

EFKA vario dc

CONTROL

AM82MV3205

PARAMETER LIST

No. 402061 english

OPERATOR LEVEL

Parameter	Designation	Unit	max	min	Preset	Ind. Prg. No.
Group 0 Stitches/Countings						
F-000 c01	Initial counting for chain cutter (start of counting when light barrier covered)		254	0	0	A
F-001 c02	Final counting for chain cutter (start of counting when light barrier uncovered)		254	0	0	A
F-002 c03	Initial counting for chain suction until start of chain cutter (start of counting when light barrier covered)		254	0	254	A
F-003 c04	Final counting until start of chain suction (start of counting when light barrier uncovered)		254	0	0	A
F-004 LS	Stitches after light barrier sensing until final counting		254	0	0	A
F-005 LSF	Number of stitches of the light barrier filter for knitted fabrics		254	0	1	A
F-006 LSn	Number of light barrier seams until seam end		15	1	1	A
F-007 Stc	Stitches for chain suction (start with signal chain cutter at the start of the seam)		254	0	10	A

OPERATOR LEVEL

Parameter	Designation	Unit	max	min	Preset	Ind. Prg. No.
Group 0 Stitches/Countings						
F-008 -F-	Setting of pushbutton 3 with a parameter from the technician level 1 = Sewing start blocked with light barrier uncovered ON/OFF 2 = Softstart ON/OFF 3 = Chain suction light barrier section ON/OFF 4 = Full stitch with pushbutton needle up/down ON/OFF 5 = Signal M1 ON/OFF 6 = Signal M2 ON/OFF 7 = Signal M3 ON/OFF 8 = Signal M4 ON/OFF 9 = Reversion ON/OFF 10= Unlocking the chain ON/OFF		10	1	10	A
F-009 LSI	Sensitivity adjustment of the transmitted light barrier		255	0	16	A

OPERATOR LEVEL

Parameter	Designation	Unit	max	min	Preset	Ind. Prg. No.
Group 2 Switching Functions						
F-020 SLS	Chain suction light barrier section at the start of the seam				ON	A
F-021 SPO	Chain suction at the seam end until pedal in position 0 (neutral)				OFF	A
F-022 t04	Switch-off delay for chain suction at stop at the seam end (only if F-021 = OFF)	ms	2550	0	0	A
F-023 FLE	Suppression of automatic foot lifting in the case of light barrier seam end or if F-147 = ON				OFF	A
F-024 ckb	Number of seam ends until chain suction (only if F-133 = ON, F-144 = ON and F-222 = <>2)		255	1	1	A
F-025 kSS	Signal chain suction by stitch counting				OFF	A

OPERATOR LEVEL

Parameter	Designation	Unit	max	min	Preset	Ind. Prg. No.
<u>Group 4 Switching Functions</u>						
F-040 S _{nA}	<p>Speed status for initial counting until chain cutter</p> <p>0 = speed controllable dependent upon pedal actuation up to the set maximum speed (F-111)</p> <p>1 = fixed speed (F-112) without influence by the pedal (Machine stop by heeling the pedal back to the basic position)</p> <p>2 = limited speed controllable dependent upon pedal actuation up to the set limit (F-116)</p> <p>3 = with fixed speed (F-112) can be interrupted by full heelback</p>		3		1	A
F-041 S _{Gn}	<p>Speed status for a seam with stitch counting (counting chain suction)</p> <p>0 = speed controllable dependent upon pedal actuation up to the set maximum speed (F-111)</p> <p>1 = fixed speed (F-118) without influence by the pedal (Machine stop by heeling the pedal back to the basic position)</p> <p>2 = limited speed controllable dependent upon pedal actuation up to the set limit (F-118)</p> <p>3 = with fixed speed (F-118) can be interrupted by full heelback</p>		3		0	A

OPERATOR LEVEL

Parameter	Designation	Unit	max	min	Preset	Ind. Prg. No.
<u>Group 4 Switching Functions</u>						
F-042 SFn	<p>Speed status for the free seam and for the seam with light barrier</p> <p>0 = speed controllable dependent upon pedal actuation up to the set maximum speed (F-111)</p> <p>1 = fixed speed (F-118) without influence by the pedal (Machine stop by heeling the pedal back to the basic position)</p> <p>2 = limited speed controllable dependent upon pedal actuation up to the set limit (F-118)</p> <p>3 = with fixed speed (F-118) can be interrupted by full heelback (status 3 is only possible with light barrier = ON; if light barrier = OFF status 0 is effective)</p>		3		0	A
F-043 SnE	<p>Speed status for final counting until chain cutter</p> <p>0 = speed controllable dependent upon pedal actuation up to the set maximum speed (F-111)</p> <p>1 = fixed speed (F-113) without influence by the pedal (Machine stop by heeling the pedal back to the basic position)</p> <p>2 = limited speed controllable dependent upon pedal actuation up to the set limit (F-117)</p> <p>3 = with fixed speed (F-113) can be interrupted by full heelback</p>		3		1	A

OPERATOR LEVEL

Parameter	Designation	Unit	max	min	Preset	Ind. Prg. No.
Group 5 <u>Stitches/Countings for Specific Types</u>						
F-050 c05	Activation time chain cutter by stitches in order to jam chain (only if F-125/F-126 = ON)		254	0	0	A
F-051 chP	Stitches for minimum activation for flip-flop function in the operating mode not stored		254	0	0	A
F-052 AbS	Stitches until chain cutter ON after initial counting		254	0	0	A
F-053 tdA	Time until chain cutter ON after final counting		500	0	0	A

OPERATOR LEVEL

Parameter	Designation	Unit	max	min	Preset	Ind. Prg. No.
Group 8 <u>Stitches/Times for Specific Types</u>						
F-080 c06	Activation delay for signal M1	ms	254	0	5	A
F-081 c07	Activation time for signal M1 (according to the selected program F-280 different abbreviations for F-080/F-081 may appear on the display)	ms	2550	0	500	A
F-082 t08	Activation delay for signal M2		2550	0	0	A
F-083 t09	Activation time for signal M2 (according to the selected program F-282 different abbreviations for F-082/F-083 may appear on the display)	ms	2550	0	80	A
F-084 d13	Activation delay for signal M3				fixed	A
F-085 S3	Activation time for signal M3 (according to the selected program F-284 different abbreviations for F-084/F-085 may appear on the display)				ON	A
F-086 d14	Activation delay for signal M4				fixed	A
F-087 S4	Activation time for signal M4 (according to the selected program F-286 different abbreviations for F-086/F-087 may appear on the display)				ON	A

TECHNICIAN LEVEL

Parameter	Designation	Unit	max	min	Preset	Ind. Prg. No.
Group 0 Stitches/Countings						
F-100 SSc	Number of Softstart stitches		20	0	2	A
Group 1 Speeds						
F-110 n1	Positioning speed	RPM	390	70	180	A
F-111 n2-	Upper limit setting range n-max	RPM	9900	400	3800	A
F-112 n3	Speed initial counting	RPM	9900	400	3000	A
F-113 n4	Speed final counting	RPM	9900	400	3000	A
F-114 n5	Speed after light barrier sensing	RPM	9900	400	3000	A
F-115 n6	Softstart speed	RPM	1500	70	400	A
F-116 n9	Limited speed for initial counting	RPM	9900	400	3000	A
F-117 n10	Limited speed for signal MV1 and final counting	RPM	9900	400	3000	A
F-118 n12	Automatic speed for stitch counting	RPM	9900	400	3000	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.
Group 2 Time/Switching Functions						
F-120 FnA	Chain suction at the start of the seam and motor at standstill				OFF	A
F-121 FLS	Chain suction with light barrier section at the start of the seam and motor at standstill				OFF	A
F-122 FSt	Chain suction by stitch counting				ON	A
F-123 FnE	Chain suction at seam end and motor at standstill				OFF	A
F-124 t01	Time for chain cutter signal	ms	500	0	80	A
F-125 ABE	Chain cutter at the seam end only at standstill with automatic stop				OFF	A
F-126 ABk	Chain cutter ON in order to jam chain (only with F-125 = ON)				OFF	A

TECHNICIAN LEVEL

Parameter	Designation	Unit	max	min	Preset	Ind. Prg. No.
Group 2 Time/Switching Functions						
F-128 ASd	Start delay, when starting command is given by covering the light barrier (see F-129)	ms	2000	0	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:</p> <ul style="list-style-type: none"> - F-132/F-133 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 actuated 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.
Group 3 Switching Functions						
F-130 LSF	Light barrier filter for knitted fabrics				ON	A
F-131 LSd	Light barrier sensing "uncovered"				ON	A
F-132 LSS	Blocking of machine start, when light barrier "uncovered"				OFF	A
F-133 StP	Light barrier stop after final counting				ON	A
F-134 SSt	Softstart				OFF	A
F-137 hP	Signal MV1 (e.g. high lift walking)				OFF	A
F-138 hPr	Signal MV1 (e.g. high lift walking) stored				OFF	A
F-139 nIS	Display of machine speed				ON	A
Group 4 Time/Switching Functions						
F-140 Sht	Full stitch = ON Needle up/down = OFF				ON	A
F-144 kBA	Chain blowing automatically at the seam end (Blow fabric on stacker)				ON	A
F-145 t02	Activation delay for chain blowing	ms	500	0	0	A
F-146 t03	Time for chain blowing	ms	2550	0	1000	A
F-147 Sac	Stop after initial counting				OFF	A
F-148 LSA	Start of initial counting with light barrier uncovered				OFF	A
F-149 LSu	Suppression of compensating stitches in the last light barrier seam section				OFF	A

TECHNICIAN LEVEL

Parameter	Designation	Unit	max	min	Preset	Ind. Prg. No.
Group 5 Time Functions						
F-152 thP	Run-out time of the limited speed after switching off the signal MV1	ms	500	80	400	A
F-153 brt	Braking power at machine standstill	ms	50	0	0	A
F-154 t6	Activation delay for presser foot lifting at automatic stop at the seam end	ms	2550	0	80	A
F-155 tSG	Mode running signal 0 = Signal OFF 1 = Running signal ON 2 = Switching running signal on, when speed > 3000 RPM 3 = Signal when pedal <> 0 4 = Signal when pedal in position 0 (neutral)		4	0	1	A
F-156 t05	Switch-off delay for running signal or signal in position 0 (neutral)	ms	2550	0	0	A
Group 6 DC Motor						
F-161 drE motor	Sense of rotation of the motor 0 = clockwise rotation 1 = anticlockwise rotation				0	A

TECHNICIAN LEVEL

Parameter	Designation	Unit	max	min	Preset	Ind. Prg. No.
Group 7 Service Functions						
F-170 Sr1	Setting of the reference position (Position 0) = Needle point at the height of the needle plate					A
F-171 Sr2	Adjustment of the needle positions 1 = lower needle position 1A = switch-off position 2 = switch-on position 2A = upper needle position The positions 3 and 3A are to be set to 000		510	0	328	A
			510	0	260	A
			510	0	040	A
			510	0	400	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 the signal outputs</p> <p>Pushbutton 1 = Chain suction</p> <p>Pushbutton 2 = Presser foot lifting</p> <p>Pushbutton 3 = Chain removal by suction</p> <p>Pushbutton 4 = Needle cooling (disposal of chain cuttings by suction)</p> <p>Pushbutton 5 = Chain blowing (blow fabric on stacker)</p> <p>Pushbutton 6 = Chain cutter</p> <p>Pushbutton 7 = Signal M1</p> <p>Pushbutton 8 = Signal M2</p> <p>Pushbutton 9 = Signal M3</p> <p>Pushbutton 0 = Signal MV1</p> <p>Pushbutton - = Signal M4</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 Sr5	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.
Group 8 <u>Functions for Specific Types</u>						
F-180 Ird	Number of increments of reversion		500	0	240	A
F-181 drd	Activation delay for reversion	ms	990	0	0	A
F-182 Frd	Reversion				OFF	A
F-183 Ent	Unlocking the chain				OFF	A
Group 9 <u>Functions for Specific Types</u>						
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.
Group 0 Time Functions						
F-201 t2	Activation delay of presser foot lifting with half heelback	ms	500	20	80	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	240	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	1	4	A
F-207 br1	Braking effect with speed jumps under 400 RPM		255	1	25	A
F-208 br2	Braking effect with speed jumps over 400 RPM		255	1	60	A

SUPPLIER LEVEL

Parameter	Designation	Unit	max	min	Preset	Ind. Prg. No.
Group 2 Speeds						
F-220 ALF	Accelerating power of the drive		255	5	32	A
F-221 LSP	Blocking of machine run				ON	A
F-222 FAB	<p>Mode chain cutter system</p> <p>1 = Chain cutter is activated over time after initial and/or final counting of the signal chain suction. (Output at socket b3/10)</p> <p>2 = Chain cutter is activated over time after initial and/or final counting of the signal chain suction. (Output 1 at socket b3/10, output 2 at socket b3/8, e.g. quick scissors)</p> <p>3 = Chain cutter continuous signal</p> <ul style="list-style-type: none"> - After power ON the chain cutter signal is not active - After initial counting the chain cutter signal is inverted - After final counting the chain cutter signal is inverted (output at socket b3/10) 		3	1	1	A
F-223 PnE	<p>Seam end by pedal in position -2.</p> <p>If the parameter is OFF and light barrier ON initiation of the seam end is only possible by light barrier</p>				OFF	A
F-224 LSh	Light barrier uncovered - checking during initial counting				OFF	A
F-225 POE	Seam end after final counting by pedal in position 0 (neutral) (only effective if F-133=OFF)				OFF	A

SUPPLIER LEVEL

Parameter	Designation	Unit	max	min	Preset	Ind. Prg. No.
Group 3 Switching Functions						
F-231 Sn1	Execution of the first stitch in positioning speed after power ON				OFF	A
F-280 FS1	<p>Program for signal M1 (corresponding parameters on level 0 are F-080 and F-081)</p> <p>1 = Static activation of M1 according to F-281 (duration of activation determined by the seam sections preselected with F-281)</p> <p>2 = Activation delay and activation of M1 determined by time</p> <p>3 = Activation delay and activation of M1 determined by stitches</p> <p>4 = Activation delay determined by time and activation of M1 determined by stitches</p> <p>5 = Activation delay determined by stitches and activation of M1 determined by time</p>		5	1	5	A
F-281	<p>Initialization in the seam section (LC display bottom line)</p> <div style="border: 1px solid black; padding: 5px; display: inline-block; margin-bottom: 5px;"> <p>F-281 -----1---</p> </div> <p>e. g. here initialization of the signal sequence M1 if light barrier is uncovered.</p> <ul style="list-style-type: none"> ----- Initialization at seam end ----- Initialization at the start of final counting for chain suction ----- Initialization if light barrier uncovered ----- Initialization free seam ----- Initialization stitch counting ----- Initialization at the start of initial counting for chain suction ----- Initialization light barrier uncovered at the start of the seam ----- Initialization at the start of the seam if motor at standstill <p>(Switching the seam sections on and/or off by pushbuttons 1 to 8)</p>					

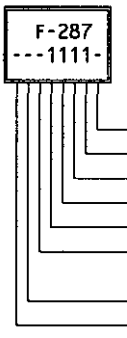
SUPPLIER LEVEL

Parameter	Designation	Unit	max	min	Preset	Ind. Prg. No.
Group 3 Switching Functions						
F-282 FS2	<p>Program for signal M2 (corresponding parameters on level 0 are F-082 and F-083)</p> <p>1 = Static activation of M2 according to F-283 (duration of activation determined by the seam sections preselected with F-283)</p> <p>2 = Activation delay and activation of M2 determined by time</p> <p>3 = Activation delay and activation of M2 determined by stitches</p> <p>4 = Activation delay determined by time and activation of M2 determined by stitches</p> <p>5 = Activation delay determined by stitches and activation of M2 determined by time</p>		5	1	2	A
F-283	<p>Initialization in the seam section (LC display bottom line)</p> <div style="border: 1px solid black; padding: 5px; display: inline-block; margin-bottom: 5px;"> <p>F-283 -----1</p> </div> <p>e. g. here initialization of the signal sequence M2 at seam end.</p> <ul style="list-style-type: none"> ----- Initialization at seam end ----- Initialization at the start of final counting for chain suction ----- Initialization if light barrier uncovered ----- Initialization free seam ----- Initialization stitch counting ----- Initialization at the start of initial counting for chain suction ----- Initialization light barrier uncovered at the start of the seam ----- Initialization at the start of the seam if motor at standstill <p>(Switching the seam sections on and/or off by pushbuttons 1 to 8)</p>					

SUPPLIER LEVEL

Parameter	Designation	Unit	max	min	Preset	Ind. Prg. No.
Group 3 Switching Functions						
F-284 FS3	<p>Program for signal M3 (corresponding parameters on level 0 are F-084 and F-085)</p> <p>1 = Static activation of M3 according to F-285 (duration of activation determined by the seam sections preselected with F-285)</p> <p>2 = Activation delay and activation of M3 determined by time</p> <p>3 = Activation delay and activation of M3 determined by stitches</p> <p>4 = Activation delay determined by time and activation of M3 determined by stitches</p> <p>5 = Activation delay determined by stitches and activation of M3 determined by time</p>		5	1	1	A
F-285	<p>Initialization in the seam section (LC display bottom line)</p> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin-bottom: 10px;"> <p>F-285 111----1</p> </div> <p>e. g. here initialization of the signal sequence M3 with start of the seam until end of initial counting for chain suction and at seam end.</p> <ul style="list-style-type: none"> — Initialization at seam end — Initialization at the start of final counting for chain suction — Initialization if light barrier uncovered — Initialization free seam — Initialization stitch counting — Initialization at the start of initial counting for chain suction — Initialization light barrier uncovered at the start of the seam — Initialization at the start of the seam if motor at standstill <p>(Switching the seam sections on and/or off by pushbuttons 1 to 8)</p>					

SUPPLIER LEVEL

Parameter	Designation	Unit	max	min	Preset	Ind. Prg. No.
Group 3 Switching Functions						
F-286 FS4	<p>Program for signal M4 (corresponding parameters on level 0 are F-086 and F-087)</p> <p>1 = Static activation of M4 according to F-287 (duration of activation determined by the seam sections preselected with F-287)</p> <p>2 = Activation delay and activation of M4 determined by time</p> <p>3 = Activation delay and activation of M4 determined by stitches</p> <p>4 = Activation delay determined by time and activation of M4 determined by stitches</p> <p>5 = Activation delay determined by stitches and activation of M4 determined by time</p>		5	1	1	A
F-287	<p>Initialization in the seam section (LC display bottom line)</p> <div style="border: 1px solid black; padding: 2px; display: inline-block; margin-bottom: 5px;"> <p>F-287 ---1111-</p> </div>  <p>e. g. here initialization of the signal sequence M4 with start of stitch counting until end of final counting for chain suction.</p> <ul style="list-style-type: none"> — Initialization at seam end — Initialization at the start of final counting for chain suction — Initialization if light barrier uncovered — Initialization free seam — Initialization stitch counting — Initialization at the start of initial counting for chain suction — Initialization light barrier uncovered at the start of the seam — Initialization at the start of the seam if motor at standstill <p>(Switching the seam sections on and/or off by pushbuttons 1 to 8)</p>					

SUPPLIER LEVEL

Parameter	Designation	Unit	max	min	Preset	Ind. Prg. No.
Group 3 Switching Functions						
F-290 S1h	Signal M1 at intermediate stop				ON	A
F-291 S2h	Signal M2 at intermediate stop				ON	A
F-292 S3h	Signal M3 at intermediate stop				ON	A
F-293 S4h	Signal M4 at intermediate stop				ON	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

For your notes:

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Efka

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