# IRC series
# C12-A2x
# 8-pin, Interface relays, 2-pole, plug-in faston

| | | | |
|---|---|---|---|
| **Type** | | | **C12-A2x/ ... V**<br>Standard relay<br>2 change-over contact |
| **Maximum contact load** | | | **5 A/250 V AC1** **0,5 A/110 V DC1**<br>**5 A/30 V DC1** **0,2 A/220 V DC1** |
| **Recommended minimum contact load** | | | **1 mA/10 V** (with 10 µ Au)<br>**10 mA/10 V** (standard contact) |
| **Contacts** | | | |
| Material | Standard | Code 1 | AgNi + 0,2 µ Au |
| | Optional | Code 2 | AgNi + 10 µ Au |
| Rated current | | | 5 A |
| Switch-on current max. (20 ms) | | | 15 A |
| Switching voltage max. | | | 250 V |
| AC load | | | 1,2 kVA |
| DC load | | | see f g. 2 |
| **Coil** | | | |
| Coil resistance | | | see table; tolerance ± 10 % |
| Pick-up voltage | | | ≥ 0,8 x $U_N$ |
| Release voltage | | | ≥ 0,1 x $U_N$ |
| Nominal power | | | 1,1 VA (AC)/0,7 W (DC) |

**Coil table**

| VAC | Ω | mA | VDC | Ω | mA |
|---|---|---|---|---|---|
| 24 | 290 | 45 | 12 | 224 | 53 |
| 48 | 1200 | 23 | 24 | 742 | 32 |
| 115 | 7.300 | 9,5 | 48 | 3.500 | 13,7 |
| 230 | 28.800 | 4,7 | 110 | 19.900 | 5,5 |

| | |
|---|---|
| **Insulation** | Volt rms, 1 min |
| Contact open | 1000 V |
| Contact/contact | 3000 V |
| Contact/coil | 5 kV |
| Insulation resistance at 500 V | ≥3 GΩ |
| Insulation, IEC 61810-5 | 4 kV/3 |
| **Specifications** | |
| Ambient temperature operation/storage | -40 (no ice)….60 °C /-40 ... 80 °C |
| Pick-up time/bounce time | 10 ms/≤ 1 ms |
| Release time/bounce time | 5 ms/≤ 3 ms |
| Mechanical life | AC: 10 Mill./DC: 20 Mill. switching cycles |
| Rated load | ≥100000 switching cycles |
| Switching frequency at rated load | ≤ 1200/h |
| Protection class | IP40 |
| Weight | 21 g |

| **Standard types** | | |
|---|---|---|
| **AC 50 Hz/60 Hz: 24, 48, 115, (120), 230, (240)** | **C12-A21/AC ... V** | **C12-A22/AC ... V** |
| **LED** | **C12-A21X/AC ... V** | **C12-A22X/AC ... V** |
| **RC suppresor** | **C12-A21R/AC ... V** | **C12-A22R/AC ... V** |
| **DC 12, 24, 48, 110** | **C12-A21/DC ... V** | **C12-A22/DC ... V** |
| **LED** | **C12-A21X/DC ... V** | **C12-A22X/DC ... V** |
| **Polarity and free wheeling diode** | **C12-A21FX/DC ... V** | **C12-A22FX/DC ... V** |
| **AC/DC bridge rectifier 24 V, 48 V, 60 V** | **C12-A21BX/UC ... V** | **C12-A22BX/UC ... V** |

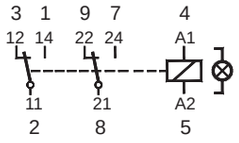
"..." Enter the voltage for full type designation

| | |
|---|---|
| **Accessories** | |
| Socket: | **S12, S12-P** |

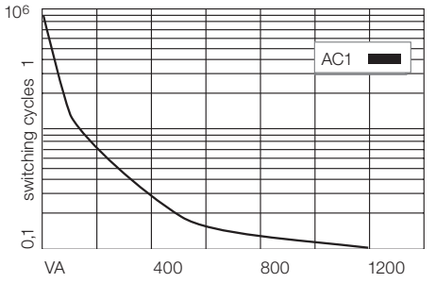


## Connection diagram

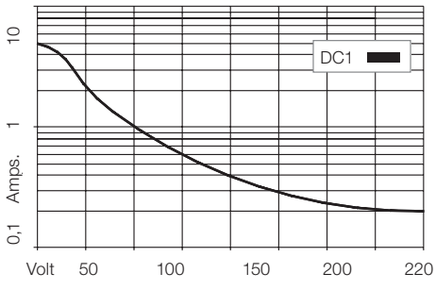
**Gap:**
**0,5 mm**



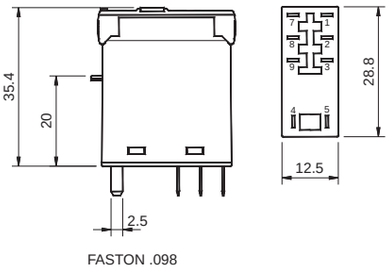

## Fig. 1 AC voltage endurance




## Fig. 2 DC load limit curve




## Dimensions [mm]




## Technical approvals, conformities

IEC 61810; EN 60947