

Efka vario dc

CONTROL

DA820V3233

PARAMETER LIST

No. 402152 english

Efka
FRANKL & KIRCHNER
GMBH & CO KG

Efka
EFKA OF AMERICA INC.

Efka
EFKA ELECTRONIC MOTORS
SINGAPORE PTE. LTD.

OPERATOR LEVEL

Parameter	Designation	Unit	max		min	Preset		Ind. Prg. No.
			KL.767	KL.221		KL.767	KL.221	
F-000 Arv	Start backtacking stitches forward		254		0	2	3	A
F-001 Arr	Start backtacking stitches backward		254		0	3	3	A
F-002 Err	End backtacking stitches backward		254		0	2	3	A
F-003 Erv	End backtacking stitches forward		254		0	3	3	A
F-004 LS	Light barrier compensating stitches		254		0	4	3	A
F-005 LSF	Number of stitches of the light barrier filter for knitted fabrics		254		0	1	1	A
F-006 LSn	Number of light barrier seams		15		1	1	1	A
F-007 Stc	Number of stitches of the seam with stitch counting		254		0	20	20	A
F-008 -F-	Setting of pushbutton 3 with a parameter from the technician level 1 = Needle cooling ON/OFF 2 = Stitch counting for high lift walking (see F-187) ON/OFF 3 = Ornamental backtack ON/OFF 4 = Softstart ON/OFF		4		1	1	1	A
F-009 LSI	Sensitivity adjustment of the transmitted light barrier		255		0	16		A
F-080 SAV	Start backtacking stitches forward (ornamental backtack)		254		0	3	3	A
F-081 SAR	Start backtacking stitches backward (ornamental backtack)		254		0	3	3	A

Note: On the operator level, the display does not show the parameter number (F-xxx), but only the abbreviation (e.g. ARV) and the actual value (e.g. 004 - for 4 stitches).

OPERATOR LEVEL

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			KL.767	KL.221		KL.767	KL.221	
F-082 SEr	End backtacking stitches backward (ornamental backtack)		254		0	3	3	A
F-083 SEv	End backtacking stitches forward (ornamental backtack)		254		0	3	3	A
F-085 cFw	Number of stitches after triggering the bobbin thread monitor if F-195 = 1..3 if F-195 = 4		2540 5000		0 0	0 0		D
F-090 FES	Operating mode of the thread pull-in device		6		0	0	0	A

Note: On the operator level, the display does not show the parameter number (F-xxx), but only the abbreviation (e.g. ARV) and the actual value (e.g. 004 - for 4 stitches).

TECHNICIAN LEVEL

Code No. 1907

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			KL.767	KL.221		KL.767	KL.221	
Group 0 Stitches/Countings								
F-100 SSc	Number of Softstart stitches		20		0	1	1	A
Group 1 Speeds								
F-110 n1	Positioning speed	RPM	500		80	160	100	A
F-111 n2	Upper limit setting range n-max	RPM	4000	1200	n2_	3300	1200	A
F-112 n3	Start backtacking speed	RPM	3000	1200	200	1200	400	A
F-113 n4	End backtacking speed	RPM	3000	1200	200	1200	400	A
F-114 n5	Speed after light barrier sensing	RPM	3000	1200	200	1200	400	A
F-115 n6	Softstart speed	RPM	1200		100	400	400	D
F-117 n10	High lift walking speed	RPM	3000	1200	200	2000	600	A
F-118 n12	Speed Modes see F-141 and F-142	RPM	6000		400	1500	800	A
F-119 nSt	Speed stage graduation 1 = linear 2 = slightly progressive 3 = highly progressive		3		1	2	2	A

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Group 2 Speeds								
F-121 n2_	Lower limit setting range n-max	RPM	n2_			500	500	A
F-122 StP	Intermediate stop in the backtack					OFF	OFF	D
F-123 tnS	Backtack synchronization time	ms	500		0	0	0	D
F-124 nrS	Backtack synchronization speed	RPM	3000	1200	100	1200	400	D
F-128 ASd	Start delay, when starting command is given by covering the light barrier (see F-129)	ms	2000		0	200	200	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: - F-132 in position ON - Function light barrier sensing switched on at the control panel - Initiation of the first seam section "normal" (Pedal in basic position - Light barrier covered - Pedal actuated forward) - Leaving the pedal in position of the previous seam section</p> <p>This function will be deactivated by heeling the pedal back to the basic position.</p>					OFF	OFF	A

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Group 3 Switching Functions								
F-130 LSF	Light barrier filter for knitted fabrics					OFF	OFF	A
F-131 LSd	Light barrier sensing "uncovered"					ON	ON	A
F-132 LSS	Blocking of machine start with light barrier "uncovered"					ON	ON	A
F-133 LSE	Thread trimmer, when terminating the seam after light barrier sensing					ON	ON	A
F-134 SSt	Softstart					ON	ON	A
F-135 SrS	Ornamental backtack					OFF	OFF	A
F-136 FAr	Last stitch backward					OFF	OFF	A
F-139 nIS	Display of machine speed	RPM				OFF	OFF	A
Group 4 Switching Functions								
F-140 Mht	Mode needle UP/DOWN 1 = Needle up 2 = Half stitch (needle up/down) 3 = Full stitch		1		1	1	1	A

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			KL.767	KL.221			KL.767	KL.221	
Group 4 Switching Functions									
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		0	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		0	0	A

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Group 5 Time Functions								
F-150 t8	Stitch correction of the double start backtack (Prolongation of the operating time of the stitch regulator - not effective with ornamental backtack)	ms	500		0	0	0	A
F-151 t9	Stitch correction of the double end backtack (Prolongation of the operating time of the stitch regulator - not effective with ornamental backtack)	ms	500		0	0	0	A
F-152 thP	Run-out time of the high lift walking speed after switching off high lift walking	ms	500		80	180	180	A
F-153 brt	Braking power at machine standstill	ms	50		0	5	5	A
Group 6 DC Motor								
F-161 drE	Direction of rotation of the motor 0 = clockwise rotation 1 = counterclockwise rotation		1		0	1	1	A
Group 7 Service Functions								
F-170 Sr1	Adjustment of the reference position (Position 0) = Needle point at the height of the needle plate							A

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Group 7 Service Functions								
F-171 Sr2	Adjustment of the needle positions 1 = lower needle position (stop position and switch-on position for the thread trimmer with class 467/767) 1 = lower needle position (stop position switch-on position for thread trimmer and thread tension release with class 221) 1A = switch-off position for the thread trimmer with class 467/767 2 = switch-on position for the thread tension release with class 467/767 2A = upper needle position (stop position with classes 467/767 and 221) The positions 3 and 3A are to be set to 000					46	190	A
						124	256	A
						306	266	A
						466	388	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)							

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			KL.767	KL.221		KL.767	KL.221	
Group 7 Service Functions								
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 = Pressure of the presser foot</p> <p>Pushbutton 4 = Thread tension release</p> <p>Pushbutton 5 = FF signal</p> <p>Pushbutton 6 = High lift for walking foot</p> <p>Pushbutton 7 = Thread clamp</p> <p>Pushbutton 8 = Needle cooling</p> <p>Pushbutton 9 = Thread trimmer</p> <p>By actuating the switches (make contacts [N.O.] 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

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			KL.767	KL.221			KL.767	KL.221	
Group 8 Functions for Specific Types									
F-182 knP	Allocation of maximum speed (F-111) and minimum speed (F-117 = high lift walking) for the 21 stages of the Speedomat Example of a display: 10 15 19 2500 10 = display of the stage up to which the maximum speed is effective 19 = display of the stage from which the minimum speed is effective 15 = display of the stage 2500 set on the Speedomat with corresponding speed Change of the setting: Set Speedomat to the desired stage, then push button E briefly.		1		21				A
F-183 InP	Increments of reversion	approx. 0.7°	500		0		80	0	A
F-184 dnk	Run-out time for needle cooling from machine stop onwards	ms	5000		0		2500	2500	A
F-185 chP	Number of stitches of the stitch counting of the high lift for walking foot (see F-187)		100		1		10	10	A
F-186 Snk	Needle cooling						ON	ON	A

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			KL.767	KL.221		KL.767	KL.221	
Group 8 Functions for Specific Types								
F-187 ShP	Stitch counting for the high lift for walking foot (high lift for walking foot remains activated at least for the stitches programmed with F-185, independent of the duration of actuation of the external knee switch and its position)					OFF	OFF	A
F-188 rFw	Bobbin thread monitor ON/OFF see also F-195					OFF	OFF	A
F-189 ESt	Function +1 stitch 0 = OFF / 1 = ON		1		0	0		D
F-190 FFM	FF functions		2		0	2		D
F-191 AF2	FF choice if F-190 = 2		3		0	1		D
F-192 n11	FF speed	RPM	3000	1200	200	2500	1000	D
Group 9 General Functions								
F-195 rFw	Bobbin thread monitor functions		4		0	0		D
F-197 FMb	Function Memory Box					OFF		A
F-198 Foc	Format Memory Card					OFF		A

SUPPLIER LEVEL

Code No. 3112

Parameter	Designation	Unit	max		min		Preset		Ind. Prg. No.
			KL.767	KL.221			KL.767	KL.221	
Group 0 Time Functions									
F-200 t1	Delay of speed release after the start backtack	ms	500		50		100	100	A
F-201 t2	Activation delay of presser foot lifting with half heelback	ms	500		20		80	80	A
F-202 t3	Start delay after presser foot lifting	ms	500		10		80	140	A
F-203 t4	Time of full power of presser foot lifting	ms	600		0		0	0	A
F-204 t5	Holding current for presser foot lifting Stages 0...7 Stage 0 = 100% Stage 1 = 12.5% Stage 7 = 87.5%		7		0		0	0	A
F-207 br1	Braking effect if set value is changed ≤ 4 stages		100 255		1 1		60 25	60 25	A B
F-208 br2	Braking effect if set value is changed ≥ 5 stages		100 255		1 1		25 60	25 60	A B
Group 1 Time Functions									
F-210 tSr	Stop time for commutation of the stitch regulator for ornamental backtack	ms	500		0		180	180	A
F-212 t10	Time of full power of backtacking	ms	600		0		500		B
F-213 t11	Holding power for back-tacking Stages 0, 1...7 Stage 0 = 100 % Stage 1 = 12.5% Stage 7 = 87.5%	ms	7		0		4		B

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Parameter	Designation	Unit	max		min		Preset		Ind. Prg. No.
			KL.767	KL.221	KL.767	KL.221	KL.767	KL.221	
Group 2 Speeds									
F-220 ALF	Accelerating power of the motor		100		1		32	32	A
Group 3 Switching functions									
F-231 Sn1	Execution of the first stitch after power ON at positioning speed						OFF ON		A B
Group 8 Functions for Specific Types									
F-280 SEL	Display of the machine class 1 = class 467/767 2 = class 221						1	2	A
F-281 LSP	New machine start after blocking of machine run with pedal in position 0 (neutral) ON = New machine start with pedal in neutral position after end of signal OFF = New machine start after end of signal						ON	ON	A
F-282 LOS	Blocking of machine run 0 = make contact (N.O.) 1 = break contact (N.C)						0	0	A
Group 9 Functions for Specific Types									
F-290 tFA	Stop time for the the thread trimmer	ms	500		20		20	20	A
F-291 tFS	Switch-off delay of the thread tension release	ms	500		20		60	60	A
F-293 n9	Limited speed of the manual ornamental backtack	RPM	3000		200		1200	400	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 A5	Emergency run, no valid machine select 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 - D-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

1(1)-241095-A(402152EN)