

Motor Condition Monitoring Devices

K6CM series



- Stay alert to signs of motor failure with real-time monitoring
- "Motor Condition Monitoring Tool" for PCs
- Clamp-type current transformer (CT) is easy to install on existing equipment

K6CM monitors your need for motor mainten

Eliminating time-consuming maintenance inspection and need for motor expertise.

[Problems]

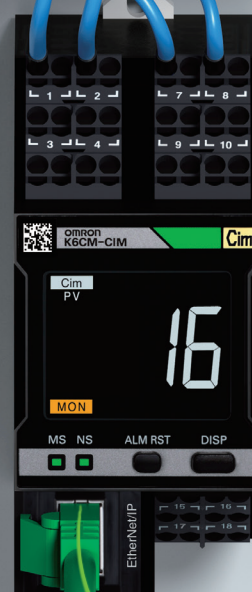
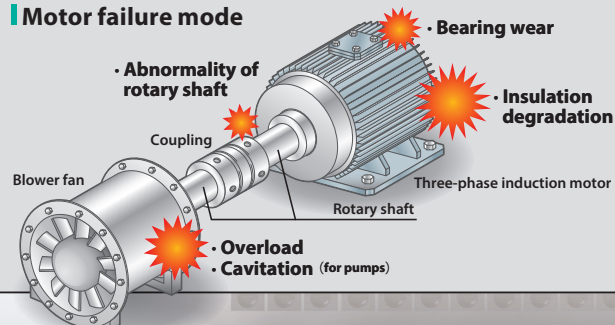
Are you having trouble preventing motor issues caused by degradation?

The conventional motor condition inspection has several items to examine. Therefore, an experienced maintenance engineer is required to determine the need for motor maintenance. Furthermore, typical motor inspection in production facilities is very time consuming due to the large quantity of motors.

Example of inspection items

Phenomenon Symptoms	Vibration	Heat generation	Decreased electrical resistance	Overcurrent
Bearing wear	✓	✓		✓
Insulation degradation			✓	
Overload	✓	✓		✓
Open phase		✓		

Motor failure mode



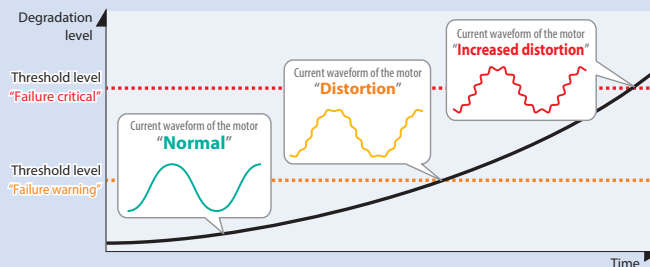
EtherNet/IP™

[OMRON Solution]

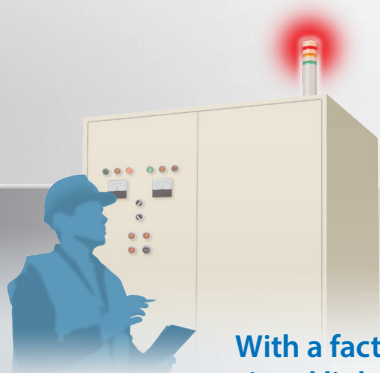
Avoid motor failure by performing preventative maintenance activity in advance.

K6CM (comprehensive current diagnosis type) can identify motor condition by monitoring the current waveform of the motor. Furthermore, all maintenance personnel can easily understand the motor's condition using the K6CM threshold settings.

What is comprehensive current diagnosis?



When an abnormality occurs in the load such as bearing, rotary shaft, or reducer, the motor does not rotate smoothly and a distortion occurs in its current waveform. K6CM measures its distortion as a degradation level.



With a factory floor signal light

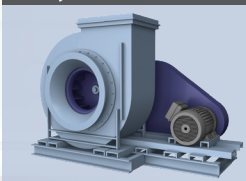


With an office PC

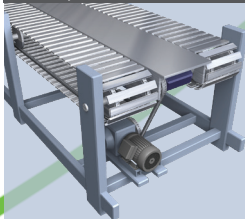
With the accessory software "Motor Condition Monitoring Tool", you can monitor motor conditions remotely.

* The screen is a sample image.

Rotary fan



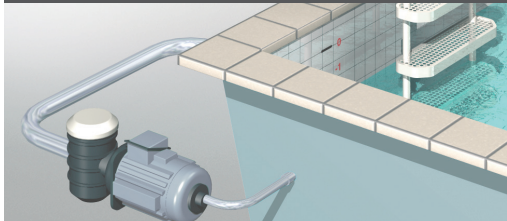
Conveyor



Elevator



Pump



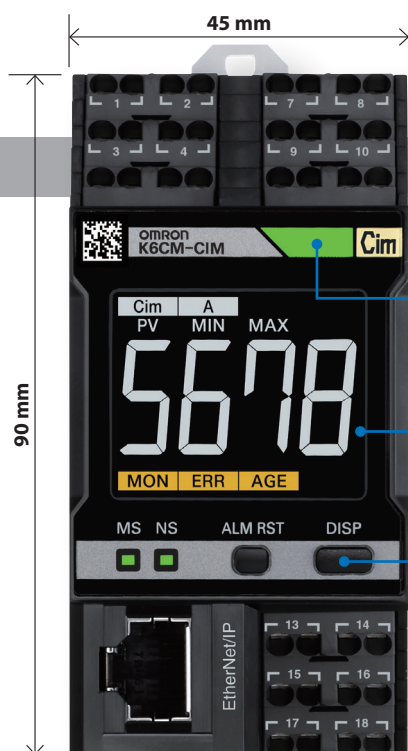
Monitors the 3-phase induction motor which is the driving force of every facility.



Motor Condition Monitoring Device Lineup

type
01

To make an integrated diagnosis with a single parameter



<Actual Size>

Comprehensive current diagnosis type



Bearing wear



Insulation degradation



Overload



Open phase

K6CM-CIM



Clamp-type CT which is easy to retrofit



CT
K6CM-CICB

Alarm bar

- Green : Status normal
- Orange : Failure warning
- Red : Failure critical

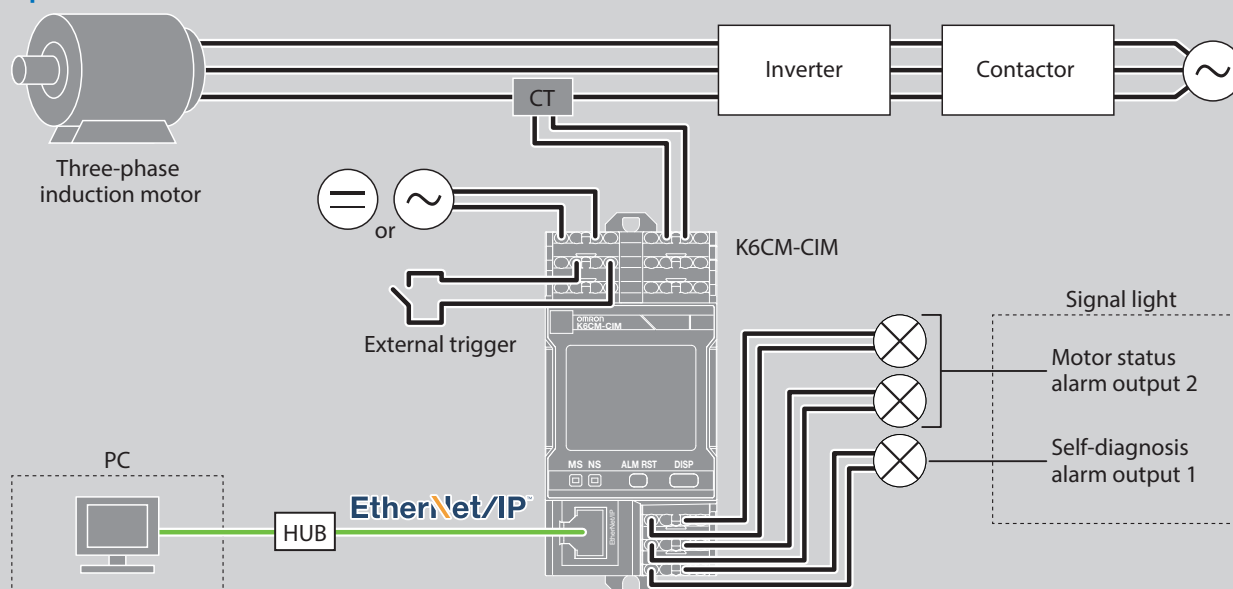
Display

- [PV] : Present value
- [MIN] : Minimum value
- [MAX] : Maximum value

Switches the units of the measured value displayed

- [CIM] : Degradation level
- [A] : Current

Example: Connections



Motor Condition Monitoring Device Lineup

type 02 To measure the insulation resistance level

Insulation degradation

Insulation resistance monitoring type

K6CM-ISM

ZCT
K6CM-ISZBI



type 03 To measure the vibration and temperature level

Bearing wear **Overload** **Open phase**

Vibration/temperature monitoring type

K6CM-VBM

Pre-amplifier & vibration/temperature sensor
K6CM-VBS



* Applicable motor: 3-phase induction motor
* For explanation purposes, all indication lights are on.

K6CM Software
Software for setup and monitoring

Software for PC
Motor Condition Monitoring Tool

[Windows7, Windows8.1, Windows10, (32bit/64bit) (English/Japanese)]
* Software included with main unit.




Our shared Value Design for Panel (herein after referred to as Value Design) concept for the specifications of products used in control panels will create new value for our customers' control panels. Combining multiple products that share the Value Design concept will further increase the value provided to control panels.

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