ELC Accessories

ELC-GPXFERMOD

Transfer programs to or from ELC-GPxx units. These devices can be write protected to maintain program integrity.

ELC-HHP

ELC-HHP is an easy-to-use, hand-held programming tool for ELC controllers when a PC is not available. With ELC-HHP, applications can be programmed directly with the attached keypad. Or uploaded from an ELC, saved, and transferred to a different ELC. Or

downloaded from a PC and transferred to other ELCs. No need for outlets when using the ELC-HHP since it draws its power from either the ELC or the PC through the attached cable. Monitor applications when a PC is not available.
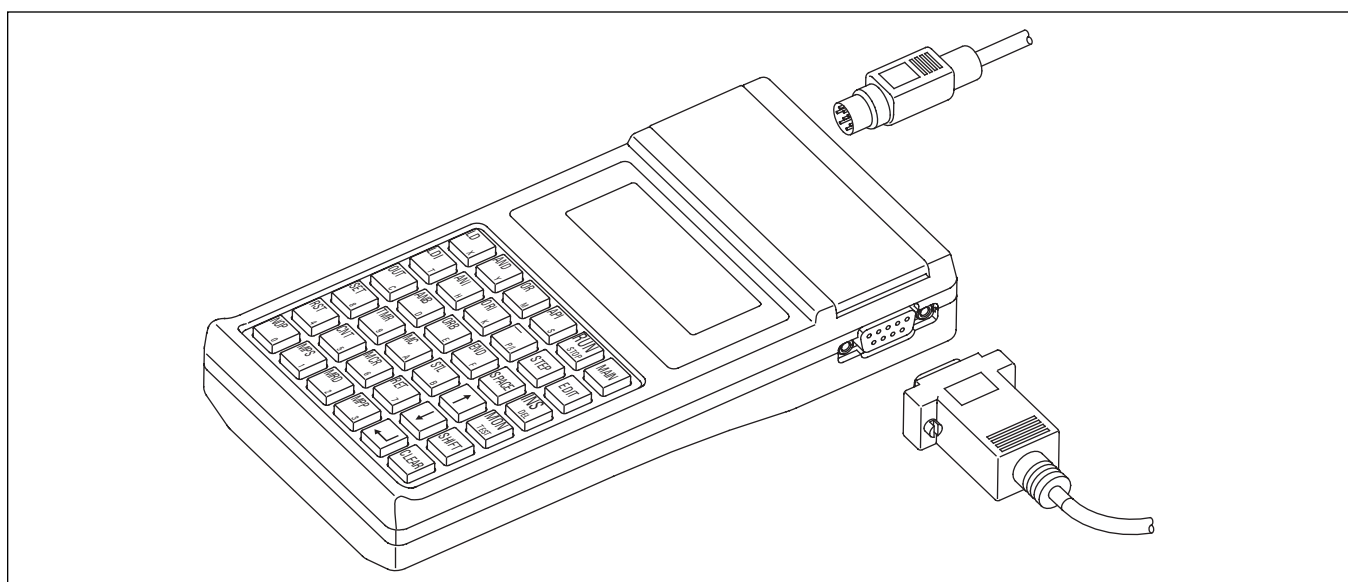

Figure 50-4. ELC-HHP with Cables for ELC and PC Connections

ELC Power Supplies

All ELC modules operate from 24V DC. These power supplies provide a convenient way to provide robust DC voltage.
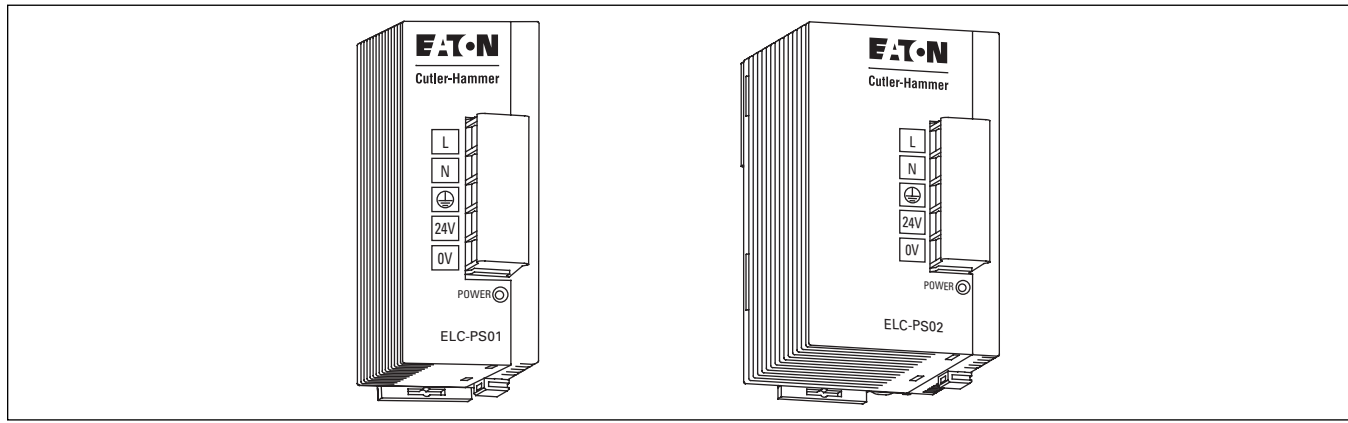

Figure 50-5. ELC Power Supplies

Table 50-13. ELC Power Supply Specifications

Item	ELC-PS01	ELC-PS02
Dimensions WxHxD in Inches (mm)	1.44 x 3.54 x 2.36 (36.5 x 90 x 60)	2.17 x 3.54 x 2.36 (55 x 90 x 60)
Input Power	100 – 240V AC 50/60 Hz	
Output Volts	24V DC	
Output Current (A)	1A	2A

ELC-CBPCELC3

Use this cable to download, upload, monitor ELC controllers. Or use this same cable to connect any ELC-GPxx to an ELC controller. This cable is 3 meters long.
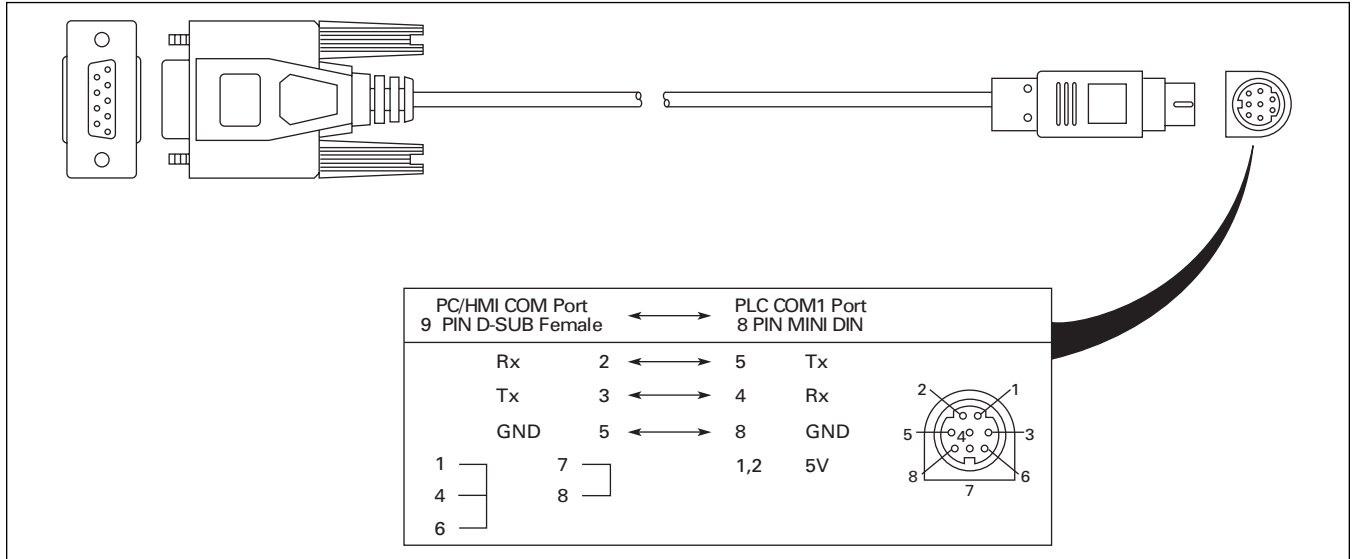

Figure 50-6. ELC-CBPCELC3 Cable

ELC-CBPCGP3

Use this cable to download or upload applications between a PC and the ELC-GPxx graphic panels. This cable can also be used to transfer a program from an ELC-GPxx to another ELC-GPxx. This cable is 3 meters long.

■ The Pin definition of 9 PIN D-SUB RS-232:
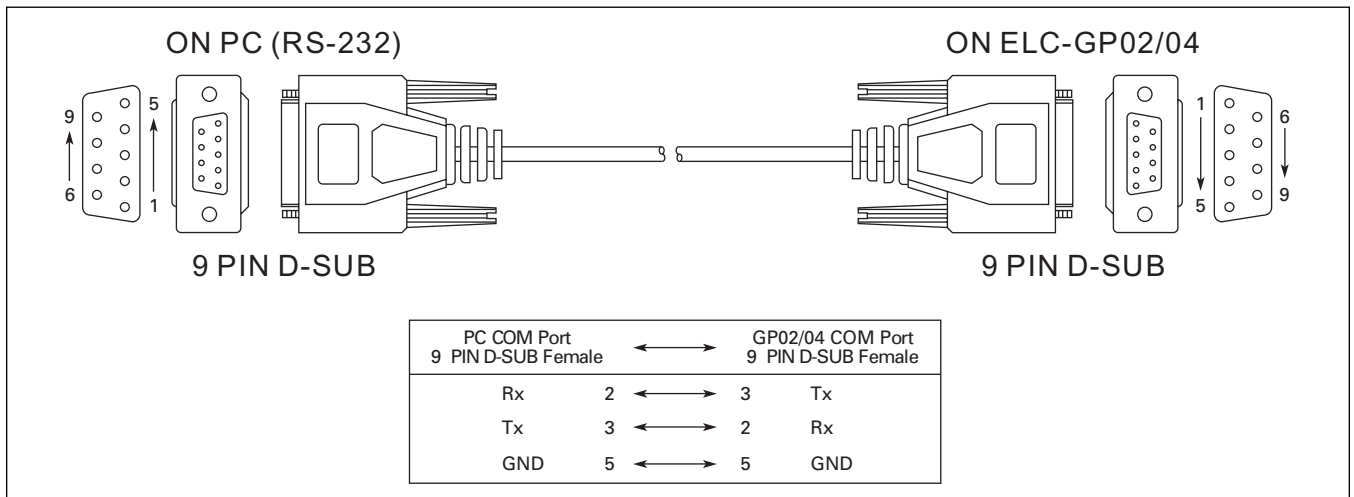
ELC-GP04 COM Port RS-232 9 PIN D-SUB Male	
3	Tx
2	Rx
5	GND

Figure 50-7. PC or GPO2/04

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ELC Controllers/Modules

Table 50-14. ELC Accessories

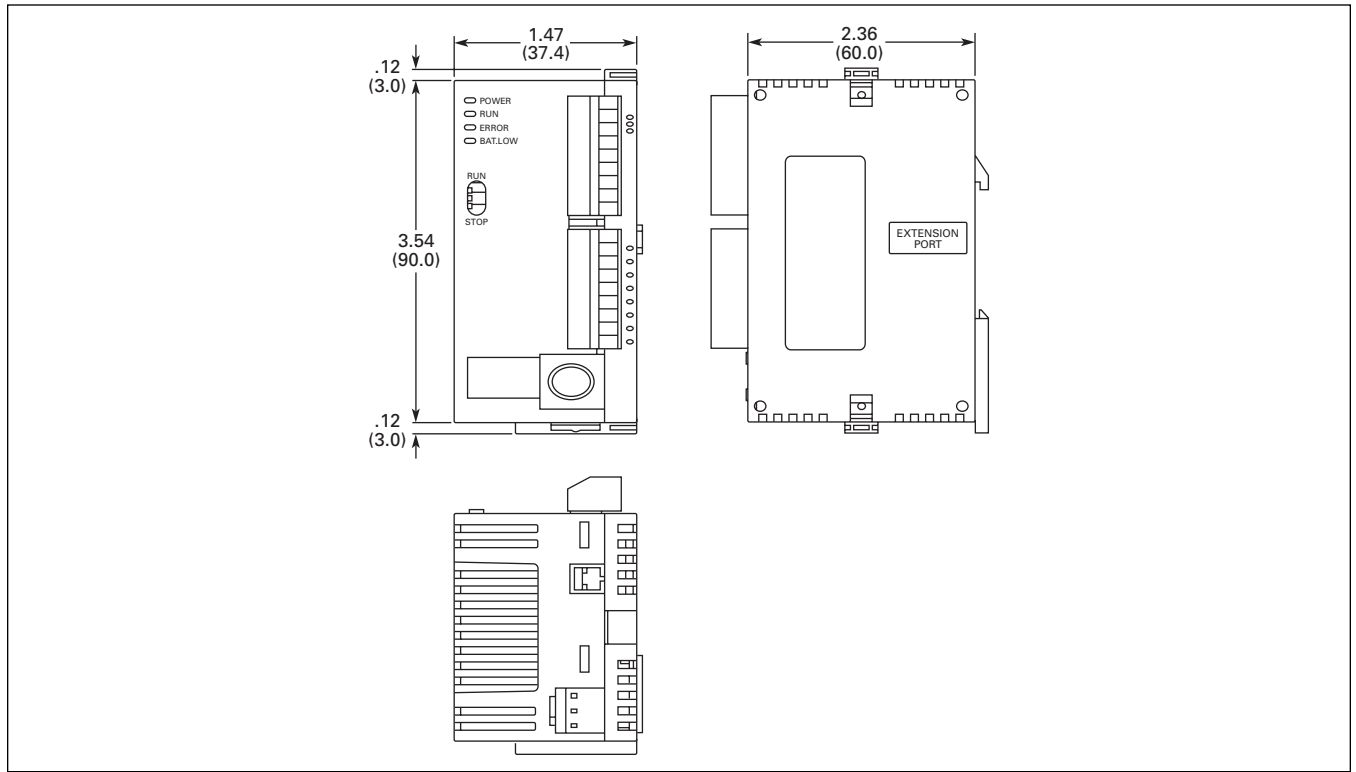| Description	Catalog Number	Price U.S. $
24 Watt, 1 Amp Power Supply	**ELC-PS01**	
48 Watt, 2 Amp Power Supply	**ELC-PS02**	
Hand-Held Programmer (Includes ELC-CBHHELC15)	**ELC-HHP**	
Cable to Connect a PC or a GP unit to ELC, 3 meters (DB9 pin female to 8 pin DIN)	**ELC-CBPCELC3**	
Cable to Connect a PC to a GP unit. 3 meters (DB9 pin female to DB9 pin female)	**ELC-CBPCGP3**	
Program transfer module for GP units	**ELC-GPXFERMOD**	
Program transfer module for ELC controllers	**ELC-ACPGMXFR**	
Plate mount for specialty modules, qty. 10	**ELC-ACCOVER**	
ELC Starter Kit (Includes ELC-PA10AADT, ELC-PS01, ELC-GP04, ELC-CBPCELC3, ELC-CBPCGP3, ELCSoft, ELCSoft GP)	**ELCSTARTKIT1**	

Dimensions

Figure 50-8. ELC-PA10, ELC-PC12 and ELC-PH12 Controllers — Approximate Dimensions in Inches (mm)

Discount Symbol **2CD-5**

ELC Graphic Panels

Product Description

ELC Graphic Panels are simple to program and easily connect to ELC products. ELC graphic panels make modifying an application quick and easy. ELC graphic panels also connect to Cutler-Hammer® MVX drives, IQ MODBUS meters and many other devices. With over 30 objects that can be placed anywhere on the display, these tough panels also communicate to other major controllers. These graphic panels have two serial ports which can be used simultaneously to communicate. Transfer applications to or from these graphic panels using the handy transfer module. Ten programmable functions keys provide easy to change pages, input numeric values, enter alpha-numeric passwords, set, reset and more. Create alarms, password protect, import bitmaps, and use many different fonts.

Protocols Supported

- Eaton D50/D32LT, D320
- Eaton ELC
- Eaton MVX ASCII
- Eaton MVX RTU
- MODBUS ASCII
- MODBUS RTU
- AB DF1
- Mitsubishi FX Series
- Mitsubishi FX2N Series
- Koyo K-Sequence
- LG 200S
- OMRON C-Series
- Siemens 57-200 Series
- ASCII Slave Mode
- And more...

ELC-GP02

ELC-GP04

Features

Table 50-15. ELC Graphic Panel Features

Item	ELC-GP02	ELC-GP04
Display Screen		
Screen	STN-LCD	
Color	Monochromatic	
Back-light	The back-light automatic turn off time is 1 – 99 minutes (0 = do not to turn off) (back-light life is 50 thousand hours at 25°C)	
Resolution	160X32 pixels	128X64 pixels
Display Range	72 mm (W) X 22 mm (H)	67mm (W) X 32mm (H); 3.00" (diagonal preferred)
Contrast Adjustment	15-step contrast adjustment	10-step contrast adjustment
Language Font	ASCII: characters (including European Fonts) Taiwan: (BIG 5 code) traditional Chinese character font China: (GB2324-80 code) simplified Chinese character font	
Font Size (ASCII)	5 X 8, 8 X 8, 8 X 12, 8 X 16	
ALARM Indication LED	1. Power on indication (Flash three times) 2. Flash for communication error or other alarm 3. Special Indication by user programming	
RS-232 LED (Yellow)	Flashes when communicating	
RS-485 LED (Green)	Flashes when communicating	
Program Memory		
Program Memory	256KB flash memory	
External Interface		
Serial Communication Port RS-232 (COM1) 9 PIN D-SUB male	Data length: 7 or 8 bits Stop bits: 1 or 2 bits Parity: None/Odd/Even Baud Rate: 4800 bps – 115200 bps	
Extension Communication port RS-485 (COM2) 5-Pin Removal Terminal (RS-485 or RS-422)	Data length: 7 or 8 bits Stop bits: 1 or 2 bits Parity: None/Odd/Even Baud Rate: 4800 bps – 115200 bps	
Extension Slot	The slot for program copy card	
Power	24V DC input	

Product Selection

Table 50-16. Graphics Panels

Description	Catalog Number	Price U.S. $
160 x 32 pixels, 10 Function Keys, Monochrome	**ELC-GP02**	
128 x 64 pixels, 10 Function Keys, Monochrome	**ELC-GP04**	

Discount Symbol **2CD-5**

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Standards and Certifications

Table 50-17. Approvals/Certifications

Description	Specifications
Electrical/EMC	
Electrostatic Discharge Immunity	EN61000-4-2/1995
Radiated Immunity	EN61000-4-3/1995
Electrical Fast Transient	EN61000-4-4/1995
Radiated Emission	CISPR22, Class A
Other Approvals	
Waterproof Class of Front Panel	IP65/NEMA Type 4
Agency Certifications	UL 508, cUL (CSA C22.2 No. 14), CE (Low Voltage Directive)

Technical Data and Specifications

Table 50-18. Environmental Ratings/Specifications

Description	Specification
Transportation & Storage	
Temperature	-4° – 140°F (-20° – 60°C)
Operating	
Temperature	32° – 122°F (0° – 50°C)
Humidity	20 – 90% RH (non-condensing)
Communication Interface	COM1: RS-232; COM2: RS-485/RS-422
Vibration	0.5 mm displacement, 10 – 55 Hz, X, Y, Z three directions and two hours for each direction
Impact	10G, 11 mS, from X, Y, Z three directions and three times for each direction
Weight	0.53 Lbs. (0.24 kg)
Cooling Method	Natural Air Cooling

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ELC Graphic Panels
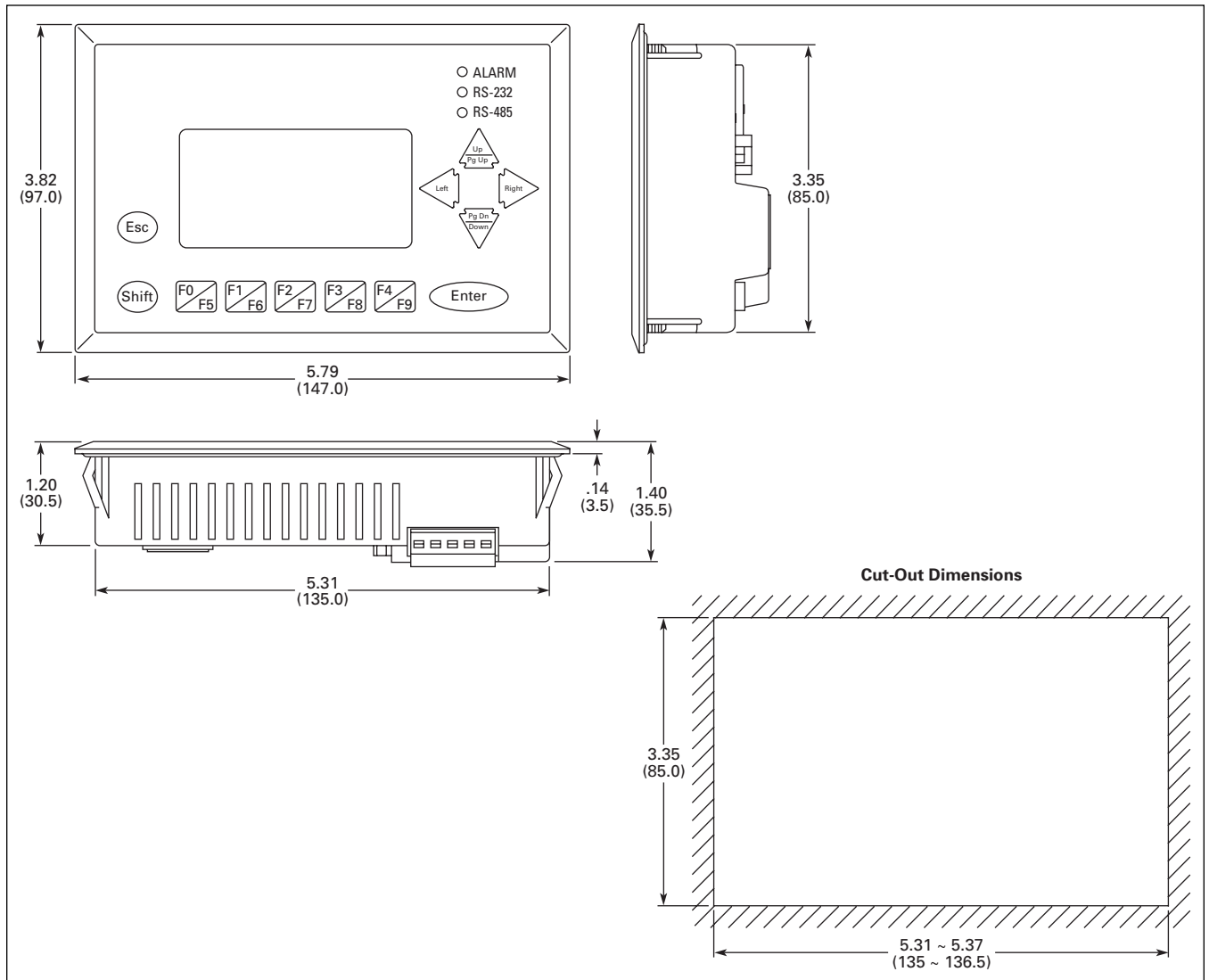
Dimensions

Cut-Out Dimensions

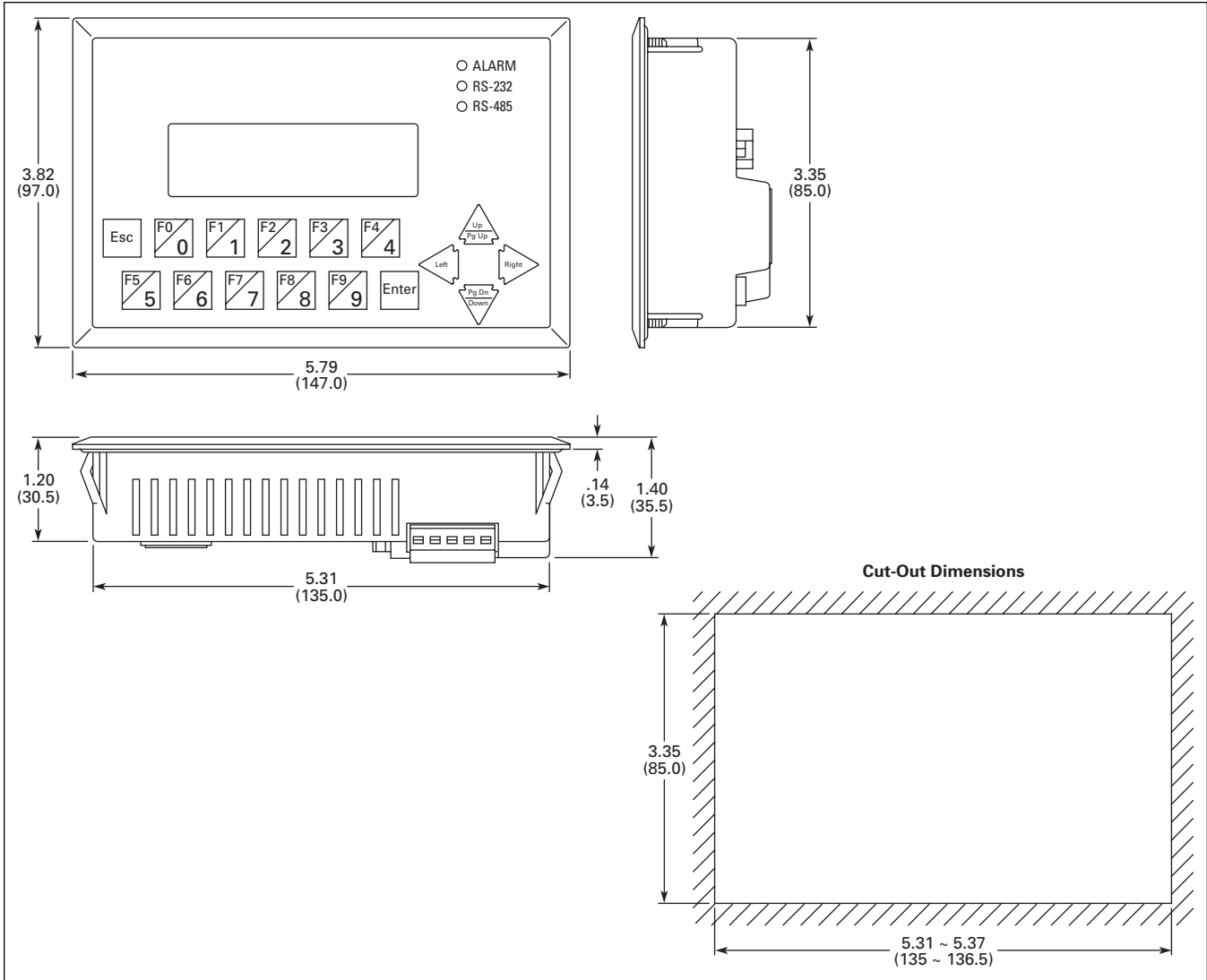**Figure 50-16. ECL-GP04 — Approximate Dimensions in Inches (mm)**

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Figure 50-17. ECL-GP02 — Approximate Dimensions in Inches (mm)

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