

7 MOVIMOT® mounting close to the motor (remote)

7.1 Description

The following figure shows the MOVIMOT® design for mounting close to the motor (left: size MM03 to MM15, right: size MM22 to MM40):

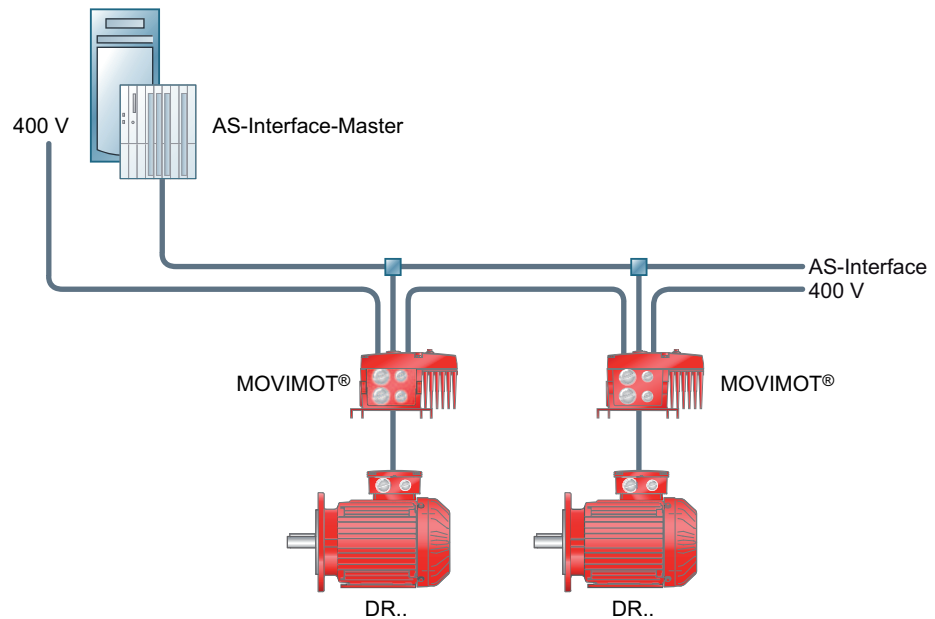


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- The P2.A option is used to mount the MOVIMOT® inverter in close proximity to the motor (i.e. separate from the motor).
- The inverter is connected to the "assigned motor" (→ 301) using a prefabricated "hybrid cable" (→ 304).
- MOVIMOT® with option P2.A is with IP65 degree of protection.

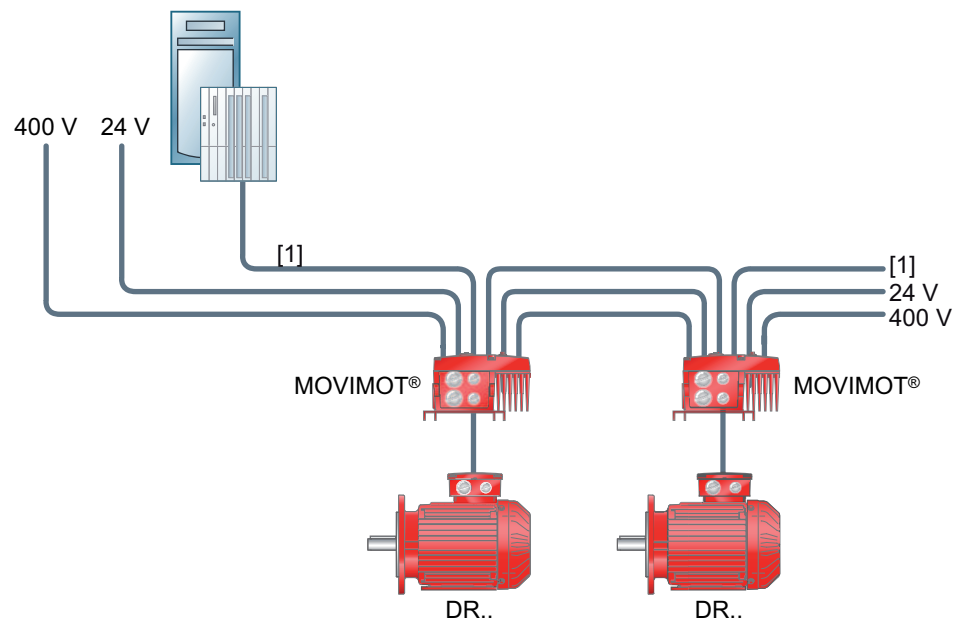
7.2 Installation topology of MOVIMOT®, mounting close to the motor

The following figure shows the basic installation topology of the MOVIMOT® drive with AS-Interface when mounted close to the motor (DC 24 V supply via AS-Interface):



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The following figure shows the basic installation topology of the MOVIMOT® drive when mounted close to the motor:

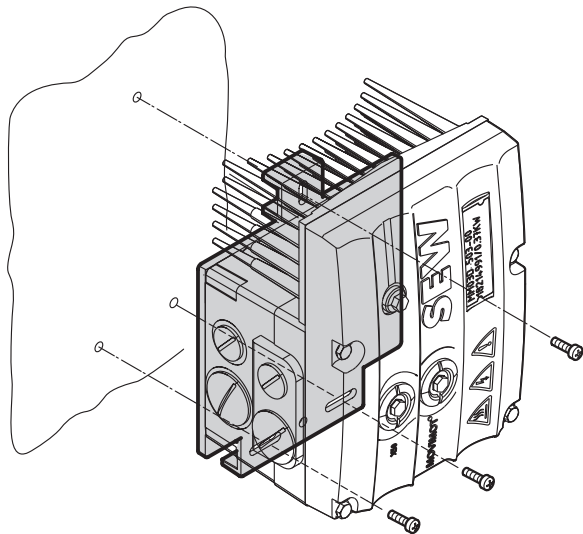


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[1] Control: Binary (+ RS485)

7.3 Available variants

The following figure shows an example of the P21A option for MOVIMOT® sizes MM03 to MM15:

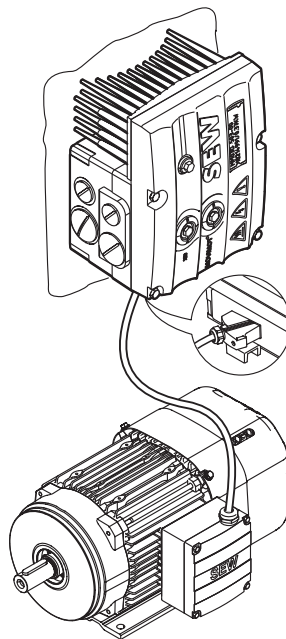


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The following designs are available:

Connection to motor	MOVIMOT® size	1)	MOVIMOT® stand-ard design	MOVIMOT® with in-tegrated AS-inter-face
	MM03 to MM15	⌒	MM..D-503-00/0/ P21A/ RO1A/APG4	MM..D-503-00/0/ P21A/ RR3A/AVSK/ APG4/MLK
		△	MM..D-503-00/1/ P21A/ RO1A/APG4	MM..D-503-00/1/ P21A/ RR3A/AVSK/ APG4/MLK
	MM22 to MM40	⌒	MM..D-503-00/0/ P22A/ RO2A/APG4	MM..D-503-00/0/ P22A/ RR4A/AVSK/ APG4/MLK
		△	MM..D-503-00/1/ P22A/ RO2A/APG4	MM..D-503-00/1/ P22A/ RR4A/AVSK/ APG4/MLK

1) Connection type of connected motor

7.4 Type designation of MOVIMOT® MM..D, mounting close to the motor

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7.4.1 Type designation

The following table shows the type designation for the MOVIMOT® inverter **MM15D-503-00/0/P21/RO1A/PG4** with mounting close to the motor:

MM15D-503-00	MOVIMOT® inverter
/	
0	Connection type 0 = Δ 1 = Δ
/	
P21A	Adapter for mounting close to the motor
/	
RO1A	Connection box design
/	
APG4	Plug connector for connection to motor

7.4.2 Ordering of an integrated braking resistorMM22D-503-00/0/**BW..**/P22A/RO2A/PG4

MM03 – MM15: **BW1**
MM22 – MM40: **BW2**

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For the regenerative current-carrying capacity of the braking resistors, refer to chapter "4Q operation with integrated BW.. braking resistor" (→ 358).

7.5 Motor assignment

7.5.1 Motor requirements

The following table lists the basic requirements and restrictions for assigned motors. Observe these specifications when ordering the drives assigned to the MOVIMOT® drive (design for mounting close to the motor):

Characteristics	Requirements for the assigned AC motor		
Permitted motors	Only motors listed in the following chapters are approved: "Motor assignment 1400 min-1" (→ 301) and "Motor assignment 2900 min-1" (→ 302).		
Approved nominal voltage	Depending on motor series:		
	Motor [type]	Nominal voltage [V]	Line frequency [Hz]
	DRS..	230/400	50
	DRE..	230/400	50
	DRS../DRE..	230/400	50
	DRN..	230/400	50
Permitted brakes	Depending on motor series:		
	Motor [type]	Standard brake [type]	Optional brake [type]
	DR63L4	BR03	–
	DRS71S4 DRE80S4	BE05	BE1
	DRS71M4 DRS80S4 DRE80M4 DRN80M4	BE1	BE05
	DRS80M4 DRE90M4 DRN90S4	BE2	BE1
	DRS90M4 DRE90L4 DRN90L4	BE2	BE1
	DRS90L4 DRE100M4 DRE100L4 DRN100LS4	BE5	BE2

7 MOVIMOT® mounting close to the motor (remote)

Motor assignment

Characteristics	Requirements for the assigned AC motor		
	DRS100M4 DRS100L4 DRS100LC4 DRE100LC4 DRN100L4	BE5	BE2
	DRE132S4 DRN112M4	BE5	BE11
Preferred brake voltage	MM..D-503, BG 1 (MM03.. – MM15..)		230 V
	MM..D-503, BG 2 (MM22.. – MM40..)		120 V
Brake rectifier	Always order the assigned motor without brake rectifier .		
Permitted plug connectors	MM../P2.A/RO.A/APG4: • ASB4 plug connector • ISU4 plug connector See chapter "Hybrid cables" (→ 304) for additional information.		
Permitted motor protection	SEW-EURODRIVE recommends to always order the motor with TH thermostat (bimetallic switch). Motor protection can also be implemented in the Expert mode of the MOVIMOT® inverter.		
Permitted encoder system	EI76 incremental encoder (can be evaluated only via fieldbus interface with integrated MQ.. minicontroller).		

21914796/EN – 09/2015

7.5.2 Motor assignment 1400 min⁻¹

Power [kW]	Motor (230/400 V, 50 Hz) 人	MOVIMOT® with option P.2A
0.25	DR63L4/TH. DRE80S4/TH.	MM03D-503-00/0/BW1/P21A.. ¹⁾
	DR63L4/BE/TH. DRE80S4/BE/TH.	MM03D-503-00/0/P21A.. ¹⁾
0.37	DRS71S4/TH.	MM03D-503-00/0/BW1/P21A..
	DRE80S4/TH.	MM05D-503-00/0/BW1/P21A.. ¹⁾
	DRS71S4/BE/TH.	MM03D-503-00/0/P21A..
	DRE80S4/BE/TH.	MM05D-503-00/0/P21A.. ¹⁾
0.55	DRS71M4/TH.	MM05D-503-00/0/BW1/P21A..
	DRE80M4/TH.	MM07D-503-00/0/BW1/P21A.. ¹⁾
	DRS71M4/BE/TH.	MM05D-503-00/0/P21A..
	DRE80M4/BE/TH.	MM07D-503-00/0/P21A.. ¹⁾
0.75	DRS80S4/TH.	MM07D-503-00/0/BW1/P21A..
	DRE80M4/TH.	MM11D-503-00/0/BW1/P21A.. ¹⁾
	DRN80M4/TH.	
	DRS80S4/BE/TH.	MM07D-503-00/0/P21A..
1.1	DRE80M4/BE/TH.	MM11D-503-00/0/P21A.. ¹⁾
	DRN80M4/BE/TH.	
	DRS80M4/TH.	MM11D-503-00/0/BW1/P21A..
	DRE90M4/TH.	MM15D-503-00/0/BW1/P21A.. ¹⁾
1.5	DRN90S4/TH.	
	DRS80M4/BE/TH.	MM11D-503-00/0/P21A..
	DRE90M4/BE/TH.	MM15D-503-00/0/P21A.. ¹⁾
	DRN90S4/BE/TH.	
2.2	DRS90M4/TH.	MM15D-503-00/0/BW1/P21A..
	DRE90L4/TH.	MM22D-503-00/0/BW2/P22A.. ¹⁾
	DRN90L4/TH.	
	DRS90M4/BE/TH.	MM15D-503-00/0/P21A..
2.2	DRE90L4/BE/TH.	MM22D-503-00/0/P22A.. ¹⁾
	DRN90L4/BE/TH.	
	DRS90L4/TH.	MM22D-503-00/0/BW2/P22A..
	DRE100M4/TH.	MM30D-503-00/0/BW2/P22A.. ¹⁾
2.2	DRN100LS4/TH.	
	DRS90L4/BE/TH.	MM22D-503-00/0/P22A..
	DRE100M4/BE/TH.	MM30D-503-00/0/P22A.. ¹⁾
	DRN100LS4/BE/TH.	

7 MOVIMOT® mounting close to the motor (remote)

Motor assignment

Power [kW]	Motor (230/400 V, 50 Hz) 人	MOVIMOT® with option P.2A
3.0	DRS100M4/TH.	MM30D-503-00/0/BW2/P22A..
	DRE100LC4/TH.	MM40D-503-00/0/BW2/P22A.. ¹⁾
	DRN100L4/TH.	
	DRS100M4/BE/TH.	MM30D-503-00/0/P22A..
	DRE100LC4/BE/TH.	MM40D-503-00/0/P22A.. ¹⁾
	DRN100L4/BE/TH.	
4.0	DRS100LC4/TH.	MM40D-503-00/0/BW2/P22A..
	DRE132S4/TH.	
	DRN112M4/TH.	
	DRE100LC4/BE/TH.	MM40D-503-00/0/P22A..
	DRE132S4/BE/TH.	
	DRN112M4/BE/TH.	

1) Combination with increased short-term torque

7.5.3 Motor assignment 2900 min⁻¹

Power [kW]	Motor (230/400 V, 50 Hz) Δ	MOVIMOT® with option P2A
0.37	DR63L4/TH	MM03D-503-00/1/BW1/P21A..
	DRE80S4/TH	MM05D-503-00/1/BW1/P21A.. ¹⁾
	DR63L4/BR/TH.	MM03D-503-00/1/P21A..
	DRE80S4/BR/TH.	MM05D-503-00/1/P21A.. ¹⁾
0.55	DRS71S4/TH.	MM05D-503-00/1/BW1/P21A..
	DRE80S4/TH.	MM07D-503-00/1/BW1/P21A.. ¹⁾
	DRS71S4/BE/TH.	MM05D-503-00/1/P21A..
	DRE80S4/BE/TH.	MM07D-503-00/1/P21A.. ¹⁾
0.75	DRS71M4/TH.	MM07D-503-00/1/BW1/P21A..
	DRE80M4/TH.	MM11D-503-00/1/BW1/P21A.. ¹⁾
	DRS71M4/BE/TH.	MM07D-503-00/1/P21A..
	DRE80M4/BE/TH.	MM11D-503-00/1/P21A.. ¹⁾
1.1	DRS80S4/TH.	MM11D-503-00/1/BW1/P21A..
	DRE80M4/TH.	MM15D-503-00/1/BW1/P21A.. ¹⁾
	DRN80M4/TH.	
	DRS80S4/BE/TH.	MM11D-503-00/1/P21A..
	DRE80M4/BE/TH.	MM15D-503-00/1/P21A.. ¹⁾
	DRN80M4/BE/TH.	

21914796/EN – 09/2015

Power [kW]	Motor (230/400 V, 50 Hz) ^Δ	MOVIMOT® with option P2A
1.5	DRS80M4/TH.	MM15D-503-00/1/BW1/P21A..
	DRE90M4/TH.	MM22D-503-00/1/BW2/P22A.. ¹⁾
	DRN90S4/TH.	
	DRS80M4/BE/TH.	MM15D-503-00/1/P21A..
	DRE90M4/BE/TH.	MM22D-503-00/1/P22A.. ¹⁾
	DRN90S4/BE/TH.	
2.2	DRS90M4/TH.	MM22D-503-00/1/BW2/P22A..
	DRE90L4/TH.	MM30D-503-00/1/BW2/P22A.. ¹⁾
	DRN90L4/TH.	
	DRS90M4/BE/TH.	MM22D-503-00/1/P22A..
	DRE90L4/BE/TH.	MM30D-503-00/1/P22A.. ¹⁾
	DRN90L4/BE/TH.	
3.0	DRS90L4/TH.	MM30D-503-00/1/BW2/P22A..
	DRE100M4/TH.	MM40D-503-00/1/BW2/P22A.. ¹⁾
	DRN100LS4/TH.	
	DRS90S4/BE/TH.	MM30D-503-00/1/P22A..
	DRE100M4/BE/TH.	MM40D-503-00/1/P22A.. ¹⁾
	DRN100LS4/BE/TH.	
4.0	DRS100M4/TH.	
	DRE100LC4/TH.	MM40D-503-00/1/BW2/P22A..
	DRN100L4/TH.	
	DRS100M4/BE/TH.	
	DRE100LC4/BE/TH.	MM40D-503-00/1/P22A..
	DRN100L4/BE/TH.	

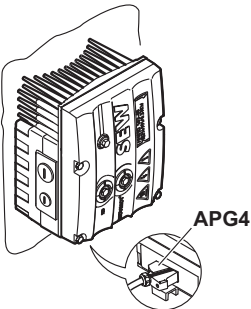
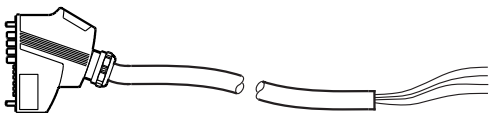
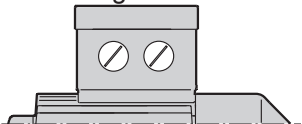
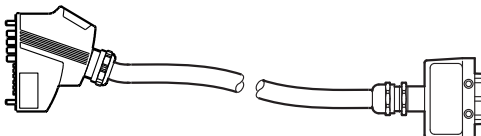
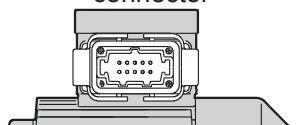
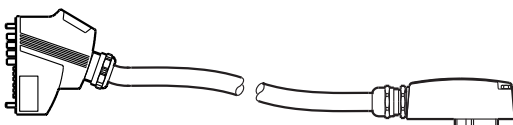
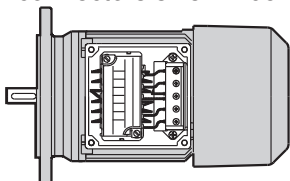
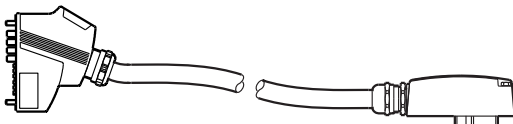
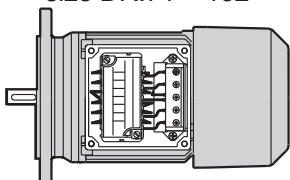
1) Combination with increased short-term torque

7 MOVIMOT® mounting close to the motor (remote)

Hybrid cables

7.6 Hybrid cables

7.6.1 Connection between MOVIMOT® and motor when mounted close to the motor

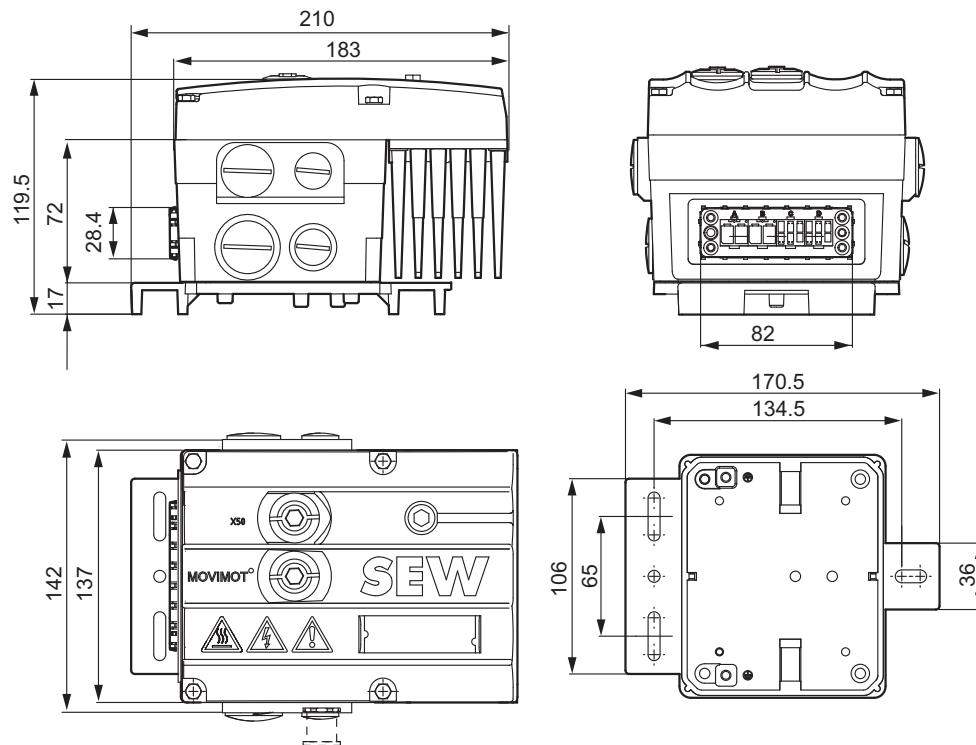
MOVIMOT® inverter	Hybrid cables	Drive
MM../P2.A/RO.A/ APG4 	Part number DR.71 – DR.100: 01867423 Part number DR.112 – DR.132: 18116620 	AC motors with cable glands 
	Part number: 05930766 	AC motors with ASB4 plug connector 
	Part number: 05932785 (∧) Part number: 08163251 (△) 	AC motors with ISU4 plug connectors size DR63 
	Part number: 05937558 (∧) Part number: 0816326X (△) 	AC motors with ISU4 plug connectors size DR.71 – 132 

21914796/EN – 09/2015

7.7 Dimension drawings

7.7.1 Dimension drawing of MM03 to MM15 with option P21A (APG4 plug connector)

The following figure shows the dimensions of MM03 to MM15 with option P21A (APG4 plug connector):



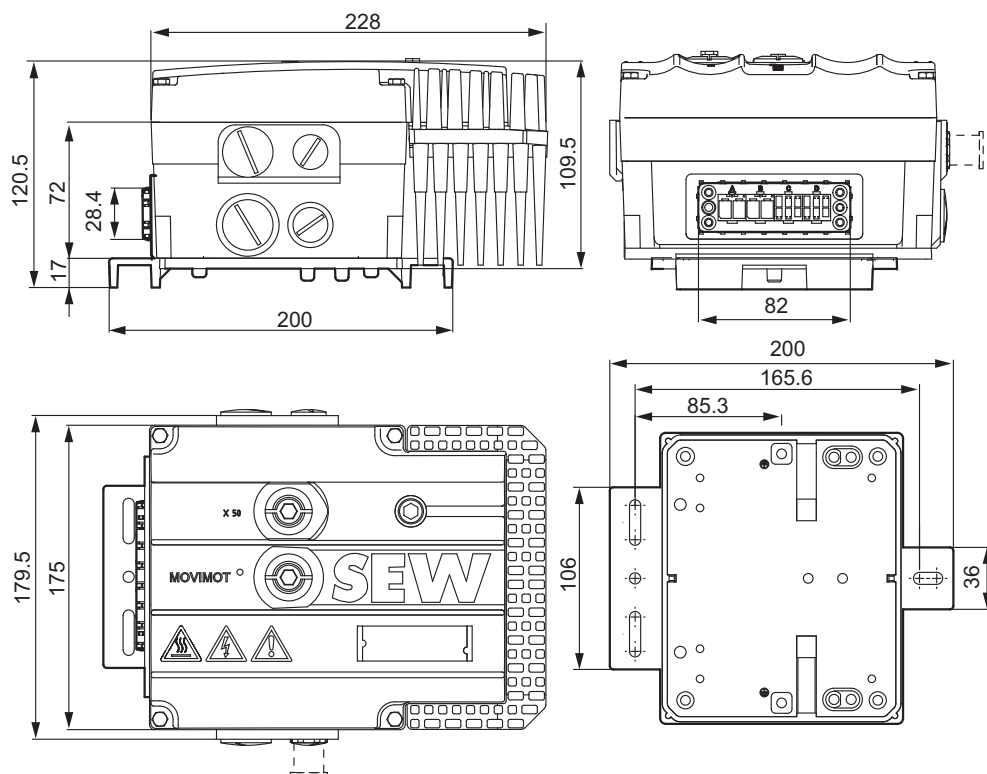
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7 MOVIMOT® mounting close to the motor (remote)

Dimension drawings

7.7.2 Dimension drawing of MM22 to MM30 with option P22A (APG4 plug connector)

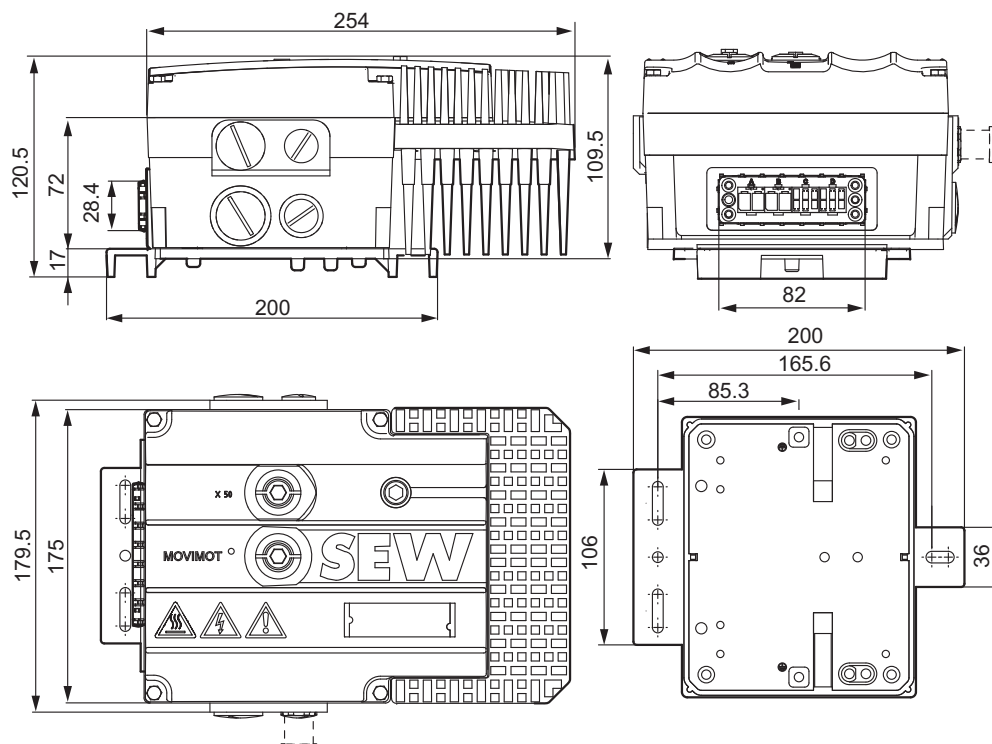
The following figure shows the dimensions of MM22 to MM30 with option P22A (APG4 plug connector):



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7.7.3 MM40 dimension drawing with option P22A (APG4 plug connector)

The following figure shows the dimensions of MM40 with option P22A (APG4 plug connector):



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