G100/G100C

General Drive





G100 3Ø 200V 0.4kW~22kW 3Ø 400V 0.4kW~22kW
G100C 3Ø 200V 0.4kW~4.0kW 3Ø 400V 0.4kW~4.0kW





Œ





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.



UL

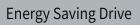
Intended Use

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 / PumpsInjection machines / Conveyors
- Dust collectors / Freezers
 Compressors / Blower
- Hoist / Lift

Product Type & Model

LSLV 002	2 G100(C) -	2	E	0	F	N
LS Low Voltage Drive Series		Ī	Ī	Ì	Ī	
Drive Capacity - 0004: 0.4kW - 0220	 .22kW					
Series Name — C:Compact Type (C	.4kW~4.0kW)					
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 EM	C filter / F: Built-in F	EMC filte	er (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

Operatio	on Mode	Keypad / Terminal Block / Communication Network o	peration options					
Frequen	cy Setting	Analogue method: -10~10 (V), 0~10 (V), 4~20 (mA); dig	ital method: keypad input					
Operatio	on Function		motor; forward/backward rotation prohibited; power eration; DC braking; frequency jump; slip compensation; flux braking; and Fire Mode					
		NPN (Sink) / PNP (Source) options						
Input	Multifunction Terminal (5Points) P1~P5	at pause; second motor option; frequency increase; fr	/deceleration by stage – high, middle, low; DC braking equency decline; 3-wire operation; switching to the body operation during option operation; analogue					
Multifunctional Relay Terminal Fault output and inverter operation mode output (N.O., N.C.) AC 250V, 1A or below, D below								
	Analogue Output	0~10V Frequency, output current, output voltage, DC voltage options						





3-Phase 200V Class (0.4~22kW)

L	LSLV			0008	0015	0022	0040	0055	0075	0110	0150	0185	0220
	Heavy Duty [HD]	[kW]	0.4	0.75	1.5	2.2	4.0	5.5	7.5	11	15	18.5	22
Motor	Heavy Duty [HD]	[HP]	0.5	1.0	2.0	3.0	5.4	7.5	10	15	20	25	30
Rating	Normal Duty [ND]	[kW]	0.75	1.5	2.2	4.0	5.5	7.5	11	15	18.5	22	-
	Normal Duty [ND]	[HP]	1.0	2.0	3.0	5.4	7.5	10	15	20	25	30	-
	Capacity [IA/A]	Heavy Duty (HD)	1.0	1.9	3.0	4.2	6.5	9.1	12.2	17.9	22.9	28.6	33.5
	Capacity [kVA] Normal Duty (ND)		1.2	2.3	3.8	4.6	6.9	11.4	15.2	21.3	26.7	31.2	-
	Rated Current [A]		2.5	5.0	8.0	11.0	17.0	24.0	32.0	47	60	75	88
Output		Normal Duty (ND)	3.1	6.0	9.6	12.0	18.0	30.0	40.0	56	70	82	-
Rating		Heavy Duty (HD)	1.5	2.8	4.6	6.1	9.3	12.8	17.4	26.8	34	41	48
	(1-Phase Power Input)	Normal Duty (ND)	2.0	3.6	5.9	6.7	9.8	16.3	22.0	31	38	45	-
	Frequency [Hz]		0~400H	z(IM Sens	sorless: 0	~120Hz)	0~400Hz (IM sensorless: 0~120Hz)						
	Voltage [V]		3	-Phase 2	200~240	V			3-Ph	ase 200^	·240V		
	Voltage [V]		3-Phase	200~240	VAC (-15%	6~+10%)		3-Ph	ase 200~	240VAC	(-15%~+	10%)	
Input	Frequency [Hz]			50~60H	z (±5%)				50~	60Hz (±	5%)		
Rating	Rated Current [A]	Heavy Duty [HD]	2.2	4.9	8.4	11.8	18.5	25.8	34.9	53.2	68.4	85.5	101.6
	Rateu Current [A]	Normal Duty [ND]	3.0	6.3	10.8	13.1	19.4	32.7	44.2	63.8	79.8	94.6	-
G100 We	ight [kg]	1.04	1.06	1.36	1.4	1.89	3.08	3.21	4.84	7.6	11.1	11.18	
G100C W	eight [kg]		0.81	0.83	1.10	1.13	1.78	-	-	-	-	-	-

Applicable capacity range with G100C (0.4kW~2.2kW)

G100C doesn't support built-in EMC filter. (Not possible to add filter)

3-Phase 400V Class (0.4~22kW)

Ľ	LSLV			0008	0015	0022	0040	0055	0075	0110	0150	0185	0220
	Heavy Duty [HD]	[kW]	0.4	0.75	1.5	2.2	4.0	5.5	7.5	11	15	18.5	22
Motor	neavy Duty [hD]	[HP]	0.5	1.0	2.0	3.0	5.4	7.5	10	15	20	25	30
Rating Normal Duty [ND]		[kW]	0.75	1.5	2.2	4.0	5.5	7.5	11	15	18.5	22	30
	Normal Duty [ND]	[HP]	1.0	2.0	3.0	5.4	7.5	10	15	20	25	30	40
	Canacity [14/4]	Heavy Duty (HD)	1.0	1.9	3.0	4.2	6.5	9.1	12.2	18.3	23.6	29.7	34.3
	Capacity [kVA] Normal Duty (ND)		1.5	2.4	3.9	5.3	7.6	12.2	17.5	23.6	29.0	34.3	46.5
	Rated Current [A]		1.3	2.5	4.0	5.5	9.0	12.0	16.0	24	31	39	45
Output		Normal Duty (ND)	2.0	3.1	5.1	6.9	10.0	16.0	23.0	31	38	45	61
Rating		Heavy Duty (HD)	0.7	1.4	2.1	2.8	4.9	6.4	8.7	15	18	23	27
	(1-Phase Power Input)	Normal Duty (ND)	1.3	1.9	2.8	3.6	5.4	8.7	12.6	18	23	27	35
	Frequency [Hz]		0~400H	z(IM Sens	sorless: 0	~120Hz)	0~400Hz (IM sensorless: 0~120Hz)						
	Voltage [V]			B-Phase	380~480	V	3-Phase 380~480V						
	Voltage [V]		3-Phase	380~480	VAC (-15%	%~+10%)		3-Ph	ase 380~	480VAC	(-15%~+	10%)	
Input	Frequency [Hz]			50~60H	z (±5%)				50~	60Hz (±	5%)		
Rating	Dated Current [A]	Heavy Duty [HD]	1.1	2.4	4.2	5.9	9.8	12.9	17.5	27.2	35.3	44.5	51.9
	Rated Current [A] Normal Duty [ND]		2.0	3.3	5.5	7.5	10.8	17.5	25.4	35.3	43.3	51.9	70.8
G100 Wei	G100 Weight [kg]			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)
G100C Weight [kg]				0.85	1.14	1.14	1.77	-	-	-	-	-	-

• Applicable capacity range with G100C (0.4kW~2.2kW)

• G100C doesn't support built-in EMC filter. (Not possible to add filter) • Maximum applicable capacity is indicated in case of using a 4-pole standard motor

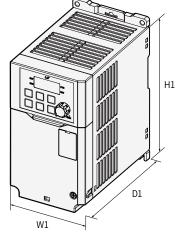
• For the rated capacity, 200 and 400V class input capacities are based on 220 and 440V, respectively.

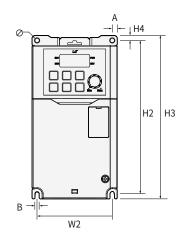
• The rated output current is limited based on the carrier frequency set at Cn.04.

• The output voltage becomes 20-40 % lower during no-load operations to protect the inverter from the impact of the motor closing and opening (0.4-4.0 kW models only).



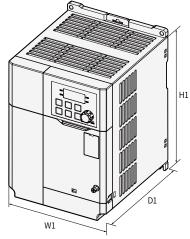
Product Dimension

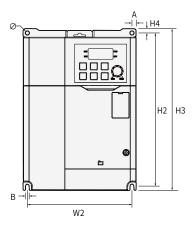




Unit: mm (inches)

Model	W1	W2	H1	H2	H3	H4	D1	А	В	Ø
0004G100-2					164 (6.46)					
0008G100-2	oc 2 (2 20)	76 2 (2 00)	154 (6.06)	154 (6.06)		5 (0.20)	121 5 (5 10)	F (0.20)	4 5 (0.10)	4 5 (0 10)
0004G100-4	00.2 (3.39)	76.2 (3.00)	154 (0.00)	154 (0.00)	104 (0.40)	5 (0.20)	131.5 (5.18)	5 (0.20)	4.5 (0.18)	4.5 (0.18)
0008G100-4										
0015G100-2					177 (6.07)	F (0.00)			4.5 (0.10)	4.5 (0.10)
0022G100-2	101 (3.98)	90 (3.54)	167 (6.57)				150 5 (5 00)	Г Г (0, 22)		
0015G100-4	101 (3.98)	90 (3.54)	101 (0.51)	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)
0022G100-4										



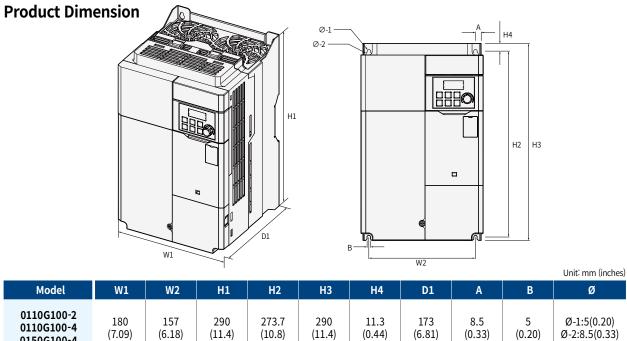


			4						Ur	iit: mm (inches)
Model	W1	W2	H1	H2	H3	H4	D1	А	В	Ø
0040G100-2	135 (5.31)	125 (4.92)	183 (7.20)	183 (7.20)	193 (7.60)	5 (0.20)	150.5 (5.93)	5 (0.20)	4.5 (0.18)	4.5 (0.18)
0040G100-4	133 (3.31)	125 (4.52)	105 (1.20)	105 (1.20)	155 (1.00)	5 (0.20)	100.0 (0.00)	5 (0.20)		4.3 (0.10)
0055G100-2		Top:						Top:		Ø-1:
0075G100-2	180 (7.09)	162 (6.38)	220 (8.66)	229.5 (9.04)	240 (0.45)	Г Г (0 2 2)	144 (5.67)	9 (0.35)	4 5 (0 10)	4.5 (0.18)
0055G100-4	100 (1.09)	Bottom:	220 (0.00)		240 (9.43)	5.5 (0.22)	144 (3.07)	Bottom:	4.5 (0.18)	Ø-2:
0075G100-4	-	170 (6.70)						5 (0.20)		6 (0.24)

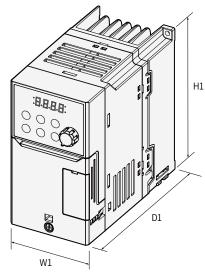


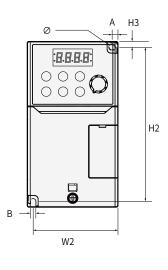
G100/G100C General Drive





Model	W1	W2	H1	H2	H3	H4	D1	Α	В	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)



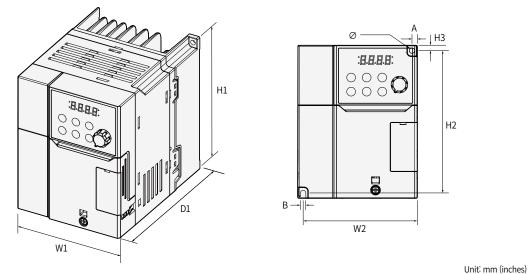


Unit: mr	m (inches)
----------	------------

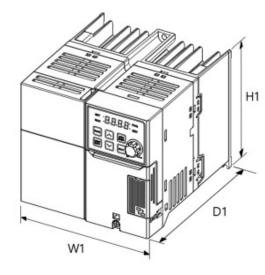
형명	W1	W2	H1	H2	H3	D1	А	В	Ø
0004G100C-2 0004G100C-4	70 (2.76)	65.5 (2.58)	128 (5.04)	119 (4.69)	4.5 (0.18)	130 (5.11)	4.5 (0.18)	4.5 (0.18)	4.5 (0.18)
0008G100C-2 0008G100C-4	70 (2.76)	65.5 (2.58)	128 (5.04)	119 (4.69)	4.5 (0.18)	135 (5.31)	4.5 (0.18)	4.5 (0.18)	4.5 (0.18)

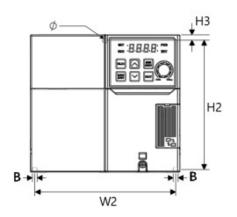
www.vectorenergy.com





Model	W1	W2	H1	H2	H3	D1	А	В	Ø
0015G100C-2	100 (3.93)	95.5 (3.76)	128 (5.04)	119 (4.69)	4.5 (0.18)	135 (5.31)	4.5 (0.18)	4.5 (0.18)	4.5 (0.18)
0015G100C-4	100 (3.93)	95.5 (5.10)	120 (3.04)	119 (4.09)	4.5 (0.16)	133 (3.31)	4.5 (0.16)	4.5 (0.10)	4.5 (0.18)
0022G100C-2	100 (3.93)	95.5 (3.76)	128 (5.04)	119 (4.69)	4.5 (0.18)	135 (5.31)	4.5 (0.18)	4.5 (0.18)	4.5 (0.18)
0022G100C-4	100 (2.92)	33.3 (3.10)	120 (3.04)	119 (4.09)	4.5 (0.18)	133 (3.31)	4.5 (0.16)	4.5 (0.16)	4.5 (0.16)





	Unit: mm (inches)									
Model	W1	W2	H1	H2	H3	D1	Α	В	ø	
0040G100C-2	140	132	128	120.5	5	155		4.5	4.5	
0040 G100C-4	(5.51)	(5.20)	(5.04)	(4.74)	(0.20)	(6.10)	-	(0.18)	(0.18)	