

Motor Condition Monitoring Devices

K6CM series



K6CM takes the burden of monitoring off maintenance engineers.

Stay alert to signs of motor failure through monitoring conditions.



EtherNet/IP™

- K6CM's threshold setting keeps users informed of maintenance timing
- "Motor Condition Monitoring Tool" for PCs
- Clamp-type CT which is easy to install on existing equipment



No need for time-consuming patrol inspection or expertise.

K6CM informs you of the motor's maintenance

[Problems]

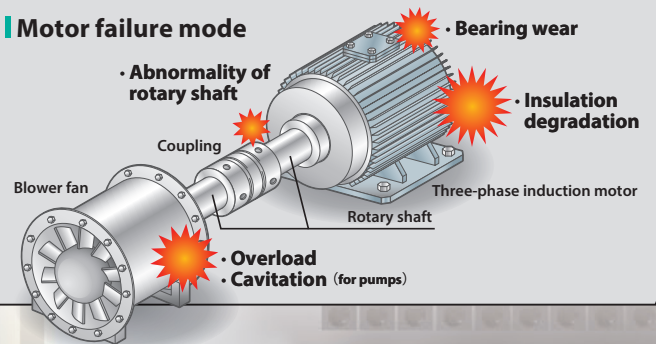
It's difficult to prevent motor issues caused by degradation.

The conventional motor condition check had several check items. Therefore a skilled maintenance engineer was required to judge the motor's maintenance timing. Additionally, inspection was time-consuming because there were many motors.

Example of patrol inspection items

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

Motor failure mode



EtherNet/IP™

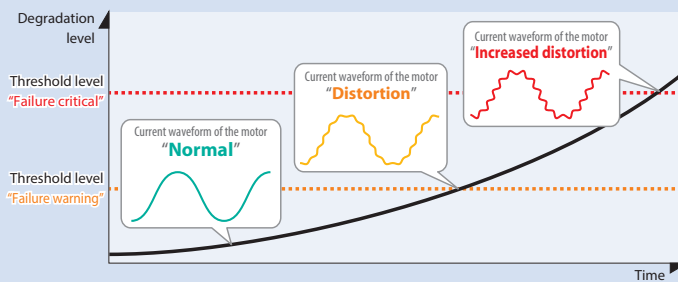
timing.

[Solution from OMRON]

Motors can be maintained in advance of failure due to degradation.

K6CM (comprehensive current diagnosis type) can consistently monitor motor conditions by observing the current waveform of the motor. Additionally, you can understand the motor's maintenance timing without depending on an engineer, because K6CM provides threshold value setting.

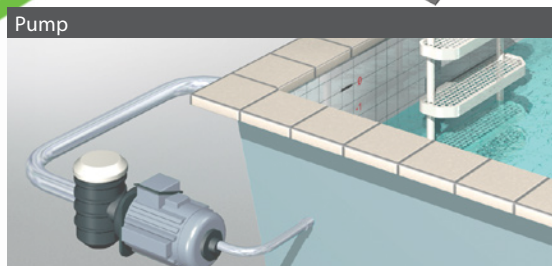
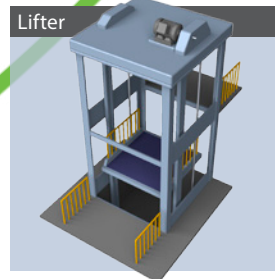
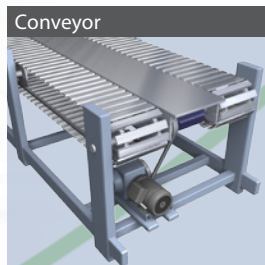
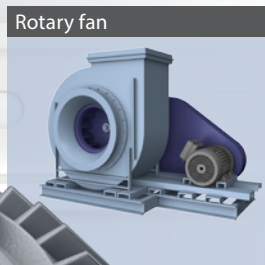
What is comprehensive current diagnosis?



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.



* The screen is a sample image.



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

K6CM-CIM

Alarm bar

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

Display

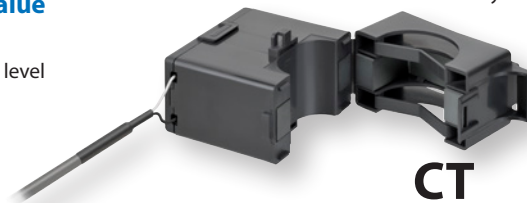
- [PV] : Present value
- [MIN] : Minimum value
- [MAX] : Maximum value

Switches the units of the measured value displayed

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

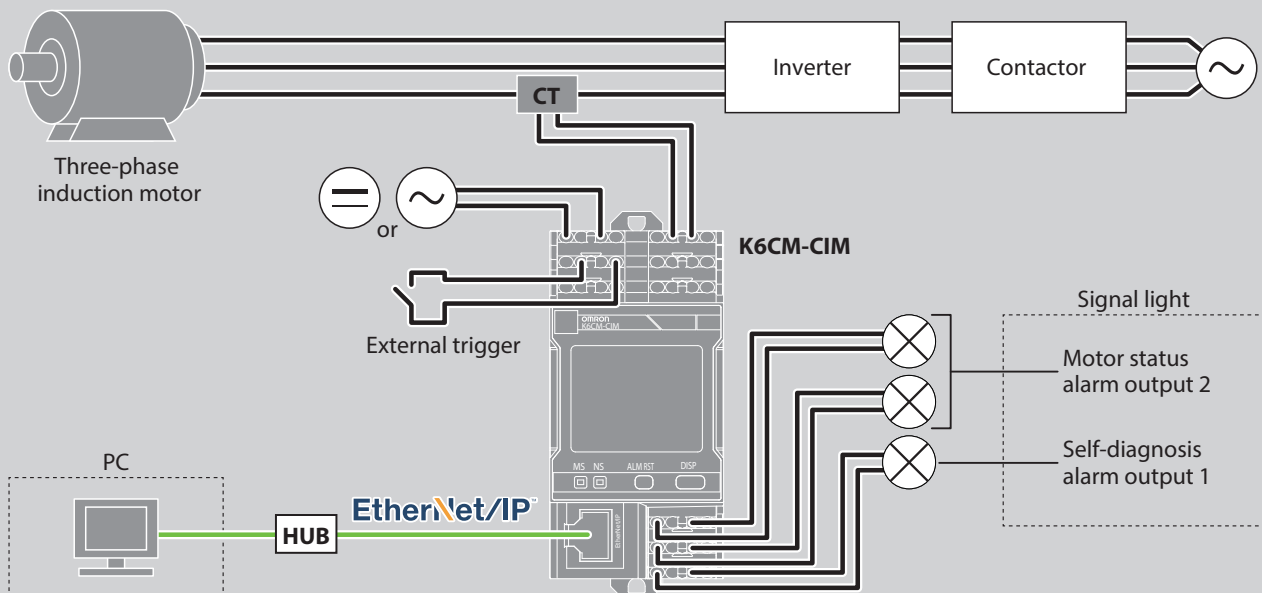


Clamp-type CT which is easy to retrofit



CT
K6CM-CICB400

Example: Connections



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 of units are on.

K6CM common software
Software for setup and monitoring

Software for PC

Motor Condition Monitoring Tool

[Windows7, Windows8, 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.

OMRON Corporation Industrial Automation Company
Kyoto, JAPAN

Contact: www.ia.omron.com

Regional Headquarters

OMRON EUROPE B.V.

Wegalaan 67-69, 2132 JD Hoofddorp
The Netherlands
Tel: (31)2356-81-300/Fax: (31)2356-81-388

OMRON ELECTRONICS LLC

2895 Greenspoint Parkway, Suite 200
Hoffman Estates, IL 60169 U.S.A.
Tel: (1) 847-843-7900/Fax: (1) 847-843-7787

OMRON ASIA PACIFIC PTE. LTD.

No. 438A Alexandra Road # 05-05/08 (Lobby 2),
Alexandra Technopark,
Singapore 119967
Tel: (65) 6835-3011/Fax: (65) 6835-2711

OMRON (CHINA) CO., LTD.

Room 2211, Bank of China Tower,
200 Yin Cheng Zhong Road,
PuDong New Area, Shanghai, 200120, China
Tel: (86) 21-5037-2222/Fax: (86) 21-5037-2200

Authorized Distributor:

© OMRON Corporation 2017 All Rights Reserved.
In the interest of product improvement,
specifications are subject to change without notice.

Cat. No. N220-E1-01

1117(1117)