G100 General Drive

- 3Ø 200V Class 0.4kW~22kW
- 3Ø 400V Class 0.4kW~22kW

Scan the QR code marked on the product cover for further details on this product.

G100, an Optimal General Drive for Various Industrial Sectors!

It is a general drive optimized for wide use in all industrial sectors with powerful sensor-less functions, improved hardware performance and certified high product reliability.

Improved Torque Performance Through Powerful Sensor-less Vector Control Functions

With improved sensor-less vector control functions when compared to our original standard drive, it maintains high torque performance at low speed and efficiently controls the motor.

Various User Convenience Functions and Field Network Support

G100 enables compact installation with DIN rail and side-by-side installation. It supports RJ port connection on the front of the product and greatly enhances the convenience of connecting with peripheral devices.
EtherNet/IP, Modbus-TCP, Profibus-DP, Support CANopen option, Built-in RS485

High Product Reliability

The heat-resisting property and intensity of our enclosure have significantly increased, and the insulation distance improved with our design that meets UL61800-5-1 standard.

Intended Use

Used in all industries including metal processing, molding machines, hydraulic / air conditioning equipment, food and beverage / textile machinery, lifts /conveyors and environment / water treatment

- Cutting / Bending / Polishing machines
- Fans / Pumps
- Injection machines / Conveyors
- Dust collectors / Freezers
- Compressors / Blower
- Hoist / Lift

Product Type & Model

LSLV	0022	G100	-	2	E	O	F	N

LS Low Voltage Drive Series

Drive Capacity
0004: 0.4kW - 0220: 22kW

Series Name

Input Voltage
2: 3Ø 200V-240V / 4: 3Ø 380V-480V

Keypad
E: LED Keypad

UL Type
O: UL Open Type

EMC Filter
N: Non Built-in EMC filter / F: Built-in EMC filter (C3)

Reactor
N: Non-Reactor

Main Functions

Features	Description	Benefits
Improved Control Performance	Improved sensor-less function and simplified function setting	Powerful torque performance at low speed and high load conditions
Din rail Mounting and Side-by-side Installation	Removable clips to fix the Din-Rail to the product rear and sides; 2mm installation span between products	Fast and simple product installation that takes less than 5 minutes; increased space efficiency of panels
RJ45 Port at the Front Side of the Product	Easily connected to peripheral devices; and parameter can be copied (read/write) without taking the product out from its box	Enhanced convenience in product setting and extended connection with peripheral devices
Various Field Communication Network Support	Modbus, Profibus-DP, CANopen and Ethernet IP communication network support	Connectible with widely-used field networks
Quick Parameter Menu	Frequently-used and useful parameters are set in Quick Parameter Menu (Favorites)	Quick setting with operational convenience according to the customer's application
EMC Filter	Filter that meets the Category C3 standard	Reduced electromagnetic noise and no additional space and expenses for filter installation necessary
Improved Heat-resisting Property and Intensity of Enclosures	The heat-resisting property and intensity have improved with a new material for our enclosures; the enclosures have gotten thicker to prevent damages	Significantly improved product reliability and MTTF 27 years guaranteed
Network Option, Installation Convenience	Communication network operation can be easily connected to the product body without removing its cover; Ethernet 2 port support at the lower part of the option	Easy and fast removable communication network option
Global Standard Requirement	Obtained a certification of CE and new UL 61800-5-1 standard	Product reliability guaranteed (Improved quality of insulation distance)

Control

Control Mode	V/F, slip compensation and sensor-less vector
Frequency Setting Resolution	Digital command: 0.01Hz; analogue command: 0.06Hz (based on 60Hz)
Frequency Level	1% of the peak output frequency
V/F Pattern	Linear, square-law torque reduction, user V/F
Overload Capacity	Heavy duty: 150% 1min, Normal duty: 120% min
Torque Boost	Passive torque boost; auto torque boost

Operation

Operation Mode		Keypad / Terminal Block / Communication Network operation options	
Frequency Setting		Analogue method: -10~10 (V), 0~10 (V), 4~20 (mA); digital method: keypad input	
Operation Function		PID control; 3-wire operation; frequency limit; second motor; forward/backward rotation prohibited; power switching; speed search; power braking; up-down operation; DC braking; frequency jump; slip compensation; auto restart; auto tuning; energy buffering operation; flux braking; and Fire Mode	
Input	Multifunction Terminal (5Points) P1~P5	NPN (Sink) / PNP (Source) options	
		Function: Forward operation; backward operation; reset; external trip; emergency trip; jog operation; switching frequency – high, middle, low; acceleration/deceleration by stage – high, middle, low; DC braking at pause; second motor option; frequency increase; frequency decline; 3-wire operation; switching to general operation during PID operation; switching to the body operation during option operation; analogue command fixed frequency; acceleration or deceleration stop option	
Output	Multifunctional Relay Terminal	Fault output and inverter operation mode output	(N.O., N.C.) AC 250V, 1A or below, DC 30V, 1A or below
	Analogue Output	0~10V Frequency, output current, output voltage, DC voltage options	

3Ø 200V Class (0.4~22kW)

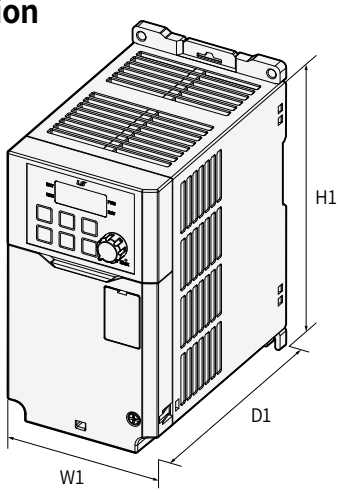
LSLV□□□□G100-2□□□□□			0004	0008	0015	0022	0040	0055	0075	0110	0150	0185	0220
Applied Motor	Heavy Duty	(HP)	0.5	1.0	2.0	3.0	5.4	7.5	10	15	20	25	30
		(kW)	0.4	0.75	1.5	2.2	4.0	5.5	7.5	11	15	18.5	22
	Normal Duty	(HP)	1.0	2.0	3.0	5.0	7.5	10	15	20	25	30	-
		(kW)	0.75	1.5	2.2	4.0	5.5	7.5	11	15	18.5	22	-
Output	Rated Capacity (kVA)	Heavy Duty	1.0	1.9	3.0	4.2	6.5	9.1	12.2	17.9	22.9	28.6	33.5
		Normal Duty	1.2	2.3	3.8	4.6	6.9	11.4	15.2	21.3	26.7	31.2	-
	Rated Current (3Ø Input) [A]	Heavy Duty	2.5	5.0	8.0	11.0	17.0	24.0	32.0	47	60	75	88
		Normal Duty	3.1	6.0	9.6	12.0	18.0	30.0	40.0	56	70	82	-
	Rated Current (1Ø Input) [A]	Heavy Duty	1.5	2.8	4.6	6.1	9.3	12.8	17.4	26.8	34	41	48
		Normal Duty	2.0	3.6	5.9	6.7	9.8	16.3	22.0	31	38	45	-
	Rated Frequency (Hz)		0~400Hz (IM Sensorless: 0~120Hz)										
	Rated Voltage (V)		3Ø 200~240V										
Input	Rated Voltage (V)		3Ø 200~240VAC (-15%~+10%)										
	Rated Frequency (Hz)		50~60Hz (±5%)										
	Rated Current (A)	Heavy Duty	2.2	4.9	8.4	11.8	18.5	25.8	34.9	53.2	68.4	85.5	101.6
		Normal Duty	3.0	6.3	10.8	13.1	19.4	32.7	44.2	63.8	79.8	94.6	-
Weight (kg)			1.04	1.06	1.36	1.4	1.89	3.08	3.21	4.84	7.6	11.1	11.18

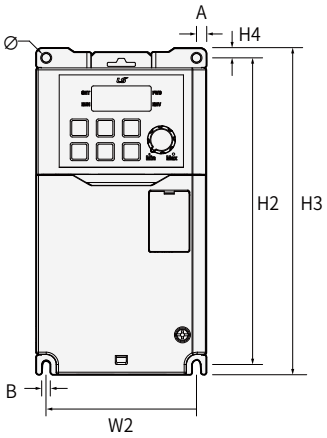
3Ø 400V Class (0.4~22kW)

LSLV□□□□G100-4□□□□□			0004	0008	0015	0022	0040	0055	0075	0110	0150	0185	0220
Applied Motor	Heavy Duty	(HP)	0.5	1.0	2.0	3.0	5.4	7.5	10	15	20	25	30
		(kW)	0.4	0.75	1.5	2.2	4.0	5.5	7.5	11	15	18.5	22
	Normal Duty	(HP)	1.0	2.0	3.0	5.0	7.5	10	15	20	25	30	40
		(kW)	0.75	1.5	2.2	4.0	5.5	7.5	11	15	18.5	22	30
Output	Rated Capacity (kVA)	Heavy Duty	1.0	1.9	3.0	4.2	6.5	9.1	12.2	18.3	23.6	29.7	34.3
		Normal Duty	1.5	2.4	3.9	5.3	7.6	12.2	17.5	23.6	29.0	34.3	46.5
	Rated Current (3Ø Input) (A)	Heavy Duty	1.3	2.5	4.0	5.5	9.0	12.0	16.0	24	31	39	45
		Normal Duty	2.0	3.1	5.1	6.9	10.0	16.0	23.0	31	38	45	61
	Rated Current (1Ø Input) (A)	Heavy Duty	0.7	1.4	2.1	2.8	4.9	6.4	8.7	15	18	23	27
		Normal Duty	1.3	1.9	2.8	3.6	5.4	8.7	12.6	18	23	27	35
	Rated Frequency (Hz)		0~400Hz (IM Sensorless: 0~120Hz)										
	Rated Voltage (V)		3Ø 380~480V										
Input	Rated Voltage (V)		3Ø 380~480VAC (-15%~+10%)										
	Rated Frequency (Hz)		50~60Hz (±5%)										
	Rated Current (A)	Heavy Duty	1.1	2.4	4.2	5.9	9.8	12.9	17.5	27.2	35.3	44.5	51.9
		Normal Duty	2.0	3.3	5.5	7.5	10.8	17.5	25.4	35.3	43.3	51.9	70.8
Weight (kg) (Built-in EMC Filter)			1.02 (1.04)	1.06 (1.08)	1.4 (1.44)	1.42 (1.46)	1.92 (1.98)	3.08 (3.24)	3.12 (3.28)	4.89 (5.04)	4.91 (5.06)	7.63 (7.96)	7.65 (7.98)

- The motor capacity is calculated with a standard 4-pole motor.
- 200V Class is based on 220V and 400V Class on 440V.
- The rated output current is limited according to the carrier frequency (Cn.04) setting.
- Upon no-load operation to protect the inverter when the motor is open/closed, the output voltage is 20~40% lower than the original voltage. (only for 0.4~4.0kW)

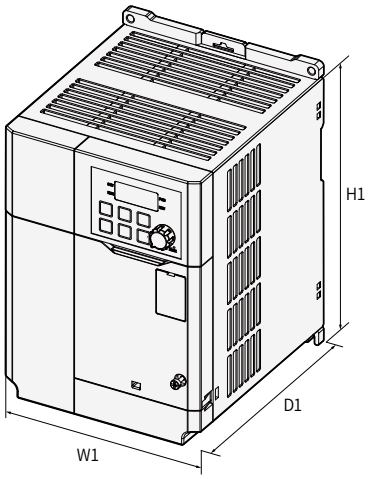
Product Dimension

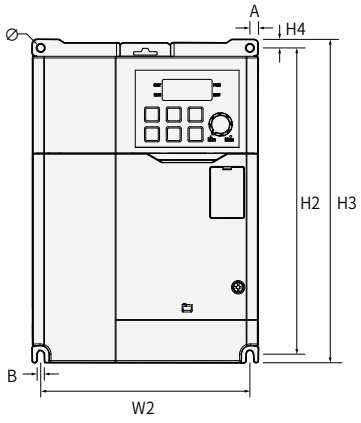




Unit: mm (inches)

Model	W1	W2	H1	H2	H3	H4	D1	A	B	Ø
0004G100-2	86.2 (3.39)	76.2 (3.00)	154 (6.06)	154 (6.06)	164 (6.46)	5 (0.20)	131.5 (5.18)	5 (0.20)	4.5 (0.18)	4.5 (0.18)
0008G100-2										
0004G100-4										
0008G100-4										
0015G100-2	101 (3.98)	90 (3.54)	167 (6.57)	167 (6.57)	177 (6.97)	5 (0.20)	150.5 (5.93)	5.5 (0.22)	4.5 (0.18)	4.5 (0.18)
0022G100-2										
0015G100-4										
0022G100-4										

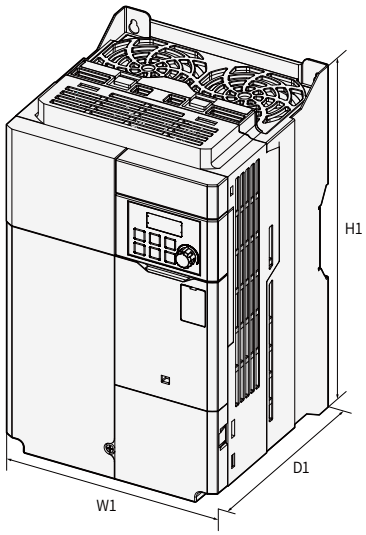


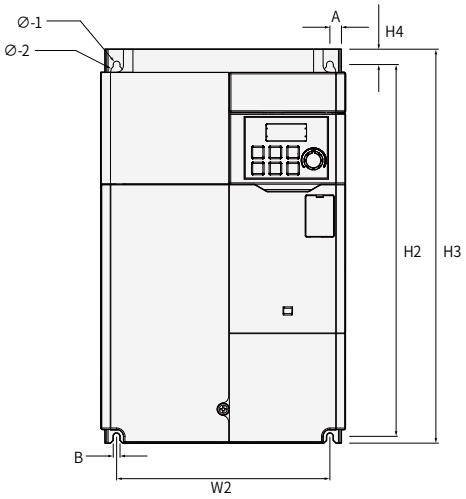


Unit: mm (inches)

Model	W1	W2	H1	H2	H3	H4	D1	A	B	Ø
0040G100-2	135 (5.31)	125 (4.92)	183 (7.20)	183 (7.20)	193 (7.60)	5 (0.20)	150.5 (5.93)	5 (0.20)	4.5 (0.18)	4.5 (0.18)
0040G100-4										
0055G100-2	180 (7.09)	Top: 162 (6.38) Bottom: 170 (6.70)	220 (8.66)	229.5 (9.04)	240 (9.45)	5.5 (0.22)	144 (5.67)	Top: 9 (0.35) Bottom: 5 (0.20)	4.5 (0.18)	Ø-1: 4.5 (0.18) Ø-2: 6 (0.24)
0075G100-2										
0055G100-4										
0075G100-4										

Product Dimension





Unit: mm (inches)

Model	W1	W2	H1	H2	H3	H4	D1	A	B	Ø
0110G100-2 **0110G100-4** **0150G100-4**	180 (7.09)	157 (6.18)	290 (11.4)	273.7 (10.8)	290 (11.4)	11.3 (0.44)	173 (6.81)	8.5 (0.33)	5 (0.20)	Ø-1:5(0.20) Ø-2:8.5(0.33)
0150G100-2 **0185G100-4** **0220G100-4**	220 (8.66)	193.8 (7.63)	345 (13.6)	331 (13.0)	345 (13.6)	8 (0.31)	187 (7.36)	10.1 (0.40)	6 (0.24)	Ø-1:6(0.24) Ø-2:11(0.43)
0185G100-2 **0220G100-4**	260 (10.2)	229.8 (9.05)	400 (15.7)	386 (15.2)	400 (15.7)	8 (0.31)	187 (7.36)	11.4 (0.45)	7 (0.28)	Ø-1:7(0.28) Ø-2:13.5(0.53)