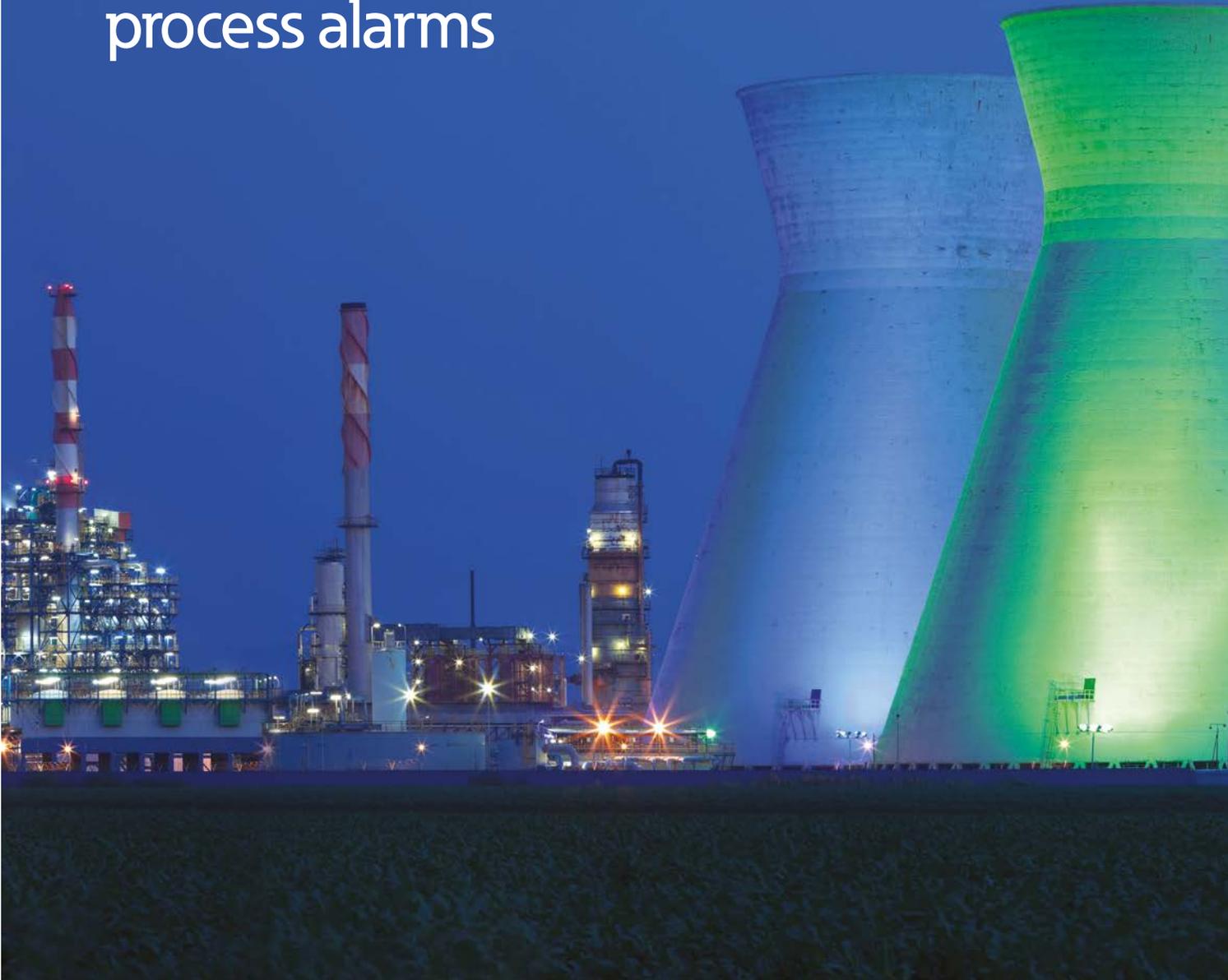


Flexible, reliable monitoring and notification for critical process alarms



Powering Business Worldwide

Contents

RTK alarm annunciators	4 - 5
RTK hazardous area alarm annunciators	6 - 7
RTK events recorders	8 - 9
RTK hazardous area notifications	10
RTK engineered solutions	11

Only Eaton can deliver...

- Protection and safety of people and assets around the world with unsurpassed reliability and quality in every product we offer
- Industry leading innovation and product efficiency
- Product solutions designed and certified for global specifications
- Best-in-class, global sales, and customer service teams that provide local support
- More than 40 years of process automation industry knowledge and expertise



www.mtl-inst.com
mtlenquiry@eaton.com



Eaton is a leading supplier with a wealth of experience in the design and manufacture of process alarm equipment. The MTL RTK product range, part of Eaton's Crouse-Hinds series portfolio, is suitable for use in safe and hazardous area environments across the process, power and utility sectors.

Our product offering includes alarm management solutions and associated instrumentation ranging from a single sounder to a complete plant-wide alarm and monitoring system. With unique and innovative product solutions our MTL RTK products help to keep operators safe and plant running smoothly through the alarm and event monitoring of critical processes.

A comprehensive 5 year warranty is included as standard and as recognition of our successful adoption of international quality management systems we are audited against the ISO9001:2000 standard by the BSI, giving you the peace of mind that you are receiving quality and reliable products.

Dedication to our customers and recognition of industry requirements continues to drive our development of new products to ensure we deliver the best values and solutions to meet our customers' needs.

At Eaton, we provide one of the world's largest portfolio of electrical equipment for explosive, classified and industrial areas. With unsurpassed product reliability and quality, industry-leading innovation and product efficiency, and products designed and certified for global specifications, Eaton delivers proven solutions for harsh and hazardous environments.



Alarm solutions to the worldwide power and process industries

RTK alarm annunciators

Eaton is a leading supplier of MTL process alarm equipment, with RTK alarm annunciator solutions available for all safe and hazardous area industrial applications.

Our range of RTK alarm annunciators are all modular in design, customised to your specification and come with a range of additional options. This gives you the flexibility of a solution that will meet your exact needs and clear monitoring of critical alarms.

NEW

Alarm annunciator

RTK SmartAlarm annunciator

Eaton are pleased to announce a new RTK alarm annunciator family in the popular DIN package size. The RTK SmartAlarm brings together many years of development in alarm annunciator technology and builds on the functionality of the field proven RTK UC625. The RTK SmartAlarm is designed as a complete alarm system with integral, audible, relays and pushbuttons for the most cost effective solution for monitoring critical process alarms. Incorporating ISA 18-1 1979 (R1992) alarm sequence programmable via the front panel mounted USB connector, the unit also accommodates optional signal duplicating relays, dual horn relays, LED display, making the RTK SmartAlarm an ideal choice where full functionality is required and space is a premium.

- DIN size module with 8, 16 and 24 channel versions
- Internal FCV 24vDC
- Pluggable LED's in five colours, red, yellow, white, blue and green
- Internal logic PSU
- Remote pushbuttons mapped to P/B function

The RTK SmartAlarm annunciator provides a feature rich critical alarm annunciator in an industry standard footprint



NEW

Substation annunciator RTK 725B

This feature rich, remote logic annunciator has the ability to handle thousands of alarms channels. The multi-redundant design is also extended to the PSU and the serial communications. The system is based on a standard Eurorack and is programmable from the front and also through software. A wide variety of displays or mimics can be driven from this system including the range of RTK display facias.

- Expandable up to 1000s of alarm channels
- Can be used as a multiplexer and data gatherer
- Can be linked to alarm management software

The RTK 725B substation annunciator brings together the advanced functionality of the RTK 725B panel mounted annunciator with the capability of interfacing directly with substation automation protocols as used in smart grid applications. This scalable product can be configured from up to 254 channels with dual redundant power options and two protocol options.

- Can be configured with dual redundant PSU and supply monitoring relay
- Two protocol options are available, Kema certified IEC61850 and DNP3 Level 2
- Both protocol options allow for the unit to be used as either an intelligent lamp unit or data collector



Alarm annunciator/event recorder RTK 725B

The RTK 725B brings together many years of development in alarm annunciator technology and represents the best available investment in protection for your industrial plant. Using advanced communication techniques, coupled with our unique multi-redundant design, the RTK 725B annunciator gives the best combination of flexibility, usability, reliability and cost of ownership.

- 1ms event recording functionality up to 256 points
- Multi-redundant design, no single source of failure
- Advanced diagnostics
- Fully software configurable through USB port



Safety annunciator RTK SIL725

The RTK SIL725 safety annunciator is designed and manufactured to provide a high safety integrity for critical alarm applications and for use as a component part of a safety instrumented system. The unit is third party certified by SIRA using the CASS methodology to a safety integrity level of SIL2.

- SIRA certified at safety integrity level SIL2 to IEC61508
- Modular construction from 1 to 128 ways
- Each channel configurable from the front



Alarm annunciator RTK 725 range

The fully programmable RTK 725 annunciator range is the perfect solution for monitoring critical process alarms. With the unique multi-redundant design and a proven history of 100,000s of alarm points world-wide, this annunciator can be manufactured in any shape and size to your exact requirement. There are also a host of options to choose from including repeat relays, time delays and serial communications.

- Three window sizes and six window colours
- Up to 256 channels
- Fully user programmable per point from the front



Alarm annunciator RTK UC625

A cost effective, compact annunciator packed with useful features, this product is ideal for machine alarms and sub-station alarm monitoring. With thousands of units operating reliably in the field, particularly in transmission and distribution, the RTK UC625 has proven itself in harsh environments. Despite the size, this unit is still fully programmable and uses a multi-redundant design.

- Dual universal redundant power supply
- Programmable time delays
- Individual repeat relays

RTK hazardous area alarm annunciators

A full range of RTK annunciators are available for installation in the heart of the hazardous area. These are offered with different protection concepts to suit particular applications, including explosion-proof and intrinsically safe (IS).

To extend the range of applications and improve connectivity between safe and hazardous areas, RTK IS relays and MTL multiplexers are also available.



Intrinsically safe annunciator RTK LN1000

A world exclusive design allowing complete alarm annunciator capabilities in the heart of the hazardous area. This is a unique solution for monitoring and displaying critical alarm operators within any zone. The combination LCD and LED displays show all the alarm information for all of the alarm channels. The tough yet lightweight stainless and polyurethane enclosure is sealed to IP65.

- Certified for use in any zone
- 32 channels can be driven from one interface
- Simple to commission and maintain



The RTK LN1000 intrinsically safe annunciator provides a unique solution for problems with hazardous area alarm indication



Explosion proof annunciator
RTK PEX7250

This annunciator offers a vast range of features and benefits normally reserved for use in safe area annunciators only. All windows are illuminated with ultra-bright LEDs and are available in the full range of colours and window sizes. The same options are available as for the RTK series 725, RTK 725B and RTK SIL725 alarm annunciators.

- Three window sizes and six window colours
- Available from 4 to 56 alarm channels
- RS485 MODBUS communications option



Intrinsically safe relay
RTK DA-149

A critical part of the system is the ability to interface between safe and hazardous areas. The RTK DA-149 range of intrinsically safe relays is used to undertake the task of transferring signals between the safe and hazardous areas or between equipment within the hazardous area. Therefore the hazardous area annunciator can provide drive signals back into the safe area and safe area alarm information can be indicated within the hazardous area.

- Can transfer signals from safe to hazardous area or vice versa
- Extremely low current consumption
- High switching capacity on contacts

Offering a vast range of features and benefits normally reserved for use in safe area annunciators only



RTK event recorders

Eaton leads the way with the latest technically advanced RTK sequence of events recorders and combined alarm annunciators. Available as rack mounted systems for large applications or smaller combined event recorder/annunciators for time-stamping applications, the modular design allows for flexibility right down to a few channels per unit.

Combined event recorder/annunciator RTK 9000TS

A technically advanced distributed system, capable of a high speed event capture to a true 1ms resolution on all alarms. Expandable up to 4,000 channels, this high integrity product has distributed non-volatile memory allowing up to 15,000 events to be buffered prior to printing and/or transmitting through the communications port. The RTK 9000TS is even available with a dual redundant communications option to ensure the security of event data. Various communication outputs and protocols are available including IEC60870, DNP3 and IEC61850. The combined annunciator/event recorder can be used to indicate the fault for immediate action and then provide detail of the exact chain of events for later analysis. RTK display facias are available to display the alarm information.

- Various communication protocols
- Synchronised through GPS, IRIG-B or pulse
- Simple configuration using the setup software provided
- Configurable alarm shelving to avoid nuisance trips

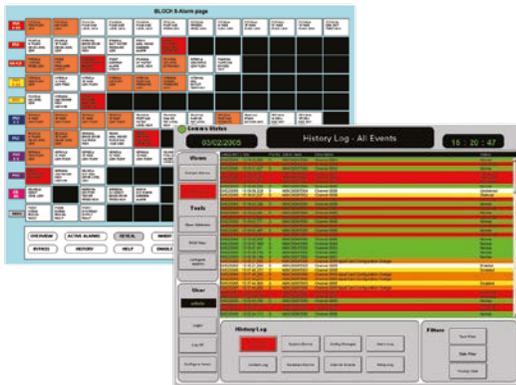
A technically advanced sequence of events recorder and combined alarm annunciator



Event recorder RTK 725B

The RTK 725B brings together many years of development in alarm annunciator technology and represents the best available investment in protection for your industrial plant. This annunciator can be supplied with an integral event recorder, time stamping to 1ms, and is ideal for applications where the alarm channels are distributed over a large plant area as the units remain extremely cost effective even with only a small number of channels.

- 1ms event recording functionality up to 256 points
- Multi-redundant design, no single source of failure
- Advanced diagnostics
- Fully software configurable through USB port



Alarm management software RTK INDICIUM



This software has been designed as a ready to use standard package to provide alarm display information in conjunction with our annunciators. When used with the RTK 9000TS event recorder, the time is also logged to a resolution of 1ms. The software can be set up to the user's requirements and provides an easy method of viewing current alarms and historical data as well as being able to filter by time, text or priority and to export to databases or spreadsheets for further analysis. This package can be used as a platform to create further alarm management software for more complex display or analysis requirements. This may include dual redundant systems with industrial servers etc.

- Import settings from spreadsheet
- Export to database
- View and record system errors

Display facia RTK P725LO

Used where the alarm logic is controlled elsewhere, the RTK P725LO modular display facias come with either lamp or LED illumination and can be manufactured in almost any shape and size. Versions are available for hazardous areas or high voltage inputs.

- Integral control components and/or audibles
- A range of window sizes and colours
- Simple replacement for multiple pilot lights



Master clock RTK 5201

Global time synchronisation of multiple RTK 9000TS systems can be achieved to a resolution of 1ms to world time standards. This 1U high 19" rack mounted unit presents the RTK 9000TS system with a combination of serial communications and one second pulses to ensure devices in the alarm management infrastructure share an accurate and common time reference.

- AC or DC Supply
- Status relay output
- Optional GPS aerial and interface

RTK hazardous area notification

Our range of RTK notification products are ideal for operators working within a hazardous area and need clear and immediate notification of a potential hazard.



Intrinsically safe sounder

RTK DB5

A sound output up to 100dB and a selection of 32 different tones makes this compact sounder a perfect solution for notification of personnel working within hazardous areas. The unit is sealed to IP65 and certified to European ATEX standards and the emerging IECEx international standard.

- Dual certification
- 32 different tones and up to 100dB output
- Simple installation



LED cluster

RTK DA170/DA180

The RTK DA170 range of LED clusters consists of 22mm super-bright LED pilot lights in six different colours and matching illuminated pushbuttons/selector switches. As an extension to this range the RTK DA180 giant LED clusters are larger 66mm diameter units which give clear indication from a distance and from the side. The clusters can be supplied as loose items or pre-installed in stainless steel or GRP enclosures ready for immediate mounting on site.

- Suitable for zones 1 and 2
- 22 or 66mm diameter lens
- Tough impact resistant IP65 casing



Intrinsically safe LED

RTK P861

A certified LED lamp which provides visual on/off indication of process conditions in hazardous areas. The standard RTK BA9s can be supplied as part of a pilot light or supplied separately to be used in any suitable standard switch or lamp assembly.

- Available in six colours
- Current limited



Display facia

RTK DFR301S

The simple backlit flashing display is regarded as the clearest way of alerting operators to abnormal conditions on complex process plants. The RTK DFR301S display facia provides a clear, bright display and is approved for use in Zone 1 and Zone 2 hazardous areas.

- Three window sizes and six window colours
- Bright LED illumination
- Integral control push buttons

RTK engineered solutions

Many customers require much more than the simple supply of component products. To service these requirements our experienced team of engineers can provide a consultancy service to help select the most appropriate solution. These solutions can consist of any intrinsically safe explosion proof system or custom alarm/event recording system.

The solutions we provide often include a combination of hardware and software pre-installed and configured offering a customised solution to address particular applications.

Offering a consultancy service to help a user select the most appropriate solution



Our systems team will manage each project throughout its life-cycle. This will include creation of the specification and design of the complete system for approval by the customer. Following approval, the project passes to production where the complete system, including any software and related IT hardware, is fabricated and wired.

The finished package, with all agreed documentation, is then ready for the factory acceptance test prior to shipment to site. Commissioning and training can also be provided if required.





EATON Crouse-Hinds series

The safety you rely on.

See the complete MTL process alarm product portfolio at www.mtl-inst.com

U.S. (Global Headquarters):
Eaton's Crouse-Hinds Business
1201 Wolf Street
Syracuse, NY 13208

(866) 764-5454
FAX: (315) 477-5179
FAX Orders Only:
(866) 653-0640

CrouseCustomerCTR@Eaton.com

For more information:

If further assistance is required, please contact an authorised MTL RTK Distributor, Sales Office, or Customer Service Department

AUSTRALIA

MTL Instruments Pty Ltd,
10 Kent Road, Mascot, New South Wales, 2020, Australia
Tel: +61 1300 308 374 Fax: +61 1300 308 463
E-mail: mtlsalesanz@eaton.com

BeNeLux

MTL Instruments BV
Ambacht 6, 5301 KW Zaltbommel
The Netherlands
Tel: +31 (0)418 570290 Fax: +31 (0)418 541044
E-mail: mtl.benelux@eaton.com

CHINA

Cooper Electric (Shanghai) Co. Ltd
955 Shengli Road, Heqing Industrial Park
Pudong New Area, Shanghai 201201
Tel: +86 21 2899 3817 Fax: +86 21 2899 3992
E-mail: mtl-cn@eaton.com

FRANCE

MTL Instruments sarl,
7 rue des Rosieristes, 69410 Champagne au Mont d'Or
France
Tel: +33 (0)4 37 46 16 53 Fax: +33 (0)4 37 46 17 20
E-mail: mtlfrance@eaton.com

GERMANY

MTL Instruments GmbH,
Heinrich-Hertz-Str. 12, 50170 Kerpen, Germany
Tel: +49 (0)22 73 98 12 - 0 Fax: +49 (0)22 73 98 12 - 2 00
E-mail: csckerpen@eaton.com

INDIA

MTL India,
No.36, Nehru Street, Off Old Mahabalipuram Road
Sholinganallur, Chennai - 600 119, India
Tel: +91 (0) 44 24501660 /24501857 Fax: +91 (0) 44 24501463
E-mail: mtlindiasales@eaton.com

ITALY

MTL Italia srl,
Via San Bovio, 3, 20090 Segrate, Milano, Italy
Tel: +39 02 959501 Fax: +39 02 95950759
E-mail: chmninfo@eaton.com

JAPAN

Cooper Crouse-Hinds Japan KK,
MT Building 3F, 2-7-5 Shiba Daimon, Minato-ku,
Tokyo, Japan 105-0012
Tel: +81 (0)3 6430 3128 Fax: +81 (0)3 6430 3129
E-mail: mtl-jp@eaton.com

NORWAY

Norex AS
Fekjan 7c, Postboks 147,
N-1378 Nesbru, Norway
Tel: +47 66 77 43 80 Fax: +47 66 84 55 33
E-mail: info@norex.no

RUSSIA

Cooper Industries Russia LLC
Elektrozavodskaya Str 33
Building 4
Moscow 107076, Russia
Tel: +7 (495) 981 3770 Fax: +7 (495) 981 3771
E-mail: mtlrussia@eaton.com

SINGAPORE

Cooper Crouse-Hinds Pte Ltd
No 2 Serangoon North Avenue 5, #06-01 Fu Yu Building
Singapore 554911
Tel: +65 6 645 9888 Fax: +65 6 487 7997
E-mail: sales.mtlsing@eaton.com

SOUTH KOREA

Cooper Crouse-Hinds Korea
7F Parkland Building 237-11 Nonhyun-dong Gangnam-gu,
Seoul 135-546, South Korea.
Tel: +82 6380 4805 Fax: +82 6380 4839
E-mail: mtl-korea@eaton.com

UNITED ARAB EMIRATES

Cooper Industries/Eaton Corporation
Office 205/206, 2nd Floor SJ Towers, off. Old Airport Road,
Abu Dhabi, United Arab Emirates
Tel: +971 2 44 66 840 Fax: +971 2 44 66 841
E-mail: mtlgulf@eaton.com

UNITED KINGDOM

Eaton Electric Ltd,
Great Marlings, Butterfield, Luton
Beds LU2 8DL
Tel: +44 (0)1582 723633 Fax: +44 (0)1582 422283
E-mail: mtlenquiry@eaton.com

AMERICAS

Cooper Crouse-Hinds MTL Inc.
3413 N. Sam Houston Parkway W.
Suite 200, Houston TX 77066, USA
Tel: +1 281-571-8065 Fax: +1 281-571-8069
E-mail: mtl-us-info@eaton.com

Eaton Electric Ltd,
Great Marlings, Butterfield, Luton
Beds LU2 8DL, UK.
Tel: + 44 (0)1582 723633 Fax: + 44 (0)1582 422283
E-mail: rtkenquiry@eaton.com

www.mtl-inst.com



VTL TECH CO., LTD.

SOLUTIONS PROVIDER FOR INDUSTRIES

19A Cong Hoa Street, Bay Hien Ward, Ho Chi Minh City

Tel: 028 – 3811 0510 / 11, Email: info@vlttech.com.vn

Fax: 028 – 3811 0512 Website: www.vlttech.com.vn



Powering Business Worldwide

© 2016 Eaton
All Rights Reserved
ZL-B-RTK-EN-0916
September 2016

Eaton Electric Limited,
Great Marlings, Butterfield, Luton
Beds, LU2 8DL, UK.
Tel: + 44 (0)1582 723633 Fax: + 44 (0)1582 422283
E-mail: mtlenquiry@eaton.com
www.mtl-inst.com

Eaton is a registered trademark.

All other trademarks are property of their respective owners.