G010989

Manual Call Point IP66/67

CD-MCP WP Ex ia

Part no. 5101083-00A

System: CS3000, CS4000, NSAC-1, TERRA FIRE

General Description

CD-MCP WP Ex ia is an intrinsically safe addressable manual call point within the NS-range that can be connected to fire alarm systems as specified above*.

* System CS3000: SPK-2 for NOSE based detectors.

CD-MCP WP Ex ia is connected to the detector loop via an intrinsically safe isolator.

Pressing the glass causing it to crack activates the fire alarm. A resettable element can be used as an alternative to the breakable glass. The call point can also be tested with a special key, included in the delivery.

A red LED on the front of the call point indicates the fire alarm. The LED remains lit until the glass has been replaced and the fire alarm has been reset on the control panel.

The address of the call point is set with a DIP-switch.

NOTE!
Potential electrostatic charging risk!

- Do not clean with solvents.
- Clean with a damp cloth.

Local intelligence via an integrated CPU

The integrated CPU makes it possible to make decisions locally, like evaluation of the alarm condition.

Data

Sensor method	Glass break
Sensor element	Limit switch
Operating voltage	16–28 VDC
Operating current:	
- Normal condition	0.1 mA ± 5%
- Alarm condition with LED activated	1.6 mA ± 5%
Cable dimension	M20 ø 6–12 mm Material: Black polyamide
Cable terminals	2.5 mm^2
Operating temperature	-40 °C to +70 °C
Storage temperature	-50 °C to +70 °C
Relative humidity	≤ 95 % RH non-condensing
Addressing method	DIP switch
Ingress protection	IP66/67
Material	PC/ABS
Weight	250 g ± 5%
Colour	Red (RAL 3001)
Loop cable requirement	See the Installation & Commissioning manual
Certified according to	CE 2531-CPR-CSP10869 DoP no. DOC-005127

Accessories

Protection lid, transparent	5200232-00
Protection lid, "BRANDLARM"	5200233-00A
Adapter plate	5200206-00
Spare glass, GB (10 pcs.)	5200075-00A
Spare glass, no text (10 pcs.)	5200077-00A
Resettable element	5200144-00A

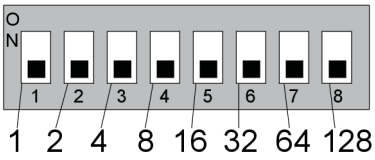
Test key (10 pcs.)	N1394

Safety Data

IMQ 16 ATEX 018 X	Ex II 1G
IECEx IMQ 16.0012X	Ex ia IIC T5 Ga -40 °C < Ta < +70 °C
Maximum voltage (U_i)	28 V
Maximum current (I_i)	93 mA
Internal capacitance (C_i)	532 pF
Internal inductance (L_i)	Negligible
Maximum power (P_i)	0.653 W

Address switch

The loop units are identified by a physical address. The address number is set on an 8 pole DIP switch located on the loop unit. (For settings use a pointed tool of suitable size.)



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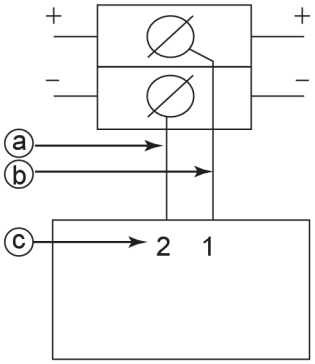
1 to 254 are valid addresses. The DIP switch value follows the binary system.

Connection



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a) Black (-)

b) Red (+)

c) Call points circuits

NOTE!
When used as a spare part for NS-ACP-IS WP
To use the existing mounting holes, please use 5200206-00 ADAPTER PLATE MCP Interconnect terminal 2 and 4 in unit.

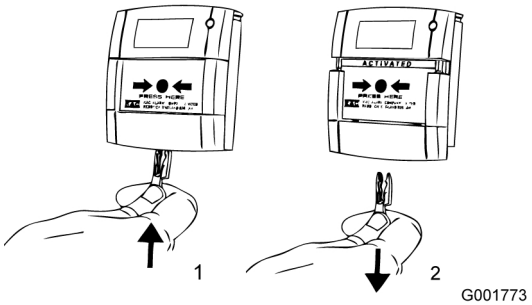
NOTE!
When used in a hazardous area, the loop unit must be connected to an intrinsically safe isolator. Refer to the data sheet for connection examples.

Cleaning

WARNING!
Potential electrostatic charging hazard
If the unit requires cleaning, only clean exterior with a damp cloth to avoid electrostatic charge build up.

Testing & Maintenance

The call point can be tested with a special key, included in the delivery.



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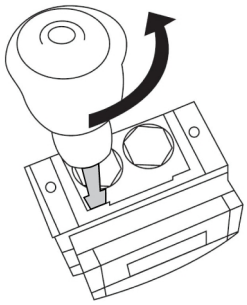
Cover removal



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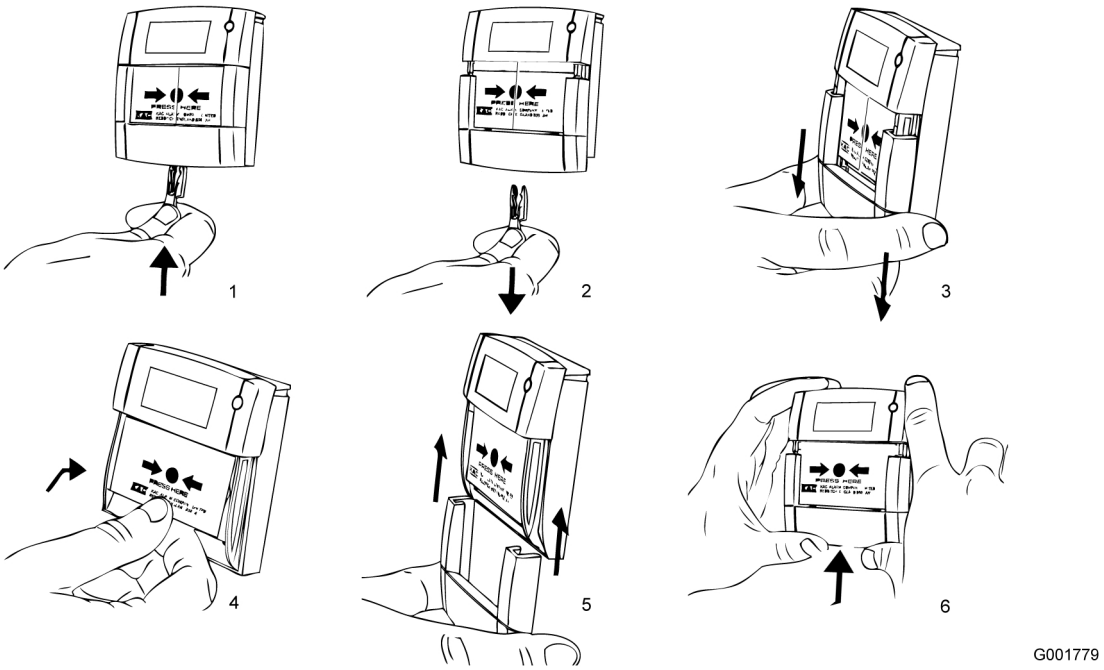
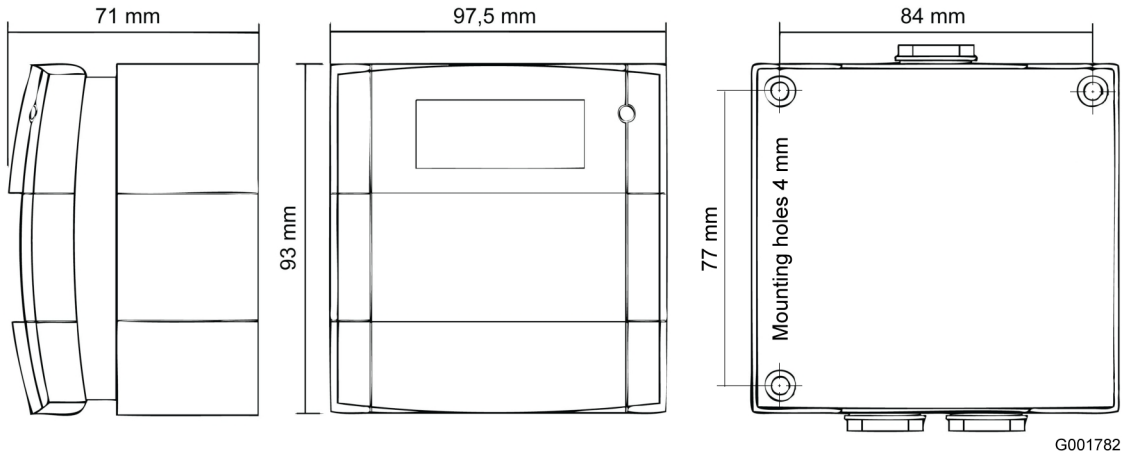
1. Remove the four cover fixing screws.
2. Place the edge of a large flat bladed screwdriver into the slot between the cover and back box, as shown in picture, and gently twist until the latches are disengaged.
3. Pull cover away from the back box.

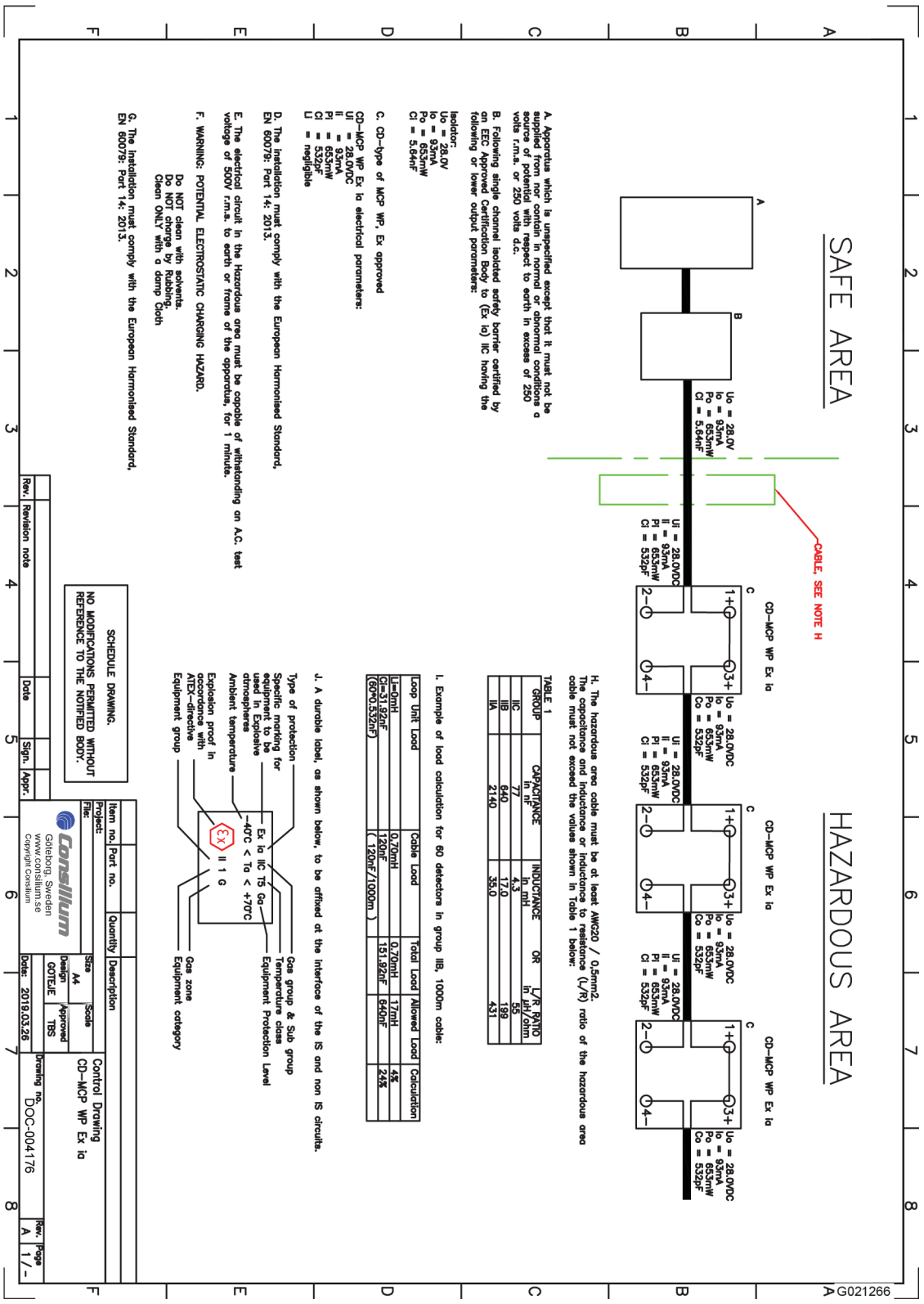
Replace glass



If a resettable element is used, perform steps 1+2+6 above. Should the element be broken, all steps must be performed.

Dimensions (mm)




SAFE AREA
HAZARDOUS AREA
CABLE, SEE NOTE H
CD-MCP WP Ex ia
Uo = 28.0V
Io = 93mA
Po = 653mW
Ci = 5.64nF
Ui = 28.0VDC
Ii = 93mA
Pi = 653mW
Ci = 532pF
Co = 532pF
A. Apparatus which is unspecified except that it must not be supplied from nor contain in normal or abnormal conditions a source of potential with respect to earth in excess of 250 volts r.m.s. or 250 volts d.c.
B. Following single channel isolated safety barrier certified by an EEC Approved Certification Body to (Ex ia) IIC having the following or lower output parameters:
Isolator:
Uo = 28.0V
Io = 93mA
Po = 653mW
Ci = 5.64nF
C. CD-type of MCP WP, Ex approved
CD-MCP WP Ex ia electrical parameters:
Ui = 28.0VDC
Ii = 93mA
Pi = 653mW
Ci = 532pF
Li = negligible
D. The installation must comply with the European Harmonised Standard, EN 60079: Part 14: 2013.
E. The electrical circuit in the Hazardous area must be capable of withstanding an A.C. test voltage of 500V r.m.s. to earth or frame of the apparatus, for 1 minute.
F. WARNING: POTENTIAL ELECTROSTATIC CHARGING HAZARD.
Do NOT clean with solvents.
Do NOT charge by Rubbing.
Clean ONLY with a damp Cloth
G. The installation must comply with the European Harmonised Standard, EN 60079: Part 14: 2013.
H. The hazardous area cable must be at least AWG20 / 0,5mm2. The capacitance and inductance or inductance to resistance (L/R) ratio of the hazardous area cable must not exceed the values shown in Table 1 below:
TABLE 1
GROUP | CAPACITANCE in nF | INDUCTANCE in mH | OR L/R RATIO in µH/ohm
IIC | 77 | 4.3 | 55
IIB | 640 | 17.0 | 199
IIA | 2140 | 35.0 | 431
I. Example of load calculation for 60 detectors in group IIB, 1000m cable:
Loop Unit Load | Cable Load | Total Load | Allowed Load | Calculation
Li=0mH | 0.70mH | 0.70mH | 17mH | 4%
Ci=531.92nF | 120nF | 151.92nF | 640nF | 24%
(60*0.532nF) | (120nF/1000m) |
J. A durable label, as shown below, to be affixed at the interface of the IS and non IS circuits.
Type of protection
Specific marking for equipment to be used in Explosive atmospheres
Ambient temperature
Explosion proof in accordance with ATEX-directive
Equipment group
Gas group & Sub group
Temperature class
Equipment Protection Level
Gas zone
Equipment category
Ex ia IIC T5 Ga
-40°C < Ta < +70°C
Ex II 1 G
SCHEDULE DRAWING.
NO MODIFICATIONS PERMITTED WITHOUT REFERENCE TO THE NOTIFIED BODY.
Rev. | Revision note | Date | Sign. | Appr.
Item no. | Part no. | Quantity | Description
Project:
File:
Size A4
Scale
Design GOTE/E
Approved TBS
Date: 2019.03.26
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Control Drawing
CD-MCP WP Ex ia
Drawing no. DOC-004176
Rev. A
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