MINI-STOP

QE3760

CE

Type

Q25MS

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.

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11.3 Parameter survey Q25MS (7a_925_1.EN)

Function	Abbrev'n	Parameter	Input Output	Connection Socket/Contacts
Accelerate	DRZAN	722		
Brake	DRZAB	723/851		
Control	REG	880/881/884 885/886/887 889/890/891 990		
Delay	VERZ	623/730/767		
Direction of rotation	DRR	800		
Hardware test	HWT	797		
Inverse rotation	RDR	618/623/801		
Machine class	MAKL	799		
Needle cooling	NAKU	119		
Needle position	NAPO	648/701/702 703		
Needle position change-over	NPW	616	E2	X5:8
Needle up without trimming	NHOS	616	E2	X5:8
Presser foot	PF	651/719/729 730/767	A4	X5:13
Program	PR	851		
Programming level C	EBC	798		
Residual brake	STBR	718		
Soft start	SANL	116/117		
Speed	DRZ	117/605/606 607/608/609 676		
Speed decrease	DRZAB	723/851		
Speed increase	DRZAN	722		
Start	START	603		
Start delay	STVERZ	729		
Thread trimming	SN	609		
Time needed to switch on	EINZ	119/889		
Timing output	TA	719		
Unlocking of chain	ENTKET	425		

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11.4 List of Parameters Q25MS (7a_925_1.EN)

No.	Function (Meaning)	Level	Range of Values	Standard Value
116	(SANL) Soft start stitches	A,B,C	0-255	0
117	(SANL/DRZ) Speed for soft start stitches	B,C	30-640	500
119	(EINZ/NAKU) Time for needle cooling including time after stop	B,C	0-2550	0
425	(ENTKET) Unlocking of chain at seam end I yes II no	A,B,C		II
603	(START) Start after seam end I after treadle 0 only II immediate start of operation	B,C		I
605	(DRZ) Actual speed in display I yes II no	B,C		II
606	(DRZ) Speed: level 1 (min.)	B,C	30-640	200
607	(DRZ) Speed: level 12 (max.)	B,C	100-10000	4000
608	(DRZ) Speed level curve (treadle characteristic) I linear II not linear	B,C		I
609	(SN/DRZ) Trimming speed 1	B,C	30-300	200
616	(NPW/NHOS) Function of external key (input E2) I needle position change-over (NPW) II needle up without trimming (NHOS)	B,C		II
618	(RDR) Inverse rotation after seam end I yes II no	B,C		II
623	(RDR/VERZ) Delay in start-up time (ms) for inverse rotation	B,C	0-2550	10
648	(NAPO) Needle positions I one II two	B,C		II
651	(PF) Presser foot with automatic descent on machine stop I yes II no	B,C		I
676	(DRZ) Speed adjustment via potentiometer possible I yes II no	B,C		I
701	(NAPO) Angular adjustment I with handwheel (teach-in) II by keys (+/-)	B,C		I
702	(NAPO) Needle position 1 (needle down) (01000000)	B,C	0-127	40
703	(NAPO) Needle position 2 (thread take-up lever up) (11000000)	B,C	0-127	108
718	(STBR) Timing of residual brake (0 = brake off)	B,C	0-100	0

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719	(PF/TA) Timing output A4 (0 = 100% switching on)	B	0-100	40
722	(DRZAN) Acceleration ramp 1 gradual 50 steep	B,C	1-50	40
723	(DRZAB) Brake ramp 1 gradual 50 steep	B,C	1-50	31
729	(STVERZ/PF) Start delay after lowering presser foot	B,C	0-2550	120
730	(PF/VERZ) Lift delay for presser foot after seam end	B,C	0-2550	50
767	(PF/VERZ) Lift delay for presser foot at stop	B,C	0-2550	20
797	(HWT) Hardware test I yes II no	B,C		II
798	(EBC) Programming level C I yes II no	B,C		II
799	(MAKL) Machine class which has been selected	B,C	1-1	1
800	(DRR) Direction of motor rotation viewed from belt pulley I left-hand rotation II right-hand rotation	B,C		II *
801	(RDR) Reverse rotation angle after seam end	B,C	5-106	16
851	(PR/DRZAB) Brake ramp for stitch-count seams I steep II gradual	C		I
880	(REG) Starting current max. [A]	C	1-10	5
881	(REG) adaption of positioning characteristics of motor to machine to avoid vibration	B,C	1-12	6
884	(REG) Proportional amplification of the speed control (in general)	B,C	4-255	15
885	(REG) Integral amplification of the speed control	C	0-100	35
886	(REG) Proportional amplification of the order controllers	C	1-255	64
887	(REG) Differential amplification of the order controllers	C	1-255	32
889	(EINZ/REG) Time required for order controlling (0 = always)	C	0-1000	250
890	(REG) Proportional amplification of the superior order controllers for the residual brake	C	1-255	25
891	(REG) Proportional amplification of the lower speed controllers for the residual brake	C	1-255	20
990	(REG) Distance to position at switch over from speed control to position control	C	1-255	12

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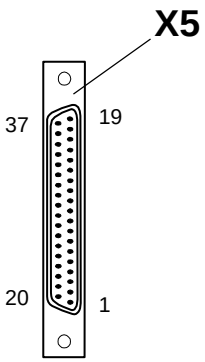
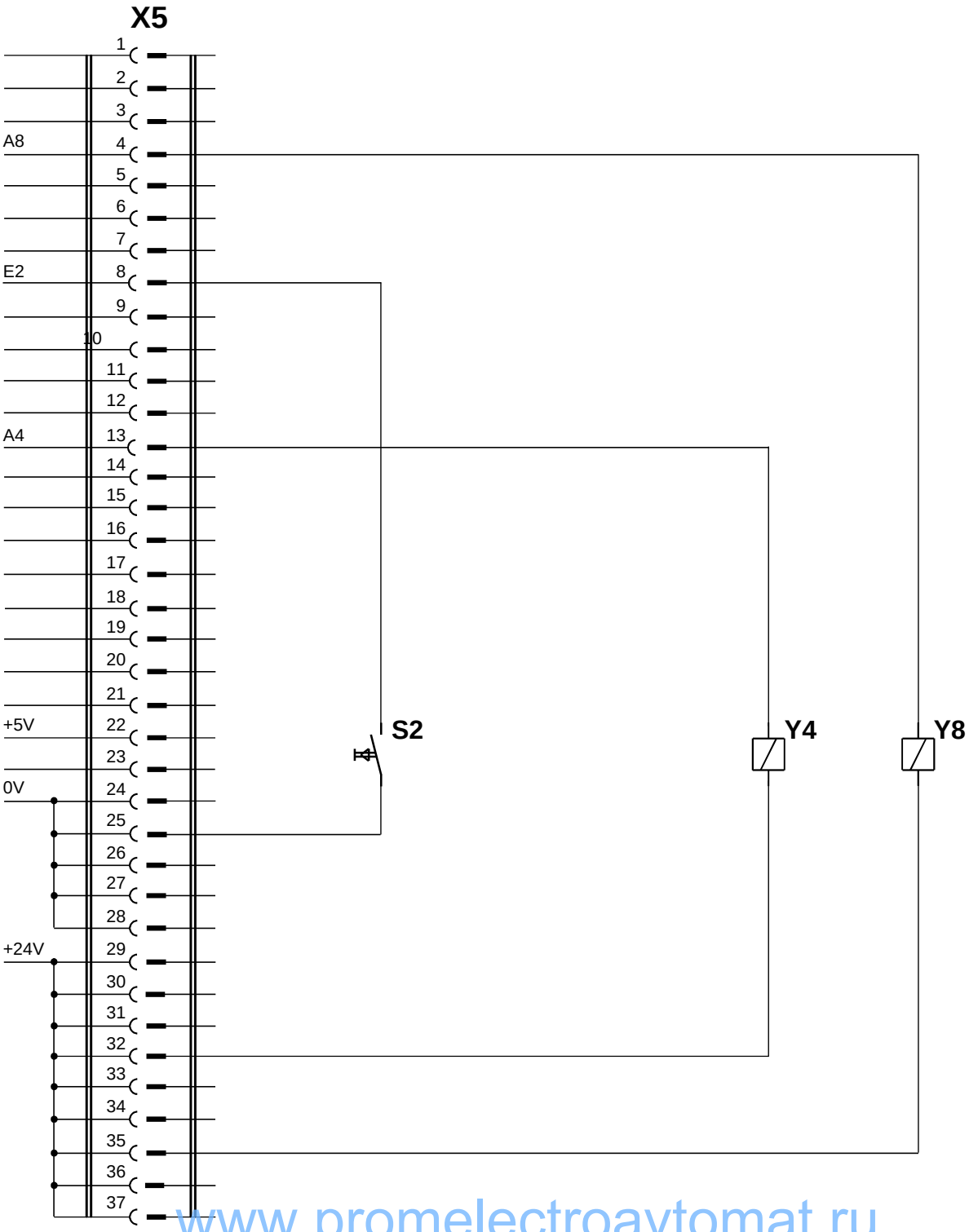
12. Electrical Connections Diagram Q25MS





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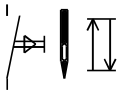
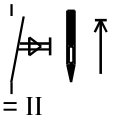
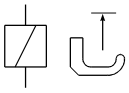
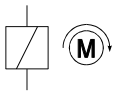
Bedeutung der Magnete bzw. Magnetventile, Taster / Meaning of magnets and/or solenoids and keys
Signification des aimants resp. solenoides et touches / Significação dos imaõs e/ou as solenoidas e teclas
Significato dei magneti, delle valvole magnetiche e dei tasti / Significación de los imanes y/o los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

S2  <616> = I	Nadelpositionswechsel / needle position change-over / changement de position d´aiguille / troça de posição da agulha / cambio di posizione dell´ago / cambio de posición de aguja / naaldpositie-verwisseling
S2  <616> = II	Nadel hoch ohne Schneiden / needle up without thread trimming / aiguille en haut sans coupe / agulha para cima sem corte de linhas / ago su senza taglio / aguja arriba sin corte / naald omhoog zonder snijden
Y4 I max 8 A ✱ 	Presserfuß heben / lifting presser foot / relevage du pied presseur / levantar do calcador / sollevamento del alzapiedino / elevación de prensatelas / drukvoet optillen
Y8 I max 8 A ✱ 	Motor läuft / motor runs / moteur en marche / motor em movimento / motore in moto / motor en marcha / loop van de machine

✱ 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).

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