SLC40 Series — **Panel Mounted Annunciators**

SLC 40 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 configurations with 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





Cert No. B970213332375









Extended Windows





Style H (40mm x 40mm) (40mm x 80mm)



Style L (40mm x 120mm) (80mm x 40mm)



Style V



Staggered Terminals: increased safety and serviceability



Specifications

	Light Source		LED Incandescent						
		Full Voltage	6, 12, 24V AC/DC 6, 12, 18, 24, 30V AC/DC						
	Nominal Voltages	Transformer	120, 240V AC 120, 240V AC						
	Tollagoo	DC-DC Conv.	110V DC —						
	Colors		Full voltage: 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 E12/15 Screw terminal base (2W)						
		24V AC/DC	40mA 0.08A						
	Current	12V AC/DC	80mA 0.16A						
	Consumption	6V AC/DC	160mA 0.33A						
'n	Available Win	dow Sizes	"F" "H" "L" "V" ☐ 40x40mm ☐ 40x80mm ☐ 40x120mm						
	Insulation Resistance		100MW minimum (with 500V DC megger), between live and dead parts						
	Degree of Prot	ection	IP20 (for indoor use only), NEMA 1						
Specifications	Dielectric Stre	ength	Full voltage: 2,000V AC direct Adaptor/transformer 2,500V AC (1 minute)						
	Operating Tem	perature	- 20° to +40°C; (45-85% relative humidity)						
	Material of Ma and Color Scre		Polycarbonate						
	Termination		X1 and X2 terminals: M3.5 screw with a captive wire clamp washer (Check terminal: M3 screw on applicable models)						
	Maximum Size)	Full voltage: 7 rows, 15 columns (105 windows) Others: 50 windows maximum						
	Recommended	l Wire Size	22-14 AWG x2 (2mm² x 2)						
	Approvals		Cert. No. B970213332375 UL. Recognized File No. E68961 ABS American Bureau of Shipping Cert. No. B970213332375 UL. Recognized File No. E68961						



Part Numbers (assembled)

Part Number Guide

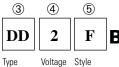




Rows









Color and Number of Windows

6

	Description	1	Code	Remark		
①Number of Ro	WS		01, 02, 03, 04, 05, 06, 07	7 row maximum (always expressed in terms of "F" size windows)		
② Number of Co	olumns		01, 02, 03, 04, 05, 06, 07, 08, 09, 10 11, 12, 13, 14, 15	15 column maximum (always expressed in terms of "F" size windows)		
		Full voltage	DD	6V, 12V, 24V		
		Full voltage with check terminal	DHM	24V only		
	LED	Full voltage 2 color (Red/Green)	DW	24V only		
③ Туре		Transformer	TD	120V, 240V AC		
		DC-DC converter	CD	110V DC only		
		Full voltage	DE	6V, 12V, 18V, 24V, 30V		
	Incandescent	Full voltage with check terminal	DEM	6V, 12V, 18V, 24V, 30V		
		Transformer	TS	120V, 240V		
	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		
Voltage	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		
	Square		F	40x40mm		
	Horizontal rect	angle	н	40x80mm		
Style	Large horizonta	al rectangle	L	40x120mm		
	Vertical rectan	gle	V	80x40mm		
	Combination		M	Fill out order form on next page		
	Amber		A			
	Green		G			
© Color	Red		R	A6		
number of windows)	Blue		S (LED version: 24V only)	After each color, specify the number of windows Example A(3), G(2), R(1)		
	White		W			
	Yellow		Υ			



- Secondary voltage on transformers and DC-DC converters is 24V.
- To specify the 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).

ð

Sheet

Date

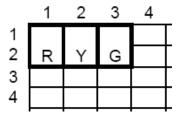
Purchase Order No.

Order Form Number of Amber Number of Yellow Number of White Number of Green Number of Blue Number of Red 3 Ø S G ~ **B–** Black Frame For information on how to complete the Remarks or engraving information, see order form or to view examples, see Note: All units ordered with one Style Code order form must be identical H = Two Windows Wide
L = Three Windows Wide
V = Two Windows High
M = Multiple Combination Operating Voltage the following page. **F** = One Window page 715. **Quantity** Type Code THIS SIDE UP I Note: Convert all window styles Number of to the style F (basic unit size). Columns Basic Unit Size (style F) Fill in Part Number Below: Number of Rows 1 SLC40N THIS SIDE UP The part number guide is on the previous page.
 Panel cutout dimensions are on page 712. -First Window (upper, left-hand corner of panel) Contact Company Ship to Phone # City/State/Zip



1. Draw the layout of SLC40N annunciator in the Order Form as per customer requirements. Define the boundaries of each window (F, V, H or L 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.

Example 1



2. Count number of rows and columns. Eg: Example 1 has 02 rows and 03 columns.

SLC40N-0203

3. Determine the type of illumination required. Eg: "DD" for LED full voltage type illumination.

SLC40N-0203-DD

4. Determine the voltage code. Eg: "2" for 24V AC/DC, as in Example 1.

SLC40N-0203-DD2

5. Determine window style. Eg: "V" style windows as shown in Example 1.

SLC40N-0203-DD2VB*

*B denotes black frame.

6. Count the number of different colored windows. Eg: Example 1 has 1 Red V-style (80mmx40mm) window, 1 Yellow V-style window and 1 Green V-style window. Therefore to complete the part number for example 1, you would illustrate this by: R(1)Y(1)G(1)

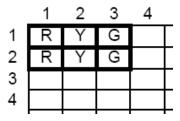
SLC40N-0203-DD2VB-R(1)Y(1)G(1)

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 examples on page 715 and send us your engraving information. If you have any questions please contact IDEC Technical Support.

Here are two more examples of your order form and the subsequent SLC40N layout you will receive.

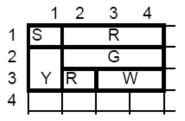
Example 2

Rows=02; Columns= 03; F Style Windows (40x40mm); LED Full Voltage 24V AC/DC Illumination. Part number SLC40N-0203-DD2FB-R(2)Y(2)G(2).



Example 3

Rows=3; Columns= 4; M = combination of various window styles (F, H, L and V Style); LED Full Voltage 24V AC/DC Illumination. Part number **SLC40N-0304-DD2MB-R(1)Y(1)G(1)W(1)S(1)**.



Panel Cut-Out Dimensions

Dimensions

	No. of Co	lumns		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Overall Pa Dimension	ınel Wid ı →	lth	2.205" (56mm)	3.780" (96mm)	5.354" (136mm)	6.929" (176mm)	8.504" (216mm)	10.079" (256mm)	11.654" (296mm)	13.228" (336mm)	14.804" (376mm)	16.378" (416mm)	17.953" (456mm)	19.528" (496mm)	21.102" (536mm)	22.677" (576mm)	24.252" (616mm)
No. of Rows	Overall Height ↓	Cut- out Ht ↓	Cut- out Wd →	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 ^t (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 ¹ (125m		3	6	9	12	15	18	21	24	27	30	33	36	39	42	45
4	6.929" (176mm)	6.496' (165m		4	8	12	16	20	24	28	32	36	40	44	48	52	56	60
5	8.504" (216mm)	8.071 ¹ (205m		5	10	15	20	25	30	35	40	45	50	55	60	65	70	75
6	10.079" (256mm)	9.646' (245m		6	12	18	24	30	36	42	48	54	60	66	72	78	84	90
7	11.654" (296mm)	11.220 (285m		7	14	21	28	35	42	49	56	63	70	77	84	91	98	105
				Total Nu	ımber of \	Nindows	(equivalen	t to style F	-basic u	nit 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)

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

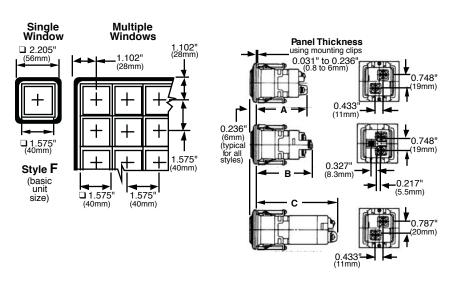
2. See page 709 for part numbering information.

Window Dimensions

Window Style		Style F	Style H	Style L	Style V
Appearance			99		90
	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)
	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)
Window Size	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)

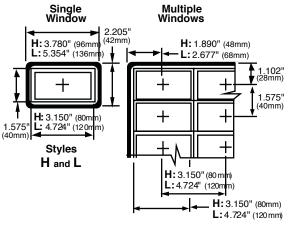
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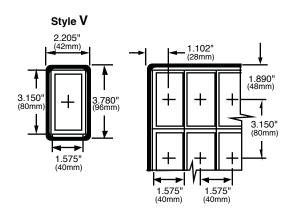


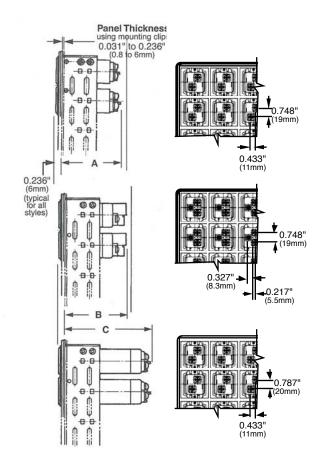


Styles F, H, L, V, : Single Window (right) Multiple Windows (below)

	Description	LED	Incandescent		
Α	Full voltage	2.618" (66.5mm)	2.539" (64.5mm)		
В	Full voltage LED 2-color alternate	2.874" (73mm)	_		
	Transformer	3.327" (84.5mm)	_		
С	DC-DC converter	3.327" (84.5mm)	_		
	Transformer	_	2.854" (72.5mm)		
Term	ninals (X1, X2)	M3.5 screw			
Che	ck terminal (C)	M3 screw			
	e terminals, cent windows	1.575" (40mm) centers			









JUMPERS

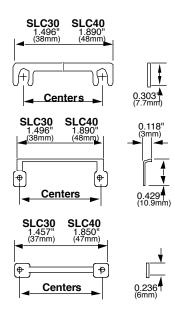
Thickness = 0.020" (0.5mm)

Centers:

SLC30 = 1.181" (30mm)

SLC40 = 1.575" (40mm)

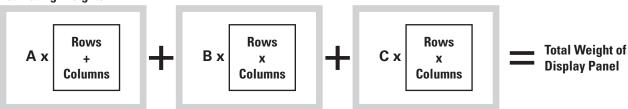
± 0.004" (0.1mm)



Dimensions, continued

Instructions

Estimating Weights





1. 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 Frame Weight	B Housing Weight		C Lamp/LED Weight (includes lamp/l	LED)
0.93oz (30g)	0.93oz (30g)	0.93oz (30g)	2.98oz (96g)	1.92oz (62g)



2. Weights are approximate.

:xample

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



Part Numbers: SLC30 Engraving Plates

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

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

F		5/16	5	2
40x40mm	SLC-4PF	7/32	8	4
Tox tottill		5/32	11	5
Н		5/16	12	2
40x80mm	SLC-4PH	7/32	17	4
_ ; _ loxeelilli		5/32	22	5
L		5/16	18	2
40x120mm	SLC-4PL	7/32	26	4
		5/32	34	5
V		5/16	5	6
80x40mm	SLC-4PV	7/32	8	7
00040111111		5/32	11	12

Engraving Size Samples

5/16" size 7/32" size

5/32" size

USA: 800-262-IDEC

Canada: 888-317-IDEC

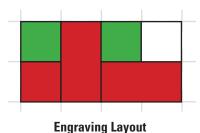
It Breakers

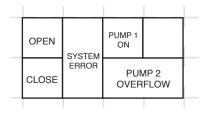
Engraving information can be provided in two ways:

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 Example

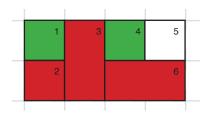




SLC Annunciator Layout

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.

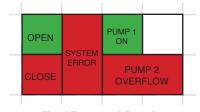


Keeping engraving window type, character size, maximum character per line and maximum number of lines in perspective, create a table (see Engraving Table Example shown below). Please attach the Table along with SLC annunciator layout and send it to IDEC Customer Service for processing.

Engraving Table Example

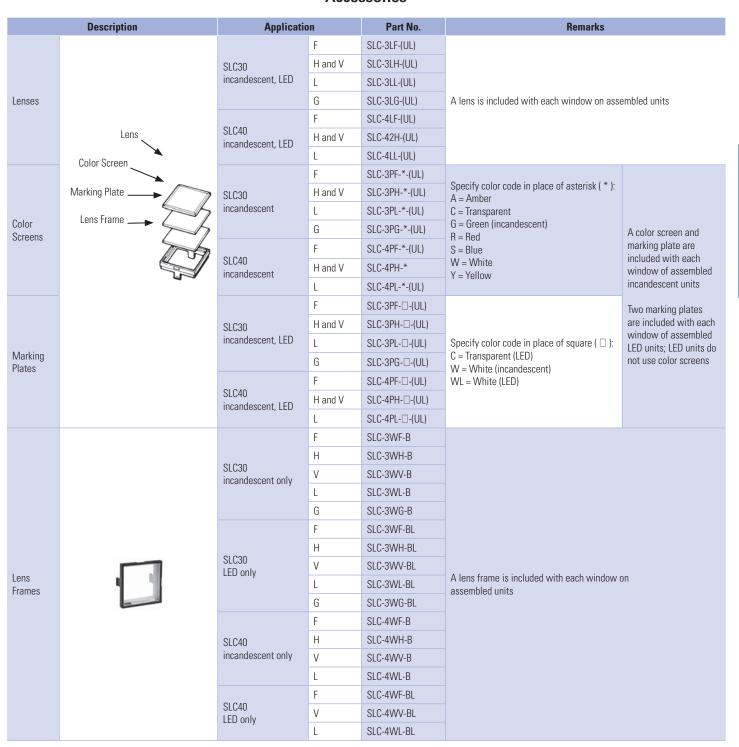
Window	Font Size	Engrave
1	7/32"	"OPEN"
2	7/32"	"CLOSE"
3	7/32"	"SYSTEM" "ERROR "
4	3/16"	"PUMP 1" "ON"
5		NO ENGRAVING
6	5/32"	"PUMP 2" "OVERFLOW"

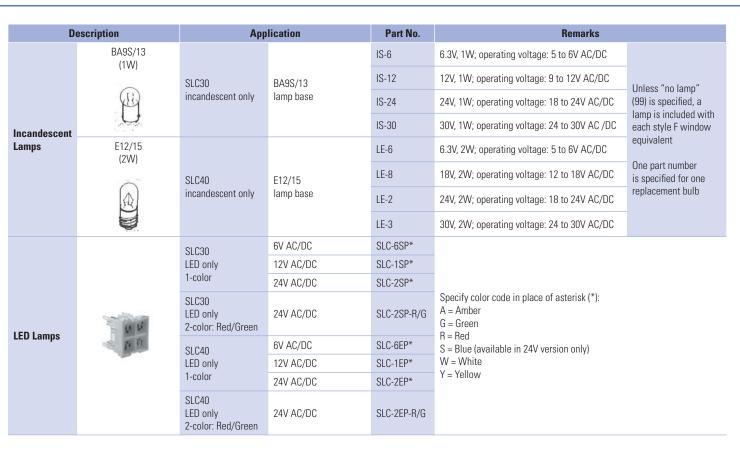
Using method 1 or 2, the final engraved panel will look as below:



Final Engraved Panel

Accessories



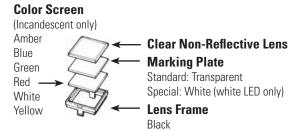


Replacement Parts

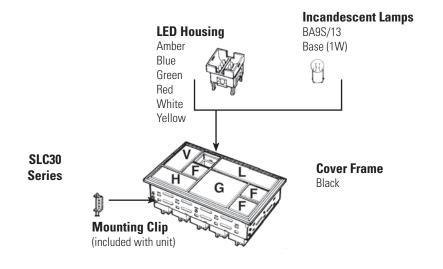
Full Voltage Models		Description	Туре	Part Number
SLC30	Incandescent	Incandescent	DS	SLC-3DS
		Standard LED	DD	SLC-3DH
	LED	LED w/ Check Terminal	DHM	SLD-3DHM
		Dual Color LED	DW	SLD-3DW
SLC 40		Incandescent	DE	SLC-4DE
100	Incandescent	Incandescent w/ Check Terminal	DEM	SLC-4DEM
		Standard LED	DD	SLC-4DH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



ъ	A 11 4	•	D (N	D. I
Description	11		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
		X1 terminal (spade)	SLC-JP30	
Jumpers	SLC30	X2 terminal (ring)	SLC-JP33	
11_11		C terminal (ring)	SLC-JP32	
P - 0	1	X1 terminal (spade)	SLC-JP40	Total number of jumpers equals total number of style F window equivalents
D	SLC40	X2 terminal (ring)	SLC-JP41	
		C terminal (ring)	SLC-JP42	
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 \times L): 0.197" \times 393.701" (5 \times 10,000mm)
Finger-Safe Terminal Covers	Use with CD, DS ar	SLC30 types DD, TD, nd TS	SLC30-VL3	
	Use with and DW	all SLC30 types DHM	SLC30-VL6	_
	Use with SLC40 types DD, TD, CD, DE and TE		HW-VL3	_



Canada: 888-317-IDEC



SLC40-VL6

Use with SLC40 types DHM, DW,

and DEM



SLC Series Installation Instructions

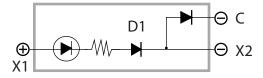
Installation Notes

- Since lamps generate heat, it is recommended that ventilation be provided for cooling when more than ten lamps are lit continuously.
- 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.
- 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.

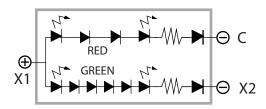
LED Operating Voltage Range: 24V AC/DC ± 10%

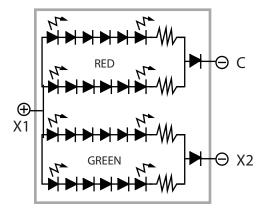
Terminal Arrangements (LED units)

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.

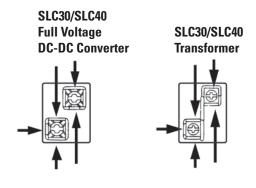


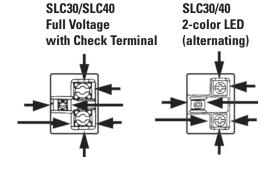
For 2-color alternate units, terminal X1 is positive, and terminals X2 and C (check terminal) are negative.















Installation Instructions, continued

frame, and press the lens into the lens frame as shown in Figure 5.

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.

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 2: SLC30 and SLC40





Figure 8: SLC40

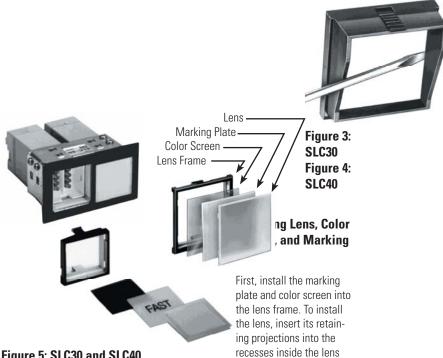


Figure 5: SLC30 and SLC40

USA: 800-262-IDEC Canada: 888-317-IDEC



SLC Series Installation Instructions, continued

Number of Mounting Clips Included

Columns	1 0	r 2	3 t	o 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
	4				\Longrightarrow	\mapsto
3 to 6	4 Clips	6 Clips	6 Clips	8 Clips	8 Clips	10 Clips
	#	#	$\not \cong$	\Rightarrow		
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, Blu	e 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) Light Source	Matte Surface (non-shiny) Light Source	Matte Surface (non-shiny) Light Source	Matte Surface (non-shiny) Light Source (LED only)
Lens Color Marking Screen: Plate: Any Color White	Lens Marking Color Plate: Screen: White Any Color	Lens Marking Color Plate: Screen: White White	Lens Marking Color Plate: Screen: White White