



| Coil Data at 20 °C | Conditions   | Min | Typ | Max | Unit |
|--------------------|--|-----|-----|-----|------|
| Coil resistance    |  | 225 | 250 | 275 | Ohm  |
| Coil voltage       |  |     | 12  |     | VDC  |
| Rated power        |  |     | 576 |     | mW   |
| Coil current       |  |     | 48  |     | mA   |
| Thermal resistance | max. Relay temperature<br>= operating temperature + self heating |     | 25  |     | K/W  |
| Inductance         |  |     | 280 |     | mH   |
| Pull-In voltage    |  |     |     | 9   | VDC  |
| Drop-Out voltage   |  | 1   |     |     | VDC  |

| Contact data 83           | Conditions   | Min | Typ | Max   | Unit  |
|---------------------------|--|-----|-----|-------|-------|
| Contact rating            | Any DC combination of V & A<br>not to exceed their individual max.'s |     |     | 50    | W     |
| Switching voltage         | DC or Peak AC  |     |     | 7.500 | V     |
| Switching current         | DC or Peak AC  |     |     | 3     | A     |
| Carry current             | DC or Peak AC  |     |     | 5     | A     |
| Contact resistance static | Measured with 40% overdrive<br>Start Value                           |     |     | 150   | mOhm  |
| Insulation resistance     | RH <45 %, 100 V test voltage   | 10  |     |       | TOhm  |
| Breakdown voltage         | according to IEC 255-5   | 10  |     |       | kV DC |
| Operate time incl. bounce | measured with 40% overdrive  |     |     | 3,2   | ms    |
| Release time              | measured with no coil excitation                                     |     |     | 1,5   | ms    |
| Capacitance               | @ 10 kHz across open switch  |     | 1   |       | pF    |

| Special Product Data               | Conditions                    | Min | Typ                     | Max | Unit  |
|------------------------------------|-------------------------------|-----|-------------------------|-----|-------|
| Number of contacts                 |                               |     | 1                       |     |       |
| Contact - form                     |                               |     | A - NO                  |     |       |
| Dielectric Strength Coil/Contact   | according to IEC 255-5        | 15  |                         |     | kV DC |
| Insulation resistance Coil/Contact | RH <45%, 200 VDC test voltage | 10  |                         |     | TOhm  |
| Capacity Coil/Contact              | @ 10 kHz                      |     | 2,5                     |     | pF    |
| Case colour                        |                               |     | gray                    |     |       |
| Housing material                   |                               |     | Polycarbonat            |     |       |
| Sealing compound                   |                               |     | Polyurethan             |     |       |
| Connection pins                    |                               |     | Copper alloy tin plated |     |       |
| Magnetic Shield                    |                               |     | no                      |     |       |
| Reach / RoHS conformity            |                               |     | yes                     |     |       |



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Item No.:  
**8412183300**  
Item:  
**HM12-1A83-300**

| Environmental data    | Conditions                  | Min | Typ | Max | Unit         |
|-----------------------|-----------------------------|-----|-----|-----|--------------|
| Shock                 | 1/2 sine wave duration 11ms |     |     | 50  | g            |
| Vibration             | from 10 - 2000 Hz           |     |     | 20  | g            |
| Operating temperature |                             | -20 |     | 70  | °C           |
| Storage temperature   |                             | -35 |     | 105 | °C           |
| Soldering temperature | wave soldering max. 5 sec.  |     |     | 260 | °C           |
| Washability           |                             |     |     |     | fully sealed |

| General data | Conditions | Min | Typ | Max | Unit                        |
|--------------|------------|-----|-----|-----|-----------------------------|
| Total weight |            |     | 50  |     | g                           |
| Packaging    |            |     |     |     | carton pallet, 10 pcs./each |

Modifications in the sense of technical progress are reserved

Designed at: 29.10.08 Designed by: MPOTUZAK  
Last Change at: 04.05.11 Last Change by: WKOVACS

Approval at: 30.10.08 Approval by: DSTASTNY  
Approval at: 04.05.11 Approval by: CRUF

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