

Elevator applications L1000A

200 V Class

Model	CIMR-LT2A	0008	0011	0018	0025	0033	0047	0060	0075	0085	0115	0145	0180	0215	0283	0346	0415	
Max. Applicable Motor Capacity*1	kW	1.5	2.2	3.7	5.5	7.5	11	15	18.5	22	30	37	45	55	75	90	110	
Output	Rated Output Capacity*2	kVA	3**3	4.2**3	6.7**3	9.5**3	12.6**3	17.9**3	23**3	29**3	32**3	44**3	55**4	69**4	82**4	108**4	132**4	158**4
	Rated Output Current	A	8**3	11**3	17.5**3	25**3	33**3	47**3	60**3	75**3	85**3	115**3	145**4	180**4	215**4	283**4	346**4	415**4
	Overload Tolerance	150% of rated output current for 60 s																
	Max. Output Voltage	Three-phase 200 to 240 V (proportional to input voltage)																
	Max. Output Frequency	200 Hz (user adjustable)																
Power	Rated Voltage/Rated Frequency	Three-phase 200 to 240 Vac 50/60 Hz, 270 to 340 Vdc																
	Allowable Voltage Fluctuation	-15 to +10%																
	Allowable Frequency Fluctuation	±5%																

400 V Class

Model	CIMR-LT4A	0005	0006	0009	0015	0018	0024	0031	0039	0045	0060	0075	0091	0112	0150	0180	0216	
Max. Applicable Motor Capacity*1	kW	1.5	2.2	3.7	5.5	7.5	11	15	18.5	22	30	37	45	55	75	90	110	
Output	Rated Output Capacity*3	kVA	3.7**3	4.2**3	7**3	11.3**3	13.7**3	18.3**3	24**3	30**3	34**3	48**3	57**3	69**3	85**4	114**4	137**4	165**4
	Rated Output Current	A	4.8**3	5.5**3	9.2**3	14.8**3	18**3	24**3	31**3	39**3	45**3	60**3	75**3	91**3	112**4	150**4	180**4	216**4
	Overload Tolerance	150% of rated output current for 60 s																
	Max. Output Voltage	Three-phase 380 to 480 V (proportional to input voltage)																
	Max. Output Frequency	200 Hz (user adjustable)																
Power	Rated Voltage/Rated Frequency	Three-phase 380 to 480 Vac 50/60 Hz, 510 to 680 Vdc																
	Allowable Voltage Fluctuation	-15 to +10%																
	Allowable Frequency Fluctuation	±5%																

Common Specifications

Item	Specification
Control Method	V/f Control, Open Loop Vector Control, Closed Loop Vector Control, Closed Loop Vector Control for PM
Frequency Control Range	0.01 to 120 Hz
Frequency Accuracy (Temperature Fluctuation)	Digital reference: within ±0.01% of the max. output frequency (-10 to +40°C) Analog reference: within ±0.1% of the max. output frequency (25±10°C)
Output Frequency Resolution	0.001 Hz
Frequency Setting Resolution	-10 to +10 V, 0 to +10 V
Starting Torque	150%/3 Hz (V/f Control)
	200%/0.3 Hz (Open Loop Vector Control)** 200%/0 min ⁻¹ (Closed Loop Vector Control) 200%/0 min ⁻¹ (Closed Loop Vector Control for PM)
Speed Control Range	1:40 (V/f Control)
	1:200 (Open Loop Vector Control)** 1:1500 (Closed Loop Vector Control) 1:1500 (Closed Loop Vector Control for PM)
Speed Control Accuracy	±0.2% in Open Loop Vector Control (25±10°C)**6, *7, ±0.02% in Closed Loop Vector Control (25±10°C)
Speed Response	10 Hz in Open Loop Vector Control (25±10°C)**6, 50 Hz in Closed Loop Vector Control (25±10°C) (excludes temperature fluctuation when performing Rotational Auto-Tuning)
Torque Limit	All vector control modes allow separate settings in four quadrants
Accel/Decel Time	0.00 to 6000.0 s (4 selectable combinations of independent acceleration and deceleration settings)
Braking Torque	Approximately 125% when using a braking resistor option
V/f Characteristics	User-selected programs and V/f preset patterns possible
Main Control Functions	Advanced short floor, Landing distance control (direct landing function)
Standards Compliant	· UL508C
	· IEC/EN61800-3, IEC/EN61800-5-1
	· Two Safe Disable inputs and 1EDM output according to ISO/EN13849-1 Cat. 3 PLd, IEC/EN61508 SIL2
Protective Design	IP00 open-chassis, UL Type 1 enclosure**

*1: The motor capacity (kW) refers to a Yaskawa 4-pole induction motor (200 V, 60 Hz).

The rated output current of the drive output amps should be equal to or greater than the motor rated current.

*2: Rated output capacity is calculated with a rated output voltage of 220 V.

*3: Carrier frequency is set to 8 kHz. Current derating is required in order to raise the carrier frequency.

*4: Carrier frequency is set to 5 kHz. Current derating is required in order to raise the carrier frequency.

*5: Rated output capacity is calculated with a rated output voltage of 440 V.

*6: Auto-Tuning must be performed prior to operating in Open Loop Vector Control to achieve the performance specifications listed above.

*7: Speed control accuracy may vary slightly depending on installation conditions or motor used. Contact Yaskawa for details.

*8: Removing the top cover on the following models converts the UL Type 1 rating to IP20: CIMR-LA2A0008 to 2A0075, CIMR-LA4A0005 to 4A0039