1. SAFETY INSTRUCTIONS
Installation is to be performed by skilled electricians and instructed personnel in accordance with national legislation, including the relevant standards and, where applicable, in accordance with IEC 60079-17 on electrical apparatus for explosive atmospheres. The national safety rules and regulations for prevention of accidents and the following safety instructions, which are marked with an ( ) in these operating instructions, must be observed.
- The floodlight must not be operated in Zone 0, 1, or 20 hazardous areas.
- The requirements of EN 61241-0 and -1 regarding excessive dust deposits and temperature must be considered by the user.
- The technical data indicated on the floodlight is to be observed.
- Changes of the design and modifications to the floodlight are not permitted.
- The floodlight shall be operated as intended and only in undamaged and perfect condition.
- Only genuine Cooper Crouse-Hinds (CC-H) spare parts may be used for replacement.
- Avoid short time switch on / switch off mode.
- Repairs that affect the explosion protection (see national standard) may only be carried out by Cooper Crouse-Hinds or a qualified electrician and will subsequently have to be checked by an “expert.”
- Do not keep these operating instructions inside the light fitting during operation.

2. CONFORMITY WITH STANDARDS
The floodlight conforms to the standards specified in the EC-Declaration of Conformity. It has been designed, manufactured, and tested according to the DIN EN ISO 9001: 94/9 EC: Equipment and protective systems intended for use in potentially explosive atmospheres. The enclosure materials used, including any external metal parts, are high quality materials that ensure corrosion resistance and resistance to chemical substances according to the requirements for use in a “normal” industrial atmosphere.
- Copper-free aluminum.
- Stainless steel.
- Epoxy powder finish.
In case of use in an extremely aggressive atmosphere, please refer to manufacturer.

3. TECHNICAL DATA:
Category of application: DEMKO 10 ATEX0907694:
CE 0359 II 3 G Ex nR II
II 2 D Ex ID A21 IP66
IECEx UL 09.0025: Ex nR II Ex ID A21 IP66

Type of lamps:
High Pressure Sodium:
150 W HSE / HIT
250 W HSE / HIT
400 W HSE / HIT
Metal Halide:
250 W HIE / HIT
400 W HIE / HIT

Electrical Data:
Rated Voltage: 220V, 230V, 240 VAC
Rated Frequency: 50 Hz, 60 Hz
Rated Lamp Power: 150W, 250W, 400W

Degree of protection to EN/IEC 60529: IP 66
Insulation class acc. to EN 60598 / IEC 598I
Permissible Ambient Temperature: - 25°C…+40°C/+55°C
Perm. Storage Temperature in Original Packing: -40 °C … +60 °C

Supply terminals: 6.0 mm² single or multi-wired
Cable entries metal thread:
M20 x 1, 5,
M25 x 1, 5,
3⁄4” NPT

Dimensions: see dimensional drawings.

4. FIELD OF APPLICATION
The luminaire is intended for use in potentially explosive atmospheres Zone 2 according to IEC/EN 60079-10-1 and Zone 21 and Zone 22 in accordance with IEC/EN 60079-10-2. The enclosure materials used, including any external metal parts, are high quality materials that ensure corrosion resistance and resistance to chemical substances according to the requirements for use in a “normal” industrial atmosphere.
- Copper-free aluminum.
- Stainless steel.
- Epoxy powder finish.

In case of use in an extremely aggressive atmosphere, please refer to manufacturer.
5. APPLICATION / PROPERTIES

The luminaire can be used inside or outside to light areas with potentially explosive atmospheres.

6. INSTALLATION

Respective national and local codes and standards which apply to the installation and operation of explosion-protected apparatus must be observed. Transport and storage of the luminaire is permitted in original packaging and specified positions only.

6.1 MOUNTING

A) Pole Mount with SFA6 Slipfitter
1. Using the ½" (12mm) bolts, nuts, and lock washers provided, securely fasten the floodlight yoke to the flange on the SFA6 slipfitter. See Figure 1. Refer to Figure 2 for slipfitter dimensions. Torque the bolts to 45 lbs.-ft. (61 Nm).
   NOTE: Angular positioning of the floodlight will be done later.

2. Place the SFA6 slipfitter adapter with the secured floodlight onto the 2" (50mm) pole top tenon.
3. Secure by tightening the slipfitter base bolts. Torque base bolts to 19 lbs.-ft. (26 Nm).

B) Wall Bracket Mount - Wall Mount Using SWB6 Wall Mount Bracket and SFA6 Slipfitter
1. Determine the mounting location of the SWB6 bracket using the bolt hole pattern shown in Figure 2.
2. Mount the SWB6 bracket (with elbow pointing up) using four (4) ½" (12mm) bolts or lag screws (not provided) or by welding in position.
3. Using the ½" (12mm) bolts, nuts, and lock washers provided, securely fasten the floodlight yoke to the flange on the SFA6 slipfitter. Torque the bolts to 45 lbs.-ft. (61 Nm).
4. Position the SFA6 Slipfitter onto the SWB6 bracket.
5. Secure by tightening the slipfitter base bolts. Torque base bolts to 19 lbs.-ft. (26 Nm).

C) Yoke Mount - Wall Mount Using Floodlight Yoke Only
1. Using floodlight yoke as a template, mark and drill desired location on mounting surface.
2. Secure floodlight yoke to surface using ½" (12mm) bolts or lag screws (not provided).

6.2 CABLE ENTRIES; BLANKING PLUGS

Only certified cable entries and blanking plugs are permitted for use. Flexible cables shall be used with trumpet-shaped cable glands or other suitable entries with additional pull-relief. When using cable entries with a lower IP protection than that which applies to the device (see technical data), the IP protection of the whole device will be reduced. The mounting directives applicable to the cable entries used shall be observed. Unused holes shall be closed with a certified blanking plug in order to establish the minimum protection category. In case of sealing inserts that are cut out, it shall be ensured that the insert is properly adapted to the cable diameter. In order to ensure the required minimum protection category, the cable glands are to be tightened down.

Over-tightening might impair the protection category. ATTENTION: When tightening the cap nut of the (type ADL/ADE) metal cable entry, care must be taken not to twist the cable.

All vacant COOPER CROUSE-HINDS / CEAG cable entries shall be closed with the certified blanking plug.

6.3 WIRING

Electrical connection - Only heat resistant cable according to the data on the type label may be used for the electrical installation.

A) Pole Mount with SFA6 Slipfitter
1. For SFA6 Slipfitter Adapter: Remove the access cover by loosening the captive screw to disengage the locking tab. Set aside for reassembly later.

IMPORTANT!
Under no circumstances may wire splices be used in the slipfitter or pole. Use continued length supply cord from fixture to approved customer supplied wiring chamber.

2. Using access opening pull #16-3 type SO cord (or other extra hard usage portable cord) supply wire from customer supplied wire chamber through pole. Using the cable connector provided, position a minimum overall length of 3 ft. (1m) cord for final connection to light fixture. Use a small amount of HTL thread lubricant when installing cord connector and install according to instructions supplied with connector. Securely tighten cord connector into slipfitter.

3. Strip cord insulation jacket back 3" (76mm) and strip each conductor 3/8" (9.5mm).

4. Secure the access cover as follows: For SFA6 slipfitter, secure cover by tightening the captive screw to engage locking tab. For SFA6 SS slipfitter, attach access plate with four (4) screws and lock washers.

Proceed to C) Wiring the Floodlight on the next page.
B) Wall Mount With or Without SWB6 Wall Mount Bracket and SFA6 Slipfitter

1. When using the SWB6 wall bracket and SFA6 slipfitter, plug the ¾ NPT entry on the SFA6 slipfitter with Cooper Crouse-Hinds plug PLG2 (not supplied).

2. To make the required wiring transition to portable cord, use Cooper Crouse-Hinds GRFX229 S752 outlet box, with GRF10SA S752 cover and GASK 643 gasket. Wall mount the outlet box adjacent to the floodlight yoke or SWB6 wall mount bracket if used.

3. Install one end of a length of #16-3 type SOW portable cord (or other extra hard usage portable cord) into the GRFX outlet box using a Cooper Crouse-Hinds NCG75-75 cable connector. The cord length required will allow ample slack to adjust the aiming angle of the floodlight.

See Figure 3 - Pole mount with SFA6 Slipfitter.

C) Wiring the Floodlight

1. Loosen the six (6) captive floodlight cover screws on the door and completely open the cover. Remove the screw that secures the cover plate over the ballast housing. Be sure to retain the screw in a safe place.

2. Unscrew the screws in the connection space cover and remove the cover. Insert the connection cable through the cable entry.

3. With sealing inserts which can be trimmed, it should be ensured that the insert is correctly adapted to the diameter of the cable. The cable entries are to be securely tightened to ensure the necessary minimum protection rating.

If they are tightened excessively, the protection rating may be compromised.

Wire cable according to the terminal numbering and circuit diagram. See Figure 4. The conductors shall be connected with special care in order to maintain the explosion category.

The insulation of the conductors shall reach up to the terminal. The conductor itself shall not be damaged.

The connectible min. and max. conductor cross-sections shall be observed (see technical data).

All screws and/or nuts of the supply terminals, also of those remaining vacant, shall be tightened down.

4. Position the ballast cover back in place and fasten with three (3) screws, making sure that all wires are safely inside and positioned away from the ballast area.

5. Install the lamp as specified on the nameplate. See LAMP INSTALLATION AND REPLACEMENT section.

6. Close floodlight cover door. Securely tighten all cover screws. For proper gasket seal, torque the cover screws to 10-14 lbs.-in. (1.13-1.5 Nm).

7. To make final vertical adjustment, loosen the two pivot bolts on the floodlight yoke to position floodlight at the desired angle (within the acceptable aiming range limits). See Figure 5. Tighten the two pivot bolts to 45 lbs.-ft. (61 Nm).

Figure 5 - Final Vertical Adjustment

8. To make the final horizontal (radial) adjustment, loosen the four (4) slipfitter base bolts.

9. Rotate the floodlight housing to the desired position.

10. Tighten the slipfitter base bolts to 19 lbs.-ft. (26 Nm) to lock in position.

6.4 LAMP INSTALLATION & REPLACEMENT

1. Note both vertical and radial aiming angles. If these are disturbed during re-lamping, they should be readjusted after re-lamping.

2. Disconnect power to the floodlight and allow to cool completely. Allow the capacitor to discharge for 15 minutes.

3. Completely loosen the six (6) captive cover screws and swing open the cover. See Figure 6.

Figure 6 - Swing Open Cover
6.4 LAMP INSTALLATION & REPLACEMENT (CONTINUED)

4. Remove lamp.
5. Perform cleaning and inspection as noted in the MAINTENANCE section.
6. Screw new lamp into lampholder and securely tighten lamp. New lamp must be identical type, size, and wattage as marked on the floodlight nameplate.

The lamp must be screwed tightly into the lampholder. Ensure that it is screwed in fully so that no arcs or other inadmissible operating conditions can occur. Protect lamp from glass breakage during installation.

7. Thoroughly clean lens and cover gasket seal with a clean, damp cloth. If this is not sufficient, use a mild soap or a liquid cleaner such as Collinite NCF or Duco #7. Do not use an abrasive, strong alkaline, or acid cleaner. Damage may result.
8. Close floodlight cover door making sure that all wires are safely inside and positioned away from the ballast area. Securely clean all cover screws. For proper gasket seal, torque the cover screws to 10-14 lbs.-in. (1.13-1.58 Nm).

Over-tightening can impair the degree of protection.

6.5 PUTTING INTO OPERATION

Prior to taking the apparatus into operation, the tests specified in the relevant national regulations shall be carried out. Apart from that, the correct functioning and installation of the apparatus in accordance with these operating instructions and other applicable regulations must be observed.

Insulation measurements may only be carried out between PE and the external conductor • L1 (L2, L3) as well as between PE and N.
- Measurement voltage: max. 1 kVAC/DC
- Measurement current: max. 10 mA
- The floodlight may only be operated when sealed.
- Carry out test in accordance with IEC 60079-15 33.7.1 (see Section 7.1).

7. MAINTENANCE/SERVICING

The relevant national regulations which apply to the maintenance/servicing of electrical apparatus in explosion atmospheres shall be observed (IEC 60079-19).

Servicing:
- When servicing, in particular those components that affect the explosion protection, will have to be checked, e.g.:
  - Housing for any cracks or damages.
  - Gaskets for their perfect condition.
  - Terminals and blanking plugs for their firm fit.
  - Defective lamps must be replaced immediately.

The interval between maintenance depends upon the ambient conditions and the hours of operation. The suggested interval between lamp changes given by the lamp manufacturer should be followed. A visual check and the test to IEC 60079-15 33.7.1 (see Section 6.1) should be carried out every 6 months.

We recommend a regular maintenance according to an approved preventive maintenance program. To prevent additional lumen depreciation, thoroughly clean the lens and cover gasket seal with a clean, damp cloth. If this is not sufficient, use a mild soap or a liquid cleaner such as Collinite NCP or Duco #7. Do not use an abrasive, strong alkaline, or acid cleaner. Damage may result.

7.1 TEST FOR RESTRICTED BREATHING TO IEC 60079-15

33.7.1:
This test is to be carried out:
- Installation
- Lamp change
- During scheduled maintenance
- Check the lamp holder for damage
- The lamp must be screwed tightly in to the lampholder
- Tighten all cover screws (over-tightening of the screws can damage the threads)
- Connect test unit to the test point on the luminaire. See Figure 7.
- The time required for a vacuum from 300 Pa (30mm water pressure) to reduce to 150 Pa (15mm water pressure) at constant temperature conditions, may not be less than 80 sec. (see Figure 7). If the vacuum cannot be maintained for this length of time, then the seals (enclosure, cable entry, etc.) must be replaced. After this, the test must be repeated.

8. REPAIR/OVERHAUL/ MODIFICATIONS

Repairs and overhaul may only be carried out with genuine COOPER CROUSE-HINDS spare parts. Before lamp change or dismantling of individual parts, ensure that no explosive atmosphere is present. Switch off the apparatus before opening or isolate before commencing maintenance. Only use original spare parts. If the floodlight was previously in operation, then wait 15 minutes before opening. Repairs that affect the explosion protection may only be carried out by COOPER CROUSE-HINDS or a qualified electrician in compliance with the applicable national rules.

Modifications to the device or changes of its design are not permitted.

9. DISPOSAL / RECYCLING

When the apparatus is disposed of, the respective national regulations on waste disposal must be observed. In order to facilitate the recycling of individual components, plastic parts are provided with the identification mark of the plastic material used. Subject to modifications or supplement of the product range.