

Efka vario dc

CONTROL

PF82AV3216

+ 3203

PARAMETER LIST

No. 0402007

english

Efka

**FRANKL & KIRCHNER
GMBH & CO KG**

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EFKA OF AMERICA INC.

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**EFKA ELECTRONIC MOTORS
SINGAPORE PTE. LTD.**

OPERATOR LEVEL

Parameter	Designation	Unit	max	min	Preset	Ind. Prg. No.
F-000 Arv	Initial backtacking stitches forward		254	0	3	A
F-001 Arr	Initial backtacking stitches backward		254	0	3	A
F-002 Err	Final backtacking stitches backward		254	0	3	A
F-003 Erv	Final backtacking stitches forward		254	0	3	A
F-004 LS	Light barrier compensating stitches		254	0	7	A
F-005 LSF	Number of stitches of the light barrier filter for knitted fabrics		254	0	0	A
F-006 LSn	Number of light barrier seams		15	1	1	A
F-007 Stc	Stitches for the seam with stitch counting		254	0	20	A
F-008 -F-	Setting of pushbutton 3 with a parameter from the technician level 1 = Softstart ON/OFF 2 = Ornamental backtack ON/OFF 3 = High lift walking ON/OFF 4 = Full stitch with pushbutton needle up/down ON/OFF 5 = Sewing start blocked with light barrier uncovered ON/OFF 6 = Reversion on/off		6	1	4	A
F-009 LSI	Sensitivity adjustment of the transmitted light barrier		255	0	32	A
F-080 SSF	Bobbin thread monitor				ON	A

Note

Program no. 3216 replaces program no. 3203. Parameter F-189 has been added.

TECHNICIAN LEVEL

Parameter	Designation	Unit	max	min	Preset	Ind. Prg. No.
<u>Group 0 Stitches/Countings</u>						
F-100 SSc	Softstart stitches		20	0	0	A
<u>Group 1 Speeds</u>						
F-110 n1	Positioning speed	RPM	390	70	180	A
F-111 n2-	Upper limit setting range n-max	RPM	9900	n2_	1500	A
F-112 n3	Initial backtacking speed	RPM	6500	200	1200	A
F-113 n4	Final backtacking speed	RPM	6500	200	1200	A
F-114 n5	Speed after light barrier sensing	RPM	6500	200	1200	A
F-115 n6	Softstart speed	RPM	1500	70	400	A
F-116 n7	Trimming speed	RPM	500	70	180	A
F-117 n10	High lift walking speed	RPM	6500	400	1500	A
F-118 n12	Automatic speed for stitch counting	RPM	6500	400	1200	A
F-119 nSt	Speed stage graduation 1 = linear 2 = slightly prograssive 3 = highly progressive		3	1	2	A

TECHNICIAN LEVEL

Parameter	Designation	Unit	max	min	Preset	Ind. Prg. No.
<u>Group 2 Speeds</u>						
F-121 n2_	Lower limit setting range n-max	RPM	n-	400	400	A
F-128 ASd	Start delay, when starting command is given by covering the light barrier (see F-129)	ms	2000	0	0	A
F-129 ALS	<p>Machine start by covering the light barrier without previously heeling the pedal back to the basic position</p> <p>Additional prerequisites:</p> <ul style="list-style-type: none"> - F-132 in position ON - Function light barrier sensing switched on at the control panel - Initiation of the <u>first</u> seam section "normal" (Pedal in basic position - Light barrier covered - Pedal pushed forward) - Leaving the pedal in the position of the previous seam section <p>This function will be deactivated by heeling the pedal back to the basic position.</p>				OFF	A

TECHNICIAN LEVEL

Parameter	Designation	Unit	max	min	Preset	Ind. Prg. No.
<u>Group 3 Switching Functions</u>						
F-130 LSF	Light barrier filter for knitted fabrics				OFF	A
F-131 LSd	Light barrier sensing "uncovered"				ON	A
F-132 LSS	Blocking of machine start, when light barrier "uncovered"				ON	A
F-133 LSE	Thread trimmer, when terminating the seam after light barrier sensing				ON	A
F-134 SSt	Softstart				OFF	A
F-135 SrS	Ornamental backtack				OFF	A
F-136 FAr	Trimming stitch backward				OFF	A
F-137 hP	High lift walking				ON	A
F-138 hPr	High lift walking stored				ON	A
F-139 nIS	Display of machine speed				OFF	A
<u>Group 4 Switching Functions</u>						
F-140 Sht	Full stitch with pushbutton needle up/down				OFF	A

TECHNICIAN LEVEL

Parameter	Designation	Unit	max	min	Preset	Ind. Prg. No.
<u>Group 4 Switching Functions</u>						
F-141 SGN	Speed status for one seam with stitch counting 0 = speed controllable dependent upon pedal actuation up to the set maximum speed (F-111) 1 = fixed speed (F-118) without influence by the pedal (Machine stop by heeling the pedal back to the basic position) 2 = limited speed controllable dependent upon pedal actuation up to the set limit (F-118) 3 = with fixed speed, can be interrupted by full heelback		3		0	A
F-142 SFn	Speed status for the free seam and for the seam with light barrier 0 = speed controllable by pedal actuation up to the set maximum speed (F-111) 1 = fixed speed (F-118) without influence by the pedal (Machine stop by heeling the pedal back to the basic position) 2 = limited speed controllable by pedal actuation up to the set limit (F-118) 3 = with fixed speed, can be interrupted by full heelback (only in connection with light barrier On, otherwise as mode 0)		3		0	A

TECHNICIAN LEVEL

Parameter	Designation	Unit	max	min	Preset	Ind. Prg. No.
<u>Group 5 Time Functions</u>						
F-150 t8	Stitch correction of the double initial backtack (Prolongation of the operating time of the stitch regulator - not effective with ornamental backtack)	ms	500	0	0	A
F-151 t9	Stitch correction of the double final backtack (Prolongation of the operating time of the stitch regulator - not effective with ornamental backtack)	ms	500	0	0	A
F-152 tHP	Run-out time high lift walking speed	ms	500	80	150	A
F-153 brt	Braking power at machine standstill	ms	50	0	0	A
<u>Group 6 DC Motor</u>						
F-161 drE	Sense of rotation of the motor 0 = clockwise rotation 1 = anticlockwise rotation				1	A
<u>Group 7 Service Functions</u>						
F-170 Sr1	Setting of the reference position (Position 0) = Needle point at the height of the needle plate					A

TECHNICIAN LEVEL

Parameter	Designation	Unit	max	min	Preset	Ind. Prg. No.
<u>Group 7 Service Functions</u>						
F-171 Sr2	Adjustment of the needle positions 1 = lower needle position switch-on position of magnetic thread trimmer 1A = switch-off position of magnetic thread trimmer, switch-on position of pneumatic thread trimmer 2 = stop position after trimming 2A = no effect The positions 3 and 3A are to be set to 000		510	0	162 254 460 48	A A A A
F-172 Sr3	Display of the signal position 1 to 1A (LED next to pushbutton 1 lights up) or position 2 to 2A (LED next to pushbutton 2 lights up)					A

TECHNICIAN LEVEL

Parameter	Designation	Unit	max	min	Preset	Ind. Prg. No.
<u>Group 7 Service Functions</u>						
F-173 Sr4	<p>Checking of the signal outputs</p> <p>Pushbutton 1 = Backtacking</p> <p>Pushbutton 2 = Presser foot lifting</p> <p>Pushbutton 3 = Magnetic thread trimmer</p> <p>Pushbutton 4 = Pneumatic thread trimmer</p> <p>Pushbutton 5 = Thread wiper</p> <p>Pushbutton 6 = Signal "motor running"</p> <p>Pushbutton 7 = Signal "motor running" + "photocell uncovered"</p> <p>Pushbutton 8 = Reversion signal</p> <p>Pushbutton 9 = High lift walking signal</p> <p>Pushbutton 0 = Final stage T19</p> <p>By actuating the switches connected to the control the function of these switches is checked and displayed with "on/oFF".</p>					A
F-174	Mechanical adjustment of the light barrier					A
F-178	Language selection				dEU--USA ESP--Fra	A
F-179	Display of the program number with index (top line) and identification number (bottom line)					A

TECHNICIAN LEVEL

Parameter	Designation	Unit	max	min	Preset	Ind. Prg. No.
<u>Group 8 Functions for Specific Types</u>						
F-180 Ird	Number of increments of reversion		500	0	0	A
F-181 drd	Activation delay for reversion	ms	990	0	0	A
F-182 SSF	Status thread monitor 0 = Bobbin thread monitor and needle thread monitor OFF 1 = Magnetic trimmer in the case of bobbin thread or needle thread error 2 = Bobbin thread monitor 926/01 Magnetic trimmer in the case of needle thread error Pneumatic trimmer in the case of bobbin thread error 3 = Bobbin supply monitor 926/04 Stop in basic position. Renewed sewing possible with pedal 0		3	0	2	A
F-183 tFA	Activation time of pneumatic thread trimmer with bobbin thread error	ms	990	0	80	A
F-184 SFr	Backtack with bobbin thread breakage		3	2	2	A
F-185 chP	Number of stitches high lift walking Lock stitch trimmer = OFF		254	0	10	A
F-186 Fnt	Function pushbutton needle up -1- = Function needle up -2- = Function partial stitch with blocking solenoid -3- = Speed limitation n11		3	1	1	A

TECHNICIAN LEVEL

Parameter	Designation	Unit	max	min	Preset	Ind. Prg. No.
F-187 n11	Speed limitation n11		4000	400	2500	A
F-188 n9	Speed limitation n9		3000	400	2000	A
F-189 csP	Number of stitches until stop in the case of a thread error (F-189 is only effective if F-182 = 3)		2540	0	30	3216A
<u>Group 9 Functions for Specific Types</u>						
F-190 rdP	Stop in reverse position				OFF	A
F-197 FMb	Function Memory Box				OFF	A
F-198 Foc	Format Memory Card				OFF	A

SUPPLIER LEVEL

Parameter	Designation	Unit	max	min	Preset	Ind. Prg. No.
<u>Group 0 Time Functions</u>						
F-200 cAr	Stitches until speed release after initial backtack		3	0	1	A
F-201 t2	Activation delay of presser foot lifting with half heelback	ms	500	20	60	A
F-202 t3	Start delay after presser foot lifting	ms	500	10	80	A
F-203 t4	Time of full power of presser foot lifting	ms	600	0	500	A
F-204 t5	Holding current for presser foot lifting Stages 0...7 Stage 1 = 12,5% Stage 7 = 87,5%		7	1	3	A
F-205 t6	Thread wiper time	ms	500	0	120	A
F-206 t7	Delay end of thread wiping until presser foot lifting ON	ms	800	50	80	A
F-207 br1	Braking effect with speed jumps under 400 RPM		255	1	200	A
F-208 br2	Braking effect with speed jumps over 400 RPM		255	1	25	A
<u>Group 1 Time Functions</u>						
F-210 tSr	Stop time for commutation of the stitch regulator for ornamental backtack	ms	500	0	140	A
F-211 tFL	Activation delay of presser foot lifting with thread wiper off	ms	500	0	60	A
F-212 t10	Full power of backtacking	ms	600	0	500	A

SUPPLIER LEVEL

Parameter	Designation	Unit	max	min	Preset	Ind. Prg. No.
<u>Group 1 Time Functions</u>						
F-213 t11	Pulsing of backtacking (1-7 stages) Stage 1 = 12.5 % Stage 7 = 87.5 %		7	1	3	A
<u>Group 2 Speeds</u>						
F-220 ALF	Accelerating power of the motor		255		1 32	A
<u>Group 3 Switching functions</u>						
F-231 Sn1	Execution of the first stitch in positioning speed after power ON				ON	A
<u>Group 8</u>						
F-280 LSP	Blocking of machine run OFF = External presser foot lift at machine standstill				OFF	A
F-281 EPd	Blocking pedal -1 and -2, when light barrier ON				OFF	A

STATUS DISPLAYS

Display	Designation
InFo A1	Pedal not in neutral position, when switching on
InFo A3	The position to which all other position values refer has not been stored (reference position missing)
InFo A4	Control panel cannot be clearly identified
InFo F1	Wrong code or function number
InFo E1	Position transmitter not connected or defective, mains voltage too low
InFo E2	Mains voltage too low or power off > on too short
InFo E3	Machine locks or does not reach the desired speed
InFo E4	Control disturbed by defective grounding or loose contact
InFo H1	Commutation transmitter cord or frequency converter disturbed
InFo H2	Processor disturbed

Efka

FRANKL & KIRCHNER GMBH & CO KG
SCHEFFELSTRASSE 73 - 68723 SCHWETZINGEN
TEL.: (06202)2020 - TELEFAX: (06202)202115 - TELEX: 466314

Efka

OF AMERICA INC.
3715 NORTHCREST ROAD - SUITE 10 - ATLANTA - GEORGIA 30340
PHONE: (404)457-7006 - TELEFAX: (404)458-3899 - TELEX: EFKA AMERICA 804494

Efka

ELECTRONIC MOTORS SINGAPORE PTE. LTD.
67, AYER RAJAH CRESCENT 05-03 - SINGAPORE 0513
PHONE: 7772459 or 7789836 - TELEFAX: 7771048

2(4)-110495(402007EN)