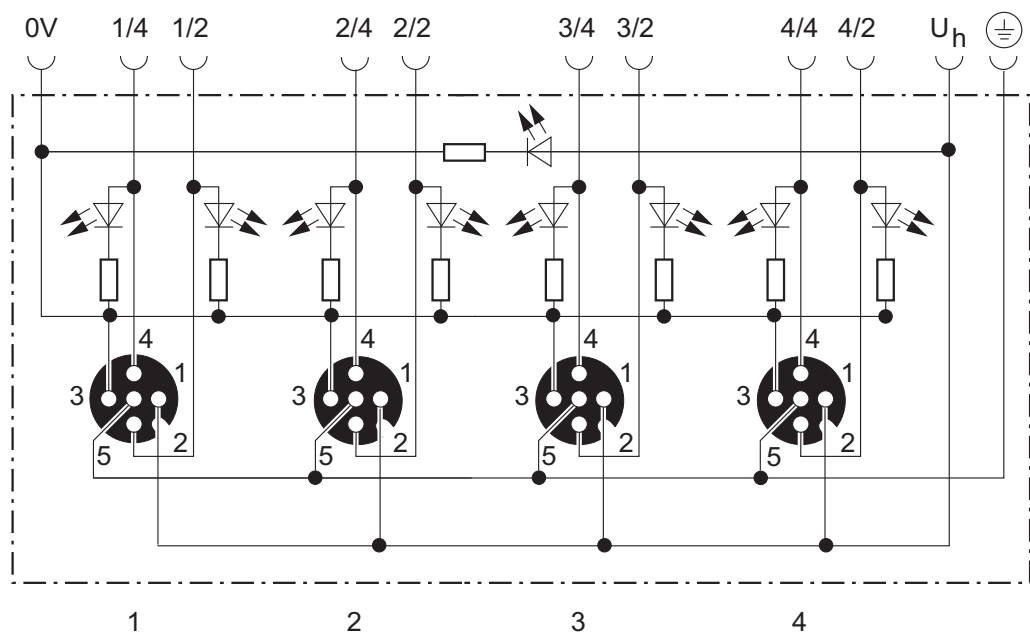
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### 3.1.2 Technical data

Basic device		
Nominal voltage	$V_N$	DC 24 V
Maximum operating voltage	$V_{max}$	DC 30 V
Current carrying capacity		
Per slot		>4 A
Overall		>8 A
Operating voltage display		Green LED
Status display		Yellow LED (signal 1) White LED (signal 2)
Operating current display elements		≤ 5 mA
Degree of protection		IP65 (with screwed plug connectors)
Connection cable		
Ambient temperature		
For fixed installation		-30 – +80 °C
For cable carrier		-5 – +70 °C
Cable type		Main cable suitable for cable carriers

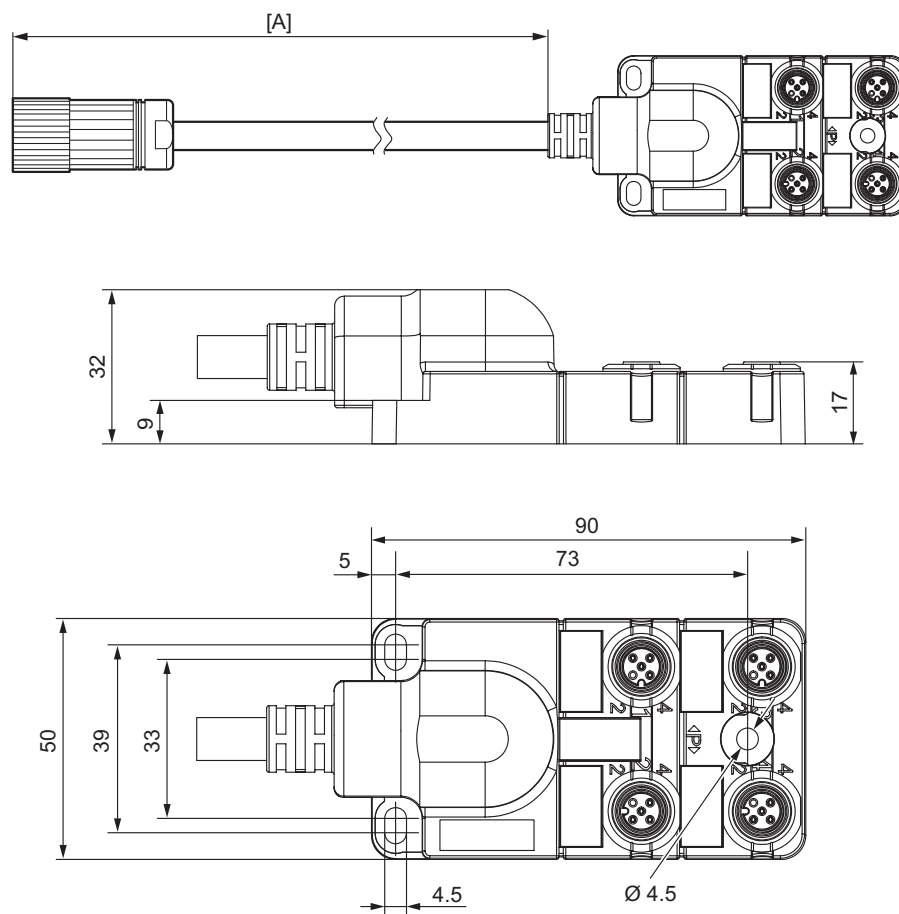
### Wiring



14790252683

**Dimension drawing**

The dimension drawing shows the mechanical dimensions in mm:

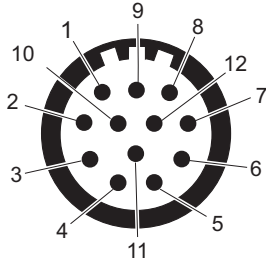


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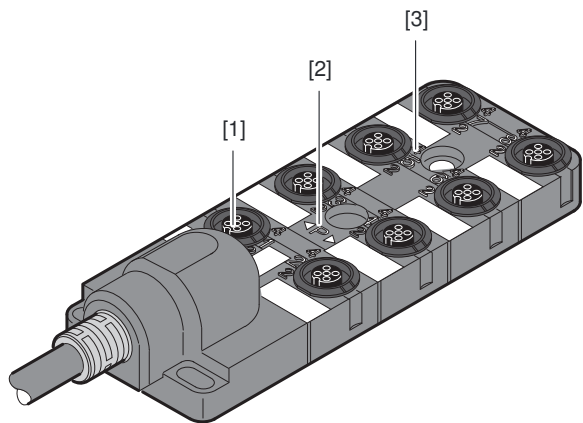
[A] = Cable length



### 3.1.3 Electrical connection

Function		
Signal transmission to a MOVIPRO®		
Connection type		
M23, P insert 12-pole, male, 0°-coded		
Connection image		
		
Assignment		
No.	Name	Function
1	1	Slot 1 – Pin 4
2	2	Slot 1 – Pin 2
3	3	Slot 2 – Pin 4
4	4	Slot 2 – Pin 2
5	5	Slot 3 – Pin 4
6	6	Slot 3 – Pin 2
7	7	Slot 4 – Pin 4
8	8	Slot 4 – Pin 2
9	0V24	0V24 reference potential
10	0V24	0V24 reference potential
11	+24V	DC 24 V output
12	FE	Equipotential bonding / functional earth

3.2 Design with 8 slots



54043196599307403

- [1] M12 slot
- [2] Operating display LED
- [3] Status display of inputs/outputs

3.2.1 Part numbers

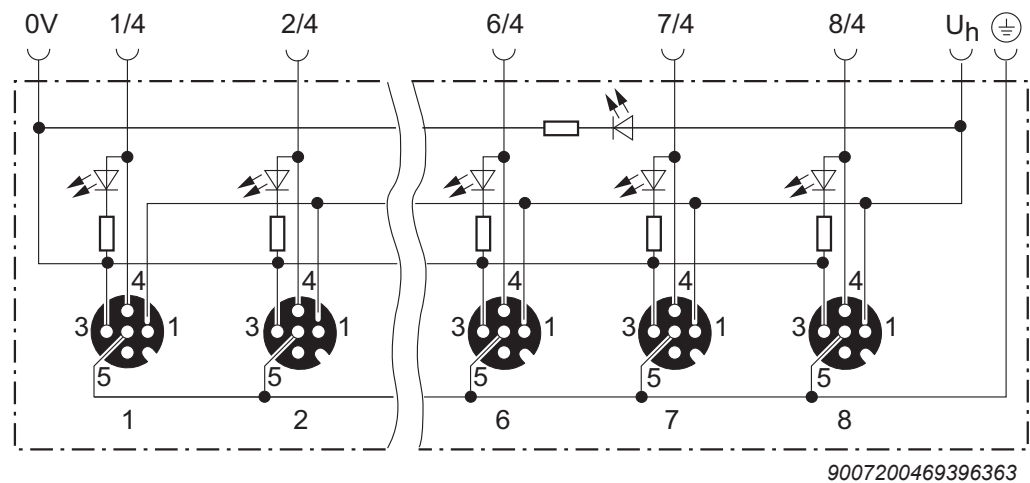
Cables	Length/installation type	Component
<b>Length 1 m:</b> Part number 13309269 <b>Length 2 m:</b> Part number 13309277 <b>Length 3 m:</b> Part number 13309285 <b>Length 5 m:</b> Part number 13309293 <b>Length 10 m:</b> Part number 13309307 Cable design: (3X0.75+8X0.34)	Fixed length	—

M23, 12-pin, male, 0°-coded ↔ sensor/actuator box with 8 slots M12

### 3.2.2 Technical data

Basic device		
Nominal voltage	$V_N$	DC 24 V
Maximum operating voltage	$V_{max}$	DC 30 V
Current carrying capacity		
Per slot		>4 A
Overall		>8 A
Operating voltage display		Green LED
Status display		Yellow LED (signal 1)
Operating current display elements		$\leq 5$ mA
Degree of protection		IP65 (with screwed plug connectors)
Connection cable		
Ambient temperature		
For fixed installation		-30 – +80 °C
For cable carrier		-5 – +70 °C
Cable type		Main cable suitable for cable carriers

### Wiring

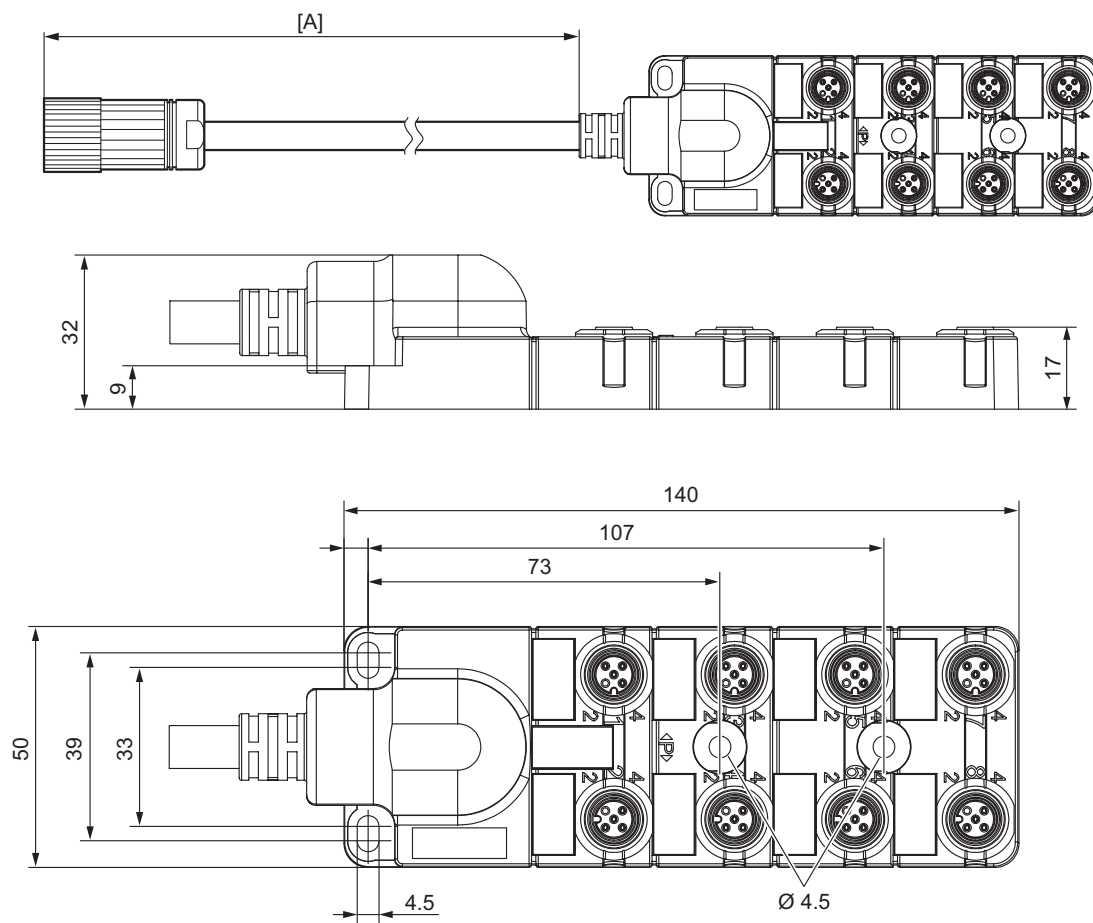


### 3 Sensor/actuator box

Design with 8 slots

#### Dimension drawing

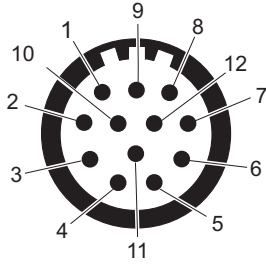
The dimension drawing shows the mechanical dimensions in mm:



18014399580341515

[A] = Cable length

### 3.2.3 Electrical connection

Function		
Signal transmission to a MOVIPRO®		
Connection type		
M23, P insert 12-pole, male, 0°-coded		
Connection image		
		
Assignment		
No.	Name	Function
1	1	Slot 1 – Pin 4
2	2	Slot 2 – Pin 4
3	3	Slot 3 – Pin 4
4	4	Slot 4 – Pin 4
5	5	Slot 5 – Pin 4
6	6	Slot 6 – Pin 4
7	7	Slot 7 – Pin 4
8	8	Slot 8 – Pin 4
9	0V24	0V24 reference potential
10	0V24	0V24 reference potential
11	+24V	DC 24 V output
12	FE	Equipotential bonding / functional earth

## 4 External braking resistors

### 4.1 Description



#### ⚠ WARNING

Danger of electric shock due to high DC voltage in the supply lines (about DC 900 V).

Severe or fatal injuries.

- Only use cables provided by SEW-EURODRIVE.
- Install the cables according to the instructions.



#### ⚠ WARNING

Risk of burns due to hot surfaces. Braking resistors reach a temperature of up to 250 °C under load.

Serious injuries.

- Select a suitable installation location and observe the minimum clearance.
- Provide for covers to secure hot surfaces.
- Install the protection devices according to the regulations.
- Check the protection devices on a regular basis.

#### NOTICE

In case of incorrect assignment of the inverters, an overload may occur at the braking resistor and damage the braking resistor.

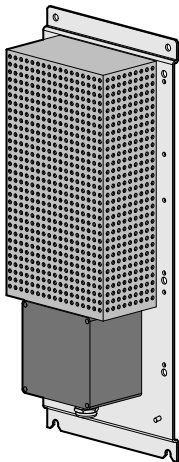
Damage to braking resistor.

- Observe the assignment of the braking resistor to the inverter and the project planning guidelines.

For regenerative operation, an external braking resistor is connected to MOVIPRO®. Observe the following technical data regarding the connection.



Flat-type resistors have internal thermal protection (fuse cannot be replaced) that interrupts the current circuit in the event of overload. Additional components for thermal monitoring are not necessary. The following figure shows an example of a size 1 braking resistor:



9007201338768011

4.2 Mechanical installation

4.2.1 Mounting position

The following table shows permitted and not permitted mounting positions:

Braking resist-ors	Mounting positions			
BW100-004-00				
BW033-012-01 BW050-008-01				
BW017-024-02 BW014-028-02				

4.2.2 Minimum clearance

Calculate the mounting surfaces, the touch guard and the clearance according to the high surface temperature. Observe a minimum clearance of 30 mm. Refer to the in-struction leaflet supplied with the corresponding braking resistor for the required min-imum clearance dimensions.

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### 4.2.3 Mounting

#### Required materials

- A mounting plate, for example, to observe the required minimum distances and clearances
- Suitable mounting and safety elements

#### Procedure

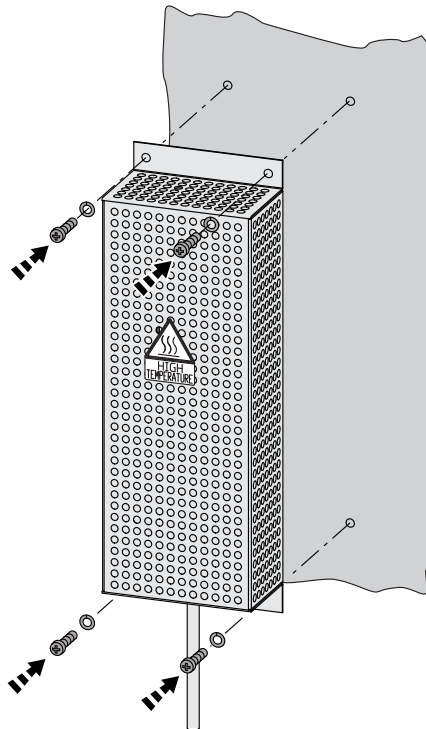
You can mount the braking resistors directly over the retaining plates.

Proceed as follows:

1. For the bore dimensions, refer to the dimension drawings in the "Technical data" (→ 33) chapter.
2. Drill the holes in the appropriate places.

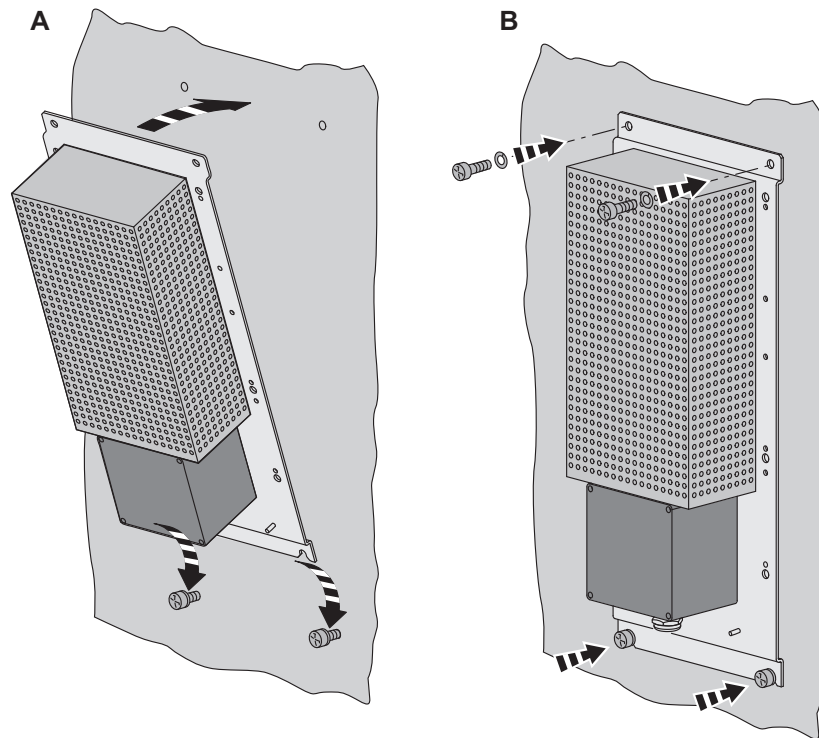
The following figures show how to mount the braking resistors:

#### Size 0



2110859403

Sizes 1 and 2



9007201365603467

3. Ground the housing of the braking resistor.

#### 4.2.4 Mounting with mounting brackets (sizes 1 and 2)

##### Required materials

- "Mounting bracket kit, BW" accessories (part number 18229689):
  - 4 mounting brackets
  - 8 M5 × 12 pan head screws

##### Procedure

### INFORMATION

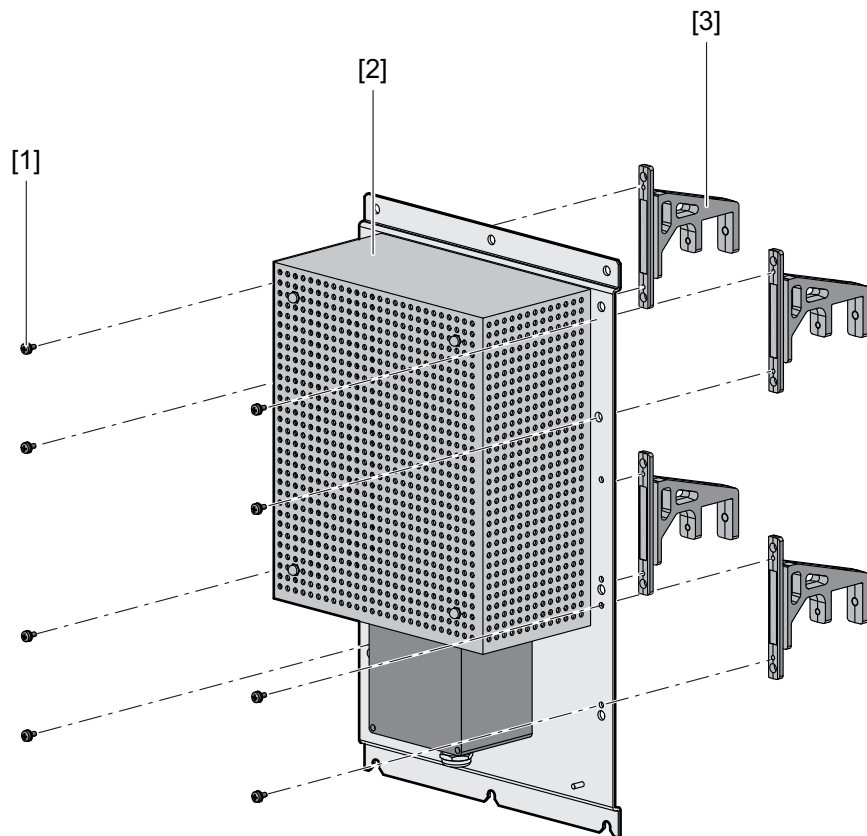


For more information on how to attach the brackets to square pipes or bars, refer to chapter "Mounting accessories" (→ 39).

You can use mounting brackets to fasten all braking resistors that are sizes 1 and 2.

Proceed as follows:

1. Use the M5 × 12 pan head screws [1] to attach the mounting brackets [3] to the braking resistor [2].



2091901579

- [1] M5 × 12 pan head screws  
 [2] Braking resistor  
 [3] Mounting bracket

2. Ground the housing of the braking resistor.

### 4.3 Technical data

#### 4.3.1 Braking resistors – assignment

The following table shows the assignment of the external braking resistors to the different MOVIPRO® devices:

Braking resistor	Part number	Size	Terminal cross section	MOVIPRO®					
				Up to 2.2 kW	Up to 4 kW	Up to 7.5 kW	Up to 11 kW	Up to 15 kW	Up to 22 kW
BW100-004-00	17962188	Size 0	pre-assembled connection cable	•	•	•			
BW050-008-01	17962242	Size 1	6 mm <sup>2</sup>			•	•	•	•
BW033-012-01	17962196	Size 1	6 mm <sup>2</sup>				•	•	•
BW017-024-02	17962218	Size 2	6 mm <sup>2</sup>					•	•
BW014-028-02	17962226	Size 2	6 mm <sup>2</sup>						•

#### 4.3.2 Technical data according to IEC

Braking resistor						
		BW100-004-00	BW050-008-01	BW033-012-01	BW017-024-02	BW014-028-02
Function		Carrying off of regenerative energy				
Degree of protection		IP65				
Mounting position		Flat-type resistor				
Resistance		100 Ω	50 Ω	33.3 Ω	16.7 Ω	14.3 Ω
Continuous braking power	100% cdf	0.4 kW	0.8 kW	1.2 kW	2.4 kW	2.8 kW
	50% cdf	0.8 kW	1.6 kW	2.4 kW	4.8 kW	5.6 kW
	25% cdf	1.5 kW	3 kW	4.5 kW	9 kW	10.5 kW
	12% cdf	2.2 kW	4.4 kW	6.6 kW	13.2 kW	15.4 kW
	6% cdf	3.6 kW	7.2 kW	10.8 kW	21.6 kW	25.2 kW
	3% cdf	6 kW	12 kW	18 kW	36 kW	42 kW
	2% cdf	7.7 kW	15.4 kW	23.1 kW	46.2 kW	53.9 kW
	1% cdf	14.4 kW	28.8 kW	43.2 kW	86.4 kW	100.8 kW
Dimensions W × H × D		320 × 70 × 106 mm	550 × 105 × 230 mm		550 × 158 × 330 mm	

# 4 External braking resistors

Technical data

## 4.3.3 Technical data according to UL

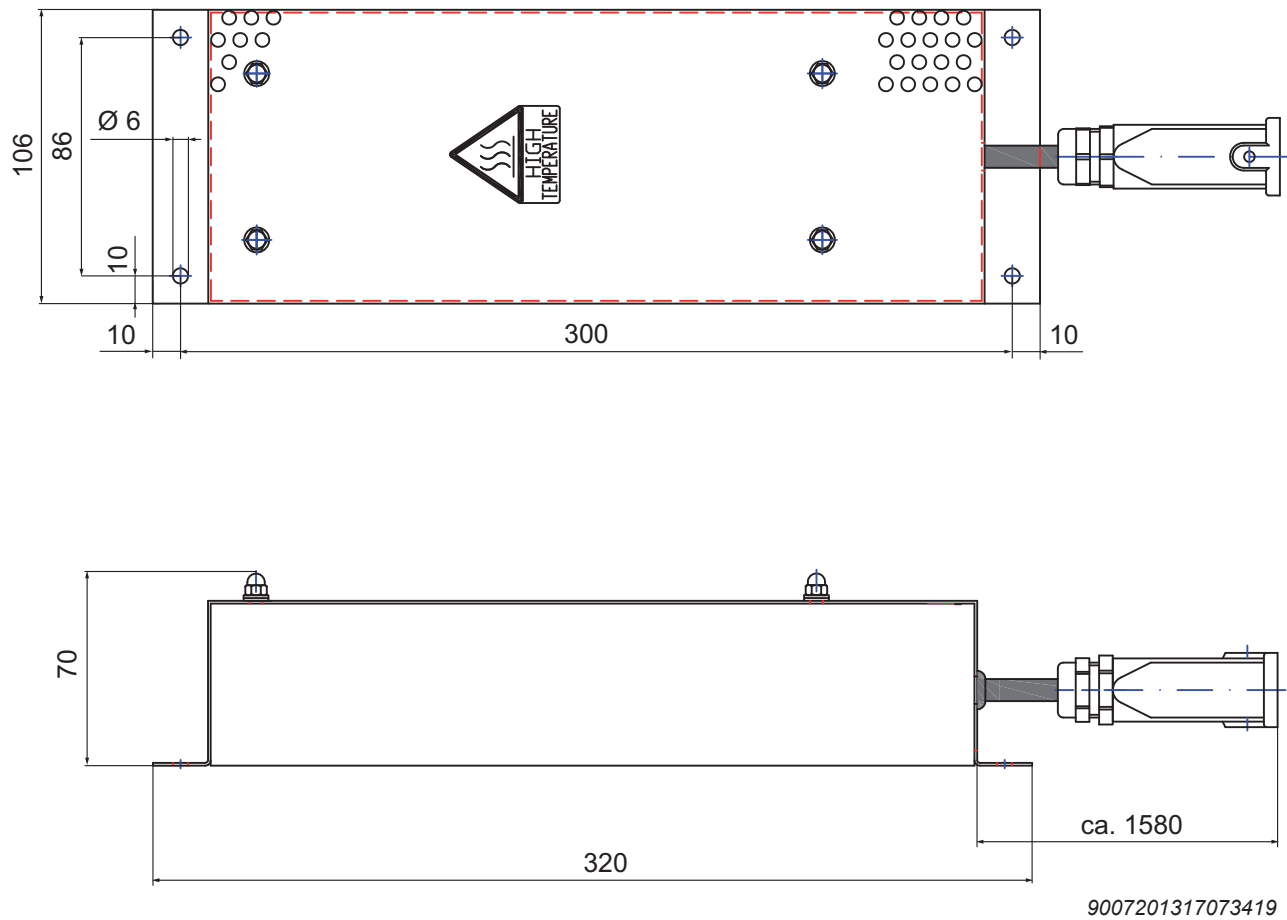
		Braking resistor				
		BW100-004 -00	BW050-008 -01	BW033-012 -01	BW017-024 -02	BW014-028 -02
Function		Carrying off of regenerative energy				
Degree of protection		IP65				
Mounting position		Flat-type resistor				
Resistance		100 Ω	50 Ω	33.3 Ω	16.7 Ω	14.3 Ω
Continuous braking power	100% cdf	0.24 kW	0.48 kW	0.72 kW	1.44 kW	1.68 kW
	50% cdf	0.5 kW	1 kW	1.5 kW	3 kW	3.5 kW
	25% cdf	1 kW	2 kW	3 kW	6 kW	7 kW
	12% cdf	2.2 kW	4.4 kW	6.6 kW	13.2 kW	15.4 kW
	6% cdf	3.6 kW	7.2 kW	10.8 kW	21.6 kW	25.2 kW
	3% cdf	6 kW	12 kW	18 kW	36 kW	42 kW
	2% cdf	7.7 kW	15.4 kW	23.1 kW	46.2 kW	53.9 kW
	1% cdf	14.4 kW	28.8 kW	43.2 kW	86.4 kW	100.8 kW
Dimensions W × H × D		320 × 70 × 106 mm	550 × 105 × 230 mm		550 × 158 × 330 mm	

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#### 4.3.4 Dimension drawings

##### Size 0 braking resistor

The dimension drawing shows the mechanical dimensions in mm:

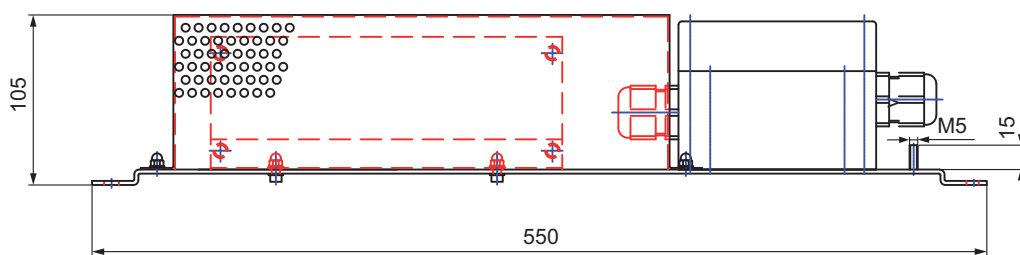
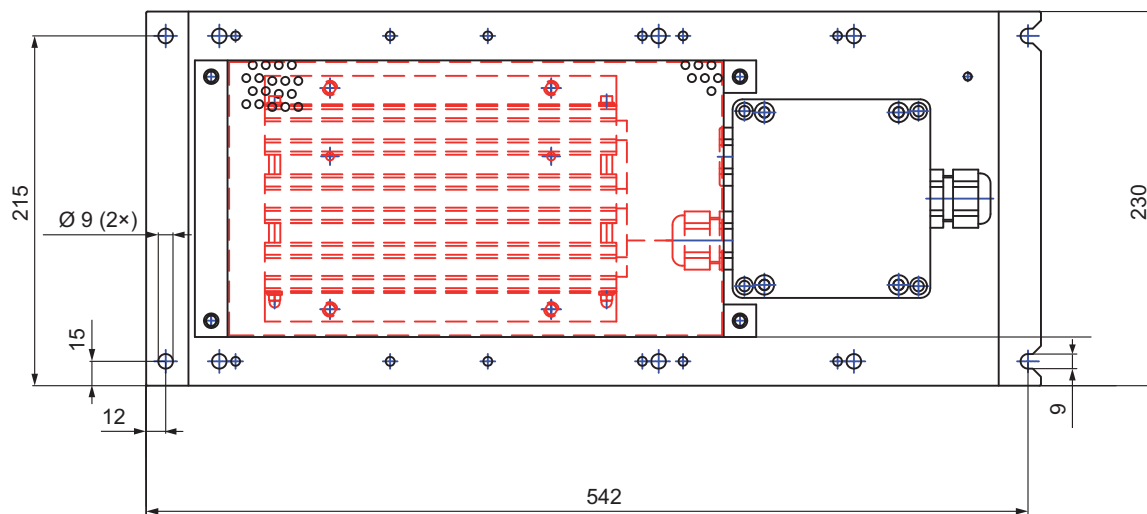


# 4 External braking resistors

## Technical data

### Size 1 braking resistors

The dimension drawing shows the mechanical dimensions in mm:

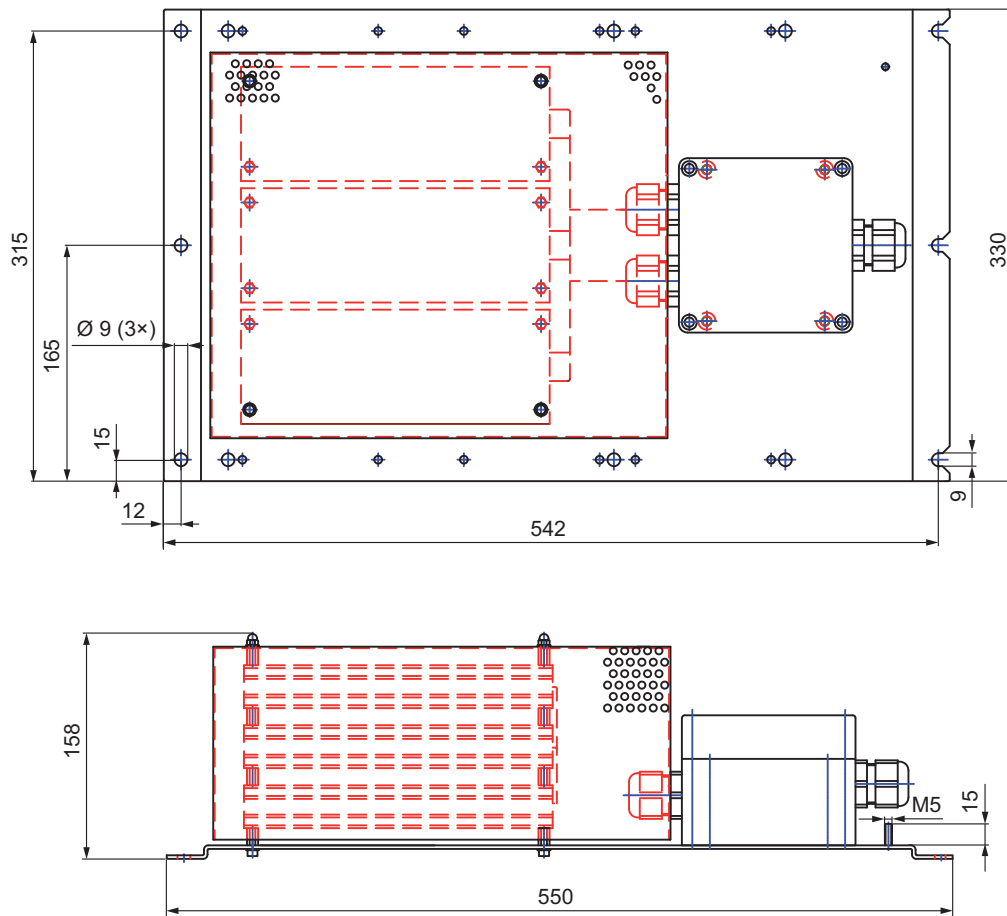


9007201317080331



## Size 2 braking resistors

The dimension drawing shows the mechanical dimensions in mm:



9007201317069579

## 5 Jumper plug

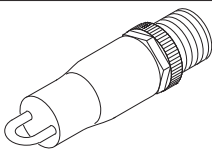


### **⚠ WARNING**

Safe disconnection of the device is not possible when the jumper plug is used.  
Severe or fatal injuries.

- Use the jumper plug only if the device is not used to perform any safety functions according to DIN EN ISO 13849-1.

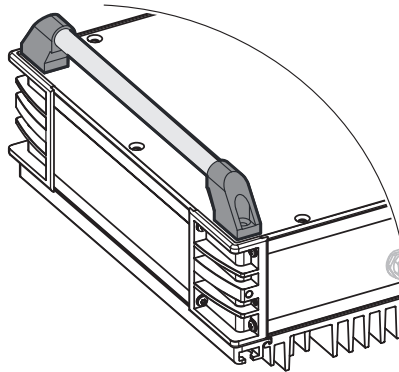
The jumper plug can be connected to the X5502 port of MOVIPRO®. The jumper plug deactivates the safety functions of the MOVIPRO®. You can use this function, for example, when you want to move a drive in manual mode for test purposes at startup.

Jumper plug	Part number
	11747099

## 6 Mounting accessories

### 6.1 Handles

You can equip the MOVIPRO® with handles for easier handling. The handles are available in two lengths, depending on the size of MOVIPRO®.



2049840395

Handles	Part number	MOVIPRO® housing height
Handle option 270 (2 pieces with 4 retaining screws)	18222781	300 mm
Handle option 390 (2 pieces with 4 retaining screws)	18222803	420 mm

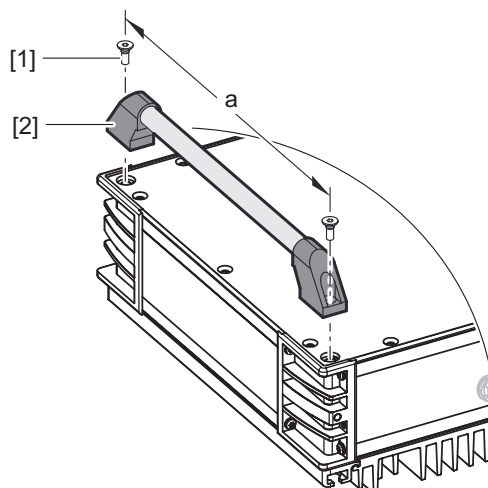
#### 6.1.1 Mounting

Proceed as follows:

1. Tighten both countersunk screws of each handle with a maximum tightening torque of 3.5 Nm.

# 6 Mounting accessories

## Handles



1531247243

[1] M8 × 20 countersunk screw (DIN EN ISO 10642) a

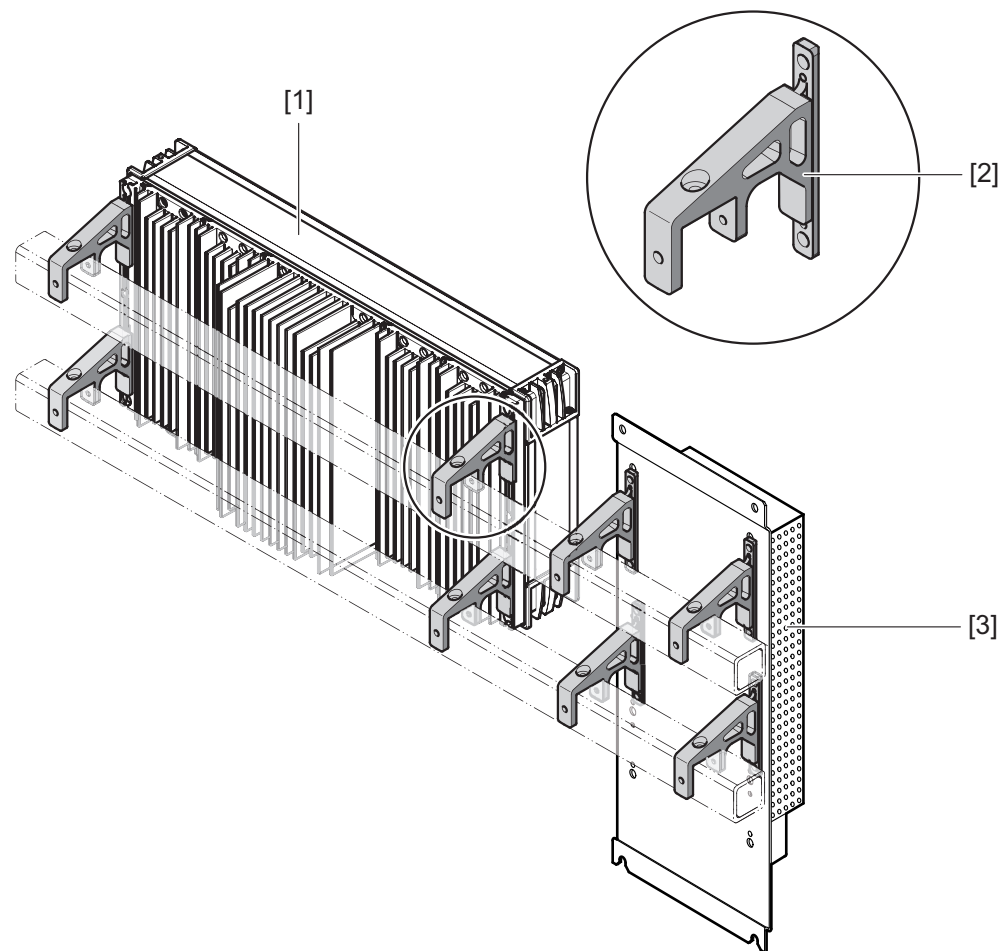
[2] Handle

Handle option =  
270 mm

Handle option =  
390 mm

## 6.2 Mounting brackets

You can use mounting brackets to mount the MOVIPRO® and braking resistors safely and easily.



9007199913283339

- [1] MOVIPRO®
- [2] Mounting bracket
- [3] Braking resistor

	Mounting bracket	Part number
MOVIPRO®	Mounting bracket kit, large (4 pieces)	12708305
Braking resistors sizes 1 and 2	Mounting bracket kit, BW (4 pieces)	18229689

### 6.2.1 Mounting

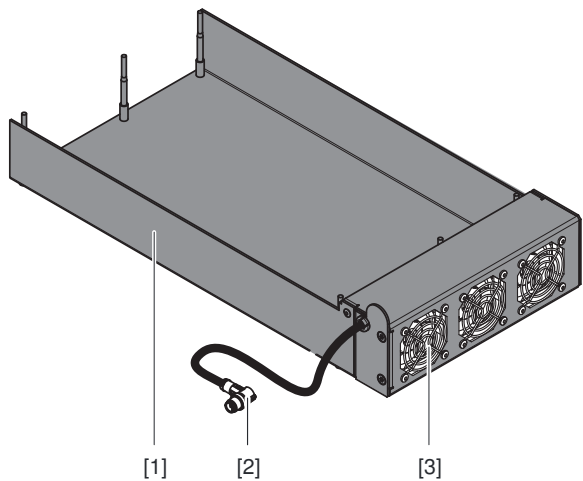
Refer to the operating instructions for additional information on mounting the MOVIPRO® device. For additional information on mounting the braking resistors, refer to the "Mechanical installation" (→ 29) chapter.

7 Fan

The fan subassembly is connected to the MOVIPRO® externally. The fans are controlled automatically depending on the temperature. The fans are encapsulated, and their degree of protection is IP54.

The fan subassembly is mandatory for MOVIPRO® devices with a power rating of 15 kW and higher; it is included automatically in the configuration here. For devices with 11 kW, you can select the fan subassembly as an option.

The following figure shows the fan subassembly:



45035996953718155

- [1] Air baffle
- [2] Connection cable
- [3] Axial fan

	Part number
Fan assembly	12709700

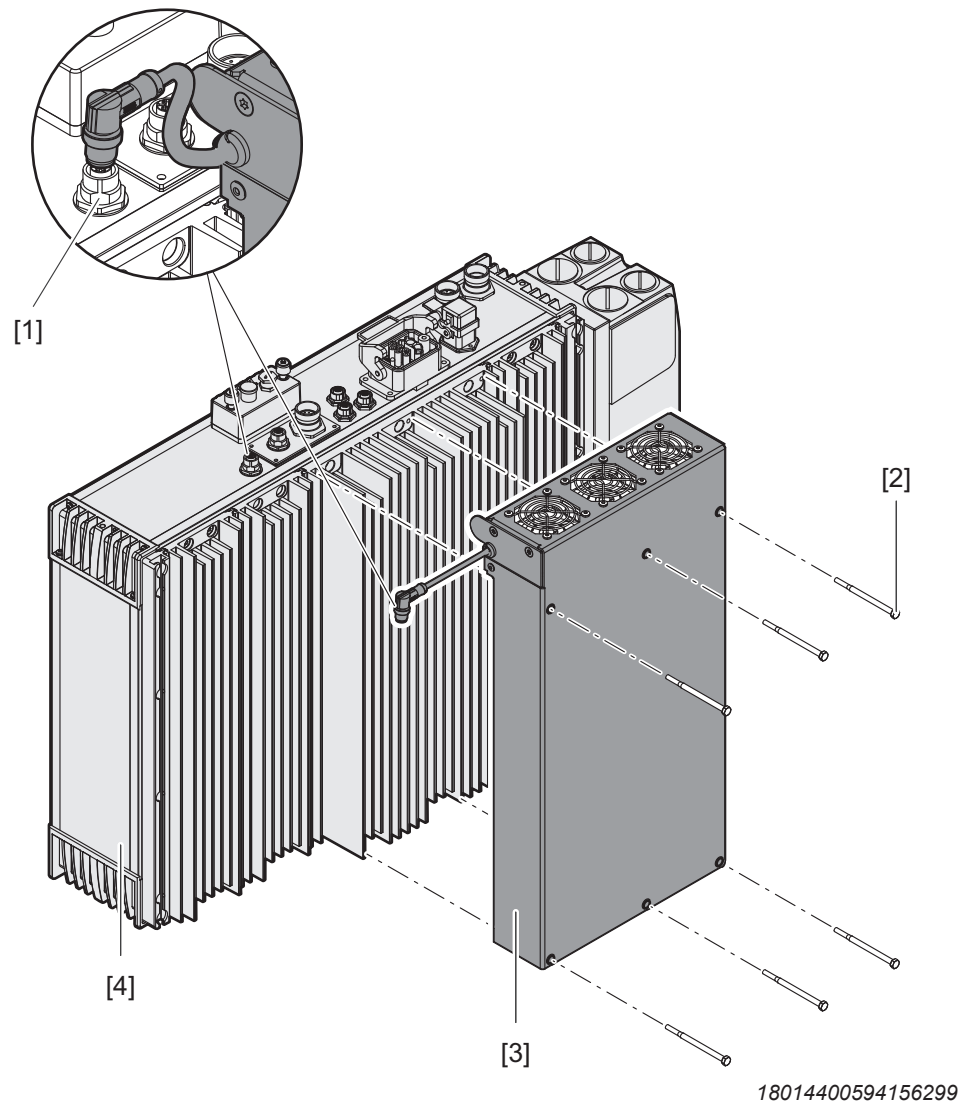
## 7.1 Mechanical installation

### 7.1.1 Required materials

- 6 screws M5 × 75
- 6 serrated lock washers

### 7.1.2 Procedure

1. Use the M5 × 75 screws [2] and the serrated lock washers to mount the fan sub-assembly [3].



- |  |                  |
|--|------------------|
| [1] MOVIPRO® connection                      | [3] Fan assembly |
| [2] M5 × 75 screws and serrated lock washers | [4] MOVIPRO®     |

2. Plug the plug connector of the fan subassembly cable onto the X5111 port [1] on MOVIPRO® [4].

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