

Reliable and Precise Command and Signalling



xCommand

Command and signalling –
ergonomic shape,
attractive design.
Switching control
circuit currents reliably
and precisely.

**Control circuit
devices RMQ**

**Foot and palm
switches FAK**

Signal towers SL

Fingerprint system

Position switches
LS-Titan

Rotary switches T/P

Selection aid

Control circuit devices

RMQ-Titan® and RMQ 16

Foot and palm switches FAK

Signal towers SL

MOELLER

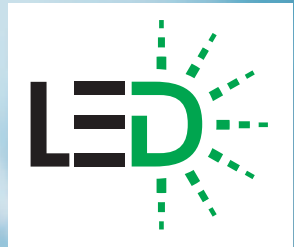


An Eaton Brand

The New Control Circuit Devices RMQ-Titan® are in Great Shape

New for ATEX use
See pages 18/19

xCommand



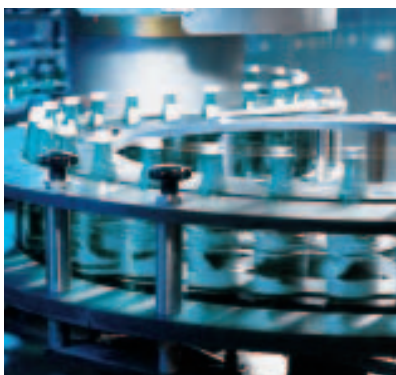
Modern styling has been combined with an optimum range of functions, – ideal for use at machines and on panels. The ergonomically shaped button elements are matched to the shape of a fingertip for even more comfortable operation.

Control circuit devices RMQ-Titan emit light non-stop for over 100 000 hours. Thereafter, the LED elements in RMQ-Titan do not suddenly fail but rather the intensity of their light is reduced. Special lenses and coloured LEDs offer enduring reliability at a very attractive price. Emergency-Stop actuators are now illuminated as well. This safety component is thus clearly visible even in dark rooms and a separate indicator light is not required.



Customised laser inscription

Whether at the control desk, in suspended operator panels or in the control cabinet, RMQ-Titan is number one when it comes to control circuit devices for machine and panel building. As well as the attractive and ergonomic design, the flexibility and versatility of the range always make it the ideal solution. All button plates, indicator lights and legend plates can be provided with abrasion resistant laser inscriptions of texts and symbols as required.



Optimum degree of protection for safety

Apart from the acoustic indicator, all RMQ-Titan front elements come with protection to at least IP67, thus already providing virtually unlimited scope for applications. Pushbutton actuators and indicator lights even offers protection to IP 69K! They can therefore be cleaned safely with high-pressure and steam cleaners – a key benefit in applications where cleanliness and hygiene are important requirements.



Adapted to the location

Mushroom actuators with a large actuation area offer more safety thanks to their conspicuous design and their ability to even be actuated with gloved hands. Illuminated Emergency-Stop buttons and buzzers ensure reliable signal indication even in dark rooms. Special diaphragms are also available for protecting buttons against dust, flour or cement.



Complete devices

For standard applications the RMQ-Titan pushbuttons, EMERGENCY-STOP buttons, selector switches and key switches are available for order as complete components for installation and mounting. You as the user save time with engineering design, ordering and mounting. The stock requirement is reduced.



Foot and palm switches

The foot and palm switches FAK are ideal for intuitive and safe operation because of their design with a particularly large actuator surface. This is especially true for use as an EMERGENCY-STOP switch. The high degree of protection IP 69K makes it ideal for use in harsh environments. The FAK is available as a complete device or as individual components.

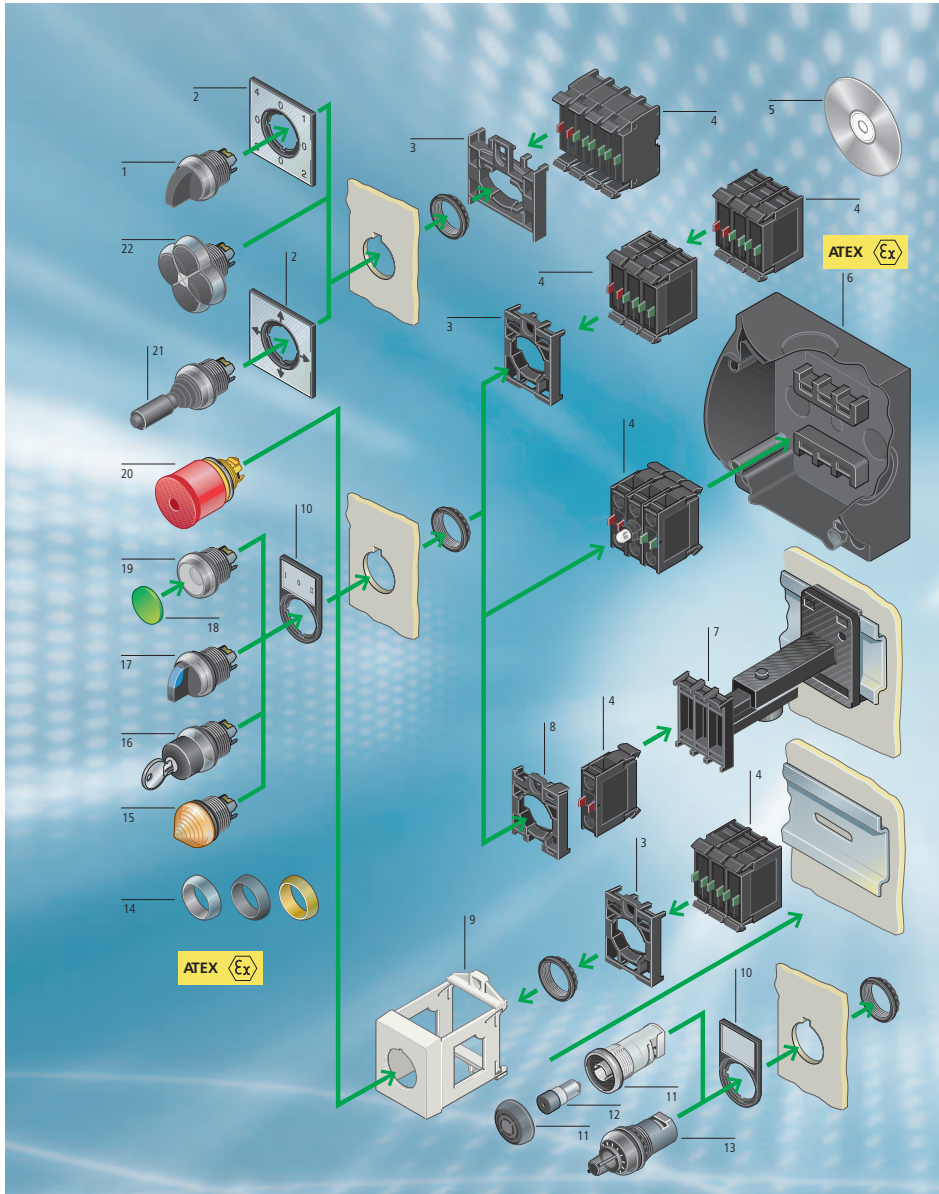


Always well enclosed

The surface mounting enclosure for eight control circuit devices RMQ16 with protection to IP65 is specially designed for industrial applications. The surface mounting enclosure in the RMQ-Titan range even provides protection to IP66 with up to 6 mounting locations.

System Overview

RMQ-Titan®



- 1 4 position selector switch actuators
- 2 Front label for 4-way selector switch/joystick
- 3 Fixing adapter
- 4 Contact element
- 5 Inscription software
- 6 Enclosure
- 7 Telescopic clip
- 8 Centring adapter
- 9 Distribution board rail adapter
- 10 Label plate
- 11 Acoustic indicator
- 12 Buzzer
- 13 Potentiometer

- 14 Frontring Titanium M22
Black M22S
(add S to types if necessary)
Gold: see page 6

- 15 Indicator light
- 16 Key switch
- 17 Selector switch
- 18 Button plate/button lens
- 19 Push-button
- 20 Emergency-stop button
- 21 Joystick
- 22 4 position button

Push-button actuators, flush

NEMA 4X, 13
IP 67, 69K



Front ring black: M22S...

| Button plate | Actuator spring-return | Actuator stay-put |
|----------------------|------------------------|-----------------------|
| ● | M22-D-S 216590 | M22-DR-S 216613 |
| ○ | M22-D-W 216592 | M22-DR-W 216615 |
| ● | M22-D-R 216594 | M22-DR-R 216617 |
| ● | M22-D-G 216596 | M22-DR-G 216619 |
| ● | M22-D-Y 216598 | M22-DR-Y 216621 |
| ● | M22-D-B 216600 | M22-DR-B 216623 |
| ⊙ | M22-D-R-X0 216605 | M22-DR-R-X0 216628 |
| ⊙ | M22-D-G-X1 216607 | M22-DR-G-X1 216630 |
| ⊙ | M22-D-S-X0 216609 | M22-DR-S-X0 216632 |
| ⊙ | M22-D-W-X1 216611 | M22-DR-W-X1 216634 |
| Without | M22-D-X 216602 | M22-DR-X 216625 |
| Without button plate | M22-DG-X 220921 | |
| With guard ring | | |



Push-button extended

NEMA 4X, 13
IP 67, 69K



Front ring black: M22S...




| Button plate | Actuator spring-return | Actuator stay-put |
|--------------|------------------------|------------------------|
| ● | M22-DH-S 216636 | M22-DHR-S 216663 |
| ○ | M22-DH-W 216638 | M22-DHR-W 216665 |
| ● | M22-DH-R 216641 | M22-DHR-R 216667 |
| ● | M22-DH-G 216643 | M22-DHR-G 216669 |
| ● | M22-DH-Y 216646 | M22-DHR-Y 216671 |
| ● | M22-DH-B 216649 | M22-DHR-B 216673 |
| ⊙ | M22-DH-R-X0 216655 | M22-DHR-R-X0 216675 |
| ⊙ | M22-DH-G-X1 216657 | M22-DHR-G-X1 216677 |
| ⊙ | M22-DH-S-X0 216659 | M22-DHR-S-X0 216679 |
| ⊙ | M22-DH-W-X1 216661 | M22-DHR-W-X1 216681 |
| Without | M22-DH-X 216602 | M22-DHR-X 216625 |

ATEX 



„The order is handled via M22-COMBINATION-“

Additional order specification „M22-ATEX“



| Mushroom actuators | | | | Selector switch actuators | | | Key-operated actuators | |
|---|-----------|-----------------------|------------------------|---|------------------------------|---------------------------|---|---------------------------------------|
| NEMA 4X, 13 IP 67, 69K Front ring black: M22S... | | | | NEMA 4X, 13 IP 66 Front ring black: M22S... ↳ = stay-put ↳ = spring-return | | | NEMA 4X, 13 IP 66 Front ring black: M22S... | |
| ATEX  | | | | ATEX  | | | ATEX  | |
| Button plate | Mush-room | spring-return | stay-put | Function | Rotary button 2 positions | Thumb-grip 2 positions | MS1 lock mechanism, 2 positions | MS2-20 lock mechanism, 2 positions |
| ● | ● | M22-DP-S 216712 | M22-DRP-S 216743 | ↳ | M22-W 216853 | M22-WK 216865 | M22-WS 216881 | M22-WS-MS* 216883 |
| ● | ● | M22-DP-R 216714 | M22-DRP-R 216745 | ↳ | M22-WR 216855 | M22-WRK 216867 | M22-WRS 216887 | M22-WRS-MS* 216880 |
| ● | ● | M22-DP-G 216716 | M22-DRP-G 216747 | ∨ | | M22-WKV 216874 | | |
| ● | ● | M22-DP-Y 216718 | M22-DRP-Y 216749 | ∨ | | | | |
| ○ | ● | M22-DP-R-X0 216720 | M22-DRP-R-X0 216751 | ↳↕ | 3 positions | 3 positions | 3 positions | 3 positions |
| ○ | ● | M22-DP-G-X1 216722 | M22-DRP-G-X1 216753 | ∨↕ | M22-W3 216861 | M22-WK3 216874 | M22-WS3 216894 | M22-WS3-MS* 216896 |
| ○ | ● | M22-DP-S-X0 216724 | M22-DRP-S-X0 216755 | ∨↕ | M22-WR3 216863 | M22-WRK3 216872 | M22-WRS3 216900 | M22-WRS3-MS* 216903 |
| ○ | ● | M22-DP-W-X1 216726 | M22-DRP-W-X1 216757 | ∨↕ | | M22-WRK3-1 217436 | Also available with lock mechanism suitable for master key systems | |
| Without | ● | M22-DP-S-X 216728 | M22-DRP-S-X 216759 | ∨↕ | 4 positions | 4 positions | | |
| Without | ● | M22-DP-R-X 216731 | M22-DRP-R-X 216762 | ⊗ | M22-WR4 279419 | M22-WRK4 279431 | Protective diaphragm for use with | |
| Without | ● | M22-DP-G-X 216734 | M22-DRP-G-X 216765 | | | | | |
| Without | ● | M22-DP-Y-X 216737 | M22-DRP-Y-X 216768 | | | | M22-WS ... | M22-XWS 231275 |



| Illuminated push-button actuators | | | | | Indicator light lens assemblies | |
|---|-----------------------------------|------------------------------|--------------------------------------|--------------------------------------|---|-----------------------|
| NEMA 4X, 13 IP 67, 69K Front ring black: M22S... | | | | | NEMA 4X, 13 IP 67, 69K | |
| ATEX  | | | | | ATEX  | |
| Button lens | Actuators flush, spring-return | Actuators flush, stay-put | Actuators extended, spring-return | Actuators extended, spring-return | Flush | Extended, conical |
| ○ | M22-DL-W 216922 | M22-DRL-W 216944 | M22-DLH-W 216965 | M22-DRLH-W 216788 | M22-L-W 216771 | M22-LH-W 216778 |
| ● | M22-DL-R 216925 | M22-DRL-R 216946 | M22-DLH-R 216967 | M22-DRLH-R 216789 | M22-L-R 216772 | M22-LH-R 216779 |
| ● | M22-DL-G 216927 | M22-DRL-G 216948 | M22-DLH-G 216969 | M22-DRLH-G 216796 | M22-L-G 216773 | M22-LH-G 216780 |
| ● | M22-DL-Y 216929 | M22-DRL-Y 216950 | M22-DLH-Y 216971 | M22-DRLH-Y 216799 | M22-L-Y 216774 | M22-LH-Y 216781 |
| ● | M22-DL-B 216931 | M22-DRL-B 216952 | M22-DLH-B 216973 | M22-DRLH-B 216802 | M22-L-B 216775 | M22-LH-B 216782 |
| Without | M22-DL-X 216933 | M22-DRL-X 216954 | M22-DLH-X 216973 | M22-DRLH-X 216802 | M22-L-X 216776 | M22-LH-X 216776 |
| ○ | M22-DL-R-X0 216936 | M22-DRL-R-X0 216957 | M22-DLH-R-X0 216975 | M22-DRLH-R-X0 216804 | | |
| ○ | M22-DL-G-X1 216938 | M22-DRL-G-X1 216959 | M22-DLH-G-X1 216977 | M22-DRLH-G-X1 216805 | Colour Lens, thumb-grip | Colour LED |
| ○ | M22-DL-W-X0 216940 | M22-DRL-W-X0 216961 | M22-DLH-W-X0 216979 | M22-DRLH-W-X0 216806 | | |
| ○ | M22-DL-W-X1 216942 | M22-DRL-W-X1 216963 | M22-DLH-W-X1 216981 | M22-DRLH-W-X1 216807 | | |



| Joystick | | Selector switch actuators | | |
|--|---|--|----------------------------|-----------------------|
| 2 and 4 positions IP 66 | | NEMA 4X, 13 IP 66 | | |
| Front ring black: M22S... | | Front ring black: M22S... | | |
| Function | Part no. | Function | Rotary button, 4 positions | Thumbgrip 4 positions |
| One position per direction | Front ring titanium Front ring black | | | |
| in 2 positions horizontal | Spring-return M22-WJ2H 289195 | Stay-put M22-WRJ2H 289199 | | M22-WR4 279419 |
| in 2 positions vertical | M22-WJ2V 289196 | M22-WRJ2V 289240 | | |
| in 4 positions | M22-WJ4 289196 | M22-WRJ4 279415 | | |
| Function | Part no. | | | |
| Two positions per direction. ¹⁾ | Front ring titanium Front ring black | | | |
| in 2 positions horizontal | Spring-return M22-WJ2H-2P 111508 | – | | |
| in 2 positions vertical | M22-WJ2V-2P 111507 | – | | |
| in 4 positions | M22-WJ4-2P 110836 | – | | |

¹⁾ The joystick is combined with two positions per actuation direction with "normally closing" M22-K10 and "early closing" M22-K10P.



| 4 position push-button | | | |
|---|--------------------|------------|------------------------|
| IP 66 | | | |
| Front ring black: M22S... | | | |
| Function | Inscription | Colour | Part no. |
| Buttons not mechanically interlocked | | | |
| All buttons spring-return | Directional arrows | Black | M22-D4-S-X7 286336 |
| All buttons spring-return | None | Black | M22-D4-S 279411 |
| All buttons spring-return | Individual | Individual | M22-D4-*. * 279413 |
| Opposing buttons mechanically interlocked | | | |
| All buttons spring-return | Directional arrows | Black | M22-DI4-S-X7 286338 |
| All buttons spring-return | Individual | Individual | M22-DI4-*. * 286340 |

| Labels | |
|---|--|
| for joystick for 4-way selector switch | |
| Version | Part no. |
| Blank | M22-XCK 279433 |
| Arrows | M22-XCK-1 for joystick 4 positions 279434 |
| Arrows | M22-XCK-3 for joystick 2 positions 290260 |
| Arrows | M22-XCK-2 for 4-way selector switch 279435 |
| 0-1-0-2-0-3-0-4 | |
| with individual inscription | M22-XCK- * 279436 |

| Built-in sockets | |
|------------------|--|
| Design | Part No. |
| | M22-USB-SA for USB 2.0 A/A with connection cable 187412 |
| | M22-RJ45-SA Front mounting 8/8 187413 |



„The order is handled via
M22-COMBINATION-*“

Additional order specification
„M22-ATEX“



| Emergency-Stop actuators | | | Contact elements | | |
|--|---|---|---|--|---|
| NEMA 4X, 13 IP 66, 69K | | | IP 20 | | |
| ATEX | | | ⊕ = Positive opening safety function to IEC / EN 60 947-5-1 | | |
| Function | Tamper proof | | Function | Screw terminal | Cage Clamp ³⁾ |
| Non-illuminated | | M22-PV ¹⁾ 216876 M22-PVT ²⁾ 263467 | Front fixing | M22-K10 216376 M22-K01 216378 M22-K10P | M22-CK10 216384 M22-CK01 216385 |
| Non-illuminated | | M22S-PV ¹⁾ 225528 | | M22-K01D 262165 | M22-CK01D 262510 |
| illuminated | | M22-PVL ¹⁾ 216878 M22-PVLT ²⁾ 263469 | | | M22-CK11 107940 |
| illuminated | | M22S-PVL ¹⁾ 230960 | | | M22-CK02 107899 |
| With key-telease MS1 individual lock mechanism | | M22-PVS ¹⁾ 216879 | | | M22-CK20 107898 |
| With key-telease MS2-20 individual lock mechanism | | M22-PVS-MS* ¹⁾ 216880 | | | M22-KC10 216380 M22-KC01 216382 |
| | | | Adapters | | |
| Sealable shroud | Protective collar for Emergency-Stop push-buttons | Emergency-Stop labels | | Screw terminal Cage Clamp ³⁾ | Note |
| M22-PL-PV 216397 | M22-XG-PV 231273 | see current Industrial Switchgear main catalogue | Front fixing | M22-A 216374 M22-A4 279437 | max. 3 contact elements max. 4 contact elements (only for 4-way switch and Joystick) |
| | | | Base fixing | Built into the enclosure | max. 3 contact elements |















| Acoustic indicators | LED elements | | | | | |
|--|--------------|----------------|----------------------|--------------------------|-----------------------|--------------------------|
| IP 40 | IP 20 | | | | | |
| Compact without buzzer | | Screw terminal | | Cage Clamp ³⁾ | | |
| | | 12-30 V AC/DC | 85-264 V AC | 12-30 V AC/DC | 85-264 V AC | |
| M22-AMC | Front fixing | | M22-LED-W 216557 | M22-LED230-W 216563 | M22-CLED-W 216569 | M22-CLED230-W 216575 |
| | | | M22-LED-R 216558 | M22-LED230-R 216564 | M22-CLED-R 216570 | M22-CLED230-R 216576 |
| | | | M22-LED-G 216559 | M22-LED230-G 216565 | M22-CLED-G 216571 | M22-CLED230-G 216577 |
| | | | M22-LED-B 218057 | M22-LED230-B 218059 | M22-CLED-B 218061 | M22-CLED230-B 218063 |
| Buzzer 24 V AC/DC +10% / -15% | Base fixing | | M22-LEDC-W 216560 | M22-LEDC230-W 216566 | M22-CLEDC-W 216572 | M22-CLEDC230-W 216578 |
| | | | M22-LEDC-R 216561 | M22-LEDC230-R 216567 | M22-CLEDC-R 216573 | M22-CLEDC230-R 216579 |
| | | | M22-LEDC-G 216562 | M22-LEDC230-G 216562 | M22-CLEDC-G 216574 | M22-CLEDC230-G 216580 |
| | | | M22-LEDC-B 218058 | M22-LEDC230-B 218060 | M22-CLEDC-B 218062 | M22-CLEDC230-B 218064 |





| Housing | | |
|--|-----------------------------|------------------|
| NEMA 4X, 13 IP 67 | | |
| ATEX | | |
| M22 enclosure ATEX also available as individual unit | | |
| Locations | Surface mounting enclosures | |
| 1 | M22-IY1, M22-IY1-ATEX | 216536 104370 |
| 1 | M22-I1, M22-I1-ATEX | 216535 104371 |
| 2 | M22-I2, M22-I2-ATEX | 216537 104372 |
| 3 | M22-I3, M22-I3-ATEX | 216538 104373 |
| 4 | M22-I4, M22-I4-ATEX | 216539 104374 |
| 6 | M22-I6, M22-I6-ATEX | 216540 104375 |
| 12 | M22-I12 | 222688 |
| Connecting screw for M22-I... | M22-XI | 229162 |
| NEMA 4X, 13 IP 54 | | |
| | | |
| Locations | Flush mounting panels | |
| 1 | M22-EY1 | 216542 |
| 1 | M22-E1 | 216541 |
| 2 | M22-E2 | 216543 |
| 3 | M22-E3 | 216544 |
| 4 | M22-E4 | 216545 |
| 5 | M22-E5 | 216546 |
| 6 | M22-E6 | 216547 |
| NEMA 4X, 13 IP 55, 40* | | |
| | | |
| Locations | Shrouds | |
| 1 | M22-H1 | 216548 |
| 2 | M22-H2 | 216549 |
| 3 | M22-H3 | 216550 |
| 4 | M22-H4* | 216551 |
| 5 | M22-H5* | 216552 |
| 6 | M22-H6* | 216553 |
| Dust protection cover | | |
| with fixing adapter IP 53 (IP 4X) | | |
| for one M22... device 5 x M20 knock-outs | | |
| | | |
| Contacts/LEDs | Dust protection cover | |
| max. 3 | M22-ADC | 106523 |
| max. 4 | M22-ADC4 | 106524 |
| Attachment plate | M22-XADC | 107918 |

ATEX 

„The order for FAK-ATEX is handled via FAK-COMBINATION-* with the specification FAK-ATEX“



| Foot and palm switches | | | Emergency-Stop button | | |
|---|---|------------------------|---|---|----------------------------|
| NEMA 4X, 13 IP 67, 69K | | | NEMA 4X, 13 IP 67, 69K tamper proof | | |
| ATEX  | | | ATEX  | | |
| Mushroom head | Function | Spring-return | Mushroom head | Function | Spring-return |
|  |  | FAK-S/KC11/I 229749 |  |  | FAK-R/V/KC01/I/Y 229747 |
|  |  | FAK-R/KC11/I 229746 |  |  | FAK-R/V/KC11/I/Y 229748 |
| | | |  |  | FAK-R/V/KC02/I/Y 256790 |

| Indicator lights | |
|---|--|
| conical, BA9s | |
| Lens | for filament lamps, neon lamps and LEDs |
|  | L-R 208689 |
|  | L-W 208692 |
|  | L-G 208690 |
|  | L-Y 208691 |

⊕ = Positive opening safety function to IEC / EN 60 947-5-1




| Accessories | | | | | | | |
|---------------------------|--------------------------|--|---|---|--|--|---------------|
| For use with | IVS top-hat rail adapter | For use with | Actuator diaphragms | For use with | Telescopic clips | | Legend plates |
| Top-hat rail EN 50 022 | M22-IVS 216400 | Push-button actuators indicator lights, flush Double actuators | M22-T-D 216395 M22-T-DD 216396 | Mounting depth compensation 115–155 mm With top-hat rail | M22-TC 216398 M22-TA 226161 | With various languages and symbols | M22S-ST-... |



| LED series elements for front and base fixing | |
|---|-------------------------|
| Function | Part no. |
| LED resistor element for connection of 12-30 V LED's to 42-60 V AC/DC | M22-XLED60 231078 |
| LED resistor element for connection of 12-30 V LED's to 220 V DC | M22-XLED220 271541 |
| LED test element for decoupled function test (lamp test) on 12-30 V AC/DC | M22-XLED-T 231079 |
| LED test element for decoupled function test (lamp test) on 85-264 V AC | M22-XLED230-T 231080 |

| AS-Interface for RMQ Titan | |
|--|---|
| For use with | Part no. |
| AS-Interface connection Flush mounting panel | M22-ASI 231269 M22-ASI-C 231271 |
| Base fixing | |
| Surface mounting enclosure | RMQ-M1C-ASI 032314 |
| Emergency-Stop connections for safety monitor | |
| Front fixing | M22-ASI-S 231270 M22-ASI-CS 231272 |
| Base fixing | |

| Potentiometer, IP 66 | |
|---|------------------------------|
| ATEX  | Part no. |
| Resistance KΩ | Front ring black: M22S... |
| 1 | M22-R1K 229489 |
| 4,7 | M22-R4K7 229490 |
| 10 | M22-R10K 229491 |
| 47 | M22-R47K 229492 |
| 100 | M22-R100K 229493 |
| 470 | M22-R470K 229494 |

High Information Density Thanks to Compact Mounting: RMQ 16

xCommand



The control panels of modern machines and plants must be able to convey increasingly complex information, even though the available space is limited. The RMQ16 range of compact control circuit devices provides the solution.

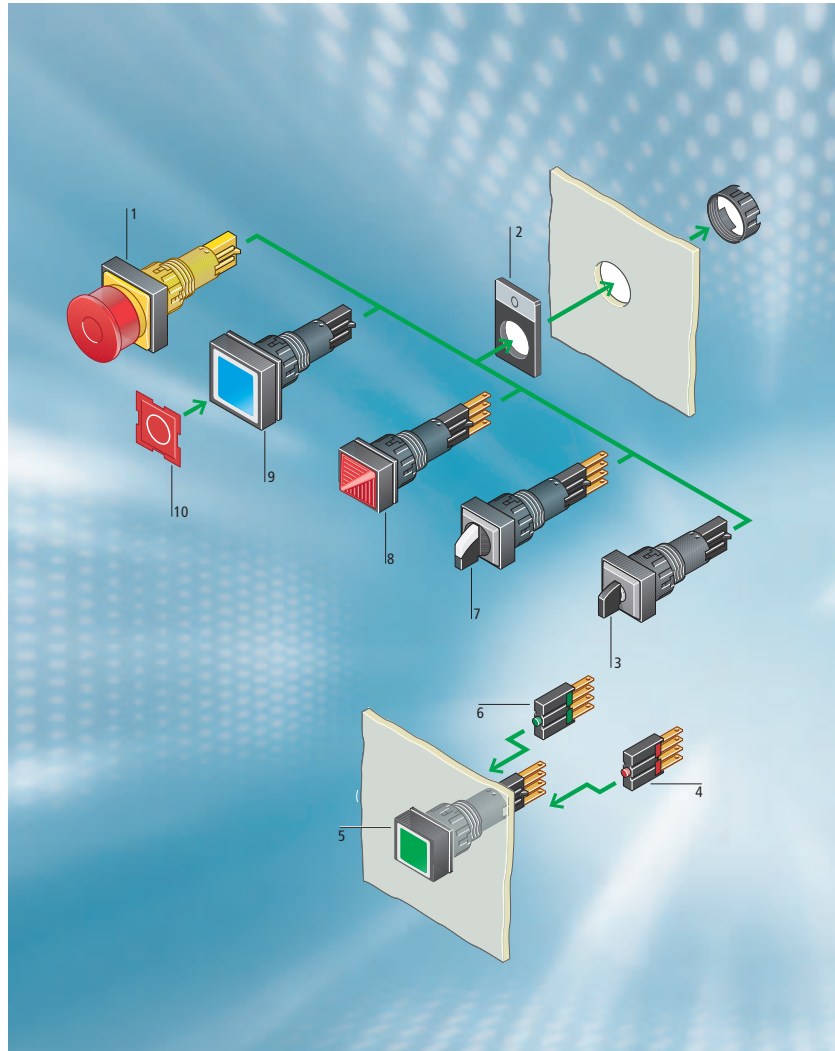
The various front elements can be mounted flush on all four sides, without any gaps. Compared with conventional 22 mm ranges, using RMQ16 devices with their 18 x 18 mm front dimension, achieves three times the information density.



**Two sizes of front element:
25 x 25 mm and 18 x 18 mm.
Both sizes use the same,
standard mounting aperture
of 16.2 mm.**

System Overview

RMQ16



- 1 Emergency-stop button
- 2 Base plate
- 3 Key switch
- 4 Contact element break (red)
- 5 Illuminated push button
- 6 Contact element make (green)
- 7 Selector switch
- 8 Indicator light
- 9 Push-button
- 10 Button plate/insert label

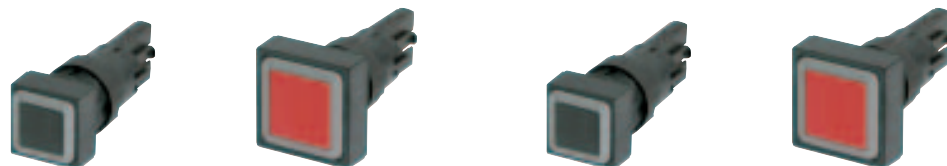
Label mounts with insert plates offer additional labelling options. Secured via the front elements, both elements are simply bolted on from the rear of the flush mounting plate using a lock nut.

The RMQ 16 control circuit devices range can also be inscribed. The button plates as well as the lenses for the illuminated push buttons and the flat lenses for indicator lights are inscribed by laser.

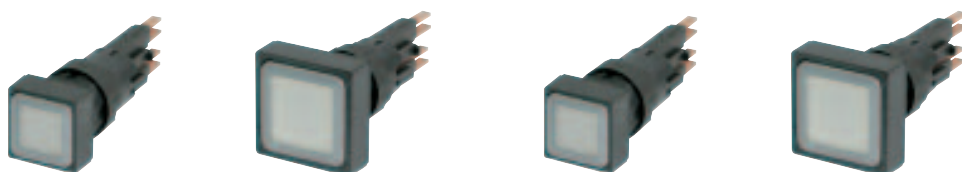
Thus, even after years of use, the information they provide is still clear and unambiguous. These control circuit devices can be fitted with LEDs instead of filament bulbs. This means no more changing of bulbs, because LED service life equals machine life. The high degree of protection, IP 65, of the front elements ensures safe operation even in harsh environments. This makes RMQ16 ideally suitable for industrial applications.



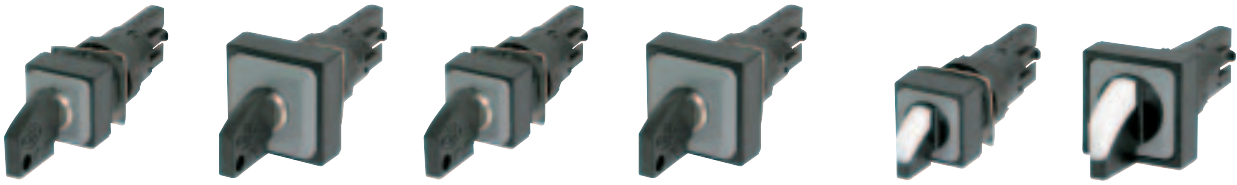
“Side by side mounting enables well ordered control panels on the smallest possible space.”



| Push-button actuators | | | | |
|-----------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| IP 65, NEMA 13 | | | | |
| Button plates | 18 x 18 mm Spring-return | 25 x 25 mm Spring-return | 18 x 18 mm Spring-return | 25 x 25 mm Spring-return |
| | Q18D-11 086332 | Q25D-11 090471 | | |
| | Q18D-10 086299 | Q25D-10 090421 | | |
| | Q18D-20 054041 | Q25D-20 054038 | | |
| | Q18D-19 054040 | Q25D-19 054039 | | |
| | Q18D-SW 086788 | Q25D-SW 087230 | Q18DR-SW 088739 | Q25DR-SW 088739 |
| | Q18D-WS 086752 | Q25D-WS 086808 | Q18DR-WS 088701 | Q25DR-WS 088701 |
| | Q18D-GN 086450 | Q25D-GN 086409 | Q18DR-GN 088531 | Q25DR-GN 088531 |
| | Q18D-RT 086713 | Q25D-RT 086444 | Q18DR-RT 088627 | Q25DR-RT 088627 |
| | Q18D-GE 086417 | Q25D-GE 086343 | Q18DR-GE 088404 | Q25DR-GE 088404 |
| | Q18D-BL 086384 | Q25D-BL 086328 | Q18DR-BL 088110 | Q25DR-BL 088110 |
| Without | Q18D-X 093623 | Q25D-X 093624 | Q18DR-X 093626 | Q25DR-X 093626 |



| Illuminated push-button actuators | | | | |
|---|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| IP 65, NEMA 13 with 24 V filament lamp | | | | |
| Button lens | 18 x 18 mm Spring-return | 25 x 25 mm Spring-return | 18 x 18 mm Spring-return | 25 x 25 mm Spring-return |
| | Q18LT-WS/WB 88561 | Q25LT-WS/WB 90226 | Q18LTR-WS/WB 86708 | Q25LTR-WS/WB 86447 |
| | Q18LT-GN/WB 88509 | Q25LT-GN/WB 89190 | Q18LTR-GN/WB 86413 | Q25LTR-GN/WB 86380 |
| | Q18LT-RT/WB 88537 | Q25LT-RT/WB 89998 | Q18LTR-RT/WB 86448 | Q25LTR-RT/WB 86412 |
| | Q18LT-GE/WB 88449 | Q25LT-GE/WB 89137 | Q18LTR-GE/WB 86382 | Q25LTR-GE/WB 86346 |
| | Q18LT-BL/WB 88338 | Q25LT-BL/WB 89102 | Q18LTR-BL/WB 86348 | Q25LTR-BL/WB 86330 |



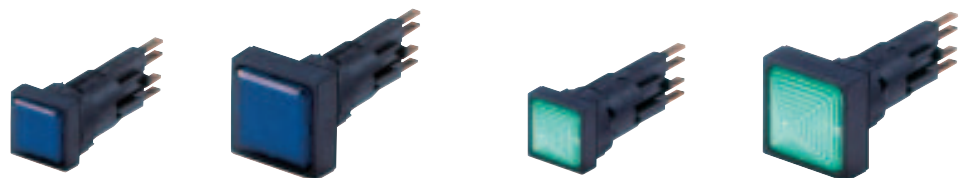
| Key-operated actuators | | | |
|--|--|---|---|
| IP 65, NEMA 13 | | | |
| 18 x 18 mm 2 positions | 25 x 25 mm 2 positions | 18 x 18 mm 3 positions | 25 x 25 mm 3 positions |
| ↘ ⁰ Q18S1 38806 ↘ ^{0,I} Q18S1R 38805 ↘ ⁰ Q18S1R-A1 72312 | ↘ ⁰ Q25S1 38773 ↘ ^{0,I} Q25S1R 38772 ↘ ⁰ Q25S1R-A1 72376 | ↙ ⁰ Q18S3 72313 ↙ ^{I,0,II} Q18S3R 72314 ↘ ⁰ Q18S3R-A1 72315 ↙ ^{I,0} Q18S3R-A2 72316 ↘ ^{0,II} Q18S3R-A3 72317 ↘ ^{I,0} Q18S3R-A4 72318 ↘ ⁰ Q18S3R-A5 72319 ↙ ^{0,II} Q18S3R-A6 72320 ↙ ⁰ Q18S3R-A7 72321 | ↙ ⁰ Q25S3 72337 ↙ ^{I,0,II} Q25S3R 72378 ↘ ⁰ Q25S3R-A1 72379 ↙ ^{I,0} Q25S3R-A2 72380 ↘ ^{0,II} Q25S3R-A3 72381 ↘ ^{I,0} Q25S3R-A4 72382 ↘ ⁰ Q25S3R-A5 72383 ↙ ^{0,II} Q25S3R-A6 72384 ↙ ⁰ Q25S3R-A7 72385 |

| Selector switch actuators | |
|---|---|
| IP 65, NEMA 13 | |
| 18 x 18 mm 2 positions | 25 x 25 mm 2 positions |
| ↘ Q18WK1 36515 ↘ Q18WK1R 36598 | ↘ Q25WK1 36599 ↘ Q25WK1R 36600 |
| 3 positions | 3 positions |
| ↙ Q18WK3 72308 ↘ Q18WK3R 72309 ↘ Q18WK3R1 72310 ↙ Q18WK3R2 72311 | ↙ Q25WK3 72372 ↘ Q25WK3R 72373 ↘ Q25WK3R1 72374 ↙ Q25WK3R2 72375 |

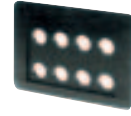
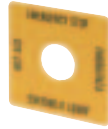
↘ = Stay-put 45° ↘ = Spring-return 45° For further individual locking arrangements please enquire

↘ = Stay-put 45° ↘ = Spring-return 45°

I,0,II = Key can be withdrawn in the positions indicated



| Indicator lights | | | | |
|---|----------------------|----------------------|------------------------|------------------------|
| IP 65, NEMA 13 with 24 V filament lamp | | | | |
| Lens | 18 x 18 mm Flush | 25 x 25 mm Flush | 18 x 18 mm Extended | 25 x 25 mm Extended |
| □ | Q18LF-WS/WB 88059 | Q25LF-WS/WB 89151 | Q18LH-WS/WB 88535 | Q25LH-WS/WB 90405 |
| ■ | Q18LF-GN/WB 87947 | Q25LF-GN/WB 88828 | Q18LH-GN/WB 88483 | Q25LH-GN/WB 90312 |
| ■ | Q18LF-RT/WB 88001 | Q25LF-RT/WB 89104 | Q18LH-RT/WB 88507 | Q25LH-RT/WB 90354 |
| ■ | Q18LF-GE/WB 87915 | Q25LF-GE/WB 88798 | Q18LH-GE/WB 88448 | Q25LH-GE/WB 90285 |
| ■ | Q18LF-BL/WB 87860 | Q25LF-BL/WB 88761 | Q18LH-BL/WB 88424 | Q25LH-BL/WB 90240 |



Emergency-Stop actuators

IP 65,
NEMA 13
Tamper proof
25 x 25 mm

| | |
|--------------------------------------|---|
| Non-illuminated | illuminated by means of 24 V multiple LED |
| Q25PV 072370 Q25PV-S 257063 | Q25LPV 072371 Q25LPV-S 257064 |

Emergency-Stop labels

| | |
|-------------------------------------|-------------------------------------|
| | |
| in four languages SQT1 058874 | in four languages SRT1 058873 |
| Blank SQ-GE 063263 | Blank SR-GE 063264 |

Housing

| IP 65 | | |
|-----------|-----------------------------|-----------------------|
| Locations | Surface mounting enclosures | Flush mounting panels |
| 8 | 18 46299 | E 8 54423 |
| 8 | | E 8-SW 65212 |



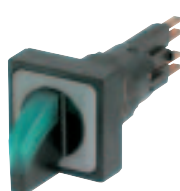
Contact elements

⊕ = Positive opening safety function to IEC / EN 60 947-5-1

| N/O | | N/C | |
|--------------|--|--------------|--|
| E10 90351 | | E01 90401 | |

Screw adapter

| 1 x 1.5 mm ² 2 x 0.75 mm ² | | |
|---|-----------------|------------------|
| For N/O | For N/C | For lamp sockets |
| SRA10 028100 | SRA01 028101 | SRAL 028099 |



Illuminated selector switches

IP 65,
NEMA 13
with 24 V filament lamp = Stay-put 45° = Spring-return 45°

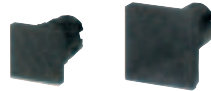
| | 18 x 18 mm 2 positions | 25 x 25 mm 2 positions | 18 x 18 mm 2 positions | 25 x 25 mm 2 positions | 18 x 18 mm 2 positions | 25 x 25 mm 2 positions |
|--|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| | Q18LWK1-WS/WB 38978 | Q25LWK1-WS/WB 40379 | Q18LWK1-GN/WB 38883 | Q25LWK1-GN/WB 40377 | Q18LWK1-RT/WB 38930 | Q25LWK1-RT/WB 40378 |
| | Q18LWK1R-WS/WB 39335 | Q25LWK1R-WS/WB 40476 | Q18LWK1R-GN/WB 39247 | Q25LWK1R-GN/WB 40380 | Q18LWK1R-RT/WB 39248 | Q25LWK1R-RT/WB 40381 |
| | 3 positions | 3 positions | 3 positions | 3 positions | 3 positions | 3 positions |
| | Q18LWK3-WS/WB 72334 | Q25LWK3-WS/WB 72346 | Q18LWK3-GN/WB 72336 | Q25LWK3-GN/WB 72348 | Q18LWK3-RT/WB 72335 | Q25LWK3-RT/WB 72347 |
| | Q18LWK3R-WS/WB 72337 | Q25LWK3R-WS/WB 72349 | Q18LWK3R-GN/WB 72339 | Q25LWK3R-GN/WB 72351 | Q18LWK3R-RT/WB 72338 | Q25LWK3R-RT/WB 72350 |
| | Q18LWK3R1-WS/WB 72340 | Q25LWK3R1-WS/WB 72352 | Q18LWK3R1-GN/WB 72342 | Q25LWK3R1-GN/WB 72354 | Q18LWK3R1-RT/WB 72341 | Q25LWK3R1-RT/WB 72353 |
| | Q18LWK3R2-WS/WB 72343 | Q25LWK3R2-WS/WB 72355 | Q18LWK3R2-GN/WB 72345 | Q25LWK3R2-GN/WB 72357 | Q18LWK3R2-RT/WB 72344 | Q25LWK3R2-RT/WB 72356 |



| Additional labelling | | |
|------------------------------|--|--------------------|
| Insert plates | Label mounts, complete | |
| | 10 x 22 mm | 25 x 38 mm |
| | 01SQ25 37986 | Q25TS-01 46184 |
| | 02SQ25 38074 | Q25TS-02 46185 |
| | 05SQ25 63201 | Q25TGE-05 63259 |
| | 111SQ25 38508 | Q25TS-111 46192 |
| | 110SQ25 38507 | Q25TS-110 46190 |
| | 10SQ25 38268 | Q25TS-10 46186 |
| | 11SQ25 38269 | Q25TS-11 46187 |
| | without 36601 | Q25TS-X 36601 |
| Additional texts and symbols | See Industrial Switchgear Main Catalogue | |

| Cover plate | |
|---|-----------------|
| IP 65 | |
| For surface mounting enclosures and flush mounting panels | 25 x 38 mm |
| | Q25AS 036602 |
| | Q25AGR 48641 |
| | Q25AGE 48640 |

| Laser inscription |
|--|
| Labelling plates |
| See Industrial Switchgear Main Catalogue |



| Blanking plug, IP 65 | | |
|----------------------|-----------------|-----------------|
| | 18 x 18 mm | 25 x 38 mm |
| | Q18BS 037985 | Q25BS 036976 |

| Lights | | | |
|--|--------------------|---------------------|---------------------|
| Socket Wedge Base W2x4,6d Positive pole connected to X1 | | | |
| Filament lamps | 6 V / 1 W | 12 V / 1 W | 24-28 V / 1 W |
| | WBGL6 90223 | WBGL12 89968 | WBGL24 89247 |
| LEDs (AC / DC) | 6 V / 45 mA | 12 V / 24 mA | 18-30 V / 7-12.5 mA |
| | — | — | LEDWB-W 208728 |
| | WBLED-GN6 55712 | WBLED-GN12 55715 | LEDWB-G 208725 |
| | WBLED-RT6 55713 | WBLED-RT12 55716 | LEDWB-R 208726 |
| | WBLED-GE6 55711 | WBLED-GE12 55714 | LEDWB-Y 208724 |
| | — | — | LEDWB-B 208727 |

Clear Signals – Quick Reactions



A clear picture at a glance

Signal towers SL provide visual and audible signals of machine states, easily identifiable even at a distance. Signals are distinguishable as continuous light, flashing light, strobe light or acoustic indication, enabling their level of importance to be correctly evaluated without delay.

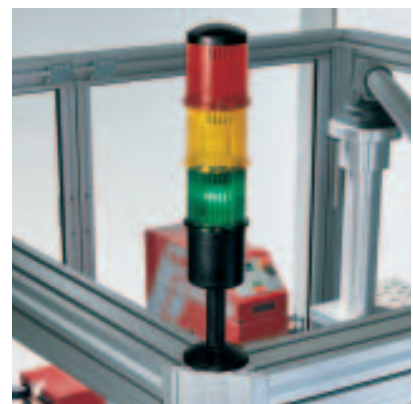
The individual modules can be combined as required, and simply assembled by plugging the bayonet fitting into place and turning slightly.

The individual modules are freely programmable by merely relocating a wire link (jumper) on each module board. This, for example, enables a dangerous machine state to be indicated by a red flashing light backed up at the same time by an audible alarm signal. To achieve this, put the jumpers of both modules in the same position on the module board, irrespective of the module position in the column.

1 Base module

2 Light modules

3 Fixing base



Signal towers SL indicate the machine operating state clearly and unmistakably.



| Base module | |
|------------------------------|--------------------|
| IP 54 Black with cover | |
| Description | Part no. |
| With screw terminals | SL-B 205311 |
| With Cage Clamp | SL-CB 218483 |
| With connection AS-Interface | SL-B-ASI 222174 |

| Acoustic module | | |
|---------------------|--------------------------|------------------------|
| IP 20 | | |
| Operational voltage | Part no. Continuous tone | Part no. Pulsed tone |
| 24 V AC/DC | SL-A24 205341 | SL-AP24 205343 |
| 110-230 V AC/DC | SL-A110-230 205342 | SL-AP110-230 205344 |

| Fixing base | | |
|-------------|-------------------|--------------------|
| With spacer | | |
| Height mm | Part no. Plastic | Part no. Metal |
| 100 | SL-F100 205345 | SL-F100M 265359 |
| 250 | SL-F250 205346 | SL-F250M 268925 |
| 400 | | SL-F400 215275 |
| 800 | | SL-F800 215276 |

Signal columns

Individual programming via jumpers
Max. 5 modules and base module



| | Continuous light module | Flashing light module | Operating voltages | Multiple LED | Filament lamp | Strobe light module |
|--|----------------------------|---|---|--|--|---|
| | Without bulb, BA15d socket | Without bulb, approx. 1 Hz, BA15d socket | | BA15d socket | BA15d socket | With flash tube, 1 Hz, 1 Ws |
| | Part no. | Part no. | | Part no. | Part no. | Part no. |
| | SL-L-W 205312 | SL-BL24-W 205317 SL-BL130-W 205322 SL-BL230-W 205327 | 24 V AC/DC 110-130 VAC 230 VAC | SL-LED-W 215278 SL-LED230-W 285532 SL-LED230-W 285532 | SL-L24 205348 SL-L130 205349 SL-L230 205350 | SL-FL24-W 205332 SL-FL130-W 205335 SL-FL230-W 205338 |
| | SL-L-R 205313 | SL-BL24-R 205318 SL-BL130-R 205323 SL-BL230-R 205328 | 24 V AC/DC 110-130 VAC 230 VAC | SL-LED-R 215279 SL-LED230-R 285533 SL-LED230-R 285533 | SL-L24 205348 SL-L130 205349 SL-L230 205350 | SL-FL24-R 205333 SL-FL130-R 205336 SL-FL230-R 205339 |
| | SL-L-G 205314 | SL-BL24-G 205319 SL-BL130-G 205324 SL-BL230-G 205329 | 24 V AC/DC 110-130 VAC 230 VAC | SL-LED-G 215280 SL-LED230-G 285534 SL-LED230-G 285534 | SL-L24 205348 SL-L130 205349 SL-L230 205350 | |
| | SL-L-Y 205315 | SL-BL24-Y 205320 SL-BL130-Y 206325 SL-BL230-Y 205330 | 24 V AC/DC 110-130 VAC 230 VAC | SL-LED-Y 215281 SL-LED230-Y 285535 SL-LED230-Y 285535 | SL-L24 205348 SL-L130 205349 SL-L230 205350 | SL-FL24-Y 205334 SL-FL130-Y 205337 SL-FL230-Y 205340 |
| | SL-L-B 205316 | SL-BL24-B 205321 SL-BL130-B 205326 SL-BL230-B 205331 | 24 V AC/DC 110-130 VAC 230 VAC | SL-LED-B 215282 SL-LED230-B 285536 SL-LED230-B 285536 | SL-L24 205348 SL-L130 205349 SL-L230 205350 | |

RMQ Titan with ATEX Approval



ATEX = Atmospheres Explosibles =
explosive atmospheres

Moeller now offers the following in conformity with the manufacturers guidelines: ATEX guideline 94/9 EC (mandatory from 06/2003) devices from the RMQ Titan range and the FAK range. The switches are approved for device group II, with area of application "all except mining" as well as for category 3. The approval has the test number BVS 06 ATEX E023U, BVS 06 ATEX E024X.

The enclosures, push buttons, indicator lights etc. as well as the foot and palm switches are marked with equipment designation

II 3D IP5X T85°C. According to the guideline for operators: guideline 1999/92/EC (mandatory from 06/2006) all the devices with test number BVS 06 ATEX E023U, BVS 06 ATEX E024 can be used in dust areas, zone 22, category 3.

The devices in surface mounting enclosures with the ATEX approval are used in dust hazard areas, for example in mills, metal grinding plants, wood processing and wood process areas, cement factories, the aluminium industry, the foodstuffs industry, grain storage and processing facilities, agriculture, pharmaceutical industry, etc.

The devices in our main catalogue and the basic types mentioned can be ordered with the approval to ATEX guideline 94/9 EC.

| | | | |
|--|---------------|-------------------------------|-------------|
| Push button, flat | P. 4 | Double actuators | P. 6 |
| Push button, raised | P. 4 | Illuminated selector | |
| Mushroom actuators | P. 5 | Switch actuators | P. 6 |
| Selector switches | P. 5/7 | Joysticks | P. 7 |
| Key operated actuators | P. 5 | 4-way push buttons | P. 7 |
| Illuminated push buttons | P. 5 | Emergency-Stop buttons | P. 8 |
| Indicator light lens assemblies | P. 5 | Foot and palm switches | P. 9 |
| | | Potentiometers | P. 9 |



See individual products for ordering details



ATEX approved devices enhance the operational security in industrial manufacturing areas, production plants, during the storage of grains and their preparation and processing as well

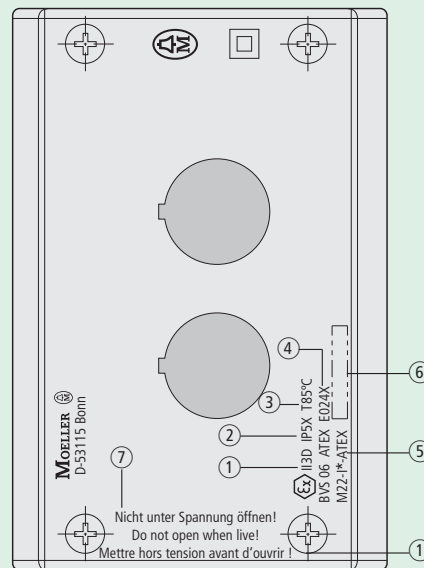
as in agriculture. Grain storage silos are also subject to dust in outdoor areas, which requires the use of devices with ATEX approval.

Important general mounting and application note:

- only category 3D suitable cable glands can be used!
- only heat-resistant cables can be used (>90 °C)!
- the surface temperature is a maximum of 90 °C!
- only permissible with an ambient temperature from -20 °C to +40 °C!
- the technical data of the devices used must be observed!
- never open the device in the dust explosion hazardous area!
- the demands of the EN 50281-1-2 must be observed!
- the device must be checked for dust before assembly!
- Impact energy max. 2 joules according to EN 50014



Approval certificate for use of the Moeller RMQ range in surface mounting enclosure conform to ATEX guideline 94/9 EC.



The marking of the housing is conform to the ATEX guideline 94/9 EC.

1. categories
2. degree of protection
3. temperature class
4. test numbers
5. type
6. production code
7. warning text



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