

SLC30 Series — Panel Mounted Annunciators

SLC Series Panel Mounted Annunciators — 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 SLC30 series include:

- Custom configurations with up to 200 windows
- Five window sizes based on a 30mm grid
- Non-reflective clear lenses
- Incandescent or Superbright LED illumination
- Wide variety of input voltages
- Two color alternate illumination in Red/Green LED



Cert No.
B970213332375

ABS
American
Bureau of
Shipping



Style F
(30mm x 30mm)



Style H
(30mm x 60mm)



Style L
(30mm x 90mm)



Style V
(60mm x 30mm)



Style G
(60mm x 60mm)



Staggered Terminals:
increased safety
and serviceability

Switches & Pilot Lights

Display Lights

Relays & Sockets

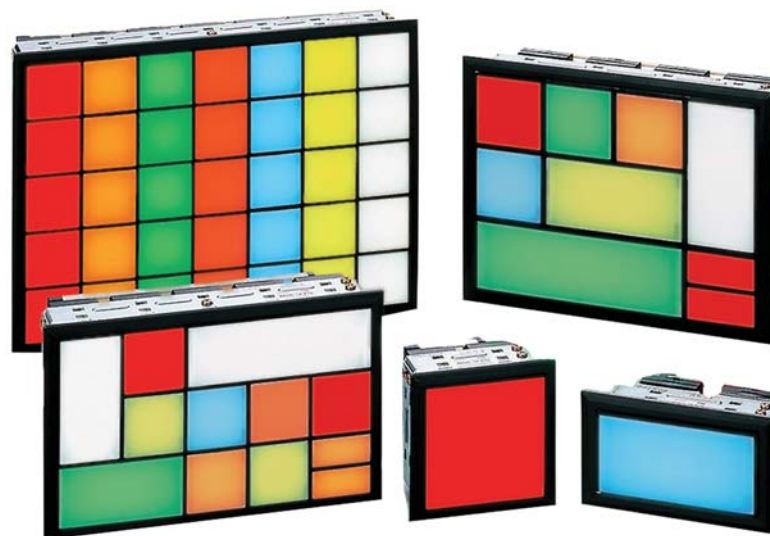
Timers

Terminal Blocks

Circuit Breakers

Specifications

| Light Source | | LED | Incandescent | |
|--|--------------|--|--|-----------------------------------|
| Nominal Voltages | Full Voltage | 6, 12, 24V AC/DC | 6, 12, 18, 24, 30V AC/DC | |
| | Transformer | 120, 240V AC | 120, 240V AC | |
| | DC-DC Conv. | 110V DC | 110V DC | |
| Colors | | Amber, Green, Red, Yellow, Blue (24V only), White, dual color Red/Green (24V only) | Amber, Green, Red, Yellow, Blue, White | |
| Lamp Type | | Surface (Chip type) LED cluster | BA9S/13 (T3-1/4) bayonet base (1W) | |
| Current Consumption | 6V DC | Red (R), Green (G), Yellow (Y), Amber (A), White (W): 80mA | | |
| | 12V DC | Red (R), Green (G), Yellow (Y), Amber (A), White (W): 40mA | | |
| | 24V DC | Red (R), Green (G), Yellow (Y), Amber (A), White (W), Blue (S): 20mA | | |
| Available Window Sizes | | "F" 30x30mm "H" 30x60mm "L" 30x90mm "V" 60x30mm "G" 60x60mm | | |
| Insulation Resistance | | More than 100 MΩ by a 500V DC megger | | |
| Degree of Protection | | IP20 (for indoor use only), NEMA 1 | | |
| Dielectric Strength | | 2,000V AC direct (2,500V AC transformer, 1 minute) | | |
| Operating Temperature | | - 20° to +40°C; 15-90% relative humidity (- 10° to +40°C DC-DC converter) | | |
| Material of Marking Plate and Color Screen | | Polycarbonate | | |
| Termination | | M3.5 screw with captive sems plate (Check terminals: M3 screw with captive sems plate on applicable units) | | |
| Maximum Size | | Full voltage 10 rows, 20 columns (200 windows) Transformer and DC/DC converter (50 windows) | | |
| Recommended Wire Size | | 22-14 AWG x2 (2mm ² x 2) | | |
| Approvals | | Cert. No. B970213332375 Bauart geprüft | UL Recognized File No. E68961 | CSA Certified File No. LR48366 |



Switches & Pilot Lights

Display Lights

Relays & Sockets

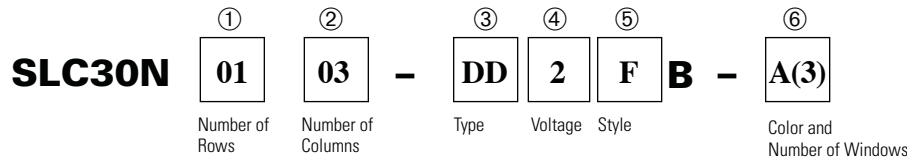
Timers

Terminal Blocks

Circuit Breakers

Part Numbers (assembled)

Part Number Guide



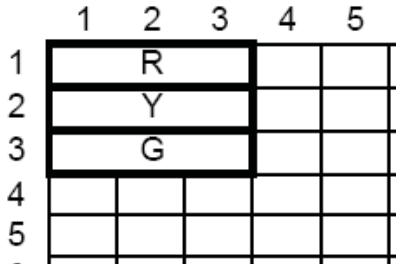
| Description | | Code | Remark |
|-----------------------------|-----------------------------------|--|---|
| ① Number of Rows | | 01, 02, 03, 04, 05, 06, 07, 08, 09, 10 | 10 row maximum (always expressed in terms of "F" size windows) |
| ② Number of Columns | | 01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20 | 20 column maximum (always expressed in terms of "F" size windows) |
| ③ Type | 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 | DS 6V, 12V, 18V, 24V, 30V |
| | | Transformer | TS 120V, 240V |
| ④ Voltage | 6V AC/DC | 6 | Type DD or DS |
| | 12V AC/DC | 1 | With Type DD or DS |
| | 18V AC/DC | 8 | Type DS only |
| | 24V AC/DC | 2 | Type DD, DW, DS or DHM |
| | 30V AC/DC | 3 | Type DS only |
| | 120V AC | 12 | Type TD or TS |
| | 240V AC | 24 | Type TD or TS |
| | 110V DC | 1 | With Type CD |
| | No lamp | 99 | Type DS only |
| ⑤ Style | Square | F | 30x30mm |
| | Horizontal rectangle | H | 30x60mm |
| | Horizontal rectangle with barrier | H2 | |
| | Large horizontal rectangle | L | 30x90mm |
| | Vertical rectangle | V | 60x30mm |
| | Large square | G | 60x60mm |
| | Combination | M | Fill out order form on next page |
| ⑥ Color (number of windows) | Amber | A | After each color, specify the number of windows Example... A(3), G(2), R(1) |
| | Green | G | |
| | Red | R | |
| | Blue | S (LED version: 24V only) | |
| | White | W | |
| | Yellow | Y | |

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

How to complete SLC30N Series annunciator order form:

1. Draw the SLC30N layout in the Order Form as per customer requirements. Define the boundaries of each window (F, V, H, L or G Style) and of complete annunciator panel by heavy border lines. Specify each window color with appropriate designation (eg: G for Green, R for Red, etc). See Example 1 below:

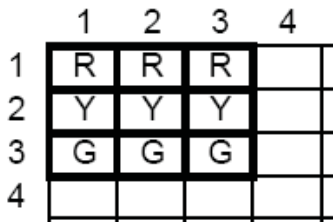
Example 1



2. Count number of rows and columns. eg: Example 1, Rows: 03 and Columns: 03
SLC30N-0303
3. Determine the type of illumination required. eg: "DD" for LED full voltage type illumination.
SLC30N-0303-DD
4. Determine the voltage code. eg: "2" for 24V AC/DC.
SLC30N-0303-DD2
5. Determine window style. eg: "L" style windows as shown in Example 1.
SLC30N-0303-DD2LB*
*B denotes black frame
6. Count the number of different colored windows in the annunciator. Example 1 has 1 Red L-style (30x90mm) window, 1 Yellow L-style window and 1 Green L-style window.
SLC30N-0303-DD2LB-R(1)Y(1)G(1)
7. Now your part number is complete, please fill out contact information and fax or email the form to IDEC Customer Service for order processing. If you would like to get annunciator windows engraved, please see the information on page 715 and send us your engraving information. If you have any questions, please contact IDEC Technical Support or for additional information, view examples 2 and 3.:

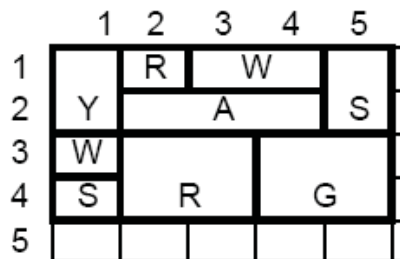
Example 2

Rows=03; Columns= 03; F Style Windows (30x30mm); LED Full Voltage 24V AC/DC Illumination. Part number **SLC30N-0303-DD2FB-R(3)Y(3)G(3)**.



Example 3:

Rows = 04; Columns = 05; M = combination of various window styles(F, H, L V and G Style) ; LED Full Voltage 24V AC/DC Illumination.
Part number **SLC30N-0405-DD2MB-A(1)R(2)Y(1)G(1)W(2)S(2)**.



Dimensions

Panel Cut-Out Dimensions

| No. of Rows | No. of Columns | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|--|---------------------------------|--------------------|------------------|------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| | Overall Panel Width Dimension → | | 1.654" (42mm) | 2.853" (72mm) | 4.016" (102mm) | 5.197" (132mm) | 6.378" (162mm) | 7.559" (192mm) | 8.740" (222mm) | 9.921" (252mm) | 11.102" (282mm) | 12.283" (312mm) | 13.465" (342mm) | 14.646" (372mm) | 15.827" (402mm) | 17.008" (432mm) | 18.189" (462mm) | 19.370" (492mm) | 20.551" (522mm) | 21.732" (552mm) | 22.913" (582mm) | 24.094" (612mm) |
| | Overall Height ↓ | Cut-out Ht ↓ | Cut-out Wd → | 1.378" (35mm) | 2.559" (65mm) | 3.740" (95mm) | 4.921" (125mm) | 6.102" (155mm) | 7.283" (185mm) | 8.465" (215mm) | 9.646" (245mm) | 10.827" (275mm) | 12.008" (305mm) | 13.189" (335mm) | 14.370" (365mm) | 15.551" (395mm) | 16.732" (425mm) | 17.913" (455mm) | 19.094" (485mm) | 20.276" (515mm) | 21.457" (545mm) | 22.638" (575mm) |
| 1 | 1.654" (42mm) | 1.378" (35mm) | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 2 | 2.853" (72mm) | 2.559" (65mm) | 2 | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 22 | 24 | 26 | 28 | 30 | 32 | 34 | 36 | 38 | 40 |
| 3 | 4.016" (102mm) | 3.740" (95mm) | 3 | 6 | 9 | 12 | 15 | 18 | 21 | 24 | 27 | 30 | 33 | 36 | 39 | 42 | 45 | 48 | 51 | 54 | 57 | 60 |
| 4 | 5.197" (132mm) | 4.921" (125mm) | 4 | 8 | 12 | 16 | 20 | 24 | 28 | 32 | 36 | 40 | 44 | 48 | 52 | 56 | 60 | 64 | 68 | 72 | 76 | 80 |
| 5 | 6.378" (162mm) | 6.102" (155mm) | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 80 | 85 | 90 | 95 | 100 |
| 6 | 7.559" (192mm) | 7.283" (185mm) | 6 | 12 | 18 | 24 | 30 | 36 | 42 | 48 | 54 | 60 | 66 | 72 | 78 | 84 | 90 | 96 | 102 | 108 | 114 | 120 |
| 7 | 8.740" (222mm) | 8.465" (215mm) | 7 | 14 | 21 | 28 | 35 | 42 | 49 | 56 | 63 | 70 | 77 | 84 | 91 | 98 | 105 | 112 | 119 | 126 | 133 | 140 |
| 8 | 9.921" (252mm) | 9.646" (245mm) | 8 | 16 | 24 | 32 | 40 | 48 | 56 | 64 | 72 | 80 | 88 | 96 | 104 | 112 | 120 | 128 | 136 | 144 | 152 | 160 |
| 9 | 11.102" (282mm) | 10.827" (275mm) | 9 | 18 | 27 | 36 | 45 | 54 | 63 | 72 | 81 | 90 | 99 | 108 | 117 | 126 | 135 | 144 | 153 | 162 | 171 | 180 |
| 10 | 12.283" (312mm) | 12.008" (305mm) | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | 170 | 180 | 190 | 200 |
| Total Number of Windows (equivalent to style F—basic unit size) | | | | | | | | | | | | | | | | | | | | | | |

1. The number of rows and columns refers to styles equivalent to style F (basic unit size).
 For styles H, L, V, and G, 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)
 Style G: 2 windows high (2 rows) x 2 windows wide (2 columns)
 Example: 18 windows = 3 windows high (3 rows) x 6 windows wide (6 columns)
 Overall dimension (H x W): 4.016" x 7.559" (102 x 192mm)
 Panel cut-out (H x W): 3.740" x 7.283" (95 x 185mm)
 Tolerance: +0.039" (1mm), -0
 2. For part numbering information, see page 694.

Window Dimensions

| Window Style | Style F | Style H | Style L | Style V | Style G | |
|--------------|---------------------------|--|--|--|--|--|
| Appearance | | | | | | |
| Window Size | Illumination Face (H x W) | 1.181" x 1.181" (30 x 30mm) | 1.181" x 2.362" (30 x 60mm) | 1.181" x 3.543" (30 x 90mm) | 2.362" x 1.181" (60 x 30mm) | 2.362" x 2.362" (60 x 60mm) |
| | Lens (H x W) | 1.102" x 1.102" (28 x 28mm) | 1.102" x 2.283" (28 x 58mm) | 1.102" x 3.432" (28 x 88mm) | 2.283" x 1.102" (58 x 28mm) | 2.283" x 2.283" (58 x 58mm) |
| | Marking Plate (H x W x t) | 1.062" x 1.062" x 0.04" (27 x 27 x 1.0mm) | 1.062" x 2.244" x 0.04" (27 x 57 x 1.0mm) | 1.062" x 3.425" x 0.04" (27 x 87 x 1.0mm) | 2.244" x 1.062" x 0.04" (57 x 27 x 1.0mm) | 2.244" x 2.244" x 0.04" (57 x 57 x 1.0mm) |
| | Color Screen (H x W x t) | 1.062" x 1.062" x 0.04" (27 x 27 x 1.0mm) | 1.062" x 2.244" x 0.04" (27 x 57 x 1.0mm) | 1.062" x 3.425" x 0.04" (27 x 87 x 1.0mm) | 2.244" x 1.062" x 0.04" (57 x 27 x 1.0mm) | 2.244" x 2.244" x 0.04" (57 x 57 x 1.0mm) |
| | Engraving Area | 0.984" x 0.984" (25 x 25mm) | 0.984" x 2.165" (25 x 55mm) | 0.984" x 3.346" (25 x 85mm) | 2.165" x 0.984" (55 x 25mm) | 2.165" x 2.165" (55 x 55mm) |

Switches & Pilot Lights

Display Lights

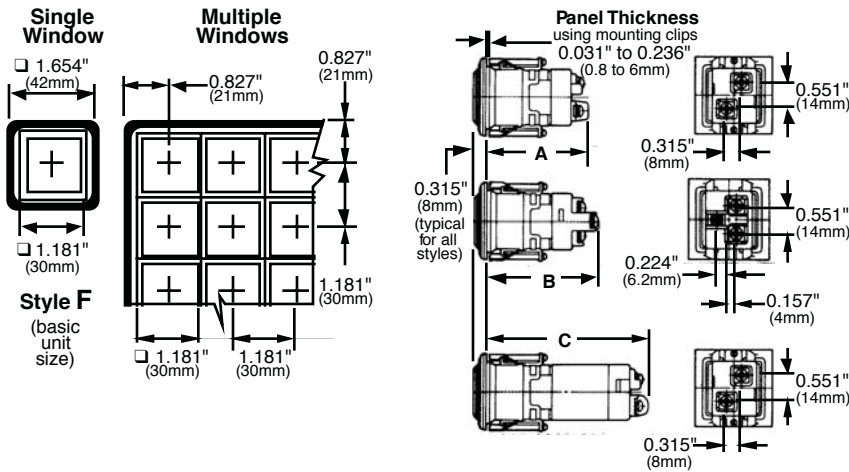
Relays & Sockets

Timers

Terminal Blocks

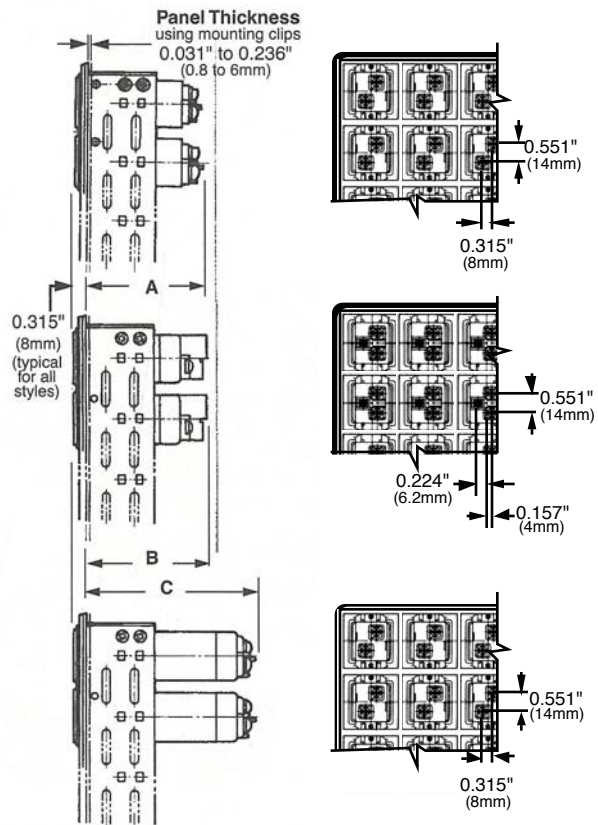
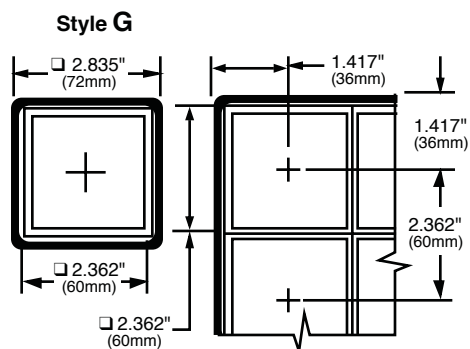
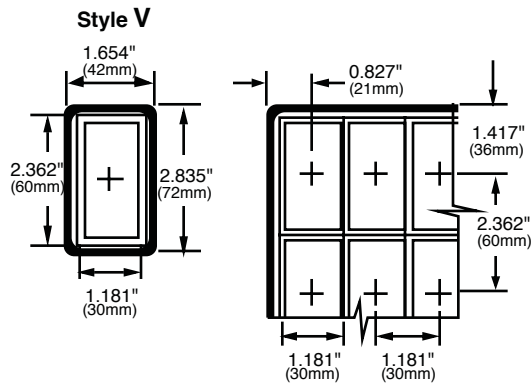
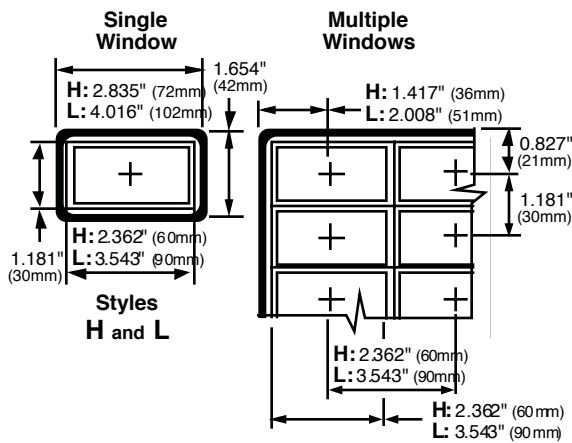
Circuit Breakers

Dimensions, continued



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

| | Description | LED | Incandescent |
|---|---------------------------------------|-----------------------|-----------------|
| A | Full voltage | 2.146" (54.5mm) | 2.264" (57.5mm) |
| B | Full voltage LED 2-color alternate | 2.343" (59.5mm) | — |
| C | Transformer | 3.228" (82mm) | — |
| | DC-DC converter | 3.228" (82mm) | — |
| | Transformer | — | 3.228" (82mm) |
| | Terminals (X1, X2) | M3.5 screw | |
| | Check terminal (C) | M3 screw | |
| | Same terminals, adjacent windows | 1.181" (30mm) centers | |



Dimensions, continued

JUMPERS

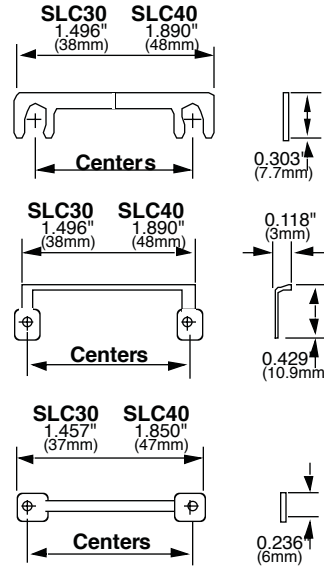
Thickness = 0.020" (0.5mm)

Centers:

SLC30 = 1.181" (30mm)

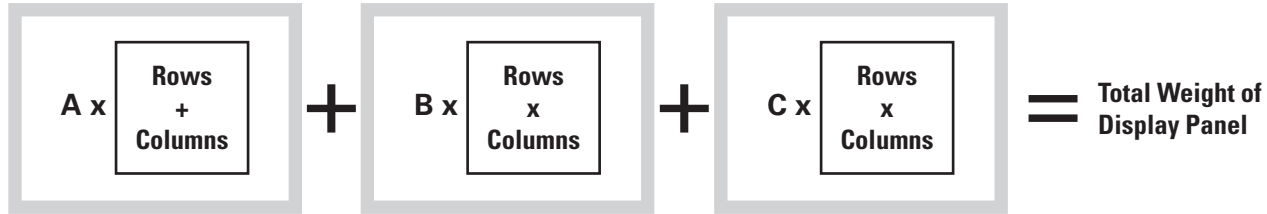
SLC40 = 1.575" (40mm)

± 0.004" (0.1mm)



Instructions

Estimating Weights



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

| A Frame Weight | B Housing Weight | Full Voltage | Transformer (incandescent/LED) | DC-DC Converter (LED only) |
|-------------------|---------------------|--|--------------------------------|----------------------------|
| | | C Lamp/LED Weight (includes lamp/LED) | | |
| 0.68oz (22g) | 0.53oz (17g) | 0.65oz (21g) | 2.36oz (76g) | 1.77oz (52g) |

2. Weights are approximate.

Example:

SLC30N-0304-DD2FB

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

Total weight = 0.68 (3+4) + 0.53 (3x4) + 0.65 (3x4) = 19.92 oz

Engraving Information

Part Numbers: SLC30 Engraving Plates

| Window Type | Part No. | Character Size | Maximum Characters per Line | Maximum Lines |
|--------------|----------|----------------|-----------------------------|---------------|
| F 30x30mm | SLC-3PF | 7/32 | 7 | 3 |
| | | 3/16 | 7 | 3 |
| | | 5/32 | 9 | 4 |
| | | 9/64 | 9 | 4 |
| | | 1/8 | 10 | 4 |
| H 30x60mm | SLC-3PH | 5/16 | 8 | 2 |
| | | 7/32 | 13 | 3 |
| | | 5/32 | 17 | 4 |
| L 30x90mm | SLC-3PL | 5/16 | 14 | 2 |
| | | 7/32 | 20 | 3 |
| | | 5/32 | 26 | 4 |
| V 60x30mm | SLC-3PV | 5/16 | 4 | 4 |
| | | 7/32 | 6 | 6 |
| | | 5/32 | 8 | 8 |
| G 60x60mm | SLC-3PG | 5/16 | 9 | 4 |
| | | 7/32 | 12 | 6 |
| | | 5/32 | 16 | 8 |

Part Numbers SLC40 Engraving Plates

| | | | | |
|---------------|---------|------|----|----|
| F 40x40mm | SLC-4PF | 5/16 | 5 | 2 |
| | | 7/32 | 8 | 4 |
| | | 5/32 | 11 | 5 |
| H 40x80mm | SLC-4PH | 5/16 | 12 | 2 |
| | | 7/32 | 17 | 4 |
| | | 5/32 | 22 | 5 |
| L 40x120mm | SLC-4PL | 5/16 | 18 | 2 |
| | | 7/32 | 26 | 4 |
| | | 5/32 | 34 | 5 |
| V 80x40mm | SLC-4PV | 5/16 | 5 | 6 |
| | | 7/32 | 8 | 7 |
| | | 5/32 | 11 | 12 |

Engraving Size Samples

5/16" size

7/32" size

3/16" size

5/32" size

9/64" size

1/8" size

Engraving Size Samples

5/16" size

7/32" size

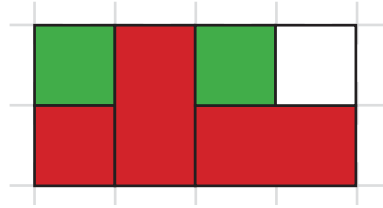
5/32" size

Engraving Example

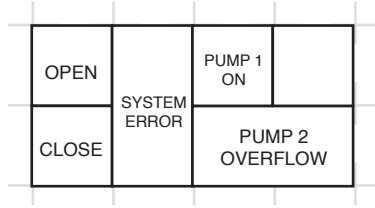
Engraving information can be provided in two ways:

Method 1

If you have created your own SLC annunciator layout and there is enough space to write engraving information, please print out a copy of the layout and write what you would like to be engraved in respective window. Attach this with the Order Form and send it to IDEC Customer Service for processing.



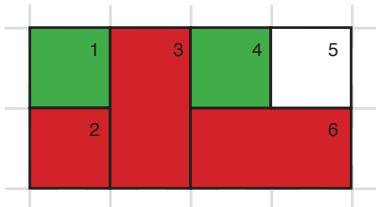
Engraving Layout



SLC Annunciator Layout

Method 2

If you are using the Order Form from the IDEC Automation Catalog and do not have enough space to list engraving information, you can number the top right corner of the window you would like to be engraved.

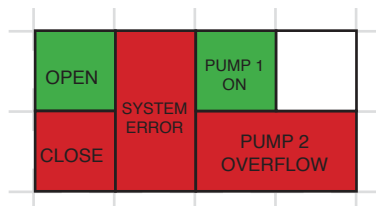


Keeping engraving window type, character size, maximum character per line and maximum number of lines in perspective, create a table (see Engraving Table Example shown below). Please attach the Table along with SLC annunciator layout and send it to IDEC Customer Service for processing.

Engraving Table Example

| Window | Font Size | Engrave |
|--------|-----------|------------------------|
| 1 | 7/32" | "OPEN" |
| 2 | 7/32" | "CLOSE" |
| 3 | 7/32" | "SYSTEM" "ERROR " |
| 4 | 3/16" | "PUMP 1" "ON" |
| 5 | | NO ENGRAVING |
| 6 | 5/32" | "PUMP 2" "OVERFLOW" |

Using method 1 or 2, the final engraved panel will look as below:



Final Engraved Panel

Switches & Pilot Lights

Display Lights

Relays & Sockets

Timers

Terminal Blocks

Circuit Breakers

Accessories

| Description | | Application | | Part No. | Remarks |
|----------------|------------|-------------------------|---------|----------------|--|
| Lenses | | SLC30 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) | |
| | | SLC40 incandescent, LED | F | SLC-4LF-(UL) | |
| | | | H and V | SLC-42H-(UL) | |
| | | | L | SLC-4LL-(UL) | |
| Color Screens | | SLC30 incandescent | F | SLC-3PF-*(UL) | Specify color code in place of asterisk (*): A = Amber C = Transparent G = Green (incandescent) R = Red S = Blue W = White 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 incandescent | F | SLC-4PF-*(UL) | |
| | | | H and V | SLC-4PH-* | |
| | | | L | SLC-4PL-*(UL) | |
| Marking Plates | | SLC30 incandescent, LED | F | SLC-3PF-□-(UL) | Specify color code in place of square (□): C = Transparent (LED) W = White (incandescent) 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) | |
| | | SLC40 incandescent, LED | F | SLC-4PF-□-(UL) | |
| | | | H and V | SLC-4PH-□-(UL) | |
| | | | L | SLC-4PL-□-(UL) | |
| Lens Frames | | SLC30 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 LED only | F | SLC-3WF-BL | |
| | | | H | SLC-3WH-BL | |
| | | | V | SLC-3WV-BL | |
| | | | L | SLC-3WL-BL | |
| | | | G | SLC-3WG-BL | |
| | | SLC40 incandescent only | F | SLC-4WF-B | |
| | | | H | SLC-4WH-B | |
| | | | V | SLC-4WV-B | |
| | | | L | SLC-4WL-B | |
| | | SLC40 LED only | F | SLC-4WF-BL | |
| V | SLC-4WV-BL | | | | |
| L | SLC-4WL-BL | | | | |

Switches & Pilot Lights

Display Lights

Relays & Sockets

Timers

Terminal Blocks

Circuit Breakers



Switches & Pilot Lights

Display Lights

Relays & Sockets

| Description | Application | Part No. | Remarks | |
|--|--|---------------------------|--|--|
| Incandescent Lamps  | SLC30 incandescent only BA9S/13 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 | |
| | SLC40 incandescent only E12/15 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 | |
| LED Lamps  | SLC30 LED only 1-color | 6V AC/DC | SLC-6SP* | |
| | | 12V AC/DC | SLC-1SP* | |
| | | 24V AC/DC | SLC-2SP* | |
| | SLC30 LED only 2-color: Red/Green | 24V AC/DC | SLC-2SP-R/G | |
| | | SLC40 LED only 1-color | 6V AC/DC | SLC-6EP* |
| | 12V AC/DC | | SLC-1EP* | |
| | 24V AC/DC | | SLC-2EP* | |
| | SLC40 LED only 2-color: Red/Green | 24V AC/DC | SLC-2EP-R/G | |
| | | | | Specify color code in place of asterisk (*): A = Amber G = Green R = Red S = Blue (available in 24V version only) W = White Y = Yellow |





Replacement Parts

| Full Voltage Models | | Description | Type | Part Number |
|--|--------------|--------------------------------|------|-------------|
| SLC30  | Incandescent | Incandescent | DS | SLC-3DS |
| | | Standard LED | DD | SLC-3DH |
| | LED | LED w/ Check Terminal | DHM | SLD-3DHM |
| | | Dual Color LED | DW | SLD-3DW |
| SLC 40  | Incandescent | Incandescent | DE | SLC-4DE |
| | | Incandescent w/ Check Terminal | DEM | SLC-4DEM |
| | LED | 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 |
| SLC30  | 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 |
| | | LED DC-DC converter, 110V DC | CD1 | SLC-3CP1 |
| SLC40  | 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 |
| | | | | |

Timers

Terminal Blocks

Circuit Breakers

| Description | Application | Part No. | Remarks |
|---|--|---------------------|---|
| Lamp Holder Tool | SLC30 and SLC40 incandescent | OR-55 | Rubber tool eases the removal of incandescent lamps |
| Tab Terminal Adaptors  | 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 |
| Jumpers  | SLC30 | X1 terminal (spade) | SLC-JP30 |
| | | X2 terminal (ring) | SLC-JP33 |
| | | C terminal (ring) | SLC-JP32 |
| | SLC40 | X1 terminal (spade) | SLC-JP40 |
| | | X2 terminal (ring) | SLC-JP41 |
| | | C terminal (ring) | SLC-JP42 |
| Total number of jumpers equals total number of style F window equivalents | | | |
| Mounting Clip  | All SLCs | SLC-3K1 | Mounting clips are included with the panel (see page 721 for details about quantity and placement). |
| Marking Strip | | 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) |
| Finger-Safe Terminal Covers  | 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 | |

Switches & Pilot Lights

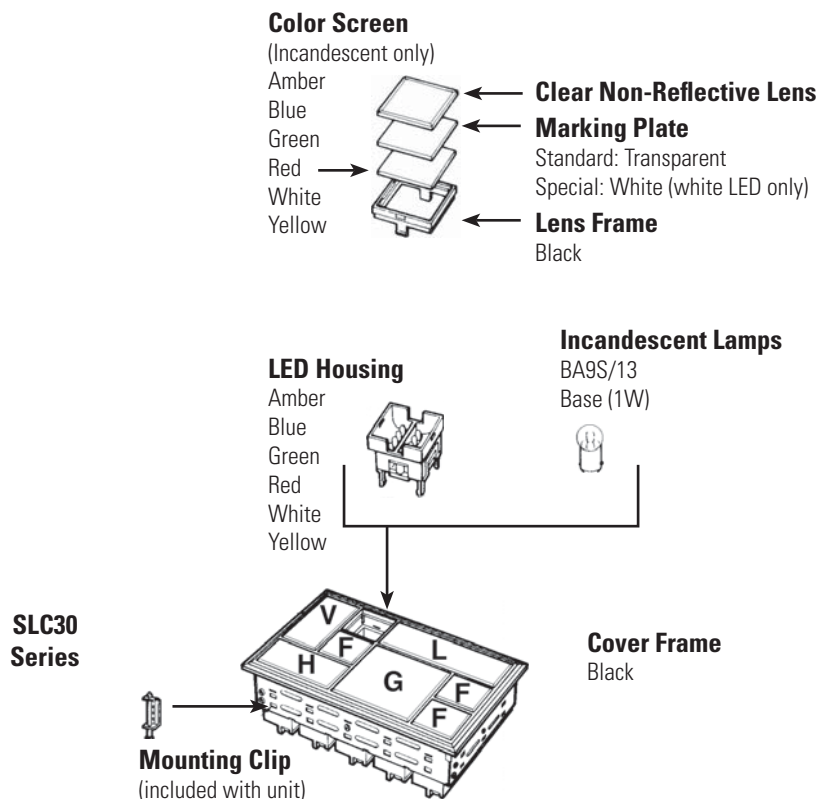
Display Lights

Relays & Sockets

Timers

Terminal Blocks

Circuit Breakers



SLC Series Installation Instructions

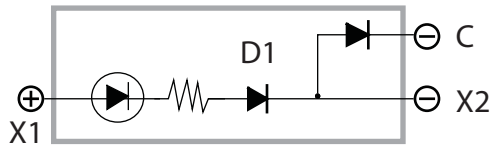
Installation Notes

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 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.

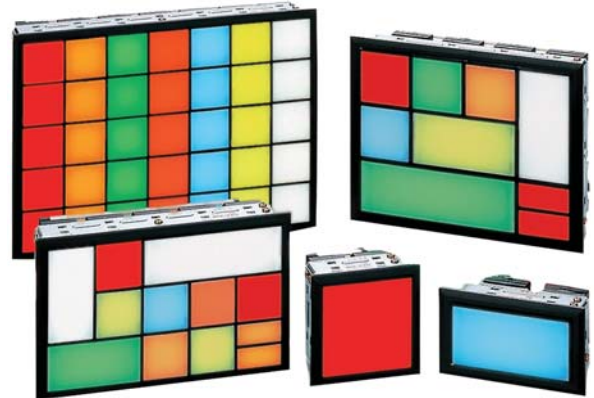
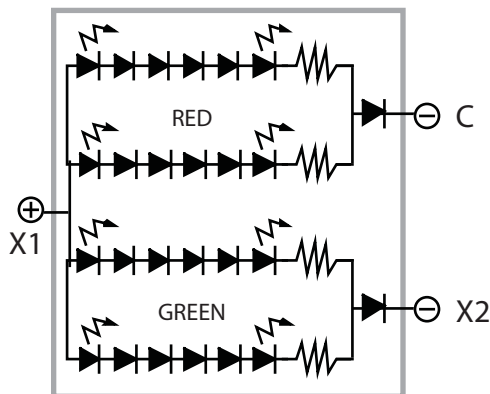
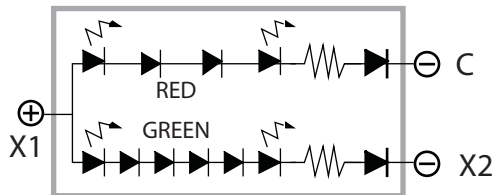
LED Operating Voltage Range: 24V AC/DC ± 10%

Terminal Arrangements (LED units)

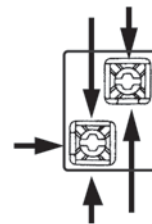
For full voltage (1- and 2-color) and DC-DC converter LED units, terminal X1 is positive and terminal X2 is negative. Make sure to observe polarity when wiring.



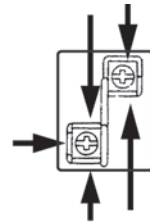
For 2-color alternate units, terminal X1 is positive, and terminals X2 and C (check terminal) are negative.



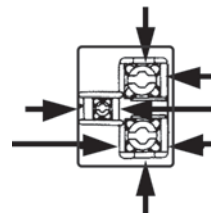
SLC30/SLC40 Full Voltage DC-DC Converter



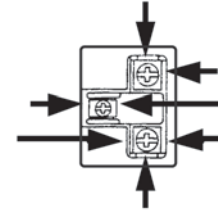
SLC30/SLC40 Transformer



SLC30/SLC40 Full Voltage with Check Terminal



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

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.

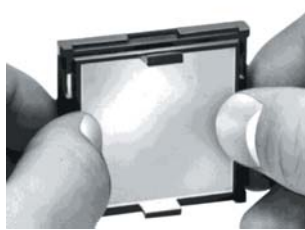


Figure 2: SLC30 and SLC40

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.

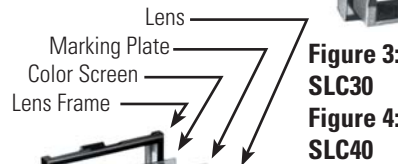


Figure 3:
SLC30
Figure 4:
SLC40



Figure 5: SLC30 and SLC40

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.




Figure 8: SLC40

SLC Series Installation Instructions, continued

Number of Mounting Clips Included

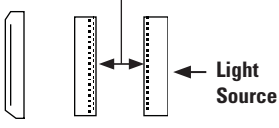
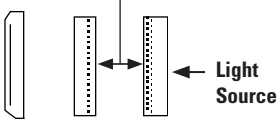
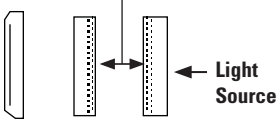
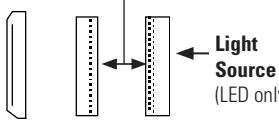
| Columns | 1 or 2 | | 3 to 8 | | 9 to 15 | 16 to 20 * |
|----------------------|--------------|--------|--------------|--------|-----------|------------|
| Rows | Full Voltage | Others | Full Voltage | Others | All Types | All Types |
| 1 or 2 | 2 | | 4 | | 6 | 8 |
| 3 to 6 | 4 | 6 | 6 | 8 | 8 | 10 |
| 7 to 10 (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 (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 | | | |
| <p>Matte Surface (non-shiny)</p>  <p>Light Source</p> <p>Lens Color Marking Screen: Plate: Any Color White</p> | | <p>Matte Surface (non-shiny)</p>  <p>Light Source</p> <p>Lens Marking Color Plate: Screen: White Any Color</p> | | <p>Matte Surface (non-shiny)</p>  <p>Light Source</p> <p>Lens Marking Color Plate: Screen: White White</p> | | <p>Matte Surface (non-shiny)</p>  <p>Light Source (LED only)</p> <p>Lens Marking Color Plate: Screen: White White</p> | |

Switches & Pilot Lights
Display Lights
Relays & Sockets
Timers
Terminal Blocks
Circuit Breakers