GEFRAN

GF_VEDO serie SL 35CT - 70CT - V70CT

Controller and integrated operator Terminal

Main characteristics

- PLC + HMI in one product
- Integrated Ethernet port
- Wide availability of communication ports
- A single programming environment

Main applications

- Climatic chambers
- Autoclaves
- Plastic Dryers
- Washing machines
- Packaging
- Laboratory Extruders

C E

PROFILE

The integrated Controller and Operator Panel allows the complete management of automation. Available in 3 versions (6 models), and equipped with a powerful 400 MHz processor.

It is destined mainly to operate in an industrial environment on the control panels of production process machines or processes.
The operator interacts through a colour touch screen. Depending on the model, the size of the screen is 3.5" or 7" wide.
As an option, the device can be equipped with programmable function buttons.

Thanks to its numerous communication ports (some of which are optional), it is possible to connect a wide range of devices to the controller, such as computers, barcode readers, USB sticks, modems, printers, etc., and connect it to an Ethernet network.

The remote input and output modules (CAN-IO/GILOGIK II) are connected by bus to the CAN port (CANopen). Other CANopen standard compliant devices can also be connected to the bus.
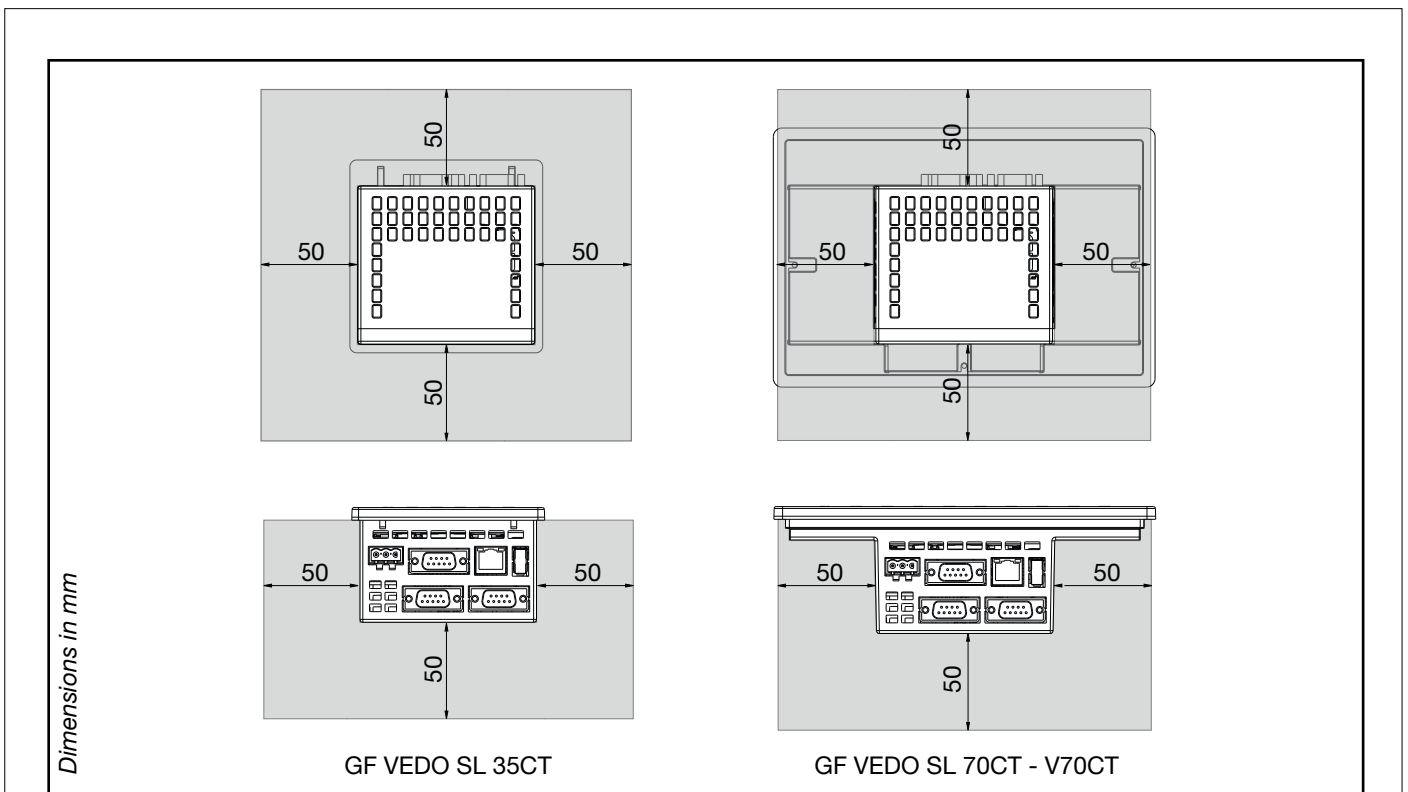
TECHNICAL DATA

		35CT	70CT – V70CT
POWER	Operating voltage	24 Vdc ±25%	
	Absorbed current (at 24 Vdc)	300 mA max	350 mA max
	Dissipated power	7,5 W max	8,5 W max
	Protections	Protection for polarity inversion Short circuit	
	Connection	3-pole polarised extractable connector Screw terminals, max wire section 2,5 mm²	
BACK-UP BATTERY	Type	Rechargeable Li-Al 3 V 65 mA/h, type ML2032, non-replaceable	
	Duration	10 years in absence of power: 20 months	
CONNECTIONS	CAN port	Opto-isolated Connector: DB9 M Speed: 10 kbit/s … 1 Mbit/s Termination: to be managed externally	
	Ethernet port (ETH)	Connector: RJ45 Speed: 10 / 100 Mbit/s Signals: green connection LED, yellow data LED	
	RS-485 port (optional)	Opto-isolated Connector: DB9 M Speed: 9,6 kbit/s … 115 kbit/s	
	RS-232 port (optional)	Connector: DB9 M Speed: 9,6 kbit/s … 115 kbit/s	
	USB port (optional)	Connector: type A Standard: USB 2.0	
COMMUNICATIONS PROTOCOLS	Ethernet	FTP (File Transfer Protocol) Modbus TCP/IP Master/Slave	
	CAN	CANopen Master	
	Modbus	Modbus RTU Master/Slave	
DISPLAY	Type	TFT touch screen with 4-wires resistive technology	
	Dimensions (diagonal)	3,5"	7"
	Resolution in pixels	320 x 240 (QVGA)	70CT: 800 x 480 (WVGA) V70CT: 480 x 800
	Display area (L x H)	70 x 52,5 mm	70CT: 152,4 x 91,4 mm V70CT: 91,4 x 152,4 mm
	Colours	262.000	
	Brightness	400 cd/m^2	240 cd/m²
	Contrast	400:1	1000:1
	Backlighting	White LEDs, duration 50.000 hours @ 25 °C	
	Visual angle	Horizontal: 60° Vertical: 45°-60°	70CT and V70CT: 85° in all directions
CONFIGURATION ELEMENTS	Procedure software access	16-position dial	
CONTROL ELEMENTS	Keypad (optional)	6 programmable function buttons	10 programmable function buttons
MICROPROCESSOR	Type	ARM9	
	Frequency	400MHz	
MEMORY	Sistem	64 MB, type SDRAM • 12 MB HMI application • 2,5 MB PLC applicative	
	Retentive	• 32 kB retentive variables (FLASH / FRAM *) • 1 MB data logger (FLASH)	
	Mass	128 MB, type FLASH • 32 MB for user	
	Mass extension	Slot SD Card (optional) *	

		35CT	70CT – V70CT
ENVIRONMENTAL CONDITIONS	Operative temperature	0 ... +50 °C (according to IEC 68-2-14)	
	Storage temperature	-20 ... +70 °C (according to IEC 68-2-14)	
	Relative humidity	max 95% RH non condensing (according to IEC 68-2-3)	
ASSEMBLY		Embedded, in control panels	
DEGREE OF PROTECTION		IP 65 on the front (according to IEC 68-2-3)	
WEIGHT		0,25 kg	0,5 kg
CE STANDARDS	EMC conformity (electromagnetic compatibility)	Observance of directive 2004/108/CE EMC Emission: EN 61000-6-4 EMC Immunity: EN 61131-2, EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-5, EN 61000-4-6, EN 61000-4-8, EN 61000-4-11	
	LV conformity (low voltage)	Obseervance of 2006/95/CE Safety LVD: EN 61010-1	

* Available from January 2013

Dimensions

Dimensions in mm
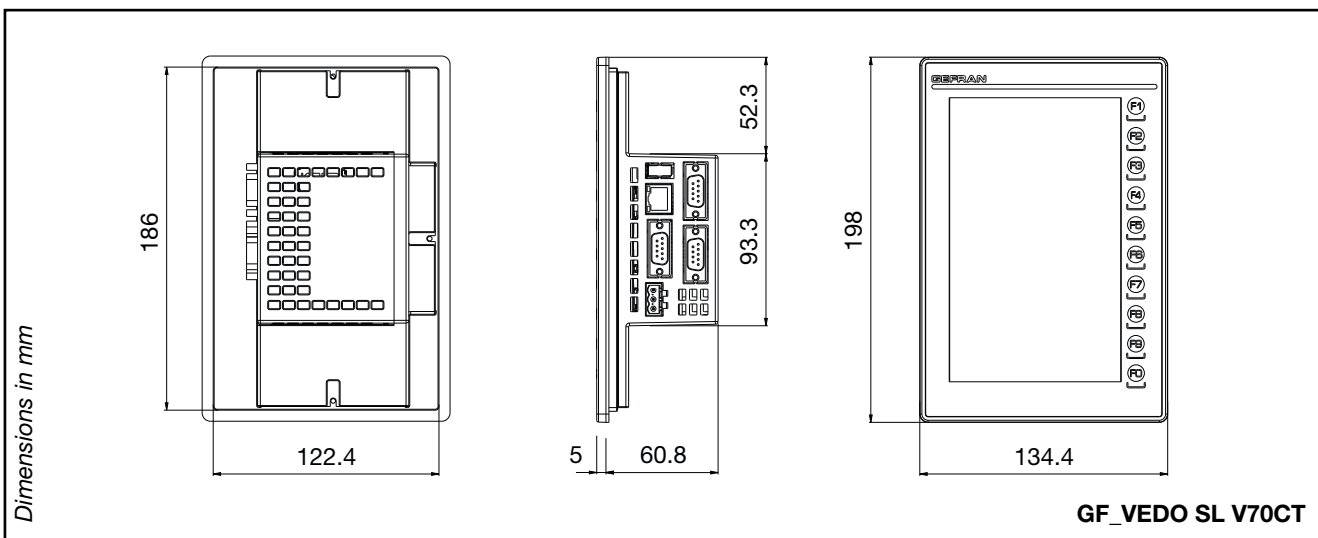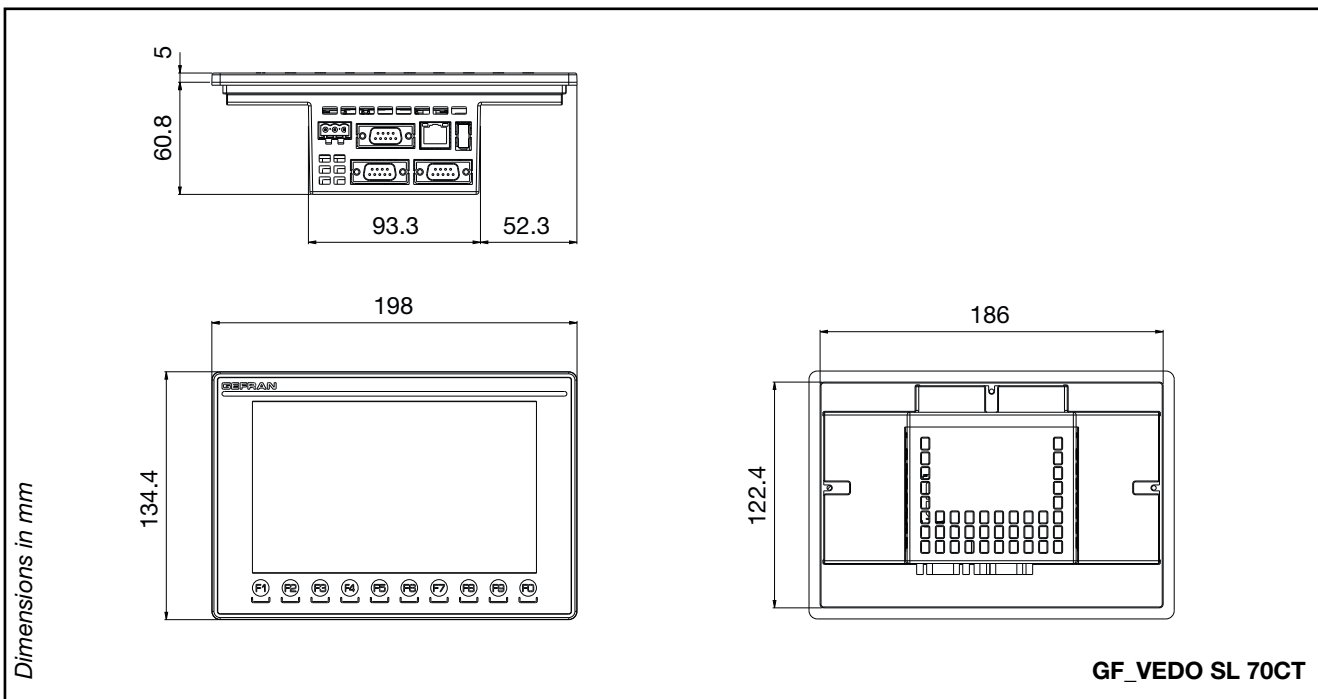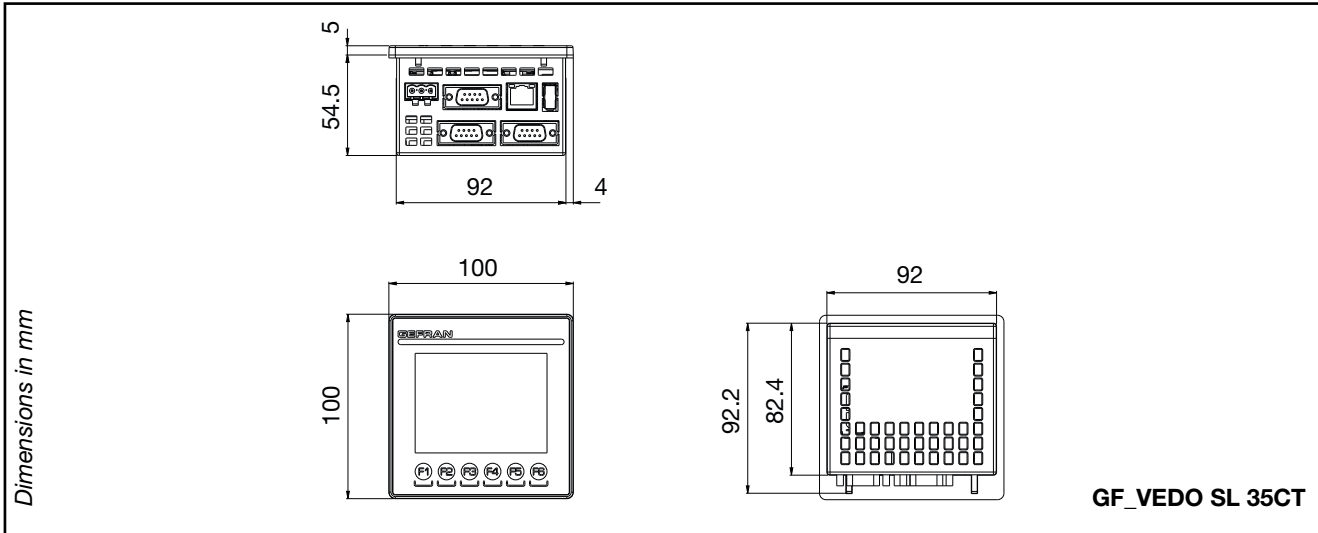
GF VEDO SL 35CT   GF VEDO SL 70CT - V70CT

Free spaces for ventilation

⚠ Attention: the temperature inside the compartment that houses the integrated Controller and Operator Panel must never exceed 50 °C.

The free spaces highlighted in grey are those recommended with static ventilation.
With forced ventilation these spaces can be reduced even further.

Dimensions

5
54.5
92
4
100
100
92
92.2
82.4

GF_VEDO SL 35CT

5
60.8
93.3
52.3
198
134.4
F1 F2 F3 F4 F5 F6 F7 F8 F9
186
122.4

GF_VEDO SL 70CT

186
122.4
52.3
93.3
5
60.8
198
134.4
F1 F2 F3 F4 F5 F6 F7 F8 F9

GF_VEDO SL V70CT

Integrated Controller and Operator Panel

Create the codes to suit the device configuration required

GF_VEDO SL #### LX0 ## ## ## ## #

Modell	
3,5" display	**35CT**
7" horizontal display	**70CT**
7" vertical display	**V70CT**

Basic memory	
FLASH 128 MB DRAM 64 MB FRAM 32 kB **(1)**	**LX0**

RS485 + RS232 ports		
Absent	**00**	
serial RS485+RS232+slot SD card	**S1**	1)

CAN Port		
Absent	**00**	
CANopen	**C1**	3)

USB Port	
Absent	**00**
USB	**U1**

Keypad	
Absent	**00**
Present	**K1**

Lexan		
Gefran	**G**	
Open Frame	**0**	
Custom	**C**	2)

(1) SD and FRAM available from January 2013
(2) Ask for availability
(3) Mandatory port for use with remote IO

Code examples

GF_VEDO SL 70CT LX0 S1 C1 U1 00 G 7" display; CANopen, RS485, RS232 and USB ports; lexan Gefran; no keypad

GF_VEDO SL 35CT LX0 00 C1 U1 K1 C 3,5"display; CANopen and USB ports; lexan customized; 6-key keypad

Programming tool

GF_PROJECT LX

Development software that allows the writing of the application program for PLC with IEC1131 languages. Also allows the construction, in graphic mode, of the various pages of the user interface necessary to the application developed.
Via GF_PROJECT LX it is possible to connect to the device that will host the application to debug the program and upload the upgrades.

System requirements

	Minimum	**Recommended**
Sistema operativo	Windows XP SP2 or Windows Vista or Windows 7 (32 bit)	Windows 7 (64 bit)
Processore	Intel Pentium 1 GHz	Intel Core i5 2,5 Ghz or superior
RAM	2 GB	4 GB or superior
Free space on Hard Disk	2 GB	4 GB or superior
Graphic resolution	XGA (1024 x 768 pixel)	SXGA (1280 x 1024 pixel) or superior
Browser	Microsoft Internet Explorer 8.0	Microsoft Internet Explorer 9.0 or superior
Ethernet Port	1 RJ45	
DVD player	Yes	
USB Port		1 USB 2.0

CE The instrument conforms to the European Directives 2004/108/CE (EMC) and 2006/95/CE (LVD) with reference to the generic standards: **EN 61131-2** (product) - **EN 61010-1** (safety)