

## Printed circuit board mount

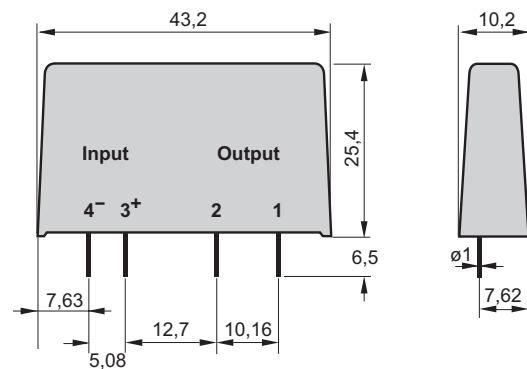
### Solid-state relay HM



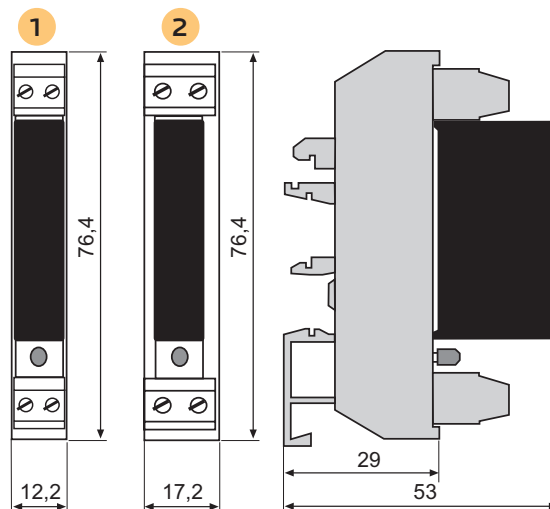
Construction M

- Control voltage range: 4 ... 30 VDC, 3 ... 30 VDC
- Load voltage range: 12 ... 275 VAC, 2 ... 60 VDC
- Load current range: 5 mA ... 4 A, 5 mA ... 3 A

### Dimensions

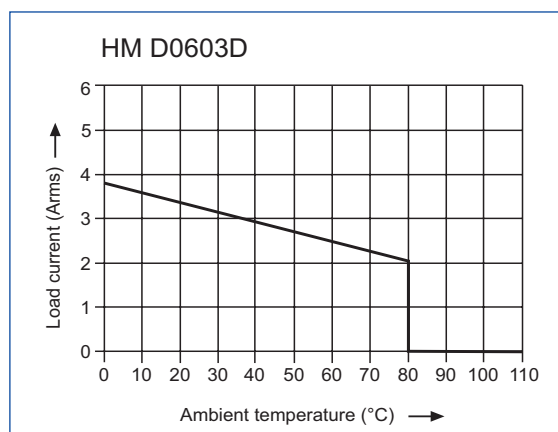
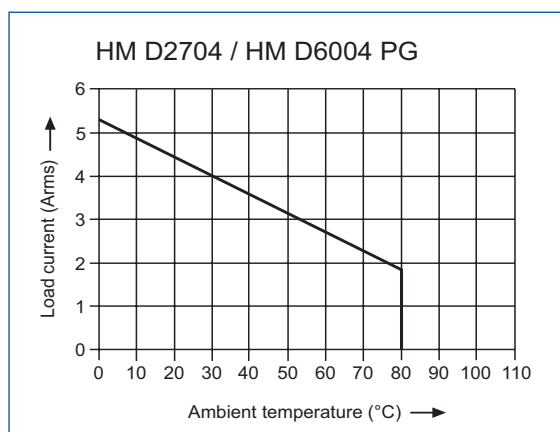


HM D2704  
HM D0603D



HM D2704 PG 1  
HM D0603D PG 1  
HM D6004 PG 2

### Thermal diagrams



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### Solid-state relay HM

| Technical data                                 | HM D2704            | HM D0603D       | HM D6004 PG         |
|------------------------------------------------|---------------------|-----------------|---------------------|
| Zero switching                                 | Yes                 | –               | Yes                 |
| Instantaneous switching-on                     | –                   | Yes             | –                   |
| Control circuit                                | DC                  | DC              | DC                  |
| Load circuit                                   | AC                  | DC              | AC                  |
| <b>Load circuit</b>                            |                     |                 |                     |
| Voltage range                                  | 12 ... 275 VAC      | 2 ... 60 VDC    | 24 ... 600 VAC      |
| Operating frequency range                      | 10 ... 440 Hz       | –               | 10 ... 440 Hz       |
| Transient overvoltage                          | 600 V               | 60 V            | 1200 V              |
| Load current range                             | 5 mA ... 4 A        | 5 mA ... 3 A    | 5 mA ... 4 A        |
| Max. surge current (10 ms/AC; 1s/DC)           | 100 A               | 10 A            | 120 A               |
| Max. off-state leakage current (rated voltage) | 0,3 mA              | 1 mA            | 0,3 mA              |
| Min. off-state du/dt                           | 500 V/μs            | 200 V/μs        | 500 V/μs            |
| Max. on-state voltage drop                     | 1,6 V               | 1,6 V           | 1,6 V               |
| Max. turn-on time                              | 10 ms               | 200 μs          | 10 ms               |
| Max. turn-off time                             | 10 ms               | 800 μs          | 10 ms               |
| Max. I <sup>2</sup> t for fusing (< 10 ms)     | 50 A <sup>2</sup> s | 3 A             | 72 A <sup>2</sup> s |
| <b>Control circuit</b>                         |                     |                 |                     |
| Control voltage range                          | 4 ... 30 VDC        | 3 ... 30 VDC    | 5 ... 30 VDC        |
| Must release voltage                           | 0,8 VDC             | 1 VDC           | 0,8 VDC             |
| Nominal input impedance                        | 1000 Ω              | 1000 Ω          | 1000 Ω              |
| Typical input current at nominal voltage       | 3 mA                | 1 mA            | 3 mA                |
| <b>Generalities</b>                            |                     |                 |                     |
| Insulation input/output                        | 4000 Vrms           | 2500 Vrms       | 4000 Vrms           |
| Galvanic insulation input ↔ output             | No                  | No              | No                  |
| Ambient operating temperature range            | -40 ... +80 °C      | -40 ... +80 °C  |                     |
| Ambient storage temperature range              | -40 ... +150 °C     | -40 ... +105 °C |                     |
| Weight (typical)                               | 20 g                | 20 g            |                     |
| Approvals                                      | UL                  | –               |                     |
| Article number                                 | 42310081            | 42310080        |                     |
| (Order data see chapter 1)                     |                     |                 |                     |

| Mounted on profile housing          | HM D2704 PG     | HM D0603D PG    | HM D6004 PG     |
|-------------------------------------|-----------------|-----------------|-----------------|
| <b>Generalities</b>                 |                 |                 |                 |
| Ambient operating temperature range | -40 ... +80 °C  | -40 ... +80 °C  | -40 ... +80 °C  |
| Ambient storage temperature range   | -40 ... +150 °C | -40 ... +105 °C | -40 ... +105 °C |
| Weight (typical)                    | 30 g            | 30 g            | 30 g            |
| Approvals                           | UL              | –               | –               |
| Article number                      | 42310086        | 42310087        | 42310088        |
| (Order data see chapter 1)          |                 |                 |                 |