

E-T-A GmbH // Industriestraße 2-8 // 90518 Altdorf // Germany

To whom it may concern



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Recommendations for soldering E-T-A products

Dear customers,

all the information provided below is intended to help you optimize your soldering process in the event of adversity. This recommendation applies to the following E-T-A products:

E-T-A Circuit Breaker series 104-PR...
E-T-A Circuit Breaker series 1410-L11...-L1...
E-T-A Circuit Breaker series 1410-L21...-L2...
E-T-A Circuit Breaker series 1410-G11...-L2...
E-T-A Circuit Breaker series 2215-L1-...-L1...
E-T-A Circuit Breaker series 808-...

Reflow soldering

The above-mentioned products are not suitable for reflow soldering.

Wave soldering for processing in soldering masks (lead-free)

Temperature difference between soldering bath and preheating: < 120 °C

Temperature on top of printed circuit board: 120 °C

Temperature on bottom of printed circuit board: 140 °C

Pot temperature (depending on alloy used): 260 °C – 280 °C

Contact time:

- 3-hole nozzle: 2 s – 3 s
- 5-hole nozzle: 4 s – 6 s
- 1-2 waves (chip and Wörthmann wave): max. 10 s

Selective soldering for processing in soldering masks (lead-free)

Temperature difference between soldering bath and preheating: < 120 °C

Temperature on top of printed circuit board: 120 °C

Temperature on bottom of printed circuit board: 140 °C

Pot temperature (depending on alloy used): 280 °C – 300 °C

Contact time:

- 3-hole nozzle: 2 s – 3 s
- 5-hole nozzle: 4 s – 6 s
- 1-2 waves: max. 10 s

Hand soldering / soldering iron (lead-free)

Output of soldering stations (controlled electronically): 80 W – 100 W

Soldering temperature: 300 °C – 350 °C

Contact time: 3 s – 6 s

Solderability

Solderability of silver-plated terminals is limited in time. We ensure proper solderability up to six months after delivery date.

Best regards,
E-T-A Elektrotechnische Apparate GmbH

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