MINI-STOP

QE3760

$\mathrm{C}\,\mathrm{\epsilon}$

Type

PE41MSII

Instruction Manual

Part 3

Contents   Part 3

Technical updatings reserved!

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 PE41MS (7Z_Q02_2.HEX)

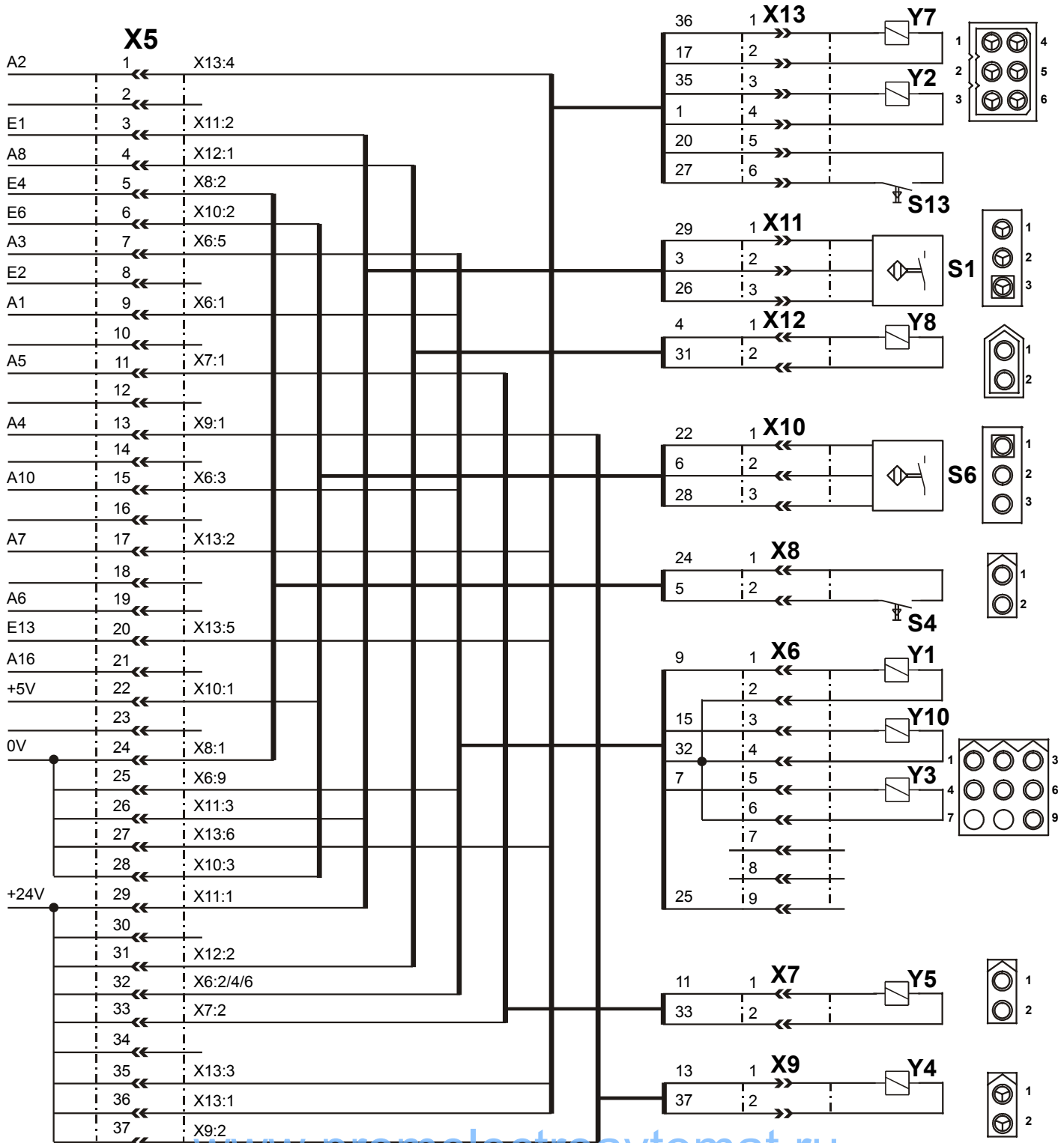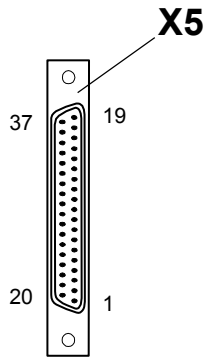| Function	Abbrev'n	Parameter	Input Output	Connection Socket/Contacts
Accelerate	DRZAN	722		
Blower	BLA	250		
Brake	DRZAB	723/758/851		
Chopper	MESSER	714		
Control	REG	758/880/881 884/885/886 887/889/890 891/990		
Defect search	HWT	797		
Delay	VERZ	189/190/716 717/730/770		
Direction of rotation	DRR	800		
Feed reverse	TUM	721		
Hardware test	HWT	797		
Machine class	MAKL	799		
Needle position	NAPO	521/701/702 703		
Presser foot	PF	651/719/729 730/770		
Program	PR	221/851		
Programming level C	EBC	798		
Residual brake	STBR	718		
Soft start	SANL	116/117		
Speed	DRZ	117/221/605 606/607/609 676		
Speed decrease	DRZAB	723/758/851		
Speed increase	DRZAN	722		
Speed limitation	DB	221/676		
Start delay	STVERZ	729		
Stitchcounter	STZ	250		
Thread trimming	SN	609/714/717		

Thread wiper	WI	715/716
Time needed to switch on	EINZ	714/715/889
Timing output	TA	719/721

11.4 List of Parameters PE41MS (7Z_Q02_2.HEX)
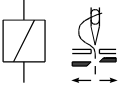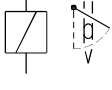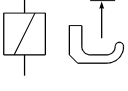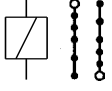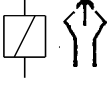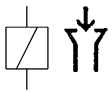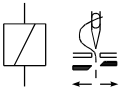
No.	Function (Meaning)	Level	Range of Values	of Value	Standard
116	(SANL) Soft start stitches	A,B,C	0 - 255	0	Kl. 1, 2
117	(SANL/DRZ) Speed for soft start stitches	B,C	30 - 640	500	Kl. 1, 2
189	(VERZ) Delay t1	B,C	0 - 2550	100	Kl. 2
				-	Kl. 1
190	(VERZ) Delay t2	B,C	0 - 2550	100	Kl. 2
				-	Kl. 1
221	(PR/DB/DRZ) Speed limitation for sewing programs (or sewing program 1)	B,C	300 - 6400	1000	Kl. 1, 2
250	(STZ/BLA) Stitches for edging blower (hemming)	A,B,C	0 - 255	10	Kl. 1, 2
521	(NAPO) Needle position at stop before seam end I position 2 (up) II position 1 (down)	B,C		I	Kl. 1, 2
605	(DRZ) Actual speed in display I yes II no	B,C		II	Kl. 1, 2
606	(DRZ) Speed: level 1 (min.)	B,C	30 - 640	200	Kl. 1, 2
607	(DRZ) Speed: level 12 (max.)	B,C	100 - 9900	1500	Kl. 1, 2
609	(SN/DRZ) Trimming speed 1	B,C	30 - 300	200	Kl. 1, 2
651	(PF) Presser foot with automatic descent on machine stop I yes II no	B,C		I	Kl. 1, 2
676	(DRZ/DB) Speed adjustment via potentiometer possible I yes II no	A,B,C		I	Kl. 1, 2
701	(NAPO) Angular adjustment I with handwheel (teach-in) II by keys (+/-)	B,C		I	Kl. 1, 2
702	(NAPO) Needle position 1 (needle down)	B,C	0 - 127	40	Kl. 1, 2
703	(NAPO) Needle position 2 (thread take-up lever up)	B,C	0 - 127	108	Kl. 1, 2
714	(EINZ/SN/MESSER) Duration (ms) for chainstitch trimming or chopper	B,C	0 - 2550	100	Kl. 1, 2
715	(EINZ/WI) Duration (ms) of thread wiper	B,C	0 - 2550	50	Kl. 1, 2
716	(VERZ/WI) Delay in start-up time (ms) for thread wiper	B,C	0 - 2550	30	Kl. 1, 2
717	(SN/VERZ) Delay in start-up time (ms) for trimming method when the machine is not activated by the treadle	B,C	0 - 2550	100	Kl. 1, 2
718	(STBR) Timing of residual brake (0 = brake off)	B,C	0 - 100	0	Kl. 1, 2
719	(PF/TA) Timing output A4 (0 = 100% switching on)	B,C	0 - 90	50	Kl. 1, 2
721	(TUM/TA) Timing output A5 (0 = 100% switching on)	B,C	0 - 90	50	Kl. 1, 2
722	(DRZAN) Acceleration ramp 1 gradual 50 steep	B,C	1 - 50	40	Kl. 1, 2
723	(DRZAB) Brake ramp 1 gradual 50 steep	B,C	4 - 50	25	Kl. 1, 2
729	(STVERZ/PF) Start delay after lowering presser foot	B,C	0 - 2550	130	Kl. 1, 2
730	(PF/VERZ) Lift delay for presser foot after seam end	B,C	0 - 2550	100	Kl. 1, 2
758	(REG/DRZAB) Deceleration ramp I braking as per <723> II braking with maximal moment	B,C		II	Kl. 1, 2
770	(PF/VERZ) Lifting delay of presser foot at threadle-position „-1"	B,C	0 - 250	30	Kl. 1, 2

797	(HWT) Hardware test I yes II no	B,C		II	Kl. 1, 2
798	(EBC) Programming level C I yes II no	B,C		II	Kl. 1, 2
799	(MAKL) Machine class which has been selected	B,C	1 - 2	1 2	Kl. 1 Kl. 2
800	(DRR) Direction of motor rotation viewed from belt pulley I left-hand rotation II right-hand rotation	B,C		I	Kl. 1, 2
851	(PR/DRZAB) Brake ramp for stitch-count seams I steep II gradual	B,C		II	Kl. 1, 2
880	(REG) Starting current max. [A]	C	1 - 10	5	Kl. 1, 2
881	(REG) adaption of positioning characteristics of motor to machine to avoid vibration	B,C	1 - 12	6	Kl. 1, 2
884	(REG) Proportional amplification of the speed control (in general)	B,C	4 - 255	15	Kl. 1, 2
885	(REG) Integral amplification of the speed control	C	0 - 255	35	Kl. 1, 2
886	(REG) Proportional amplification of the order controllers	C	1 - 255	25	Kl. 1, 2
887	(REG) Differential amplification of the order controllers	C	1 - 255	25	Kl. 1, 2
889	(EINZ/REG) Time required for order controlling (0 = always)	C	0 - 2550	150	Kl. 1, 2
890	(REG) Proportional amplification of the superior order controllers for the residual brake	C	1 - 255	25	Kl. 1, 2
891	(REG) Proportional amplification of the lower speed controllers for the residual brake	C	1 - 255	20	Kl. 1, 2
990	(REG) Distance to position at switch over from speed control to position control	B,C	1 - 127	16	Kl. 1, 2

X5

37   19

20   1

X5

Pin	Signal	Connection
1	A2	X13:4
2		
3	E1	X11:2
4	A8	X12:1
5	E4	X8:2
6	E6	X10:2
7	A3	X6:5
8	E2	
9	A1	X6:1
10		
11	A5	X7:1
12		
13	A4	X9:1
14		
15	A10	X6:3
16		
17	A7	X13:2
18		
19	A6	
20	E13	X13:5
21	A16	
22	+5V	X10:1
23		
24	0V	X8:1
25		X6:9
26		X11:3
27		X13:6
28		X10:3
29	+24V	X11:1
30		
31		X12:2
32		X6:2/4/6
33		X7:2
34		
35		X13:3
36		X13:1
37		X9:2

X13

36	1	Y7
17	2	
35	3	Y2
1	4	
20	5	
27	6	S13

1 4
2 5
3 6

X11

29	1	S1
3	2	
26	3	

1
2
3

X12

| 4 | 1 | Y8 |
| 31 | 2 | |

1
2

X10

22	1	S6
6	2	
28	3	

1
2
3

X8

| 24 | 1 | |
| 5 | 2 | S4 |

1
2

X6

9	1	Y1
	2	
15	3	Y10
32	4	
7	5	Y3
	6	
	7	
	8	
25	9	

1 3
2
4 6
5
7 9
8

X7

| 11 | 1 | Y5 |
| 33 | 2 | |

1
2

X9

| 13 | 1 | Y4 |
| 37 | 2 | |

1
2

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Bedeutung der Magnete bzw. Magnetventile, Taster / Meaning of magnets and/or solenoids and keys
Signification des aimants resp. solenoides et touches / Significação dos imaõs 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

S1		Sensor am Saumapparat / sensor at the hemming guide
S4		Knieschalter - Saum-Apparat setzen/rücksetzen / knee switch - hemming guide set/reset
S6		Anlaufsperre (Überwachung Fadenschneiden) / Safety switch no run / Verrouillage de remise en marche / Bloqueio de arranque / Blocco avviamento / Bloqueo de repuesta en marcha / Startblokkering
S13		Funktionsumschaltung (sleeve/bottom) säumen offen/geschlossen function change-over (sleeve/bottom) hemming open/clossed
Y1 I max 8 A∗		Fadenschneiden oben / thread trimmer on top / coupe-fil / corte de linhas / rasafilo / cortahilos / draadsnijder
Y2 I max 8 A∗		Saumapparat / Hemmig guide /
Y3 I max 8 A∗		Fadenwischer / thread wiper / écarteur de fil / retira-linhas / scartafilo / retirahilos / draadwisser
Y4 I max 8 A∗		Presserfuß heben + Hemming - guide blasen 1 / lifting presser foot + hemming - guide blowing 1 / relevage du pied presseur + hemming - guide soufflage 1 / levantar do calcador + hemming - guide soprar 1 / sollevamento del alzapiedino + hemming - guide soffiatura 1 / elevación de prensatelas + hemming - guide soplar 1 / drukvoet optillen + hemming - guide blazen 1
Y5 I max 8 A∗		Stichverdichtung / stitch condensation / rétrécissement des points / condensação dos pontos / addensamento punti / condensación de puntadas / steekverdichting
Y7 I max 8 A∗		Hemming - guide blasen 2 / blowing 2 hemming - guide / soufflage 2 hemming - guide / soprar 2 hemming - guide / soffiatura 2 hemming - guide / soplar 2 hemming - guide / blazen 2 hemming - guide
Y8 I max 8 A∗		Saugen / vacuum / aspiration / aspirar / aspirazione / aspiración / zuigen
Y10 I max 8 A∗		Fadenschneiden unten / thread trimmer on bottom/ coupe-fil / corte de linhas / rasafilo / cortahilos / draadsnijder

✱ 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 (ímans, 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 (magneti, 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).