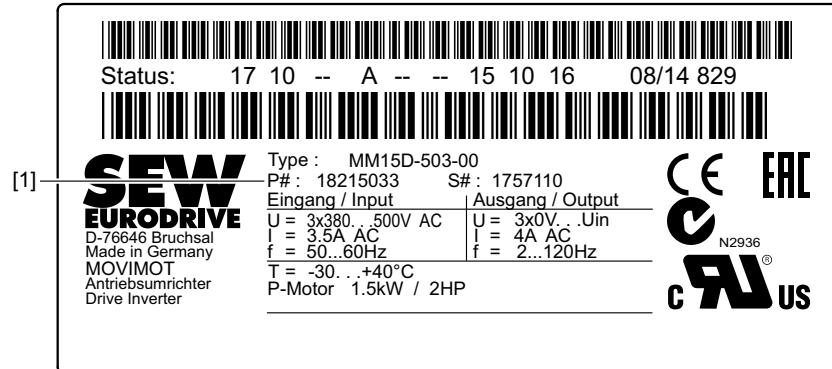


3.4 MOVIMOT® inverter type designation

3.4.1 Nameplate

The following figure gives an example of a MOVIMOT® inverter nameplate:



18014400467409291

[1] Part number

3.4.2 Type designation

The following table shows an example of the type designation of the MOVIMOT® inverter **MM15D-503-00**:

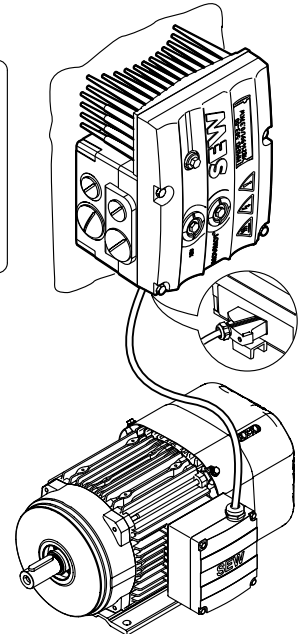
MM	Unit series	MM = MOVIMOT®
15	Motor power	15 = 1.5 kW
D	Version D	
-		
50	Connection voltage	50 = AC 380 – 500 V 23 = AC 200 – 240 V
3	Connection type	3 = 3-phase
-		
00	Design	00 = Standard

The available designs can be found in the "MOVIMOT® gearmotors" catalog.

3.5 Type designation of the design "mounted close to the motor"

3.5.1 Nameplate

The following figure shows an example of the MOVIMOT® inverter mounted close to the motor with corresponding nameplate and unit designation:



9007199712662539

3.5.2 Type designation

The following table shows the type designation for the MOVIMOT® inverter **MM15D-503-00/0/P21A/RO1A/APG4** with mounting close to the motor:

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

4.5.3 Installation of MNF21A option

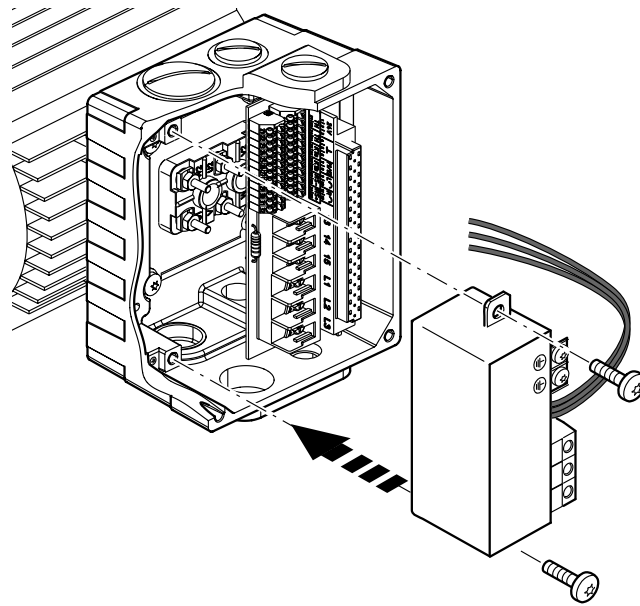
The MNF21A option is installed in the modular connection box at the factory. If you have any questions about retrofitting the option, do not hesitate to contact the SEW-EURODRIVE service.

INFORMATION



Installation is only permitted in combination with the modular connection box of MOVIMOT® MM03D-503-00 – MM15D-503-00.

The following figure depicts an installation example. The installation depends on the connection box used and on other installed options, if there are any.

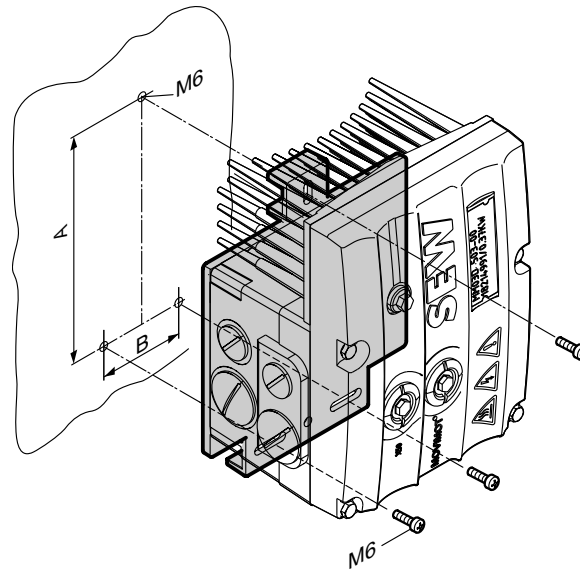


9007202007925643

For more information about connecting the MNF21A option, refer to section "Connection of option MNF21A" (→ 49).

4.6 Mounting MOVIMOT® inverter close to the motor

The following figure shows the mounting dimensions for mounting the MOVIMOT® inverter close to the motor:



9007199713018763

Size	Type	A	B
1	MM03D503-00 – MM15D-503-00 MM03D233-00 – MM07D-233-00	140 mm	65 mm
2/2L	MM22D503-00 – MM40D-503-00 MM11D233-00 – MM22D-233-00	170 mm	65 mm

5.7.4 Connection of MNF21A option

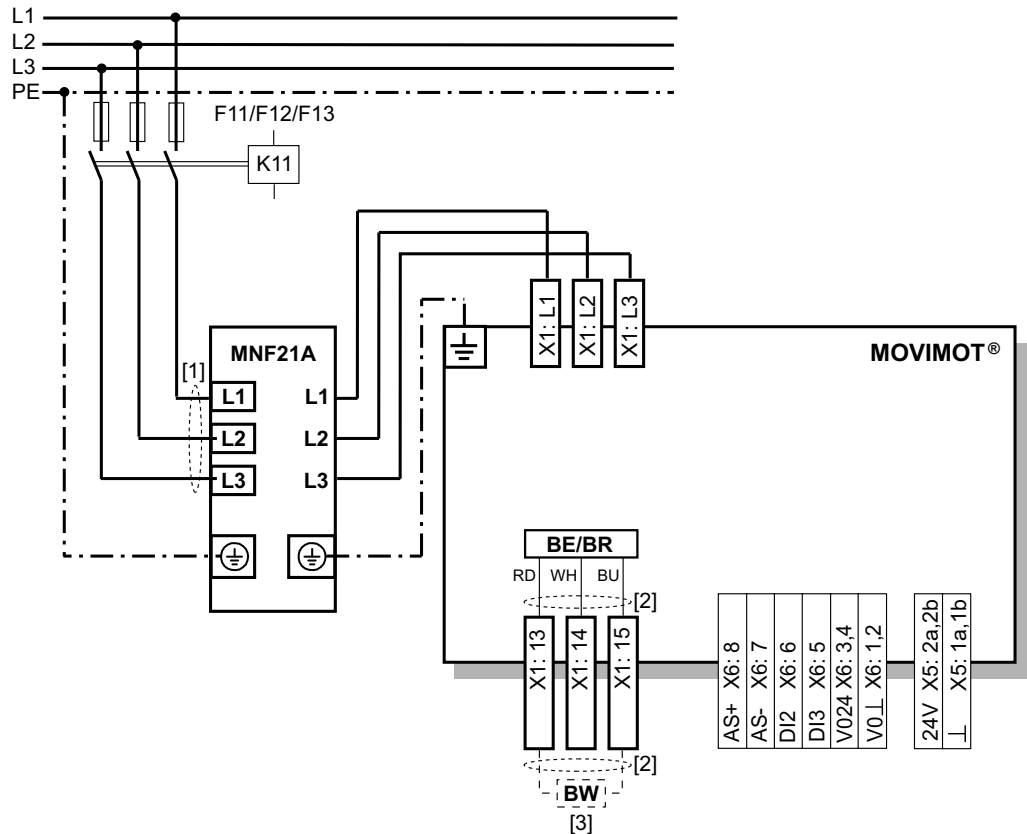
INFORMATION



Installation is only permitted in combination with the modular connection box of MOVIMOT® MM03D-503-00 – MM15D-503-00.

For more information about mounting the MNF21A option, refer to chapter "Installation of MNF21A option" (→ 25).

The following figure shows how to connect the MNF21A option:



1754451723

- [1] Keep the cable length for the power supply as short as possible!
- [2] Keep the length of the brake cables as short as possible!
Do not route the brake cables in parallel, but as far away from the power supply cables as possible!
- [3] BW braking resistor (only in MOVIMOT® without mechanical brake)

10.7 SEW-EURODRIVE Service

If an error cannot be solved, please contact SEW-EURODRIVE Service (see "Address list"). When contacting SEW-EURODRIVE Service, always provide the following information:

- Service code [1]
- Unit designation on inverter nameplate [2]
- Part number [3]
- Serial number [4]
- Type designation on motor nameplate [5]
- Serial number [6]
- Short description of application (application, binary control or via RS485)
- Type of error
- Accompanying circumstances (e.g. initial startup)
- Your own presumptions, any unusual events preceding the problem, etc.

[1]	 Status: 17 10 -- A -- 15 10 16 08/14 829	
[2]		
[3]	 D-76646 Bruchsal Made in Germany MOVIMOT Antriebsumrichter Drive Inverter	Type: MM15D-503-00 P#: 18215033 S#: 1757110 Eingang / Input Ausgang / Output U = 3x380...500V AC U = 3x0V...U _{in} I = 3.5A AC I = 4A AC f = 50...60Hz f = 2...120Hz T = -30...+40°C P-Motor 1.5kW / 2HP
[4]		
[5]	 76646 Bruchsal/Germany RF47 DRE90L4BE2/MM15/MO	
[6]	01.1398407701.0001.14 Inverter duty VPWM 3-IEC60034 kW 1.5 S1 r/min 1400/86 Hz 50 V 380-500 IP 54 TEFC CT 1:5 Hz 50-60 A 3,5 kW 0.3 S1 r/min 280/17 Hz 13 Th.Kl. 155(F) ML 02	
	i 16,22 Nm 166 IM M1 Vbr 230 AC Nm 20  CLP 220 Miner.Öl/0.65 l kg 42.000 AMB °C -20..40 1886177DE Made in Germany	

18014398969472139

10.8 Shutdown

To shut down the MOVIMOT® drive, de-energize the drive using appropriate measures.

▲ WARNING



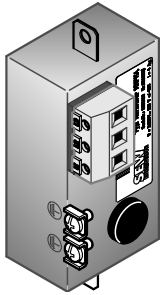
Electric shock from capacitors that have not been fully discharged.

Severe or fatal injuries.

- Disconnect the inverter from the power. Observe the minimum switch-off time after disconnection from the supply system:

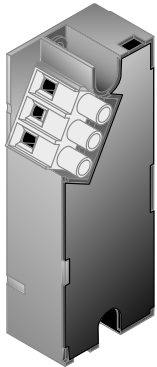
– **1 minute**

11.5.4 MNF21A



Option	MNF21A (only for MM03D-503-00 – MM15D-503-00)
Part number	08042659
Function	3-phase line filter (allows for category C1 to EN 61800-3)
Input voltage	AC 3 x 380 V ± 10%/50 – 60 Hz
Input current	4 A
Degree of protection	IP20
Ambient temperature	-25 – +60°C
Storage temperature	-25 – +85°C

11.5.5 URM



Option	URM
Part number	08276013
Function	Voltage relay, ensures quick application of the mechanical brake
Rated voltage V_N	DC 36 – 167 V (Brake coil AC 88 – 400 V)
Braking current I_N	0.75 A
Degree of protection	IP20
Ambient temperature	-25 – +60°C
Storage temperature	-25 – +85°C
Disconnection time t_{off}	Approx. 40 ms (without URM option: 100 ms) (cut-off in the DC circuit)

11.5.6 BEM



NOTICE

If the connection voltage is too high, the BEM brake rectifier or the brake coil connected to it can be damaged.

Damage to the BEM brake rectifier or the brake coil.

- Select a brake with rated brake voltage that matches the nominal line voltage.

11.9 Braking torque assignment

Motor type	Brake type	Braking torque steps [Nm]													
DR.71	BE05	1.8	2.5	3.5	5.0										
	BE1				5.0	7.0	10								
DR.80	BE05	1.8	2.5	3.5	5.0										
	BE1				5.0	7.0	10								
	BE2					7.0	10	14	20						
DR.90	BE1				5.0	7.0	10								
	BE2					7.0	10	14	20						
	BE5								20	28	40	55			
DR.100	BE2					7.0	10	14	20						
	BE5								20	28	40	55			
DR.112	BE5									28	40	55			
	BE11										40	55			
DR.132	BE5									28	40	55			
	BE11										40	55	80	110	

Preferred brake voltage

MOVIMOT® type	Preferred brake voltage
MOVIMOT® MM..D-503, size 1 (MM03.. to MM15..)	230 V
MOVIMOT® MM..D-503, size 2 (MM22.. to MM40..)	120 V
MOVIMOT® MM..D-223 ¹⁾ , size 1 and 2 (MM03.. to MM40..)	

1) In connection with MOVIMOT MM..D-233, only the brakes with a nominal voltage of 120 V are permitted.

11.10 Assignment of internal braking resistors

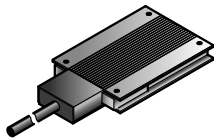
MOVIMOT® type	Braking resistor	Part number
MM03D-503-00 – MM15D-503-00 MM03D-233-00 – MM07D-233-00	BW1	08228973 ¹⁾
MM22D-503-00 – MM40D-503-00 MM11D-233-00 – MM22D-233-00	BW2	08231362 ¹⁾

1) 2 screws M4 x 8, included in scope of delivery.

11.11 Assignment of external braking resistors

MOVIMOT® type	Braking resistor	Part no.	Protective grid
MM03D-503-00 – MM15D-503-00 MM03D-233-00 – MM07D-233-00	BW200-003/K-1.5	08282919	0813152X
	BW200-005/K-1.5	08282838	–
	BW150-010	08022852	–
MM22D-503-00 – MM40D-503-00 MM11D-233-00 – MM22D-233-00	BW100-003/K-1.5	08282935	0813152X
	BW100-005/K-1.5	08282862	–
	BW068-010	08022879	–
	BW068-020	08022860	–

11.11.1 BW100.. BW200..



	BW100-003/ K-1.5	BW100-005/ K-1.5	BW200-003/ K-1.5	BW200-005/ K-1.5
Part number	08282935	08282862	08282919	08282838
Function	Dissipating the regenerative energy			
Degree of protection	IP65			
Resistance	100 Ω	100 Ω	200 Ω	200 Ω
Power in S1, 100% cdf	100 W	200 W	100 W	200 W
Dimensions W x H x D	146 x 15 x 80 mm	252 x 15 x 80 mm	146 x 15 x 80 mm	252 x 15 x 80 mm
Line length	1.5 m			