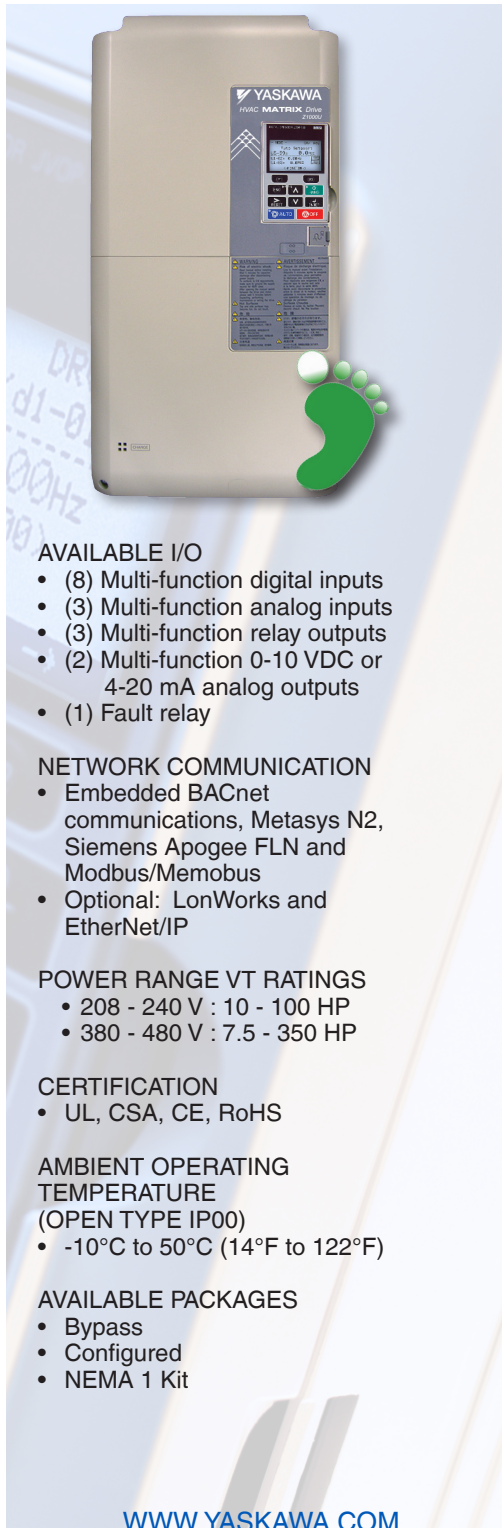
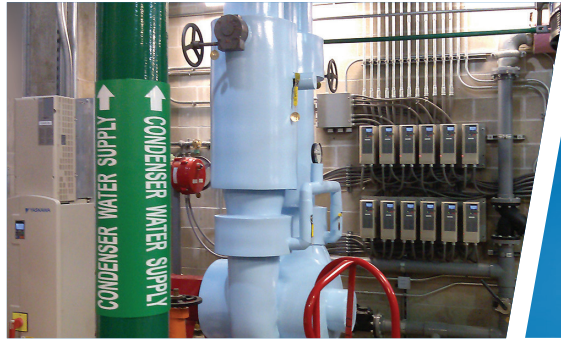


Z1000U HVAC MATRIX DRIVE



Merging **Green** and Technology for Building Automation

Add significantly to your green initiative with the Yaskawa Z1000U HVAC Matrix Drive, the product that goes beyond conventional drives by combining excellent harmonic mitigation, input power factor control and energy saving capabilities.

The HVAC Matrix drive (Z1000U) provides extremely low harmonic distortion in a space-saving design, along with the same HVAC-specific features as the standard Z1000. This single-component solution achieves excellent low distortion levels all by itself, completely without the need for additional countermeasures such as passive filters or multi-pulse arrangements. Unlike conventional drives, Yaskawa's matrix technology creates a variable output by switching directly from the input power (no DC bus). Not only does the Matrix drive provide outstanding harmonic performance, but being a member of the Z1000 family, it provides the same user experience for those already familiar with commissioning and maintaining the standard Z1000.

Primary Features and Benefits:

- Low Input Distortion Across a Wide Load and Speed Range
- IEEE-519 Compliant (< 5% THD)
- Eco-Mode to Achieve Near Across-the-Line THD
- High Efficiency Design Provides Extra Energy Savings as Compared to Other Low Harmonic Solutions
- Near Unity True Power Factor at Full Load
- 0.98 Displacement Power Factor Throughout Entire Load and Speed Range
- Integrated Input Fusing Provides 100kA SCCR
- Integrated C2 EMC Filter
- Compact Design
- High Reliability with an MTBF of 28 Years
- Embedded BACnet Communications (BTL Certified)
- Embedded Real Time Clock for Event Stamping
- High Carrier Frequency (Low Motor Noise) Capability
- 0-400 Hz Output Frequency
- 120% Overload for 60 Seconds
- Motor Auto-tuning
- Multi-language LCD Display, with Hand/Off/Auto and Copy function
- DriveWizard® HVAC Software
- Embedded Timer Functions for Starting, Stopping and Speed Changes
- Start into Spinning Load (Speed Search)
- Both Induction and Permanent Magnet Motor Control

AVAILABLE I/O

- (8) Multi-function digital inputs
- (3) Multi-function analog inputs
- (3) Multi-function relay outputs
- (2) Multi-function 0-10 VDC or 4-20 mA analog outputs
- (1) Fault relay

NETWORK COMMUNICATION

- Embedded BACnet communications, Metasys N2, Siemens Apogee FLN and Modbus/Memobus
- Optional: LonWorks and EtherNet/IP

POWER RANGE VT RATINGS

- 208 - 240 V : 10 - 100 HP
- 380 - 480 V : 7.5 - 350 HP

CERTIFICATION

- UL, CSA, CE, RoHS

AMBIENT OPERATING TEMPERATURE

- (OPEN TYPE IP00)
- -10°C to 50°C (14°F to 122°F)

AVAILABLE PACKAGES

- Bypass
- Configured
- NEMA 1 Kit



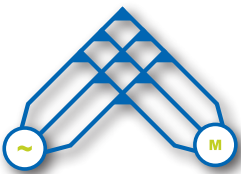
Merging Green and Technology
in Building Automation



OPEN CHASSIS (IP00)

208 - 240 V Class			Dimensions in mm (inches)			Weight in kg (lb)
Model: CIMR- ZU2E□	Amps	HP 240V (208V)	H	W	D	
0028	28	10 (7.5)	480 (18.89)	250 (9.84)	360 (14.17)	21 (46)
0042	42	15 (10)	650 (25.60)	264 (10.39)	420 (16.53)	33 (73)
0054	54	20 (15)				36 (79)
0068	68	25 (20)				63 (139)
0081	81	30 (25)				115 (254)
0104	104	40 (30)	816 (32.12)	264 (10.39)	450 (17.71)	63 (139)
0130	130	50 (40)	900 (38.97)	415 (16.33)	403 (15.86)	115 (254)
0154	154	60 (50)				181 (399)
0192	192	75 (60)				267 (589)
0248	248	100 (75)	1132 (44.56)	490 (19.29)	450 (17.71)	181 (389)

480 V Class			Dimensions in mm (inches)			Weight in kg (lb)
Model: CIMR- ZU4E□	Amps	HP	H	W	D	
0011	11	7.5	480 (18.89)	250 (9.84)	360 (14.17)	21 (46)
0014	14	10				
0021	21	15				
0027	27	20				
0034	34	25	650 (25.60)	264 (10.39)	420 (16.53)	33 (73)
0040	40	30				36 (79)
0052	52	40				63 (139)
0065	65	50	816 (32.12)	264 (10.39)	450 (17.71)	63 (139)
0077	77	60				115 (254)
0096	96	75				181 (399)
0124	124	100	990 (38.97)	415 (16.33)	403 (15.86)	63 (139)
0156	156	125				115 (254)
0180	180	150				181 (399)
0216	216	175	1132 (44.56)	490 (19.29)	450 (17.71)	267 (589)
0240	240	200				267 (589)
0302	302	250				267 (589)
0361	361	300	1132 (44.56)	695 (27.36)	450 (17.71)	267 (589)
0414	414	350				267 (589)



Z1000U MATRIX INNOVATION

Improved Energy Efficiency with Direct
Conversion from AC to AC

YASKAWA AMERICA INC.
DRIVES & MOTION DIVISION
WWW.YASKAWA.COM

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1-800-YASKAWA (927-5292) | TEL 847-887-7000 | FAX 1-847-887-7310

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engineer

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OF THE YEAR** | Most
Valuable
Product

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