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Installation Instructions & Dimensional Drawings

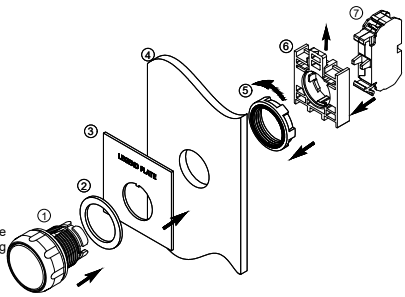
series 22 iec

IL 100131
W22 PILOT DEVICES

MOMENTARY AND MAINTAINED PUSH BUTTONS, SELECTOR SWITCHES, PILOT LIGHTS, AND PTR

After removing the operator from its package, remove latching device with contact block(s) attached by using a #2 flat head screwdriver to lift up on the lever to unlock, then unscrew and remove the clamp ring.

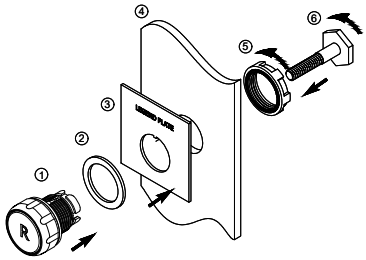
① **Operator**
② **Panel Gasket**
a.) Make certain the panel gasket sits flat against the panel or legend plate and is compressed between the housing and mounting surface.
③ **Legend Plate** (optional)
④ **Panel**
⑤ **Clamp Ring**
a.) Secure the operator with the recommended tightening torque of 0.79 Nm (7 lb-in). This will compress the panel gasket making the operator tight to the panel.
⑥ **Latching Device**
a.)Snap contact block(s) onto latching device (may be pre-assembled). Note: Max contact depth of 2 blocks; selector switches and illuminated devices cannot utilize middle row of contacts; pilot light cannot utilize any contact blocks.
b.) Slide latching device onto the back of the operator housing. Make certain to align the operator arrow with the top of the latching device. Push on to operator until an audible click is heard. Verify that components are locked into place.
⑦ **Contact Block**
Note: For Pilot Lights stop after Step 6, for Unibody Pilot Lights stop after Step 5.

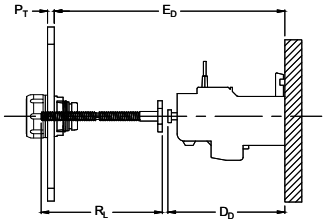


MOMENTARY NON-ILLUMINATED RESET PUSH BUTTONS

After removing the operator from its package, unscrew and remove both the rod and clamp ring.
① Operator
② Panel Gasket
a.) Make certain the panel gasket sits flat against the panel or legend plate and is compressed between the housing and mounting surface.
③ Legend Plate (optional)
④ Panel
⑤ Clamp Ring
a.)Secure the operator with the recommended tightening torque of 0.79 Nm (7 lb-in). This will compress the panel gasket making the operator tight to the panel.
⑥ Rod
a.) Cut the rod to the desired length.
$R_L = E_D - D_D + P_T + 4.00$ mm (0.157")
Min. Panel Thickness (P_T) = 1mm (0.04")
Max. Panel Thickness (P_T) = 4mm (0.16")
Min. Enclosure Depth (E_D) = 34.10mm (1.34") + D_D - P_T
Max. Enclosure Depth (E_D) = 175.40mm (6.91") + D_D - P_T

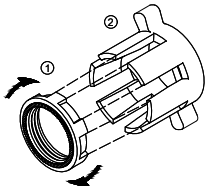
E_D = Enclosure Depth
P_T = Panel Thickness
D_D = Device Depth*
R_L = Rod Length
*Device Depth (D_D) is based on the mounting of the device (ex: panel mount or direct mount to a contactor).





CLAMP RING WRENCH

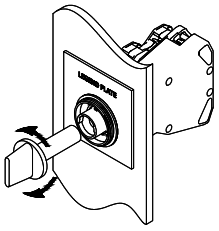
To tighten or loosen clamp ring, slide the notches on the wrench into the notches of the clamp ring. Turn clockwise to tighten, counter clockwise to loosen. Torque to compress gaskets 0.79 Nm (7 lb-in) recommended.
① Clamp Ring
② Wrench

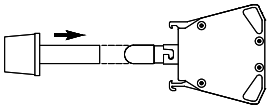


LAMP REMOVAL TOOL

Front of Panel:
To replace lamp, unscrew illuminated lens or bezel (remove clear diffuser cap if applicable) and insert tool over lamp. Push-in and turn counter clockwise, 1/4 turn (90°). Pull tool toward you. Remove lamp from tool. Gently insert the replacement lamp into the tool. Align the notches on the lamp base with the socket notches. Turn clockwise, 1/4 turn (90°). Remove tool. Screw lens on operator.

Back of Panel:
To replace lamp, remove latching device by using a #2 flat head screwdriver to lift up on the lever to unlock and remove the latching device assembly. Insert tool over lamp and push-in and turn counter clockwise, 1/4 turn (90°). Pull tool toward you. Remove lamp from tool. Gently insert the replacement lamp into the tool. Align the notches on the lamp base with the socket notches. Turn clockwise, 1/4 turn (90°). Remove tool. Slide latching device assembly onto the back of the operator housing until an audible click is heard. Make certain to align the operator arrow with the top of the latching device. Verify the bracket is locked into place.



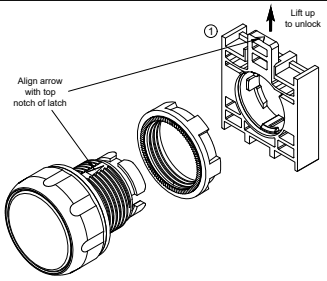


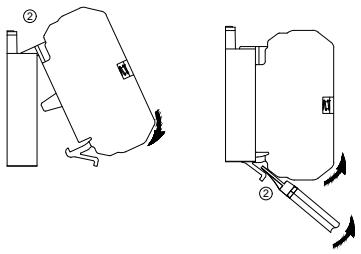
LATCHING DEVICE

Attachment:
① Latching Device
a.) Slide latching device onto the back of the operator housing. Make certain to align the operator arrow with the top of the latching device. Push on to operator until an audible click is heard. Verify the bracket is locked into place.
② Contact Block
a.) Hook top tab of contact block onto top bracket on back of latching device.
b.) Rotate contact block downward until bottom tab of contact block clips into latching device's lower bracket.

Removal:
① Latching Device
a.) Use a #2 flat head screwdriver to lift up on the lever to unlock latching device.
b.) Slide latching device off of the back of the operator housing.

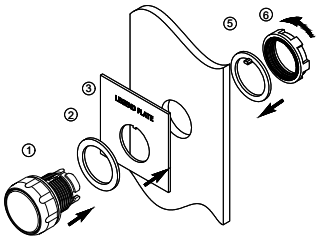
② Contact Block
a.) Insert a flat head screwdriver into valley on bottom contact block tab and lever upward to unlatch bottom tab.
b.) Rotate contact block upward until bottom tab of the contact block is free from latching device bracket, then remove entire contact block.





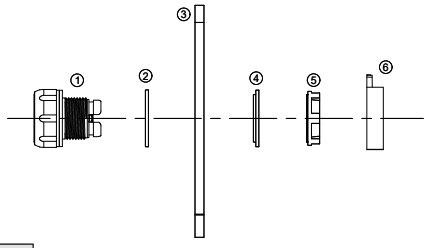
THRUST WASHERS

Thrust washer should be positioned behind the panel.
Note: Do not use the trim washer with legend plate or panels **thicker than 1.58 mm (1/16").**
① Operator
② Panel Gasket
a.) Make certain the panel gasket sits flat against the panel and is compressed between the housing and mounting surface.
③ Legend Plate (optional)
④ Panel
⑤ Thrust Washer
⑥ Clamp Ring



MOUNTING ADAPTERS

Mounting Adapter for mounting 22mm pilot devices in a round 25.4mm (1") hole.
① Operator
② 22mm Panel Gasket
③ Panel
④ Mounting Hole Adapter
⑤ Clamp Ring
⑥ Latching Device Assembly
a.) Includes contact block(s) and/or light module.



COMPATIBLE ACCESSORIES	
CODE	**DESCRIPTION**
22LP Series	Standard & Custom Legend Plates
W22CRW	Clamp Ring Wrench
W22-LD	Latching Device
LRT	Lamp Removal Tool
LED Series	LED Replacement Lamps
FVB Series	Incandescent Replacement Lamps
W Series	Modular Contact Blocks
HP22 Series	Hole Plugs
22TWH	Thrust Washers Horizontal
MAK-1/22	Mounting Adapter (1" to 22mm only)
22LOAFC	Lock Off Attachment

⚠ CAUTION

In applications where the multi-voltage pilot light is in line with an inductive component (i.e. relay coils, solenoids, motors…etc.) that may cause transient voltages, we recommend surge protection (i.e. MOVs, diodes) be added to the circuit to prevent any damage to the multi-voltage pilot light or any electronic based components in the circuit.

⚠ ATTENTION

Dans des demandes(applications) où le pilote de multi-tension la lumière est conformément à un composant inductif (c'est-à-dire des bobines de relais, des solénoïdes, moteurs) qui peut causer des tensions passagères, nous recommandons la protection de montée (c'est-à-dire MOVs, les diodes) être ajouté au circuit pour empêcher n'importe quels dégâts au pilote de multi-tension allument(éclairent) ou n'importe quels composants basés électroniques dans le circuit.

⚠ WARNING

Installation of c3controls product must be in accordance with the NEC (U.S. National Electrical Code) regulations or local codes/standards per your application. Any violation of these safety requirements could result in a personal injury and/or result in damage to the equipment.

⚠ AVERTISSEMENT

L'installation de produit c3controls doit être conformément au NEC (le Code Électrique national américain) des règlements ou des codes/normes locaux par votre demande(application). N'importe quelle violation de ces exigences de sécurité pourrait aboutir à une blessure personnelle et-ou aboutir aux dégâts à l'équipement.

Product installation instructions and dimensional drawings may be downloaded from our website, www.c3controls.com.

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CE

CONFORMITY TO STANDARDS
UL 508
CSA C22.2 No. 14
IEC 60947-1 & 60947-5-1

CERTIFICATIONS
UL File #: E68568 (Guide NKCR, NKCR7)
CE Marked (per EU Low Voltage Directive 2006/95/EC & RoHS Directive 2011/65/EU)

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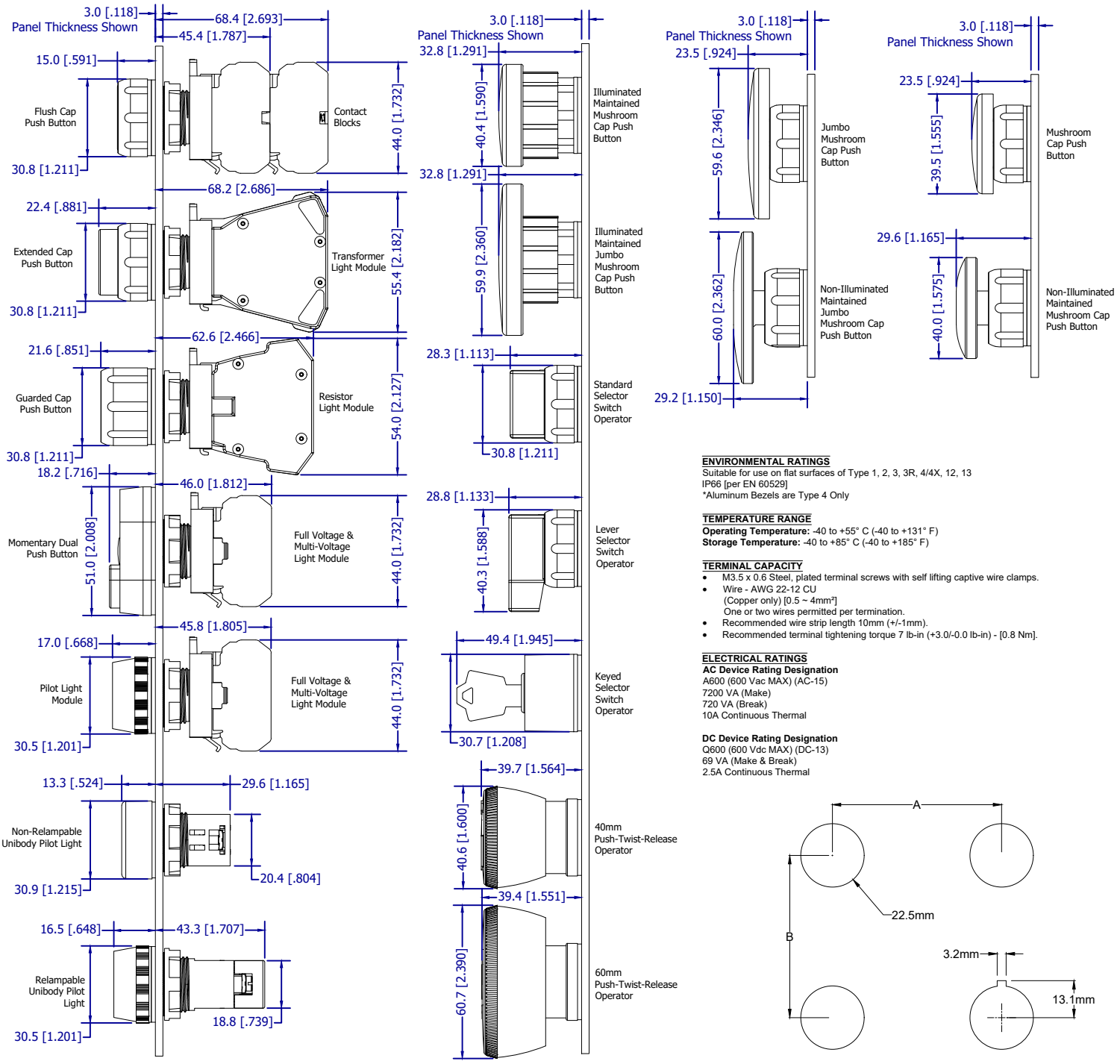

ENVIRONMENTAL RATINGS
Suitable for use on flat surfaces of Type 1, 2, 3, 3R, 4/4X, 12, 13
IP66 [per EN 60529]
*Aluminum Bezels are Type 4 Only

TEMPERATURE RANGE
Operating Temperature: -40 to +55° C (-40 to +131° F)
Storage Temperature: -40 to +85° C (-40 to +185° F)

TERMINAL CAPACITY
- M3.5 x 0.6 Steel, plated terminal screws with self lifting captive wire clamps.
- Wire - AWG 22-12 CU
  (Copper only) [0.5 ~ 4mm²]
  One or two wires permitted per termination.
- Recommended wire strip length 10mm (+/-1mm).
- Recommended terminal tightening torque 7 lb-in (+3.0/-0.0 lb-in) - [0.8 Nm].

ELECTRICAL RATINGS
AC Device Rating Designation
A600 (600 Vac MAX) (AC-15)
7200 VA (Make)
720 VA (Break)
10A Continuous Thermal

DC Device Rating Designation
Q600 (600 Vdc MAX) (DC-13)
69 VA (Make & Break)
2.5A Continuous Thermal

MOUNTING HOLE PATTERN		
SPACING	**A**	**B**
Minimum	31.8mm (1-1/4")	47.9mm (1-7/8")
Standard	38.1mm (1-1/2")	57.2mm (2-1/4")
Staggered Contacts	44.5mm (1-3/4")	44.5mm (1-3/4")

- Mounting hole in panel 22.5mm (7/8").
- Mounting hole spacing (for standard legend plates) Horizontal & Vertical distance - 47.9mm (1-7/8") center to center.
- Fully-assembled operators come standard with one 1.6mm (1/16" gasket).
- Maximum panel thickness 6mm (1/4").
- When installing illuminated devices vertically adjacent to one another, use the "Standard" spacing as the "Minimum".

All dimensions represent both plastic and metal versions unless otherwise noted.
All dimensions represent both illuminated and non-illuminated versions unless otherwise noted.

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