



File No. LR90200



■ Description

The STI Universal controller is available in two different enclosure styles. A metal IP65 (NEMA 12) rated enclosure and a DIN-rail mount plastic enclosure. For performance and reliability, both versions make extensive use of surface mount technology.

Set up is simplified—a single switch is used to select Program, Operate or Exact Channel Select modes. Both versions are capable of handling three different STI light curtains with ranges up to 30.5 m (100 ft.) and protected heights from 102 to 1626 mm (4 to 64 in.).

The metal enclosure version includes all of the features listed at left. Multiple input voltages are possible and include 115 or 230 VAC and 24 VDC. A cover-mounted reset switch is optional. The enclosure itself is shallow for easy access to control switches and wiring connections. Upgrading from previous STI controller versions is simplified by having an identical mounting pattern.

The DIN-rail mount version is ideal for the OEM or machine builder and can be mounted to a standard 35 mm DIN rail or screw-mounted directly to a metal back panel. This version operates from 24 VDC. Operation from 115 or 230 VAC is possible with the optional power supply. Clearly labeled, removable terminal blocks allow input and output

Universal Controller

LCC and LCC-DN Series

- Floating Blanking
- Exact Channel Select
- MPCE Checking
- Machine Test Signal
- Switch selected Normal/ Guard mode
- Switch selected Power-up Inhibit
- Visible status and diagnostic indicator lights
- Remote Reset and Operating mode selection
- One controller works with all of the following STI transmitters and receivers:
 - FlexSafe FS4300
 - MiniSafe MS4300
 - MiniSafe MS4400



For information on the FlexSafe FS4300, see www.sti.com



For information on the MiniSafe MS4300, see www.sti.com



For information on the MiniSafe MS4400, see www.sti.com

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safety light curtains



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connections to be made quickly and easily, even with the controller mounted on a DIN rail.

The control reliable design of the Universal controller meets all applicable OSHA and ANSI standards.

Compatibility with STI B-2 Controllers

The Universal controller has been designed as a lower-cost, full-featured, form, fit and function replacement for the STI B-2 series controllers. The B-2 series will continue to be sold and serviced to those customers requiring a replacement controller or systems which match currently installed products. Contact STI for details.

■ Specifications

General
Response Time: < 0.045 seconds
Input Power: 115 or 230 VAC $\pm 10\%$, 30 VA, 50/60 Hz, 24 VDC $\pm 10\%$, 30 VA. LCC-DN version operates only from 24 VDC negative ground
Safety Output: Two relays with force-guided contacts, NO, rated 4 A resistive at 250 VAC. Estimated mechanical life is 5,000,000 operations. Electrical life is 100,000 operations with 4 A at 250 VAC. Arc suppression devices are recommended for inductive loads.
Status Outputs: One relay with NO and NC contacts. Rated 4 A at 250 VAC. Field selectable operational modes, Alarm and Follow.
Indicators: Status-clear, blocked, channel select, floating blanking 1, floating blanking 2, transmitter power, alignment; fault-transmitter, receiver, controller
Temperature: 0 to 55°C (32 to 131°F)
Mechanical
NEMA Enclosure Version: Polyurethane painted steel
DIN-Rail Mount Version: Polycarbonate
Mounting (DIN-Rail Version): 35 mm DIN rail or screw
Environmental
Protection Rating for NEMA Enclosure Version: IP65; NEMA 4, 12
Protection Rating for DIN-Rail Mount Version: IP20

Specifications are subject to change without notice.

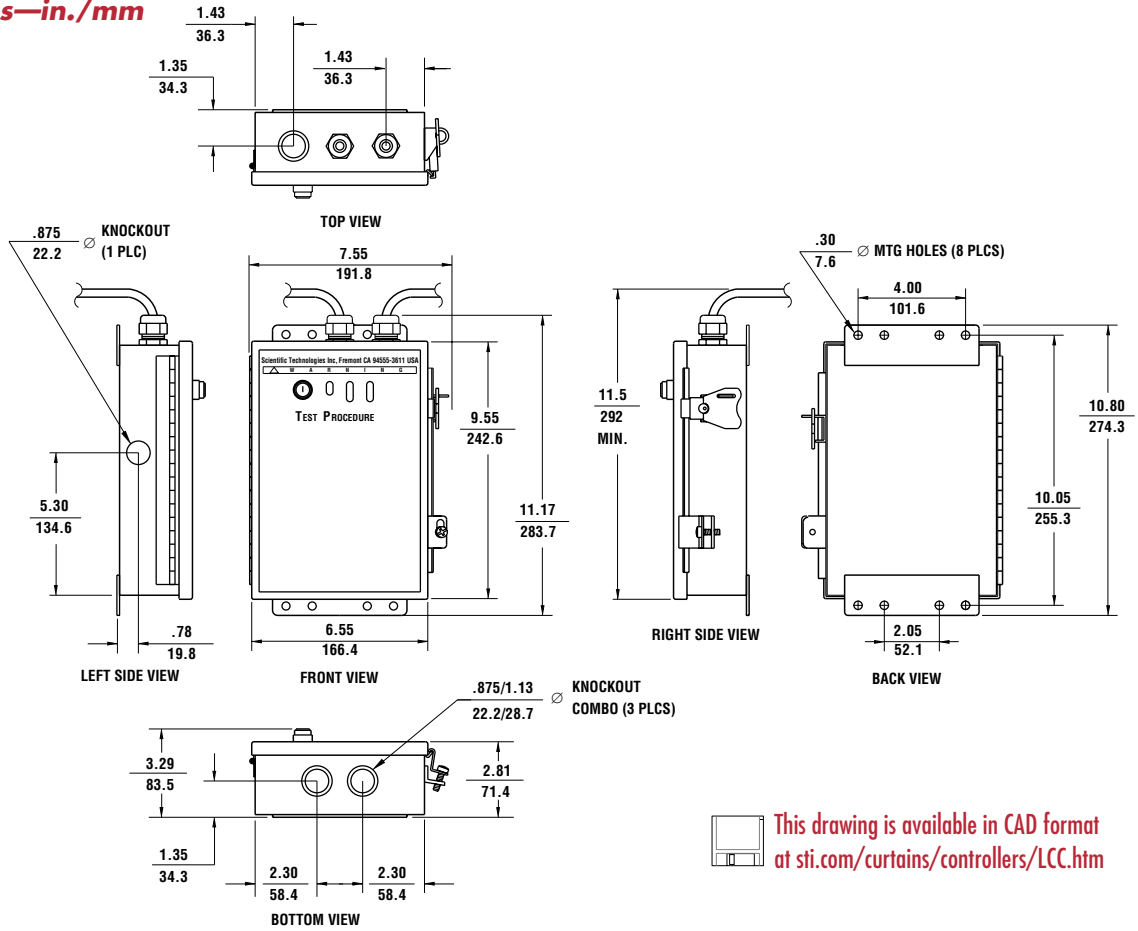


Go to the Engineering Guide
For in-depth information on safety standards and use.



■ Dimensions—in./mm

NEMA Enclosure

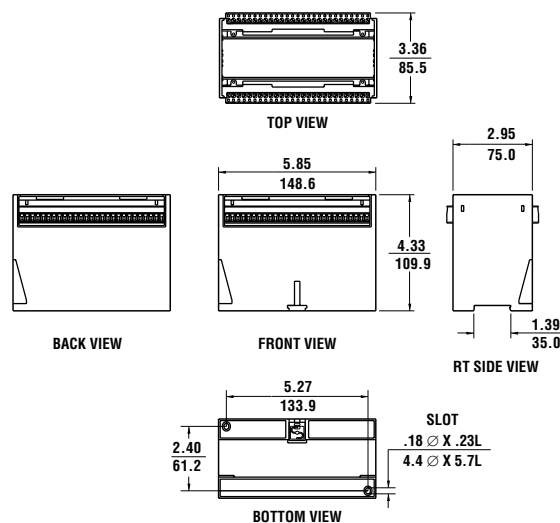


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This drawing is available in CAD format at sti.com/curtains/controllers/LCC.htm

DIN-Rail Mount Enclosure



This drawing is available in CAD format at www.sti.com/curtains/controllers/LCC.htm

■ Ordering

To order a complete system incorporating a Universal controller, see detailed instructions given in the appropriate transmitter and receiver section.

 For information on the FlexSafe FS4300, see www.sti.com

 For information on the MiniSafe MS4300, see www.sti.com

 For information on the MiniSafe MS4400, see www.sti.com

To order a Universal controller only—as a spare part, please use the following model numbers:

Model Number	Description
LCC-AC1	NEMA enclosure, 115 VAC input power
LCC-AC2	NEMA enclosure, 230 VAC input power
LCC-DC1	NEMA enclosure, 24 VDC input power
LCC-DC2	NEMA enclosure, 24 VDC, positive or negative ground input power
LCC-DN-DC1	DIN-rail mount enclosure, 24 VDC negative ground input power

To specify a controller with lid-mounted Run/Start key switch, begin designator with CK- rather than C-. Available only on NEMA enclosure.

 For information on STI safety light curtain accessories, see www.sti.com

■ Power Requirements for DIN Style Controllers

When using the DIN style LCC-DN controller, follow the guidelines below for sizing an appropriate 24 VDC power supply.

Light Curtain Model	Transmitter/ Receiver Height	Power Requirements/ STI DIN Mount Power Supply Part Number	Transmitter/ Receiver Height	Power Requirements/ STI DIN Mount Power Supply Part Number
MS4300C-DN	4 to 32 in.	50 W, 2.1 A / 42992	36 to 64 in.	100 W, 4.2 A / 40128
FS4300C-DN	8 to 32 in. total	50 W, 2.1 A / 42992	36 to 64 in. total	100 W, 4.2 A / 40128
MS4400C-DN	8 to 32 in. total	50 W, 2.1 A / 42992	36 to 64 in. total	100 W, 4.2 A / 40128



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