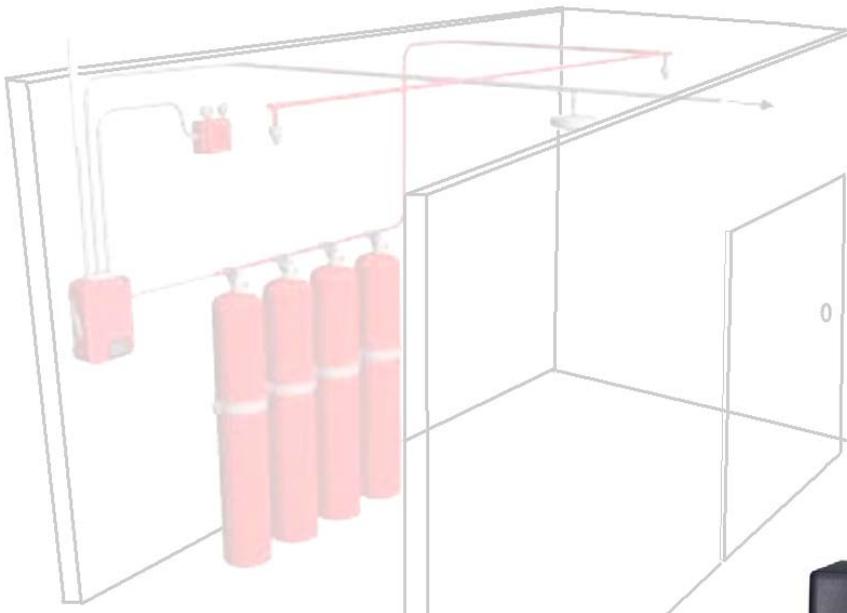# Application Note

## Making an EN12094 Compliant Gas Extinguishing Installation

## Introduction

To be EN12094 compliant, not only do you need to have en EN12094-1 approved extinguishing control panel, but you will also need to have EN54 approved peripheral products. The panel, the detectors and manual call points, as well as the sounders are the obvious products that require EN54 approval. You may therefore believe that you know what to offer for an EN12094 complaint installation, but you would only be partly right. Did you know that you require an EN54 approved, *TYPE B manual call point* to be EN12094-3 complaint in your extinguishing installation?
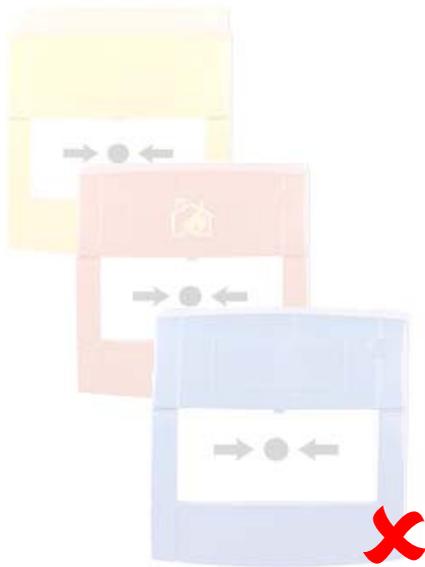


Fire Suppression System

# Application Note

## Manual Call Points and EN12094



**DMN700 Series**



**DM860 Series**

The normal DMN700 series (KAC) manual call points are EN54 Type-A call points. They cannot be used in an EN12094 compliant gas installation. To have an EN54 complaint installation, the following Type-B manual call points are available (to begin with):

| | |
|---|---|
| DM861-0 | MCP YELLOW, Gas Manual Release, 100 ohm, English, Dutch & French |
| DM861-4 | MCP YELLOW, Gas Manual Release, 100 ohm, Spanish, Portuguese & Italian |
| DM862-0 | MCP BLUE, Gas Extinguishing Hold, 100 ohm, English, Dutch & French |
| DM862-4 | MCP BLUE, Gas Extinguishing Hold, 100 ohm, Spanish, Portuguese & Italian |
| DM863-0 | MCP WHITE, Gas Extinguishing Abort, 100 ohm, English, Dutch & French |
| DM863-4 | MCP WHITE, Gas Extinguishing Abort, 100 ohm, Spanish, Portuguese & Italian |
| DM865 | MCP RED, Manual Fire Alarm, 100 ohm |

# Application Note

The "–x" behind the call point code indicates the language group. These are defined as follows:

| Language group (0 to 5) and languages | | | | | |
|---|---|---|---|---|---|
| 0 | 1 | 2 | 3 | 4 | 5 |
| English | Polish | Danish | Lithuanian | Italian | English |
| Dutch | Hungarian | Swedish | Estonian | Spanish | Romanian |
| French | Czech | Norwegian | Latvian | Portuguese | Greek |
| German | Slovak | Finnish | Russian | | Luxemburgish |

New languages will be introduced as the product is rolled out into all the regions.

Languages are required on these manual call points because the text on these call points are also regulated. To be EN12094 complaint, the manual call points have to display the following texts:

On the **YELLOW** manual call point:

**MANUAL RELEASE, Gas Extinguishing System**

On the **BLUE** manual call point:

**EMERGENCY STOP, Gas Extinguishing System**

On the **WHITE** manual call point:

**ABORT, Gas Extinguishing System**

The RED manual call points in the system are standard and simply show the standard EN54 "house on fire" function indicator.
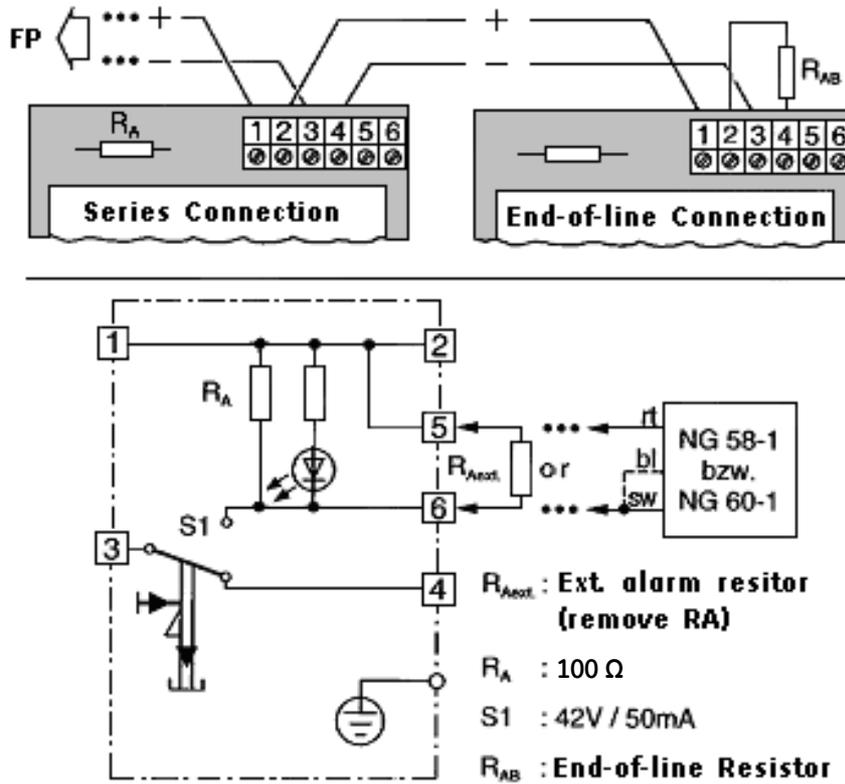
The DM860 series is approved in accordance with EN 54-11/B. It consists of a durable aluminium housing that proves to be better in comparison with plastic housings owing to its environmental stability. It is shatterproof, form stable and does not discolour due to sunlight.

The call points have an optical release indication by means of LED. The call point is activated with a single push button.

The front door has an opening angle of 180° and contains a replaceable windowpane. When the MCP is activated, the door cannot be closed. The call point can therefore not be left in the activated position accidentally during testing. The DM860 is available in the colours mentioned above.

For installation, it is not more complicated than any other call point. See below:

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Together with the panel, the manual call points and detectors determine the compliancy of the installation.

✎ For non-gas systems (non EN12094 compliant), the standard NK700/FEC400 and accompanying DMN700 manual call points are still perfectly usable.

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# Application Note

## Upcoming new products

### Audio visual indications

Sounders and bells need to be CPD approved, but beacons and warning signs do not require any approval today.

We will be able to offer the following sounders (CPD approved) and sounder-beacons:

AS363  Fire sounder, multi tone, shallow base

AS363W  Fire sounder, multi tone, shallow base, white

AS363M  Fire sounder, multi tone, shallow base, mains powered

AS364  Fire sounder, multi tone, deep base

AS364W  Fire sounder, multi tone, deep base, white

AS364M  Fire sounder, multi tone, deep base, mains powered


AS366  Sounder-beacon, multi tone, shallow base

AS366W  Sounder-beacon, multi tone, shallow base, white

AS367  Sounder-beacon, multi tone, deep base

AS367W  Sounder-beacon, multi tone, deep base, white


**"TWIST AND CLICK" FIRE SOUNDERS FOR FASTER INSTALLATION**
The new AS360 series *alarm sounders* from GE Security allows faster installation and maintenance thanks to an innovative mounting base. Dispensing with the need for locking screws, these sounders and sounder beacons use TimeSaver™ bases from the 630 series detectors. Heads are simply locked onto the base with a "twist and click" action, allowing fitting or removal at any time because the base is the only component that needs to be wired. As the cabling requirement is reduced, commissioning time and costs are naturally reduced as well.

Although tone and volume settings can be preset, the AS360 series also allows individual adjustment of the head settings for installations where precise local control is needed. Optimised for use in fire systems, the range provides 32 distinct alarm tones, with outputs up to 110 dBA at 1 metre depending on the tone. Loops of sounders are automatically synchronised for maximum audibility in the event of an alarm.

A combined sounder and beacon is offered for applications requiring visual as well as audible warnings. To ensure all-round visibility, the entire sounder head is transparent.

As well as the standard shallow base, the AS360 series units can also be supplied with a deep base for installations in which cable conduit is used. Deep bases are ingress protected to IP65, making them ideal for external as well as internal use.

Available in either red or white, The AS360 series units draw currents from 6 to 35 mA depending on the tone set, and are all approved to EN54 pt. 3

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We will be able to offer base sounders (CPD approved):

AS368      Base-sounder, multi tone

AS368W     Base-sounder, multi tone, white

The AS360 Series **base sounder** is a low profile unit designed to be installed beneath a variety of smoke and heat detectors in existing fire alarm systems. It enables detection and alarm at the same point, eliminating the need to have separate sounders in the circuit. Consequently, it also reduces wiring and installation costs.

With a sound output of 95 dB, 32 distinct alarm tones and volume control, the product is ideal for areas with low ambient noise where it is desirable to have a large number of low power sounders.

We will be able to offer beacons only:

FA350      Led Beacon, Red shallow base, Red lens

FA350WY    Led Beacon, White shallow base, Yellow lens

FA350Y     Led Beacon, Red shallow base, Yellow lens

FA350WRC  Led Beacon, White shallow base, Red flash, Clear lens

FA355      Led Beacon, Red deep base, Red lens

FA355WY    Led Beacon, White deep base, Yellow lens

FA355WRC  Led Beacon, White deep base, Red flash, Clear lens


FA380      Rotating beacon, 24V, 48W, DC, Red

FA380M     Rotating beacon, 230V, 60W, AC, Red

FA380MY    Rotating beacon, 230V, 60W, AC, Yellow

FA380Y     Rotating beacon, 24V, 48W, DC, Yellow

**BEACONS COVER ALL BASES**
We are also able to offer an extensive range of **general-purpose beacons,** for fire applications. This includes an LED beacon optimised for fire applications, as well as a xenon beacon available in DC and AC variants. These products utilise a full faced, translucent case rather than a separate add on beacon, giving a much larger lens area and resulting in a greater light spread.  They are available in deep or shallow base variants, the latter being weatherproof to IP65, and come with a choice of red, amber, and clear lenses.

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# Application Note

## Warning Indictors

Here we are able to offer the following:

GRP25-01    Acoustic/Optical Panel, 12/24V for internal use, Dutch

GRP25-02    Acoustic/Optical Panel, 12/24V for internal use, French

GRP25-03    Acoustic/Optical Panel, 12/24V for internal use, English

GRP25-09    Acoustic/Optical Panel, 12/24V for internal use, Spanish

GRP25-10    Acoustic/Optical Panel, 12/24V for internal use, Italian

GRP25-21    Acoustic/Optical Panel, 12/24V for internal use, Portuguese

As well as the old:

KR24    Extinguishing agent release sign (Spanish)

KR24B    Extinguishing agent release sign without text

More country variants will be introduced as the FEC403EN is rolled out into the rest of Europe.

Each of the GRP-series panels will be supplied with 3 easily interchangeable inserts in the country language indicating the 3 required messages for an extinguishing installation. These will be:

Insert 1:    Fire Alarm

Insert 2:    Evacuate Immediately

Insert 3:    Extinguishing in Progress

The GRP-series optical panels are low current consumption devices using LED technology, allowing more units to be connected to the FEC403EN than the old KR24 series optical/acoustic indicators. The GRP-series support an internal buzzer with and sound output of 93 dBA to attract additional attention if required. Easy installation and maintenance with a housing in auto-extinguishing plastic material and the possibly to flush mount add additional flexibility to the new line.

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