

## Technical Data KT 410

|                                 |  |
|---------------------------------|--|
| <b>Test points</b>              |  |
| Type of test point cards        | PEX04  |
| Max. number of test point cards | 16   |
| Max. number of test points      | 2048 (with test point units expandable up to max. 16384 test points)   |
| Test point interface            | Female connector DIN 41612, 2 x 64-way   |
| <b>General</b>                  |  |
| Power supply                    | 90 – 240 VAC (50 - 60 Hz)  |
| Dimensions (W x H x D)          | 450 mm x 275 mm x 395 mm   |
| Weight                          | approx. 11 kg  |
| Environmental conditions        | Temperature range: operation: +10 °C – +40 °C<br>storage: +10 °C – +60 °C  |
|                                 | Relative humidity: 20 % – 70 %, non-condensing   |
| Operating                       | Operating unit consisting of a high-contrast LC-display with 4 x 20 characters and 11 keys   |
|                                 | Operating languages: German, English, French, Italian, Spanish, Danish, Czech, Polish, Hungarian and Japanese (further languages on request) |
| Features                        | Self-learning of known good samples  |
|                                 | Programming with test program editor NT Control LT (PC software)   |
|                                 | Elaborate possibilities for the output and formatting of test results for printer and/or file  |
|                                 | Expanded label and report printing, also to file   |
|                                 | Test procedure control for the customization to special test tasks   |
|                                 | Division of the test procedure into single test steps (segments) e.g. for the test of switch positions or for segment specific parameters    |
| Diagnosis                       | Visual check of LEDs   |
|                                 | Self-diagnosis for the measurement electronics and the test point cards  |
| Interfaces                      | Network  |
|                                 | Serial interface (RS232) / 3 x USB 2.0 (1 x front, 2 x rear)   |
|                                 | 3 x I/O, digital, 24 V, D-Sub 15-way   |
|                                 | Interface for warning lamp red-green, foot switch, test result lamp  |
|                                 | Pin number probe for test point identification   |
|                                 | Safety loop for the protection of the work place   |
| Specialties                     | RJ12 interface for the connection of a temperature and humidity sensor   |
|                                 | Microsoft® Network Client and server software pre-installed and configured   |
| Data storage                    | Flash Memory 2 GB internal and USB stick ≥ 2 GB  |
| Scope of delivery               | KT 410, main cable, pin number probe, USB flash drive with NT Control LT and documentation in PDF format                                     |

| Options (Excerpt) |   |
|-------------------|---|
|                   | Test program selection via I/O card   |
|                   | Checking and testing with barcode   |
|                   | Correction value determination for R, C, L and Z  |
|                   | Digital I/O interfaces 24 V, 8 or 16 I/Os, D-Sub 37-way                                       |
|                   | Test system remote control via digital I/Os, serial interface or all common field-bus systems |
|                   | Temperature and humidity protocol, 0 - 100 % rF $\pm 2$ %, -40 - 80 °C $\pm 0.3$ K            |
|                   | Adapter cables as well as I/O connection cables and I/O interface boards                      |
|                   | Interface for adaptronic test tables  |
|                   | Handles / installation set 19"  |
|                   | UNICAD converter for CAD- and Excel link data   |

## Measurement electronics MT20

| Low voltage test             |  |
|------------------------------|--|
| Test voltage                 | 1 – 25 V; in steps of 1 V ( $\pm 3$ %, min. 0.2 V)   |
| Test current                 | max. 25 mA   |
| Threshold continuity test    | 1 Ohm – 1 kOhm ( $\pm 5$ %, min. 1 Ohm)  |
| Threshold short-circuit test | 20 kOhm – 1 MOhm ( $\pm 5$ %)<br>Option: up to 5 MOhm ( $\pm 20$ % at test voltages $\geq 20$ V)           |
| Component test               |  |
| Resistors                    | 1 Ohm – 1 MOhm ( $\pm 5$ %, min. 1 Ohm)<br>Option: up to 5 MOhm ( $\pm 20$ % at test voltages $\geq 20$ V) |
| Capacitors                   | 10 nF – 20 mF ( $\pm 10$ %)  |
| Diodes                       | Forward voltage: < 1.0 V<br>Reverse voltage: max. 25 V   |
| Zener diodes                 | Forward voltage: < 3.0 V<br>Zener voltage: max. 20 V ( $\pm 10$ %)   |
| LEDs                         | Forward-Voltage: < 4.0 V<br>Reverse voltage: max. 25 V   |
| Suppressor diode             | Break-down voltage: 3 V – 23 V ( $\pm 10$ %)   |

Conditions for all tolerance statements: operating mode „Precise Mode“, earthbound operation, environmental conditions 15 – 35 °C / 20 – 60 % rel. humidity (non-condensing)

The statements for the component test refer to the test of single components, which are connected separately with test points.

Technical data and tolerances are subject to change depending on a specific ambient of the test object or application.