

# BLACKBURN ELECTRIC WIRES PTY LTD

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Page 26.

## THERMIK THERMAL PROTECTORS

### GENERAL PRODUCT INFORMATION

According to VDE 0631, 12.83/3.2.1, thermal protectors are overheating protective devices which when applied as intended, limit the temperature of devices in which they are installed. Thermal protectors with normally closed contacts open an electrical circuit on temperature rise and reclose after a significant temperature drop; protectors with normally open contacts close an electrical circuit on rising temperature (e.g. to initiate an alarm or to start a cooling fan) and switch it off after a significant temperature drop. Temperature limiting switches do the same as a protector with normally closed contacts, however, they are not automatically resetting on temperature drop.

### APPLICATION

Thermik thermal protectors and temperature limiting switches are designed for overheating protection of all kinds of electrical windings and devices. When applied as intended, Thermik switches meet the most important international standards. Overheating protection of electric motors is in accordance with IEC34-11, VDE 0700 and UL 547.

Based on their sturdy design, Thermik thermal protectors with insulated housing (Design S) are imbedded within the winding heads without pre-treatment. With installed thermal protectors the winding heads can be formed and impregnated. With an outer diameter of only 9-11mm and a height of only 4-7mm (depending on type, design and connections), Thermik thermal protectors virtually fit into any slot, into the smallest motor, transformer etc. The product series 01 is suitable for vacuum impregnation.

### TECHNICAL DATA

SWITCHING TEMPERATURES FROM 70°C - 180°C; TOLERANCE +/- 5°C

| TYPE, CONTACT SETTING         | S01 normally closed |          | S06 normally closed |
|-------------------------------|---------------------|----------|---------------------|
| OPERATING VOLTAGES            | 12 - 500 V AC       |          | 12 - 500 V AC       |
|                               | 12 - 100 V DC       |          | 12 - 100 V DC       |
| RATED VOLTAGE                 | 250 V AC            | 500 V AC | 250 V AC            |
| RATED CURRENT $\cos \phi$ 1.0 | 2.5 A               | 0.75 A   | 10.0 A              |
|                               | $\cos \phi$ 0.6     | 1.6 A    | 0.5 A               |
| MAX. SWITCHING CURRENT        | 5.0 A               | 2.5 A    | 25.0 A              |
| HEIGHT                        | 5.1 mm              |          | 6.6 mm              |
| DIAMETER                      | 9.4 mm              |          | 9.4 mm              |
| LEAD LENGTH                   | 300 mm              |          | 300 mm              |