



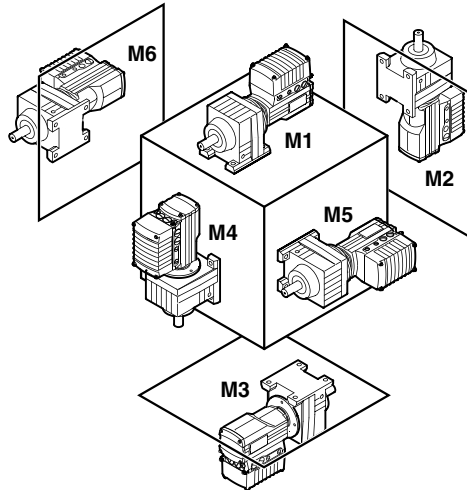
Mounting Positions and Important Order Information

General information on the mounting positions of R, F, K, S, W gear units

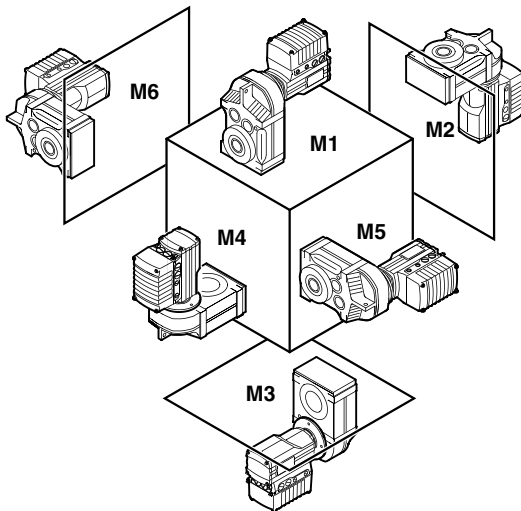
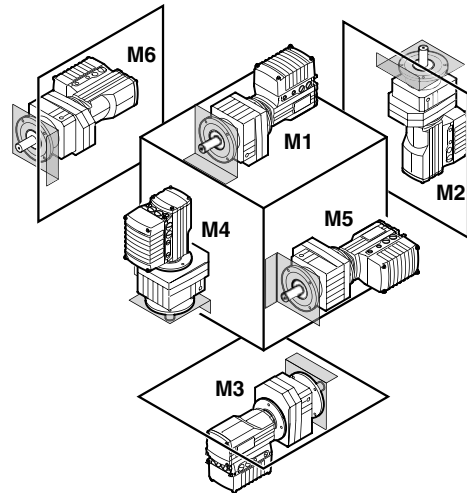
5 Mounting Positions and Important Order Information

5.1 General information on the mounting positions of R, F, K, S, W gear units

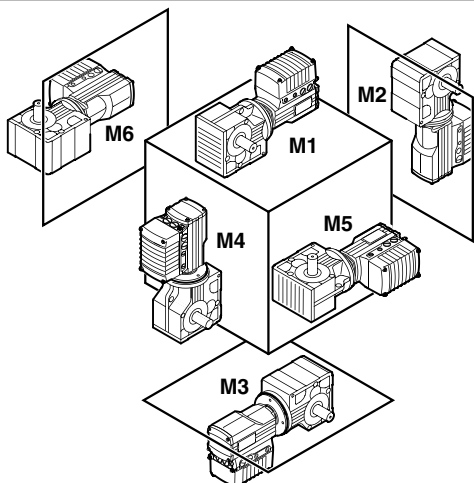
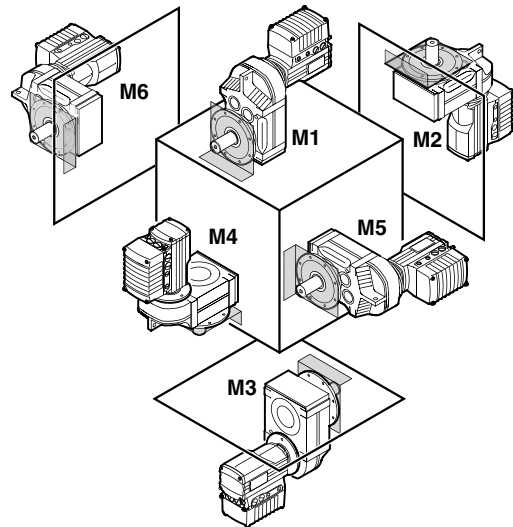
SEW-EURODRIVE distinguishes between the six mounting positions M1 to M6 for DRC gearmotors. The following figure shows the spatial orientation of the gearmotor in mounting positions M1 to M6:



R..

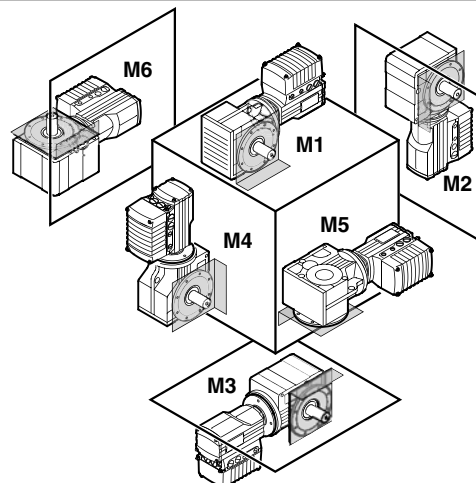


F..



K..

W..



5013169547



5.2 Important order information



INFORMATION

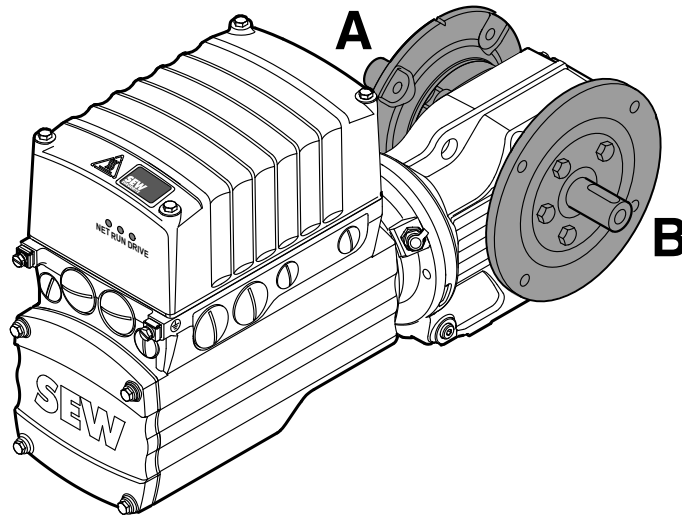
The following order information is required for R, F, and K gearmotors in addition to the mounting position to exactly determine the design of the drive.

This information is also required for Spiroplan® gearmotors (W gearmotors) that do not depend on a particular mounting position.

5.2.1 Position of output shaft and output flange

In right-angle gear units, you also have to indicate the position of the output shaft and the output flange:

- A or B or AB



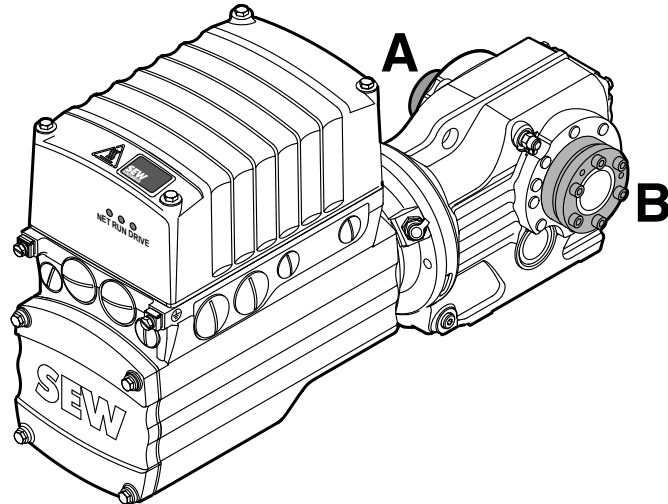
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5.2.2 Position of the output end in right-angle gear units

In shaft mounted right-angle gear units with a shrink disk, you also have to indicate whether the A or B end is the output end. In the figure below, the A end is the output end. The shrink disk is located opposite the output end.

In shaft mounted right-angle gear units, the output end is equivalent to the shaft position of right-angle gear units with solid shaft.



5013258379



INFORMATION

Refer to the mounting position sheets for permitted mounting surfaces (= hatched area).

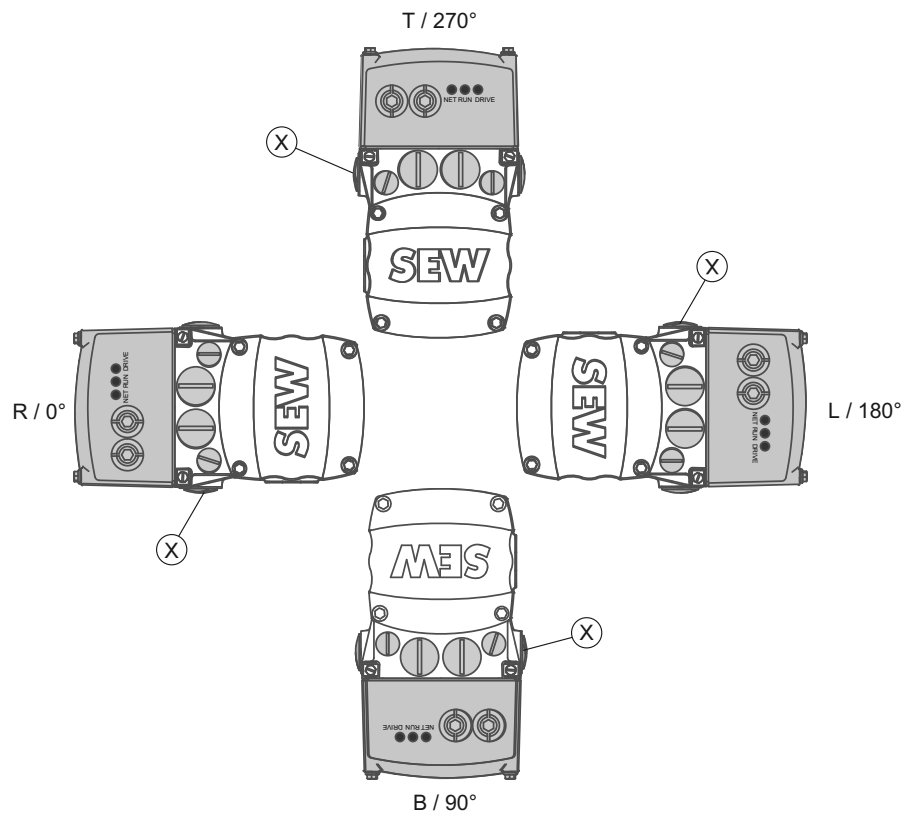


5.2.3 Position of electronics cover and cable entry

The position of the electronics cover has so far been specified with 0°, 90°, 180° or 270° as viewed onto the fan guard = B end. A change in the product standard EN 60034 specifies that the following designations have to be used for terminal box positions for motors:

- As viewed onto the output shaft = A-end
- Designation as R (right), B (bottom), L (left) and T (top)

This new designation applies to motors without gear unit. The previous designation is maintained for gearmotors. The following figure shows both designations. Where the mounting position of the motor changes, R, B, L and T are rotated accordingly. For DRC gearmotors in mounting position M3, T / 270° is at the bottom.



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Unless indicated otherwise, you will receive the electronics cover type 0° with "X" cable entry.



INFORMATION

When the terminal box is in the 90° (B) position, check whether the gearmotor has to be supported.

For FH/FT gear units, electronics cover position 90° is not possible.

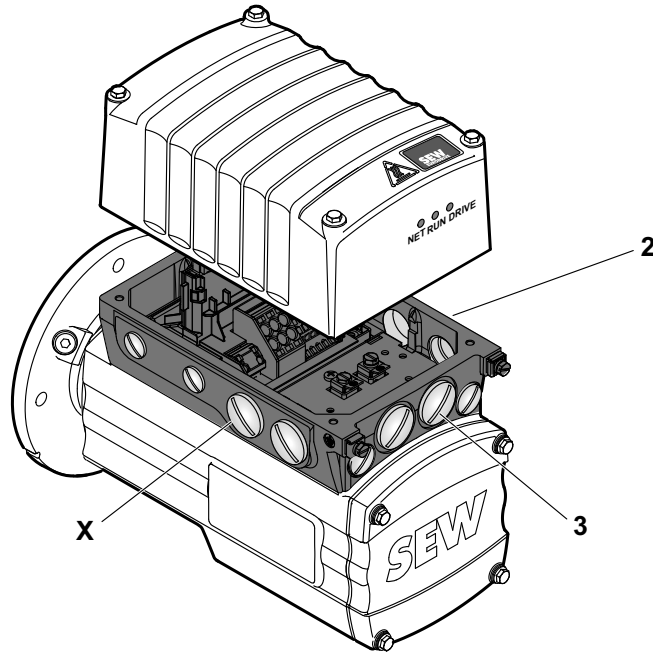


Mounting Positions and Important Order Information

Important order information

The DRC electronic motor generally comes equipped with the following cable entries ¹⁾:

- Position X + 2 + 3
 - X: 2 x M25 x 1.5 + 2 x M16 x 1.5
 - 2: 2 x M25 x 1.5 + 2 x M16 x 1.5
 - 3: 2 x M25 x 1.5 + 2 x M16 x 1.5



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5.2.4 Software support

In some cases, not all positions of the electronics cover [0°(R), 90°(B), 180°(L), 270°(T)] are possible.

For a thorough check of the possible positions of your drive, you can use the DRIVECAD software in DriveGate on the SEW-EURODRIVE website.

- If you are already a registered DriveGate user: <https://portal.drivegate.biz/drivecad>
- If you are not registered: www.sew-eurodrive.com → DriveGate login

5.2.5 Sample orders

Type (examples)	Mounting position	Shaft position	Flange position	Position of electronics cover	
K47DRC1-005-DSC-A-ECR	M2	Order confirmation	-	0°	(R)
KA87DRC2-015-SNI-A-ECR	M4	B	-	270°	(T)
KHF57DRC2-015-SNI-A-ECR	M1	A	A	180°	(L)
WF37DRC1-005-DBC-A-ECR	-	A	A	270°	(T)
WA47DRC2-015-DAC-A-ECR	-	Order confirmation	-	0°	(R)

1) 1 x M16 x 1.5 reserved for pressure compensation fitting (only in conjunction with ASEPTIC/ASEPTIC^{plus} variants as well as brakemotors operated at ambient temperatures of < 20 °C)



5.2.6 Type of electronics

The following types of electronics are available for DRC drive units:

- **Installation technology**

You can order DRC drive units with the following installation technology:

- DBC = **D**irect **B**inary **C**ommunication
- DAC = **D**irect **A**S-Interface **C**ommunication

For DRC-DAC, you can choose between the variants binary slave GLK30 or double slave GLK31.

- DSC = **D**irect **S**Bus **C**ommunication
- SNI = **S**ingle **L**ine **N**etwork **I**nstallation

Refer to the "Startup" chapter for additional information on the setpoint source.

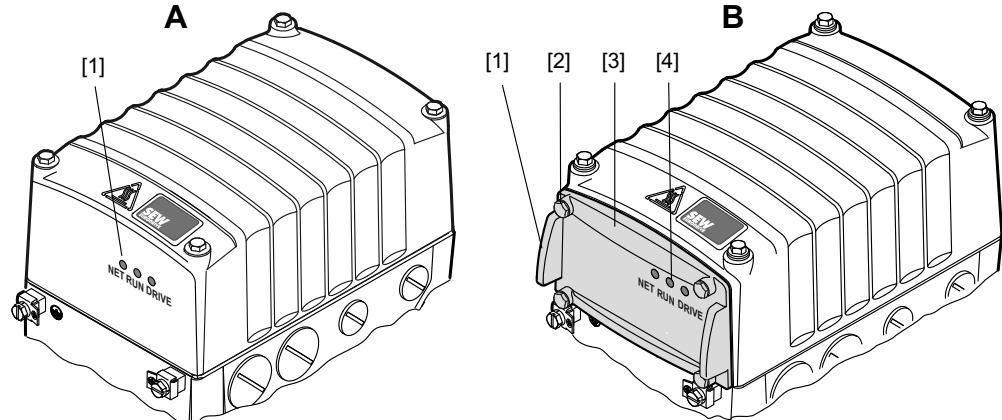
- **Electronics cover variant**

The following types of electronics covers of DRC-DSC and DRC-SNI units are available for all sizes (DRC1 and DRC2):

- Electronics cover without application slot
- Electronics cover with application slot and application cover (for integrating application options)

The electronics cover of DRC-DBC and DRC-DAC is designed without application slot.

The following figure shows possible types of the electronics cover:



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A Electronics cover without application slot B Electronics cover with application slot

[1] LED displays

[1] Assembly/disassembly handle

[2] Retaining screws (4x)

[3] Application cover

[4] LED displays

For an overview of available application options, refer to the "Example type designations of application options" chapter.



5.2.7 Plug connectors

The DRC electronic motor is supplied without plug connector unless specified otherwise in the order. Exception: DRC-DAC electronic motors are supplied with the following plug connectors as standard:

- X4271: AS-Interface communication interface
- X5011: AS-Interface sensors

For more information, see the chapter "Technical data of DRC electronic motors".

*Plug connector
variant*



▲ NOTICE

Possible damage of the right-angle connector in case of rotation without mating connector.

Irreparable damage to the thread, damage to the sealing surface.

- Do not use pliers to adjust the right-angle connector before connecting it.



▲ NOTICE

Adjusting the right-angle connector too often can damage it.

Potential damage to property

- Adjust the plug connector only when installing and connecting the drive unit.
- Make sure the plug connector is not turned regularly once it has been installed.

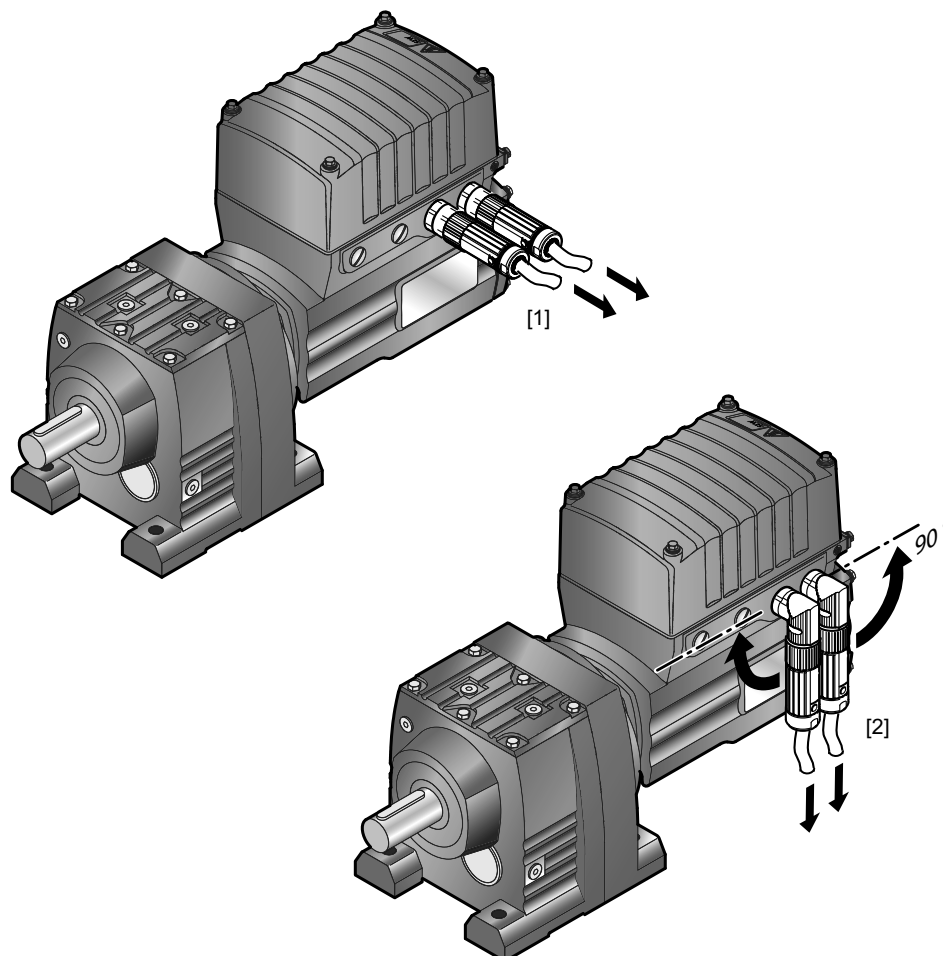
M23 plug connectors are available in the following variants:

- [1] "Straight" plug connector variant
- [2] "Right-angle" plug connector variant

Once the mating connector has been plugged in, the "right-angle" connector can be adjusted without using additional tools.



Example



5

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INFORMATION

The "right-angle" plug connector variant is not possible when using plug connector position 3.



5.2.8 Change in mounting position

Make sure to read the following information when you operate the gearmotor in a mounting position other than the one indicated in the order:

- Adjust lubricant fill quantity to match the new mounting position
- Adjust the position of the breather valve and, if necessary, of the pressure compensation fitting.
- For helical-bevel gearmotors: Contact SEW-EURODRIVE customer service prior to changing to mounting position M5 or M6 and when changing from M5 to M6 or vice versa.

5.2.9 ASEPTIC design

ASEPTIC or ASEPTIC^{plus} design is available for applications in wet areas.

Observe the notes in chapter "Product description/DRC drive units in ASEPTIC/ASEPTIC^{plus} design".



5.3 Key to the mounting positions

5.3.1 Symbols used

The following table shows the symbols used in the mounting position sheets and what they mean:

Symbol	Meaning
	Breather valve
	Oil level plug ¹⁾
	Oil drain plug

1) Does not apply to the 1st gear unit (large gear unit) when using double gear units

5.3.2 Churning losses

Churning losses can occur in some mounting positions. Contact SEW-EURODRIVE in case of the following combinations:

Mounting position	Gear unit type	Gear unit size	Input speed [rpm]
M2, M3, M4, M5, M6	K	77 ... 87	> 1500

5.3.3 Displayed shaft

Note the following information regarding display of shafts in the mounting position sheets:



INFORMATION

- **For gear units with solid shaft:** The displayed shaft is always on the A end.
- **For shaft-mounted gear units:** The shaft with dashed lines represents the customer shaft. The output end (\triangle shaft position) is always shown on the A end.



Mounting Positions and Important Order Information

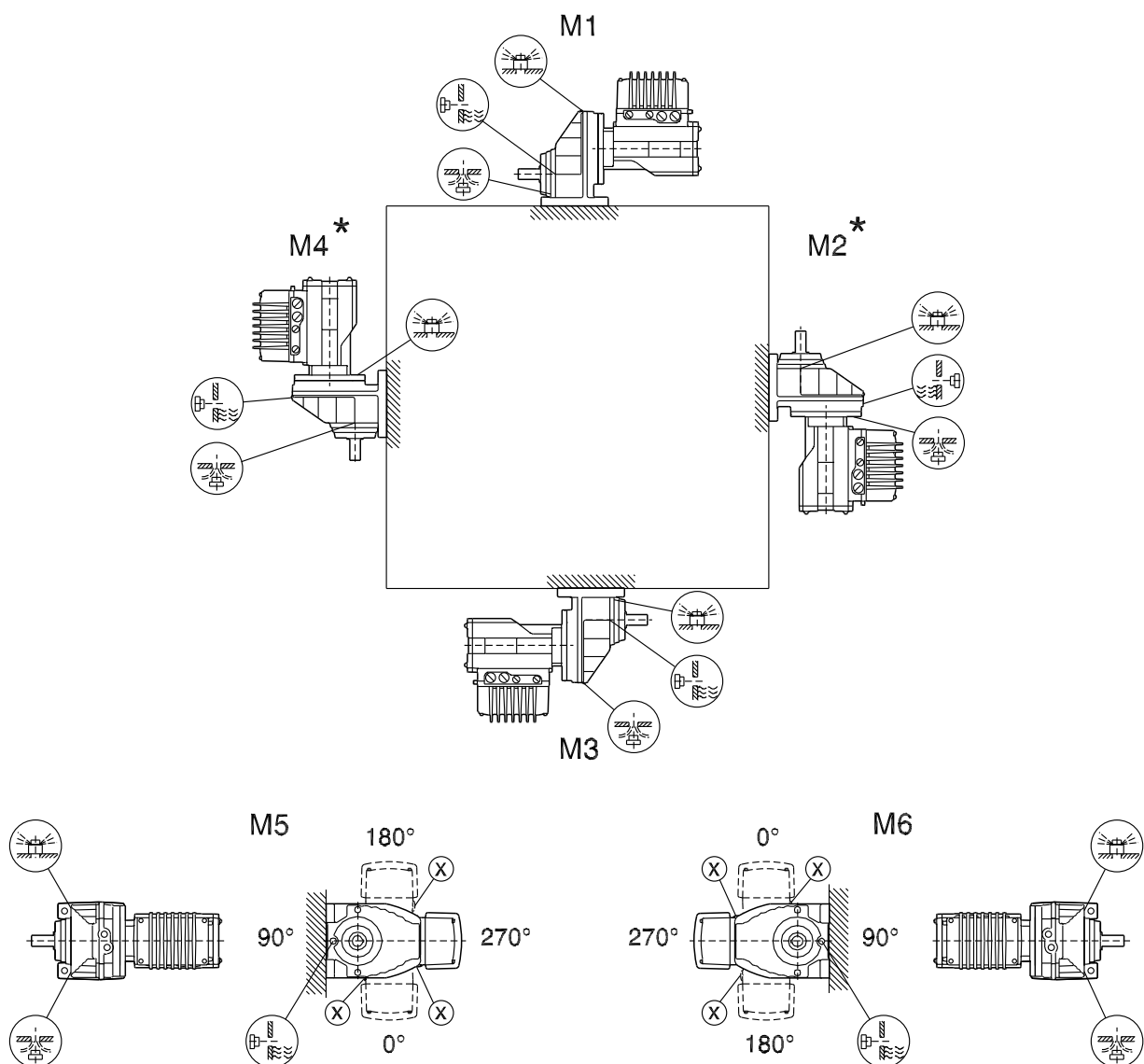
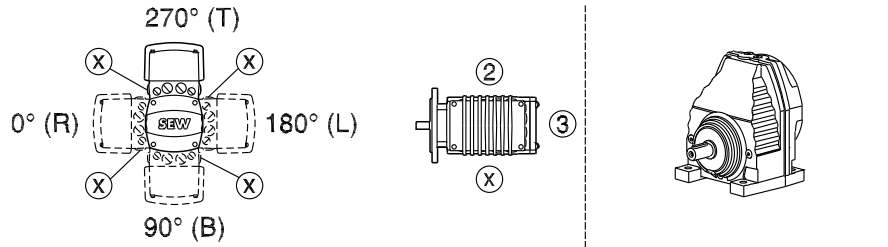
Mounting positions for DRC gearmotors

5.4 Mounting positions for DRC gearmotors

5.4.1 Mounting positions for helical gearmotors

RX57-87

01 030 00 12

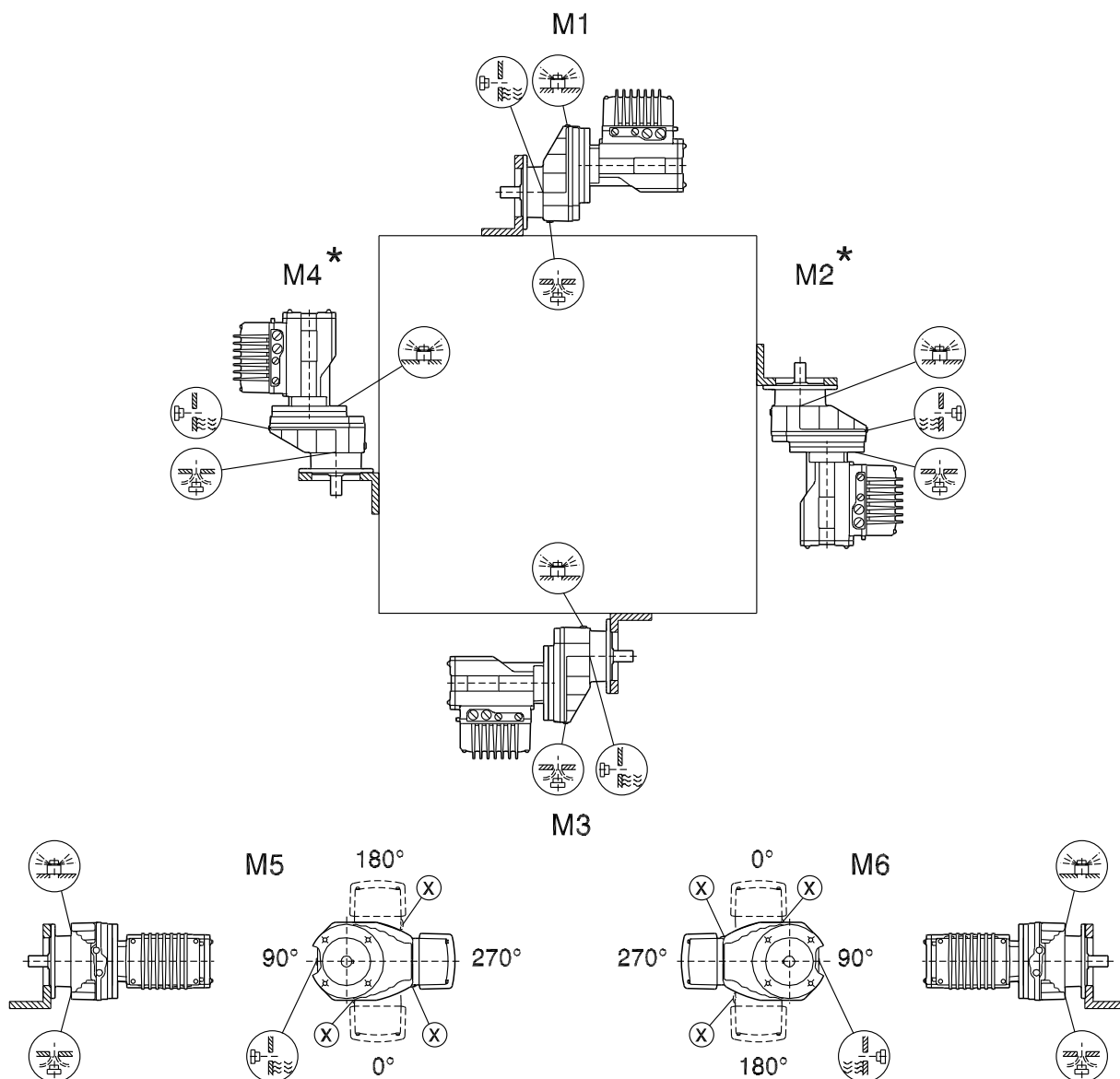
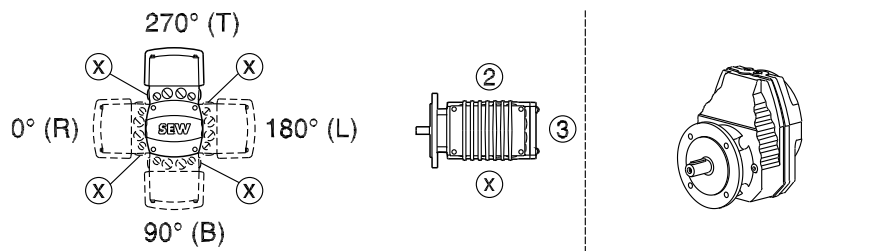


* → Page 77



RXF57-87

01 031 00 12



* → Page 77

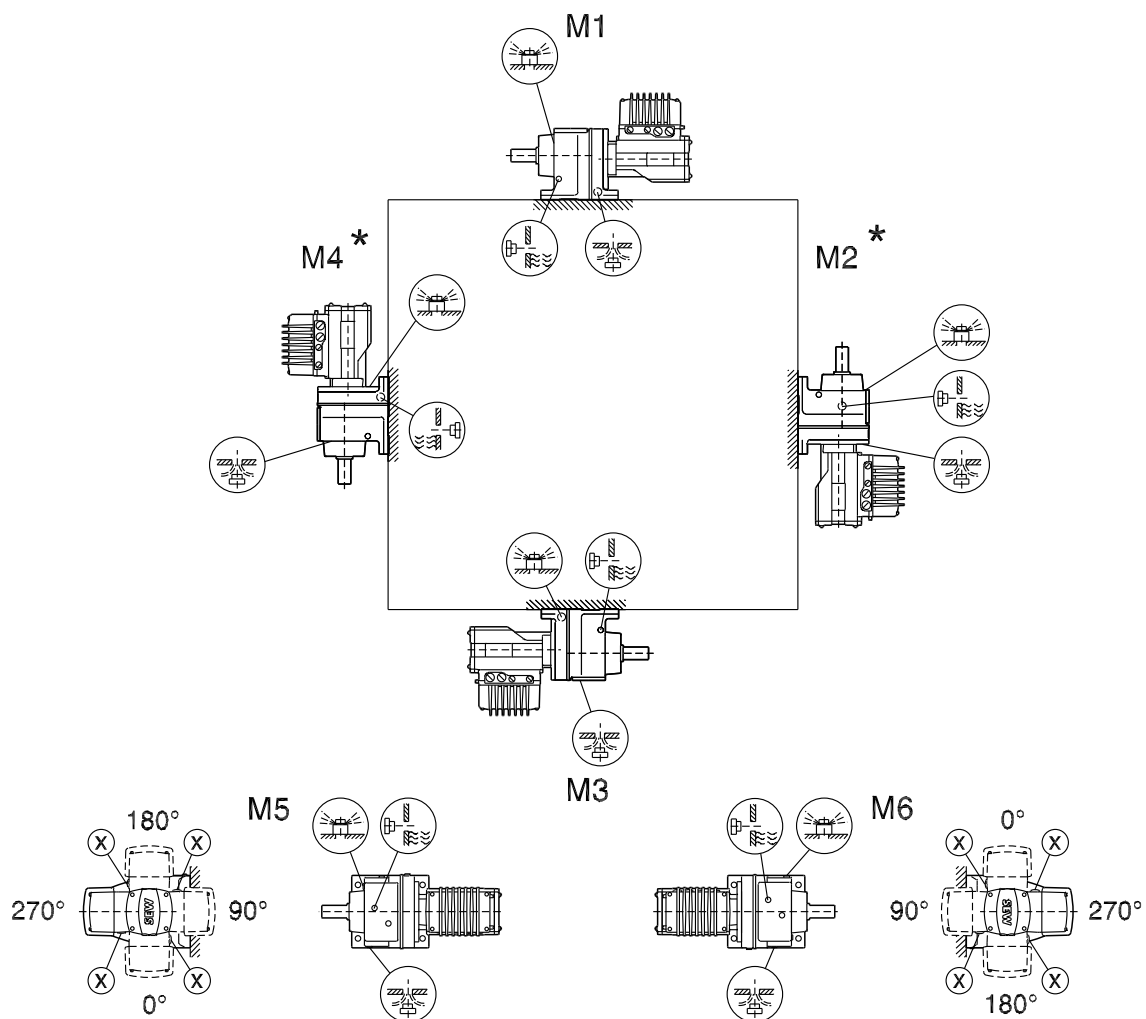
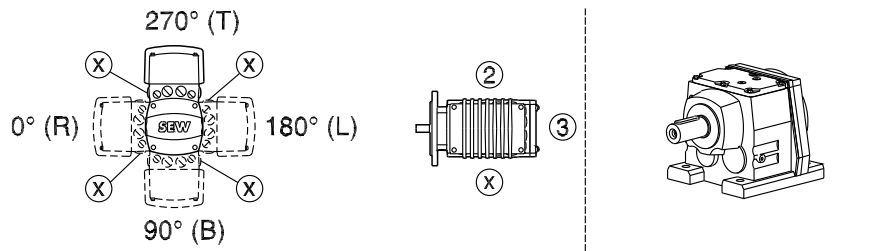


Mounting Positions and Important Order Information

Mounting positions for DRC gearmotors


R27-87

01 032 00 12



R27  M1, M3, M5, M6

R27  

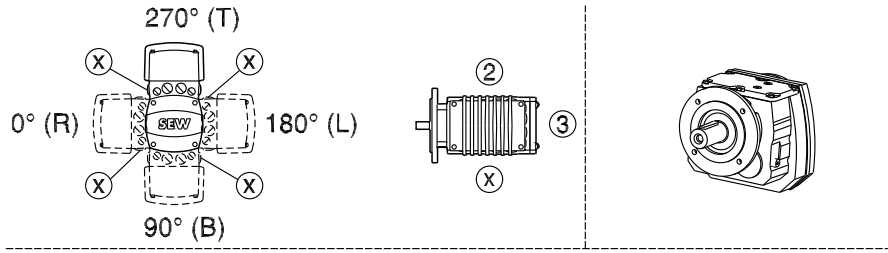
R47, R57  M5

* → Page 77

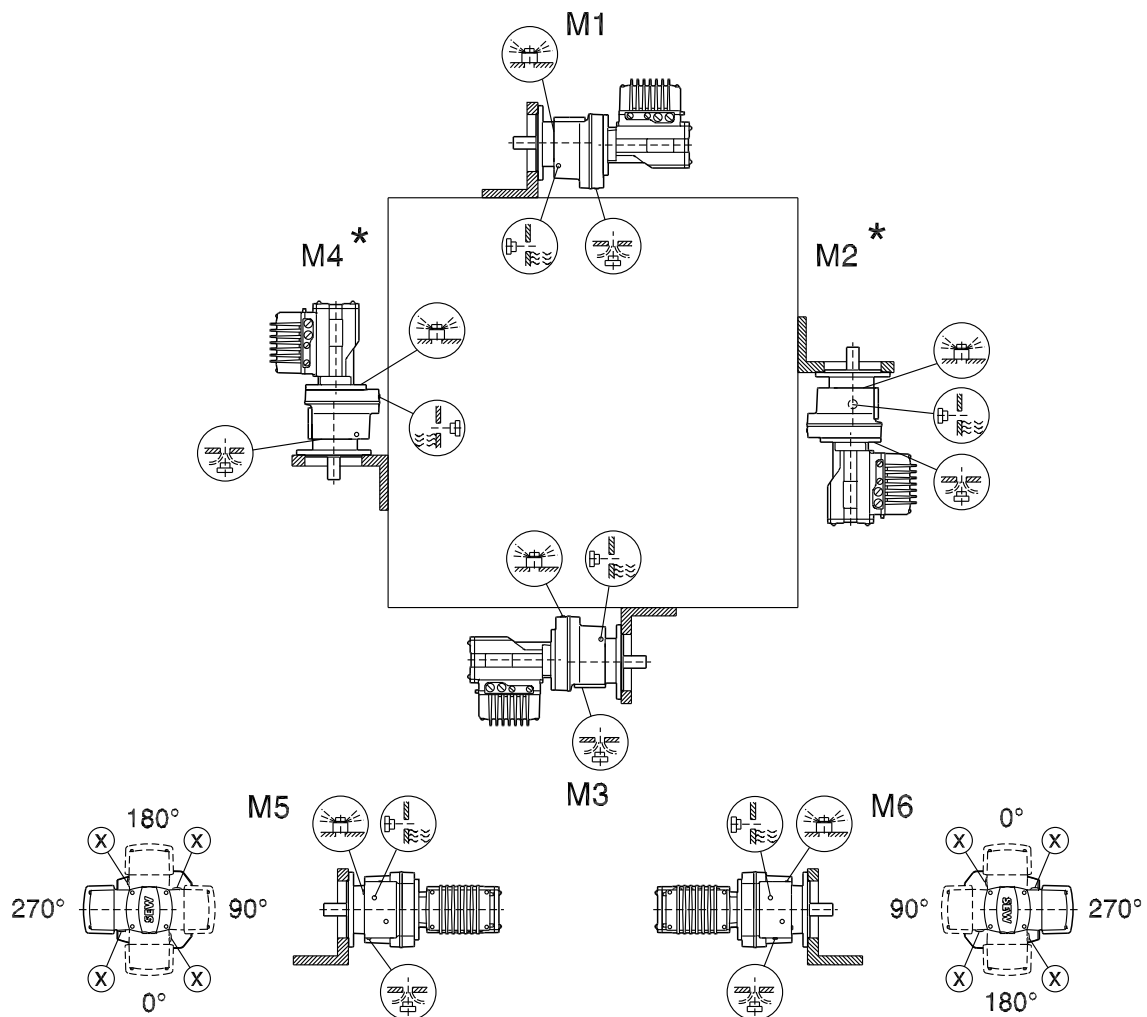


RF/RZ27-87

01 033 00 12



5



RF/RZ27  M1, M3, M5, M6

RF/RZ27  

RF/RZ47, 57  M5

* → Page 77

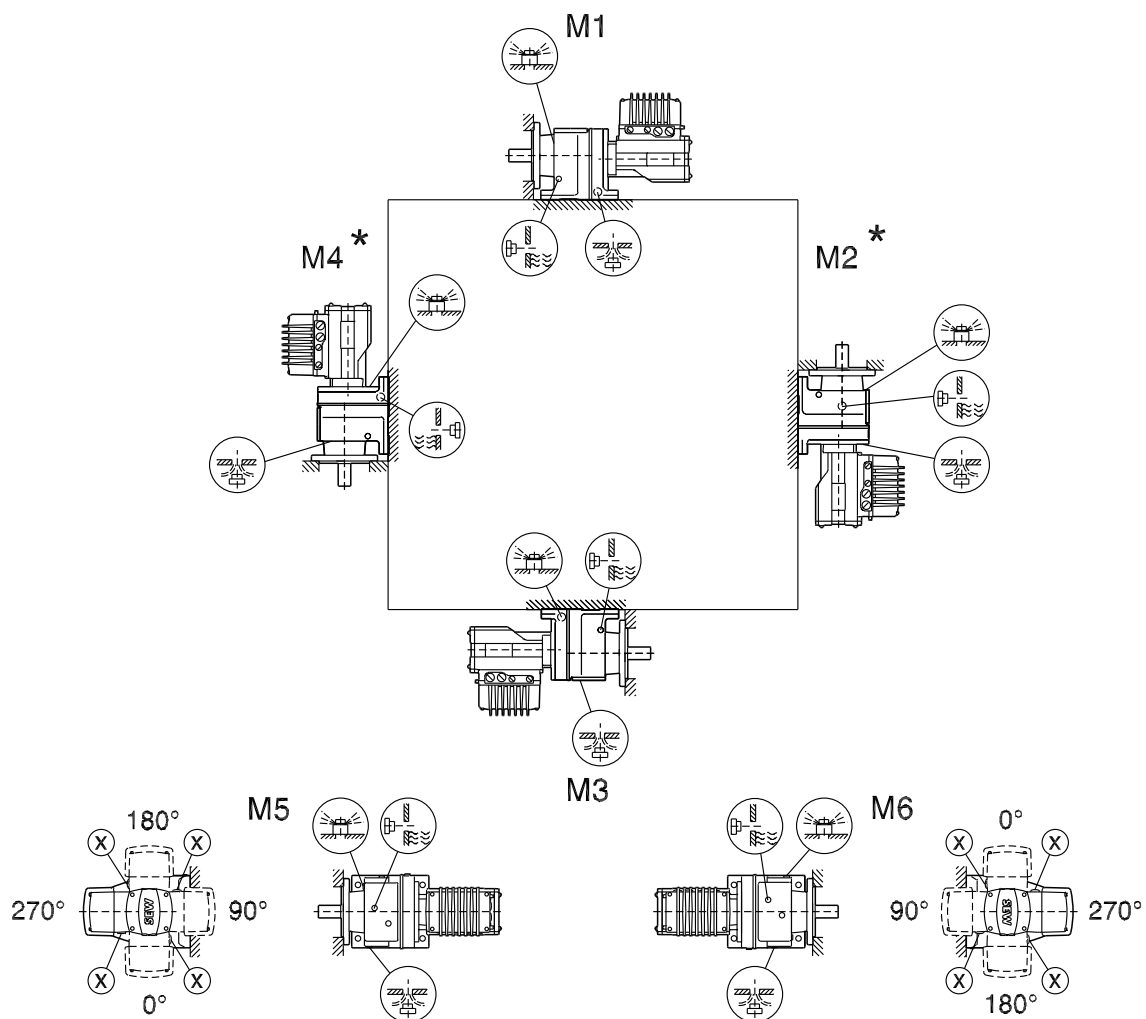
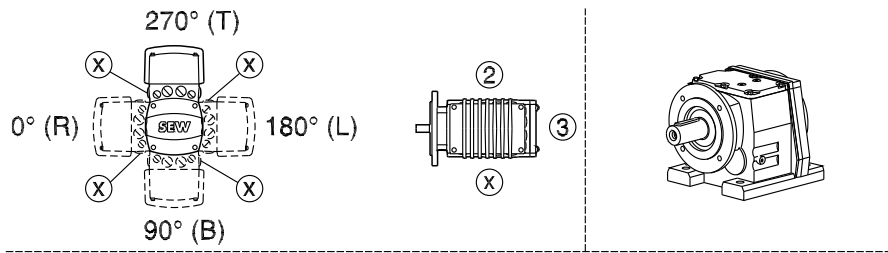


Mounting Positions and Important Order Information

Mounting positions for DRC gearmotors

R27-87F

01 034 00 12




R27F  M1, M3, M5, M6

R27F  

R47F, R57F  M5

* → Page 77

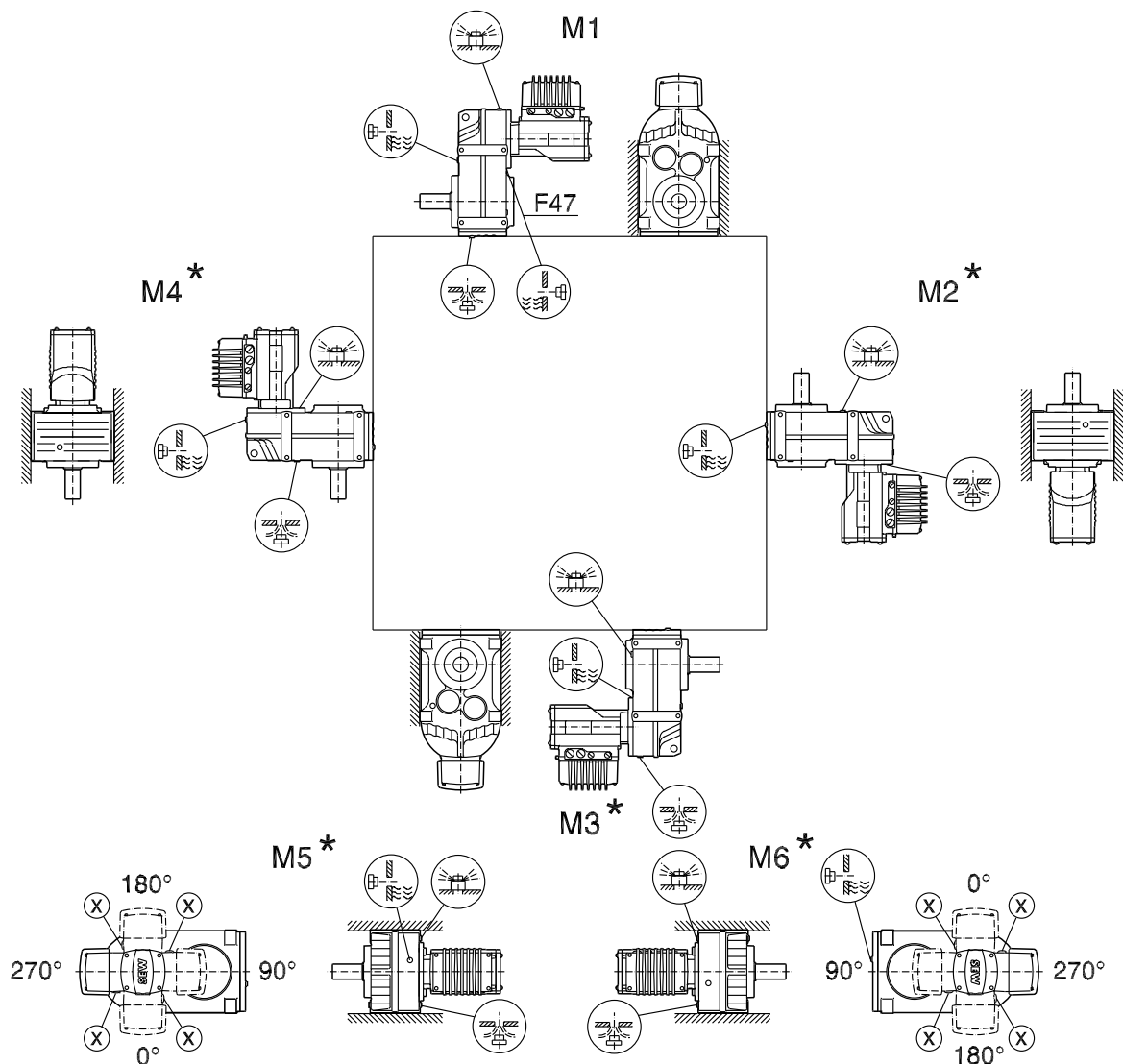
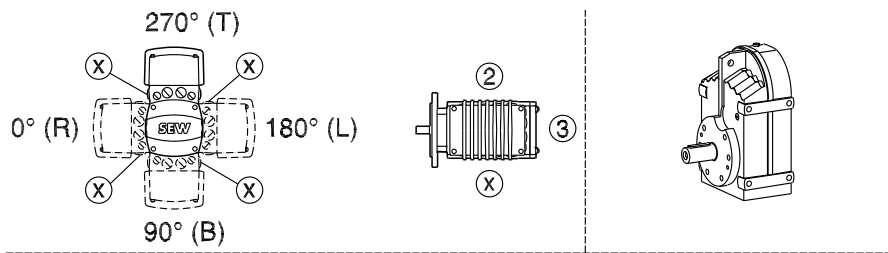
Important: Please observe the  notes in chapter "Project Planning/Gear units/Overhung and axial loads".



5.4.2 Mounting positions for parallel-shaft helical gearmotors

F/FA..B/FH..B/ FV27-87B

42 035 00 12



- F..27 M1, M3 , M5 , M6
- F..27 M1 - M6
- F..27 M1, M3 , M5 , M6

* → Page 77

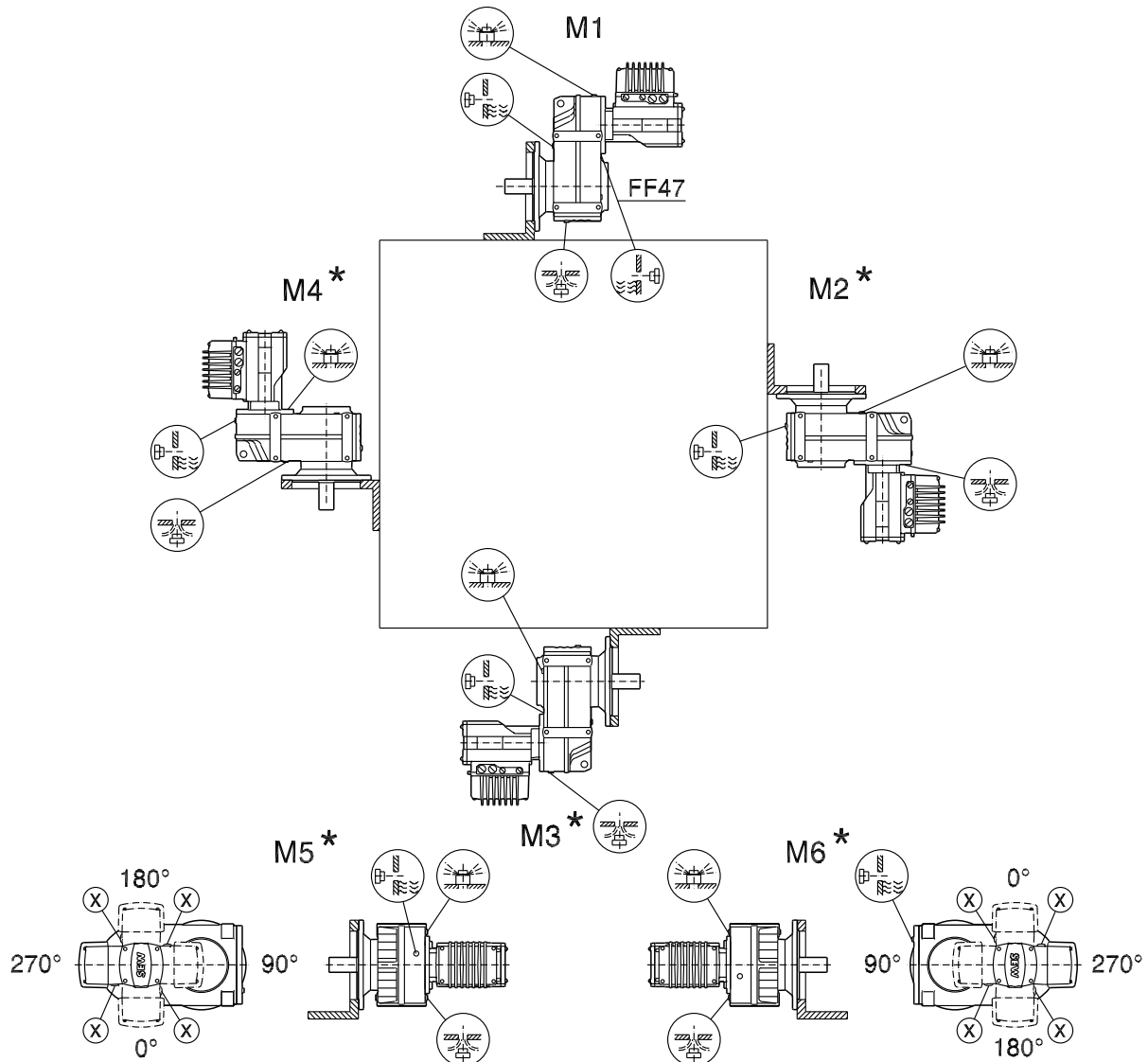
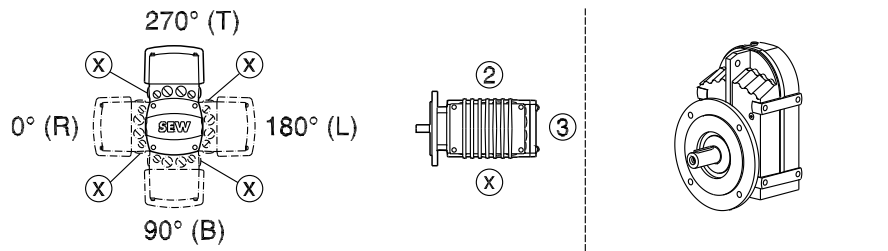





Mounting Positions and Important Order Information

Mounting positions for DRC gearmotors

FF/FAF/FHF/FAZ/FHZ/FVF/FVZ27-87

42 036 00 12



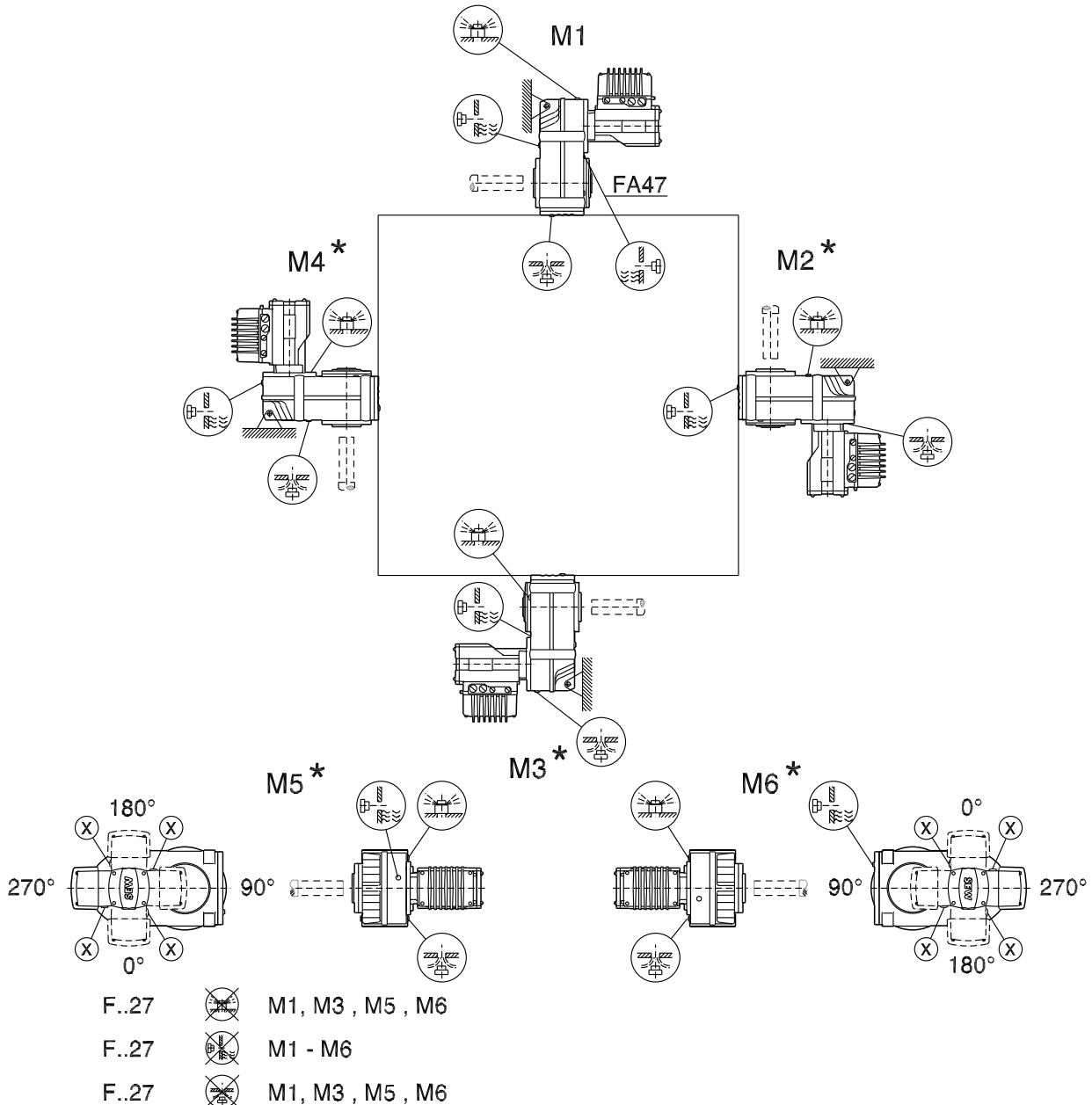
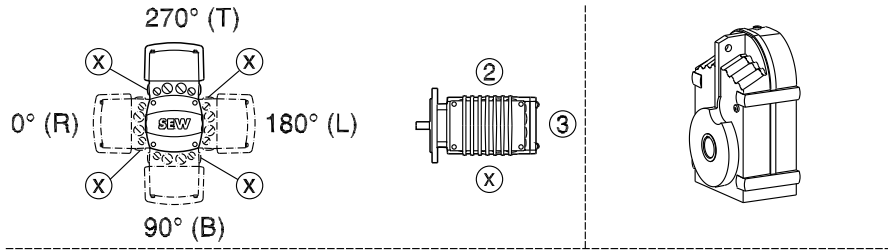
- F..27  M1, M3, M5, M6
- F..27  M1 - M6
- F..27  M1, M3, M5, M6

* → Page 77



FA/FH/FV/FT37-87

42 037 00 12



* → Page 77



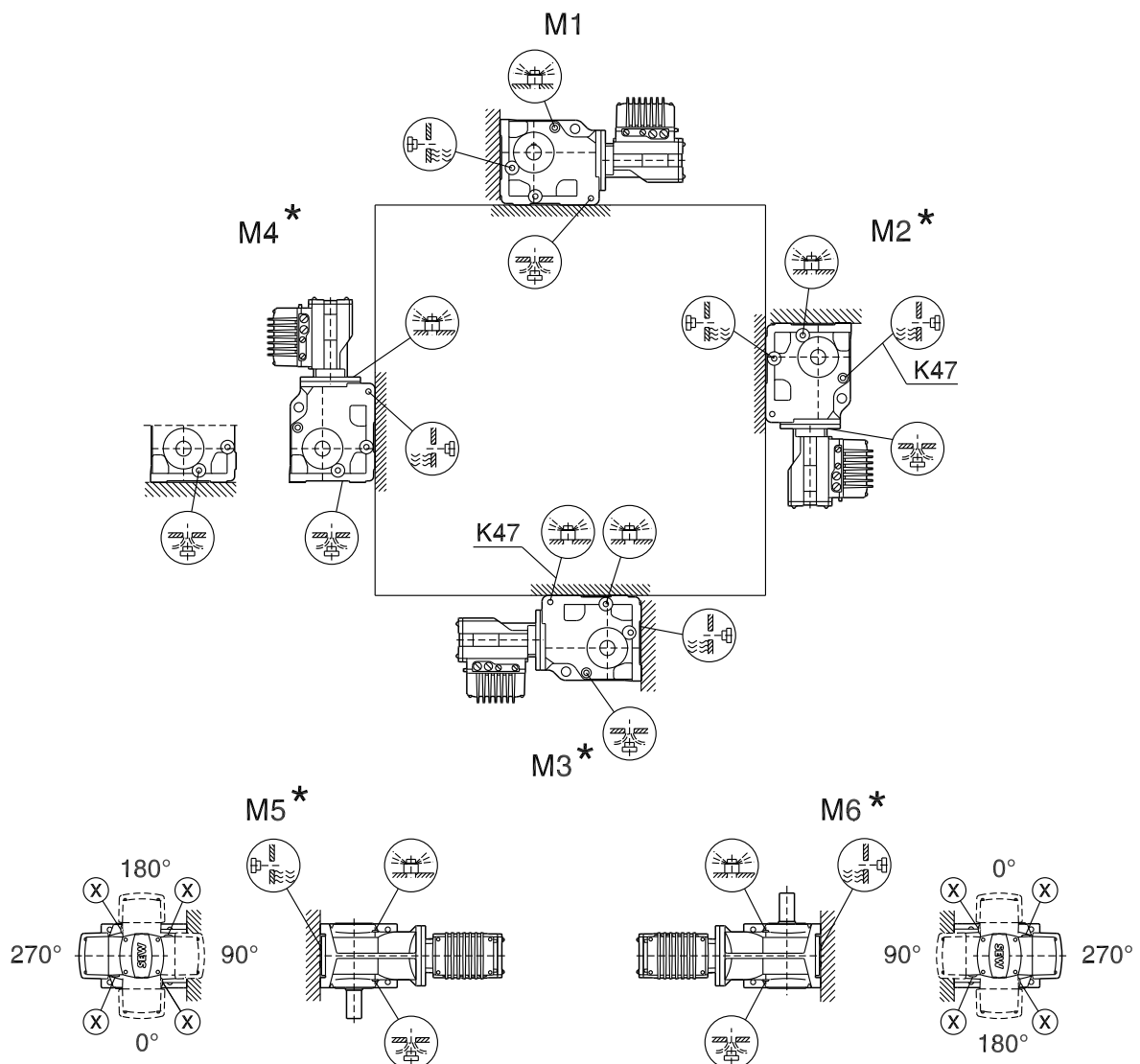
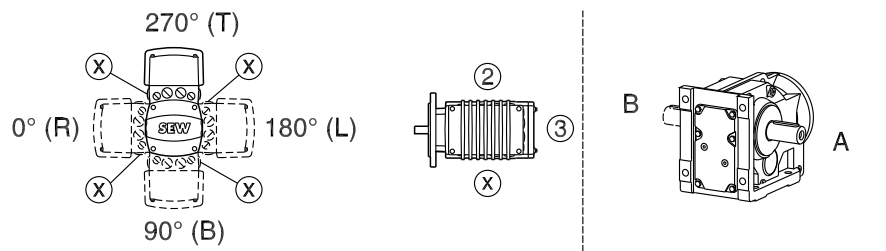
Mounting Positions and Important Order Information

Mounting positions for DRC gearmotors

5.4.3 Mounting positions for helical-bevel gearmotors

K/KA..B/KH..B/ KV37-87B

33 031 00 12



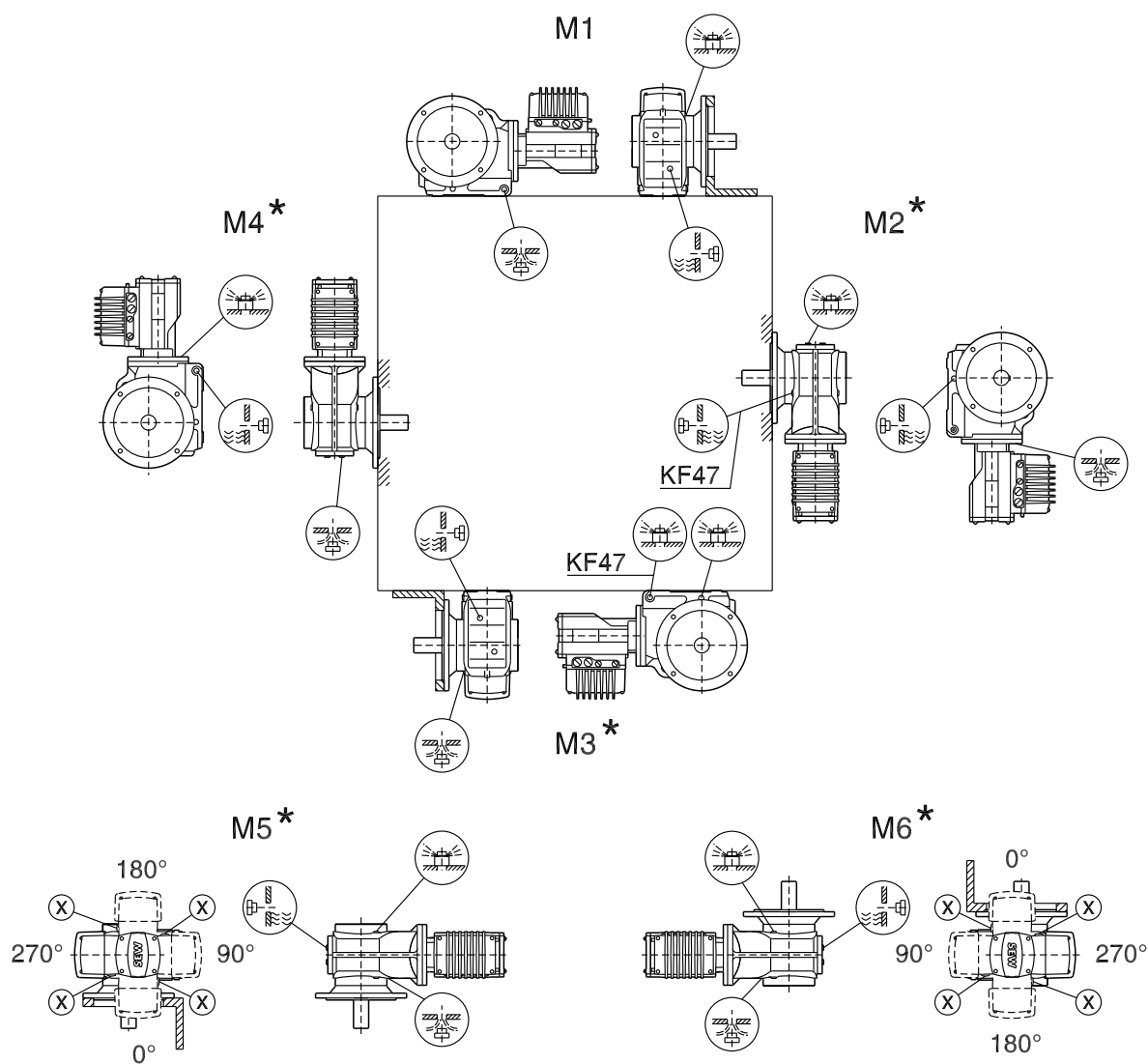
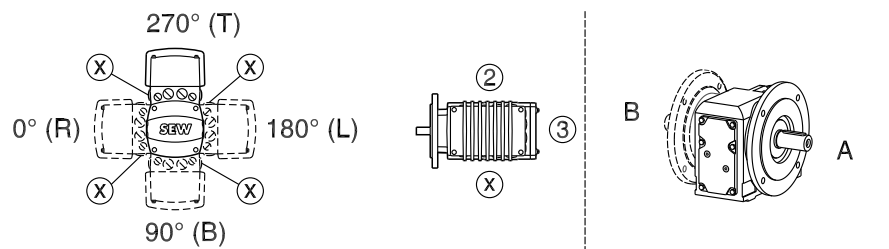
* → Page 77

Important: Please observe the **i** notes in chapter "Project Planning/Gear units/Overhung and axial loads".



KF/KAF/KHF/KAZ/KHZ/KVF/KVZ37-87

33 032 00 12



* → Page 77

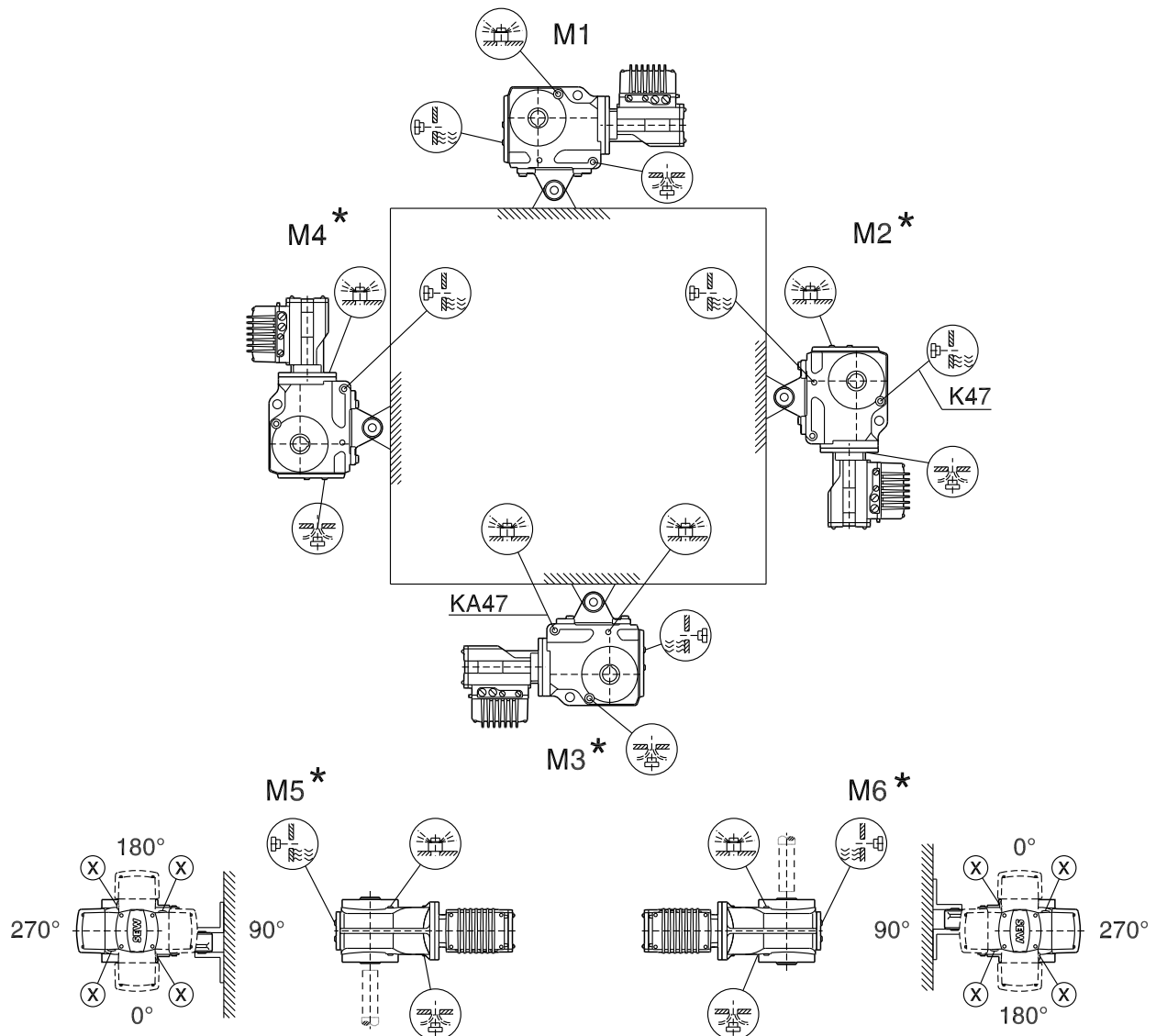
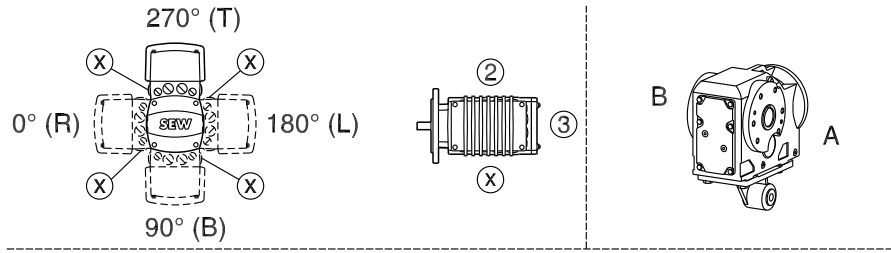


Mounting Positions and Important Order Information

Mounting positions for DRC gearmotors

KA/KH/KV/KT37-87

33 033 00 12



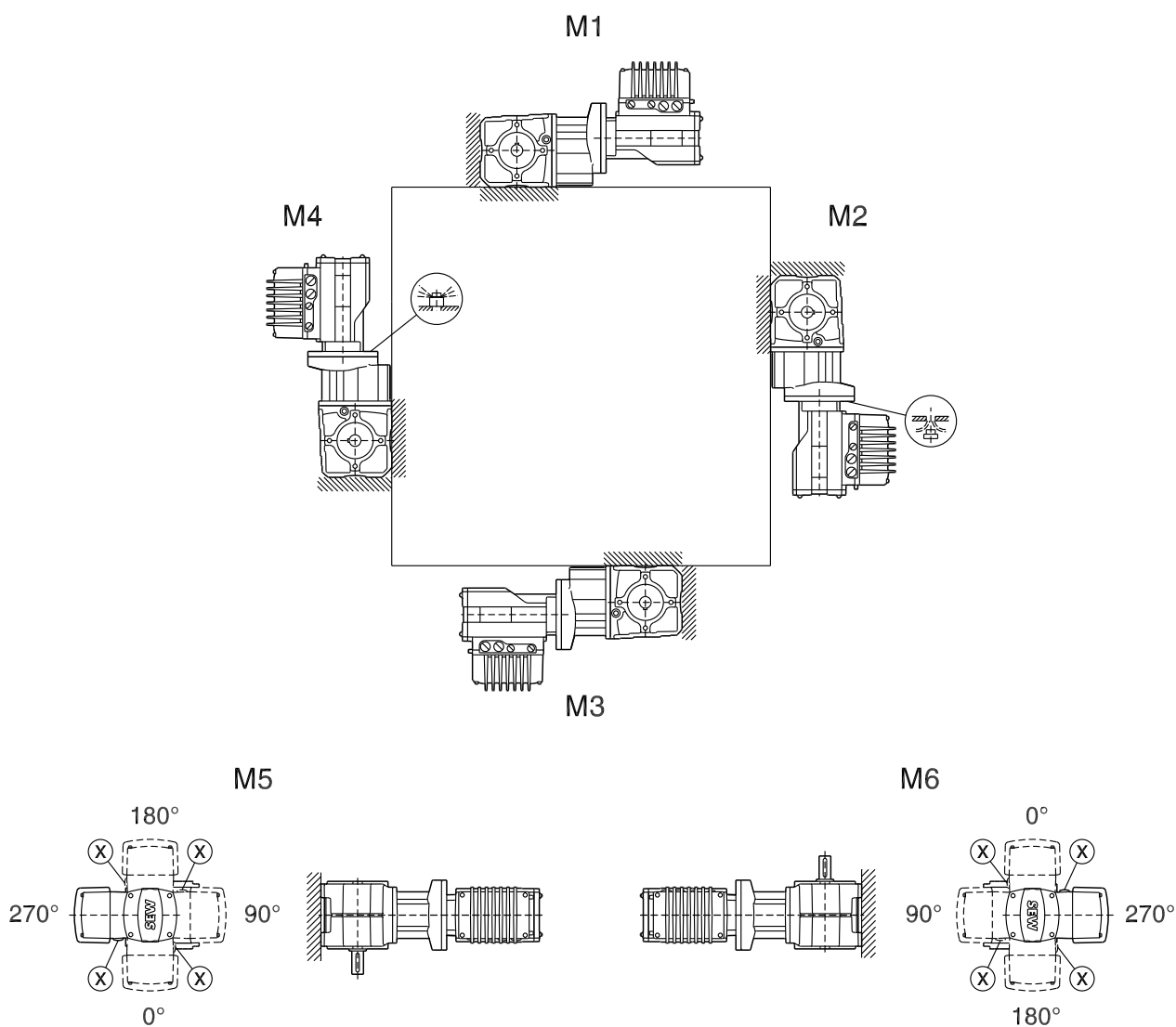
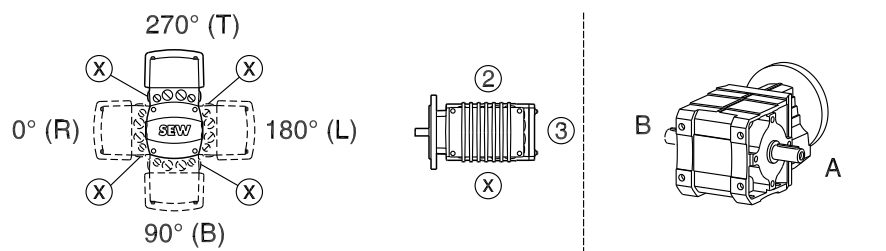
* → Page 77



5.4.4 Mounting positions for SPIROPLAN® gearmotors

W/WA..B/WH37-47B

20 010 00 12



* → Page 77

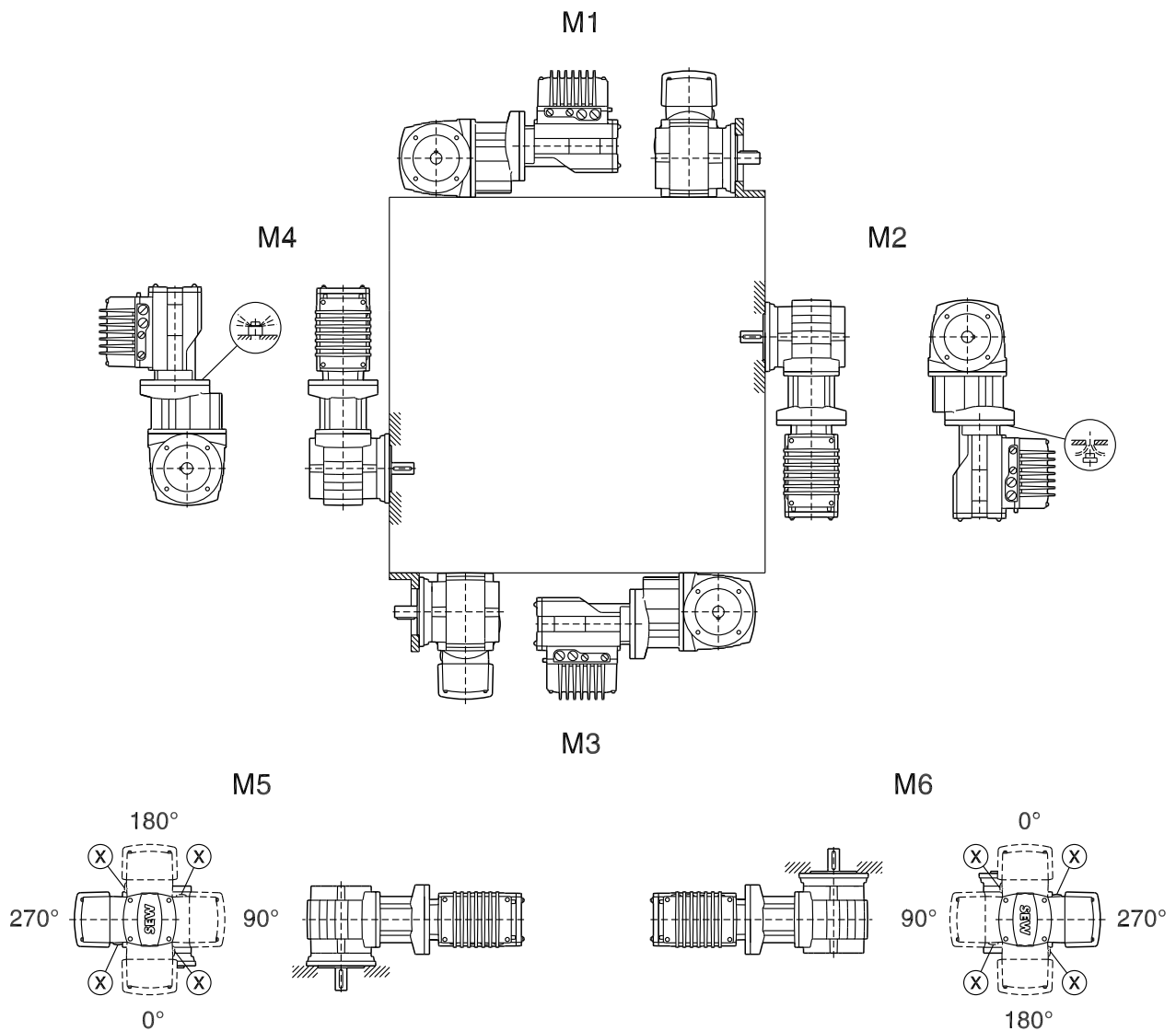
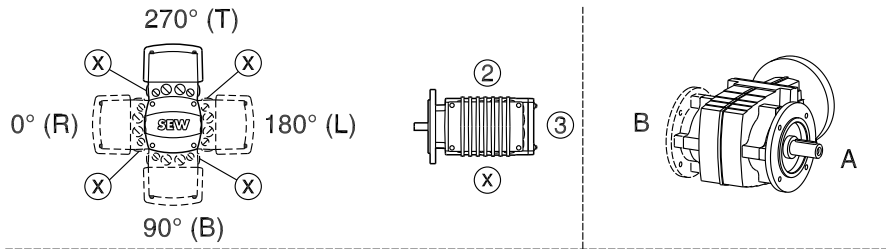


Mounting Positions and Important Order Information

Mounting positions for DRC gearmotors

WF/WAF/WHF37-47

20 011 00 12

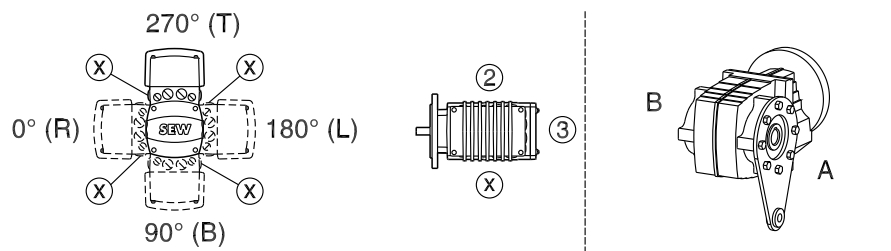


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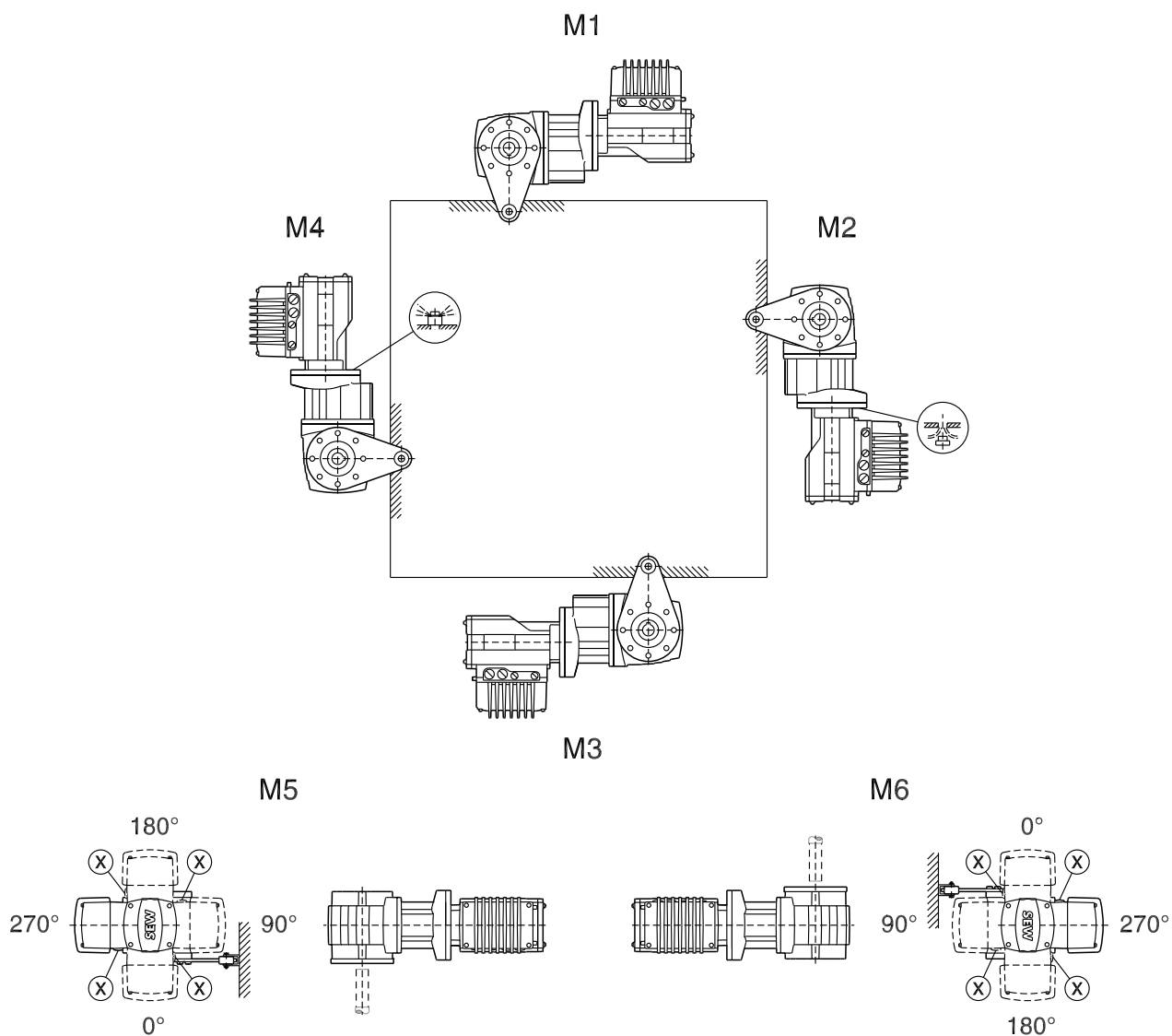


WA/WH/WT37-47

20 012 00 12



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* → Page 77



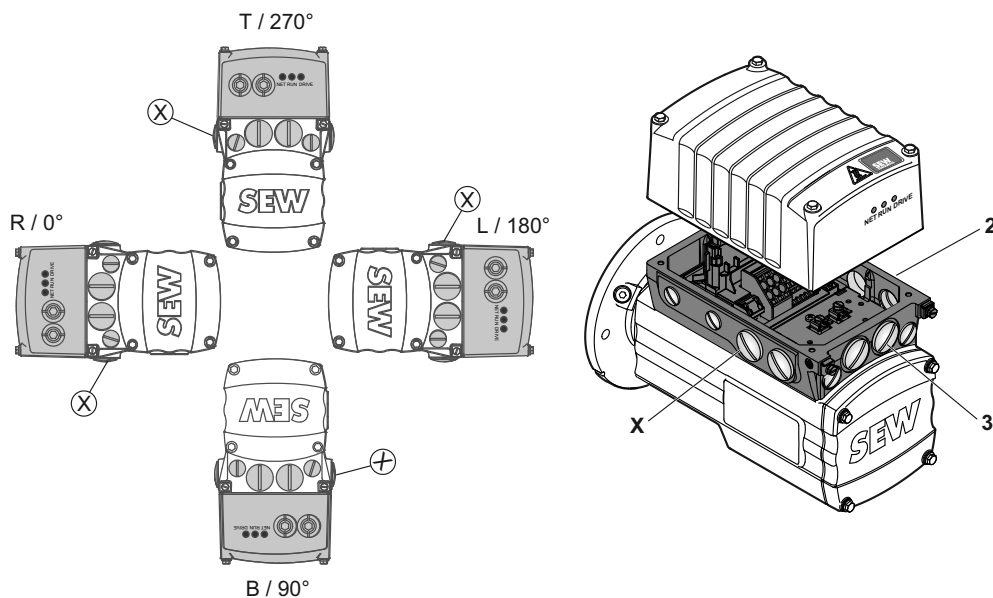
Mounting Positions and Important Order Information

Mounting positions for DRC stand-alone motors with IEC flange

5.5 Mounting positions for DRC stand-alone motors with IEC flange

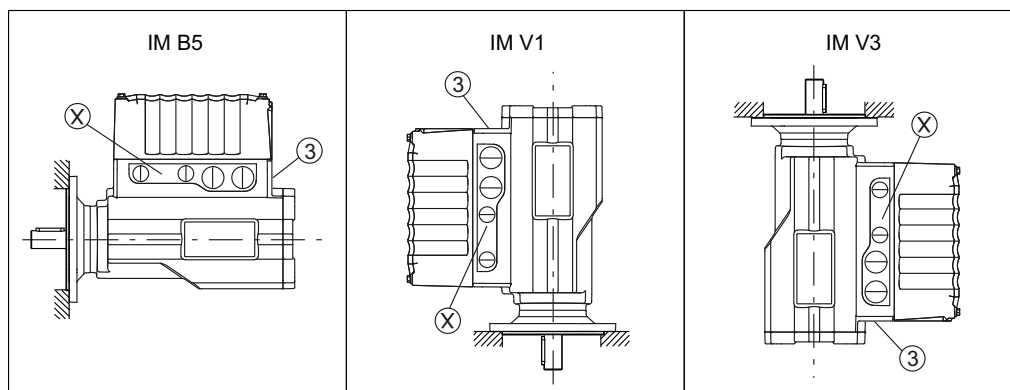
5.5.1 Position of electronics cover and cable entry

The following figure shows the mounting positions for DRC electronic motors with IEC flange:



5037224203

5.5.2 Mounting positions



5031582475

Flange mounting

Flange mounting
Input side at the bottom

Flange mounting
Input side on top