Switches & Pilot Lights

Signaling Lights

Relays & Sockets

Timers

Contactors

Terminal Blocks

Circuit Breakers

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

UL Recogized
File No. E68961

CSA Certified
File No.
LR48366

TUV
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

Specifications
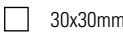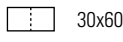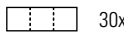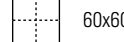
Light Source		LED	Incandescent
Nominal Voltages	Full Voltage	6, 12, 24V AC/DC	6, 12, 18, 24, 30V AC/DC
	Transformer	120, 240V AC	120, 240V AC
	DC-DC Conv.	110V DC	110V DC
Colors		Amber, Green, Red, Yellow, Blue (24V only), White, dual color Red/Green (24V only)	Amber, Green, Red, Yellow, Blue, White
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)	
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 (2mm² x 2)	
Approvals		TUV Cert. No. B970213332375 ® RU UL Recognized File No. E68961 ABS American Bureau of Shipping ® CSA CSA Certified File No. LR48366	

Part Numbers (assembled)

Part Number Guide

①	②		③	④	⑤		⑥
SLC30N	**01**	**03** −	**DD**	**2**	**F**	**B** −	**A(3)**
	Number of Rows	Number of Columns	Type	Voltage	Style		Color and Number of Windows
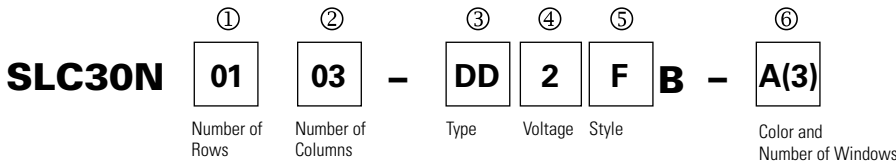
Description			Code	Remark
①Number of Rows			01, 02, 03, 04, 05, 06, 07, 08, 09, 10	10 row maximum (always expressed in terms of "F" size windows)
② Number of Columns			01, 02, 03, 04, 05, 06, 07, 08, 09, 10 11, 12, 13, 14, 15, 16, 17, 18, 19, 20	20 column maximum (always expressed in terms of "F" size 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	
	Green		G	
	Red		R	After each color, specify the number of windows Example... A(3), G(2), R(1)
	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).

Switches & Pilot Lights

Signaling Lights

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Circuit Breakers

Order Form

Switches & Pilot Lights

Signaling Lights

Relays & Sockets

Timers

Contactors

Terminal Blocks

Circuit Breakers

Purchase Order No. _____

Date _____ Sheet ☐ of ☐

Contact _____
Company _____
Phone # _____
Ship to _____
_____
City/State/Zip _____

Fill in Part Number Below:

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

Style Code
Operating Voltage
Type Code

B – *Black Frame*

SLC30N — ☐☐ — ☐☐

Number of Rows
Number of Columns

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

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

Remarks: _____

Basic Unit Size (style F)

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

← THIS SIDE UP

ROWS ↓

COLUMNS →

THIS SIDE UP →

← **THIS SIDE UP**

Quantity _____

Note: All units ordered with one order form must be identical

For engraving information, see page 715.

For information on how to complete the order form or to view examples, see the following page.

1. For part number development, see the previous page.
2. Panel cutout dimensions are on page 697.
3. Additional ordering information is on page 696.

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
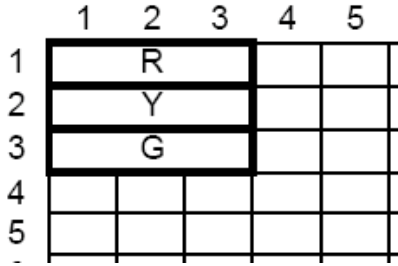
2. Count number of rows and columns. eg: Example 1, Rows: 03 and Columns: 03
   SLC30N-0303

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 745 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:
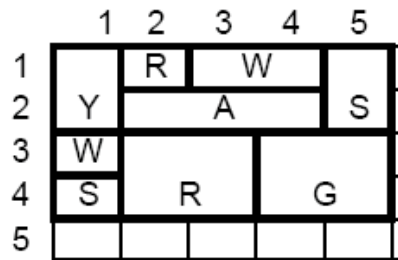
Example 2
Rows=03; Columns= 03; F Style Windows (30x30mm); LED Full Voltage 24V AC/DC Illumination. Part number **SLC30N-0303-DD2FB-R(3)Y(3)G(3)**.
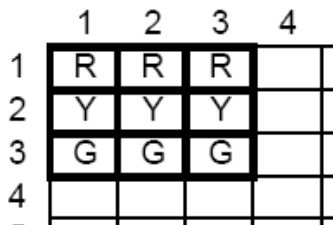
Example 3:
Rows = 04; Columns = 05; M = combination of various window styles(F, H, L V and G Style) ; LED Full Voltage 24V AC/DC Illumination.
Part number **SLC30N-0405-DD2MB-A(1)R(2)Y(1)G(1)W(2)S(2)**.

Dimensions

Panel Cut-Out Dimensions

No. of 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)

No. of Rows | **Overall Height ↓** | **Cut-out Ht ↓** | **Cut-out Wd →**

No. of Rows	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)	23.819" (605mm)
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
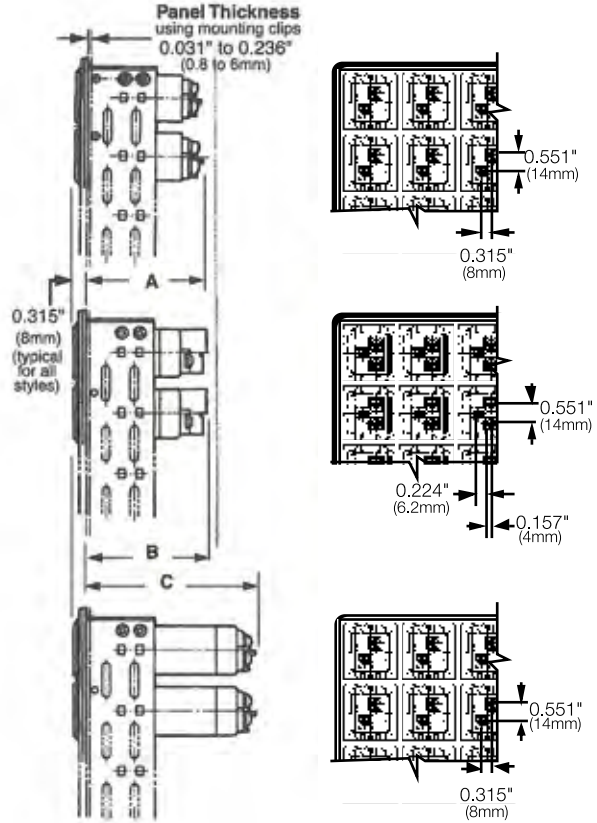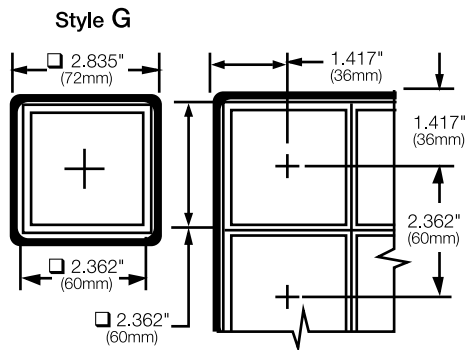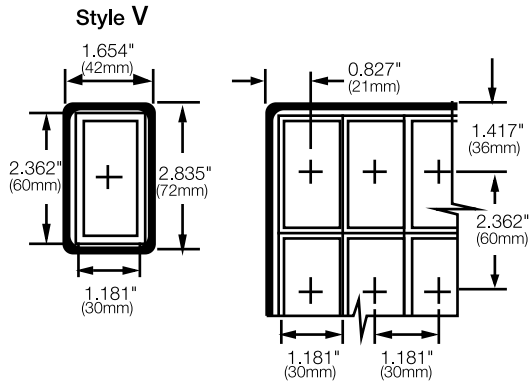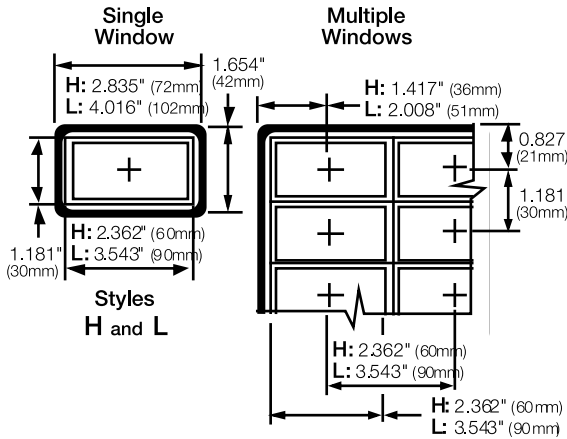2. For part numbering information, see page 724.

Window Dimensions

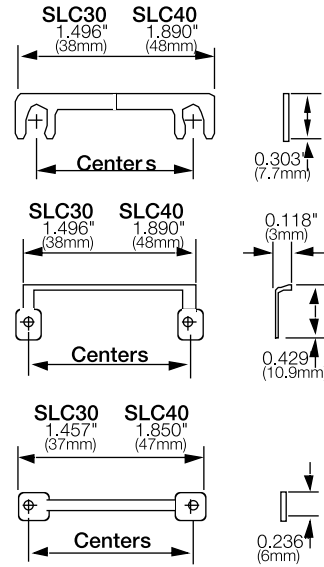| Window Style		Style F	Style H	Style L	Style V	Style G
Appearance						
Window Size	Illumination Face (H x W)	1.181" x 1.181" (30 x 30mm)	1.181" x 2.362" (30 x 60mm)	1.181" x 3.543" (30 x 90mm)	2.362" x 1.181" (60 x 30mm)	2.362" x 2.362" (60 x 60mm)
	Lens (H x W)	1.102" x 1.102" (28 x 28mm)	1.102" x 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)

Side tabs: Switches & Pilot Lights | Signaling Lights | Relays & Sockets | Timers | Contactors | Terminal Blocks | Circuit Breakers

Switches & Pilot Lights

Signaling Lights

Relays & Sockets

Timers

Contactors

Terminal Blocks

Circuit Breakers

Dimensions, continued

Single Window

□ 1.654" (42mm)

□ 1.181" (30mm)

Style F
(basic unit size)

Multiple Windows

0.827" (21mm)

0.827" (21mm)

1.181" (30mm)

1.181" (30mm)

1.181" (30mm)

Panel Thickness
using mounting clips
0.031" to 0.236"
(0.8 to 6mm)

A

0.315" (8mm) (typical for all styles)

B

C

0.551" (14mm)

0.315" (8mm)

0.551" (14mm)

0.224" (6.2mm)

0.157" (4mm)

0.551" (14mm)

0.315" (8mm)

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		

Single Window

H: 2.835" (72mm)
L: 4.016" (102mm)

1.654" (42mm)

H: 2.362" (60mm)
L: 3.543" (90mm)

1.181" (30mm)

Styles H and L

Multiple Windows

H: 1.417" (36mm)
L: 2.008" (51mm)

0.827" (21mm)

1.181" (30mm)

H: 2.362" (60mm)
L: 3.543" (90mm)

H: 2.362" (60mm)
L: 3.543" (90mm)

Style V

1.654" (42mm)

2.362" (60mm)

2.835" (72mm)

1.181" (30mm)

0.827" (21mm)

1.417" (36mm)

2.362" (60mm)

1.181" (30mm)

1.181" (30mm)

Style G

□ 2.835" (72mm)

□ 2.362" (60mm)

□ 2.362" (60mm)

1.417" (36mm)

1.417" (36mm)

2.362" (60mm)

Panel Thickness
using mounting clips
0.031" to 0.236"
(0.8 to 6mm)

0.315" (8mm) (typical for all styles)

A

B

C

0.551" (14mm)

0.315" (8mm)

0.551" (14mm)

0.224" (6.2mm)

0.157" (4mm)

0.551" (14mm)

0.315" (8mm)

Signaling Lights   SLC30

Switches & Pilot Lights

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Circuit Breakers

Dimensions, continued

SLC30 1.496" (38mm) SLC40 1.890" (48mm)

Centers

0.303" (7.7mm)

SLC30 1.496" (38mm) SLC40 1.890" (48mm)

0.118" (3mm)

Centers

0.429" (10.9mm)

SLC30 1.457" (37mm) SLC40 1.850" (47mm)

Centers

0.236" (6mm)

Instructions

Estimating Weights

A x | Rows + Columns | ➕ | B x | Rows x Columns | ➕ | C x | Rows x Columns | ➡ | **Total Weight of Display Panel**
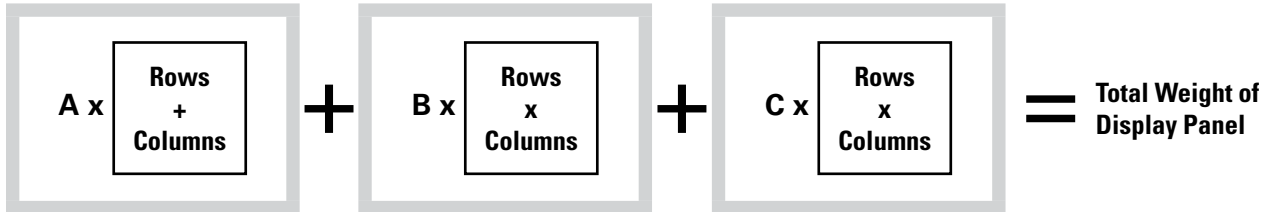
ℹ 1. Make sure that the panel thickness is sufficient to support the total weight of the display panel(s).

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

ℹ 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

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SLC30-IPS Series — Panel Mounted Annunciators

SLC Series Panel Mounted Annunciators — an Ideal Alternative to Mounting Multiple Pilot Devices

SLC30-IPS combination display lights with control units combine display lights with control units such as pushbuttons, illuminated pushbuttons, selector switches and keylock selector switches.

This results in savings of both space and installation time, since mounting separate switches becomes unnecessary. SLC30-IPS combination display lights can be custom built to meet your specifications.

Key features of the SLC30-IPS series include:

- Switches are integrated into an assembled SLC matrix, requiring only one panel cutout
- Illuminated, non-illuminated, selector, and key-switches are available
- Five window sizes based on a 30mm grid
- Non-reflective clear lenses
- Incandescent or Superbright LED illumination
- Momentary pushbuttons only

Momentary Illuminated Pushbuttons
Square or Round with Square Bezel

Momentary Non-Illuminated Pushbuttons
Square or Round with
Square Bezel

Selector Switches
2-Position or 3-Position

UL Recogized
File No. E68961

CSA Certified
File No.
LR48366

TÜV
Cert No.
B970213332375

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
Maximum Voltage		250V AC/DC	
Contact Thermal Current		3A (gold contact), 5A (silver contact)	
Contact Operating Current		Gold contact: 125V AC/0.1A, 30V DC/0.1A (resistive load) Silver contact: 125V AC/3A, 250V AC/2.0A (resisitive load), 30V DC/2A, 125V DC/0.4A (resistive load)	
Control Unit Types		Pushbuttons: Square or round, illuminated or non-illuminated (momentary only)	
		Selector switches: 2-position or 3-position, maintained	
		Keylock switches: 2-position or 3-position, maintained	
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)
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), Type 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		TÜV Cert. No. B970213332375 UL Recognized File No. E68961 CSA Certified File No. LR48366	

Switches & Pilot Lights

Signaling Lights

Relays & Sockets

Timers

Contactors

Terminal Blocks

Circuit Breakers

Part Numbers (assembled)

Part Number Guide

SLC30N– [① 01] [② 03] – [③ DD] [④ 2] MLB

Number of Rows | Number of Columns | Type | Voltage
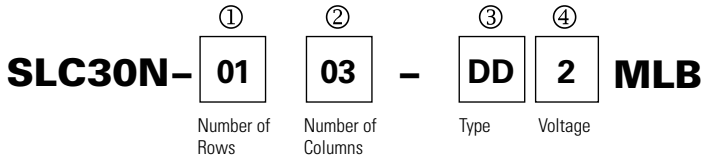
Description	Code	Remark
①Number of Rows	01, 02, 03, 04, 05, 06, 07, 08, 09, 10	10 row maximum (number of base unit (F-style) windows)
② Number of Columns	01, 02, 03, 04, 05, 06, 07, 08, 09, 10 11, 12, 13, 14, 15, 16, 17, 18, 19, 20	20 column maximum (number of base unit (F-style) windows)

③ Type				Code	Remark
	LED	Full voltage	Standard	DD	6V, 12V, 24V
			With check terminal	DHM	24V only
			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		Code	Remark
	6V AC/DC	6	Type DD or DS
	12V AC/DC	1	With Type DD, DHM or DS
	18V AC/DC	8	Type DS only
	24V AC/DC	2	Type DD, DHM, DW, or DS
	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

ℹ 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.

SLC30-IPS Order Form Instructions

How to order a SLC30-IPS display light:

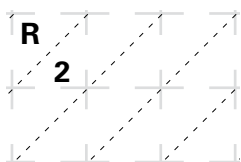**Example 1: Specifying a window color**
Enter the lens illumination color code in each square. Use the table below for color codes.

R
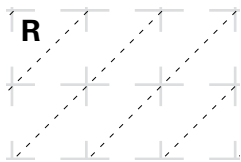
This example would place a Red window in this location

Example 2: Specifying a control unit
Enter the lens illumination color code in each square. Use the table below for color codes.

R
2

This example would place a Red, square, illuminated pushbutton with silver contacts in this location

For assistance with developing part numbers or completing the order form on the next page, contact IDEC technical support.

Color Codes

Color	Code
Amber	A
Green	G
Red	R
Blue	S
White	W
Yellow	Y

Control Unit Codes

Type	Contact Type	
	Gold	Silver
Square illuminated pushbutton (DPDT)	1	2
Round illuminated pushbutton (DPDT)	3	4
Square pushbutton (DPDT)	5	6
Round pushbutton (DPDT)	7	8
Selector switch (2-position)	9	10
Selector switch (3-position)	11	12
Keylock selector switch (2-position)	13	14
Keylock selector switch (3-position)	15	16

Order Form

Switches & Pilot Lights

Signaling Lights

Relays & Sockets

Timers

Contactors

Terminal Blocks

Circuit Breakers

Purchase Order No.

Date

Sheet ___ of ___

Contact

Company

Phone #

Ship to

City/State/Zip

Fill in Part Number Below:

SLC30N — [ ][ ] — [ ][ ] — [ ] [ ][ ] — MLB

Number of Rows | *Number of Columns* | *Type Code* | *Lamp Voltage* | *Black Frame*

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

Remarks:
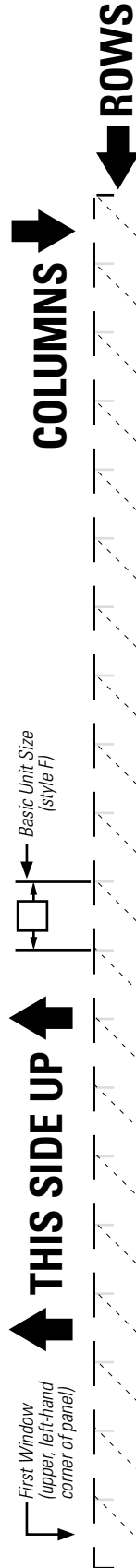
Basic Unit Size (style F)

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

← THIS SIDE UP

← THIS SIDE UP

ROWS

COLUMNS

THIS SIDE UP →

Quantity _____

Note: All units ordered with one order form must be identical

For engraving information, see page 715.

For information on how to complete the order form or to view examples, see the following page.

1. For SLC30-IPS ordering form instruction, see previous page.
2. See engraving information page 715.
3. See panel cutout dimensions on page 705.
4. Additional ordering information is on page 702 and 704.

How to complete SLC30N-IPS Series annunciator order form:

1. Determine the type of switches you would like to include in the annunciator panel. For this example, we will include the following 3 types of switches:
   i. Red Square illuminated pushbutton DPDT with silver contacts.
   ii. Yellow round non-illuminated push button DPDT with silver contacts.
   iii. 2 Position keylock selector switch with silver contacts.

2. From chart shown on page 732,

CODE	DESCRIPTION
R/2	Red Square Illuminated Push Button DPDT with Silver Contacts.
Y/8	Yellow Round Non-illuminated Push Button DPDT with Silver contacts
14	2 Position Keylock Selector Switch with Silver contacts.

Enter the above mentioned CODE designation in the layout window (on the previous page), where you would like the respective switch to be installed.

3. Determine the type of 30x30mm illuminated windows you would like to include. For the current example, we will assume 3 F-Style (30x30mm) windows in Yellow, Green and White color. Specify each window color in the Order Form with appropriate designation: "Y" for Yellow, "G" for Green and "W" for White.

4. Define the boundaries of each window (F, V, H, L or G Style) and of complete annunciator panel by heavy border lines, as shown below.

5. Count the number of rows and columns in the SLC30N diagram. eg: For the current example, we have, Rows: 02 and Columns: 03.
   SLC30N-0203

6. Determine the type of illumination for SLC30N annunciator. eg: For the current example, we use, "DD" for LED Full Voltage type illumination.
   SLC30N-0203-DD

7. Determine the voltage code; for the current example, we will use 24V AC/DC for all illuminated windows and illuminated switches. This is designated by using the number "2".
   SLC30N-0203-DD2

8. The complete part number would be:
   SLC30N-0203-DD2MLB

9. **A drawing must be provided for each of these parts ordered.**

   Note: Buttons and switches are only available in 'F' (30 x 30mm) window sizes.

Signaling Lights

SLC30-IPS

Switches & Pilot Lights

Signaling Lights

Relays & Sockets
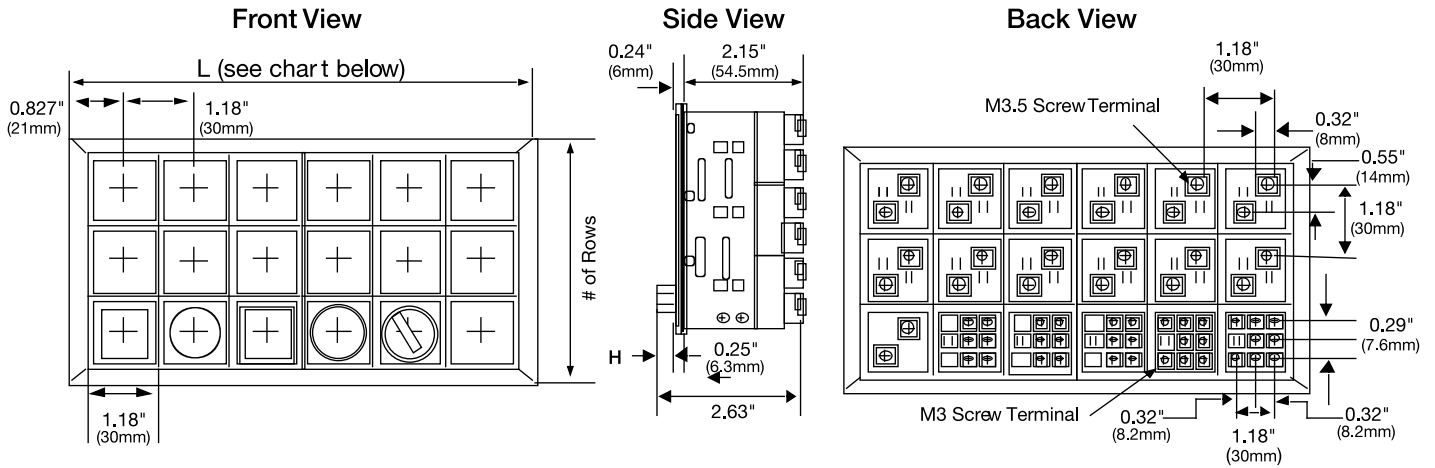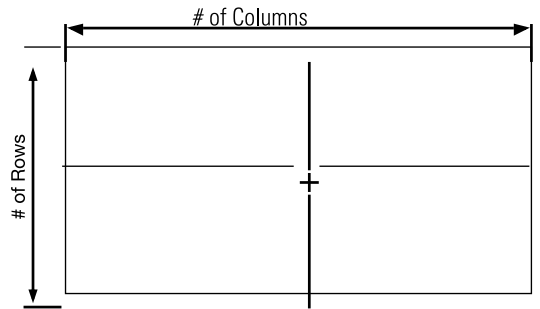
Timers

Contactors

Terminal Blocks

Circuit Breakers

Dimensions

Front View

L (see chart below)

0.827" (21mm)
1.18" (30mm)
# of Rows
1.18" (30mm)

Side View

0.24" (6mm)
2.15" (54.5mm)
H
0.25" (6.3mm)
2.63"

Back View

1.18" (30mm)
M3.5 Screw Terminal
0.32" (8mm)
0.55" (14mm)
1.18" (30mm)
0.29" (7.6mm)
M3 Screw Terminal
0.32" (8.2mm)
1.18" (30mm)
0.32" (8.2mm)

Bottom View

SLC30

X1
X2

Illuminated Pushbuttons

X1	NC2	NC1
	NO2	NO1
X2	C2	C1

Non-Illuminated Pushbuttons and Selector Switches

NC2	NC1
NO2	NO1
C2	C1

X1 = Positive Terminal, X2 = Negative Terminal

Panel Cut-Out Size

# of Columns
# of Rows

Panel Cut-Out Dimensions

	No. of Columns	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
No. of Rows	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)	23.819" (605mm)
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)

Dimensions, continued

SLC30   SLC40
1.496"   1.890"
(38mm)   (48mm)

Centers

0.303"
(7.7mm)

SLC30   SLC40
1.496"   1.890"
(38mm)   (48mm)

Centers

0.118"
(3mm)

0.429"
(10.9mm)

SLC30   SLC40
1.457"   1.850"
(37mm)   (47mm)

Centers

0.236"
(6mm)
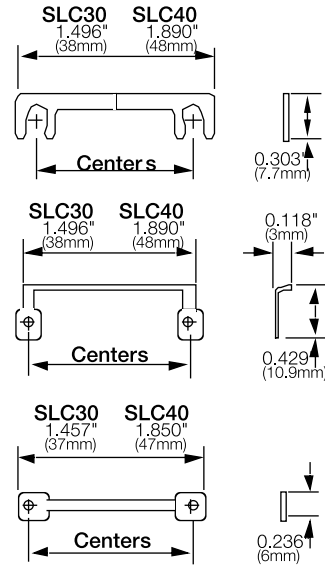
Contact Operations

Selector Switches and Keylock Selector Switches

		Operator Position and Contact Operation (top view)		
Position	Contacts	Left	Center	Right
90° 2-position maintained L⌄R	DPDT 2-position	Left Right NO NC NO NC	—	Left Right NO NC NO NC
45° 3-position maintained C L⌄R	DPDT 3-position	Left Right NO NC NO NC	Left Right NO NC NO NC	Left Right NO NC NO NC

Contact Operation

Switches & Pilot Lights | Signaling Lights | Relays & Sockets | Timers | Contactors | Terminal Blocks | Circuit Breakers

Engraving Information

Switches & Pilot Lights

Signaling Lights

Relays & Sockets

Timers

Contactors

Terminal Blocks

Circuit Breakers

Part Numbers: SLC30 Engraving Plates

Window Type	Part No.	Character Size	Maximum Characters per Line	Maximum Lines
F 30x30mm	SLC-3PF	7/32	9	4
		3/16	10	4
		5/32	11	5
		9/64	12	6
		1/8	13	7
H 30x60mm	SLC-3PH	5/16	10	3
		7/32	15	4
		5/32	19	6
L 30x90mm	SLC-3PL	5/16	16	3
		7/32	22	4
		5/32	28	6
V 60x30mm	SLC-3PV	5/16	6	7
		7/32	8	9
		5/32	10	13
G 60x60mm	SLC-3PG	5/16	12	7
		7/32	15	10
		5/32	18	14

Engraving Size Samples

5/16" size
7/32" size
3/16" size
5/32" size
9/64" size
1/8" size

Part Numbers SLC40 Engraving Plates

Window Type	Part No.	Character Size	Maximum Characters per Line	Maximum Lines
F 40x40mm	SLC-4PF	5/16	8	4
		7/32	11	6
		5/32	14	8
H 40x80mm	SLC-4PH	5/16	17	4
		7/32	20	6
		5/32	24	8
L 40x120mm	SLC-4PL	5/16	22	4
		7/32	30	6
		5/32	34	8
V 80x40mm	SLC-4PV	5/16	7	8
		7/32	10	9
		5/32	12	14
G 80x80mm	SLC-4PG	5/16	12	7
		7/32	15	10
		5/32	18	14

**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.
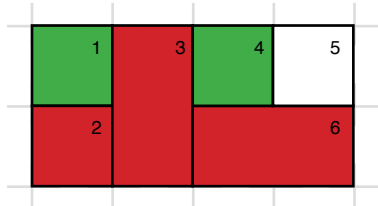
OPEN	SYSTEM ERROR	PUMP 1 ON
CLOSE		PUMP 2 OVERFLOW
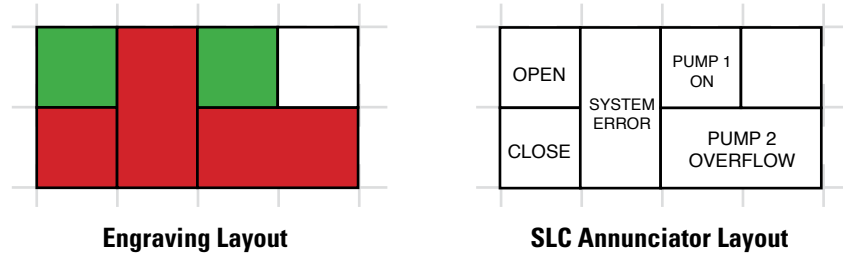
Engraving Layout   **SLC Annunciator Layout**

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:

OPEN	SYSTEM ERROR	PUMP 1 ON
CLOSE		PUMP 2 OVERFLOW
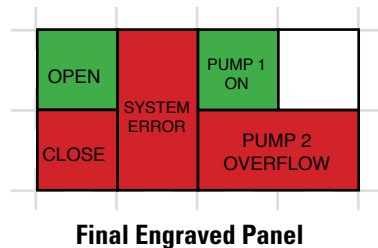
Final Engraved Panel
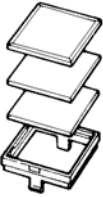
Switches & Pilot Lights

Signaling Lights

Relays & Sockets

Timers

Contactors

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)		
		G	SLC-3LG-(UL)		
	SLC40 incandescent, LED	F	SLC-4LF-(UL)		
		H and V	SLC-42H-(UL)		
		L	SLC-4LL-(UL)		
		G	SLC-4LG		
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)		
		G	SLC-3PG-*		
	SLC40 incandescent	F	SLC-4PF-*-(UL)		
		H and V	SLC-4PH-*		
		L	SLC-4PL-*-(UL)		
		G	SLC-4PG		
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)		
		G	SLC-3PG-□-(UL)		
	SLC40 incandescent, LED	F	SLC-4PF-□-(UL)		
		H and V	SLC-4PH-□-(UL)		
		L	SLC-4PL-□-(UL)		
		G	SLC-4PG		
Lens Frames	SLC30 incandescent only	F	SLC-3WF-B	A lens frame is included with each window on assembled units. Lens frame for LED modules has the inner walls painted white, while the incandescent frame is completely black.	
		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		
		G	SLC-4WG-B		
	SLC40 LED only	F	SLC-4WF-BL		
		V	SLC-4WV-BL		
		L	SLC-4WL-BL		
		G	SLC-4WG-BL		

Description		Application		Part No.	Remarks	
Incandescent Lamps	BA9S/13 (1W)	SLC30 incandescent only	BA9S/13 lamp base	IS-6	6.3V, 1W; operating voltage: 5 to 6V AC/DC	Unless "no lamp" (99) is specified, a lamp is included with each style F window equivalent

One part number is specified for one replacement bulb |
				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 (2W)	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	SLDN-36F-*	Specify color code in place of asterisk (*):
A = Amber
G = Green
R = Red
S = Blue (available in 24V version only)
W = White
Y = Yellow	
			12V AC/DC	SLDN-31F-*		
			24V AC/DC	SLDN-32F-*		
		SLC30 LED only 2-color: Red/Green	24V AC/DC	SLDN-32FW-RG		
		SLC40 LED only 1-color	6V AC/DC	SLC-6EP*		
			12V AC/DC	SLCN-1ET-*		
			24V AC/DC	SLCN-2ET-*		
		SLC40 LED only 2-color: Red/Green	24V AC/DC	SLCN-2ETW-RG		

Replacement Parts

Full Voltage Models		Description	Type	Part Number
SLC30	Incandescent	Incandescent	DS	SLC-3DS
	LED	Standard LED	DD	SLDN-3DH
		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	SLDN-4DH
		LED w/ Check Terminal	DHM	SLD-4DHM
		Dual Color LED	DW	SLD-4DW
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	SLDN-3TH12
		LED xfrmr, 240V AC	TD24	SLDN-3TH24
		LED DC-DC converter, 110V DC	CD1	SLDN-3CH1
SLC40	Incandescent	Incandescent xfrmr, 120V AC	TE12	SLC-4TE12
		Incandescent xfrmr, 240V AC	TE24	SLC-4TE240
	LED	LED xfrmr, 120V AC	TD12	SLDN-4TH120
		LED xfrmr, 240V AC	TD24	SLDN-4TH240
		LED DC-DC converter, 110V DC	CD1	SLDN-4CH1

IDEC

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	Total number of jumpers equals total number of style F window equivalents
		X2 terminal (ring)	SLCN-JP34	
		C terminal (ring)	SLC-JP32	
	SLC40	X1 terminal (spade)	SLC-JP40	
		X2 terminal (ring)	SLCN-JP44	
		C terminal (ring)	SLC-JP42	
Mounting Clip	All SLCs		SLC-3K1	Mounting clips are included with the panel (see page 752 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	

Color Screen
(Incandescent only)
Amber
Blue
Green
Red
White
Yellow

Clear Non-Reflective Lens

Marking Plate
Standard: Transparent
Special: White (white LED only)

Lens Frame
Black

LED Housing
Amber
Blue
Green
Red
White
Yellow

Incandescent Lamps
BA9S/13
Base (1W)

SLC30 Series

Cover Frame
Black

Mounting Clip
(included with unit)

Switches & Pilot Lights

Signaling Lights

Relays & Sockets

Timers

Contactors

Terminal Blocks

Circuit Breakers
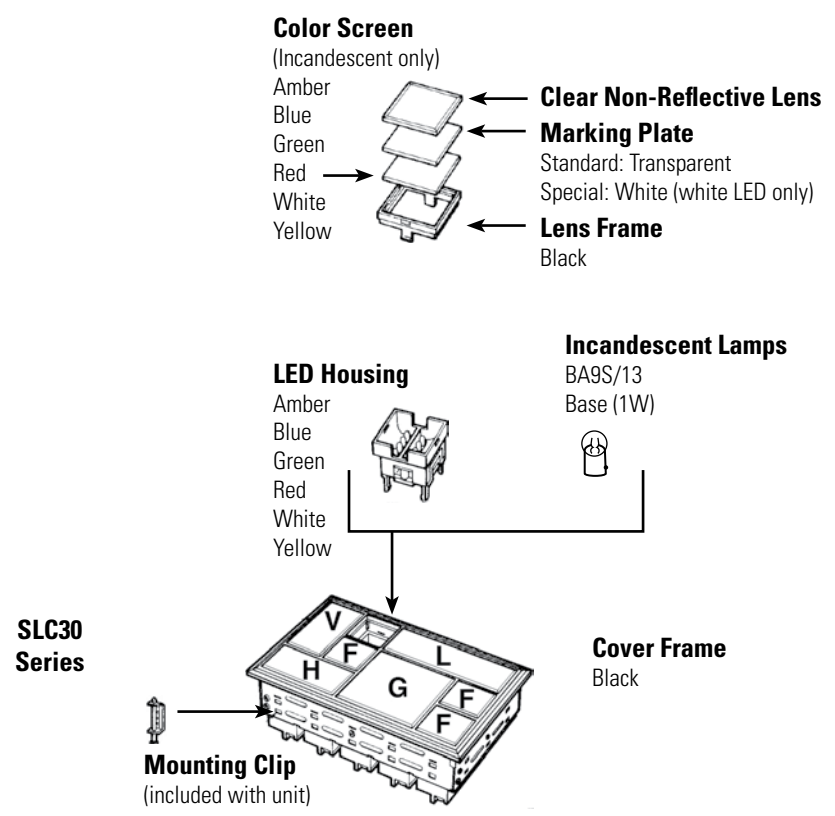
SLC Series Installation Instructions

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%
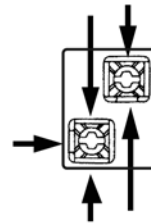
Terminal Arrangements (LED units)

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.
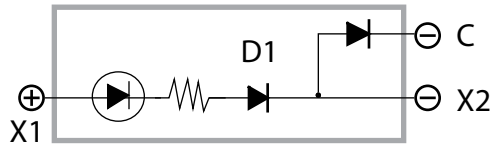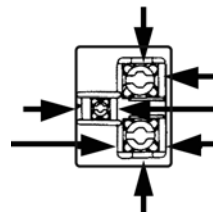

For 2-color alternate units, terminal X1 is positive, and terminals X2 and C (check terminal) are negative.
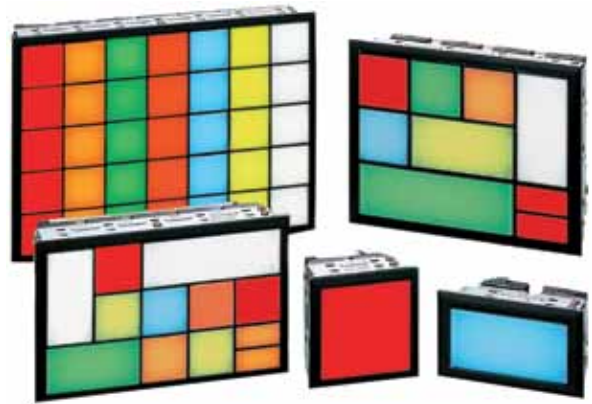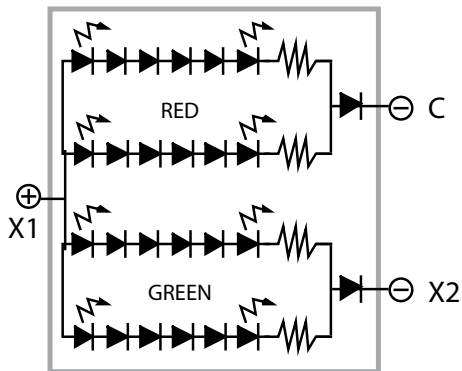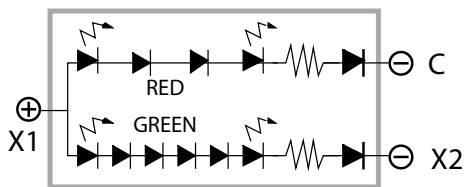
**SLC30/SLC40
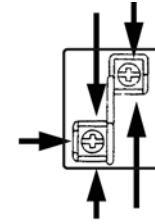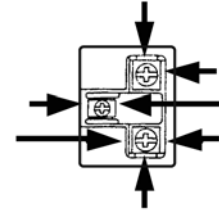Full Voltage
DC-DC Converter**

**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.

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.
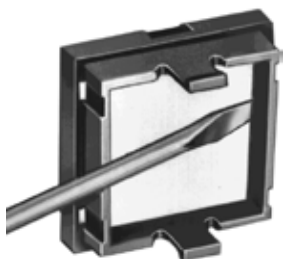
Figure 3: SLC30   **Figure 4: SLC40**

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.
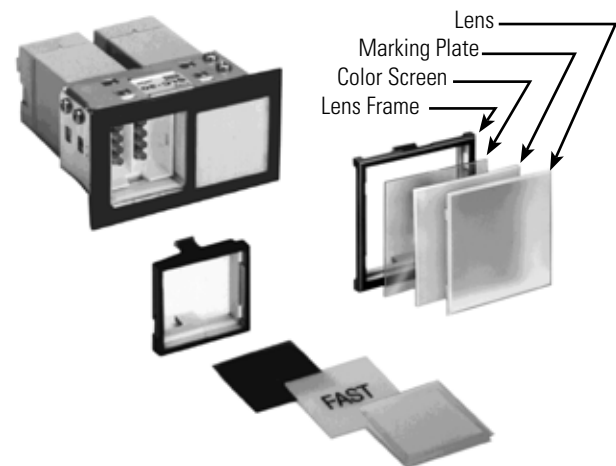
Lens
Marking Plate
Color Screen
Lens Frame

Figure 5: SLC30 and SLC40

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 6: Remove LED   **Figure 7: Install LED**

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.
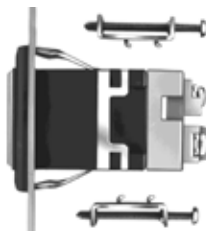
Figure 8: SLC40

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.
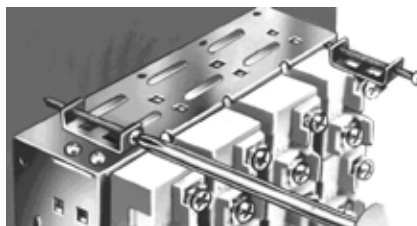
Figure 9: Multiple Combination

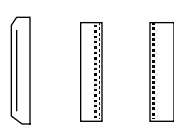## SLC Series Installation Instructions, continued

Number of Mounting Clips Included
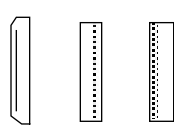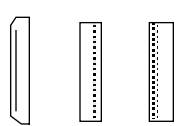
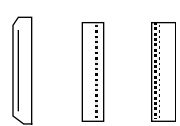| Columns	1 or 2		3 to 8		9 to 15	16 to 20 *
Rows	Full Voltage	Others	Full Voltage	Others	All Types	All Types
1 or 2	2		4		6	8
3 to 6	4	6	6	8	8	10
7 to 10 (SLC30 only)	6	8	8		10	12

ℹ️ * 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	Lamp Off: White
Matte Surface (non-shiny)	**Matte Surface** (non-shiny)	**Matte Surface** (non-shiny)	**Matte Surface** (non-shiny)

Lamp On: Amber, Blue Green, Red, Yellow / Lamp Off: Desired Color — Lens, Color Screen: Any Color, Marking Plate: White, **Light Source**

Lamp Off: White — Lens, Marking Plate: White, Color Screen: Any Color, **Light Source**

Lamp On: White / Lamp Off: White — Lens, Marking Plate: White, Color Screen: White, **Light Source**

Lamp On: Red/Green / Lamp Off: White — Lens, Marking Plate: White, Color Screen: White, **Light Source** (LED only)