

DTL DSHORT SBK Control Specification Guideline
Division 16520

PART 1. GENERAL

1.1 INTRODUCTION

- A. The intent of this specification is to provide for furnishing, installing, testing and placing into operation, a shorting cap for outdoor luminaire. Shorting caps are for use with lighting fixtures that are to remain on for continuous periods of time or are on group control circuits

1.2 DESCRIPTION OF WORK

- A. Provide a locking type shorting cap for outdoor lighting
- B. Requirements are indicated elsewhere in these specifications.

1.3 QUALITY ASSURANCE

- A. Manufacturer experience - To insure a uniform installation and single responsibility, all switching equipment described herein shall be supplied by a manufacturer with a minimum of 10 years experience in lighting control systems.
- B. Manufacturer shall be:

Dark To Light
858 Plain Street, Suite 12
Marshfield, Massachusetts
Phone 1-781-319-0634 Fax 1-781-314-0640
www.darktolight.com

- C. Manufacturing Location shall be ISO certified.
- D. Product shall be DTL (Dark To Light) **DSHORT SBK**. Alternate products meeting prior approval requirements may be proposed as add or deduct alternate only.

1.4 CODES AND STANDARDS

- A. ANSI C136.10
- B. ANSI C136.24
- C. IES DG-13

1.5 SUBMITTALS

Prior to fabrication manufacture shall submit the following materials for approval.

- A. Manufacturer's published catalog data sheets for all equipment and components of the shorting cap.
- B. Shop Drawings - Submit detailed drawings and documentation of shorting cap. As a minimum, the shop drawings shall include the following:
 - 1. Schematic diagrams
 - 2. Full catalog sheets

PART 2. PRODUCTS

2.1 SYSTEM DESCRIPTION

- A. The shorting cap shall control the luminaire on which it is installed.
- B. The shorting cap shall be a locking type device as per ANSI C136.10

2.2 RATINGS

- A. Shorting cap shall have a line voltage of 120-480 Volts AC at 60 Hertz
- B. Shorting cap shall have a load rating of at least 15 amps
- C. Shorting cap shall operate all HID, halogen, incandescent, LED, solid state, fluorescent, and relay loads
- D. Shorting cap losses shall be 0.1 Watts or less at 15 amp AC.
- E. UL or CSA is not required
- F. Shorting cap shall operate in -40 degrees to 158 degrees Fahrenheit (-40 degrees to 70 degrees Celsius) ambient temperatures
- G. Shorting cap shall withstand an Interface Temperature of 105 degrees Celsius where Interface Temperature is defined in ANSI C136.10

2.3 HARDWARE

- A. Housing
 - 1. The housing shall be 1.12 inches (28.4 millimeters) high and 3.1 inches (78.7 millimeters) in diameter
 - 2. The shorting cap weigh 1.3 ounces (37 grams)
 - 3. Housing of shorting cap shall be black polypropylene
 - 4. Housing shall be made of an impact and UV resistant material.
 - a.) Shorting cap shall have an impact resistance of greater than 1.0 ft-lbs at -20°C
 - b.) Shorting cap shall pass an impact test after 1000 hours in a QUV chamber
 - Color shift shall not be more than one Pantone number after the QUV test
 - 5. Shorting cap shall withstand a drop of three feet to a concrete floor without causing damage to the casing or changing electrical operation
- B. Housing Labeling
 - 1. Directional marking. A rib shall be molded in cover to indicate proper alignment with NORTH arrow on receptacle.
 - 2. The bottom of the shorting cap casing shall be stamped with month and year lists to enable installers to indicate an installation and removal date via pencil hash marks on the casing.
 - a.) This stamp shall consist of three concentric partial rings.
 - b.) The rings are broken by a small label box spanning all three rings.
 - c.) The outermost and innermost rings are blank by default.
 - d.) The center ring includes the numbers 1-12 to the left to indicate month and a list of 10 or more consecutive two digit years to the right.
 - e.) The label box shall indicate the outer ring is for installation information, the inner ring for removal information, the left side of the center ring is for the month, and the right side of the center ring is for the year. Abbreviations such as “mo” and “yr” are acceptable if space is limited.
- C. Base Label
 - 1. The base label shall be affixed to the bottom of the shorting cap casing
 - 2. The base label shall not block or otherwise obscure other information on the casing
 - 3. The base label shall include the following information:
 - a.) Model number or model description
 - b.) The month and year of manufacture
 - c.) A unique serial number for the control
 - d.) Operating voltage range
 - e.) Load rating
 - f.) Manufacturing location
- D. Legs and Gasket
 - 1. All three legs shall be brass. Plated steel legs are not acceptable.
 - 2. Gasket shall be neoprene or similar
 - 3. Gasket must withstand a minimum 105 Celsius at 95% humidity

2.4 PACKAGING

- A. The shorting caps shall be sold in packages of 12 units
- B. Each shorting cap shall be individually packaged inside its own box
 - 1. Each individual box shall be 3.25 inches (82.6 millimeters) long, 3.25 inches (82.6 millimeters) wide, and 2.625 inches (66.7 millimeters) high
 - 2. Each individual box shall weigh 1.975 ounces (56 grams)
 - 3. Each individual box shall include installation instructions on one side
 - 4. Each individual box shall include warranty information on one side
 - 5. Each individual box shall include the location of control assembly
 - 6. Each individual box shall include a label with the following information
 - a.) The label shall include the model number
 - b.) The label shall include the voltage rating of the control

PART 3: EXECUTION

3.1 EQUIPMENT INSTALLATION AND DOCUMENTATION

- A. Installation - The shorting cap shall be installed and connected as directed by the manufacturer.
 - 1. The shorting cap is a locking type control and shall require no field wiring.
- B. Documentation - The complete product specification shall be available from the manufacturer.

3.2 PRODUCT SUPPORT AND SERVICE

Factory telephone support shall be available at no cost to the owner. Factory assistance shall consist of assistance in solving application issues pertaining to the control equipment.

3.3 WARRANTY

Manufacturer shall provide a six year (6) limited warranty on the shorting cap consisting of a one for one control replacement. The official warranty policy is the following:

All DTL photocontrols are permanently marked with month and year of manufacture as well as serial number.

DTL undertakes that this product shall operate within its original operating specifications and shall be free of electrical or mechanical defects. DTL's liability hereunder shall be limited to providing a replacement unit and shall not cover the costs of removal or installation of the unit nor any consequential damages.

This express warranty is in lieu of and excludes all other warranties, guaranties or representations, expressed or implied, including, but not limited to, warranties of merchantability or fitness for a specific purpose, by operation of law or otherwise.

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