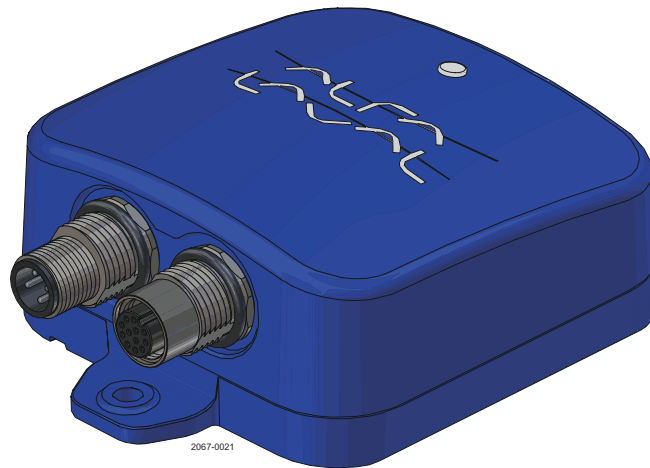




# Alfa Laval CM Connect

Condition Monitor

---



Lit. Code  
Manual No.

200005871-1-EN-GB  
100004444

Instruction manual

**Published by**  
Alfa Laval Kolding A/S  
Albuen 31  
DK-6000 Kolding, Denmark  
+45 79 32 22 00

**The original instructions are in English**

**© Alfa Laval Corporate AB 2021-11**

This document and its contents are subject to copyrights and other intellectual property rights owned by Alfa Laval Corporate AB. No part of this document may be copied, re-produced or transmitted in any form or by any means, or for any purpose, without Alfa Laval Corporate AB's prior express written permission. Information and services provided in this document are made as a benefit and service to the user, and no representations or warranties are made about the accuracy or suitability of this information and these services for any purpose. All rights are reserved.



**CSI**

CONTACT CSI FOR MORE INFORMATION | [CSIDESIGNS.COM](https://www.csidesigns.com) | [SALES@CSIDESIGNS.COM](mailto:SALES@CSIDESIGNS.COM) | 417.831.1411

---

## Contents

1	EC Declaration of Conformity.....	5
2	About CM – Connect.....	7
2.1	Purpose of this manual.....	8
2.2	Use of symbols.....	8
3	Installation.....	9
3.1	Setting up the CM Connect.....	11
3.2	Link CM to CM Connect (gateway).....	13
4	Safety.....	15
4.1	Safety – Installation.....	15
4.2	Product.....	15
4.3	Recycling information.....	15
5	Addendum.....	17



**CSI**

CONTACT CSI FOR MORE INFORMATION | [CSIDESIGNS.COM](http://CSIDESIGNS.COM) | [SALES@CSIDESIGNS.COM](mailto:SALES@CSIDESIGNS.COM) | 417.831.1411



**CSI**

CONTACT CSI FOR MORE INFORMATION | [CSIDESIGNS.COM](http://CSIDESIGNS.COM) | [SALES@CSIDESIGNS.COM](mailto:SALES@CSIDESIGNS.COM) | 417.831.1411

# 1 EC Declaration of Conformity

The Designation Company

Alfa Laval Kolding A/S

Compagny Name

Albuen 31, 6000 Kolding, Denmark

Address

+45 79 32 22 00

Phone No

hereby declare that

Alfa Laval CM Connect

Condition Monitor

Designation

Type

## EU Conformities

EN 301 489-52: V1.1.2: 2020, Class A

EN 301 489-1 V2.2.3: 2019, Class A

RoHS2 Directive 2011/65/EU

Reach

## US and Canada conformities

FCC 47CFR part 15: 2020, subpart B, Class A

ICES-003:2017 Issue 6, Class A

The person authorised to compile the technical file is the signer of this document

Global Product Quality Manager

Hygienic Fluid Handling

Lars Kruse Andersen



Title

Name

Signature

Kolding

2018-10-01

Company

Date





**CSI**

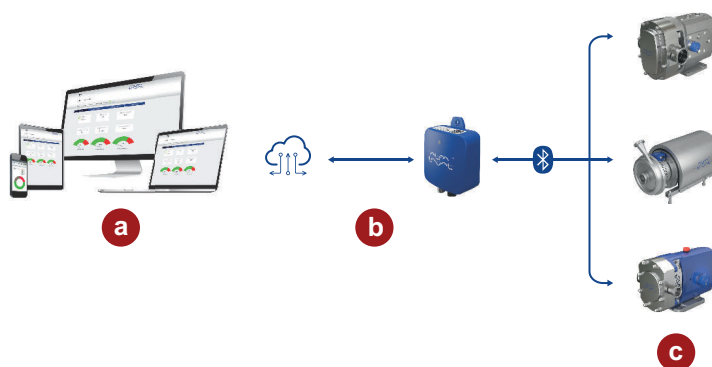
CONTACT CSI FOR MORE INFORMATION | [CSIDESIGNS.COM](http://CSIDESIGNS.COM) | [SALES@CSIDESIGNS.COM](mailto:SALES@CSIDESIGNS.COM) | 417.831.1411

## 2 About CM – Connect

The CM Connect is a compact, easy to use, cloud-based gateway and vibration monitoring system which allows the user to connect and remotely monitor the condition of rotating equipment. The CM Connect communication is performed wirelessly. Via the built-in cellular solution, internal sensor and external connectors from critical equipment and application information can be accessed anytime and anywhere from a PC or handheld device.

The CM Connect can be connected to up to 10 Alfa Laval Condition Monitors (CM) via Bluetooth which measures equipment vibration and temperature. The measurements are compared against a baseline set during an initial “Teach” calibration period, which reflects normal condition.

All data and alerts are stored in the cloud and can be accessed for easy record keeping and troubleshooting.



- a) Connected devices and services
- b) Cellular 4G data-connection
- c) BLE connection up to 10 CM's per gateway

### NOTE

The CM Connect can be accessed from any browser application and/or through the Alfa Laval CM Connect App available on the Apple App Store, Google Play Store and Huawei App Gallery. Android users in China can download the app from the CM Connect product page on [alfalaval.cn](http://alfalaval.cn).

### NOTE

The device is approved for use in the following countries:

United States and The United Kingdom, **Europe**; Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden and The Netherlands, **EFTA**; Switzerland, Iceland, Liechtenstein and Norway.

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

## 2.1 Purpose of this manual

### NOTE

Save this manual for future reference and keep it readily available. For detailed use of product guidance, consult the Alfa Laval CM Connect App. Requesting other information for instructions, situations, or events that are not considered in this manual or in the sales documents, please contact your local Alfa Laval representative. Always specify the exact product type and identification code when requesting technical information or spare parts.

The purpose of this manual is to provide necessary information for:

- **Installation**
- **Safety**
- **Recycling**
- **Troubleshooting**
- **Related documents**

## 2.2 Use of symbols

This section describes the symbols used throughout this manual.

### NOTE

#### **Note**

Information considered important to the reader, but not related to hazards.

### ATTENTION

#### **Attention**

Informs the reader about a potential hazard, if not avoided will result in serious injury.

### HOT SURFACE

#### **Hot surface**

Informs the reader about potential hot surfaces.

### RELATED SECTION / REFERENCE

#### **Related section / reference**

Informs the reader about a section or reference containing further detailed information.

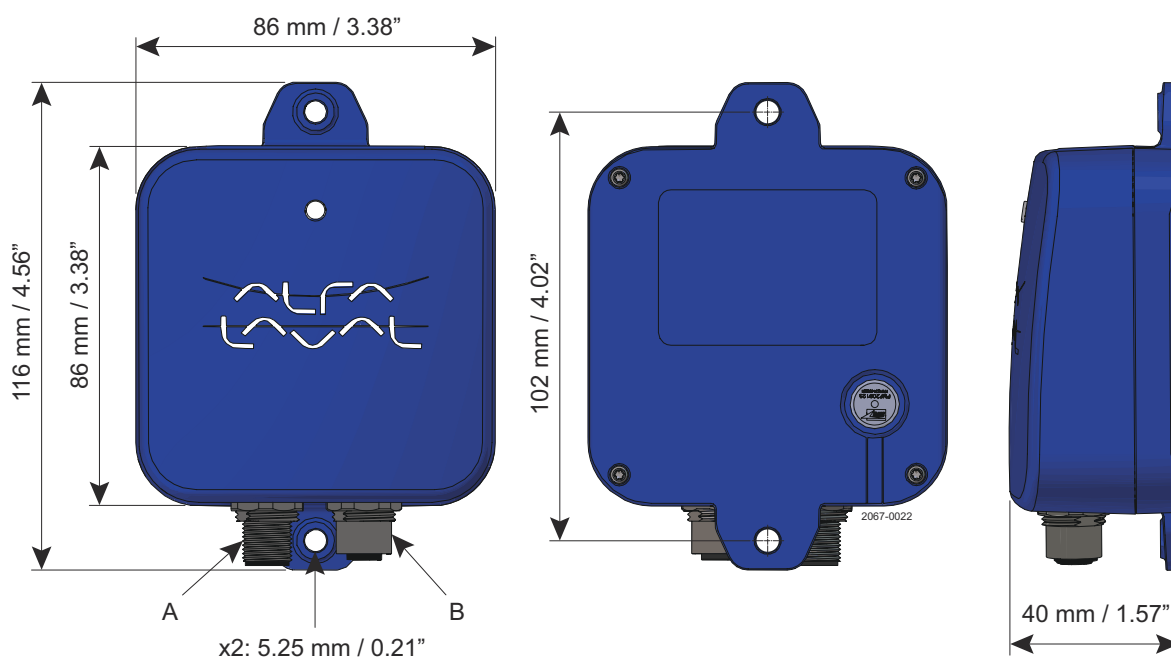


### 3 Installation

There are two ways of mounting the CM Connect:

1. Wall mounted acting as a gateway only.
2. Equipment mounted acting as gateway and a sensor (for mounting on Alfa Laval equipment – see separate Addendums).

The CM Connect should be mounted on the wall utilizing two flat or conehead screws (not included).

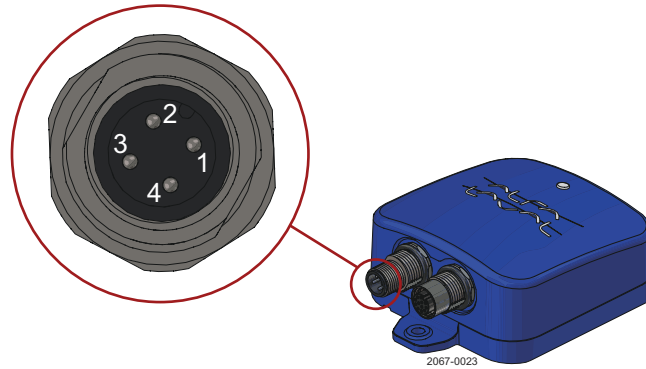


A) Power supply connector

B) External sensors connector – Future options

Power supply specifications	24VDC, 7–15W
-----------------------------	--------------

Power supply connector (A)



**Wiring diagram - power supply connector (A)**

PIN1	Power supply	24VDC (brown)
PIN2	Future option	
PIN3	Power supply	GND (blue)
PIN4	Future option	

**Power connector cables can be ordered through Alfa Laval using following article numbers:**

Cable M12	4 wire female straight connector	5m [15Ft] length	For wall mount	8010000288
Cable M12	4 wire female straight connector	10m [30Ft] length	For wall mount	8010000289

## 3.1 Setting up the CM Connect

### NOTE

Ensure there is mobile coverage at the installation location.

- 1 Mount the CM Connect (for wall mount see section 3 and for Alfa Laval equipment mount see relevant addendum).
- 2 Connect M12 cable to power (order separately) as illustrated in section 3.
- 3 The CM Connect is accessed through:

1. Web browser access go to [www.cm-connect.com](http://www.cm-connect.com).
2. To download App Scan QR code on CM Connect packaging \* *Android user in China: Download app from CM Connect product page on [alfalaval.cn](http://alfalaval.cn)*

Alfa Laval CM Connect  
Article nr: 8010014918

**Getting started:**  
**For PC:**  
Go to [cm-connect.com](http://cm-connect.com) and follow the instructions in the manual

**For mobile device:**  
1. Scan the QR code  
2. Download and open the app  
3. Follow the instructions on the screen  
(Android user in China: Download the app from CM Connect product page on [alfalaval.cn](http://alfalaval.cn))

  
Device I.D.








2067-0024

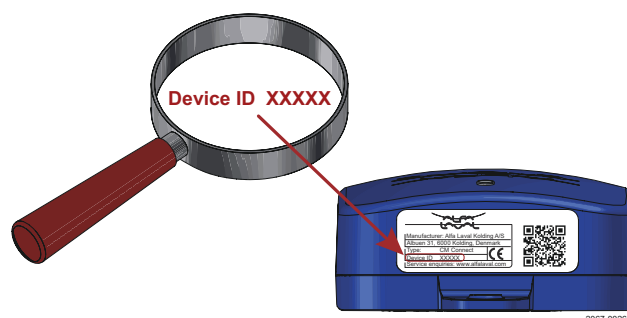
- 4
  1. New user: Press "First time log-in" and follow the instructions on the screen.
  2. For existing user:
    - Login with current credentials.
    - Press "Register new CM Connect" and enter the device ID (see where you find the device ID below). Follow the instructions on the screen.



First time user (register device and create new account)  
 Forgot login name or password?

2067-0025

- 5 Click Register Device for activation of first 12 months of connected services.



- 6 When registration is completed – wait minimum 2 minutes until the device LED enters heartbeat mode (connected to CM Connect server).

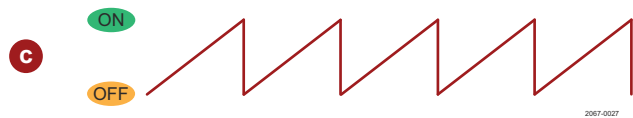
a) Searching for cellular network.  
(Single blinking led).



b) Connected to cellular network.  
(Double blinking led).



c) Connected to CM-Connect server.  
(Pulsating heartbeat led).

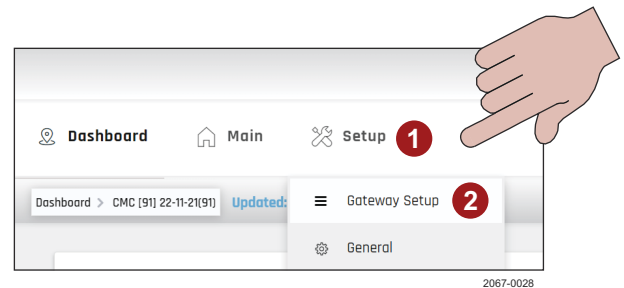


- 7 If there are any issues during the registration process please contact Alfa Laval Customer Support [connectsupport@alfalaval.com](mailto:connectsupport@alfalaval.com)

## 3.2 Link CM to CM Connect (gateway)

Install and commission the CM on the equipment as described in the CM manual.

- 1 Now enter the setup screen and scan for CM's (the CM's must be within Bluetooth range from the CM Connect).



- 2 A list of available CM's will appear in the devices in range list.



- 3 Use the wink functionality to easily identify one CM from another. Selecting Wink will instruct the CM to flash purple every second for a total of 2 minutes, enabling the user time to visually locate and assign the CM to the correct CM Connect within the user interface.





## 4 Safety



### Attention

Failure to observe the instructions contained in this manual could result in personal injury and property damage, and may void the warranty. Read this manual carefully before installing and using the product.

### 4.1 Safety – Installation

This product should only be installed/commissioned by instructed or otherwise competent personnel.



### Hot surfaces

When mounting the CM Connect to external equipment, such as pump gearboxes, be aware of potential hot surfaces, and always wear appropriate protective equipment.

The CM Connect can be mounted on surfaces up to 80°C (176°F).

### 4.2 Product



### Attention

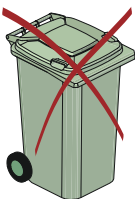
Only expose the CM Connect to ambient temperatures within -30°C to 70°C [22°F to 158°F]. Heating above these temperatures could result in serious injury. Never dispose of the CM Connect in a fire, this could result in serious injury.

### 4.3 Recycling information



### Attention

The CM Connect should be handled according to local rules for WEEE “small IT and communications equipment”.





**CSI**

CONTACT CSI FOR MORE INFORMATION | [CSIDESIGNS.COM](http://CSIDESIGNS.COM) | [SALES@CSIDESIGNS.COM](mailto:SALES@CSIDESIGNS.COM) | 417.831.1411



---

## 5 Addendum

Alfa Laval Specific Equipment Installation Guidelines.



**CSI**

CONTACT CSI FOR MORE INFORMATION | [CSIDESIGNS.COM](http://CSIDESIGNS.COM) | [SALES@CSIDESIGNS.COM](mailto:SALES@CSIDESIGNS.COM) | 417.831.1411