



## Variable frequency drives, 1p, 230 V, 3.7A, 0.75kW

**Part no.** MX12AA3D7N0-0  
**Article no.** 122663  
**Catalog No.** MMX12AA3D7N0-0

### Delivery program

Product range			M-MAX (MMX)
Rated operational voltage			1 AC 230 V
Mains voltage (50/60Hz)	U <sub>LN</sub>	V	208 (-15%) - 240 (+10%)
<b>Assigned motor rating</b>			
at 230 V, 50 Hz	P	kW	0.75
			Rated operational current at an operating frequency of 6 kHz and an ambient air temperature of +50 °C
at 230 V, 60 Hz	P	HP	0.75
			Assigned motor rating for normal internally and externally ventilated 4 pole, three-phase asynchronous motors with 1500 rpm <sup>-1</sup> (at 50 Hz) or 1800 min <sup>-1</sup> (at 60 Hz)
Rated operational current	I <sub>e</sub>	A	3.7
<b>Rated motor current</b>			
at 230 V, 50 Hz	I <sub>M</sub>	A	3.2
at 220 - 240 V, 60 Hz	I <sub>M</sub>	A	3.2
Radio interference suppression filters			without internal radio interference suppression filter
Degree of Protection			IP20/NEMA 0
Brake chopper			without internal brake chopper
Frame size			FS2
Notes			
Cross-reference Increased protection type IP21/NEMA 1, → Accessories			

### Technical data

#### Power section

Input side			
Number of phases			single-phase (L, N) two-phase (e.g. L1, L2)
Mains voltage (50/60Hz)	U <sub>LN</sub>	V	208 (-15%) - 240 (+10%)
Mains voltage UL/CSA (45-66 Hz ± 0%)	U <sub>LN</sub>	V	177 - 264 (±0%)
Rated operational voltage			1 AC 230 V
Rated operational current	I <sub>e</sub>	A	3.7
Input current	I <sub>LN</sub>	T	8.3
Overload current for 60 s every 600 s at 50 °C		T	5.6
Starting current for 2 s every 20 s at 50 °C		T	7.4
Maximum leakage current to ground (PE) without motor	I <sub>PE</sub>	mA	11.8
Apparent power			
Apparent power at rated operation 230 V	S	kVA	1.47
Apparent power at rated operation 240 V	S	kVA	1.54
Assigned motor rating			
at 230 V, 50 Hz	P	kW	0.75
at 230 V, 60 Hz	P	HP	0.75
Braking torque			
Standard braking torque			max. 30 % M <sub>N</sub>
DC braking torque			max. 100% of rated operational current I <sub>e</sub> , variable
Switching frequency	f <sub>PWM</sub>	kHz	6 adjustable 1 - 16
Heat dissipation at rated operational current I <sub>e</sub> = 150 %	P <sub>V</sub>	W	40.2

Efficiency		%	95
Fitted with			Fan (internal, temperature controlled)
Frame size			FS2
Weight	m	kg	0,500

## Technical data ETIM 5.0

Low-voltage industrial components (EG000017) / Frequency controller =< 1 kV (EC001857)

Electric engineering, automation, process control engineering / Electrical drive / Static frequency converter / Static frequency converter = < 1 kv (ec1@ss8-27-02-31-01 [AKE177010])

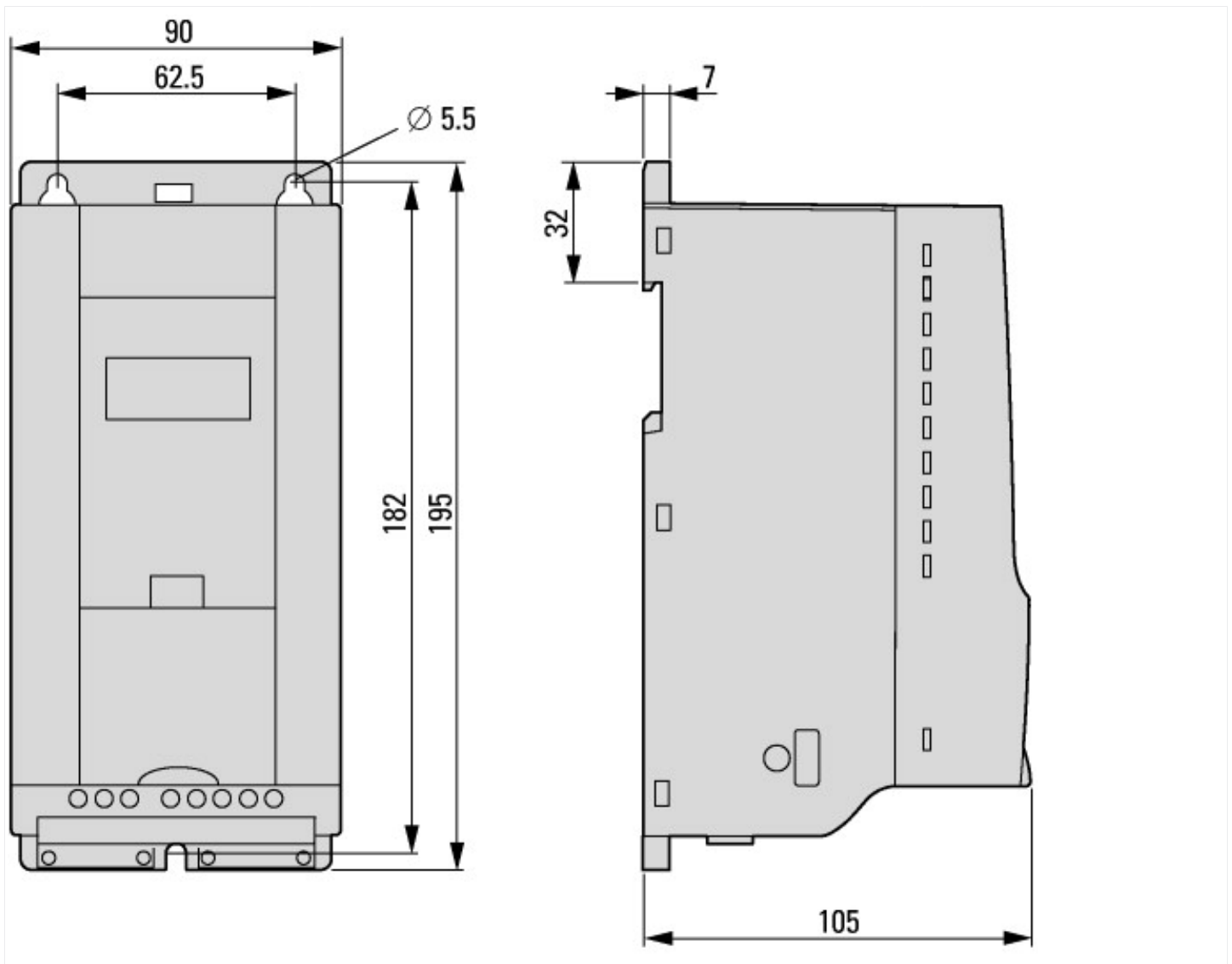
Mains voltage	V	0 - 240
Mains frequency		50/60 Hz
Number of phases input		1
Number of phases output		1
Max. output frequency	Hz	0
Rated output voltage	V	230
Measuring output current	A	3.7
Output power at rated output voltage	kW	0.75
Max. output at quadratic load at rated output voltage	kW	0.75
Max. output at linear load at rated output voltage	kW	0.75
With control unit		Yes
Application in industrial area permitted		Yes
Application in domestic- and commercial area permitted		No
Supporting protocol for TCP/IP		No
Supporting protocol for PROFIBUS		No
Supporting protocol for CAN		No
Supporting protocol for INTERBUS		No
Supporting protocol for ASI		No
Supporting protocol for KNX		No
Supporting protocol for MODBUS		Yes
Supporting protocol for Data-Highway		No
Supporting protocol for DeviceNet		No
Supporting protocol for SUCONET		No
Supporting protocol for LON		No
Supporting protocol for PROFINET IO		No
Supporting protocol for PROFINET CBA		No
Supporting protocol for SERCOS		No
Supporting protocol for Foundation Fieldbus		No
Supporting protocol for EtherNet/IP		No
Supporting protocol for AS-Interface Safety at Work		No
Supporting protocol for DeviceNet Safety		No
Supporting protocol for INTERBUS-Safety		No
Supporting protocol for PROFIsafe		No
Supporting protocol for SafetyBUS p		No
Supporting protocol for other bus systems		No
Number of HW-interfaces industrial Ethernet		0
Number of HW-interfaces PROFINET		0
Number of HW-interfaces RS-232		0
Number of HW-interfaces RS-422		0
Number of HW-interfaces RS-485		1
Number of HW-interfaces serial TTY		0
Number of HW-interfaces USB		0
Number of HW-interfaces parallel		0
Number of HW-interfaces other		0
With optical interface		No
With PC connection		Yes
Integrated braking resistance		No

4-quadrant operation possible		No
Type of converter		U converter
Degree of protection (IP)		IP20
Height	mm	195
Width	mm	90
Depth	mm	105
Relative symmetric net frequency tolerance	%	10
Relative symmetric net current tolerance	%	10

## Approvals

Product Standards		UL 508C; CSA-C22.2 No. 14; IEC/EN61800-3; IEC/EN61800-5; CE marking
UL File No.		E134360
UL Category Control No.		NMMS, NMMS7
CSA File No.		UL report applies to both US and Canada
CSA Class No.		3211-06
North America Certification		UL listed, certified by UL for use in Canada
Specially designed for North America		No
Suitable for		Branch circuits
Max. Voltage Rating		1~ 240 V AC IEC: TN-S UL/CSA: "Y" (Solidly Grounded Wey)
Degree of Protection		IEC: IP20; optionally UL/CSA NEMA 1

## Dimensions



## Additional product information (links)

[IL04020006Z MMX adjustable frequency drives, size 1, 2 and 3](#)

IL04020006Z MMX adjustable frequency drives, size 1, 2 and 3 [ftp://ftp.moeller.net/DOCUMENTATION/AWA\\_INSTRUCTIONS/IL04020006Z2011\\_06.pdf](ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL04020006Z2011_06.pdf)

**MN04020001Z M-Max variable frequency drive, manual**

MN04020001Z Frequenzumrichter M-Max, Handbuch - Deutsch [ftp://ftp.moeller.net/DOCUMENTATION/AWB\\_MANUALS/MN04020001Z\\_DE.pdf](ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN04020001Z_DE.pdf)

MN04020001Z M-Max variable frequency drive, manual - English [ftp://ftp.moeller.net/DOCUMENTATION/AWB\\_MANUALS/MN04020001Z\\_EN.pdf](ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN04020001Z_EN.pdf)

MN04020001Z Convertisseurs de fréquence M-Max, manuel - français [ftp://ftp.moeller.net/DOCUMENTATION/AWB\\_MANUALS/MN04020001Z\\_FR.pdf](ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN04020001Z_FR.pdf)

MN04020001Z Frekvenční měnič M-Max, manuál - čeština [ftp://ftp.moeller.net/DOCUMENTATION/AWB\\_MANUALS/MN04020001Z\\_CZ.pdf](ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN04020001Z_CZ.pdf)

MN04020001Z Convertitori di frequenza M-Max, manuale - italiano [ftp://ftp.moeller.net/DOCUMENTATION/AWB\\_MANUALS/MN04020001Z\\_IT.pdf](ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN04020001Z_IT.pdf)

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