

Division  
Machine Tools



Mikron AG Biel Phone 032 21 77 33  
Allestrasse 11 Telex 934 327  
CH-2501 Biel/Switzerland Telefax 032 22 19 20

# **Electro documentation**

**WF 31D**

**TNC 407/415**

**152.34.80.817**

Valid from series 51 onwards

| Resources | Mikron number | Designation/type                               | Manufacturer | Order number      | Technical data | Gross reference location | Wiring diagram<br>Commentary        |
|-----------|---------------|------------------------------------------------|--------------|-------------------|----------------|--------------------------|-------------------------------------|
| -B621     | 958.19.00.011 | Proximity switch with cable<br>PNP M12x1 Cable | BALLUFF      | BE5516-113-00-X-3 |                | B/29.5                   | +MA<br>Spindle positioning          |
| -K615     | 956.64.71.013 | Contacteur relais<br>22E                       | SIEMENS      | 3TH20 22-0BB4     | 220V 4A        | B/29.8                   | +EM<br>Drive<br>Spindle positioning |
| -K616     | 956.64.71.019 | Interference inverter                          | SIEMENS      | 3TX4 490-3A       | DC12-250V      |                          |                                     |
|           | 956.64.71.013 | Contacteur relais<br>22E                       | SIEMENS      | 3TH20 22-0BB4     | 220V 4A        | B/29.7                   | +EM<br>Clamp<br>Spindle positioning |
| -M615     | 956.64.71.019 | Interference inverter                          | SIEMENS      | 3TX4 490-3A       | DC12-250V      |                          |                                     |
|           | 153.40.81.320 | Geared motor<br>GJ/24V                         | BOSCH        | 0 390 117 002     | 24 V 4A        | B/29.3                   | +MA<br>Spindle<br>turn              |
| -Y625     | 103.15.81.070 | Coupler plug and socket conn.                  |              |                   |                | B/29.2                   | +MA<br>Clamp<br>Spindle             |

152.34.80.817

List of equipment  
152348080751  
Ajust spindles

**MIKRON**

WF 31D-TNC407/415

07.07.1997

Approved by: \_\_\_\_\_  
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ELS-E11

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| Installation-Group |  | Page | Kind of design | Page title                 | Drawing No.        | Amendment a |               | Amendment b |               | Amendment c |               |   |               |   |                      |  |
|                    |  |      |                |                            |                    | Name        | Date          | Name        | Date          | Name        | Date          |   |               |   |                      |  |
| ELS-A1             |  | 1    | Wiring diagram | Spindle motor              | 152.34.80.817      |             |               |             |               |             |               |   |               |   |                      |  |
| ELS-B              |  | 1    | Wiring diagram | Aux.equipment              | 152.34.80.817      |             |               |             |               |             |               |   |               |   |                      |  |
| ELS-B              |  | 2    | Wiring diagram | Supply                     | 152.34.80.817      |             |               |             |               |             |               |   |               |   |                      |  |
| ELS-B              |  | 3    | Wiring diagram | Feed drive                 | 152.34.80.817      |             |               |             |               |             |               |   |               |   |                      |  |
| ELS-B              |  | 4    | Wiring diagram | Feed drive                 | 152.34.80.817      |             |               |             |               |             |               |   |               |   |                      |  |
| ELS-B              |  | 5    | Wiring diagram | Measuring system           | 152.34.80.817      |             |               |             |               |             |               |   |               |   |                      |  |
| ELS-B              |  | 6    | Wiring diagram | Control                    | 152.34.80.817      | mG          | 08.10.92      |             |               |             |               |   |               |   |                      |  |
| ELS-B              |  | 7    | Wiring diagram | Control                    | 152.34.80.817      |             |               |             |               |             |               |   |               |   |                      |  |
| ELS-B              |  | 8    | Wiring diagram | Aux.equipment              | 152.34.80.817      |             |               |             |               |             |               |   |               |   |                      |  |
| ELS-B              |  | 9    | Wiring diagram | Control unit               | 152.34.80.817      | Jen         | 15.07.92      |             |               |             |               |   |               |   |                      |  |
| ELS-B              |  | 10   | Wiring diagram | Control unit               | 152.34.80.817      | Jen         | 15.07.92      |             |               |             |               |   |               |   |                      |  |
| ELS-B              |  | 11   | Wiring diagram | Emergency-stop             | 152.34.80.817      |             |               |             |               |             |               |   |               |   |                      |  |
| ELS-B              |  | 12   | Wiring diagram | Limit switch               | 152.34.80.817      |             |               |             |               |             |               |   |               |   |                      |  |
| ELS-B              |  | 13   | Wiring diagram | Safety component           | 152.34.80.817      |             |               |             |               |             |               |   |               |   |                      |  |
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| ELS-B              |  | 15   | Wiring diagram | Inputs 18-115              | 152.34.80.817      |             |               |             |               |             |               |   |               |   |                      |  |
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| ELS-B              |  | 17   | Wiring diagram | Inputs 124-131             | 152.34.80.817      |             |               |             |               |             |               |   |               |   |                      |  |
| ELS-B              |  | 18   | Wiring diagram | Inputs 132-143             | 152.34.80.817      |             |               |             |               |             |               |   |               |   |                      |  |
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| ELS-B              |  | 20   | Wiring diagram | Outputs 00-07              | 152.34.80.817      |             |               |             |               |             |               |   |               |   |                      |  |
| ELS-B              |  | 21   | Wiring diagram | Outputs 08-07              | 152.34.80.817      |             |               |             |               |             |               |   |               |   |                      |  |
| ELS-B              |  | 22   | Wiring diagram | Outputs 08-015             | 152.34.80.817      |             |               |             |               |             |               |   |               |   |                      |  |
| ELS-B              |  | 23   | Wiring diagram | Outputs 08-015             | 152.34.80.817      |             |               |             |               |             |               |   |               |   |                      |  |
| ELS-B              |  | 24   | Wiring diagram | Outputs 016-024            | 152.34.80.817      |             |               |             |               |             |               |   |               |   |                      |  |
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| ELS-B              |  | 26   | Wiring diagram | Outputs 025-032            | 152.34.80.817      |             |               |             |               |             |               |   |               |   |                      |  |
| ELS-B              |  | 27   | Wiring diagram | Option Spindia positioning | 152.34.80.817      | mG          | 08.10.92      |             |               |             |               |   |               |   |                      |  |
| ELS-B              |  | 28   | Wiring diagram | Option Tool changer        | 152.34.80.817      |             |               |             |               |             |               |   |               |   |                      |  |
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|                    |  |      |                |                            | WF 31D-TNC407/4.15 |             | ELS-A         |             | Page 1        |             | Page 1        |   | Page 1        |   | Page 1               |  |
|                    |  |      |                |                            | 07.07.1992         |             | 08.10.92      |             | 08.10.92      |             | 08.10.92      |   | 08.10.92      |   | 08.10.92             |  |
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| ELS-C1               | 1    | Terminal plan     | +E-X1                                         | 152.34.80.817 |                             |                             |                             |
| ELS-C1               | 2    | Terminal plan     | +EM-X1                                        | 152.34.80.817 |                             |                             |                             |
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| ELS-C1               | 4    | Terminal plan     | +EM-X2                                        | 152.34.80.817 |                             |                             |                             |
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| ELS-C7               | 1    | Terminal plan     | -X60                                          | 152.34.80.817 |                             |                             |                             |
| ELS-C11              | 1    | Terminal plan     | +MA-X8                                        | 152.34.80.817 |                             |                             |                             |
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| ELS-E1               | 6 | List of equipment | Basic machine            | 152.34.80.817 |  | mG          |  | 08.10.92     |  |              |  |              |  |   |  |
| ELS-E1               | 7 | List of equipment | Basic machine            | 152.34.80.817 |  | mG          |  | 08.10.92     |  |              |  |              |  |   |  |
| ELS-E1               | 8 | List of equipment | Basic machine            | 152.34.80.817 |  | mG          |  | 08.10.92     |  |              |  |              |  |   |  |
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| ELS-E4               | 1 | List of equipment | Circular tables          | 152.34.80.817 |  |             |  |              |  |              |  |              |  |   |  |
| ELS-E5               | 1 | List of equipment | NC dividing unit         | 152.34.80.817 |  |             |  |              |  |              |  |              |  |   |  |
| ELS-E7               | 1 | List of equipment | Tool changer             | 152.34.80.817 |  |             |  |              |  |              |  |              |  |   |  |
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| ELS-E9               | 1 | List of equipment | 3D tracer                | 152.34.80.817 |  |             |  |              |  |              |  |              |  |   |  |
| ELS-E10              | 1 | List of equipment | 3D tracer-IR             | 152.34.80.817 |  |             |  |              |  |              |  |              |  |   |  |
| ELS-E11              | 1 | List of equipment | Adjust spindle           | 152.34.80.817 |  |             |  |              |  |              |  |              |  |   |  |
| List of contents     |   |                   |                          |               |  |             |  |              |  |              |  |              |  |   |  |
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| 152.34.80.817        |   |                   |                          |               |  |             |  |              |  |              |  |              |  |   |  |
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