



# SERIES 1930 - DOUBLE-POLE ROCKER SWITCHES IP 65

TO 20 (4) A 250 V AC



## PRODUCT FEATURES

- Illuminated and non-illuminated variants with various switching functions
- IP 65 with integrated gasket for high dust and water protection
- Inrush current (capacitive) up to 120 A
- Approval for 400 V
- 100 million times proven switching principle
- Modern rocker design
- High, flexible variety

## ON REQUEST

- Other switching functions (e.g. Changeover switch)
- Other terminal types
- Other colors
- Other printing variants
- Other lamp variants
- Cable assembly

|   |  |
|---|--|
| <b>Mechanical life endurance</b>                      | 5E4  |
| <b>Operating force</b>                                | 3 - 8 N  |
| <b>Inrush current (capacitive)</b>                    | 120 A<br>100 A (basic type 1939)<br>50 A (basic type 1934)           |
| <b>Contact resistance (new condition)</b>             | < 100 mOhm (1 A 12 V DC)   |
| <b>Insulation resistance (new condition)</b>          | > 100 MOhm (500 V DC)  |
| <b>Proof tracking</b>                                 | 250 PTI  |
| <b>Protection type</b>                                | IP 40 (terminal side), IP 65 (actuating side)                        |
| <b>Ambient temperature</b>                            | terminal side -30 °C ... +105 °C<br>actuating side -30 °C ... +55 °C |
| <b>Flammability</b>                                   | UL 94 V-2<br>UL 94 V-0 (housing and socket only)                     |
| <b>Glow wire test temperature</b>                     | 850 °C   |
| <b>Material</b><br>actuator<br>housing<br>terminals   | PC / TPU (bellows)<br>PA<br>silver plated                            |
| <b>Plug force of the terminals</b>                    | ≤ 80 N   |
| <b>Approval marks</b>                                 |  |
| <b>Suitable for appliances of protection class II</b> |  |



# SERIES 1930 - DOUBLE-POLE ROCKER SWITCHES IP 65

TO 20 (4) A 250 V AC


| <p>double-pole</p>           |  | ON / OFF switch (DPST) |                       |                                  |                                  |                                  |                                  |                       |                       |                       |                       |                       |                       |                       |                                  |                       |
|------------------------------|--|------------------------|-----------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------------------------------|-----------------------|
| Lighting voltage (V)         |  | 1935.3135              | 1935.3137             | 1935.3112                        | 1935.3113                        | 1935.3114                        | 1935.3118                        | 1935.3119             | 1935.3129             | 1935.3134             | 1935.3128             | 1935.3131             | 1935.3138             | 1932.1113             | 1932.3112                        | 1932.3113             |
| Actuator color / printing    |  |                        |                       |                                  |                                  |                                  |                                  |                       |                       |                       |                       |                       |                       |                       |                                  |                       |
| Housing color                |  | Black                  | Black                 | Black                            | Black                            | Black                            | Black                            | Black                 | Black                 | Black                 | Black                 | Black                 | Black                 | Black                 | Black                            | Black                 |
| 20 (4) A 250 V AC 1E4        |  | <input type="radio"/>  | <input type="radio"/> | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>            | <input type="radio"/> |
| 12 (4) A 250 V AC 1E4        |  |                        |                       |                                  |                                  |                                  |                                  |                       |                       |                       |                       |                       |                       |                       |                                  |                       |
| 10 (8) A 400 V AC 5E4        |  | <input type="radio"/>  | <input type="radio"/> |                                  |                                  |                                  |                                  |                       |                       |                       |                       |                       |                       |                       |                                  |                       |
| 10 (8) A 250 V AC 5E4        |  | <input type="radio"/>  | <input type="radio"/> | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |                       | <input type="radio"/> | <input type="radio"/>            | <input type="radio"/> |
| 10 A 12 V DC                 |  |                        |                       |                                  |                                  |                                  |                                  |                       |                       |                       |                       |                       | <input type="radio"/> |                       |                                  |                       |
| 6 (4) A 250 V AC 5E4         |  |                        |                       |                                  |                                  |                                  |                                  |                       |                       |                       |                       |                       |                       |                       |                                  |                       |
| 16 A 250 V AC 1 HP           |  | <input type="radio"/>  | <input type="radio"/> | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |                       | <input type="radio"/> | <input type="radio"/>            | <input type="radio"/> |
| 16 A 125 V AC 3/4 HP         |  | <input type="radio"/>  | <input type="radio"/> | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |                       | <input type="radio"/> | <input type="radio"/>            | <input type="radio"/> |
| 16 A 125 V AC 1/3 HP         |  |                        |                       |                                  |                                  |                                  |                                  |                       |                       |                       |                       | <input type="radio"/> |                       |                       |                                  |                       |
| 14 A 250 V AC 3/4 HP         |  |                        |                       |                                  |                                  |                                  |                                  |                       |                       |                       |                       |                       |                       |                       |                                  |                       |
| 14 A 250 V AC 1/2 HP         |  |                        |                       |                                  |                                  |                                  |                                  |                       |                       |                       |                       |                       |                       |                       |                                  |                       |
| 14 A 125 V AC 1/3 HP         |  |                        |                       |                                  |                                  |                                  |                                  |                       |                       |                       |                       |                       |                       |                       |                                  |                       |
| 14 A 125 V AC 1/4 HP         |  |                        |                       |                                  |                                  |                                  |                                  |                       |                       |                       |                       |                       |                       |                       |                                  |                       |
| 12 A 250 V AC 1 HP           |  |                        |                       |                                  |                                  |                                  |                                  |                       |                       |                       |                       |                       |                       |                       |                                  |                       |
| 12 A 125 V AC 1/2 HP         |  |                        |                       |                                  |                                  |                                  |                                  |                       |                       |                       |                       |                       |                       |                       |                                  |                       |
| Terminal type                |  |                        |                       |                                  |                                  |                                  |                                  |                       |                       |                       |                       |                       |                       |                       |                                  |                       |
| Terminal description         |  | 6.3                    | 6.3                   | 6.3                              | 6.3                              | 6.3                              | 6.3                              | 6.3                   | 6.3                   | 6.3                   | 6.3                   | 6.3                   | 6.3                   | 4.8                   | 6.3                              | 6.3                   |
| Contact distance (mm)        |  | Ag ≥ 3                 | Ag ≥ 3                | Ag ≥ 3                           | Ag ≥ 3                           | Ag ≥ 3                           | Ag ≥ 3                           | Ag ≥ 3                | Ag ≥ 3                | Ag ≥ 3                | Ag ≥ 3                | Ag ≥ 3                | Ag ≥ 3                | Ag ≥ 3                | Ag ≥ 3                           | Ag ≥ 3                |
| Contact material             |  | Ag                     | Ag                    | Ag                               | Ag                               | Ag                               | Ag                               | Ag                    | Ag                    | Ag                    | Ag                    | Ag                    | Ag                    | Ag                    | Ag                               | Ag                    |
| EN 60335 cap. 30 conform "G" |  |                        |                       |                                  |                                  |                                  |                                  |                       |                       |                       |                       |                       |                       |                       |                                  |                       |
| Miscellaneous                |  |                        |                       |                                  |                                  |                                  |                                  | bellows anthracite    |                       |                       |                       |                       |                       |                       |                                  |                       |
| Stock version                |  |                        |                       | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> |                       |                       |                       |                       |                       |                       |                       | <input checked="" type="radio"/> |                       |

ROCKER SWITCHES  
 PUSHBUTTON SWITCHES  
 TOGGLE SWITCHES  
 SLIDE SWITCHES  
 ROTARY SWITCHES  
 FOOT SWITCHES  
 TACT AND KEY SWITCHES  
 SMP-ACTION SWITCHES  
 MICRO-SIGNAL SWITCHES  
 SENSORS  
 ECO  
 PUSH N' DRIVE



# SERIES 1930 - DOUBLE-POLE ROCKER SWITCHES IP 65

TO 20 (4) A 250 V AC

| <br>double-pole |                           | ON / OFF switch (DPST) |                       |                       |                       |                       |              |                      |                    | Normally closed contact (DPNC) |                      | Normally open contact (DPNO) |                      |                      |                      |                    |                      |               |                      |                       |                  |                              |                      |               |
|--|---------------------------|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|--------------|----------------------|--------------------|--------------------------------|----------------------|------------------------------|----------------------|----------------------|----------------------|--------------------|----------------------|---------------|----------------------|-----------------------|------------------|------------------------------|----------------------|---------------|
| Lighting voltage (V)   | Actuator color / printing | Housing color          | 20 (4) A 250 V AC 1E4 | 12 (4) A 250 V AC 1E4 | 10 (8) A 400 V AC 5E4 | 10 (8) A 250 V AC 5E4 | 10 A 12 V DC | 6 (4) A 250 V AC 5E4 | 16 A 250 V AC 1 HP | 16 A 125 V AC 3/4 HP           | 16 A 125 V AC 1/3 HP | 14 A 250 V AC 3/4 HP         | 14 A 250 V AC 1/2 HP | 14 A 125 V AC 1/3 HP | 14 A 125 V AC 1/4 HP | 12 A 250 V AC 1 HP | 12 A 125 V AC 1/2 HP | Terminal type | Terminal description | Contact distance (mm) | Contact material | EN 60335 cap. 30 conform "G" | Miscellaneous        | Stock version |
|  |                           |                        | ○                     | ○                     | ○                     | ○                     | ○            | ○                    | ○                  | ○                              | ○                    |                              |                      |                      |                      |                    |                      | U             | 6.3                  | Ag ≥ 3                | Ag               |                              |                      |               |
|  |                           |                        | ○                     | ○                     | ○                     | ○                     | ○            | ○                    | ○                  | ○                              | ○                    |                              |                      |                      |                      |                    |                      | U             | 6.3                  | Ag ≥ 3                | Ag               |                              |                      |               |
|  |                           |                        | ○                     | ○                     | ○                     | ○                     | ○            | ○                    | ○                  | ○                              | ○                    |                              |                      |                      |                      |                    |                      | U             | 6.3                  | Ag ≥ 3                | Ag               |                              |                      |               |
|  |                           |                        | ○                     | ○                     | ○                     | ○                     | ○            | ○                    | ○                  | ○                              | ○                    |                              |                      |                      |                      |                    |                      | U             | 6.3                  | Ag ≥ 3                | Ag               | ○                            |                      |               |
|  |                           |                        | ○                     | ○                     | ○                     | ○                     | ○            | ○                    | ○                  | ○                              | ○                    |                              |                      |                      |                      |                    |                      | U             | 6.3                  | Ag ≥ 3                | Ag               | ○                            | bellows white        |               |
|  |                           |                        | ○                     | ○                     | ○                     | ○                     | ○            | ○                    | ○                  | ○                              | ○                    |                              |                      |                      |                      |                    |                      | U             | 6.3                  | Ag ≥ 3                | Ag               | ○                            | bellows red          |               |
|  |                           |                        | ○                     | ○                     | ○                     | ○                     | ○            | ○                    | ○                  | ○                              | ○                    |                              |                      |                      |                      |                    |                      | U             | 6.3                  | Ag ≥ 3                | Ag               | ○                            | single-pole occupied |               |
|  |                           |                        |                       |                       |                       |                       |              |                      |                    |                                |                      |                              |                      |                      |                      |                    |                      | U             | 6.3                  | Ag ≥ 3                | Ag               |                              |                      |               |
|  |                           |                        |                       |                       |                       |                       |              |                      |                    |                                |                      |                              |                      |                      |                      |                    |                      | U             | 6.3                  | Ag ≥ 3                | Ag               |                              |                      |               |
|  |                           |                        |                       |                       |                       |                       |              |                      |                    |                                |                      |                              |                      |                      |                      |                    |                      | U             | 6.3                  | Ag ≥ 3                | Ag               | ○                            | 250                  |               |
|  |                           |                        |                       |                       |                       |                       |              |                      |                    |                                |                      |                              |                      |                      |                      |                    |                      | U             | 6.3                  | Ag ≥ 3                | Ag               | ○                            |                      |               |

ROCKERSWITCHES

PUSHBUTTON SWITCHES

TOGGLE SWITCHES

SLIDE SWITCHES

ROTARY SWITCHES

FOOT SWITCHES

TACT AND KEY SWITCHES

SNAP-ACTION SWITCHES

MIKRO-SIGNALSCHALTER

SENSORS

ECO

PUSH'N'DRIVE



# SERIES 1930 - DOUBLE-POLE ROCKER SWITCHES IP 65

TO 20 (4) A 250 V AC

| <p>double-pole</p>           |  | Changeover switch (DPDT) |                          |                          | Changeover switch with OFF position in the center (DPDT - Center OFF) |           |                               |                               |                               |   |  |  |  |  |  |  |  |
|------------------------------|--|--------------------------|--------------------------|--------------------------|---|-----------|-------------------------------|-------------------------------|-------------------------------|---|--|--|--|--|--|--|--|
| Lighting voltage (V)         |  | 1934.3112                | 1934.3114                | 1934.2114                | 1939.3119   | 1939.3125 | 1939.3312                     | 1939.3314                     | 1939.3318                     | 1939.0454   |  |  |  |  |  |  |  |
| Actuator color / printing    |  |                          |                          |                          |   |           |                               |                               |                               |   |  |  |  |  |  |  |  |
| Housing color                |  |                          |                          |                          |   |           |                               |                               |                               |   |  |  |  |  |  |  |  |
| 20 (4) A 250 V AC 1E4        |  |                          |                          |                          |   |           |                               |                               |                               |   |  |  |  |  |  |  |  |
| 12 (4) A 250 V AC 1E4        |  |                          |                          |                          |   |           |                               |                               |                               |   |  |  |  |  |  |  |  |
| 10 (8) A 400 V AC 5E4        |  |                          |                          |                          |   |           |                               |                               |                               |   |  |  |  |  |  |  |  |
| 10 (8) A 250 V AC 5E4        |  | <input type="checkbox"/> | <input type="checkbox"/> |                          |   |           |                               |                               |                               |   |  |  |  |  |  |  |  |
| 10 A 12 V DC                 |  |                          |                          |                          |   |           |                               |                               |                               |   |  |  |  |  |  |  |  |
| 6 (4) A 250 V AC 5E4         |  |                          |                          | <input type="checkbox"/> |   |           |                               |                               |                               |   |  |  |  |  |  |  |  |
| 16 A 250 V AC 1 HP           |  |                          |                          |                          |   |           |                               |                               |                               |   |  |  |  |  |  |  |  |
| 16 A 125 V AC 3/4 HP         |  |                          |                          |                          |   |           |                               |                               |                               |   |  |  |  |  |  |  |  |
| 16 A 125 V AC 1/3 HP         |  |                          |                          |                          |   |           |                               |                               |                               |   |  |  |  |  |  |  |  |
| 14 A 250 V AC 3/4 HP         |  |                          |                          |                          | <input type="checkbox"/>  |           |                               |                               |                               |   |  |  |  |  |  |  |  |
| 14 A 250 V AC 1/2 HP         |  |                          |                          |                          |   |           |                               |                               |                               |   |  |  |  |  |  |  |  |
| 14 A 125 V AC 1/3 HP         |  |                          |                          |                          | <input type="checkbox"/>  |           |                               |                               |                               |   |  |  |  |  |  |  |  |
| 14 A 125 V AC 1/4 HP         |  |                          |                          |                          |   |           |                               |                               |                               |   |  |  |  |  |  |  |  |
| 12 A 250 V AC 1 HP           |  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |   |           |                               |                               |                               |   |  |  |  |  |  |  |  |
| 12 A 125 V AC 1/2 HP         |  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |   |           |                               |                               |                               |   |  |  |  |  |  |  |  |
| Terminal type                |  |                          |                          |                          |   |           |                               |                               |                               |   |  |  |  |  |  |  |  |
| Terminal description         |  | 6.3                      | 6.3                      |                          | 6.3   | 6.3       | 6.3                           | 6.3                           | 6.3                           | 6.3   |  |  |  |  |  |  |  |
| Contact distance (mm)        |  | Ag ≥ 3                   | Ag ≥ 3                   | Ag ≥ 3                   | Ag ≥ 3  | Ag ≥ 3    | Ag < 3                        | Ag < 3                        | Ag < 3                        | Ag < 3  |  |  |  |  |  |  |  |
| Contact material             |  | Ag                       | Ag                       | Ag                       | Ag  | Ag        | Ag                            | Ag                            | Ag                            | Ag  |  |  |  |  |  |  |  |
| EN 60335 cap. 30 conform "G" |  |                          |                          |                          |   |           |                               |                               |                               |   |  |  |  |  |  |  |  |
| Miscellaneous                |  |                          |                          |                          |   |           | momentary function both sides | momentary function both sides | momentary function both sides | single-pole occupied<br>momentary function both sides |  |  |  |  |  |  |  |
| Stock version                |  | <input type="checkbox"/> |                          |                          | <input type="checkbox"/>  |           | <input type="checkbox"/>      | <input type="checkbox"/>      | <input type="checkbox"/>      |   |  |  |  |  |  |  |  |

ROCKER SWITCHES  
PUSHBUTTON SWITCHES  
TOGGLE SWITCHES  
SLIDE SWITCHES  
ROTARY SWITCHES  
FOOT SWITCHES  
TACT AND KEY SWITCHES  
SMAP-ACTION SWITCHES  
MICRO-SIGNAL SWITCHES  
SENSORS  
ECO  
PUSH N'DRIVE

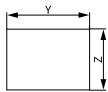


# SERIES 1930 - DOUBLE-POLE ROCKER SWITCHES IP 65

TO 20 (4) A 250 V AC

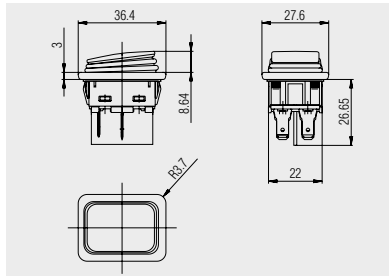


Basic types 1932, 1934, 1935 and 1939 double-pole

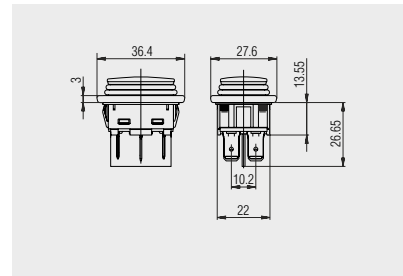


X = Wall thickness

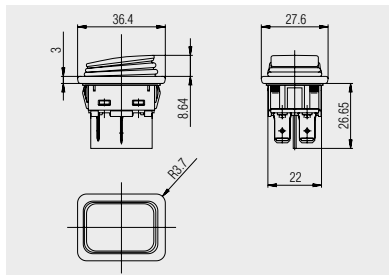
| x             | y                    | z                  |
|---------------|----------------------|--------------------|
| 0.75 ... 1.25 | 30 <sup>-0.1</sup>   | 22 <sup>+0.2</sup> |
| 1.25 ... 3    | 30.2 <sup>-0.1</sup> | 22 <sup>+0.2</sup> |



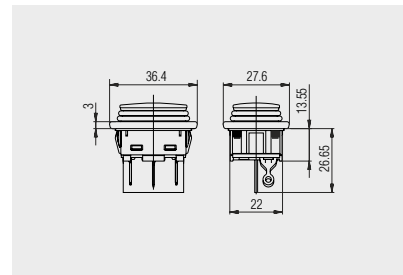
Quick-connect terminal 4.8 x 0.8 basic type 1932



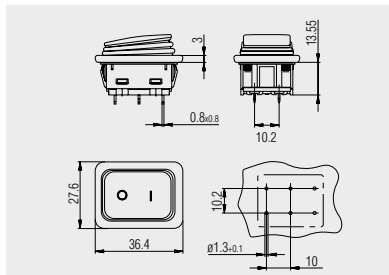
Quick-connect terminal 6.3 x 0.8 basic type 1939



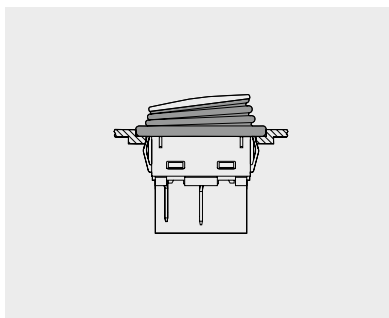
Quick-connect terminal 6.3 x 0.8 basic types 1932, 1934 and 1935



Solder terminal basic type 1939



PCB terminal basic type 1934



Sunken installation recommended for IP 65

A correct assembly and examination on tightness according to IP 65 in the equipment must be ensured by the customer.



Block connector  
217.954.011

Block connector for cable connection for the double-pole versions of the rocker switch series 1830 und 1930.

Used with the standard timer plug AMP 0-927 936-1

THIS DRAWING IS THE EXCLUSIVE PROPERTY OF MARQUARDT. WITHOUT THEIR CONSENT IT MAY NOT BE REPRODUCED OR GIVEN TO THIRD PARTIES.

CONFIDENTIAL

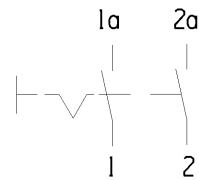
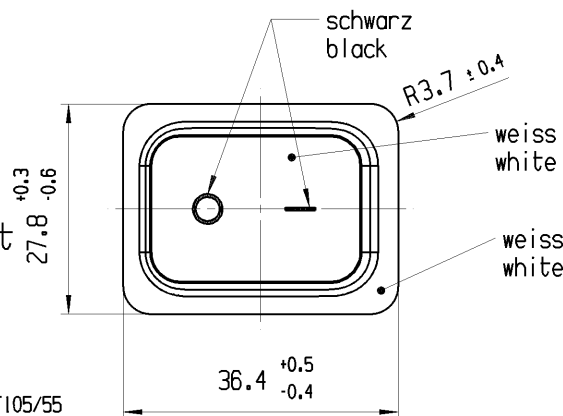
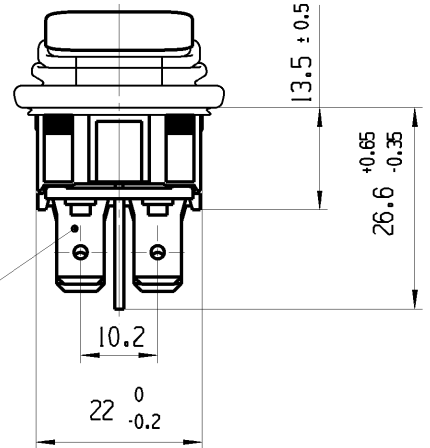
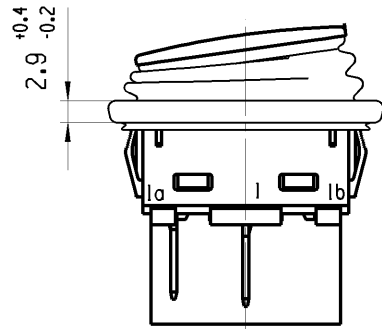
VERTRAULICH

Alle Rechte bei Marquardt, auch fuer den Fall von Schutzrechtsverletzungen. Jede Verfuugungs-befugnis, wie Kopier- und Weitergaberecht, bei uns.

|  |                                       |  |  |
|--|---------------------------------------|--|--|
| 1  | 2                                     | 3  | 4  |
| Empfohlener Ausschnitt fuer Rastbefestigung (Grat gegenueber Bestueckungsseite recommended cut-out for snap-in fixing (ledge opposite to snap-in direction)) | Wanddicke wall thickness              | Ausschnittlaenge length of cut-out         | Ausschnittbreite width of cut-out        |
|  | 0.75 bis / to 1.25<br>1.25 bis / to 3 | 30 <sup>+0.1</sup><br>30.2 <sup>-0.1</sup> | 22 <sup>+0.2</sup><br>22 <sup>+0.2</sup> |

Die in unseren Unterlagen angegebene IP Schutzklasse bezieht sich auf die Betaetigungsseite des Schalters, wenn dieser in das Kundengerat eingebaut ist. Die Abdichtung zwischen Schalter und Kundengerat kann ueber die umlaufende Dichtlippe der Betaetigungskappe erfolgen. Die Montage in das Kundengerat und die Pruefung auf Dichtheit an dieser Stelle erfolgen kundenseitig. Schalter mit beschaedigten Betaetigungskappen muessen sofort ausgetauscht werden.

The IP-protection class mentioned in our documents refers to the actuating side of the switch when mounted into the customer appliance. The sealing between switch and customer appliance is realizable through the surrounding sealing lip of the actuating cap. The mounting into the customer appliance and the testing of the tightness have to be effected by the customer. Switches with damaged actuating caps have to be replaced immediately.



Aufschrift Marking  
 193..  
 10181/250 ~ 5E4  
 20141/250 ~ T105/55  
 5/120A 250V ~  
 05  
 16A 125-250V AC  
 3/4 HP 125V AC  
 1 HP 250V AC  
 R188  
 SP US

Ausschalter 2-polig  
 Fuer Gerate der Klasse II geeignet

DPST  
 suitable for appliances of class II

Herstellort/-jahr/-woche nach DIN EN 60062  
 code of manufacture: place/year/week acc. to DIN EN 60062  
 Auf Verpackung / on box: G

G-Konform nach IEC 60335-1:2001 Kap. 30  
 G-matching IEC 60335-1:2001 clause 30

|                                       |                    |   |  |                     |                   |                                      |                |       |                              |       |
|---------------------------------------|--------------------|---|--|---------------------|-------------------|--------------------------------------|----------------|-------|------------------------------|-------|
| fuer Form und Lage FOR SHAPE AND LOC. | ☉ =                | Allgemeintoleranzen UNTOLERANCED DIMENSIONS |  |                     |                   | Pause COPY                           | Blatt SHEET 01 | TYP K | Zeichn./DRAWING NO. 19323131 | Index |
| fuer Winkel FOR ANGLE. ± 2            |                    | PROJEKTION                                  | Abmasse und Nennmassbereiche Angaben in mm | Laenge LENGTH       | Radien RADIUS     |                                      |                |       |                              |       |
|                                       |                    |   | ALL DIMENSIONS ARE IN MILLIMETRES          | 0-6 ± 0.15 ± 0.2    | >6-15 ± 0.2 ± 0.3 |                                      |                |       |                              |       |
|                                       |                    |   |  | >15-30 ± 0.25 ± 0.5 | >30-70 ± 0.4      |                                      |                |       |                              |       |
|                                       |                    |   |  | >70-120 ± 0.6       | >120-200 ± 1.0    |                                      |                |       |                              |       |
|                                       |                    |   |  |                     |                   | CAD: NX v4.0                         |                |       |                              |       |
|                                       |                    |   |  |                     |                   | gez./DRAWN BY 08.04.09 HHE           |                |       |                              |       |
|                                       |                    |   |  |                     |                   | gepr./CHECKED BY KOV                 |                |       |                              |       |
|                                       | 60969              | 20.04.09                                    | HHE  |                     |                   | Ersatz fuer/REPLACEMENT OF V09033003 |                |       |                              |       |
| Ausg. ISSUE                           | Aenderung REVISION | gez. DRAWN BY                               | Ausg. ISSUE                                | Aenderung REVISION  | gez. DRAWN BY     |                                      |                |       |                              |       |

