

### **Key Features**

#### Neon, LED, mains LED or filament lamp

- O Bezel sizes from 6.7 to 16.3mm diameter
- O Red, amber, green, blue and clear lenses
- Red, yellow, green, blue and white LEDs
- Wide choice of styles

### **Colours and voltages:**







Red, Yellow, Green, Blue, White 2.0/2.2V Resistors for other voltages available.



Red, Yellow, Green, Blue, White 110-230V ac operation.



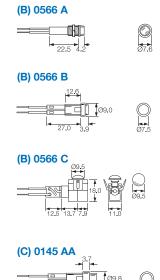
Available with Red, Amber, Green, Clear or Blue lenses 6V, 12/14V, 24/28V.

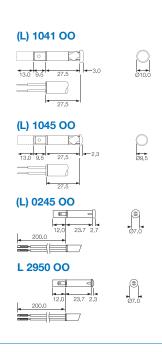
Terminal	Туре	Sealed	Illumination	Colour	Voltage	Options
B 2.8   _	(B) 0566 A	6.0 2.0 max page 6	-⊕- *± *±	Neon & Filament  R Red	1 LED Resistor	C Chrome Bezel Finish
B 2.8	(B) 0566 B	6.0 2.0 max page 6	- <b>⊕</b> *•	A Amber G Green	3 250V Neon	
B 2.8 🗀 L 🚞	(B) 0566 C	6.0 2.0max	-⊕- ** **	B Blue (Special Order)	4 6Vdc LED  5 12Vdc LED	
<b>C</b> 6.3	(C) 0145 AA	5.8 3.0max page 6	-⊕- * * -⊗-	LED	6 24Vdc LED	
L H	(L) 1041 OO	6.3 6.3max page 6	- <del>0</del> - *± -⊗-	Red Y	12/14V Filament  8 24/ 28V Filament	
w L	(L) 1045 OO	6.3  10.0max  page 6	-⊕- *- *- -⊗-	G Green B Blue	125/250Vac LED	

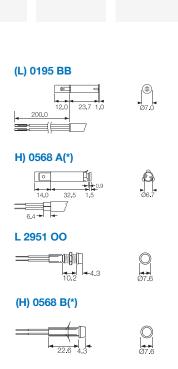


Terminal	Туре	Sealed	Illumination	Colour	Voltage	Options
L E	(L) 0245 OO	7.1 6.3 max page 6	⊕ * * -⊗-	Neon & Filament  R Red	1 LED Resistor	C Chrome Bezel Finish
L 🖺	L 2950 OO	Ø 8.0		Amber	125V Neon	
		0.8-1.6 page 6	<del>*</del> <del>*</del> } -⊗-	G Green	250V Neon	
C 6.3	(L) 0195 BB	8.0 • 0.8-3.0 page 6	- <b>⊕</b> - -⊗-	Blue (Special Order)  C Clear	6Vdc LED  5 12Vdc LED	
LE	L 2951 OO	8.0 * 0.8-1.6	<b>⊕</b>	oloui	<b>6</b> 24Vdc LED	
»		page 6	# # -⊗-	R R	7 12/14V Filament	
H 4.8	H) 0568 A(*)	8.0 0.8-3.5 page 6	-⊕- # -⊗-	Red Y Yellow	8 24/ 28V Filament	
L	(H) 0568 B(*)	8.0 0.8-3.5 page 6	- <b>⊕</b> - #- -⊗-	Green  B  Blue	125/250Vac LED	

### **Dimensions**









#### **Key Features**

## Neon, LED, mains LED or filament lamp

- Bezel sizes from 6.7 to 16.3mm diameter
- Red, amber, green, blue and clear lenses
- Red, yellow, green, blue and white LEDs
- Wide choice of styles

#### **Colours and voltages:**



Available with Red, Amber, Green or Clear lenses 100/130V (marked 110V), 200/250V (marked 230V)



Green, Blue, White 2.0/2.2V Resistors for other voltages available.



White 110-230V ac operation.

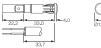


Available with Red, Amber, Green, Clear or Blue lenses 6V, 12/14V, 24/28V.

Terminal	Туре	Illumination	Colour	Voltage	Options	Panel	Approval
LE	(L) 0569 AW	-⊕ * * -⊗-	Neon & Filament  R Red	1 LED Resistor 2 125V Neon	C Chrome Bezel Finish	9.0 1 0.8-2.5 Call sales	71 Kish &
L	(C) 0273 OO	-⊕- #- -⊗-	A Amber G Green	3 250V Neon		9.0 2.0 max page 6	SAT REED &
L	(C) 0278 OO	-⊕- * <del>1</del> * <del>1</del> -⊗-	B Blue (Special Order) C Clear	6Vdc LED  5 12Vdc LED		9.0 9.0 2.0 max page 6	REEL S
L	(C) 0276 AA	-0- * * * -⊗-	LED	6 24Vdc LED <b>7</b> 12/14V Filament		9.5 0.8-2.8 page 6	SA KEED © Keed Keed Keed
L	(C) 0275 OO	-⊕- *÷ +÷ -⊗-	Red Y Yellow	8 24/ 28V Filament		10.0 12.0 page 6	71 Keed (2) Keed Keed (2)
L	(C) 0275 OO	-©- * <del>i</del> * <del>i</del> -⊗-	G Green B Blue	125/250Vac LED		10.0  11.5 max  page 6	RESE GE



Terminal	Туре	Illumination	Colour	Voltage	Options	Panel	Approval
L E	(C) 0276 OO	-0-	Neon & Filament	1	С	Ø 40.0	FN KEEA Ø
K 2.8		*	R	LED Resistor	Chrome Bezel Finish	10.0	KENA (KENA
H 4.8	103	<del>*</del> \(\frac{\lambda}{\text{\tin}\text{\tetx{\text{\tetx{\text{\text{\text{\text{\texi}\text{\texi}\text{\text{\text{\ti}\text{\text{\text{\text{\text{\texi}\text{\text{\ti}\ti}\text{\texi}\text{\text{\texi}\text{\text{\text{\texi}\text{\tet	Red	2	Dezel Fillisii	2.8 max	<b>91</b> KEM <b>(B</b>
C 6.3		<b>©</b>	Α	125V Neon		page 6	Kens
L 🚉	(C) 0277 OO		Amber			$\sim$	51 - A
K 2.8			G	3		10.0	SAT KETA
H 4.8		<del>*</del>	Green	250V Neon		12 max	KEDA
<b>C</b> 6.3			В	4		page 6	KEDA
L E	(C) 0273 LL	<del>-</del>	Blue	6Vdc LED		-	
K 2.8		₩ ₩	(Special Order)	-		10.0	KEDA (B
H 4.8		<del>- 1</del>	С	5 12Vdc LED		0.6-2.0	KEDA GD
<b>C</b> 6.3			Clear	12 VGO EED		page 6	KEDA
L	(C) 2820 OO			6			
K 2.8	(6) 2020 00	<del>-</del>		24Vdc LED		12.0	<i>91</i> K⊞# <b>®</b>
H 4.8		<del>*</del>	LED	7		0.75-2.0	KEDA
C 6.3		-⊗-	R	12/14V Filament		page 6	KECA
. *	(C) 2821 OO		Red	8			
L	(0) 2021 00	- <b>⊕</b> <del>-</del>	Υ	24/ 28V Filament		12.0or12.	
H 4.8		*	Yellow			012.0 = 0.8-2.5 012.7 = 1.1-2.5	KEDA SD
<b>C</b> 6.3				9		page 6	KEDA
. *	(C) 0586 OO		<b>G</b> Green	125/250Vac LED			
L	(C) 0388 OO	-⊕- -±				21.5	A77 KEDW 🐠
H 4.8	The state of the s	<del>8.</del> <del>2.</del>	<b>B</b> Blue			0.8-1.5	KEDA KEDA
<b>C</b> 6.3			blue			page 6	KEDA
Dimensions							
(L) 0569 AW	(C)	) 0275 OO	(C) 027	3 LL			





























(C) 0275 OO







(C) 0278 OO

















(C) 0276 AA



















#### **Key Features**

- Neon, LED, mains LED or filament lamp
- Bezel sizes from 6.7 to 16.3mm diameter
- Red, amber, green and clear lenses
- Red, yellow, green, blue and white LEDs
- Wide choice of styles

#### **Colours and voltages:**



Available with Available with Red, Amber, Green or Clear lenses 100/130V (marked 110V), 200/250V (marked 230V)



Green, Blue, White 2.0/2.2V Resistors for other voltages available.



Green, Blue, White 110-230V ac operation.



Available with Red, Amber, Green, Clear or Blue lenses 6V, 12/14V, 24/28V.

Terminal	Туре	Illumination	Colour	Voltage	Options	Panel	Approval
L	(C) 2870 OO  C) 0589 OO	⊕ # -⊗-	Neon & Filament  R Red  A Amber  G Green	1 LED Resistor 2 125V Neon 3 250V Neon	C Chrome Bezel Finish	12.7  Page 6  12.7  12.7  12.7  12.7  page 6	
L E	L 0081 00	-⊕- ** ** -⊗-	B Blue (Special Order) C Clear	6Vdc LED  5 12Vdc LED		9.5 page 6	KESA
L	(C) 0177 00	-⊕- * <del>†</del> * <del>†</del> -⊗-	LED R	6 24Vdc LED 7 12/14V Filament		12.7 12.0max page 6	KEEA SE
L	(C) 0067 OO	-©- # # -⊗-	Yellow	8 24/28V Filament 9 125/250Vac LED		12.7 1.14max page 6	RESA RESA RESA
C 6.3	(C) 0180AA	-⊕- + -⊗-	Green B Blue			12.7 19.0 max page 6	N EE S



Terminal	Туре	Illumination	Colour	Voltage	Options	Panel	Approval
L	(C) 0180BB	-⊕- ** -⊗-	Neon & Filament  R Red	1 LED Resistor 2 125V Neon	<b>C</b> Chrome Bezel Finish	13.5 0.9-1.14 page 6	KEE S
L	(C) 0579 OO (C) 1092	<ul> <li>→</li> <li>→</li> <li>→</li> <li>→</li> <li>+</li> </ul>	Amber  G Green  B Blue (Special Order)	3 250V Neon 4 6Vdc LED 5		14.0 2.5 max page 6  19.0 4.0max	KIEA SE
			Clear  LED  R Red  Y Yellow  G Green  B Blue	6 24Vdc LED 7 12/14V Filament 8 24/ 28V Filament 9 125/250Vac LED		page 6	

#### **Dimensions**

### (C) 2870 OO













## (C) 1092



### C) 0589 OO



L 0081 OO



### (C) 0180AA



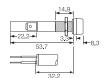








### (C) 0177 OO





### (C) 0180BB





#### (C) 0579 OO







#### **Key Features**

- Neon, LED, mains LED or filament lamp
- Bezel sizes from 6.7 to 16.3mm diameter
- Red, amber, green and clear lenses
- Red, yellow, green, blue and white LEDs
- Wide choice of styles

#### **Colours and voltages:**



Available with Available with Red, Amber, Green or Clear lenses 100/130V (marked 110V), 200/250V (marked 230V)



Green, Blue, White 2.0/2.2V White 110-230V ac Resistors for other voltages available. operation.





Available with Red, Amber, Green, Clear or Blue lenses 6V, 12/14V, 24/28V.

Terminal	Туре	Illumination	Colour	Voltage	Options	Panel	Approval
H 4.8	H 0581 AY  L 0234 OO  L 0233 OO		Neon & Filament  R Red  A Amber  G Green  B Blue (Special Order)  C Clear	1 LED Resistor 2 125V Neon 3 250V Neon 4 6Vdc LED 5 12Vdc LED	C Chrome Bezel Finish	18.2/18.3	<b>71</b> KEE <b>3</b>
			Red Y Yellow G Green B Blue	6 24Vdc LED 7 12/14V Filament 8 24/ 28V Filament 9 125/250Vac LED			

#### **Dimensions**

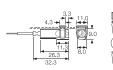
#### H 0581 AY



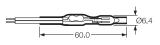




#### L 0234 OO



#### L 0233 OO



Neon tube, resistor and flexible lead assembly, protected by "shrunk on" transparent sleeving.

Indicator Lights
To match 8500, 8600, R13, 1500, 1550, 5500, 8300 and 7000 switches



#### **Key Features**

- Indicator lights
- Neon or filament lamp
- O Bezel sizes from 6.7 to 16.3mm diameter
- Red, amber green and clear
- Red, amber and green filament lamps
- Styles to match rocker and push switches

#### **Colours and voltages:**

Neon Available with Red, Amber, Green or Clear lenses 100/130V (marked 110V), 200/250V (marked 230V)

Filament lamp Available with Red, Amber or Green lenses 6V, 12/14V, 24/28V

Terminal	Туре	Illumination	Colour	Voltage	Options				Panel		
H 4.8	(C) 0276 OO	-⊗-	Neon & Filament	LED Resistor 2 125V Neon	C Chrome Bezel Finish	Body Code B	Panel Thickness 0.75-1.25 1.25-2.0 2.0-3.0		t-out Y 12.9/13.0 12.9/13.0 12.9/13.0	21.0	X
H 4.8 T	(C) 0277 00	-⊕-	A Amber G Green	3 250V Neon		Body Code B	Panel Thickness 0.75-1.25 1.25-2.0 2.0-3.0		12.9/13.0 12.9/13.0 12.9/13.0 12.9/13.0	21.0	× ×
H 4.8	(C) 0273 LL	-⊕-	Blue (Special Order)	5 12Vdc LED			uct details on p	pages 33 ckness up to 3.0		₹2.4 Ø20.2	
C 6.3 H 4.8 K 2.8 T U	(C) 2820 OO	- <b>⊕</b> - <del>‡</del> -⊗-	C Clear LED	6 24Vdc LED 7 12/14V Filament		Body Code A B L R	Y 12.2/12.3 11.0/11.1 11.0/11.1 14.0/14.1 11.5/11.6	-out X 27.2/27.3 30.0/30.1 30.0/30.1 28.5/28.6 28.5/28.6	Y     X       14.0     30       14.0     33       14.0     31       17.0     31       14.0     30	.2 .4 .9 .5	X
C 6.3	(C) 2821 OO	-⊕- *+ -⊗-	Yellow  G	8 24/ 28V Filament 9 125/250 Vac LED		Body Code A B L R	Cut- Y 22.3/22.4 22.1/22.2 22.1/22.2 23.0/25.4 22.3/22.4	-out X 27.2/27.3 30.0/30.1 30.0/30.1 28.4/28.5 24.5/28.5	Flange Y X 25.0 30 25.0 33 25.0 32 28.9 33 25.0 30	.2 .4 .0 .2	
C 6.3	(C) 0586 OO	-⊗-	B Blue			Body Code H	Cut-out Ø25.0/25.2	Flange Ø28.0		25.0/25.2	Ø28.0

#### **Approvals**

(C) 0276 OO N S (C) 2821 OO N KEGA @

(C) 0586 OO N KEA (S (C) 0277 OO N KEE G

(C) 2820 OO N S S S

## Low Voltage Lampholders



#### **Key Features**

#### **Colours and voltages:**

- O Up to 50V
- Red, Amber, Green, Blue and Clear
- C Linestra/Philinea lamp holder

These lampholders are suitable for up to 50V max. Bulbs will be supplied (dependent on order quantity) if a voltage is specified.

Colours - Red, Amber, Green, (Clear & Blue, check availability).

Terminal	Туре	Sealed	Illumination	Colour	Voltage	Options	Panel
T	T0061 OO (LES)	S	N	Neon & Filament	1	С	9.5
	4	Sealed	Neon	Red	LED Resistor	Chrome Bezel Finish	0.9-1.14 T85
			L	A	125V Neon		
C	(C) 0277 OO		DC LED	Amber	3		12.7 1.14max
				<b>G</b> Green	250V Neon		1.14max
			Mains AC LED	В	4		100
T 6.3	(C) 0273 LL			Blue (Special Order)	6Vdc LED		
			F	С	5		9.6max
			Mains AC LED	Clear	12Vdc LED		■ T85
T	(C) 2820 OO			LED	6		Ø 12.7
- 44				R	24Vdc LED		9.6max
				Red	7 12/14V Filament		<b>☐</b> T85
				Y			
S DE	(C) 2821 OO			Yellow	8 24/ 28V Filament		
				G			
	a			Green	9 125/250Vac LED		Ω
				B Blue	.10,200 140 229		T85

#### T0061 OO (LES)











#### (C) 0273 LL





#### (C) 0277 OO







(C) 2821 OO

(C) 2820 OO





## Low Voltage Lampholders





#### **Key Features**

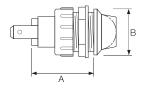
- O Up to 50V
- MES or MBC bulb
- Flat and domed lens
- Brass or nylon bodies
- Red, Amber, Green, Blue and Clear lenses

#### **Approvals and specifications**

Bulbs will be supplied (dependant on order quantity) if a voltage is specified. These lampholders are suitable for up to 50V max.

Colours - Red, Amber, Green, (Clear & Blue, check availability). Brass bodies have polished chrome finish.

#### **Dimensions and Options**



F0445 MO P.V.C. Insulating terminal cover.



Terminal	Туре	Sealed	Colour	Bulb Voltage	Options	Panel Lens	Approval
C 9.1 6.3 x 0.8	1090 MES (E10)	S Sealed	R Red Y Yellow G Green B Blue	6 6V 12 12V 24 24V Max of 50V	C Chrome Bezel Finish	The color of the	
©2.0 9.1 Solder	MBC (BA9s) (C and S Terminals only)		C Clear			The image	
Screw and Clamp							

# LED Lamps and LED Lampholders LED Lampholders can be supplied with or without LEDs



### **Key Features**

#### **Colours and voltages:**

○ LED lampholders

Colours: Red, Yellow, Green and Blue LEDs (High Intensity is standard. Option of extra super bright).

Supplied with or without LEDs Black or Chrome finish

Voltages: LEDs are available for direct connection to 2.0/2.2V or 12Vdc

For other voltages contact sales.

Terminal	Туре	Sealed	Body Colour	LED Colour	Voltage	Panel Cutout	Approval	Dimensions
W LED fitted  A LED not fitted  T  L LED & Wires fitted	(W) 1047 OO	<b>S</b> Sealed	B Black — Blank	R Red Y Red	1 LED Resistor 4 6Vdc LED	6.3 6.3max T85		14.5 +/- 0.36
W LED fitted  A LED not fitted  J J  L LED & Wires fitted	(L) 1048 OO			G Green B Blue	5 12Vdc LED 6 24Vdc LED	8.0 5.5max T85		2.0
W LED fitted  A LED not fitted  TT  L LED & Wires fitted	(W) 1050 OO					8.0 1.0 7.0max T85		2.9 010.0
W LED fitted  TT  L LED & Wires fitted	(L) 1035 OA					4.5 10.9-1.6 185		4.30 V 1.50 S.08
W LED fitted  TT  L LED &  Wires fitted	(L) 1036 OA					6.0 0.9-1.6 T85		5.85 ¥ 1.0 200.0
W LED fitted  J J  L LED & Wires fitted	(L) 1037 OA					6.35 0.9-1.6 T85		6.15 V 1.0 0

# LED Lamps and LED Lampholders Sealed to IP67



#### **Key Features Colours and voltages:**

O IP67 front bezel sealing

Red, Yellow Green and Blue LEDs.

O LED lampholders

(High Intensity is standard. Option of extra super

Supplied with or without LEDs

Voltages:

O Black or Chrome finish

LEDs are available for direct connection to

2.0/2.2V or 12Vdc.

For other voltages contact sales.

Terminal	Туре	Sealed	Body Colour	LED Colour	Voltage	Panel	Approvals	Dimensions
W LED fitted	(W) 1047 OO	<b>S</b> Sealed	<b>B</b> Black	R Red	<b>1</b> LED Resistor	8.0 * 5.5 max	KEMA	(W) 1047 OO
A LED not fitted			– Blank	Y Red	4 6Vdc LED	T85		11.0
L LED & Wires fitted	(L) 1048 OO			G Green	5 12Vdc LED	8.0 5.5max	KEMA	(L) 1048 OO → (~1.0
ΨΨ				Blue	24Vdc LED	T85		2.0
W LED fitted	(W) 1050 OO					8.0 *** 7.0max	KEMA	(W) 1050 OO -> +1.0
A LED not fitted						T85		17.9
L LED & Wires fitted	(W) 1050 OO					8.0 7.0max	KEMA	(W) 1050 OO
ΨΨ						T85		13.4

#### Properties

O-ring sealing equivalent to IP67, of both the LED to bezel, and bezel to panel is available where shown.

The nylon base mouldings are polarity marked.

Body Material and Finish

Chromed brass or Black oxide coated brass.

Items prefixed 'A' are supplied without LEDs.

LED wires or PVC covered wire leads 125mm min length wires, 6.3mm standard strip. Alternative colours, length and strip available.

## Indicator Lights - Sealed to IP67



#### **Key Features**

- O IP67 Panel Sealing
- Supplied complete with gaskets/'O' rings
- Neon, LED, mains LED or filament lamp
- Bezel sizes from 7.6 to 22.9mm diameter
- Red, amber, green, blue and clear lenses
- O Red, yellow, green, blue and white LEDs
- O Wide choice of styles

### **Colours and voltages:**



Available with Red, Amber, Green or Clear lenses 100/130V (marked 110V), 200/250V (marked 230V)



Red, Yellow, Green, Blue, 2.0/2.2V Resistors for other voltages available.



Green, Blue, 110-230V ac operation.



Available with Red, Amber, Green, Clear or Blue lenses 6V, 12/14V, 24/28V.

Terminal	Туре	Sealed	Illumination	Colour	Voltage	Option	Panel Cutout	Approval
L E	(L) 1041 OS	<b>S</b> Sealed	-⊕- * * -⊗-	R Red A Amber	1 LED Resistor 2 125V Neon	C Chrome Bezel Finish	6.3 5.3max	KEDA
L E	(L) 0245 OS		-⊕- ** ** -⊗-	G Green  B Blue	<b>3</b> 250V Neon		7.1 4.6max	KEWA
L C 6.3 K 2.8 D H 4.8	(C) 0275 OS		-⊕- *± *- -⊗-	(Special)  C Clear	4 6Vdc LED 5 12Vdc LED		10.0 11.15max	KEWA
L C 6.3 K 2.8 C H 4.8	(C) 0277 OS		-⊕- ** *- -⊗-	R Red	<b>6</b> 24Vdc LED		10.0 11.15max	KEMA
L 6.3 C 4.8	(C) 0177 OS		- <b>⊕</b> - *- *- -⊗-	Y Yellow G Green	7 12/14V Filament 8 24/ 28V Filament		12.7 11.15max	KEMA
L 6.3	(C) 1092 FFS		-⊕- *	B Blue W White	<b>9</b> 125/250Vac LED		19.0 2 4.0 max	KEMA

#### (L) 1041 OS













#### (C) 0275 OS





#### (C) 0277 OS





#### (C) 0177 OS





#### (C) 1092 FFS





## Indicator Lights - Sealed to IP67



#### **Key Features**

- O IP67 Panel Sealing
- Supplied complete with gaskets/'O' rings
- Neon, LED, mains LED or filament lamp
- O Bezel sizes from 7.6 to 22.9mm diameter
- Red, amber, green, blue and clear lenses
- Red, yellow, green, blue and white LEDs

#### **Colours and voltages:**

These lampholders are suitable for up to 50V max. Bulbs will be supplied (dependent on order quantity) if a voltage is specified.

Colours - Red, Amber, Green, (Clear & Blue, check availability).

Terminal	Туре	Sealed	Colour	Bulb Voltage	Options	Panel	Approvals	Dimensions	
C 6.3	C1090 FPS (MES)	<b>S</b> Sealed	R Red A Amber	6 6V <b>12</b> 12V	C Chrome Bezel Finish	19.0 4.0max	Kena	30.2 12.5 max	
<b>C</b> 6.3	C1091 FQS (MBC)		G Green B Blue (Special)	<b>24</b> 24V		7.1 4.6max	KEMA	35.0 12.5 max	
T Þ	T0062 AOS (Midget flange) Chrome bezel T0063 AOS (LES) Chrome bezel		<b>C</b> Clear			10.0 † 11.15max	KEUR	21.3 9.1	Ø14.7
T	T0062 MOS (LES & Midget flange T0063 MOS (LES)					10.0 11.15max	KEMA	21.3 9.5	Ø14.7

## **F0445 MO**P.V.C. Insulating terminal cover. For use with C1090 & C1091



### General Information



#### Terms and Conditions of Sale

All orders are accepted subject to our Standard Terms & Conditions. Copies of these are available: www.elektron-technology.com/terms/

#### Health & Safety

Bulgin proprietary components are designed, manufactured, assessed and tested to comply with good commercial quality and engineering standards. They are safe and reliable in use within the vast majority of normal environments. In the interest of safety, application in certain extreme destructive or unsuitable environments must be avoided. The following restrictions are given as guidance:

- External or wet areas (exposed to rain or spray), except where designated "Sealed".
- Atmospheres designated as "explosive", except where designated "Gas Tight" or "Explosion Proof".
- Highly corrosive atmospheres or subject to contamination by corrosive chemicals. (Avoid the use of corrosive acid soldering flux. Use an approved Electrical Grade).
- Atmospheres containing a high density of abrasive dust (mechanically operated components).
- Contamination with Silicone or Silicone Compounds (switches).
- Areas or levels unprotected from severe impact by heavy bodies moving in close proximity (panel mounted components).
- Extremes of temperatures, beyond the specified limits.
- Electric supply voltage or load current above the published maximum ratings.

#### General

To ensure electrical safety as far as is reasonably practical, these products should be properly applied, installed and maintained by or under the supervision of competent persons in accordance with good engineering practice.

#### **Dimensions**

All dimensions are in millimetres (mm) unless otherwise stated.

#### The CE Marking Directive

Equipment bearing the CE mark is allowed free circulation throughout Europe. The products in this catalogue, when installed correctly, comply with the CE requirements where it relates to them.

#### The Low Voltage Directive

The Low Voltage Directive 2006/95/EC seeks to ensure that electrical equipment within certain limits both provides a high level of protection for European citizens and enjoys a single market in the European Union. Where applicable, Bulgin products comply with the requirements of this directive.

#### RoHS

These European Directives introduced environmental responsibilities for electrical and electronics equipment manufacturers. The RoHS (Restriction of use of certain Hazardous Substances) regulation (Directive 2002/95/EC) came into force July 2006. The WEEE (Waste Electrical and Electronic Equipment) regulation (Directive 2002/96/EC), came into force January 2007.

The RoHS directive effectively bans the use of certain chemicals, these are defined as:

- Lead
- Cadmium
- Mercury
- Hexavalent Chromium
- Polybrominated Biphenyl (PBB) flame retardant
- Polybrominated Diphenyl Ether (PBDE) flame retardant (including Deca BDE)

Action has been taken to ensure all standard products meet the requirements of this directive. All packing carries RoHS compliance information as conformation.

#### **REACH**

REACH (Registration, Evaluation, Authorisation and Restriction of Chemicals) is the new system for controlling chemicals in Europe and became law in the UK on 1 June 2007. Elektron Technology as a manufacturer of articles, are reliant on our supply chain to ensure that the substances/articles we use, are in compliance with the EC1907/2006, REACH Regulations.

Our articles and their packaging, based on our knowledge at this point, do not contain any of the 15 substances on the SVHC Candidate List, dated 28th October 2008, nor any of the 14 substances added to the SVHC Candidate List, dated 13th January 2010, nor Acrylamide added to the SVHC Candidate List, dated 30th March 2010, according to article 59 (1, 10) of Regulation (EC) No. 1907/2006 (REACH), in a concentration above 0.1% weight

If this situation changes we confirm that this information will be passed through the supply chain in a timely manner.