

Part no.

Variable frequency drives, 1p, 230 V, 1.7A, 0.25kW

MMX12AA1D7N0-0 Article no. 122660 Catalog No. MMX12AA1D7N0-0



Delivery programme

Don'tory programmo			
Product range			M-MAX (MMX)
Rated operational voltage			1 AC 230 V
Mains voltage (50/60Hz)	U_{LN}	V	208 (-15%) - 240 (+10%)
Assigned motor rating			
at 230 V, 50 Hz	P	kW	0.25
			Rated operational current at an operating frequency of 6 kHz and an ambient air temperature of +50 $^{\circ}\text{C}$
at 230 V, 60 Hz	P	HP	0.33
			Assigned motor rating for normal internally and externally ventilated 4 pole, three-phase asynchronous motors with 1500 $\rm rpm^{-1}$ (at 50 Hz) or 1800 $\rm min^{-1}$ (at 60 Hz)
Rated operational current	l _e	Α	1.7
Rated motor current			
at 230 V, 50 Hz	I _e	Α	1.7
Radio interference suppression filters			without internal radio interference suppression filter
Degree of Protection			IP20/NEMA 0
Brake chopper			without internal brake chopper
Frame size			FS1
Notes			
Cross-reference Increased protection type IP21/NEMA 1, \Rightarrow Accessories			

Technical data

Inputs side Number of phases Number of phases Mains voltage (50/60Hz) Mains voltage (50/60Hz) Mains voltage (50/60Hz) Mains voltage (10/50A (45-66 Hz ± 0%)) Rated operational voltage Rated operational current Input current for 20 s every 600 s at 50 °C Starting current for 2 s every 20 s at 50 °C Apparent power at rated operation 230 V Apparent power at rated operation 240 V Apparent power at rated operation 240 V Assigned motor rating at 230 V, 50 Hz Apparent power Standard braking torque Do Craking torque Switching frequency Pwww Main Switching frequency Pyww Main Switching frequency Pyww W Input Switching frequency Pyww W Input Switching frequency Pyww W Input Switching frequency W Inpu	Power section			
Mains voltage (50/60Hz) ULN V 208 (-15%) - 240 (+10%) Mains voltage (UL/CSA (45-66 Hz ± 0%) ULN V 177 - 264 (±0%) Rated operational voltage ILO 1AC 230 V Rated operational current ILN T 4.2 Input current ILN T 4.2 Overload current for 60 s every 600 s at 50 °C T 2.6 Starting current for 2 s every 20 s at 50 °C T 3.4 Maximum leakage current to ground (PE) without motor IPE mA 15.4 Apparent power S kVA 0.88 Apparent power at rated operation 230 V S kVA 0.71 Assigned motor rating KVA 0.25 at 230 V, 50 Hz T 0.3 at 230 V, 50 Hz T 0.3 Standard braking torque P kW 0.5 Standard braking torque T max. 30 % M _N DC braking torque T max. 30 % M _N DC braking torque T Max. 100% of rated operational current I _n , variable	Input side			
Mains voltage UL/CSA (45-66 Hz ± 0%) Rated operational voltage Rated operational current Rated oper	Number of phases			
Rated operational voltage Rated operational current Rated operation conditions Rated operation current conditions Rated department conditions Rated condit	Mains voltage (50/60Hz)	U_{LN}	V	208 (-15%) - 240 (+10%)
Rated operational current Input current Inpu	Mains voltage UL/CSA (45-66 Hz ± 0%)	U_{LN}	V	177 - 264 (±0%)
Input current Overload current for 60 s every 600 s at 50 °C Starting current for 2 s every 20 s at 50 °C Maximum leakage current to ground (PE) without motor Apparent power Apparent power at rated operation 230 V Apparent power at rated operation 240 V Assigned motor rating at 230 V, 50 Hz at 230 V, 50 Hz Braking torque Standard braking torque Standard braking torque DC braking torque Switching frequency FWM WH ABA T 4.2 A.5 A.6 A.7 A.6 A.7 A.6 A.7 A.7 A.8 A.8 A.9 A.9 A.9 A.9 A.9 A.9	Rated operational voltage			1 AC 230 V
Overload current for 60 s every 600 s at 50 °C Starting current for 2 s every 20 s at 50 °C Maximum leakage current to ground (PE) without motor Apparent power Apparent power at rated operation 230 V Asparent power at rated operation 240 V SskVA Apparent power at rated operation 240 V Assigned motor rating at 230 V, 50 Hz at 230 V, 50 Hz braking torque Standard braking torque Standard braking torque DC braking torque Switching frequency FWM KHZ FWM KHZ Assignation at rated operational current FWM KHZ Braking torque Svitching frequency FWM KHZ Braking torque T	Rated operational current	I _e	Α	1.7
Starting current for 2 s every 20 s at 50 °C Maximum leakage current to ground (PE) without motor Apparent power Apparent power at rated operation 230 V Apparent power at rated operation 240 V Assigned motor rating at 230 V, 50 Hz at 230 V, 50 Hz Standard braking torque Switching frequency When the dissipation at rated operational current Py When the dissipation at rated operational current T 3.4 Assigned motor Apparent power at 15.4 Ac 8. Apparent power at rated operation 230 V S kVA Ac 0.68 A.7 A.7 A.7 A.8 A.9 A.9 A.9 A.9 A.9 A.9 A.9	Input current	I _{LN}	Т	4.2
Maximum leakage current to ground (PE) without motor Apparent power Apparent power at rated operation 230 V Apparent power at rated operation 240 V Assigned motor rating at 230 V, 50 Hz at 230 V, 50 Hz Braking torque Standard braking torque Standard braking torque DC braking torque Switching frequency FPWM FPWM KHz 6 adjustable 1 - 16 (real) 15.4 15.4 15.4 15.4 15.4 15.4 15.4 16.8	Overload current for 60 s every 600 s at 50 °C		T	2.6
Apparent power Apparent power at rated operation 230 V Apparent power at rated operation 240 V Assigned motor rating at 230 V, 50 Hz at 230 V, 50 Hz Braking torque Standard braking torque DC braking torque Switching frequency FPWM FPWM KHz Gaijustable 1 - 16 (real) FRANCE FR	Starting current for 2 s every 20 s at 50 °C		T	3.4
Apparent power at rated operation 230 V Apparent power at rated operation 240 V Assigned motor rating at 230 V, 50 Hz at 230 V, 50 Hz Assigned motor rating P W W 0.25 At 230 V, 60 Hz P HP 0.33 Braking torque Standard braking torque Oberaking torque Standard braking torque Switching frequency FPWM WHZ ABA Braking torque PV W 17.9	Maximum leakage current to ground (PE) without motor	I _{PE}	mA	15.4
Apparent power at rated operation 240 V Assigned motor rating at 230 V, 50 Hz at 230 V, 50 Hz PPHP Standard braking torque Standard braking torque Obstaing torque Switching frequency PWM WHZ Apparent power at rated operation 240 V 0.71	Apparent power			
Assigned motor rating at 230 V, 50 Hz at 230 V, 60 Hz Braking torque Standard braking torque DC braking torque Switching frequency FPWM Standard braking torque FPWM SWH FPWM SWH FPWM SWH FPWM FP	Apparent power at rated operation 230 V	S	kVA	0.68
at 230 V, 50 Hz at 230 V, 50 Hz P HP 0.33 Braking torque Standard braking torque DC braking torque Switching frequency FPWM WHZ Braking torque FPWM WHZ FPW	Apparent power at rated operation 240 V	S	kVA	0.71
at 230 V, 60 Hz Braking torque Standard braking torque DC braking torque Switching frequency fPWM kHz fPWM kHz fPWM kHz fPWM kHz fPWM fP	Assigned motor rating			
Braking torque Standard braking torque DC braking torque Switching frequency FPWM Braking torque FPWM Switching frequency FPWM MHz FPWM MHz FPWM MHz FPWM FPWM MHz FPWM FPWM MHz FPWM	at 230 V, 50 Hz	P	kW	0.25
Standard braking torque DC braking torque Switching frequency fPWM MHZ 6 adjustable 1 - 16 (real) Heat dissipation at rated operational current PV W 17.9	at 230 V, 60 Hz	P	HP	0.33
DC braking torque max. 100% of rated operational current I _e , variable Switching frequency f _{PWM} kHz 6 adjustable 1 - 16 (real) Heat dissipation at rated operational current P _V W 17.9	Braking torque			
Switching frequency fPWM kHz 6 adjustable 1 - 16 (real) Heat dissipation at rated operational current PV W 17.9	Standard braking torque			max. 30 % M_N
Heat dissipation at rated operational current P _V W 17.9	DC braking torque			max. 100% of rated operational current l_{e_r} variable
	Switching frequency	f _{PWM}	kHz	
Efficiency % 96	Heat dissipation at rated operational current	P_V	W	17.9
	Efficiency		%	96

Fitted with			Fan (internal, temperature controlled)
Frame size			FS1
Weight	m	kg	0,500

Technical data ETIM 5.0

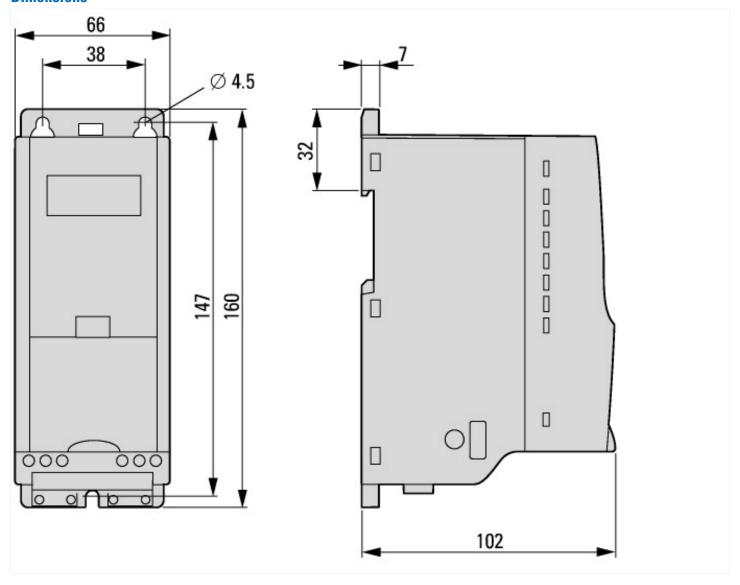
recimical data ETTIVI 3.0		
Low-voltage industrial components (EG000017) / Frequency controller =< 1 kV (E		
Electric engineering, automation, process control engineering / Electrical drive		verter / Static frequency converter = < 1 kv (ecl@ss8-27-02-31-01 [AKE177010])
Mains voltage	V	0 - 240
Mains frequency		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	Α	1.7
lutput power at rated output voltage	kW	0.25
Max. output at quadratic load at rated output voltage	kW	
Max. output at linear load at rated output voltage	kW	0.25
Vith control unit		Yes
pplication 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
upporting protocol for KNX		No
upporting protocol for MODBUS		Yes
upporting protocol for Data-Highway		No
supporting protocol for DeviceNet		No
upporting protocol for SUCONET		No
upporting protocol for LON		No
Supporting protocol for PROFINET IO		No
supporting protocol for PROFINET CBA		No
upporting protocol for SERCOS		No
upporting protocol for Foundation Fieldbus		No
supporting protocol for EtherNet/IP		No
upporting protocol for AS-Interface Safety at Work		No
upporting protocol for DeviceNet Safety		No
upporting protocol for INTERBUS-Safety		No
upporting protocol for PROFIsafe		No
upporting protocol for SafetyBUS p		No
upporting protocol for other bus systems		No
umber of HW-interfaces industrial Ethernet		0
lumber of HW-interfaces PROFINET		0
umber of HW-interfaces RS-232		0
umber of HW-interfaces RS-422		0
umber of HW-interfaces RS-485		1
umber of HW-interfaces serial TTY		0
umber of HW-interfaces USB		0
umber of HW-interfaces parallel		0
umber of HW-interfaces other		0
/ith optical interface		No
Vith PC connection		Yes
ntegrated braking resistance		No
l-quadrant operation possible		No

Type of converter		U converter
Degree of protection (IP)		IP20
Height	mm	160
Width	mm	66
Depth	mm	102
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

<code>IL04020006Z MMX</code> adjustable frequency drives, size 1, 2 and 3 $\,$

MN04020001Z M-Max variable frequency drive, manual

MN04020001Z Frequenzumrichter M-Max, Handbuch - Deutsch
MN04020001Z M-Max variable frequency drive, manual - English
MN04020001Z Convertisseurs de fréquence M-Max, manuel - français
MN04020001Z Frekvenční měnič M-Max, manuál - čeština
MN04020001Z Convertitori di frequenza M-Max, manuale - italiano
MN04020001Z Przemiennik częstotliwości M-Max, podręcznik - polski
MN04020001Z M-Max variable frequency drive, manual - русский