

# **MINI-STOP**

## **QE3760**

**CE**

## **Type**

# **DA40MS**

## **Instruction Manual**

## **Part 3**

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## 11. Survey and List of Parameters

### 11.1 Explanation of Parameter Survey

The parameter survey is designed as an aid for finding parameters quickly. It is a summary of references for the parameter list. Listed behind each reference are all parameters which exert an influence on the function described by the reference.

The parameter survey is divided into five columns:

Column 1 shows the references (functions) to which parameters are assigned.

Column 2 shows the abbreviations of the respective functions.

Column 3 shows all parameters (setting numbers) belonging to the respective reference.

Column 4 shows, for each function (reference) which controls inputs or outputs, the applicable indications such as Ex or Ax which can also be found on the connections diagram.

Column 5 shows, for each function (control inputs (Ex) or control outputs (Ax)), the respective plugs with the number of contacts (see connections diagram).

Example for searching a parameter:

Keyword (function): inverse rotation

The parameter survey shows in column 3 the parameter numbers 618, 801.

Suppose that the inverse rotation function is to be enabled. The parameter list shows this function under parameter number 618.

### 11.2 Explanation of Parameter List

The parameter list is divided into 5 columns. These comprise, in

column 1: the parameter number,

column 2: is the explanation (meaning) of the parameters and the coding system of row 1 of the keys of the mini operator's panel, used when the parameter concerned can be programmed with the mini operator's panel,

column 3: the programming level (A, B, C) on which the parameter in question can be accessed,

column 4: the range of values within which the parameter in question can be set,

column 5: the value of the parameter in question is set on delivery ex factory.

Parameters having "either/or" validity (software switches) can merely be set to value I or II. In the case of such parameters, column 4 is empty.

Parameter numbers in acute brackets; e.g. <105>, mean the value (content) set for the parameter in question.

Example:

**107** Speed for front backtack when <106> = I

I limited by <105>

II limited by <607>

Explanation:

Parameter 107 is valid only the the value (content) of parameter <106> = I.

If parameter 107 is set to I (<107> = I), then the speed for the front backtack is limited by parameter 105, e.g. <105> = 1500. If parameter 107 is set to II (<107> = II), then the speed for the front backtack is limited by the value of parameter 607, e.g. <607> = 4000.

### 11.3 Parameter survey (7A\_101\_2.EN)

| Function              | Abbrev'n | Parameter                                                | Input<br>Output | Connection<br>Socket/Contacts |
|-----------------------|----------|----------------------------------------------------------|-----------------|-------------------------------|
| Accelerate            | DRZAN    | 722                                                      |                 |                               |
| Backtack              | RIE      | 104/110/140<br>305/523/585                               |                 |                               |
| Backtack inversion    | RIV      | 419                                                      | E5              | X5:14                         |
| Backtack suppression  | RIUNT    | 419                                                      |                 |                               |
| Blower                | BLA      | 668                                                      |                 |                               |
| Brake                 | DRZAB    | 723/758/851                                              |                 |                               |
| Catcher               | FANG     | 707                                                      |                 |                               |
| Control               | REG      | 758/880/881<br>884/885/886<br>887/889/890<br>891/990     |                 |                               |
| Decorative backtack   | ZRIE     | 522/523/530<br>775                                       |                 |                               |
| Delay                 | VERZ     | 403/623/642<br>643/730/731<br>732/733/739<br>740/770/791 |                 |                               |
| Direction of rotation | DRR      | 800                                                      |                 |                               |
| End backtack          | ER       | 110/149/305<br>604/731/732<br>740                        |                 |                               |
| Edge trimmer          | KS       | 512/513/514                                              |                 |                               |
| Feed reverse          | TUM      | 643/721/733                                              | E1<br>A3        | X5:5<br>X5:34                 |
| Flip-Flop             | FF       | 510/511/512<br>513/514/515<br>516/517                    |                 |                               |
| Front backtack        | AR       | 104/105/140<br>148/305/739<br>791                        |                 |                               |
| Hardware test         | HWT      | 797                                                      |                 |                               |
| Inverse rotation      | RDR      | 618/623/801                                              |                 |                               |
| Machine class         | MAKL     | 799                                                      |                 |                               |
| Needle position       | NAPO     | 522/700/701<br>702/703/705<br>707/710                    |                 |                               |

|                             |        |                                                                                    |    |      |
|-----------------------------|--------|------------------------------------------------------------------------------------|----|------|
| Needle position change-over | NPW    | 446                                                                                | E2 | X5:6 |
| Needle up without trimming  | NHOS   | 446/710                                                                            | E2 | X5:6 |
| Operator panel              | BDF    | 681                                                                                |    |      |
| Output „A“                  | AUSGA  | 510/515/516                                                                        |    |      |
| Output „B“                  | AUSGB  | 511/512/513<br>514/517                                                             |    |      |
| Photocell                   | LS     | 111/112/113<br>199/450/451<br>615                                                  |    |      |
| Presser foot                | PF     | 554/642/651<br>719/729/730<br>770                                                  |    |      |
| Program                     | PR     | 114/206/221<br>304/313/510<br>511/512/513<br>514/515/516<br>554/851                |    |      |
| Programming level C         | EBC    | 798                                                                                |    |      |
| Puller                      | PULL   | 445                                                                                |    |      |
| Repeat backtack             | WRIE   | 731/740                                                                            |    |      |
| Residual brake              | STBR   | 718                                                                                |    |      |
| Seam end                    | NE     | 114/206/602                                                                        |    |      |
| Single stitch               | EST    | 446                                                                                |    |      |
| Soft start                  | SANL   | 116/117                                                                            |    |      |
| Speed                       | DRZ    | 105/110/117<br>199/221/402<br>403/530/585<br>586/605/606<br>607/608/609<br>676/901 |    |      |
| Speed decrease              | DRZAB  | 723/758/851                                                                        |    |      |
| Speed increase              | DRZAN  | 722                                                                                |    |      |
| Speed limitation            | DB     | 221/402/585<br>586                                                                 |    |      |
| Start                       | START  | 113/454/603                                                                        |    |      |
| Start delay                 | STVERZ | 729                                                                                |    |      |
| Starting block              | ANLSP  | 452/453/454<br>665                                                                 |    |      |

|                          |       |                            |    |       |
|--------------------------|-------|----------------------------|----|-------|
| Stitch condensation      | STVD  | 105/110/419<br>739         |    |       |
| Stitchlength             | STL   | 450                        |    |       |
| Stop                     | STOP  | 114/206/452<br>453/665     | E6 | X5:11 |
| Stop time                | STOPZ | 712/775                    |    |       |
| Stroke adjustment        | HV    | 401/402/403<br>404         |    |       |
| Target stitch            | PEIPO | 653/789                    |    |       |
| Thread puller            | FZ    | 761                        |    |       |
| Thread tension release   | FSL   | 707/761                    |    |       |
| Thread trimming          | SN    | 601/604/609<br>705/732/901 | A1 | X5:37 |
| Thread wiper             | WI    | 668/715                    | A4 | X5:27 |
| Time needed to switch on | EINZ  | 715/889                    |    |       |
| Timing output            | TA    | 719/721                    |    |       |

## 11.4 List of Parameters (7A\_101\_2.EN)

| No. | Function (Meaning)                                                                                                                                            | Level | Range of Values | Standard Value |       |
|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-----------------|----------------|-------|
| 104 | (AR/RIE) Front backtack correction (delayed disabling of feed reverse)                                                                                        | B,C   | 0 - 15          | 15             | Kl. 1 |
| 105 | (AR/DRZ/STVD) Speed for front backtack/stitch condensation                                                                                                    | B,C   | 100 - 6400      | 1400           | Kl. 1 |
| 110 | (ER/RIE/DRZ/STVD) Speed for end backtack / stitch condensation                                                                                                | B,C   | 100 - 6400      | 1400           | Kl. 1 |
| 111 | (LS) Photocell compensation stitches 1 (stitches from photocell clear to seam end)                                                                            | A,B,C | 1 - 255         | 6              | Kl. 1 |
| 112 | (LS) Number of stitches for photocell fade-out on knit fabrics (according to stitch size)                                                                     | A,B,C | 0 - 255         | 0              | Kl. 1 |
| 113 | (LS/START) Start with photocell<br>I when photocell is dark only<br>II also when photocell is clear                                                           | B,C   |                 | II             | Kl. 1 |
| 114 | (PR/STOP/NE) Stop before seam end after stitch count (last seam section)<br>I yes<br>II no                                                                    | B,C   |                 | II             | Kl. 1 |
| 116 | (SANL) Soft start stitches                                                                                                                                    | A,B,C | 0 - 255         | 2              | Kl. 1 |
| 117 | (SANL/DRZ) Speed for soft start stitches                                                                                                                      | B,C   | 30 - 800        | 800            | Kl. 1 |
| 140 | (AR/RIE) Front backtack correction (delayed enabling of feed reverse)                                                                                         | B,C   | 0 - 2550        | 0              | Kl. 1 |
| 148 | (AR) Front backtack<br>I double<br>II single                                                                                                                  | A,B,C |                 | I              | Kl. 1 |
| 149 | (ER) End backtack<br>I double<br>II single                                                                                                                    | A,B,C |                 | I              | Kl. 1 |
| 199 | (DRZ/LS) Speed for photocell compensation stitches                                                                                                            | B,C   | 300 - 6400      | 1200           | Kl. 1 |
| 206 | (NE/PR/STOP) Interrupt/discontinue seam sections at speed = constant (<203> = II)<br>I with treadle -2<br>II with treadle 0                                   | B,C   |                 | II             | Kl. 1 |
| 221 | (PR/DB/DRZ) Speed limitation for sewing programs (or sewing program 1)                                                                                        | B,C   | 300 - 6400      | 3000           | Kl. 1 |
| 304 | (PR) Stitch compensation at feed reverse for a seam section                                                                                                   | B,C   | 0 - 2550        | 0              | Kl. 1 |
| 305 | (RIE/AR/ER) Front-backtack and end-backtack with interruption at pedal zero position<br>I yes<br>II no                                                        | B,C   |                 | II             | Kl. 1 |
| 313 | (PR) Programs are backtack programs (darning programs)<br>I yes<br>II no                                                                                      | B,C   |                 | II             | Kl. 1 |
| 401 | (HV) Input „stroke adjustment“<br>I switch operation<br>II push-button operation                                                                              | B,C   |                 | II             | Kl. 1 |
| 402 | (HV/DRZ/DB) Speed at stroke adjustment                                                                                                                        | B,C   | 300 - 6400      | 2000           | Kl. 1 |
| 403 | (HV/DRZ/VERZ) Delay (ms) of the speed variation at end of stroke adjustment                                                                                   | B,C   | 0 - 2550        | 150            | Kl. 1 |
| 404 | (HV) Number of stitches with stroke adjustment                                                                                                                | B,C   | 0 - 255         | 3              | Kl. 1 |
| 419 | (RIV/RIUNT/STVD) Function of external key<br>I backtack / stitch condensation inversion<br>II backtack / stitch condensation suppression (flip-flop function) | B,C   |                 | I              | Kl. 1 |
| 445 | (PULL) Stitches for puller delay                                                                                                                              | B,C   | 0 - 255         | 10             | Kl. 1 |

|     |                                                                                                                                                               |       |            |      |       |
|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|------------|------|-------|
| 446 | (NHOS/NPW/EST) Input E2 is<br>1 = needle up without trimming<br>2 = needle position change-over<br>3 = single stitch<br>4 = single stitch with reduced length | B,C   | 0 - 4      | 1    | Kl. 1 |
| 450 | (LS/STL) Photocell compensation stitches at reduced stitchlength                                                                                              | A,B,C | 1 - 255    | 6    | Kl. 1 |
| 451 | (LS) Light barrier connection<br>I directed to the control system<br>II via the external operator panel                                                       | B,C   |            | I    | Kl. 1 |
| 452 | (ANLSP/STOP) Input „run locking“<br>I yes<br>II no (without function)                                                                                         | B,C   |            | II   | Kl. 1 |
| 453 | (ANLSP/STOP) Action of the „run lock“ input<br>I drive system not functional<br>II seam end can be performed                                                  | B,C   |            | I    | Kl. 1 |
| 454 | (ANLSP/START) Start after „run lock“ signal cancellation<br>I after treadle 0 only<br>II immediate (by any treadle position >+1)                              | B,C   |            | I    | Kl. 1 |
| 510 | (FF/PR/AUSGA) function module for output „A“                                                                                                                  | B,C   | 0 - 7      | 0    | Kl. 1 |
| 511 | (FF/PR/AUSGB) function module for output „B“                                                                                                                  | B,C   | 0 - 4      | 0    | Kl. 1 |
| 512 | (FF/PR/AUSGB/KS) Switch-off of output „B“ (edge trimmer) after thread trim<br>I yes<br>II no                                                                  | B,C   |            | II   | Kl. 1 |
| 513 | (FF/PR/AUSGB/KS) stitches before beginning of seam to edge trimmer on                                                                                         | B,C   | 0 - 255    | 5    | Kl. 1 |
| 514 | (FF/PR/AUSGB/KS) Stitches from edge trimmer on till edge trimmer off                                                                                          | B,C   | 0 - 255    | 0    | Kl. 1 |
| 515 | (FF/PR/AUSGA) outputs „A“ and „LED A“ after thread trimmer<br>I as after „mains on“<br>II unchanged                                                           | B,C   |            | I    | Kl. 1 |
| 516 | (FF/PR/AUSGA) output „A“ after „mains on“ when <510> = 1 / 6 / 7<br>I on<br>II off                                                                            | B,C   |            | II   | Kl. 1 |
| 517 | (FF/AUSGB) output „B“ after „mains on“ when <511> = 3<br>I on<br>II off                                                                                       | B,C   |            | II   | Kl. 1 |
| 522 | (NAPO/ZRIE) Needle position when stop occurs during decorative backtack (stitch in stitch)<br>I position 2 (up)<br>II position 1 (down)                       | B,C   |            | II   | Kl. 1 |
| 523 | (RIE/ZRIE) Backtack<br>I decorative backtack (stitch in stitch)<br>II standard backtack                                                                       | A,B,C |            | II   | Kl. 1 |
| 530 | (DRZ/ZRIE) Speed (max.) for decorative backtack                                                                                                               | B,C   | 100 - 6400 | 1200 | Kl. 1 |
| 554 | (PF/PR) Presser foot position after seam section stitch count and treadle position > +1<br>I up<br>II down                                                    | B,C   |            | I    | Kl. 1 |
| 585 | (DRZ/DB/RIE) Speed limitation                                                                                                                                 | B,C   | 100 - 6400 | 2000 | Kl. 1 |
| 586 | (DRZ/DB) Speed limitation                                                                                                                                     | B,C   | 100 - 6400 | 3000 | Kl. 1 |
| 601 | (SN) Trimming<br>I yes<br>II no                                                                                                                               | B,C   |            | I    | Kl. 1 |
| 602 | (NE) Seam end at treadle position<br>I slightly heeled (-1)<br>II fully heeled (-2)                                                                           | B,C   |            | II   | Kl. 1 |

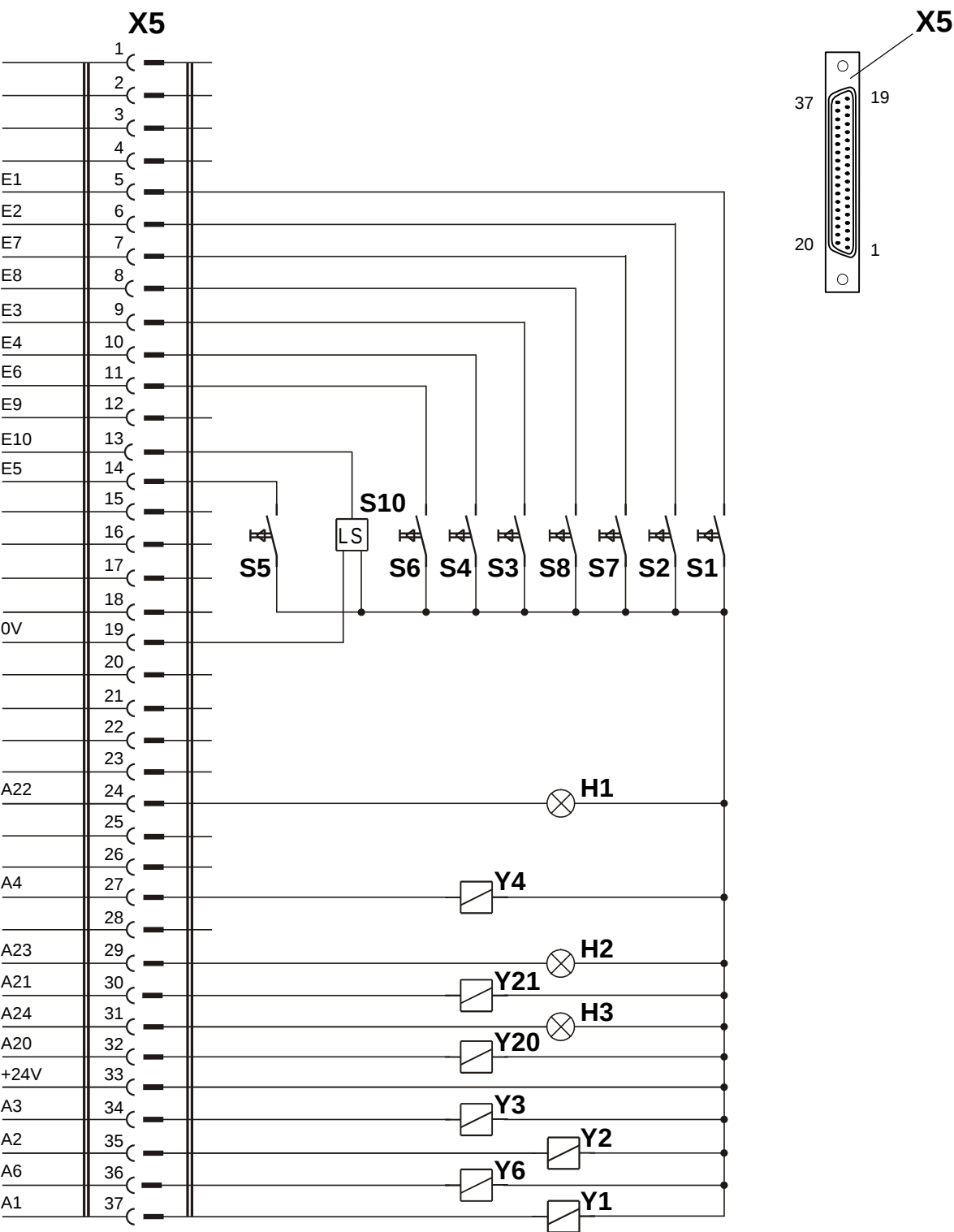
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|-----|-----------------------------------------------------------------------------------------------------|-----|------------|------|-------|
| 603 | (START) Start after seam end<br>I after treadle 0 only<br>II immediate start of operation           | B,C |            | I    | Kl. 1 |
| 604 | (SN/ER) Trimming after single end backtack<br>I forward<br>II backward                              | B,C |            | I    | Kl. 1 |
| 605 | (DRZ) Actual speed in display<br>I yes<br>II no                                                     | B,C |            | II   | Kl. 1 |
| 606 | (DRZ) Speed: level 1 (min.)                                                                         | B,C | 30 - 640   | 180  | Kl. 1 |
| 607 | (DRZ) Speed: level 12 (max.)<br>(00001001)                                                          | B,C | 100 - 5500 | 4800 | Kl. 1 |
| 608 | (DRZ) Speed level curve (treadle characteristic)<br>I linear<br>II not linear                       | B,C |            | II   | Kl. 1 |
| 609 | (SN/DRZ) Trimming speed 1                                                                           | B,C | 60 - 300   | 180  | Kl. 1 |
| 615 | (LS) End recognition when photocell goes<br>I from light to dark<br>II from dark to light           | B,C |            | II   | Kl. 1 |
| 618 | (RDR) Inverse rotation after seam end<br>I yes<br>II no                                             | B,C |            | II   | Kl. 1 |
| 623 | (RDR/VERZ) Delay in start-up time (ms) for<br>inverse rotation                                      | B,C | 0 - 2550   | 0    | Kl. 1 |
| 642 | (PF/VERZ) preser foot time from switch-on<br>to voltage reduction (cycling)                         | C   | 10 - 200   | 200  | Kl. 1 |
| 643 | (TUM/VERZ) feed reverse time from switch-on<br>to voltage reduction (cycling)                       | C   | 10 - 200   | 200  | Kl. 1 |
| 651 | (PF) Presser foot with automatic descent on<br>machine stop<br>I yes<br>II no                       | B,C |            | I    | Kl. 1 |
| 653 | (PEIPO) Target stitch before sewing<br>I yes<br>II no                                               | B,C |            | II   | Kl. 1 |
| 665 | (ANLSP/STOP) Run locking/stop<br>I contact closed<br>II contact open                                | B,C |            | I    | Kl. 1 |
| 668 | (BLA/WI) Thread wiper/thread clearer<br>I yes<br>II no                                              | B,C |            | II   | Kl. 1 |
| 676 | (DRZ) Speed adjustment via potentiometer<br>possible<br>I yes<br>II no                              | B,C |            | II   | Kl. 1 |
| 681 | (BDF) Operator panel push-button locked<br>I yes<br>II no                                           | B,C |            | II   | Kl. 1 |
| 700 | (NAPO) Needle position 0<br>(reference position of the needle)                                      | B,C | 0 - 127    | 0    | Kl. 1 |
| 701 | (NAPO) Angular adjustment<br>I with handwheel (teach-in)<br>II by keys (+/-)                        | B,C |            | I    | Kl. 1 |
| 702 | (NAPO) Needle position 1 (needle down)                                                              | B,C | 0 - 127    | 0    | Kl. 1 |
| 703 | (NAPO) Needle position 2 (thread take-up lever<br>up)<br>(00000011)                                 | B,C | 0 - 127    | 95   | Kl. 1 |
| 705 | (NAPO/SN) Needle position 5<br>(end of trimming signal 1)<br>(00000101)                             | B,C | 0 - 127    | 92   | Kl. 1 |
| 707 | (NAPO/FSL/FANG) Needle position 9<br>(thread tension release or thread catcher start)<br>(00000111) | B,C | 0 - 127    | 0    | Kl. 1 |

|     |                                                                                                                           |     |          |     |       |
|-----|---------------------------------------------------------------------------------------------------------------------------|-----|----------|-----|-------|
| 710 | (NAPO/NHOS) Needle position 3 (needle up)                                                                                 | B,C | 0 - 127  | 75  | Kl. 1 |
| 712 | (STOPZ) Time for stop in needle position 1                                                                                | B,C | 0 - 2550 | 0   | Kl. 1 |
| 715 | (EINZ/WI) Duration (ms) of thread wiper                                                                                   | B,C | 0 - 2550 | 100 | Kl. 1 |
| 718 | (STBR) Timing of residual brake<br>(0 = brake off)                                                                        | B,C | 0 - 100  | 6   | Kl. 1 |
| 719 | (PF/TA) Timing output A4<br>(0 = 100% switching on)                                                                       | B,C | 0 - 100  | 40  | Kl. 1 |
| 721 | (TUM/TA) Timing output A5<br>(0 = 100% switching on)                                                                      | B,C | 0 - 100  | 40  | Kl. 1 |
| 722 | (DRZAN) Acceleration ramp<br>1 gradual<br>50 steep                                                                        | B,C | 1 - 50   | 50  | Kl. 1 |
| 723 | (DRZAB) Brake ramp<br>1 gradual<br>50 steep                                                                               | B,C | 4 - 50   | 22  | Kl. 1 |
| 729 | (STVERZ/PF) Start delay after lowering presser foot                                                                       | B,C | 0 - 2550 | 120 | Kl. 1 |
| 730 | (PF/VERZ) Lift delay for presser foot after seam end                                                                      | B,C | 0 - 2550 | 50  | Kl. 1 |
| 731 | (ER/WRIE/VERZ) Delay before stitch counting for end backtack (ERV)                                                        | B,C | 0 - 2550 | 100 | Kl. 1 |
| 732 | (SN/ER/VERZ) Delay (ms) for trimming after single end backtack                                                            | B,C | 0 - 2550 | 30  | Kl. 1 |
| 733 | (TUM/VERZ) Verzögerungszeit von Einschaltung Transportumstellung bis Drehzahlstart                                        | B,C | 0 - 200  | 30  | Kl. 1 |
| 739 | (AR/STVD/VERZ) Delay (ms) for speed after front backtack / stitch condensation                                            | B,C | 0 - 2550 | 120 | Kl. 1 |
| 740 | (ER/WRIE/VERZ) Delay before stitch counting for end backtack (ERR)                                                        | B,C | 0 - 2550 | 50  | Kl. 1 |
| 758 | (REG/DRZAB) Deceleration ramp<br>I braking as per <723><br>II braking with maximal moment                                 | C   |          | II  | Kl. 1 |
| 761 | (FSL/FZ) Prolongation Thread tension release/ Thread puller                                                               | B,C | 0 - 2550 | 0   | Kl. 1 |
| 770 | (PF/VERZ) Lifting delay of presser foot at threadle- position „1“                                                         | B,C | 0 - 250  | 60  | Kl. 1 |
| 775 | (ZRIE/STOPZ) Stop time (ms) with stitch in stitch backtack (decorative backtack)                                          | B,C | 0 - 2550 | 100 | Kl. 1 |
| 789 | (PEIPO) Needle position 10 (target stitch)                                                                                | B,C | 0 - 127  | 91  | Kl. 1 |
| 791 | (AR/VERZ) Delay before stitch counting (ms) for front backtack                                                            | B,C | 0 - 2550 | 30  | Kl. 1 |
| 797 | (HWT) Hardware test<br>I yes<br>II no                                                                                     | B,C |          | II  | Kl. 1 |
| 798 | (EBC) Programming level C<br>I yes<br>II no                                                                               | B,C |          | II  | Kl. 1 |
| 799 | (MAKL) Machine class which has been selected                                                                              | C   | 1 - 1    | 1   | Kl. 1 |
| 800 | (DRR) Direction of motor rotation viewed from belt pulley<br>I left-hand rotation<br>II right-hand rotation<br>(00000001) | C   |          | I   | Kl. 1 |
| 801 | (RDR) Reverse rotation angle after seam end                                                                               | B,C | 5 - 106  | 26  | Kl. 1 |
| 851 | (PR/DRZAB) Brake ramp for stitch-count seams<br>I steep<br>II gradual                                                     | C   |          | I   | Kl. 1 |
| 880 | (REG) Starting current max. [A]                                                                                           | C   | 1 - 10   | 5   | Kl. 1 |
| 881 | (REG) adaption of positioning characteristics of motor to machine to avoid vibration                                      | B,C | 1 - 12   | 5   | Kl. 1 |
| 884 | (REG) Proportional amplification of the speed control (in general)                                                        | B,C | 1 - 255  | 15  | Kl. 1 |

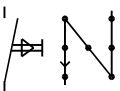
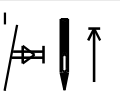
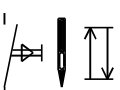
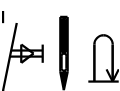
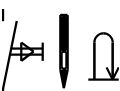
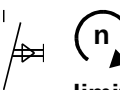
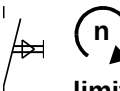
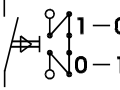
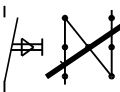
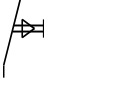
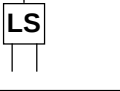
|     |                                                                                           |   |          |     |       |
|-----|-------------------------------------------------------------------------------------------|---|----------|-----|-------|
| 885 | (REG) Integral amplification of the speed control                                         | C | 0 - 255  | 35  | Kl. 1 |
| 886 | (REG) Proportional amplification of the order controllers                                 | C | 1 - 255  | 64  | Kl. 1 |
| 887 | (REG) Differential amplification of the order controllers                                 | C | 1 - 255  | 64  | Kl. 1 |
| 889 | (EINZ/REG) Time required for order controlling (0 = always)                               | C | 0 - 2550 | 150 | Kl. 1 |
| 890 | (REG) Proportional amplification of the superior order controllers for the residual brake | C | 1 - 255  | 25  | Kl. 1 |
| 891 | (REG) Proportional amplification of the lower speed controllers for the residual brake    | C | 1 - 255  | 20  | Kl. 1 |
| 901 | (DRZ/SN) Trimming release speed                                                           | C | 30 - 500 | 350 | Kl. 1 |
| 990 | (REG) Distance to position at switch over from speed control to position control          | C | 1 - 127  | 16  | Kl. 1 |



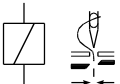
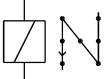
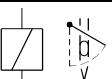
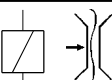
12. Electrical Connections Diagram X5 DA40MS



Bedeutung der Magnete bzw. Magnetventile, Taster / Meaning of magnets and/or solenoids and keys  
 Signification des aimants resp. solenoides et touches / Significação dos ímãs e/ou as solenoidas e teclas  
 Significato dei magneti, delle valvole magnetiche e dei tasti / Significación de los imanes y/o los solenoides  
 y pulsadores / Betekenis van de magneten resp. magneetkleppen, toetsen

|                                                                                                                 |                                                                                                                                                                                                                                                                                                |
|-----------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>S1</b><br>                  | Transportumstellung / feed reverse /<br>renversement de marche / mudança do transporte /<br>commutazione trasporto / inversión de transporte /<br>transportomschakeling                                                                                                                        |
| <b>S2</b><br><br><446> = 1     | Nadel hoch ohne Schneiden / needle up without thread trimming /<br>aiguille en haut sans coupe / agulha para cima sem corte de linhas /<br>ago su senza taglio / aguja arriba sin corte / naald omhoog zonder<br>snijden                                                                       |
| <b>S2</b><br><br><446> = 2     | Nadelpositionswechsel / needle position change-over /<br>changement de position d'aiguille / troca de posição da agulha /<br>cambio di posizione dell'ago / cambio de posición de aguja /<br>naaldpositie-verwisseling                                                                         |
| <b>S2</b><br><br><446> = 3     | Einzelstich / single stitch / point unique /<br>ponto individual / punto singolo / puntada individual /<br>enkele steek                                                                                                                                                                        |
| <b>S2</b><br><br><446> = 4     | Einzelstich verkürzt / single stitch reduced length / point unique longueur réduite /<br>ponto individual encurtado / punto singolo accorciato / puntada individual reducida /<br>enkele steek verkort                                                                                         |
| <b>S3</b><br><br><585> limit | Drehzahlbegrenzung 2 / speed limitation 2 / limitation de vitesse 2 /<br>limitação das rotações 2 / limitazione velocità 2 / limitación de velocidad 2 /<br>beperking van het toerental 2                                                                                                      |
| <b>S4</b><br><br><586> limit | Drehzahlbegrenzung 3 / speed limitation 3 / limitation de vitesse 3 /<br>limitação das rotações 3 / limitazione velocità 3 / limitación de velocidad 3 /<br>beperking van het toerental 3                                                                                                      |
| <b>S5</b><br><br><419> = I   | Nachfolgende Riegelfunktion invertieren / invert subsequent backtack<br>function / inverser la prochaine fonction de bridage / inverter o próximo<br>remate / invertire la funzione d'affr. successiva / invertir la próxima<br>función de remate / inverteren op elkaar volgende hechtfunctie |
| <b>S5</b><br><br><419> = II  | Riegelunterdrückung / backtack suppression / suppression de bridage /<br>supressão do remate / soppressione dell'afrancatura / supresion del remate /<br>onderdrukking van het strookje                                                                                                        |
| <b>S6</b><br>                | STOP                                                                                                                                                                                                                                                                                           |
| <b>S7</b><br>                | Flip-Flop 2: Eingang „B“ / Input „B“ / entrée „B“ /<br>entrada „B“ / entrata „B“ / entrada „B“ /<br>ingang „B“                                                                                                                                                                                 |
| <b>S8</b><br>                | Flip-Flop 1: Eingang „A“ / Input „A“ / entrée „A“ /<br>entrada „A“ / entrata „A“ / entrada „A“ /<br>ingang „A“                                                                                                                                                                                 |
| <b>S10</b><br>               | Lichtschranke / light barrier /<br>barrière lumineuse / barreira luminosa /<br>cellula fotoelettica / fotocélula / foto-elektrische beveiliging                                                                                                                                                |

Bedeutung der Magnete bzw. Magnetventile, Taster / Meaning of magnets and/or solenoids and keys  
 Signification des aimants resp. solenoides et touches / Significação dos ímãs e/ou as solenoidas e teclas  
 Significato dei magneti, delle valvole magnetiche e dei tasti / Significación de los imanes y/o los solenoides  
 y pulsadores / Betekenis van de magneten resp. magneetkleppen, toetsen

|                                                                                                                       |                                                                                                                                                                                 |
|-----------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Y1</b><br>I max<br>8 A *          | Fadenschneider / thread trimmer /<br>coupe-fil / corte de linhas /<br>rasafilo / cortahilos / draadsnijder                                                                      |
| <b>Y2</b><br>I max<br>8 A *          | Presserfuß heben / lifting presser foot / relevage du pied presseur /<br>levantar do calcador / sollevamento del alzapiedino /<br>elevación de prensatelas / drukvoet optillen  |
| <b>Y3</b><br>I max<br>8 A *          | Transportumsteller / feed reverse / renversement de marche /<br>mudança do transporte / commutazione trasporto / inversión de transporte /<br>transportomschakeling             |
| <b>Y4</b><br>I max<br>8 A *          | Fadenwischer / thread wiper / écarteur de fil /<br>retira-linhas / scartafilo / retirahilos / draadwisser                                                                       |
| <b>Y6</b><br>I max<br>8 A *          | Fadenspannungslösen / thread tension release /<br>détendeur de fil / soltar tensão da linha /<br>sbloccaggio tendifilo / detensión del hilo /<br>verbreken van de draadspanning |
| <b>Y20</b><br>I max<br>8 A *         | Flip-Flop 2: Ausgang „B“ / output „B“ / sortie „B“ /<br>saida „B“ / salida „B“ / uscita „B“ /<br>uitgang „B“                                                                    |
| <b>Y21</b><br>I max<br>8 A *       | Flip-Flop 1: Ausgang „A“ / output „A“ / sortie „A“ /<br>saida „A“ / salida „A“ / uscita „A“ /<br>uitgang „A“                                                                    |
| <b>H1</b><br>(A22)<br>I max 20 mA  | Anzeige S5 / display S5 /<br>affichage S5 / indicação S5 /<br>visualizzazione S5 / indicador S5 / indicatie S5                                                                  |
| <b>H2</b><br>(A23)<br>I max 20 mA  | Anzeige S8 / display S8 /<br>affichage S8 / indicação S8 /<br>visualizzazione S8 / indicador S8 / indicatie S8                                                                  |
| <b>H3</b><br>(A24)<br>I max 20mA   | Anzeige S7/ display S7/<br>affichage S7/ indicação S7/<br>visualizzazione S7/ indicador S7/ indicatie S7                                                                        |

- \* Die Summe der Lastströme aller gleichzeitig eingeschalteten Stellglieder (Magnete, Magnetventile) darf den Wert von 4A nicht überschreiten (siehe hierzu Kapitel 2. Technische Daten).
- \* The total of load currents of all servos activated simultaneously (solenoids, solenoid valves) is not allowed to exceed 4 amps (see also section 2. Technical Specifications).
- \* Le total des courants de charge de tous les vérins (aimants, électro-vannes) activés simultanément ne doit pas dépasser 4 A (voir aussi le chapitre 2. "caractéristiques techniques").
- \* A soma das correntes sob carga de todos os actuadores ligados ao mesmo tempo (ímãs, solenóides) não pode ultrapassar o valor de 4A (ver também capítulo 2. Dados Técnicos).
- \* La somma delle correnti di carico di tutti gli attuatori inseriti contemporaneamente (magnet, elettrovalvole) non deve essere superiore a 4 A (vedere il capitolo 2. Dati Tecnici).
- \* La suma de las corrientes bajo carga de todos los elementos de todos los componentes de regulación conectados simultáneamente (imanes, válvula magnética) no podrá sobrepasar el valor de 4A (véase también el capítulo 2. de datos técnicos).
- \* De belastingsstroom van alle tegelijkertijd ingeschakelde bedieningsschakels (magneten, magneetventielen) mag in totaal niet meer dan 4 A bedragen (zie hiervoor hoofdstuk 2. Technische gegevens).

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