

MANUFACTURER DOCUMENT PACKAGE

Manufacturer's Manual

Reference package for procurement and maintenance review

SEW

MM15D-503-00

DECENTRALIZED AC DRIVE INVERTER

Used with the applicable MOVIMOT MM..D configuration.

REFERENCE PACKAGE

OFFICIAL DOCUMENT

Selected official manufacturer pages follow this cover.

Source: SEW-EURODRIVE MOVIMOT MM..D product manual 33953961/EN, April 2026, pp. 33 to 36

4 Technical data

4.1 Motor with operating point 400 V/50 Hz or 400 V/100 Hz

MOVIMOT® type		MM 03D- 503-00	MM 05D- 503-00	MM 07D- 503-00	MM 11D- 503-00	MM 15D- 503-00	MM 22D- 503-00	MM 30D- 503-00	MM 40D- 503-00
Part number		1821 4991	1821 5009	1821 5017	1821 5025	1821 5033	1821 5041	1821 5068	1821 5076
Size		1					2		2L
Apparent output power at V_{line} = AC 380 – 500 V	S_N	1.1 kVA	1.4 kVA	1.8 kVA	2.2 kVA	2.8 kVA	3.8 kVA	5.1 kVA	6.7 kVA
Connection voltages	V_{line}	AC 3 x 380 V/ 400 V /415 V/460 V/500 V							
Permitted range		V_{line} = AC 380V -10% – AC 500V +10%							
Line frequency	f_{line}	50 – 60 Hz ±10%							
Nominal line current at V_{line} = AC 400 V	I_{line}	AC 1.3 A	AC 1.6 A	AC 1.9 A	AC 2.4 A	AC 3.5 A	AC 5.0 A	AC 6.7 A	AC 7.3 A
Unaffected short-cir- cuit current according to EN 61800-5-1		5 kA							
Maximum rated cur- rent		25 A							
Power factor	$\cos \varphi$	0.99							
Output voltage	V_A	0 – V_{line}							
Output frequency	f_A	2 – 120 Hz							
Resolution		0.01 Hz							
Operating point		400 V at 50/100 Hz							
Nominal output current	I_N	AC 1.6 A	AC 2.0 A	AC 2.5 A	AC 3.2 A	AC 4.0 A	AC 5.5 A	AC 7.3 A	AC 8.7 A
Motor power S1	P_{Mot}	0.37 kW 0.5 HP	0.55 kW 0.75 HP	0.75 kW 1.0 HP	1.1 kW 1.5 HP	1.5 kW 2.0 HP	2.2 kW 3.0 HP	3.0 kW 4.0 HP	4.0 kW 5.4 HP
PWM frequency		4 (factory setting)/8/16 kHz ¹⁾							
Current limitation	I_{max}	Motoring opera- tion:		160% for Δ and Δ					
		Regenerative operation:		160% for Δ and Δ					
Maximum motor cable length		15 m when MOVIMOT® inverter is mounted close to the motor (with SEW-EURODRIVE hybrid cable)							
External braking resistor	R_{min}	150 Ω					68 Ω		
Interference im- munity		Complies with EN 61800-3							

MOVIMOT® type		MM 03D- 503-00	MM 05D- 503-00	MM 07D- 503-00	MM 11D- 503-00	MM 15D- 503-00	MM 22D- 503-00	MM 30D- 503-00	MM 40D- 503-00
Part number		1821 4991	1821 5009	1821 5017	1821 5025	1821 5033	1821 5041	1821 5068	1821 5076
Size		1					2		2L
Interference emis- sion		Complies with category C2 according to EN 61800-3 (limit class A to EN 55011 and EN 55014)							
Ambient temperature		ϑ _A	-25 (-30) – +40 °C depending on the motor P _N reduction: 3% I _N per K up to max. 60 °C						
Climate class		EN 60721-3-3, class 3K22							
Storage temperature 2)		-30 to +85 °C (EN 60721-3-3, class 3K22)							
Maximum permitted vibration and impact load		3M7 according to DIN EN 60721-3-3 According to DIN EN 61800-5-1 and EN 60068-2-6							
Degree of protection (depending on the mo- tor)		IP54, IP55, IP65, IP66 (optional, specify when ordering) (Connection box closed and all cable entries sealed; if the motor has a lower degree of protection, the degree of protection of the MOVIMOT® drive is reduced accordingly)							
Operating mode		S1, S3 max. cycle duration 10 minutes (EN 60034-1)							
Type of cooling		Natural cooling (DIN 41751)							
Installation altitude		h ≤ 1000 m: No reduction h > 1000 m: I _N reduced by 1% per 100 m h > 2000 m: I _N reduction by 1% per 100 m, overvoltage category II h _{max} = 3800 m See also chapter "Installation altitudes above 1000 m above sea level" (→ 125)							
Mass		See "MOVIMOT® gearmotors" catalog							
Dimensions, dimension drawings									
Output torques									
Required preventive measures		Grounding of the device							
Motor protection		Motor protection model: see chapter "Parameter 340" Motor current 140% – 190% of I _N : Switch-off between 60 s and 134 s, (depending on the actual speed and the thermal memory)							

1) 16 kHz PWM frequency (low-noise): When DIP SWITCH S1/7 is set to ON, the devices operate at a PWM frequency of 16 kHz (low noise) and switch back in steps to lower clock frequencies depending on the heat sink temperature and the load.

2) If the device is stored for long periods, apply line voltage to the device for at least 5 minutes every 2 years. Otherwise, the service life of the device will be reduced.

4.2 Motor with operating point 460 V/60 Hz

MOVIMOT® type		MM 03D- 503-00	MM 05D- 503-00	MM 07D- 503-00	MM 11D- 503-00	MM 15D- 503-00	MM 22D- 503-00	MM 30D- 503-00	MM 40D- 503-00
Part number		1821 4991	1821 5009	1821 5017	1821 5025	1821 5033	1821 5041	1821 5068	1821 5076
Size		1					2		2L
Apparent output power at V_{line} = AC 380 – 500 V	S_N	1.1 kVA	1.4 kVA	1.8 kVA	2.2 kVA	2.8 kVA	3.8 kVA	5.1 kVA	6.7 kVA
Connection voltages	V_{line}	AC 3 x 380 V/400 V/415 V/ 460 V /500 V							
Permitted range		V_{line} = AC 380 V -10% – AC 500 V +10%							
Line frequency	f_{line}	50 – 60 Hz ±10%							
Nominal line current at V_{line} = AC 460 V	I_{line}	AC 1.1 A	AC 1.4 A	AC 1.7 A	AC 2.1 A	AC 3.0 A	AC 4.3 A	AC 5.8 A	AC 6.9 A
Unaffected short-cir- cuit current according to EN 61800-5-1		5 kA							
Maximum rated cur- rent		25 A							
Power factor	$\cos \varphi$	0.99							
Output voltage	V_A	0 – V_{line}							
Output frequency	f_A	2 – 120 Hz							
Resolution		0.01 Hz							
Operating point		460 V at 60 Hz							
Nominal output current	I_N	AC 1.6 A	AC 2.0 A	AC 2.5 A	AC 3.2 A	AC 4.0 A	AC 5.5 A	AC 7.3 A	AC 8.7 A
Motor power	P_{Mot}	0.37 kW 0.5 HP	0.55 kW 0.75 HP	0.75 kW 1.0 HP	1.1 kW 1.5 HP	1.5 kW 2.0 HP	2.2 kW 3.0 HP	3.7 kW 5.0 HP	4 kW 5.4 HP
PWM frequency		4 (factory setting)/8/16 kHz ¹⁾							
Current limitation	I_{max}	Motoring opera- tion:		160% for Δ and Δ					
		Regenerative operation:		160% for Δ and Δ					
Maximum motor cable length		15 m when MOVIMOT® inverter is mounted close to the motor (with SEW-EURODRIVE hybrid cable)							
External braking resistor	R_{min}	150 Ω					68 Ω		
Interference im- munity		Complies with EN 61800-3							

MOVIMOT® type		MM 03D- 503-00	MM 05D- 503-00	MM 07D- 503-00	MM 11D- 503-00	MM 15D- 503-00	MM 22D- 503-00	MM 30D- 503-00	MM 40D- 503-00
Part number		1821 4991	1821 5009	1821 5017	1821 5025	1821 5033	1821 5041	1821 5068	1821 5076
Size		1					2		2L
Interference emis- sion		Complies with category C2 according to EN 61800-3 (limit class A to EN 55011 and EN 55014)							
Ambient temperature	ϑ _A	-25 (-30) – +40 °C depending on the motor P _N reduction: 3% I _N per K up to max. 60 °C							
Climate class		EN 60721-3-3, class 3K22							
Storage temperature ²⁾		-30 to +85 °C (EN 60721-3-3, class 3K22)							
Maximum permitted vibration and impact load		3M7 according to DIN EN 60721-3-3 According to DIN EN 61800-5-1 and EN 60068-2-6							
Degree of protection (depending on the mo- tor)		IP54, IP55, IP65, IP66 (optional, specify when ordering) (Connection box closed and all cable entries sealed; if the motor has a lower degree of protection, the degree of protection of the MOVIMOT® drive is reduced accordingly)							
Operating mode		S1, S3 max. cycle duration 10 minutes (EN 60034-1)							
Type of cooling		Natural cooling (DIN 41751)							
Installation altitude		h ≤ 1000 m: No reduction h > 1000 m: I _N reduced by 1% per 100 m h > 2000 m: I _N reduction by 1% per 100 m, overvoltage category II h _{max} = 3800 m See also chapter "Installation altitudes above 1000 m above sea level" (→ 125)							
Mass		See "MOVIMOT® gearmotors" catalog							
Dimensions, dimension drawings									
Output torques									
Required preventive measures		Grounding of the device							
Motor protection		Motor protection model: see chapter "Parameter 340" Motor current 140% – 190% of I _N : Switch-off between 60 s and 134 s, (depending on the actual speed and the thermal memory)							

1) 16 kHz PWM frequency (low-noise): When DIP SWITCH S1/7 is set to ON, the devices operate at a PWM frequency of 16 kHz (low noise) and switch back in steps to lower clock frequencies depending on the heat sink temperature and the load.

2) If the device is stored for long periods, apply line voltage to the device for at least 5 minutes every 2 years. Otherwise, the service life of the device will be reduced.