SCA0410

4 Channel x 10 Amp Adaptive Source Controller

Key Features

- 4 x 10 Amp fully rated programmable and adaptive lighting source controller
- 128 scene memory
- Each channel can be set for leading or trailing edge dimming suitable for resistive, inductive and capacitive loads
- Complete with iProtect™ lamp protection and auto short circuit protection
- Lockable hinged door to MCBs
- Fail to full safety feature
- iCAN Network inputs
- Audio Visual Port (RS485)
- Optional: DMX512 input
- Panic/fire alarm input
- Configuration stored in Non Volatile EEPROM
- Firmware storage in reflashable FLASH memory over iCAN network
- CE & UKCA compliant to all relevant standards
- Designed and manufactured to ISO9001 standard

Overview

This 4 x 10 amp adaptive source controller is designed to provide scene set dimming of lighting loads that require either leading or trailing edge dimming. This FET based adaptive dimmer is suitable for resistive, inductive and capacitive loads. In the event of reactive loads being detected, it uses patented circuitry to protect both itself and the connected load. With a 128 scene integral memory this device offers multiple control options to meet the most demanding specifications.

The device is complete with dynamic voltage and current monitoring. This facility provides short circuit protection, and protects the lamps from thermal shock and so extends the lamp life. It is completely silent in operating mode when using trailing edge dimming. In addition to the network connectivity,

it also has an audio visual port and auxiliary, as well as a DMX512 optional input. The versatility and adaptability of this product makes it the perfect device for hotel ballrooms, museums, visitor centres, entertainment venues, and as part of large integrated systems.

Mechanical Data

Weight: 9kg

Mains Cable Access:
4 x 25mm and 1 x PG29 knockouts
Control Cable Access: 1 x 25mm knockout

Climate Range:
Temperature: +2ºC to +40ºC
Humidity: +5 to 95% non condensing

Temperature Monitor: This unit is complete with thermal monitoring. Should it over-heat the unit will automatically switch off

Control Inputs:
Two sets of terminals for the iCANnet™ network
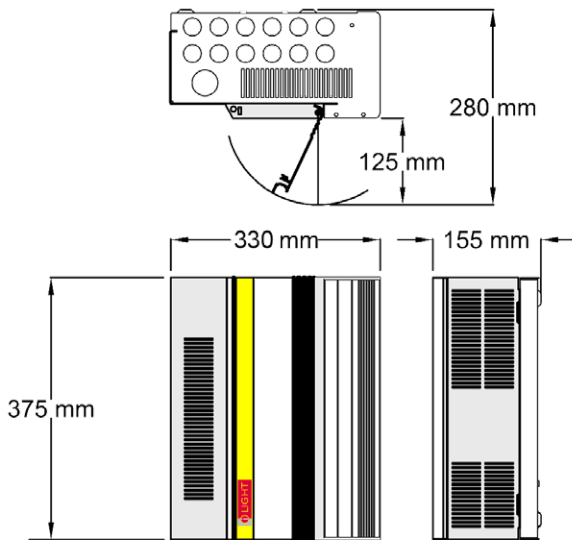Suitable for Belden 1502
One RJ12 socket for programming iCANnet™ network
One set of terminals for the Audio Visual Port, RS485
One set of terminals for the panic/fire alarm input
Optional: DMX512 input card (add X to the end of the part number)

Dimensions

280 mm
125 mm
330 mm
155 mm
375 mm

Electrical Data

Maximum Load: 40 Amp single phase @ 40ºC

Maximum Channel Current: 10 Amp*

*Please note: There are no industry standards for mains dimmable LED designs. Individual lamp performance and dimming ranges vary considerably between manufacturers, models and even over time. Always refer to the lamp manufacturer's recommended limits for leading/trailing edge operation, derating of load due to inrush current and maximum number of lamps per circuit. This is often limited to less than 10 lamps per circuit regardless of load. It shall be the responsibility of the installer to check lamp compatability in advance or arrange proving tests/quantities as necessary.

Supply: 230 volts -/+ 10% 50/60 Hz (optionally, 220/127 volt 60 Hz)

Protection: 10 Amp MCBs Type C, 10KA rated plus internal electronic short circuit protection, input isolator not included

Load Types:
Incandescent 230 volt lamps
Low voltage inductive lamps (wire wound or electronic)
Low voltage electronic (capacitive)
Cold cathode (Check the iLight help desk for details)
Minimum Load: 20 watts per channel

Dimmed Outputs: 2 x 45 Amp FET's per circuit

Switched Outputs:
The Dimmed outputs may be configured as switches for non-dimmed loads. They require a minimum load of 30mA for them to latch. Before connecting discharge lamps, consult the iLight help desk.

Terminal Sizes:
Incoming supply, max cable size: 10mm²
Loads, max cable size: 1 x 4mm² or 2 x 2.5mm² per circuit
iCANnet™ network cable size: 5 x 1mm²
Audio Visual Port: RS485 2 x 1mm²
Panic/fire alarm input: 2 x 1mm²

Memory
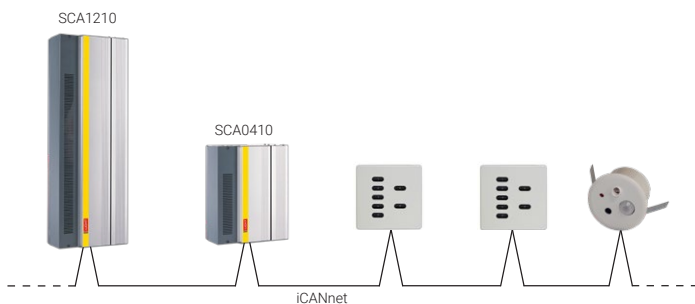FLASH memory to be able to upgrade firmware
EEPROM for 128 scene memory
Fade Times: 0.1 seconds to 60 minutes
Mains Stabilisation: 50:1

Other Adaptive Source Controllers: SCA1210, SCMA0401 and SCMA0402

Typical Schematic

SCA1210
SCA0410
iCANnet

UKCA

CE

bsi ISO 9001 Quality Management Systems CERTIFIED
FM 727924