

Hesitant to use a drive?

Problem 1

Why should I use a drive if the motor is directly connected to the power supply?

Problem 2

I do not need to consider energy savings because the motor operates at a constant speed.

Problem 3

Wiring and setup are problematic.

Problem 4

Solutions for harmonics and noise are necessary for drives.

There is no need to worry!

Yaskawa can solve your problems.

Problem 1

When you turn on the power supply to start a motor, five to six times the rated current flows to the motor. With a drive, you can...

- ◆ Reduce the starting current, which can lead to reduced power supply capacity.
- ◆ Use a breaker with a smaller capacity.
- ◆ Eliminate the need for contactor maintenance.

Problem 3

- ◆ Wiring is as easy as connecting a contactor.
- ◆ The drive can be set easily and automatically depending on the application.

3 wires on power supply side +
3 wires on motor side =
6 wires total

Problem 2

Do you use a machine for controlling airflow or water pressure? If you use a drive to control the motor speed,

- ◆ Power consumption is drastically reduced!

Problem 4

- ◆ Harmonic current solutions are not necessary.
- ◆ If you drive the motor at the power supply frequency, noise solutions are not necessary (commercial power switching function).
- ◆ A braking resistor is not required with the U1000.



The U1000 can solve your problems!

Standard Specifications

200 V Class

ND: Normal Duty, HD: Heavy Duty

Model CIMR-U-2A		0028	0042	0054	0068	0081	0104	0130	0154	0192	0248		
Rated Input/Output	Rated Input	ND	25	38	49	62	74	95	118	140	175	226	
	Current	A	HD	20	25	38	49	62	74	95	118	140	175
	Rated Input Capacity	kVA	ND	12	17	22	28	34	43	54	64	80	103
	Current	A	HD	9	12	17	22	28	34	43	54	64	80
Rated Output	Rated Output	ND	28	42	54	68	81	104	130	154	192	248	
	Current	A	HD	22	28	42	54	68	81	104	130	154	192
	Overload Tolerance	HD Rating: 150% of rated output current for 60 s, ND Rating: 120% of rated output current for 60 s (Derating may be required for repetitive loads)											
	Carrier Frequency	4 kHz (User adjustable up to 10 kHz. Derating may be required.)											
Max. Output Voltage		Depends on input voltage											
Max. Output Frequency		400 Hz											
Rated Voltage/Rated Frequency		Three-phase AC power supply: 200 to 240 Vac 50/60 Hz											
Allowable Voltage Fluctuation		-15% to +10%											
Allowable Frequency Fluctuation		± 3% (Frequency fluctuation rate: 1 Hz/100 ms or less)											
Allowable Power Voltage Imbalance between Phases		less than 2%											
Harmonic Current Distortion Rate		5% or less (IEEE 519)											
Input Power Factor		0.98 or more (for rated load)											


400 V Class

Model CIMR-U-4A		0011	0014	0021	0027	0034	0040	0052	0065	0077	0096	0124	0156	0180	0216	0240	0302	0361	0414	0477	0590	0720	0900	0930		
Rated Input/Output	Rated Input	ND	10	13	19	25	31	36	47	59	70	87	113	142	164	197	218	275	329	377	434	537	655	819	846	
	Current	A	HD	8.7	10	13	19	25	31	36	47	59	70	87	113	142	164	197	218	275	329	377	434	537	655	819
	Rated Input Capacity	kVA	ND	9	12	17	22	28	33	43	54	64	80	103	130	150	180	200	251	300	344	396	490	598	748	773
	Current	A	HD	8	9	12	17	22	28	33	43	54	64	80	103	130	150	180	200	251	300	344	396	490	598	748
Rated Output	Rated Output	ND	11	14	21	27	34	40	52	65	77	96	124	156	180	216	240	302	361	414	477	590	720	900	930	
	Current	A	HD	9.6	11	14	21	27	34	40	52	65	77	96	124	156	180	216	240	302	361	414	477	590	720	900
	Overload Tolerance	HD Rating: 150% of rated output current for 60 s, ND Rating: 120% of rated output current for 60 s (Derating may be required for repetitive loads)																								
	Carrier Frequency	CIMR-U-4A 0011 to 4A 0414: 4 kHz (User adjustable up to 6 kHz. Derating may be required.) CIMR-U-4A 0477 to 4A 0930: 3 kHz																								
Max. Output Voltage		Depends on input voltage																								
Max. Output Frequency		400 Hz																								
Rated Voltage/Rated Frequency		Three-phase AC power supply (CIMR-U-4A/4P): 380 to 500 Vac 50/60 Hz Three-phase AC power supply (CIMR-U-4E/4W): 380 to 480 Vac 50/60 Hz																								
Allowable Voltage Fluctuation		-15% to +10%																								
Allowable Frequency Fluctuation		± 3% (Frequency fluctuation rate: 1 Hz/100 ms or less)																								
Allowable Power Voltage Imbalance between Phases		less than 2%																								
Harmonic Current Distortion Rate		5% or less (IEEE 519)																								
Input Power Factor		0.98 or more (for rated load)																								


Note: For details, refer to the U1000 catalogs (No. KAEP C710636 02).

Many other products are also available


AC Drives




**Compact V/f control
J1000**
200 V CLASS, THREE-PHASE
INPUT: 0.1 to 5.5 kW
200 V CLASS, SINGLE-PHASE
INPUT: 0.1 to 2.2 kW
400 V CLASS, THREE-PHASE
INPUT: 0.2 to 5.5 kW



**Compact vector control
V1000**
200 V CLASS, THREE-PHASE
INPUT: 0.1 to 18.5 kW
200 V CLASS, SINGLE-PHASE
INPUT: 0.1 to 3.7 kW
400 V CLASS, THREE-PHASE
INPUT: 0.2 to 18.5 kW

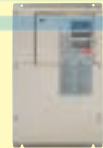


**High performance
vector control
A1000**
200 V CLASS,
0.4 to 110 kW
400 V CLASS,
0.4 to 630 kW




**High-function
fully vector control
Varispeed G7**
200 V CLASS,
0.4 to 110 kW
400 V CLASS,
0.4 to 300 kW

Regenerative Energy-saving Units



**Power Regenerative
Converter
D1000**



**Power Regenerative
Unit
R1000**

Using with drives lead to furthermore energy saving

YASKAWA

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Note: Faxes are accepted 24 hours a day.

Contact Information

Specifications are subject to change without notice for ongoing product modifications and improvements.
For inquiries on the contents of this document, contact a Yaskawa representative or the Yaskawa sales department listed above.

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