### Applications

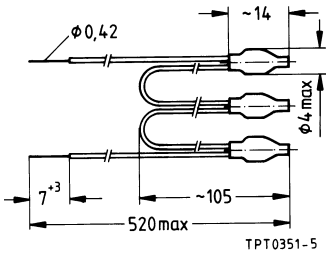
- Thermal protection of winding in electric motors

### Features

- Thermistor pellets with insulating encapsulation in series connection (triple sensor)
- Silver-plated and Teflon(PTFE)-insulated AWG 26 litz wires
- Trip temperature coded in litz wire color, connecting wires all in black
- Characteristics for nominal threshold temperatures of 90 bis 160 °C conform with DIN 44 082
- Can be used in conjunction with Siemens tripping units 3UN6 to 3UN9

| | | | | |
|---|---|---|---|---|
| Max. operating voltage | ($T_A$ = 0 … 40 °C) | $V_{max}$ | 30 | V |
| Max. measuring voltage | ($T_A$ – 25 K … $T_{NAT}$ + 15 K) | $V_{Mes,max}$ | 7,5 | V |
| Rated resistance | ($V_{PTC} \leq$ 2,5 V) | $R_N$ | ≤ 300 | Ω |
| Insulation test voltage | | $V_{is}$ | 2,5 | kV ac |
| Response time | | $t_a$ | < 5 | s |
| Operating temperature range | ($V$ = 0) | $T_{op}$ | – 25/+ 180 | °C |
| | ($V = V_{max}$) | $T_{op}$ | 0/40 | °C |

| Type | $T_{NAT} \pm \Delta T$ °C | $R$ ($T_{NAT} - \Delta T$) ($V_{PTC} \leq$ 2,5 V) Ω | $R$ ($T_{NAT} + \Delta T$) ($V_{PTC} \leq$ 2,5 V) Ω | $R$ ($T_{NAT}$ + 15 K) ($V_{PTC} \leq$ 7,5 V) Ω | $R$ ($T_{NAT}$ + 23 K) ($V_{PTC} \leq$ 2,5 V) Ω |
|---|---|---|---|---|---|
| M 355 | 60 ± 5 | ≤ 1710 | ≥ 1710 | — | ≥ 30 k |
| M 355 | 70 ± 5 | ≤ 1710 | ≥ 1710 | — | ≥ 30 k |
| M 355 | 80 ± 5 | ≤ 1710 | ≥ 1710 | — | ≥ 30 k |
| M 355 | 90 ± 5 | ≤ 1650 | ≥ 3990 | ≥ 12 k | — |
| M 355 | 100 ± 5 | ≤ 1650 | ≥ 3990 | ≥ 12 k | — |
| M 355 | 110 ± 5 | ≤ 1650 | ≥ 3990 | ≥ 12 k | — |
| M 355 | 120 ± 5 | ≤ 1650 | ≥ 3990 | ≥ 12 k | — |
| M 355 | 130 ± 5 | ≤ 1650 | ≥ 3990 | ≥ 12 k | — |
| M 355 | 140 ± 5 | ≤ 1650 | ≥ 3990 | ≥ 12 k | — |
| M 355 | 145 ± 5 | ≤ 1650 | ≥ 3990 | ≥ 12 k | — |
| M 355 | 150 ± 5 | ≤ 1650 | ≥ 3990 | ≥ 12 k | — |
| M 355 | 155 ± 5 | ≤ 1650 | ≥ 3990 | ≥ 12 k | — |
| M 355 | 160 ± 5 | ≤ 1650 | ≥ 3990 | ≥ 12 k | — |
| M 355 | 170 ± 6 | ≤ 1650 | ≥ 3990 | ≥ 12 k | — |
| M 355 | 180 ± 6 | ≤ 1650 | ≥ 3990 | ≥ 12 k | — |

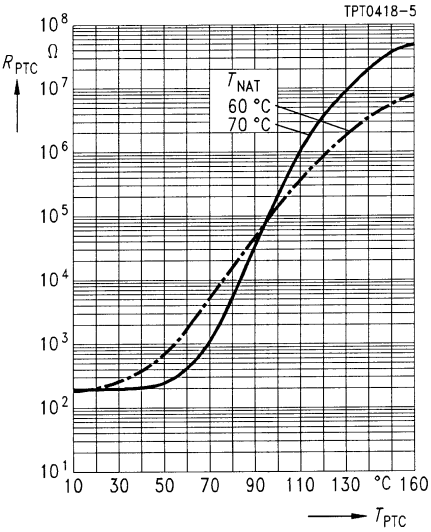


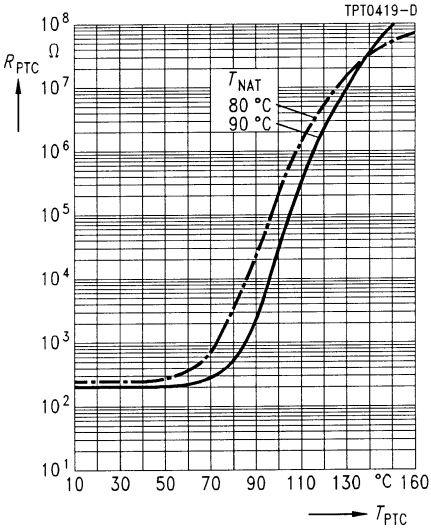

Dimensions in mm

| Type | Color coding of litz wires | Ordering code |
|---|---|---|
| M 355 | white/grey | B59355-M60-A70 |
| M 355 | white/brown | B59355-M70-A70 |
| M 355 | white/white | B59355-M80-A70 |
| M 355 | green/green | B59355-M90-A70 |
| M 355 | red/red | B59355-M100-A70 |
| M 355 | brown/brown | B59355-M110-A70 |
| M 355 | grey/grey | B59355-M120-A70 |
| M 355 | blue/blue | B59355-M130-A70 |
| M 355 | white/blue | B59355-M140-A70 |
| M 355 | white/black | B59355-M145-A70 |
| M 355 | black/black | B59355-M150-A70 |
| M 355 | blue/black | B59355-M155-A70 |
| M 355 | blue/red | B59355-M160-A70 |
| M 355 | white/green | B59355-M170-A70 |
| M 355 | white/red | B59355-M180-A70 |

**Characteristics (typical)**

PTC resistance $R_{PTC}$ versus PTC temperature $T_{PTC}$
(measured at low signal voltage)

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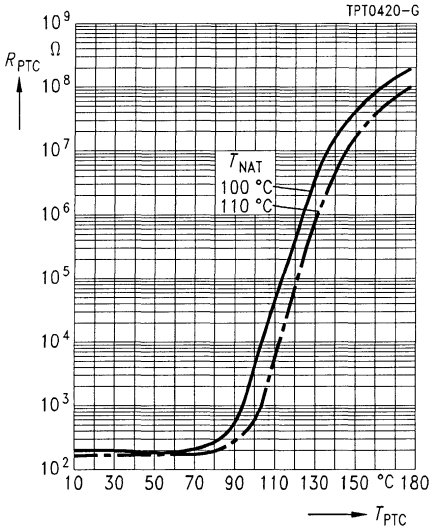


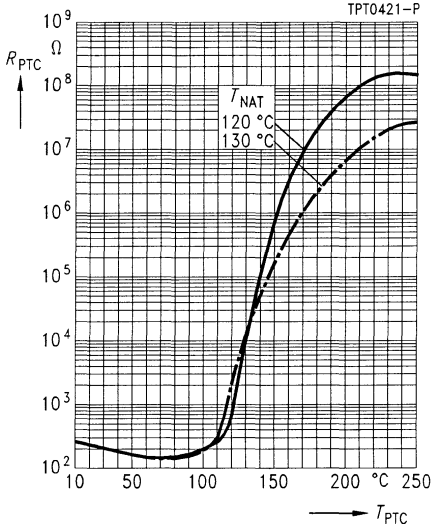

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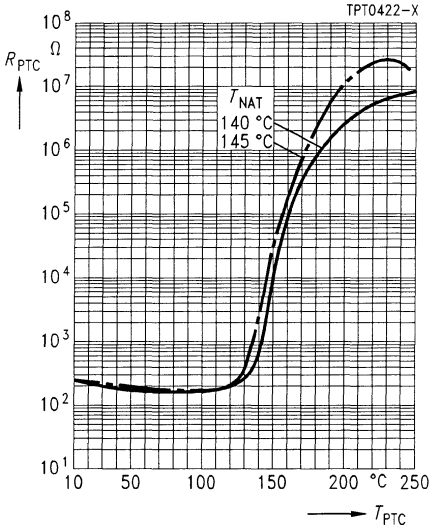


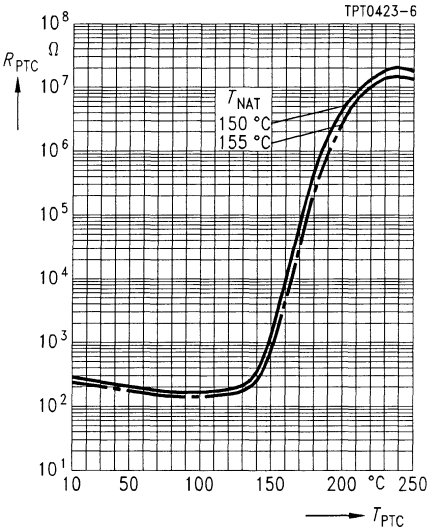


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