

# Elevator Drive L1000E

5 to 150 HP

The L1000E incorporates innovative technology and uses special hardware designed for more than 70,000 hours of maintenance free operation. It provides advanced control functions to run induction and PM (permanent magnet) motor applications in geared and gearless elevator systems.

Based on years of experience and application-oriented innovation, the L1000E provides a set of attractive, high performance features: energy and life-cycle-cost efficiency, simple and stress-free setup, and safe and comfortable rides.

The L1000E Drive Series is a dedicated drive for elevator applications suitable for both modernization projects and new installations.

# Yaskawa L1000E offers real choices and real benefits for elevator applications.

- Advanced motor and drive technology for gearless PM motor control
- Features to reduce floor-to-floor times
- Low carrier frequency based current ratings for quiet operation
- Elevator language and units for speed, accel/decel and jerk rates
- Various types of auto-tuning for induction and gearless permanent magnet motors (uncoupled/coupled)
- Built-in braking transistor for all models up to 50HP
- System inertia compensation
- Torque compensation at start without load sensor (anti-rollback)
- Simple and efficient brake sequence
- Input voltage sensors for phase loss detection
- Powerful interface capability for simple elevator controller integration
- De-magnetization protection for PM motor
- New light load function for UPS (Uninterrupted Power Supply)
- Rescue operation function

- ON/OFF and Temperature controlled cooling fan
- Service performance monitors
- Removable multi-function terminal board with parameter back up function
- Advanced high speed elevator control



### **Options**

- EMC Filter
- Network Communications: CANopen and more
- Encoder Feedback: Incremental, EnDat, HEIDENHAIN ERN1387/487
- RC5 Regenerative Unit
- LCD Digital Operator



# **Elevator Drive** L1000E

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## **Specifications & Dimensions**

#### **OVERLOAD CAPACITY**

150% Overload for 30 sec. (Heavy Duty)

#### **OUTPUT FREQUENCY**

0~200 HZ

#### **CONTROL METHODS**

Open Loop Current Vector Control, V/f Control, Flux Vector Control, PM Flux Vector Control

#### **PROTECTIVE DESIGN**

IP00/IP00 WITH TOP COVER

#### **PRODUCT CERTIFICATION**

UL, cUL

#### AVAILABLE I/O

- (8) multi-function digital inputs
- (2) multi-function +/- analog inputs
- (3) multi-function relay output
- (2) multi-function photo-coupler outputs
- (2) multi-function +/- Vdc analog outputs
- (1) fault relay
- (2) safe disable inputs
- (1) safety electronic device monitor

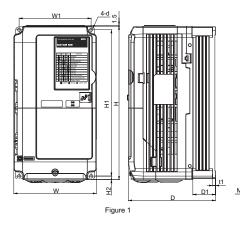
#### **NETWORK COMMUNICATION**

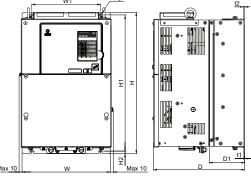
Standard: RS-422/485 MODBUS 115.2 kbps Optional: CANopen, and more

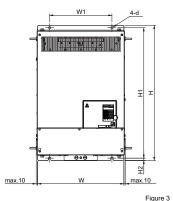
#### **KEYPAD OPERATOR**

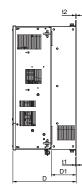
**LED Monitor Panel** 

Rated Input Voltage	Motor Capacity		Current		Dimensions in Inches			Fi
	НР	kW	Output (Amps)	Overload (150%, 30 sec)	Width	Height	Depth	Figure
200 to 240 VAC	5	3.7	17.5	26	5.5	10.2	6.5	1
	7.5	5.5	22	33	5.5	10.2	6.6	
	10	7.5	31	47	5.5	10.2	6.6	
	15	11	41	62	5.5	10.2	6.6	
	20	15	59	88	7.1	11.8	7.4	
	25	18.5	75	113	8.7	13.8	7.8	
	30	22	94	141	8.7	13.8	7.8	
	40	30	106	159	9.8	15.7	10.2	2
	50	37	144	216	10.8	17.7	10.2	
	60	45	181	272	12.8	21.7	11.1	
	75	55	225	338	12.8	21.7	11.1	
	100	75	269	403	17.7	27.8	13	3
	125	90	354	531	17.7	27.8	13	
	150	110	433	649	19.7	31.5	13.8	
380 to 480 VAC	5	3.7	9	14	5.5	10.2	6.5	1
	7.5	5.5	12	17	5.5	10.2	6.6	
	10	7.5	19	28	5.5	10.2	6.6	
	15	11	23	34	5.5	10.2	6.6	
	20	15	30	45	7.1	11.8	6.6	
	25	18.5	39	59	7.1	11.8	7.4	
	30	22	49	73	8.7	13.8	7.8	
	40	30	56	84	9.8	15.7	10.2	2
	50	37	75	113	10.8	17.7	10.2	
	60	45	94	141	12.8	20.1	10.2	
	75	55	114	171	12.8	20.1	10.2	
	100	75	140	210	12.8	21.7	11.1	
	125	90	188	281	12.8	21.7	11.1	
	150	110	225	338	17.7	27.8	13	3









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