Safety direction

- ◆Turn off the power before starting installation, removal, wiring and maintenance of products. Failure to turn power off may cause electrical shocks, burned and fire hazard.
- ◆Do not access electrified parts while electrify Do not wire while electrify and avoid touching any electrified parts while electrify; or it may cause electrical shock, burned and fire
- ◆Installation accessories and conditions accordance with the

provisions
Please refer to the "contact capacity" table for power available range of control components.

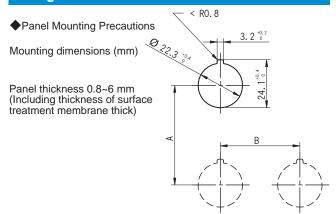
Wiring cable must be consistent with used voltage / current. Terminal screw must be locking according to suggested torque, too tight/ too loose is not suitable.

Contact Ratings (Contact Block)

Rated Insulation Voltage		600V			
Rated Terminal Current		10A			
Operating Voltage		24V	120V	240V	380V
AC 50/60Hz	Resistive Load(AC-12)	10A	10A	6A	2A
	Inductive Load(AC-15)	10A	6A	3A	1.9A
DC	Resistive Load(DC-12)	8A	2.2A	1.1A	_
	Inductive Load(DC-15)	4A	1.1A	0.55A	_

Minmum applicable load (refered values)=3V AC/DC . 3mA (Use range depends on the use conditions & load types)

Using direction

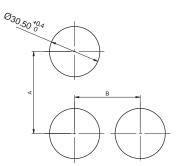


Component	A(mm)	B(mm)
Emergency stop switches	>50	>50
Pushbuttons Selector switches Key selector switches	>50	>30
Mushroom pushbuttons	>50	>40
Pilot lights	>30*	>30

*Keep a minimum spacing of 50 mm when using a lamp over 1W.

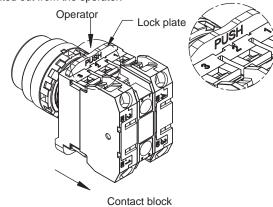
Embedded type mounting dimensions (mm)

Panel thickness 0.8~6 mm (Including surface treatment membrane thick)



Component	A(mm)	B(mm)
Pushbuttons with metal bezel Selector switches with metal bezel Key selector switches with metal bezel	>50	>35
Mushroom pushbuttons with metal bezel	>50	>40

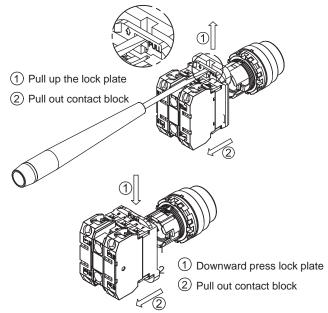
- Removal and installation of switch operator and contact block 1. Removing contact block
- a. As shown in figure below, press PUSH end of lock plate (yellow color) then pull the contact block along the direction indicated out from the operator.



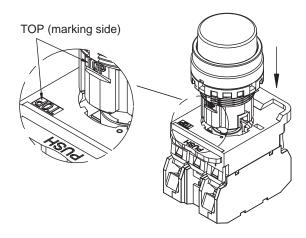
b. Intensive installation

As shown in figure below, insert flat screwdriver (5 mm wide at maximum) into PULL end of lock plate (yellow color) then force along indicated direction to make the lock plate arrive out of position, also pull the contact block out along indicated direction from operator.

◆Two way to remove full voltage adaptor

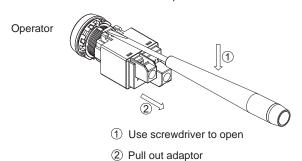


2. Installation contact block Aim the TOP marking side of contact block at another TOP marking side of operator then force to insert it. (Internal spring will make the lock plate stuck on certain location automatically)



◆Removal and installation of pilot light illuminated portion and adaptor

①Insert a flat screwdriver (5 mm wide at maximum) into the latch hole of adaptor, then press along indicated direction to make the adaptor arrive out of position, also pull the adaptor out along indicated direction from illuminated portion.

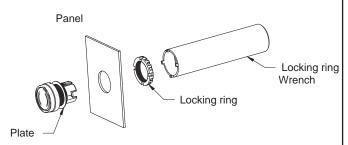


②Aim the TOP marking side of adaptor at another TOP marking side of illuminated portion then force to insert it.

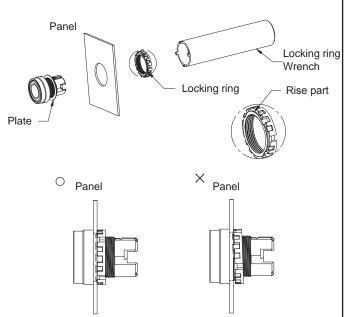
♦Instruction to mount operator on the panel

①Panel mounting hole dimension φ22.3 (standard)

As shown in figure below, please insert operator from the front of panel into the mounting hole, locking ring rotate the lock from the back of panel then lock tightly by locking ring wrench (A29Z-T1).



 \bigcirc Panel mounting hole dimension is $\phi25.5$ Face the rise part of locking ring to the panel and totally insert into the mounting hole, others are the same as previous instruction.



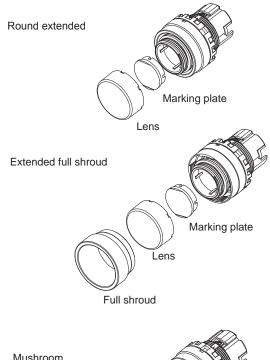
- ③Tighten torque must not exceed 2.0 N.m. Do not use pliers. Excessive tightening will damage the locking ring.
- ④Standard panel thickness must be 0.8 to 6 mm (including thickness of surface treatment membrane). Suitable panel thickness is 1.2 to 4.5 mm when using Anti-Rotation Ring (A29Z-RL). Suitable panel thickness is 1.2~4.5 mm.Panel thickness will be 0.8~3.2 mm when using Padlock Cover (A29Z-KL1).
- ⑤Do not apply excessive force on the lamp to avoid damage to the lamp holder when installing lamps.

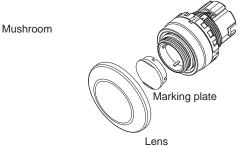
Wiring direction

- ①The terminal marking as X1 should be the positive electrode when using the DC LED lamp.
- ②Suggested tightening torque for M3.5 terminal screws is 1.0~1.3 Nm.
- ③ Wire spec. 14 ~16 AWG. is suitable for Single core wire / Stranded wire/ Y type terminal.
- ④ Do not expose the terminal to excessive shock and vibration during the wiring, otherwise the switch may be deformed or damaged, causing malfunction or operation failure.
- (5) When wiring is finished, keep the proper insulation distance.

Lens and word marking plate direction

- Installation of lens and marking plate
- (1) Illuminated pushbuttons



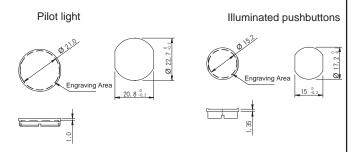


Ø22 A20 Series Control Units

②Pilot light Flush marking type Flush extended dome Marking plate Lens

3Dimension of legend marking plate

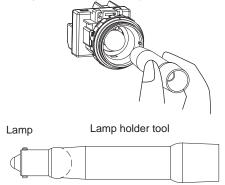
Text and symbols can be carved on the marking plate in the lens or add text and symbols printed film in the lens. Film is not standard equipment, please prepare by yourself.



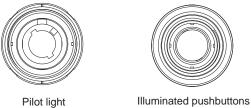
Lamp installation direction

◆Lamps can be installed directly from the front panel or remove the contact block to install lamps then put contact block back.

①As shown in figure below, we insert the lamp head in the end of recess of the lamp holder tool (A20R-55).



②Aim the installation buckle legs of the lamp bottom at the lamp holder indentation then inward pressure lamp holder tool (A20R-55) lightly to make the lamp move into the bottom of lamp holder while rotating in the clockwise direction.

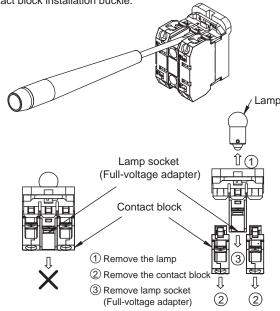


③To remove, gently insert the lamp holder tool onto the lamp head. Then push slightly, and turn the lamp holder tool to the left.

Installation precaution of contact block and full-voltage adapter

Disassembly

①As shown in figure below, please use a flat screwdriver to loosen the contact block mounting adapter (A20B-E00P) of the contact block installation buckle.

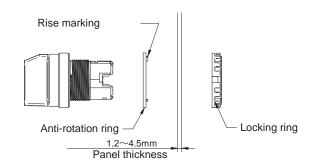


②Please remove the lamp and contact blocks before removing full-voltage adapter (A20-E00P).

◆The lamp socket (full-voltage adapter) (A20-E00P) must be installed first when installation.

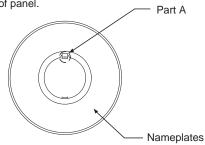
Anti-rotation ring installation direction

◆Align TOP mark of operator and a portion of anti-rotation ring and indentation of mounting panel when installation.



Nameplate direction

◆Without anti-rotation feature or use the needle-nose pliers to break part A of nameplates when there is no indentation on the mounting hole of panel.



Ø22 A20 Series Control Units

Other direction

◆About operation

- ①Do not apply excessive shock or vibration to the switch. In order to avoid deformation or damage the switch which lead to poor functioning or performance degradation.
- ②Switches are mostly plastic products, should avoid touching sharp objects to avoid the appearance of blemishes or scratches causing bad action. Please be careful when using non-random weight or drop / shock.
- ③Do not impose sharp objects or hard percussion instrument operation or it may damage the switch.

◆Illuminated intensive installation

- ①Continuous light may cause ambient temperature rise above rated temperature due to the heat.
- ②Non-metallic mounting panel or mounted on the closed distribution box, must pay attention to air circulation or use less heat lamp.

◆Operating environment

- ①Switches should be used and stored in predetermined temperature and humidity range.
- ② IP65 products are anti-drip protection structure, therefore the front panel can resist water jet without causing functional damage.
- ③There will be a risk of poor functioning because of accumulation of dust or swarf clearance activities in the product. When using in the aforementioned time environment, please install the dust cover or waterproof cover (EX: A29Z-KL1).
- 4)This product is for indoor use and should avoid direct sunlight.
- ⑤Do not use in ozone / corrosive gas environments.

◆About contact block

①The back panel has no water / oil protection structures and should be used to avoid splashing liquid.