

## SLC40 Series — Panel Mounted Annunciators

### SLC40 Series Annunciators

SLC series panel mounted annunciators are an ideal alternative to mounting multiple pilot devices. Cluster mounting simplifies panel cutouts and offers a variety of window combination sizes.

Available with incandescent or Superbright LED illumination.

Key features of the SLC40 series include:

- Custom configuration up to 105 windows
- Four window sizes based on a 40mm grid
- Non-reflective clear lenses that can be extended (angled) for better visibility when mounted in higher locations
- Incandescent or Superbright LED illumination
- Wide variety of input voltages



Display Lights



Extended Windows



Style F



Style H










Style L



Style V



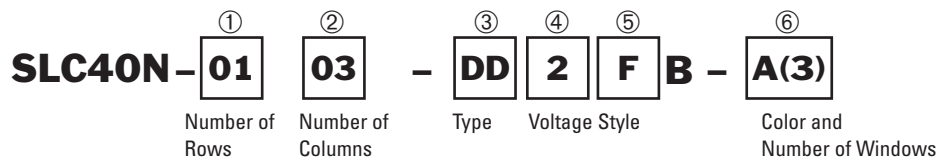
Staggered Terminals:  
increased safety  
and serviceability

| Light Source                                      | LED   | Incandescent                           |                            |
|---|---|--|----------------------------|
| <b>Voltages</b>                                   | <b>Full Voltage</b>   | 6, 12, 24V AC/DC                       | 6.3, 12, 18, 24, 30V AC/DC |
|   | <b>Transformer</b>  | 120, 240V AC                           | 120, 240V AC               |
|   | <b>DC-DC Converter</b>  | 110V DC                                | —                          |
| <b>Colors</b>                                     | Full voltage:<br>Amber, Green, Red, Yellow, Blue (24V), White,<br>dual color Red/Green (24V only)   | Amber, Green, Red, Yellow, Blue, White |                            |
| <b>Lamp Type</b>                                  | Surface (chip type) LED cluster (40mA approximately)  | E12/15 (2W) screw base                 |                            |
| <b>Available Window Sizes</b>                     | <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> <p>"F"</p>  40x40mm             </div> <div style="text-align: center;"> <p>"H"</p>  40x80mm             </div> <div style="text-align: center;"> <p>"L"</p>  40x120mm             </div> <div style="text-align: center;"> <p>"V"</p>  80x40mm             </div> </div>  |  |                            |
| <b>Insulation Resistance</b>                      | 100MΩ minimum (with 500V DC megger), between live and dead parts  |  |                            |
| <b>Degree of Protection</b>                       | IP20 (for indoor use only), NEMA 1  |  |                            |
| <b>Dielectric Strength</b>                        | Full voltage: 2,000V AC direct<br>Adaptor/transformer 2,500V AC (1 minute)  |  |                            |
| <b>Operating Temperature</b>                      | - 20° to +40°C; (45-85% relative humidity)  |  |                            |
| <b>Material of Marking Plate and Color Screen</b> | Polycarbonate   |  |                            |
| <b>Termination</b>                                | X1 and X2 terminals: M3.5 screw with a captive wire clamp washer<br>(Check terminal: M3 screw, or applicable models)  |  |                            |
| <b>Maximum Size</b>                               | Full voltage: 7 rows, 15 columns (105 windows)<br>Others: 50 windows maximum  |  |                            |
| <b>Recommended Wire Size</b>                      | 22-14 AWG x2 (2mm <sup>2</sup> x 2)   |  |                            |
| <b>Approvals</b>                                  | <div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="text-align: center;">  <p>Cert. No.<br/>B970213332375</p> </div> <div style="text-align: center;">  <p>UL Recognized<br/>File No. E69861</p> </div> </div> <div style="display: flex; justify-content: space-between; align-items: flex-start; margin-top: 20px;"> <div style="text-align: center;"> <p><b>ABS</b></p> <p>American<br/>Bureau of<br/>Shipping</p> </div> <div style="text-align: center;">  <p>CSA Certified<br/>File No.<br/>LR48366-24</p> </div> </div> |  |                            |







## Part Numbers (assembled)

### Part Number Guide



### Part Numbers: Assembled Parts

| Description |                            | Code   | Remark   |                        |
|-------------|----------------------------|--|--|------------------------|
| ①           | Number of Rows             | 01, 02, 03, 04, 05, 06, 07                                 | 7 row maximum (number of base unit "F-Style" windows)  |                        |
| ②           | Number of Columns          | 01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15 | 15 column maximum (number of base unit "F-Style" windows)                                      |                        |
| ③           | LED                        | Full voltage   | DD   | 6V, 12V, 24V           |
|             |                            | Full voltage with check terminal                           | DHM  | 24V only               |
|             |                            | Full voltage 2 color (Red/Green)                           | DW   | 24V only               |
|             |                            | Transformer  | TD   | 120V, 240V AC          |
|             |                            | DC-DC converter  | CD   | 110V DC only           |
|             | Incandescent               | Full voltage   | DE   | 6V, 12V, 18V, 24V, 30V |
|             |                            | Full voltage with check terminal                           | DEM  | 6V, 12V, 18V, 24V, 30V |
| Transformer |                            | TE   | 120V, 240V   |                        |
| ④           | 6.3V (6V) AC/DC            | 6  | Type DD, DE, or DEM  |                        |
|             | 12V AC/DC                  | 1  | Type DD, DE or DEM   |                        |
|             | 18V AC/DC                  | 8  | Type DE or DEM   |                        |
|             | 24V AC/DC                  | 2  | Type DD, DHM, DW, DE, or DEM   |                        |
|             | 30V AC/DC                  | 3  | Type DE or DEM   |                        |
|             | 120V AC                    | 12   | Type TD or TE  |                        |
|             | 240V AC                    | 24   | Type TD or TE  |                        |
|             | 110V DC                    | 1  | Type CD  |                        |
| No lamp     | 99                         | Type DE or DEM   |  |                        |
| ⑤           | Square                     | F  |  40x40mm  |                        |
|             | Horizontal rectangle       | H  |  40x80mm  |                        |
|             | Large horizontal rectangle | L  |  40x120mm |                        |
|             | Vertical rectangle         | V  |  80x40mm  |                        |
|             | Combination                | M  | Fill out the order form on the next page   |                        |
| ⑥           | Amber                      | A  | After each color, specify the number of windows<br>Example... A(3), G(2), R(1)                 |                        |
|             | Green                      | G  |  |                        |
|             | Red                        | R  |  |                        |
|             | Blue                       | S (LED version: 24V only)                                  |  |                        |
|             | White                      | W  |  |                        |
|             | Yellow                     | Y  |  |                        |

C Display Lights



1. Secondary voltage on transformers and DC-DC converters is 24V.
2. To specify the arrangement of varying window sizes and colors, use the order form on the next page.
3. Drawings are required for any units ordered with engraving.
4. Incandescents use color screen and marking plate, LEDs use two marking plates (no color screen)

Purchase Order No. \_\_\_\_\_

Date \_\_\_\_\_

Sheet \_\_\_\_\_ of \_\_\_\_\_

Contact \_\_\_\_\_  
 Company \_\_\_\_\_  
 Phone # \_\_\_\_\_  
 Ship to \_\_\_\_\_  
 City/State/ZIP \_\_\_\_\_

**Fill in Part Number Below:**

**SLC40N** —

Number of Rows   — Number of Columns

Note: Convert all window styles to the style F (basic unit size).

A  Number of Amber  
 G  Number of Green  
 R  Number of Red  
 S  Number of Blue  
 W  Number of White  
 Y  Number of Yellow

Window Code Style

Operating Voltage

Type Code

**B** — Black Frame

F = One Window  
 H = Two Windows Wide  
 L = Three Windows Wide  
 V = Two Windows High  
 M = Multiple Combination

First Window (upper, left-hand corner of panel)

↑ THIS SIDE UP

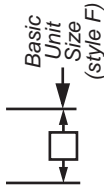
↓ COLUMNS

← ROWS

Remarks: \_\_\_\_\_

Quantity \_\_\_\_\_  
 Note: All units ordered on one order form must be identical.

Order Form







↑ THIS SIDE UP

1. The part number guide is on the previous page.
2. Engraving information is on the next page. (Separate drawing required.)
3. Panel cutout dimensions are on page C-34.



**Engraving Information**

**Part Numbers: Engraving Plates**

| Window Type   | Part No. | Character Size | Maximum Characters per Line | Maximum Lines |
|---|----------|----------------|-----------------------------|---------------|
| F<br> 40x40mm  | SLC-4PF  | 5/16           | 5                           | 2             |
|   |          | 7/32           | 8                           | 4             |
|   |          | 5/32           | 11                          | 5             |
| H<br> 40x80mm  | SLC-4PH  | 5/16           | 12                          | 2             |
|   |          | 7/32           | 17                          | 4             |
|   |          | 5/32           | 22                          | 5             |
| L<br> 40x120mm | SLC-4PL  | 5/16           | 18                          | 2             |
|   |          | 7/32           | 26                          | 4             |
|   |          | 5/32           | 34                          | 5             |
| V<br> 80x40mm  | SLC-4PV  | 5/16           | 5                           | 6             |
|   |          | 7/32           | 8                           | 7             |
|   |          | 5/32           | 11                          | 12            |

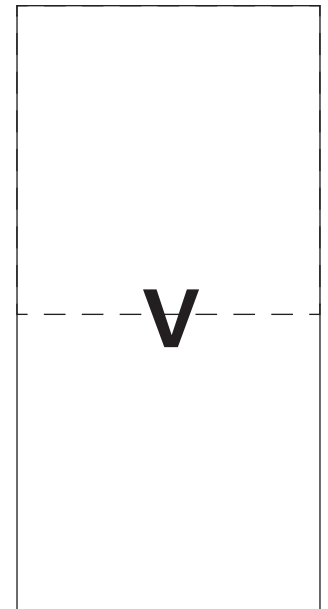
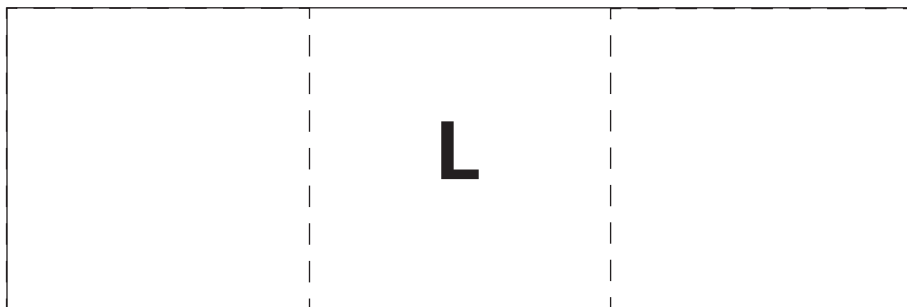
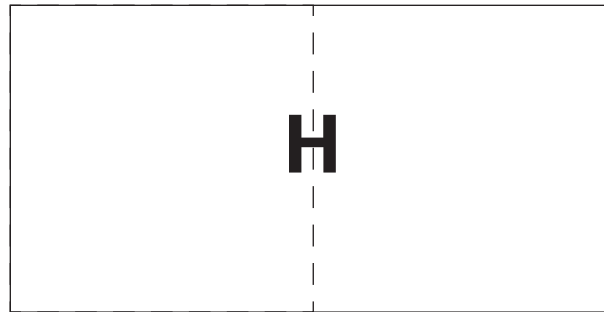
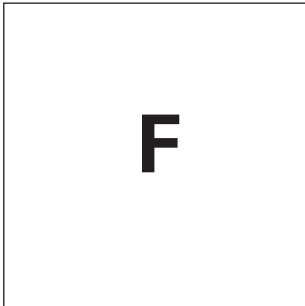
**Engraving Size Samples**

**5/16" size**

**7/32" size**

**5/32" size**

**Engraving Template**







**Dimensions**

**Panel Cut-Out Dimensions**

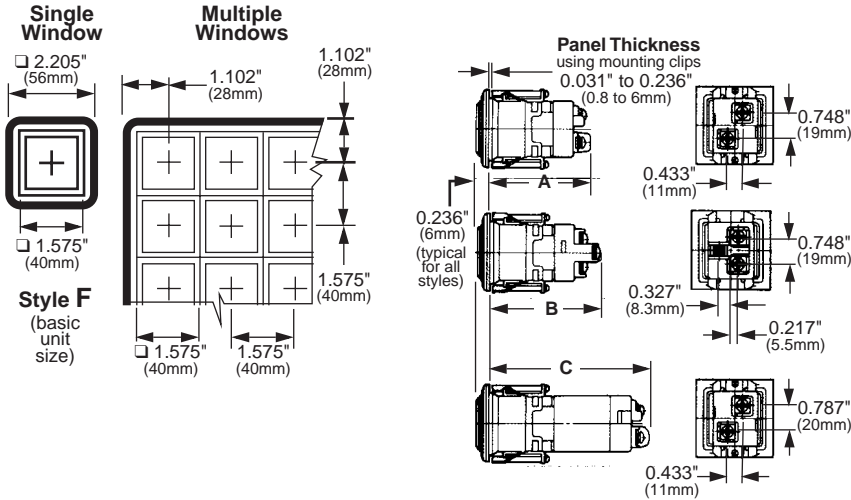
| No. of Columns → |                                 |                 |  |               |                |                |                |                |                 |                 |                 |                 |                 |                 |                 |                 |                 |
|------------------|---------------------------------|-----------------|--|---------------|----------------|----------------|----------------|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| No. of Rows ↓    | Overall Panel Width Dimension → |                 | 1  | 2             | 3              | 4              | 5              | 6              | 7               | 8               | 9               | 10              | 11              | 12              | 13              | 14              | 15              |
|                  | Overall Height ↓                | Cut-out Ht ↓    | 1.772" (45mm)  | 3.346" (85mm) | 4.921" (125mm) | 6.496" (165mm) | 8.071" (205mm) | 9.646" (245mm) | 11.220" (285mm) | 12.795" (325mm) | 14.370" (365mm) | 15.945" (405mm) | 17.520" (445mm) | 19.094" (485mm) | 20.669" (525mm) | 22.244" (565mm) | 23.819" (605mm) |
| 1                | 2.205" (56mm)                   | 1.772" (45mm)   | 1  | 2             | 3              | 4              | 5              | 6              | 7               | 8               | 9               | 10              | 11              | 12              | 13              | 14              | 15              |
| 2                | 3.780" (96mm)                   | 3.346" (85mm)   | 2  | 4             | 6              | 8              | 10             | 12             | 14              | 16              | 18              | 20              | 22              | 24              | 26              | 28              | 30              |
| 3                | 5.354" (136mm)                  | 4.921" (125mm)  | 3  | 6             | 9              | 12             | 15             | 18             | 21              | 24              | 27              | 30              | 33              | 36              | 39              | 42              | 45              |
| 4                | 6.929" (176mm)                  | 6.496" (165mm)  | 4  | 8             | 12             | 16             | 20             | 24             | 28              | 32              | 36              | 40              | 44              | 48              | 52              | 56              | 60              |
| 5                | 8.504" (216mm)                  | 8.071" (205mm)  | 5  | 10            | 15             | 20             | 25             | 30             | 35              | 40              | 45              | 50              | 55              | 60              | 65              | 70              | 75              |
| 6                | 10.079" (256mm)                 | 9.646" (245mm)  | 6  | 12            | 18             | 24             | 30             | 36             | 42              | 48              | 54              | 60              | 66              | 72              | 78              | 84              | 90              |
| 7                | 11.654" (296mm)                 | 11.220" (285mm) | 7  | 14            | 21             | 28             | 35             | 42             | 49              | 56              | 63              | 70              | 77              | 84              | 91              | 98              | 105             |
|                  |                                 |                 | <b>Total Number of Windows (equivalent to style F—basic unit size)</b> |               |                |                |                |                |                 |                 |                 |                 |                 |                 |                 |                 |                 |

Display Lights

1. The number of rows and columns refers to styles equivalent to style F (basic unit size).  
 For styles H, L, and V, convert into style F (basic unit size) equivalents.  
 Style H: 1 window high (1 row) x 2 windows wide (2 columns)  
 Style V: 2 windows high (2 rows) x 1 window wide (1 column)  
 Style L: 1 window high (1 row) x 3 windows wide (3 columns)  
 Example: 18 windows = 3 windows high (3 rows) x 6 windows wide (6 columns) →  
 Overall dimension (H x W): 5.354" x 10.079" (136 x 256mm)  
 Panel cut-out (H x W): 4.921" x 9.646" (125 x 245mm)  
 Tolerance: +0.039" (1mm), -0  
 2. See page C-31 for part numbering information.

| Window Style |                           | Style F   | Style H   | Style L  | Style V   |
|--------------|---------------------------|---|---|--|---|
| Appearance   |                           |  |  |  |  |
|              | Illumination Face (H x W) | 1.575" x 1.575" (40 x 40mm)   | 1.575" x 3.150" (40 x 80mm)   | 1.575" x 4.724" (40 x 120mm)   | 3.150" x 1.575" (80 x 40mm)   |
| Widow Size   | Lens (H x W)              | 1.457" x 1.457" (37 x 37mm)   | 1.457" x 3.031" (37 x 77mm)   | 1.457" x 4.606" (37 x 117mm)   | 3.031" x 1.457" (77 x 37mm)   |
|              | Marking Plate (H x W x t) | 1.409" x 1.409" x 0.04" (35.8 x 35.8 x 1.0mm)                                       | 1.409" x 2.984" x 0.04" (35.8 x 75.8 x 1.0mm)                                       | 1.409" x 4.559" x 0.04" (35.8 x 115.8 x 1.0mm)                                       | 2.984" x 1.409" x 0.04" (75.8 x 35.8 x 1.0mm)   |
|              | Color Screen (H x W x t)  | 1.409" x 1.409" x 0.04" (35.8 x 35.8 x 1.0mm)                                       | 1.409" x 2.984" x 0.04" (35.8 x 75.8 x 1.0mm)                                       | 1.409" x 4.559" x 0.04" (35.8 x 115.8 x 1.0mm)                                       | 2.984" x 1.409" x 0.04" (75.8 x 35.8 x 1.0mm)   |
|              | Engraving Area            | 1.339" x 1.339" (34 x 34mm)   | 1.339" x 2.913" (34 x 55mm)   | 1.339" x 4.488" (34 x 85mm)  | 2.913" x 1.339" (55 x 34mm)   |

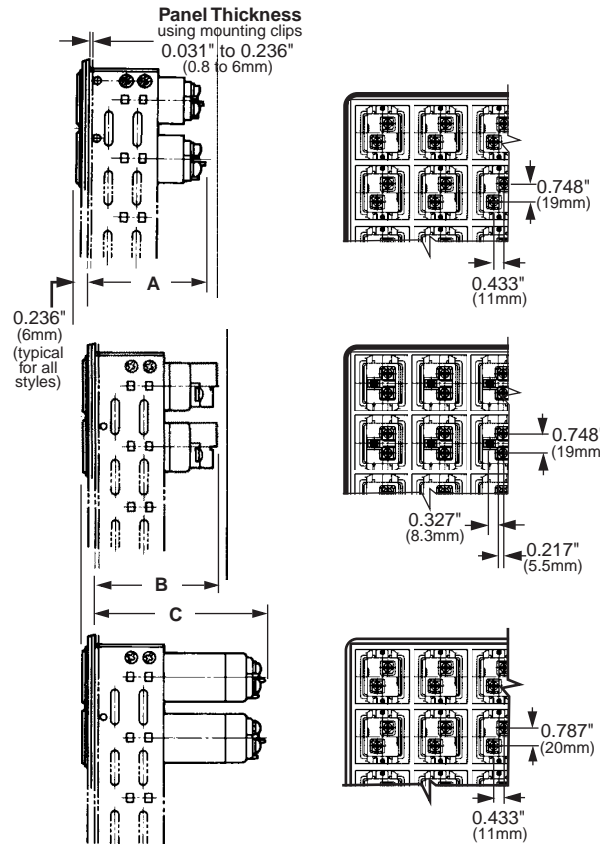
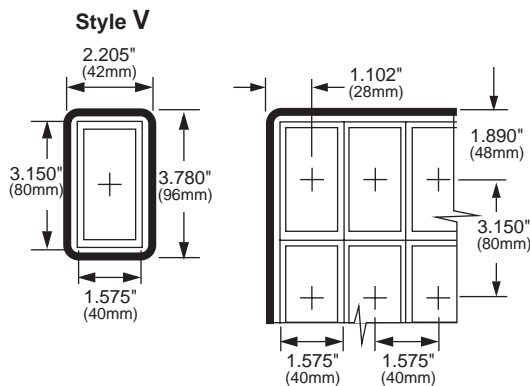
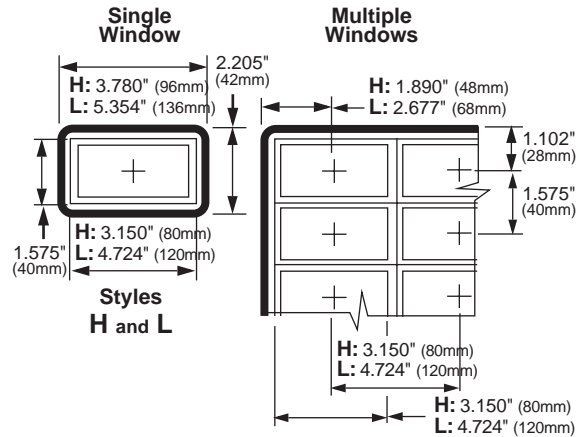
## Dimensions, continued



**Styles F, H, L, V:**  
**Single Window (right)**  
**Multiple Windows (below)**

|   | Description                           | LED                   | Incandescent    |
|---|---------------------------------------|-----------------------|-----------------|
| A | Full voltage                          | 2.618" (66.5mm)       | 2.539" (64.5mm) |
| B | Full voltage LED<br>2-color alternate | 2.874" (73mm)         | —               |
| C | AC adaptor                            | 3.327" (84.5mm)       | —               |
|   | DC-DC converter                       | 3.327" (84.5mm)       | —               |
|   | Transformer                           | —                     | 2.854" (72.5mm) |
|   | Terminals (X1, X2)                    | M3.5 screw            |                 |
|   | Check terminal (C)                    | M3 screw              |                 |
|   | Same terminals, adjacent windows      | 1.575" (40mm) centers |                 |

**Display Lights**



**Dimensions, continued**

**JUMPERS**

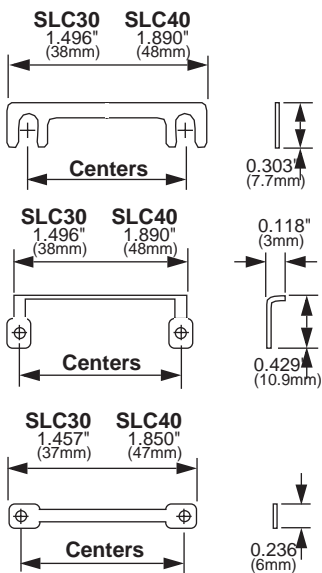
Thickness = 0.020" (0.5mm)

Centers:

SLC30 = 1.181" (30mm)

SLC40 = 1.575" (40mm)

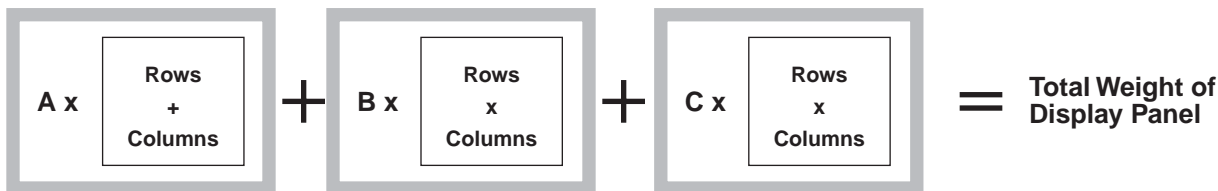
± 0.004" (0.1mm)



Display Lights

**Instructions**

**Estimating Weights**



Make sure that the panel thickness is sufficient to support the total weight of the display panel(s).

|              |                | Full Voltage                        | Transformer (incandescent) | AC Adapter (LED) | DC-DC Converter (LED only) |
|--------------|----------------|-------------------------------------|----------------------------|------------------|----------------------------|
| A            | B              | C                                   |                            |                  |                            |
| Frame Weight | Housing Weight | Lamp/LED Weight (Includes Lamp/LED) |                            |                  |                            |
| 0.93oz (30g) | 0.93oz (30g)   | 0.93oz (30g)                        | 2.98oz (96g)               |                  | 1.92oz (62g)               |



2. Weights are approximate.

Example:

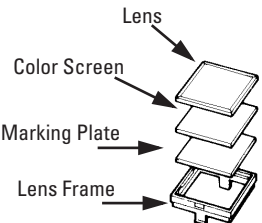

SLC40N-0304-DD2FB

Total weight = A (rows + columns) + B (rows x columns) + C (rows x columns)




Total weight = 0.93 (3+4) + 0.93 (3x4) + 0.93 (3x4) = 28.83 oz







## SLC Series Accessories





| Description    |   | Application                |         | Part No.       | Remarks  |   |
|----------------|---|----------------------------|---------|----------------|--|---|
| Lenses         |   | SLC30<br>incandescent, LED | F       | SLC-3LF-(UL)   | A lens is included with each window on assembled units   |   |
|                |   |                            | H and V | SLC-3LH-(UL)   |  |   |
|                |   |                            | L       | SLC-3LL-(UL)   |  |   |
|                |   |                            | G       | SLC-3LG-(UL)   |  |   |
|                |   | SLC40<br>incandescent, LED | F       | SLC-4LF-(UL)   |  |   |
|                |   |                            | H and V | SLC-4LH-(UL)   |  |   |
| Color Screens  |    | SLC30<br>incandescent      | F       | SLC-3PF*-(UL)  | Specify color code in place of asterisk ( * ):<br>A = Amber<br>C = Transparent<br>G = Green (incandescent)<br>R = Red<br>S = Blue<br>W = White<br>Y = Yellow | A color screen and marking plate are included with each window of assembled incandescent units              |
|                |   |                            | H and V | SLC-3PH*-(UL)  |  |   |
|                |   |                            | L       | SLC-3PL*-(UL)  |  |   |
|                |   | SLC40<br>incandescent      | F       | SLC-4PF*-(UL)  |  |   |
|                |   |                            | H and V | SLC-4PH*-(UL)  |  |   |
|                |   |                            | G       | SLC-3PG*-(UL)  |  |   |
| Marking Plates |   | SLC30<br>incandescent, LED | F       | SLC-3PF-■-(UL) | Specify color code in place of square ( ■ ):<br>C = Transparent (LED)<br>W = White (incandescent)<br>WL = White (LED)  | Two marking plates are included with each window of assembled LED units; LED units do not use color screens |
|                |   |                            | H and V | SLC-3PH-■-(UL) |  |   |
|                |   |                            | L       | SLC-3PL-■-(UL) |  |   |
|                |   |                            | G       | SLC-3PG-■-(UL) |  |   |
|                |   | SLC40<br>incandescent, LED | F       | SLC-4PF-■-(UL) |  |   |
|                |   |                            | H and V | SLC-4PH-■-(UL) |  |   |
| Lens Frames    |  | SLC30<br>incandescent only | F       | SLC-3WF-B      | A lens frame is included with each window on assembled units   |   |
|                |   |                            | H       | SLC-3WH-B      |  |   |
|                |   |                            | V       | SLC-3WV-B      |  |   |
|                |   |                            | L       | SLC-3WL-B      |  |   |
|                |   |                            | G       | SLC-3WG-B      |  |   |
|                |   | SLC30<br>LED only          | F       | SLC-3WF-BL     |  |   |
|                |   |                            | H       | SLC-3WH-BL     |  |   |
|                |   |                            | V       | SLC-3WV-BL     |  |   |
|                |   |                            | L       | SLC-3WL-BL     |  |   |
|                |   |                            | G       | SLC-3WG-BL     |  |   |
|                |   | SLC40<br>incandescent only | F       | SLC-4WF-B      |  |   |
|                |   |                            | H       | SLC-4WH-B      |  |   |
|                |   |                            | V       | SLC-4WV-B      |  |   |
|                |   | SLC40<br>LED only          | F       | SLC-4WF-BL     |  |   |
|                |   |                            | H       | SLC-4WH-BL     |  |   |

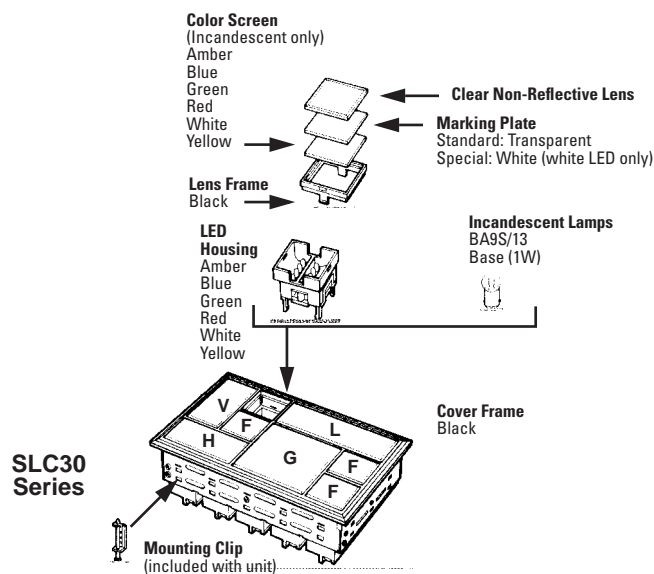

**Display Lights**

| Description                         |  | Application                             |                              | Part No.    | Remarks  |
|-------------------------------------|--|---|------------------------------|-------------|--|
| <b>Incan-<br/>descent<br/>Lamps</b> | BA9S/13<br>(1W)<br> | SLC30<br>incandescent only              | BA9S/13<br>lamp base         | IS-6        | 6.3V, 1W; operating voltage: 5 to 6V AC/DC   |
|                                     |  |   |                              | IS-12       | 12V, 1W; operating voltage: 9 to 12V AC/DC   |
|                                     |  |   |                              | IS-24       | 24V, 1W; operating voltage: 18 to 24V AC/DC  |
|                                     |  |   |                              | IS-30       | 30V, 1W; operating voltage: 24 to 30V AC /DC   |
|                                     | E12/15<br>(2W)<br>  | SLC40<br>incandescent only              | E12/15<br>lamp base          | LE-6        | 6.3V, 2W; operating voltage: 5 to 6V AC/DC   |
|                                     |  |   |                              | LE-8        | 18V, 2W; operating voltage: 12 to 18V AC/DC  |
|                                     |  |   |                              | LE-2        | 24V, 2W; operating voltage: 18 to 24V AC/DC  |
|                                     |  |   |                              | LE-3        | 30V, 2W; operating voltage: 24 to 30V AC/DC  |
| <b>LED<br/>Lamps</b>                |                     | SLC30<br>LED only<br>1-color            | 6V AC/DC                     | SLC-6SP*    | Specify color code in place of asterisk (*):<br>A = Amber<br>G = Green<br>R = Red<br>S = Blue (available in 24V version only)<br>W = White<br>Y = Yellow |
|                                     |  |   | 12V AC/DC                    | SLC-1SP*    |  |
|                                     |  |   | 24V AC/DC                    | SLC-2SP*    |  |
|                                     |  | SLC30<br>LED only<br>2-color: Red/Green | 24V AC/DC                    | SLC-2SP-R/G |  |
|                                     |  |   | SLC40<br>LED only<br>1-color | 6V AC/DC    |  |
|                                     |  | 12V AC/DC                               |                              | SLC-1EP*    |  |
|                                     |  | 24V AC/DC                               |                              | SLC-2EP*    |  |
|                                     |  | SLC40<br>LED only<br>2-color: Red/Green | 24V AC/DC                    | SLC-2EP-R/G |  |

**Replacement Parts**

| Full Voltage Models  |              | Description                    | Type | Part Number |
|--|--------------|--------------------------------|------|-------------|
| <b>SLC30</b><br>  | LED          | Incandescent                   | DS   | SLC-3DS     |
|  |              | Standard LED                   | DD   | SLC-3DH     |
|  |              | LED w/ Check Terminal          | DHM  | SLD-3DHM    |
|  |              | Dual Color LED                 | DW   | SLD-3DW     |
| <b>SLC 40</b><br> | Incandescent | Incandescent                   | DE   | SLC-4DE     |
|  |              | Incandescent w/ Check Terminal | DEM  | SLC-4DEM    |
|  |              | Standard LED                   | DD   | SLC-4DH     |
|  |              | LED w/ Check Terminal          | DHM  | SLC-4DHM    |
|  |              | Dual Color LED                 | DW   | SLC-4DHW    |
| Step Down Models   |              | Description                    | Type | Part Number |
| <b>SLC30</b><br>  | Incandescent | Incandescent xfrmr, 120V AC    | TS12 | SLC-3TS120  |
|  |              | Incandescent xfrmr, 240V AC    | TS24 | SLC-3TS240  |
|  | LED          | LED xfrmr, 120V AC             | TD12 | SLC-3TP120  |
|  |              | LED xfrmr, 240V AC             | TD24 | SLC-3TP240  |
| <b>SLC40</b><br>  | Incandescent | Incandescent xfrmr, 120V AC    | TE12 | SLC-4TE12   |
|  |              | Incandescent xfrmr, 240V AC    | TE24 | SLC-4TE240  |
|  | LED          | LED xfrmr, 120V AC             | TD12 | SLC-4TP120  |
|  |              | LED xfrmr, 240V AC             | TD24 | SLC-4TP240  |
|  |              | LED DC-DC converter, 110V DC   | CD1  | SLC-4CP1    |

| Description  | Application                                | Part No.            | Remarks   |   |
|--|--|---------------------|---|---|
| <b>Lamp Holder Tool</b>  | SLC30 and SLC40 incandescent               | OR-55               | Rubber tool eases the removal of incandescent lamps   |   |
| <b>Tab Terminal Adaptors</b><br>        | Used for wiring quick-connect terminals    | TW-FA1              | #250 tab terminal (W x H): 0.250" x 0.031" (6.35 x 0.8mm) single tab  |   |
| <b>Jumpers</b><br>                      | SLC30                                      | X1 terminal (spade) | SLC-JP30  | Total number of jumpers equals total number of style F window equivalents |
|  |  | X2 terminal (ring)  | SLC-JP33  |   |
|  |  | C terminal (ring)   | SLC-JP32  |   |
|  | SLC40                                      | X1 terminal (spade) | SLC-JP40  |   |
|  |  | X2 terminal (ring)  | SLC-JP41  |   |
| <b>Mounting Clip</b><br>                | All SLCs                                   | SLC-3K1             | Mounting clips are included with the panel (see page C-43 for details about quantity and placement).  |   |
| <b>Marking Strip</b>   |  | BNM2                | White glossy paper with adhesive back (the dimensions are given below); the marking strip can be stuck to the terminal transformer or directly to the units for identification of the unit or circuit number; Sticker dimension (W x L): 0.197" x 393.701" (5 x 10,000mm) |   |
| <b>Finger-Safe Terminal Covers</b><br> | Use with SLC30 types DD, TD, CD, DS and TS | SLC30-VL3           |   |   |
|  | Use with all SLC30 types DHM and DW        | SLC30-VL6           |   |   |
|  | Use with SLC40 types DD, TD, CD, DE and TE | HW-VL3              |   |   |
|  | Use with SLC40 types DHM, DW, and DEM      | SLC40-VL6           |   |   |



## General Information: Ordering SLC Display Lights

When ordering a custom-built combination of SLC display lights for a multiple panel, copy the order form provided. This is the only order form accepted.

### Using the Order Form

**Part No.:** Enter the part number using the part numbering guides.

**Quantity:** Enter the number of **identical** completely assembled panels required.

**Window Count:** Convert all window styles to style F (basic unit size) equivalents:

- Style F** = 1 window
- Style H** = 2 windows  
(1 row high x 2 columns wide)
- Style L** = 3 windows  
(1 row high x 3 columns wide)
- Style V** = 2 windows  
(2 rows high x 1 column wide)
- \*Style G** = 4 windows  
(2 rows high x 2 columns wide)

1. *Style G is available for the SLC30 series only.*



### Maximum Windows for Multiple Combination Panels

For style code "M," it is necessary to use the order form. Do not exceed maximum panel sizes:

SLC30: 200 windows (full voltage)  
50 windows (other type codes)

SLC40: 105 windows (full voltage)  
50 windows (other type codes)

**Series:** SLC30 1.181" (30mm) or SLC40 1.575" (40mm)

**Window style(s):** Style F, H, L, or V for SLC30 or SLC40  
Style G for SLC30 only  
Style M for a multiple combination panel

**Row count:** Convert all windows to style F (basic unit size) using information in the left column of this page.

**Column count:** Convert windows to style F (basic unit size) using information in the left column of this page.

**Illumination type:** LED or incandescent.

**Input mode:** Full voltage, transformer, or DC-DC conversion for LED; full voltage or transformer for incandescent.

**Operating voltage:** See preceding page to select voltages compatible with the input mode required.

**Window colors:** Specify the number of windows in each color.

**Engraving:** Clearly mark the engravings for each window desired on the grid of the order form clearly. If there is not enough space, number each window and use a separate sheet to write the engravings for each window number. Also note "no engraving."

Using the grid on the order form (following page), show the actual size and placement of all desired windows.



### To Specify a Multiple Combination

- Draw a **heavy** outline on corresponding gray lines to show the overall panel size.
- Darken the appropriate gray lines to show the outlines of the various window style(s) required.
- For each window, specify color and clearly identify the engraving desired.



2. *If there is not enough space on the grid to show the engraving clearly, number every required window, and write the engraving on a separate sheet of paper. Make sure to write the window number which corresponds to the engraving, and also make sure to note "no engraving" as required.*

### Determining SLC Pricing

1. The initial, 2-window price is determined based on series, type, and style. This 2-window price includes framing and assembly. When ordering a single window, the 2-window price is also the minimum price, including window, framing, and assembly.
  2. Convert all window styles required into style F (basic unit size) equivalents using the information in the left column of this page.
  3. Subtract "2" from the total number of style F equivalent windows determined in step 2. The result is the number of additional windows.
  4. Multiply the number of additional windows determined in step 3 by the additional window price.
  5. Determine the quantity of windows with engravings. Do not use the style F equivalents; use the actual window style(s) required.
3. *The pricing referred to above can be obtained from any authorized IDEC representative or distributor.*
4. *When determining window pricing, **always** convert every window size required to the style F equivalent (basic unit size).*



## SLC Series Installation Instructions

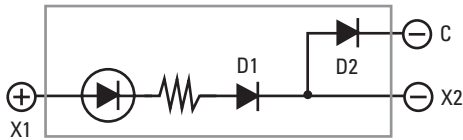
### Installation Notes

1. Since lamps generate heat, it is recommended that ventilation be provided for cooling when more than ten lamps are lit continuously.
2. A lower number of windows is specified for multiple transformer, AC adaptor, and DC-DC converter units (50 maximum, instead of 200 as for full voltage only). This is done to avoid damage which may result from excessive heat generation when all lamps are lit simultaneously.
3. When multiple units are panel mounted, determine panel thickness so that the combined weight of all units and connecting wires can be supported.
4. Multiple units are not designed for continuous, simultaneous lighting of all lamps. However, it is possible to conduct a lamp test with all lamps lit simultaneously for a period of up to 40 minutes.
5. Before removing the LED unit, turn the power supply off.
6. DC-rated voltages for LED units are complete direct current voltages. Make sure to check the measuring instruments and compensate for any error in the measured, full-wave rectified or pulsating voltages.
7. To ensure brightness and long life of LED units, keep the DC power voltage within the operating voltage range.

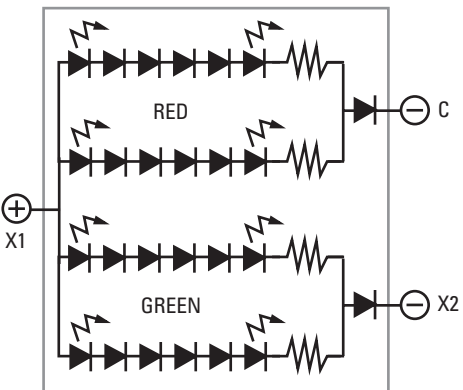
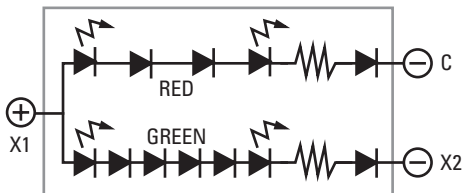
**LED Operating Voltage Range: 24V DC  $\pm$  10%**

### Terminal Arrangements (LED units)

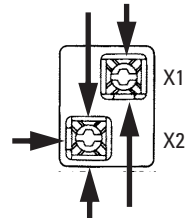
For full voltage (1- and 2-color) and DC-DC converter LED units, terminal X1 is positive and terminal X2 is negative. Make sure to observe polarity when wiring.



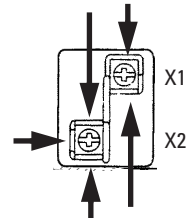
For 2-color alternate units, terminal X1 is positive, and terminals X2 and C (check terminal) are negative.



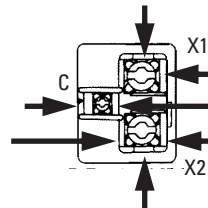
SLC30 Full Voltage DC-DC Converter



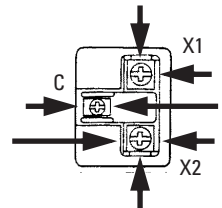
SLC30 AC Adaptor Transformer



SLC40 Full Voltage DC-DC Converter



SLC30/40 2-Color LED (alternating)



SLC30



SLC40



**Installation Instructions, continued**

**Removing Windows**

**SLC30:** To remove a window, insert the tip of a small screwdriver into the slot under the lens frame and gently press down on the screwdriver.

**SLC40:** To remove an extended window, pull on the top as if to extend the unit; then continue pulling until the unit comes out of the housing. All units are shipped with windows retracted. When transporting units, make sure windows are pushed in fully. After windows are installed, they can be extended as shown in *Figure 1*.



Figure 1: SLC40



Figure 2: SLC30 and SLC40

**Removing Lens, Color Screen, and Marking Plate**

The lens has two retaining projections on the right and two on the left. To remove the lens, color screen, and marking plate from the lens frame, push open the lens frame with both hands as shown in *Figure 2*.

The lens can also be removed by inserting a screwdriver into one of the sides with recesses. Since the lens has an orientation, be sure to insert the screwdriver in the direction shown in *Figures 3 and 4*.



Figure 3: SLC30



Figure 4: SLC40

**Installing Lens, Color Screen, and Marking Plate**

First, install the marking plate and color screen into the lens frame. To install the lens, insert its retaining projections into the recesses inside the lens frame, and press the lens into the lens frame as shown in *Figure 5*.

**Replacing the LED Unit**

**To remove:** Insert the tip of a screwdriver into one of the two slots inside the LED unit. Pull the LED unit straight out without pressing on the LED terminals, as shown in *Figure 6*.

**To install:** Make sure that the junction inside the LED unit is aligned in the same direction as the junction of the LED housing. Push the LED unit into the LED housing as shown in *Figure 7*.

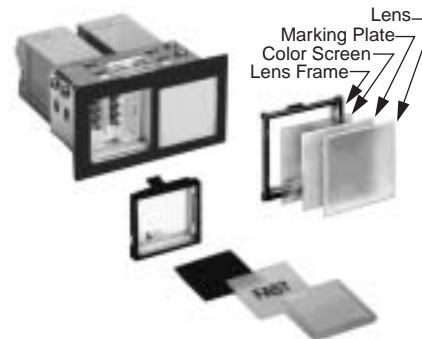


Figure 5: SLC30 and SLC40

**Installing Units into a Panel**

**Single units:** With leaf springs installed, push the SLC housing from the front of the panel. Secure the SLC housing with two mounting clips. Tighten the mounting clip screws to a torque of 4 to 5 kgf-cm as shown in *Figure 8*.

**Multiple combination units:** Insert the units into the panel cut-out from the front. Install the attached mounting clips into the openings on the frame, and tighten the screws as shown in *Figure 9*. After tightening, use Loctite to prevent loosening. The number of mounting clips included with each multiple unit varies with the number of windows as shown in the table below.



Figure 6: Remove LED



Figure 7: Install LED



Figure 8: Single Unit



Figure 9: Multiple Combination

Display Lights

## SLC Series Installation Instructions, continued

### Number of Mounting Clips Included

| Columns                 | 1 or 2       |        | 3 to 8       |        | 9 to 15   | 16 to 20 * |
|-------------------------|--------------|--------|--------------|--------|-----------|------------|
| Rows                    | Full Voltage | Others | Full Voltage | Others | All Types | All Types  |
| 1 or 2                  | 2            |        | 4            |        | 6         | 8          |
| 3 to 6                  | 4            | 6      | 6            | 8      | 8         | 10         |
| 7 to 10<br>(SLC30 only) | 6            | 8      | 8            |        | 10        | 12         |



\* SLC30 series only.

### Recommended Mounting Clip Positions

| Columns                 | 1 or 2       |         | 3 to 8       |         | 9 to 15   | 16 to 20* |
|-------------------------|--------------|---------|--------------|---------|-----------|-----------|
| Rows                    | Full Voltage | Others  | Full Voltage | Others  | All Types | All Types |
| 1 or 2                  | 2 Clips      |         | 4 Clips      |         | 6 Clips   | 8 Clips   |
|                         |              |         |              |         |           |           |
| 3 to 6                  | 4 Clips      | 6 Clips | 6 Clips      | 8 Clips | 8 Clips   | 10 Clips  |
|                         |              |         |              |         |           |           |
| 7 to 10<br>(SLC30 only) | 6 Clips      | 8 Clips | 8 Clips      |         | 10 Clips  | 12 Clips  |
|                         |              |         |              |         |           |           |

### Assembly Order for Lamp On/Lamp Off Colors

| Lamp On: Amber, Blue, Green, Red, Yellow  |   | Lamp On: White  | Lamp On: Red/Green  |
|---|---|---|---|
| Lamp Off: Desired Color   | Lamp Off: White   | Lamp Off: White   | Lamp Off: White   |
| <p>Matte Surface (non-shiny)</p> <p>Lens    Color Screen: Any Color    Marking Plate: White</p> | <p>Matte Surface (non-shiny)</p> <p>Lens    Marking Plate: White    Color Screen: Any Color</p> | <p>Matte Surface (non-shiny)</p> <p>Lens    Marking Plate: White    Color Screen: White</p> | <p>Matte Surface (non-shiny)</p> <p>Lens    Marking Plate: White    Color Screen: White</p> |