

Key Features

- Compact high voltage relay for precharge applications up to 450 VDC
- Precharge current up to 20 A
- Limiting break current up to 20 A
- Small package size, low profile
- Quick connect (QC) terminal assignment similar to ISO 7588-1

Typical Applications

- DC high voltage precharge applications in hybrid, full battery electric vehicles and fuel cell cars

Contact Data

Contact arrangement:
1 Form X (NO DM)

Rated voltage:
400 VDC

Limiting cont. current at 85 °C:
n/a ¹⁾

Limiting making / breaking current:
20 A >10⁵ ops. / 20 A >10 ops. ²⁾

Operate /release time max. (typ.):
2.5 ms / 1 ms

Coil Data

Rated coil voltage / power:
12 VDC ¹⁾

Rated coil power (+23 °C):
PCB: 2.9 W / Plug-in: 3.5 W ¹⁾

Coil resistance (+23 °C):
PCB: 50 Ω / Plug-in: 41.6 Ω

Coil Data

Ambient temperature:
-40 °C to +85 °C

Category and degree of protection:
sealed, RT III – immersion cleanable

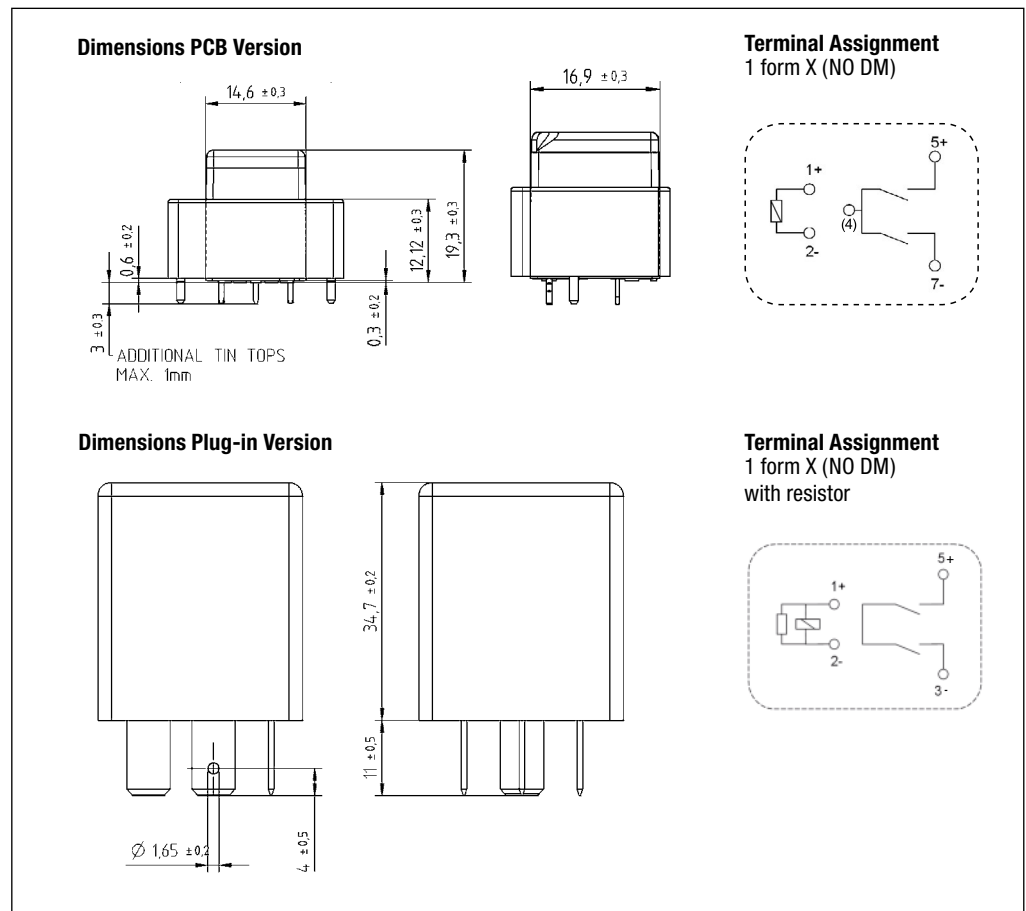
Terminal type and mounting:
PCB and plug-in/QC

Dimensions LxWxH (approx.):
PCB: 25.5 x 20.7 x 19.3 mm,
(1.0 x 0.8 x 0.8")

Plug-in: 29.9 x 29.9 x 34.7 mm,
(1.2 x 1.2 x 1.4") w/o terminals

Weight (approx.):
PCB: 17 g (0.6 oz)
Plug-in: 39 g (1.4 oz)

Mini K HV Precharge Relays



Ordering Information Mini K HV precharge Relays

Product Code	Arrangement	Coil	Terminal / Mounting	Coil Suppression	Rated Voltage	Resistance	Part Number
V23700-C0001-A408	1 form X (NO DM)	12 VDC	PCB, sealed	without parallel resistor	400 VDC	50 Ω	2-1904058-5
V23700-F0002-A408	1 form X (NO DM)	12 VDC	Plug-in, QC	with parallel resistor	400 VDC	41.6 Ω	2-1904058-7

1) Max. continuous current is limited and depends on operating conditions. Consult TE Connectivity for details.
2) Min. 10 fault break operations.