ELC Graphics Panels

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Contents

Drawings Online

An Eaton Green Solution

Product Description

ELC Graphics Panels are simple to program and easily connect to ELC products. ELC graphics panels make modifying an application quick and easy. With more than 30 objects that can be placed anywhere on the display, these tough panels also communicate to other major controllers. These graphics panels have two serial ports that can be used simultaneously to communicate. Transfer applications to or from these graphics panels using the handy transfer module. Ten programmable functions keys on the outdoor rated display 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.

Features

Protocols

Supported Protocols

Protocol
Eaton ELC
Eaton D50/D32LT, D320
Eaton MVX ASCII
Eaton MVX RTU
Modbus ASCII
Modbus RTU
Allen-Bradley DF1
Mitsubishi FX Series
Mitsubishi FX2N Series
Koyo K-Sequence
LG 200S
OMRON C-Series
Siemens S7-200 Series
ASCII Slave Mode

And more...

ELC Graphics Panel Features

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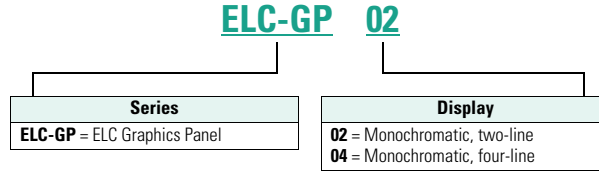| Item	ELC-GP02	ELC-GP04
Display screen		
Screen	STN-LCD	STN-LCD
Color	Monochromatic	Monochromatic
Backlight	The backlight automatic turn off time is 1–99 minutes (0 = do not to turn off) (backlight life is 50 thousand hours at 25°C)	The backlight automatic turn off time is 1–99 minutes (0 = do not to turn off) (backlight life is 50 thousand hours at 25°C)
Resolution	160 x 32 pixels	128 x 64 pixels
Display range	72 mm (W) x 22 mm (H)	67 mm (W) x 32 mm (H)
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	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	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	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	Flashes when communicating
RS-485 LED (green)	Flashes when communicating	Flashes when communicating
Program memory	256KB flash 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–115,200 bps	Data length: 7 or 8 bits Stop bits: 1 or 2 bits Parity: None/Odd/Even Baud rate: 4800 bps–115,200 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–115,200 bps	Data length: 7 or 8 bits Stop bits: 1 or 2 bits Parity: None/Odd/Even Baud rate: 4800 bps–115,200 bps
Extension slot	The slot for program copy card	The slot for program copy card
Power	24 Vdc input	24 Vdc input

Standards and Certifications

- UL 508
- cUL (CSA C22.2 No. 14)
- CE (Low Voltage Directive); Class 1 Div 2 Groups A, B, C, D
- RoHS

Catalog Number Selection

ELC-GP Graphics Panel

ELC-GP

ELC-GP	**02**
Series	**Display**
ELC-GP = ELC Graphics Panel	**02** = Monochromatic, two-line **04** = Monochromatic, four-line

Product Selection

ELC-GP04

Graphics Panels

Description	Catalog Number
Panels	
160 x 32 pixels, 10 function keys, monochrome	**ELC-GP02**
128 x 64 pixels, 10 function keys, monochrome	**ELC-GP04**
Spare Parts Kit	
Includes several power connectors, battery doors, gaskets, mounting clips, etc.	**ELC-GPSPKIT**

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Software and Accessories

ELCSoftGP Programming Software

System Requirements

• Operating Systems—Windows 2000, Windows XP

ELCSoftGP Programming Software configures all ELC graphic panels. With ELCSoftGP, applications can be created, edited, downloaded and uploaded. Move programs from one controller to a different one with ease.

ELCSoftGP

ELCSoftGP Editing Environment

Description	Catalog Number
Programming software for GP units	**ELCSOFTGP**

ELC-GPXFERMOD Program Transfer Module

The ELC-GPXFERMOD is a multifunction device that provides the ability to back up an application already loaded onto one of the ELC-GP units. It will store all system settings such as baud and ID, as well as passwords and the application itself. Once stored in the module, the application and settings can be transferred to another ELC-GP unit of the same model number.

ELC-GPXFERMOD
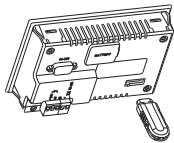
ELC-GPXFERMOD

Description	Catalog Number
Program transfer module	**ELC-GPXFERMOD**

ELC-CBPCELC_

Description	Catalog Number
1 meter cable to connect between the **HM***i* and Eaton Logic Controller (ELC)	**ELC-CBPCELC1**
3 meter cable to connect between the **HM***i* and Eaton Logic Controller (ELC)	**ELC-CBPCELC3**

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ELC-CBPCGP3 Cable

Use this cable to download or upload applications between a PC and the ELC-GP graphics panels. This cable can also be used to transfer a program from an ELC-GP to another ELC-GP.
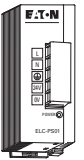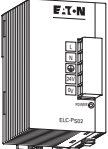
Pin definition of 9 PIN D-SUB RS-232:

ON PC (RS-232) ON ELC-GP02/04

9 PIN D-SUB 9 PIN D-SUB

PC COM Port 9 PIN D-SUB Female		GP02/04 COM Port 9 PIN D-SUB Female	
Rx	2	3	Tx
Tx	3	2	Rx
GND	5	5	GND
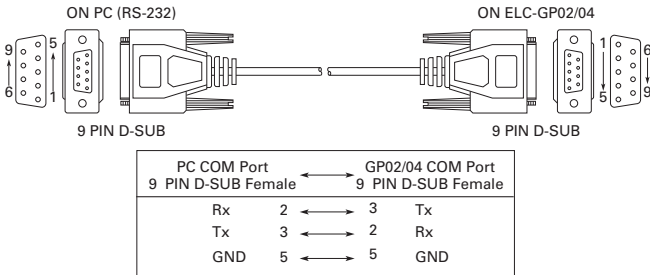
PC to ELC-GPxx Cable

Description	Catalog Number
Cable, PC to ELC-GP, 9.8 ft (3m)	**ELC-CBPCGP3**

Power Supplies

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

ELC Power Supplies

	Description	Catalog Number
ELC-PS01	Power supply, 24 watt, 1 amp	**ELC-PS01**
ELC-PS02	Power supply, 48 watt, 2 amp	**ELC-PS02**

Technical Data and Specifications

ELC Graphics Panels

Description	Specification
Environmental	
Transportation and storage	
Temperature	−4° to 140°F (−20° to 60°C)
Operating	
Temperature	32° to 122°F (0° to 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
Electrical/EMC Approvals	
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	UL Type 4X outdoor rated
UV resistant	UL 746C

ELC Power Supply

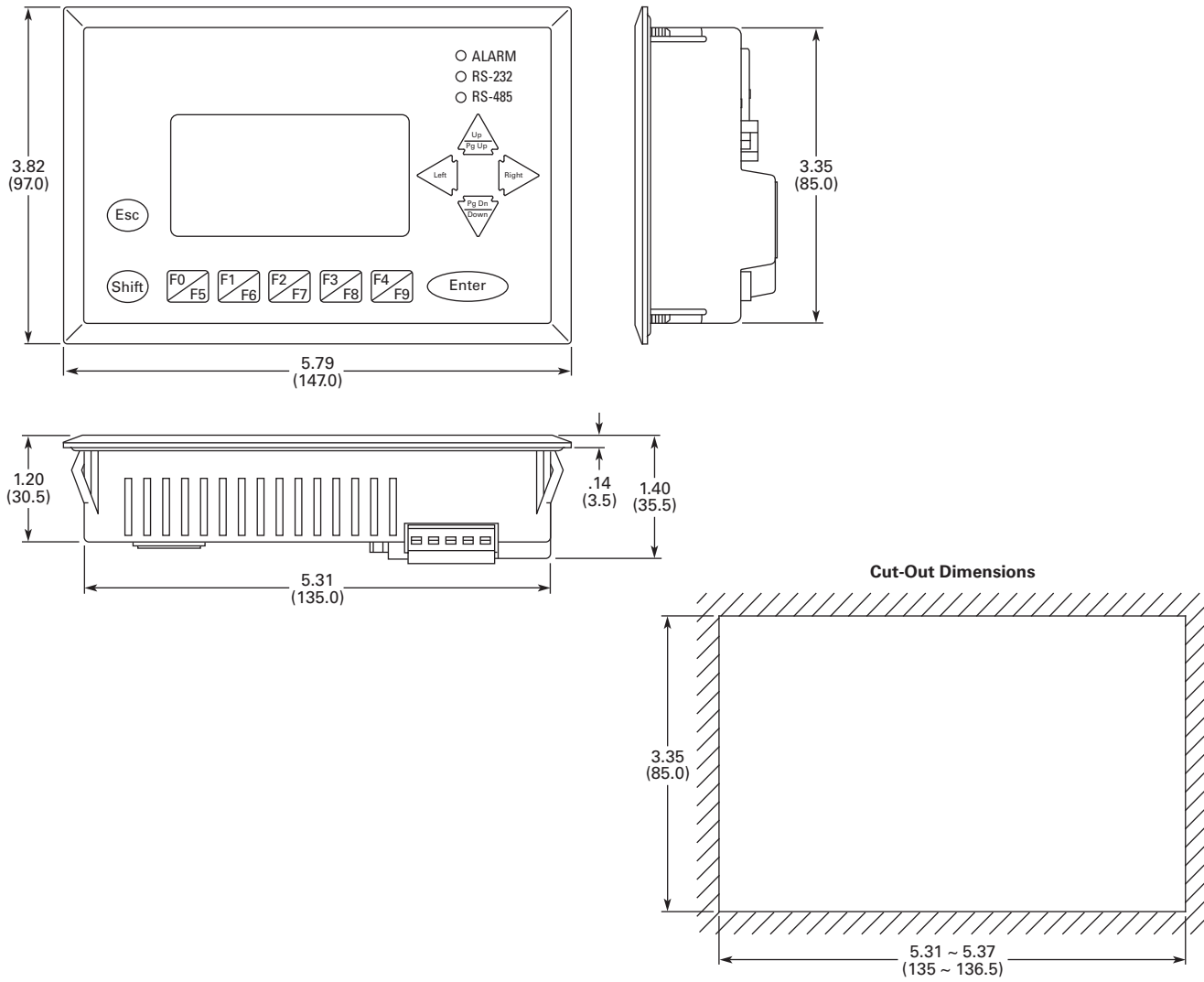| Item	ELC-PS01	ELC-PS02
Dimensions W x H x D in inches (mm)	1.44 x 3.54 x 2.36 (36.5 x 90 x 60)	2.17 x 3.54 x 2.36 (55 x 90 x 60)
Input power	100–240 Vac 50/60 Hz	100–240 Vac 50/60 Hz
Output volts	24 Vdc	24 Vdc
Output current (A)	1A	2A
Watts	24	48

Dimensions

Approximate Dimensions in Inches (mm)

ELC-GP04

3.82 (97.0)

5.79 (147.0)

3.35 (85.0)

1.20 (30.5)

5.31 (135.0)

.14 (3.5)

1.40 (35.5)

Cut-Out Dimensions

3.35 (85.0)

5.31 ~ 5.37 (135 ~ 136.5)

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Approximate Dimensions in Inches (mm)

ELC-GP02

Cut-Out Dimensions

ELC-GPXFERMOD