

NEW! Moving your Control Forward – Variable Frequency Drives

Use our VFDs as a stand-alone product or integrated with our PLC+HMI controllers.



VFD: Easy to Program. Simple to Use.

- EMC built-in filters
- Variety of mounting options
- Temperature - extended operating range
- Modbus RTU fieldbus
- UL, TÜV-SÜD safety and CE certified
- Braking units - built-in
- Sensorless Vector and Torque control
- Heavy-duty overload capacity
- STO (Safe Torque Off)

Use as an All-in-One package

Program the VFD using the same programming software as our controllers: UniStream®, Vision™ and Samba™



VFD Specifications

		UMI-B1 EU	UMI-B1 UL	UMI-B5 UL
Power	Input Voltage	200-240VAC, Single Phase 380-440VAC, Three Phase	200-240VAC, Single Phase 200-240VAC, Three Phase 380-480VAC, Three Phase	200-240VAC, Three Phase 380-480VAC, Three Phase
	Input Frequency	50/60Hz		
	Supported Motors	Asynchronous Induction Motors, Three Phase Input		Asynchronous Induction Motors, Three Phase Input Permanent Magnet Synchronous Motors, Three Phase Input
	Output Frequency	0-400Hz		
	Overload Capacity		150%, 60 seconds	
		180%, 10 seconds		
		200%, 1 second		
Control	Control Method	SVPWM (Space Vector PWM) SVC (Sensorless Vector Control)		
	Control Setting	MODBUS, Analog, Digital, PID, Pulse		
	Communication	MODBUS RTU RS-485		
Input	Analog Inputs	Total 2: 1 input 0-10V, 0-20mA, 1 input 0-10V		Total 3: 2 inputs 0-10V, 0-20mA, 1 input 0-10V
	Digital Inputs	Total 5: 4 inputs 1kHz, 1 input 50kHz		Total 9: 8 inputs 1kHz, 1 input 50kHz
Output	Analog Outputs	Up to 2: 1 output 0-10V, 0-20mA ≤2.2kW/3HP, (2nd output available from >2.2kW/3HP)	2 outputs 0-10V, 0-20mA	
	Digital Outputs	1 output sink/source		Total 2: 1 output sink/source, 1 output 50kHz
	Relay Outputs	Up to 2: 1 Programmable Multi-functional output. 2nd output available from >2.2kW/3HP	Total 2 Programmable Multi-functional outputs	
Features	Dynamic Braking Unit	Built-in (≤37kW/50HP)		Built-in (≤30kW/40HP)
		Optional (>37kW/50HP)		Optional (>30kW/40HP)
	EMC Filters	Built-In C3 (≥4kW/5HP), Comply with IEC/EN 61800-3 Optional C3 (<4kW/5HP), Comply with IEC/EN 61800-3		Built-In C3, Comply with IEC/EN 61800-3
General	Operating Temperature	(-10)°C/14°F – 50°C/122°F (de-rated by 1% for every 1°C/2°F above 40°C/104°F)		
	Altitude	2000m/6600 ft (de-rated by 1% for every additional 100m/330ft above 1000m/3300ft)		
	Enclosure Rating	IP20		
	Mounting Options	Wall and Rail (≤2.2kW/3HP)		Wall, Flange
		Wall and Flange (>2.2kW/3HP)		
	Cooling	Air-cooling		
	Safe Torque Off	√	×	
Compliance	CE, TÜV-SÜD Safety Mark		CE, UL and cUL	

VFD Models

UMI-B1 Series - STO



Article Number	Input Voltage	Rated Output Power		Rated Input Current (A)	Rated Output Current (A)	Dimensions (W x H x D mm)			Safety Class
		kW	HP						
UMI-0004BE-B1	Single phase 200-240V	0.4	0.5	6.5	2.5	80	160	124	Class SIL2 PLd CAT.3
UMI-0007BE-B1		0.75	1	9.3	4.2	80	160	124	
UMI-0015BE-B1		1.5	2	15.7	7.5	80	185	141	
UMI-0022BE-B1		2.2	3	24	10	80	185	141	
UMI-0007EE-B1		0.75	1	3.4	2.5	80	185	141	
UMI-0015EE-B1	1.5	2	5	4.2	80	185	141		
UMI-0022EE-B1	2.2	3	5.8	5.5	80	185	141		
UMI-0040EE-B1	4	5	13.5	9.5	146	256	167	Class SIL3 PLd CAT.3	
UMI-0055EE-B1	5.5	7.5	19.5	14	146	256	167		
UMI-0075EE-B1	7.5	10	25	18.5	170	320	197		
UMI-0110EE-B1	11	15	32	25	170	320	197		
UMI-0150EE-B1	15	20	40	32	170	320	197		
UMI-0185EE-B1	18.5	25	47	38	200	341	185		
UMI-0220EE-B1	22	30	51	45	200	341	185		
UMI-0300EE-B1	30	40	70	60	250	400	202		
UMI-0370EE-B1	37	50	80	75	250	400	202		
UMI-0450EE-B1	45	60	98	92	282	560	238		
UMI-0550EE-B1	55	75	128	115	282	560	238		
UMI-0750EE-B1	75	100	139	150	282	560	238		
UMI-0900EE-B1	90	120	168	180	338	554	330		
UMI-1100EE-B1	110	150	201	215	338	554	330		

UMI-B1 Series - UL



Article Number	Input Voltage	Rated Output Power		Rated Input Current (A)	Rated Output Current (A)	Dimensions (W x H x D mm)		
		kW	HP					
UMI-0004BU-B1	Single phase 200-240V	0.4	0.5	6.5	2.5	80	160	124
UMI-0007BU-B1		0.75	1	9.3	4.2	80	160	124
UMI-0015BU-B1		1.5	2	15.7	7.5	80	185	141
UMI-0022BU-B1		2.2	3	20	10	80	185	141
UMI-0004CU-B1	Three phase 200-240V	0.4	0.5	3.7	2.5	80	185	141
UMI-0007CU-B1		0.75	1	5	4.2	80	185	141
UMI-0007EU-B1	Three phase 380-480V	0.75	1	3.4	2.5	80	185	141
UMI-0015EU-B1		1.5	2	5	4.2	80	185	141
UMI-0022EU-B1		2.2	3	5.8	5.5	80	185	141

UMI-B5 Series - UL



Article Number	Input Voltage	Rated Output Power		Rated Input Current (A)	Rated Output Current (A)	Dimensions (W x H x D mm)			
		kW	HP						
UMI-0007CU-B5	Three phase 200-240V	0.75	1	5	4.5	126	193	175	
UMI-0015CU-B5		1.5	2	7.7	7	146	263	181	
UMI-0022CU-B5		2.2	3	11	10	146	263	181	
UMI-0040CU-B5		4	5	17	16	170	332	216	
UMI-0055CU-B5		5.5	7.5	21	20	170	332	216	
UMI-0075CU-B5		7.5	10	31	30	230	342	216	
UMI-0110CU-B5		11	15	43	42	255	407	245	
UMI-0150CU-B5		15	20	56	55	255	407	245	
UMI-0185CU-B5		18.5	25	71	70	270	555	325	
UMI-0220CU-B5		22	30	81	80	270	555	325	
UMI-0300CU-B5		30	40	112	110	270	555	325	
UMI-0370CU-B5		37	50	132	130	325	680	365	
UMI-0450CU-B5		45	60	163	160	325	680	365	
UMI-0550CU-B5		55	75	200	200	325	680	365	
UMI-0015EU-B5		Three phase 380-480V	1.5	2	5	3.7	126	193	175
UMI-0022EU-B5			2.2	3	5.8	5	126	193	175
UMI-0040EU-B5	4		5	13.5	9.5	146	263	181	
UMI-0055EU-B5	5.5		7.5	19.5	14	146	263	181	
UMI-0075EU-B5	7.5		10	25	18.5	170	332	216	
UMI-0110EU-B5	11		15	32	25	170	332	216	
UMI-0150EU-B5	15		20	40	32	230	342	216	
UMI-0185EU-B5	18.5		25	47	38	230	342	216	
UMI-0220EU-B5	22		30	56	45	255	407	245	
UMI-0300EU-B5	30		40	70	60	255	407	245	
UMI-0370EU-B5	37		50	80	75	270	555	325	
UMI-0450EU-B5	45		60	94	92	270	555	325	
UMI-0550EU-B5	55		75	128	115	270	555	325	
UMI-0750EU-B5	75		100	160	150	325	680	365	
UMI-0900EU-B5	90		120	190	180	325	680	365	
UMI-1100EU-B5	110		150	225	215	325	680	365	

Optional Parts



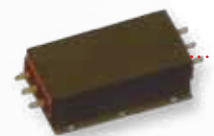
External Keypads



Flange Mounting Plates



Braking Resistors



C3 Input Filters
C2 Filters

Product Designation Key

UMI - 0022	E	U	- B1
①	②	③	④ ⑤

No.	Key	Description
①	Product Line	Unitronics Motion Inverters
②	Power Range	0004:400W/0.5HP 0022:2.2kW/3HP
③	Power Rating	B: 1PH 200V-240V C: 3PH 200V-240V E: 3PH 380V-440V/480V
④	Certification	U - UL Certified E - TÜV-SÜD Certified
⑤	Product series	B1 / B5



Fast. Easy. Cost-effective

Unitronics' integrated solution for control & automation offers the best of two worlds: broad choice and flexibility in choosing solution components together with the simplicity and time-savings of an all-inclusive, single-vendor solution.

“ Working with the Unitronics combined PLC and HMI make other systems feel old fashioned and obsolete. The support from Unitronics, from our local supplier, to email support, to help ideas on the forum, has been absolutely fantastic. ”

Justin Butler, Energy Plant Solutions

“ After programming several other brands of PLCs, Unitronics' software is by far the most intuitive and easily understood while providing significant functionality and quality. ”

Dan Murphy, Owner of Marathon Bottling and Automation

“ Using the Unitronics products, I am able to provide technologically advanced products and services that provide competitive advantages to my clients in terms of quality, efficiency, performance, safety, cost savings, and improved asset utilization of the plan floor. ”

Jeferson Franco, an Engineer at AI7 Automation Ltda.

- Complete range of PLC + HMI
- Full range of VFDs
- All-in-One programming software
- Added value for Industry 4.0, IIoT, and OT to IT
- Outstanding Support