## Motor protection switches M16-20A Main switches S25-25A



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Motor protection switches M16-20A / Main switches S25-25A

## Remark examples



## Switch type M 1611 KV 6.3 T2

Motor protection switch, 2-pole, single pole with thermal protection

## Switch type M 1620 QV 2.5 T2

 A1 PMotor protection switches, 2-pole, thermal protection, operating current release, IP 54

## Switch type M 1630 FV 12.5 T1 M H3 U5 N Z

Motor protection switch, 3-pole, thermal/magnetic protection, auxiliary contact, under voltage release, neutral conductor terminal and centre connection

## Switch type S 2503 BR

Main switch with terminal cover

## Switch type M 1630 EV 2.5 T2 M H3 U4 N

Motor protection switch, 3-pole, all poles with thermal/magnetic protection, auxiliary contact, under voltage release, neutral conductor terminal

## M16-RSQ

Dust cover including yellow front panel and red knob, with rubber seal

## Switch type M 1630 BV 4.0 T2

Main switch, 3-pole, all poles with thermal protection

## M16-GEHP

Plastic enclosure IP 54

## Short described

DISA compact switches are available as motor protection, main, load disconnecting switches.

DISA motor protection switches M16 are compact switches with builtin thermal release, available with or without electromagnetic quick release.

DISA main switches $\mathbf{S 2 5}$ are compact switches without built-in electromagnetic quick release.

Electrical characteristics: 20A rated current for type M16 or 25A rated current for type S 25 at 400 V ~. 14 adjustment ranges available from 0.63 A to 20A.

All switch types are available in 4 different front designs:

Flat front - light grey front panel with dark grey rotary knob or yellow front panel with red rotary knob.

Protective collar - same colour combinations as flat front design.

The protective collar prevents accidental operation of the rotary knob and can be fitted with up to 3 padlocks.


Rotary knob, axial adjustment, clear and easily-visible position indicator, dark grey or red


Front panel or protective collar, light grey or yellow

Under voltage release * or operating current release

Terminal for neutral conductor *

Auxiliary contacts *
6A, 230V ~ 4A, 400V ~

Output 6
Main connection 5

Centre connection * W 6

Output 4
Main connection 3
Centre connection * V 4
Output 2
Main connection 1

Centre connection * U 2

Terminal for protective conductor

Protective collar, yellow or light grey, for fitting up to 3 padlocks

Front panel protection class. IP 40 or IP 54 respectively * with additional rubber seal (splash water protection)
*Option subject to extra charge

Electrical characteristics

Release characteristics

measures in cold condition

Electrical characteristics

| $\begin{aligned} & <6.3 \mathrm{~A} \\ & >6.3 \mathrm{~A} \end{aligned}$ | sluggish release |
| :---: | :---: |
|  | quick release |
|  | sluggish releases are availab request for the ranges 9.0 A to |
|  | 16.0A |
| 20A / 690V | category of use AC 3 |
| 25A / 690V | without over current release |
| mechanical operating life |  |
|  | 50'000 operations |
| disconnectioncapacity |  |
| cos $\varnothing 0.7,500 \mathrm{~V}$ | 500A |
| disconnection time |  |
| on short circuit | < 15 ms |
| M16 calibration at | $20^{\circ}$ |
| auxiliary contacts | 6A / 230V~, 4A / 400V~ |
| no. of poles | 1 to 3-poles, irrespective of optional equipment |
| connection terminals | max $2 \times 6 \mathrm{~mm} 2$ |

## Weight of switch types

| S2502 FV | 200 g |
| :--- | :--- |
| S2502 KV | 210 g |
| S2503 FV | 250 g |
| M1630 FV 4.0 | 260 g |
| M1630 FV 4.0M | 290 g |
| M1630 FV 4.0M with H1, H2 or H3 | 320 g |
| M1630 FV 4.0M with H1, U1 or A1 | 385 g |

## Back-up fuses

| Adjustment range in A <br> Higher range used for ordering |  | M16 no magnetic quick release <br> Back-up | M16 with magnetic quick release <br> Back-up fuse in $230 / 400 \mathrm{~V} \sim \text { a.c. } \quad 690 \mathrm{~V} \sim \text { a.c. }$ |  |
| :---: | :---: | :---: | :---: | :---: |
| 0.063-0.1 | T2M | only available with | no back-up fuse | equired |
| $0.1-0.16$ | T2M | thermal and magnetic | short-circuit | 6 AgG |
| $0.16-0.25$ | T2M | quick release | resistant | 10A gG |
| $0.25-0.4$ | T2M |  | 25A gG | 25A gG |
| $0.4-0.63$ | T2 | 2 AgG | 25A gG | 25A gG |
| 0.63 - 1.0 | T2 | 4A gG | 25A gG | 25A gG |
| $1.0-1.6$ | T2 | 6A gG | 25A gG | 25A gG |
| $1.6-2.5$ | T2 | 10A gG | 25A gG | 25A gG |
| $2.5-4.0$ | T2 | 10A gG | 25A gG | 25A gG |
| $4.0-6.3$ | T2 | 16A gG | 25A gG | 25A gG |
| $6.3-9.0$ | T1 (T2) | 20A gG | 25A gG | 25A gG |
| $9.0-12.5$ | T1 (T2) | 20A gG | 25A gG | 25A gG |
| $12.5-16.0$ | T1 (T2) | 25A gG | 25A gG | 25A gG |
| $16.0-20.0$ | T1 | 35A gG | 35A gG | 35A gG |

Dimensions, installation


## Basic type and options

| Basic <br> type | Auxiliary <br> contacts | Undervoltage <br> or operating <br> current release | $\mathrm{G}\|\mathrm{mm}\|$ |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| pole |  |  |  |  |  |\(\left|\begin{array}{l}2 <br>


pole\end{array}\right|\)| pole |
| :--- |
| * |

## Front mounting (V)

Seal for protection class IP 54


## Rear mounting ( $\mathbf{R}$ )




## Enclosure (designation M16-GEH)



Order example
Order number


| Motor protection up to 20A <br> No. of <br> polesAll pole thermal <br> protection |  | Just 1 pole <br> thermal <br> protection <br> 2nd pole for <br> neutral cond.. | Noin switch up to 25A <br> poles |  |
| :--- | :--- | :--- | :--- | :--- |
| 1 | M1610 | - | No magnetic quick release |  |



Thermal characteristics

| Thermal characteristics |  |
| :--- | :--- |
| Order code | Thermal characteristics |
| T2 | (sluggish) up to 6.3A standard (on request up to 16A) |
| T1 | (quick) above 9A standard |

$\qquad$

| Magnetic quick release |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Additional equipment |  |  |  |  |  |
| Under voltage release Order code |  |  | Operating current release Order code |  |  |
| Volts | 50 Hz | 60 Hz | Volts | 50 Hz | 60 Hz |
| 110 | U1 | U61 | 110 | A1 | A61 |
| 230 | U2 | U62 | 230 | A2 | A62 |
| 240 | U3 | U63 | 240 | A3 | A63 |
| 400 | U4 | U64 | 400 | A4 | A64 |


| Auxiliary contacts <br> Order code | Contacts / Configuration |  |
| :---: | :---: | :---: |
| H3 | $13 \longrightarrow$ | $\begin{array}{ll} 14 & \text { N.O. } \\ 22 & \text { N.C. } \end{array}$ |
| H1 | $23 \longrightarrow$ | $\begin{array}{ll} 14 & \text { N.O. } \\ 24 & \text { N.O. } \end{array}$ |
| H2 | $11$ $21$ | $\begin{array}{ll} 12 & \text { N.C. } \\ 22 & \text { N.C. } \end{array}$ |


| Additional equipment |  |  |  |
| :--- | :--- | :---: | :---: |
| Order code | Additional equipment |  |  |
| P | Protection class IP 54 |  |  |
| N | Neutral conductor terminal |  |  |
| Z | Centre connection |  |  |

