

Accessories: ø 22mm

► LEGEND PLATES - EMERGENCY STOP

PLASTIC LEGEND PLATES (27.4mm diameter hole)

Part Number



LWE60300

Plastic - Yellow with black engraving

60mm diameter

Blank
EMERGENCY STOP
EMO
ARRET D'URGENCE
NOT AUS

LWE60
LWE60300
LWE60900
LWE60100
LWE60200

70mm diameter

Blank
EMERGENCY STOP
EMO

LWE70
LWE70300
LWE70900

80mm diameter

Blank
EMERGENCY STOP
EMO

LWE80
LWE80300
LWE90900

NOTES:

- 1) Custom diameters and engravings available please contact us for details.
- 2) Contact us for use with guards on page 86.

METAL LEGEND PLATES (22.4mm diameter hole)



LWE16300

Metal - Yellow with black lettering

60mm diameter

EMERGENCY STOP
ARRET D'URGENCE
NOT AUS

LWE16300
LWE16100
LWE16200

80mm diameter

EMERGENCY STOP
ARRET D'URGENCE
NOT AUS

LWE00300
LWE00100
LWE00200

Accessories: ø 22mm

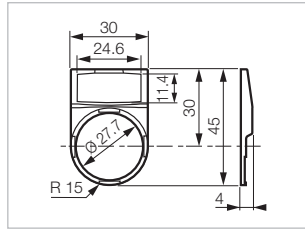
► COMPLETE LEGEND PLATES (FRAME + INSERT)

Standard model - 30 x 45 mm

Part Number



LWP31



Round shape
Black frame and legend plate unassembled
2 lines maximum, 13 characters per line

WITHOUT ENGRAVING

- Red
- Black
- White
- Alu

LWP31
LWP33
LWP35
LWP39

WITH TEXT OR SYMBOL (see p. 80 to 83)
Code to be added at the end of the part number.
For custom text or symbol please contact us.

- Red - white engraving
- Black - white engraving
- White - black engraving
- Alu - black engraving

LWP31 [] [] [] []
LWP33 [] [] [] []
LWP35 [] [] [] []
LWP39 [] [] [] []

PROTECTIVE MASK FOR LEGEND PLATE (PAPER OR OTHER ...)

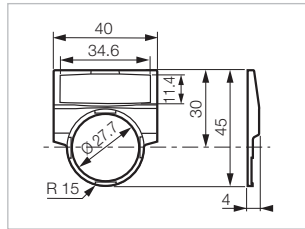
- Transparent

LWP37

Large model - 40 x 45 mm



LWG33



Round shape
Black frame and legend plate unassembled
2 lines maximum, 18 characters per line

WITHOUT ENGRAVING

- Red
- Black
- White
- Alu

LWG31
LWG33
LWG35
LWG39

WITH TEXT OR SYMBOL (see p. 80 to 83)
Code to be added at the end of the part number.
For custom text or symbol please contact us.

- Red - white engraving
- Black - white engraving
- White - black engraving
- Alu - black engraving

LWG31 [] [] [] []
LWG33 [] [] [] []
LWG35 [] [] [] []
LWG39 [] [] [] []


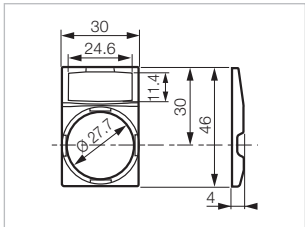
PROTECTIVE MASK FOR LEGEND PLATE (PAPER OR OTHER ...)


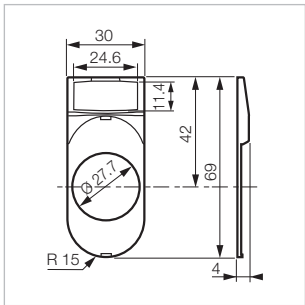
- Transparent

LWG37

Accessories: Ø 22mm

► COMPLETE LEGEND PLATES (FRAME + INSERT)

Standard model - 30 x 46 mm		Part Number
		
LWP45		
<p>Square shape Black frame and legend plate unassembled 2 lines maximum, 13 characters per line</p>		
<p>WITHOUT ENGRAVING</p>		
<p>● Red</p>		LWP41
<p>● Black</p>		LWP43
<p>○ White</p>		LWP45
<p>● Alu</p>		LWP49
<p>WITH TEXT OR SYMBOL (see p. 80 to 83) Code to be added at the end of the part number. For custom text or symbol please contact us.</p>		
<p>● Red - white engraving</p>		LWP41□□□
<p>● Black - white engraving</p>		LWP43□□□
<p>○ White - black engraving</p>		LWP45□□□
<p>● Alu - black engraving</p>		LWP49□□□
<p>PROTECTIVE MASK FOR LEGEND PLATE (PAPER OR OTHER ...)</p>		
<p>○ Transparent</p>		LWP47

Standard model - 30 x 69 mm		
		60 Round shape for Twin and Triple Touch operators Black frame and legend plate unassembled 2 lines maximum, 13 characters per line
		WITHOUT ENGRAVING
		<ul style="list-style-type: none">● Red● Black○ White● Alu
		LWP21
		LWP23
LWP25		
LWP29		

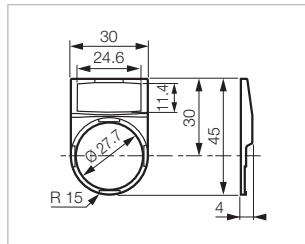
Accessories: ø 22mm

► LEGEND PLATES - FRAMES ONLY

ROUND	Standard model	Part Number
-------	----------------	-------------



LWP3



For use with standard model legend plate inserts

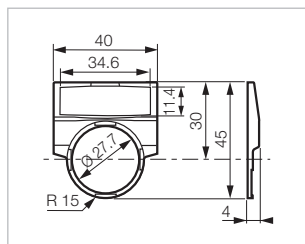
- Black

LWP3

ROUND	Large model	
-------	-------------	--



LWG3



For use with large model legend plate inserts

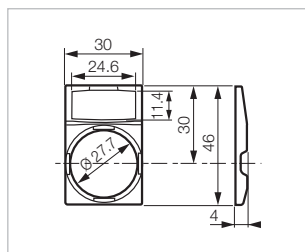
- Black

LWG3

SQUARE	Standard model	
--------	----------------	--



LWP4



For use with standard model legend plate inserts

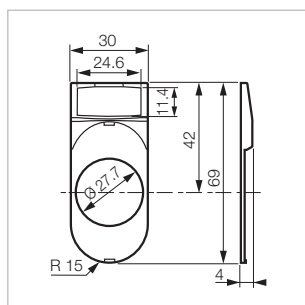
- Black

LWP4

FOR DOUBLE AND TRIPLE TOUCH	Standard model	
-----------------------------	----------------	--



LWP2



For use with standard model legend plate inserts

- Black

LWP2

Accessories: Ø 22mm

► LEGEND PLATES - INSERTS ONLY

TO BE ENGRAVED

Standard model

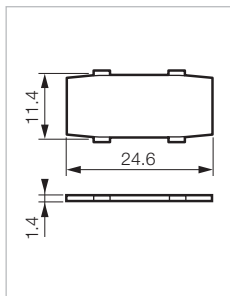
Part Number



LIA5



LIA1



2 lines maximum
13 characters per line
For use with standard model legend plate frames

WITHOUT ENGRAVING

- Red
- Black
- White
- Alu

LIA1
LIA3
LIA5
LIA9

WITH TEXT OR SYMBOL (see p. 80 to 83)
Code to be added at the end of the part number.
For custom text or symbol please contact us.

- Red - white engraving
- Black - white engraving
- White - black engraving
- Alu - black engraving

LIA1□□□
LIA3□□□
LIA5□□□
LIA9□□□

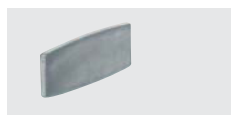
PROTECTIVE MASK FOR LEGEND PLATE (PAPER OR OTHER ...)

- Transparent

LIA7

TO BE ENGRAVED

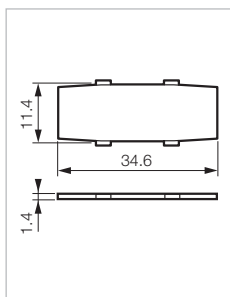
Large model



LIB9



LIB3



2 lines maximum
18 characters per line
For use with large model legend plate frame

Without engraving

- White
- Red
- Alu
- Black

LIB5
LIB1
LIB9
LIB3

WITH TEXT OR SYMBOL (see p. 80 to 83)
Code to be added at the end of the part number.
For custom text or symbol please contact us.

- White - black engraving
- Red - white engraving
- Alu - black engraving
- Black - white engraving

LIB5□□□
LIB1□□□
LIB9□□□
LIB3□□□

Protective mask for legend plate (paper or other ...)

- Transparent

LIB7

Technical Specifications

► GENERAL

Characteristics	Data	Standards
► Storage temperature	- 40 °C to + 70 °C	
► Operating temperature	- 25 °C to + 70 °C	
► Climatic resistance	Constant humid heat Cyclic damp heat Resistance to sea air	IEC 60068-2-3 IEC 60068-2-30 IEC 60068-2-52
► Degree of protection	IP 66 for standard heads IP 67 for shrouded heads IP 66 for equipped control stations IP 20 at the rear of the panel for contact blocks and one piece pilot lights Type 1, 2, 3, 3R, 3S, 4, 4X, 12, and 13 for heads and control stations	IEC 60529 NEMA standard
► Protection against mechanical impacts	IK 05 illuminated and non-illuminated heads IK 07 empty control station	IEC 62262
► Electrical insulation	Class II - heads and control station	IEC 60947-5-1
► Terminal marking		IEC 60947-1
► Tightening torques	Locking ring: recommended 3 N.m terminals: max. 1.2 N.m	
► Approvals	UL United states and Canada BV Bureau Véritas Certification OC/CB	UL 508, CSA 22.2 Marine rules IEC 60947-5-1 IEC 60947-5-5 IEC 60947-5-4
► Vibrations	withstand vibration Fc test: 2 to 25 Hz, 1.6 mm; 25-100 Hz, 4 g	IEC 60068-2-6

Technical Specifications

► HEADS

Characteristics	Data	Standards
► Mechanical endurance	Spring return: 5,000,000 Push-push: 500,000 Selector switches: 300,000 Mushroom head maintained function EN 418: 10,000 Mushroom head maintained function: 150,000	
► Activation force in N	Spring return + NO: 6.5 Spring return + NC: 4.5 Additional NO contact: 4.5 Additional NC contact: 3.0 Push-pull mushroom head + NO + NC: 27 Push-turn mushroom head + NO + NC: 22 Push-pull mushroom head EN 418 + NO + NC: 37 Push-turn mushroom head EN 418 + NO + NC: 60	
► Activation force in Nm	Selector switch + NO: 0.04 Additional NO contact: 0.03	

► EMERGENCY STOP ACTUATORS - EN 418/ISO 13850:

According to IEC/EN60947-5-5, the emergency stop function can be provided by an EN418/ISO13850 mushroom head combined with a "positive opening" NC contact block.

The mechanism of our EN418/ISO13850 mushroom heads is so designed that a "push" action of sufficient force to open the contact systematically triggers an irreversible locking of this opening. This generates an "emergency stop" signal which can be cancelled only by deliberate manual resetting of the mushroom head (pull and turn or unlocking by key).

This function allows to generate an "emergency stop" signal for any equipment subject to directive 98/37CE (machinery safety) completed by the IEC 60204-1 standard.

The EN418/ISO13850 mushroom heads also comply with the safety requirements detailed in standards EN418 and ISO13850.

Technical Specifications

► CONTACT BLOCKS

Screw and plug-in connection characteristics	Data		Standards																																												
▶ Rated insulation voltage	690 V AC 600 V AC		IEC/EN 60947-1 UL 508																																												
▶ NC contacts	Positive opening		IEC/EN 60947-5-1																																												
▶ Rated impulse voltage Uimp Pollution degree	6kV 3																																														
▶ Conventional thermal current in free air conditions	AC15: 10 A DC13: 2.5 A		IEC 60947-5-1																																												
▶ Electrical ratings	Alternating current AC15 - A 600 Ue = 120 V, Ie = 6 A Ue = 240 V, Ie = 3 A Ue = 380 V, Ie = 1.9 A Ue = 480 V, Ie = 1.5 A Ue = 500 V, Ie = 1.4 A Ue = 600 V, Ie = 1.2 A Minimum operating current - standard blocks Ue = 24 V DC and Ie = 5 mA Failure rate < 10 ⁻⁸ UL508 Alternating Current 50/60Hz - A600 Continuous Current - 10 amps Rated Voltage - 600Vac	Direct current DC13 - Q 600 Ue = 125 V, Ie = 0.55 A Ue = 250 V, Ie = 0.27 A Ue = 400 V, Ie = 0.15 A Ue = 500 V, Ie = 0.13 A Ue = 600 V, Ie = 0.1 A - gold plated contacts Ue = 5 V DC and Ie = 1 mA Failure rate < 10 ⁻⁸ Direct Current - Q600 Continuous Current - 2.5 amps Rated Voltage - 600Vdc	IEC 60947-5-1																																												
	<table><tr><td></td><td>Max. Amps</td><td>Max. Amps</td><td></td><td>Max. Amps</td><td>Max. Amps</td></tr><tr><td>Voltage</td><td>Make</td><td>Break</td><td>Voltage</td><td>Make</td><td>Break</td></tr><tr><td>72</td><td>60</td><td>10</td><td>24</td><td>2.5</td><td>2.5</td></tr><tr><td>120</td><td>60</td><td>6.0</td><td>125</td><td>0.55</td><td>0.55</td></tr><tr><td>240</td><td>30</td><td>3.0</td><td>250</td><td>0.27</td><td>0.27</td></tr><tr><td>480</td><td>15</td><td>1.5</td><td>301-600</td><td>0.10</td><td>0.10</td></tr><tr><td>600</td><td>12</td><td>1.2</td><td></td><td></td><td></td></tr></table>		Max. Amps	Max. Amps		Max. Amps	Max. Amps	Voltage	Make	Break	Voltage	Make	Break	72	60	10	24	2.5	2.5	120	60	6.0	125	0.55	0.55	240	30	3.0	250	0.27	0.27	480	15	1.5	301-600	0.10	0.10	600	12	1.2							
	Max. Amps	Max. Amps		Max. Amps	Max. Amps																																										
Voltage	Make	Break	Voltage	Make	Break																																										
72	60	10	24	2.5	2.5																																										
120	60	6.0	125	0.55	0.55																																										
240	30	3.0	250	0.27	0.27																																										
480	15	1.5	301-600	0.10	0.10																																										
600	12	1.2																																													
▶ Electrical operating life	1 million cycles for: - AC15 - B 300 Ue = 120 V, Ie = 3 A Ue = 240 V, Ie = 1.5 A		- DC13 - R 300 Ue = 125 V, Ie = 0.22 A Ue = 250 V, Ie = 0.1 A																																												
▶ Applicable wire sizes	Rigid or flexible wire without ferrule: 0.5 mm ² to 2 x 2.5 mm ² Rigid or flexible wire with ferrule: 0.5 mm ² to 2 x 1.5 mm ²																																														

Technical Specifications

▶ CONTACT BLOCKS

Faston connection	Data		Standards																															
▶ Rated insulation voltage	320 V AC 300 V AC		IEC/EN60947-1 UL 508																															
▶ NC contacts	Positive opening		IEC/EN 60947-5-1																															
▶ Rated impulse withstanding voltage Uimp Pollution degree	6 kV 3																																	
▶ Conventional thermal current in free air conditions	AC 15: 10 A DC 13: 2.5 A		IEC 60947-5-1																															
▶ Electrical ratings	Alternating current AC15 - A 300 Ue = 120 V, Ie = 6 A Ue = 240 V, Ie = 3 A Minimum current of use Ue = 24 V DC and Ie = 5 mA Failure rate < 10 ⁻⁸ UL508 Alternating Current 50/60Hz - A300 Continuous Current - 10 amps Rated Voltage - 300Vac		Direct current DC13 - Q 300 Ue = 125 V, Ie = 0.55 A Ue = 250 V, Ie = 0.27 A IEC 60947-5-1 Direct Current - Q300 Continuous Current - 2.5 amps Rated Voltage - 300Vdc																															
	<table><tr><td></td><td>Max. Amps</td><td>Max. Amps</td></tr><tr><td>Voltage</td><td>Make</td><td>Break</td></tr><tr><td>72</td><td>60</td><td>10</td></tr><tr><td>120</td><td>60</td><td>6.0</td></tr><tr><td>240</td><td>30</td><td>3.0</td></tr></table>		Max. Amps	Max. Amps	Voltage	Make	Break	72	60	10	120	60	6.0	240	30	3.0	<table><tr><td></td><td>Max. Amps</td><td>Max. Amps</td></tr><tr><td>Voltage</td><td>Make</td><td>Break</td></tr><tr><td>24</td><td>2.5</td><td>2.5</td></tr><tr><td>125</td><td>0.55</td><td>0.55</td></tr><tr><td>250</td><td>0.27</td><td>0.27</td></tr></table>		Max. Amps	Max. Amps	Voltage	Make	Break	24	2.5	2.5	125	0.55	0.55	250	0.27	0.27		
	Max. Amps	Max. Amps																																
Voltage	Make	Break																																
72	60	10																																
120	60	6.0																																
240	30	3.0																																
	Max. Amps	Max. Amps																																
Voltage	Make	Break																																
24	2.5	2.5																																
125	0.55	0.55																																
250	0.27	0.27																																
▶ Electrical operating life	1 million cycles for: - AC15 - B 300 Ue = 120 V, Ie = 3 A Ue = 240 V, Ie = 1.5 A		- DC13 - R 300 Ue = 125 V, Ie = 0.22 A Ue = 250 V, Ie = 0.1 A																															
▶ Faston size	6.35 mm (0.25") or 2 x 2.8 mm (0.110")																																	

Technical Specifications

► CONTACT BLOCKS

Pin-style connection (for PCB)	Data		Standards	
► Rated insulation voltage	250 V AC 250 V AC		IEC/EN60947-1 UL 508	
► NC contacts	Positive opening		IEC/EN 60947-5-1	
► Rated impulse withstanding voltage Uimp Pollution degree	4 kV 3			
► Conventional thermal current in free air conditions	AC 15: 5 A DC 13: 1 A		IEC 60947-5-1	
► Electrical ratings	Alternating current AC 15 - B 300 Ue = 120 V, Ie = 3 A Ue = 240 V, Ie = 1.5 A		Direct current DC13 - R 300 Ue = 125 V, Ie = 0.22 A Ue = 250 V, Ie = 0.1 A	
	Minimum current of use - standard blocks Ue = 24 V DC and Ie = 5 mA Failure rate < 10 ⁻⁸		IEC 60947-5-1 IEC 60947-5-4 - golden contacts Ue = 5 V DC and Ie = 1 mA Failure rate < 10 ⁻⁸	
	UL508 Alternating Current 50/60Hz - B300 Continuous Current - 5 amps Rated Voltage - 300Vac		Direct Current - R300 Continuous Current - 1 amp Rated Voltage - 300Vdc	
	Max. Amps	Max. Amps	Max. Amps	Max. Amps
	Make	Break	Make	Break
Voltage			Voltage	
72	30	5.0	24	1.0
120	30	3.0	125	0.22
240	15	1.5	250	0.11
► Electrical operating life	1 million cycles for: - AC15 - B 300 Ue = 120 V, Ie = 3 A Ue = 240 V, Ie = 1.5 A		- DC13 - R 300 Ue = 125 V, Ie = 0.22 A Ue = 250 V, Ie = 0.1 A	
► Pin diameter	ø 1 mm			

Technical Specifications

▶ LED BLOCKS FOR ILLUMINATED HEADS

Characteristics	Data	Standards
▶ Rated insulation voltage	300 V	IEC/EN 60947-5-1
▶ Rated impulse voltage U _{imp} Pollution degree	4 kV (with filter block see p. 70) 3	IEC/EN 60947-1
▶ Operating voltage	12 to 24 V AC/DC 48 V AC/DC (for LED block) 130 V AC 230 V AC	
▶ Frequency	50 or 60 Hz	
▶ Lifetime at rated supply voltage	Red and yellow: 100 000 hours at 25 °C Other colors: 50 000 hours at 25 °C	
▶ Consumption of LED blocks	Voltage: - 24 V: 25 mA ± 20% - 48 V: 15 mA ± 5% - 130 V: 20 mA ± 10% - 230 V: 16 mA ± 30%	

▶ ONE PIECE PILOT LIGHT BA9S

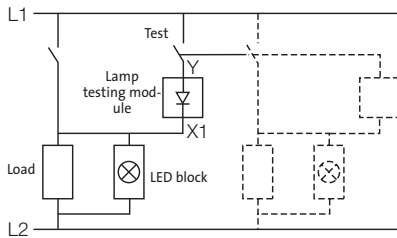
Characteristics	Data	
▶ Rated insulation voltage	400 V	IEC 60947-5-1
▶ Rated impulse withstand voltage U _{imp}	4 kV	IEC/EN 60947-1
▶ Bulb rating	400 V max. - 2.6 W max. 240 V max. - 2.6 W max.	IEC 60947-5-1 UL 508

Technical Specifications

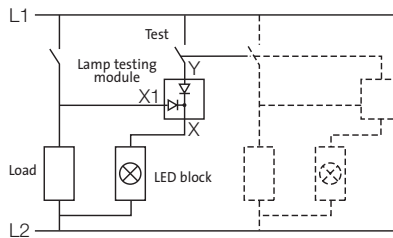
► DIAGRAMS

PUSH-TO-TEST LED PILOT LIGHT DIAGRAMS

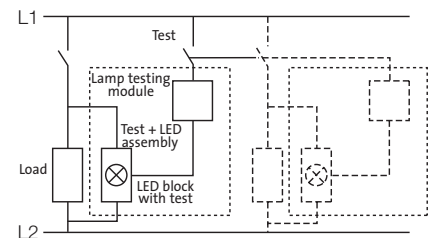
Lamp-testing module with
1 diode (33ET) for direct
supply 24 V and 48 V



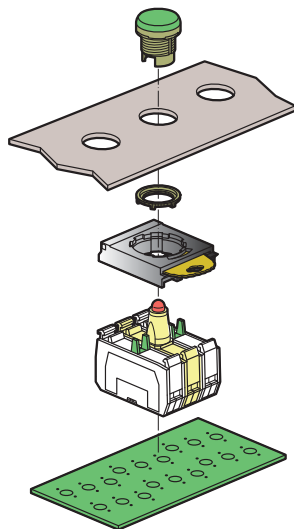
Lamp-testing module with
2 diodes (33ETT) for direct
supply 24 V and 48 V



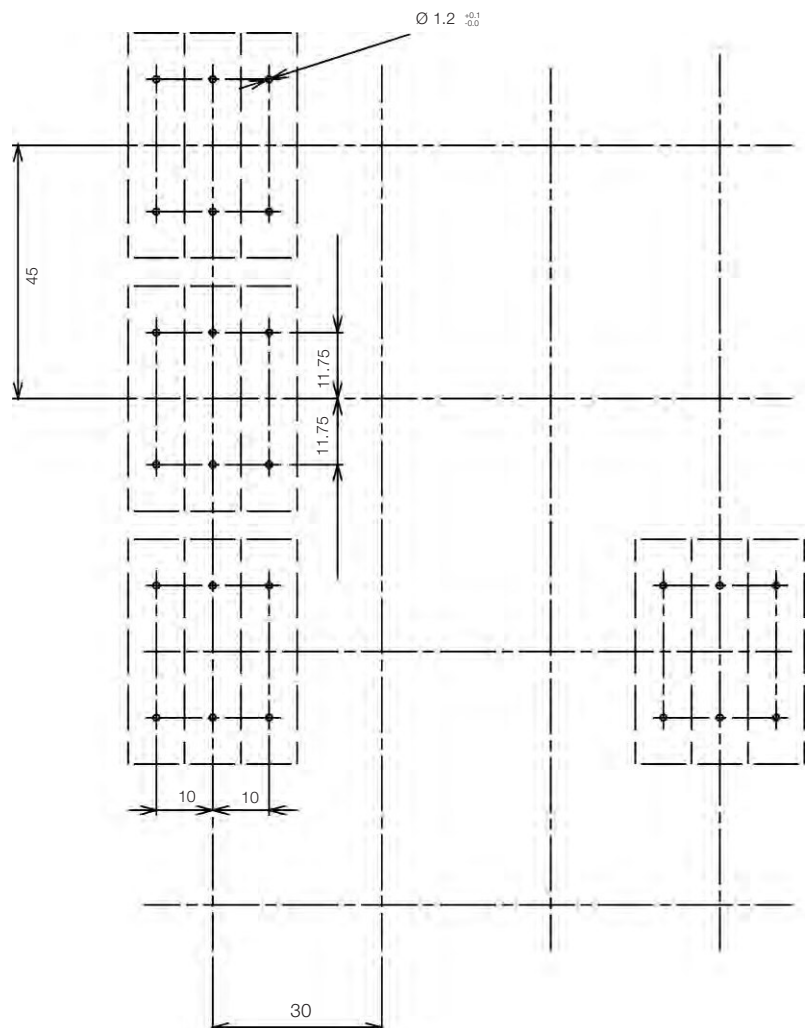
Lamp-testing assembly
for direct supply 130 V and 240 V



PRINTED CIRCUIT BOARD MOUNTING



PCB BOARD DRILL PLAN



PCB TERMINAL - SINGLE CLIP

PCB TERMINAL - 3 POSITION CLIP

