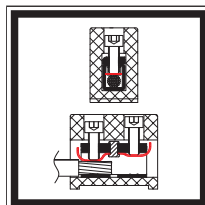


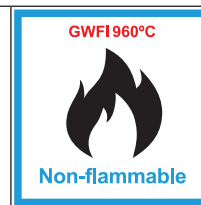
Very high temperature steatite connection blocks. Indirect pressure clamping, with pressure plate, not protected against electric shocks, **750V range**

Type BK

Main features



**C221
unglazed
ceramic**



Applications: These terminal blocks have been developed to meet the specific needs of connections that must withstand very high temperatures, up to **500°C (930°F) permanently and 700°C (1290°F) peak**. They also ensure the continuity of the connection in case of fire up to **950°C (1740°F)** (Their subsequent replacement is then necessary). They are particularly intended for **road tunnels, public transport tunnels (trains, subways), boat and submarine parts that must withstand a fire**, but also for furnace connections when the ambient temperature is very high at all times. Because of their construction, they are non-flammable and resistant to moisture. Although standards IEC (EN) 60998-1 and IEC (EN) 60998-2 have not provided for the special temperature holding conditions of these terminal blocks, their construction meets their specifications (where applicable), for a maximum voltage of **750V**.

At 700°C, in 230V, the leakage current to earth is about 0.1 milliamperes. The IEC 60331-21 and IEC 60331-11 standards for fire resistance of cables require a maximum leakage current of 2A at 850°C. It is reached only around 900°C in these terminals, for a voltage of 230V.

Ceramic: Steatite type C221, unglazed, slightly creamy color.

Typical isolation resistors between two terminals (500V measuring voltage):

- at 20°C (70°F): > 100 GΩ
- at 100°C (212°F): > 100 GΩ
- at 200°C (390°F): 90 GΩ
- at 300°C (570°F): 55 GΩ
- at 400°C (750°F): 5 GΩ
- at 500°C (750°F): 90 MΩ
- at 600°C (750°F): 10 MΩ
- at 700°C (750°F): 2,5 MΩ

The EN 60998 standard imposes an insulation resistance greater than 5MΩ. It is reached around **680°C (1250°F)** on this model.

Dielectric strength: greater than 9KV at 20°C

Screws: 304 stainless steel, hollow hexagonal head, according to ISO 4762

Terminals: Nickel

Pressure Plates: Nickel

Maximum operating voltage: 750V, in pollution class 3. (Pollution class 3 defines micro environmental conditions causing conductive pollution, or when a non-conductive pollution that may become conductive if condensation occurs).

Insulation distances: Greater than 6mm between mounting face and terminals, between terminals, and between two connection blocks mounted side by side.

Live parts: Not protected against accidental electrical contact.

Mounting: With the exception of the single-wire terminals, the terminal blocks have one or two holes for installing a fixing screw on a wall. A hexagonal housing makes it possible to place a round-headed or hexagonal screw, or a nut. This allows mounting with clamping by the front or the back. **The largest dimensions (35 and 50mm²) can accommodate a 35mm Din rail mounting clip.**

Important note: These terminal blocks must imperatively be fixed in order to prevent their movement for any reason in the box in which they are mounted, and consequently put them in a position where the insulation distances are no longer respected.

Maximum ambient temperature:

- Permanent: 500°C / 930°F
- Peak (<90 minutes): 700°C / 1290°F

The temperature resistance values of the nickel terminals were validated by wire pull tests according to EN 60998, performed after 48h at 500°C (930°F) and 90 minutes at 700°C (1290°F).

Partially applicable standards: (IEC) EN 60998-1; (IEC) EN 60998-2-1.

Caution: Special care must be taken to avoid electric shock. These terminal blocks are not usable in places accessible without tools. They must be mounted in protective boxes. Respect the distances in the air of at least 6mm between the live parts and the walls of the protective case. Other rules may apply according to local safety regulations.



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