

# MODULAR CONTACTOR R25-.. 4-pole, 2TE, low noise

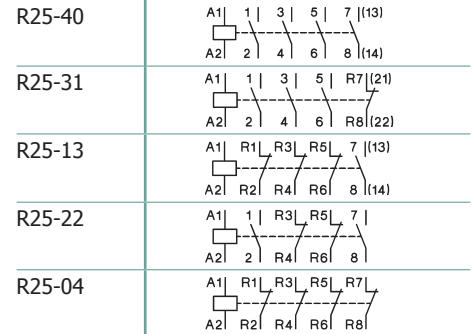
Technical Data acc. to IEC/EN60947-4-1, IEC/EN60947-5-1, VDE 0660

|   |             | Type                              | R25..              |
|---|-------------|-----------------------------------|--------------------|
| <b>Main Contacts</b> <sup>1) 2) 3)</sup>  |             |                                   |                    |
| Rated insulation voltage $U_i$  |             | V~                                | 440 <sup>4)</sup>  |
| Rated operation voltage $U_e$   |             | V~                                | 440                |
| Frequency of operations $z$   | AC1, AC3    | 1/h                               | 300                |
| Mechanical life   |             | $S \times 10^6$                   | 1                  |
| <b>Utilization category AC1 / AC7a, Switching of resistive load</b>             |             |                                   |                    |
| Rated operational current $I_e (=I_{th})$                                       | open        | at 60°C                           | <b>A</b> <b>25</b> |
| Contact life  |             | $S \times 10^6$                   | 0,1                |
| Minimum switch voltage  |             | V/mA                              | 24/100             |
| Short time current  | 10s-current | A                                 | 72                 |
| Power loss per pole at $I_e/AC1$  |             | W                                 | 2                  |
| <b>Utilization category AC2 and AC3 / AC7b, Switching of three-phase motors</b> |             |                                   |                    |
| Rated operational current $I_e$   |             | A                                 | 9                  |
| Rated operational power   | 220V        | kW                                | 2,2                |
| 50-60Hz   | 230-240V    | kW                                | 2,5                |
|   | 380-415V    | kW                                | 4                  |
| Contact life  |             | $S \times 10^6$                   | 0,15               |
| <b>Power consumption of coils</b>   |             |                                   |                    |
| AC operated   |             | inrush                            | VA                 |
|   |             | sealed                            | VA                 |
|   |             |                                   | W                  |
|   |             |                                   | 20-25              |
|   |             |                                   | 4-6                |
|   |             |                                   | 1,5-2,5            |
| Ac and DC operated  |             |                                   | W                  |
|   |             |                                   | 3-4                |
| <b>Operation range of coils</b>   |             |                                   |                    |
| in multiples of control voltage $U_s$   |             | -40°C to +40°C                    | 0,85-1,1           |
| <b>Maximum ambient temperature</b>  |             |                                   |                    |
|   |             | open                              | °C                 |
|   |             | enclosed                          | °C                 |
|   |             |                                   | -40 to +60         |
|   |             |                                   | -40 to +40         |
| Storage   |             |                                   | °C                 |
|   |             |                                   | -50 to +90         |
| <b>Short circuit protection</b>   |             |                                   |                    |
| Max. fuse Coordination-type "1"   |             | gL (gG)                           | A                  |
| Rated short circuit current   |             | "I <sub>r</sub> "                 | kA                 |
|   |             | "I <sub>q</sub> "                 | kA                 |
|   |             |                                   | 35                 |
|   |             |                                   | 3                  |
|   |             |                                   | 10                 |
| <b>Switching time at control voltage <math>U_s \pm 10\%</math></b>              |             |                                   |                    |
|   |             | make time                         | ms                 |
|   |             | release time                      | ms                 |
|   |             | arc duration                      | ms                 |
|   |             |                                   | 9-15               |
|   |             |                                   | 4-8                |
|   |             |                                   | 10-15              |
| <b>Cable cross-sections</b>   |             |                                   |                    |
| Main connector  |             | solid or stranded                 | mm <sup>2</sup>    |
|   |             | flexible                          | mm <sup>2</sup>    |
|   |             | flexible with multicore cable end | mm <sup>2</sup>    |
|   |             |                                   | 1,5-10             |
|   |             |                                   | 1,5-6              |
|   |             |                                   | 1,5-6              |
| Clamps per pole   |             |                                   | 1                  |
| Magnetic coil   |             | solid or stranded                 | mm <sup>2</sup>    |
|   |             | flexible                          | mm <sup>2</sup>    |
|   |             | flexible with multicore cable end | mm <sup>2</sup>    |
|   |             |                                   | 0,75-2,5           |
|   |             |                                   | 0,5-2,5            |
|   |             |                                   | 0,5-1,5            |
| Clamps per pole   |             |                                   | 1                  |
| <b>Auxiliary Contacts</b> <sup>1) 2) 3)</sup>                                   |             |                                   |                    |
| Rated insulation voltage $U_i$  |             | V~                                | 440 <sup>4)</sup>  |
| Thermal rated current = $I_{th}$  | 40°C        | A                                 | 25                 |
| Ambient temperature   | 60°C        | A                                 | 25                 |
| <b>Utilization category AC15</b>  |             |                                   |                    |
| Rated operational current $I_e$   | 220-240V    | A                                 | 3                  |
|   | 380-415V    | A                                 | 2                  |
|   | 440V        | A                                 | 1,6                |
| <b>Utilization category DC13</b>  |             |                                   |                    |
| Rated operational current $I_e$   | 24-60V      | A                                 | 2                  |
| per pole  | 110V        | A                                 | 0,4                |
|   | 220V        | A                                 | 0,1                |
| <b>Short circuit protection</b>   |             |                                   |                    |
| Short-circuit current 1kA, contact welding not accepted, max. fuse size         |             | gL (gG)                           | A                  |
|   |             |                                   | 10                 |



Example

## Wiring diagrams



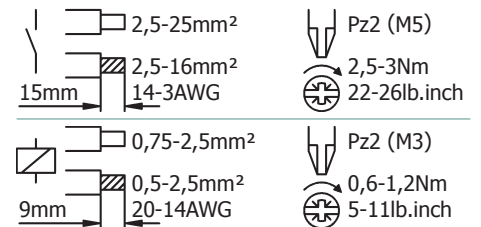
## Gewicht

0,22kg

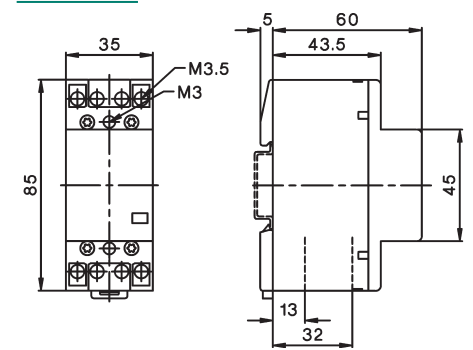
## Coil voltages

|              |                               |
|--------------|-------------------------------|
| R25-.. 230   | 220-240V 50Hz / 230-264V 60Hz |
| R25-.. 24    | 24V 50/60Hz                   |
| R25-.. 200FR | 180-210V 50Hz / 200-240V 60Hz |

## Cable cross-sections, screw driver, tightening torque



## Dimensions



- 1) Rated frequency 50/60Hz
- 2) Max. occ switching overvoltage < 4kV
- 3) Duty cycle: 100%
- 4) Suitable for: earthed-neutral systems, overvoltage category I to III, pollution degree 3 (standard-industrie): Uimp = 4kV

Technical data are subject to change without notice

Benedict GmbH  
Lieblgasse 7, A-1220 Vienna  
Tel.: +43 1 251 51-0  
Fax: +43 1 251 51-89

e-mail: sales@benedict.at  
www.benedict.at