

▪ FIELD OF APPLICATION

Lockstitch sewing machines of various manufacturers

With connections and/or outputs for:

- Thread trimmer from position 1 to position 1A (max. 3.0A)
- Thread trimmer from position 1A to position 2 (max. 3.0A)
- Thread wiper (max. 3.0A)
- Presser foot lift (max. 6.5A/3.0A)
- Signal "machine running" (max. 0.5A)
- Signal position 1 (max. 30mA)
- Signal position 2 (max. 30mA)

These outputs are located on the internal socket connector B241!

The total power of the outputs is to be limited to 96VA!

Reflection light barrier module for sensing the edge of the fabric
 Power supply 24V d.c., max. 0.5A for further additional devices
 Power supply can be changed from +5V d.c. to +12V d.c. and vice versa, max. 250mA

▪ CHARACTERISTICS

The control has a digital touch control panel for programming all parameters (functions, times, speeds, etc.). When a control panel Variocontrol is connected, additional functions are possible, e.g. 8 seam patterns with a total of 40 seams, connection of a Membox for storing the programmed sewing data, connection of an additional light barrier LS001 (order nos. of the control panels V720/V730 and of the Membox see Special Accessories).

▪ THE FOLLOWING FUNCTIONS ARE AVAILABLE AND CAN BE ADAPTED TO THE MACHINE:

- **SOFTSTART:** On/off; number of stitches and speed at the start of the seam can be set (factory setting: 2 stitches / 500 RPM).
- **BASIC POSITION:** Needle position at stop in the seam up/down.
- **BRAKING POWER AT MACHINE STANDSTILL:** Braking effect can be set.
- **PRESSER FOOT LIFT:** At stop in the seam automatic/by pedal, after thread trimming automatic/by pedal, start delay after switching off the presser foot lift signal, can be set.
- **THREAD TRIMMER/THREAD WIPER:** Can be switched on/off.
- **STITCH COUNTING:** On/off.
- **REVERSING SIGNAL:** Delay and activation time of the signal can be set.
- **SPEED RANGE:** 70 RPM to 9900 RPM (depending on machine).
- **SPEED LIMITATION:** Can be varied during machine run and at intermediate stop.

▪ ADDITIONAL FUNCTIONS WHEN A VARIOCONTROL IS CONNECTED:

- **PROGRAMMING SEAMS (TEACH-IN):** A maximum of 8 patterns with a total of 40 seams is possible. Feeding direction can be inverted.

▪ PUSHBUTTONS AND SWITCHES FOR THE FOLLOWING FUNCTIONS CAN BE CONNECTED:

- PUSHBUTTON FOR AUTOMATIC SPEED 1
- PUSHBUTTON FOR AUTOMATIC SPEED 2
- PUSHBUTTON FOR AUTOMATIC SPEED 3
- PUSHBUTTON FOR SEAM END

These inputs are located on the internal socket connector B242!

▪ If the LIGHT BARRIER IS NOT CONNECTED, THE LIGHT BARRIER INPUT CAN BE USED FOR THE FOLLOWING TOUCH AND/OR SWITCHING FUNCTIONS:

- **NEEDLE POSITION UP-DOWN**
- **NEEDLE POSITION UP**
- **SINGLE STITCH:** Basting stitch
- **FULL STITCH**
- **NEEDLE TO POSITION 2**
- **PRESSER FOOT UP WITH PEDAL IN POSITION 0 (NEUTRAL)**
- **BLOCKING OF MACHINE RUN:** Positioned stop; break contact [N.C.]/make contact [N.O.] selectable
- **BLOCKING OF MACHINE RUN:** Unpositioned stop; break contact [N.C.]/make contact [N.O.] selectable
- **AUTOMATIC SPEED**
- **LIMITED SPEED WHEN USING THE PEDAL**

By means of the internal actuator 12 speed stages are switched. Stage 1 (positioning speed) and stage 12 (maximum speed) can be set. The maximum speed of the set value can be reduced by stages. The basic setting of the maximum speed is not modified. Stages 2...11 (intermediate speeds) adapt automatically to the respective maximum speed.

▪ UNIT CONSISTING OF

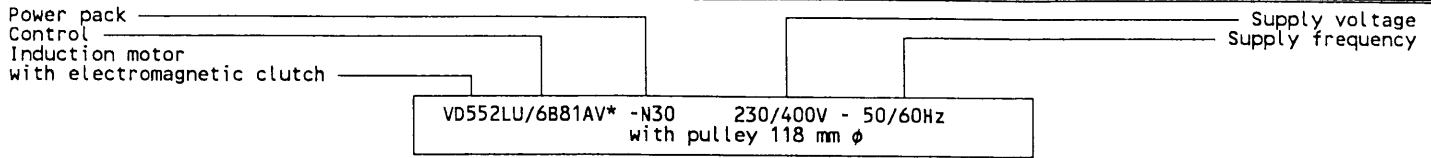
- 1 induction motor with electromagnetic clutch type V....*1)
- 1 electronic control type 6B81AV2227 with power pack type N30
- 1 position transmitter type P5-2
- 1 set of standard accessories B10 (consisting of):
 - 1 belt guard, complete (for pulleys up to 132mmφ)
 - 1 set of hardware
 - 1 motor mounting foot
 - 1 bracket 1 and 2, short
 - 1 documentation
- 1 set of accessories Z3 (consisting of):
 - 1 pitman rod, complete
 - 1 pulley DIN42692-L (size according to request)

▪ SPECIAL ACCESSORIES - SEE REVERSE:

*1) Available motors see last page

▪ SPECIAL ACCESSORIES, AGAINST EXTRA CHARGE:	Part No.
<p>Variocontrol V720 Variocontrol V730 Belt guard (for pulleys up to 180mmφ) Storage unit Memory Box MB001 Storage card Memory Card MC001 Reflection light barrier module LSM001 Reflection light barrier Variolux LS-001-004 (only in conjunction with V730) Solenoid type EM1..(for e.g. presser foot lift, etc.)</p> <p>Extension cable for external actuator, approx. 750 mm long, complete with plug and socket connector Extension cable for external actuator, approx. 1500 mm long, complete with plug and socket connector 5-pin plug with locking screw for the connection of another external actuator External actuator type EB301 with approx. 250 mm connecting cable and 5-pin plug with locking screw External actuator type EB302 (softer spring) with approx. 250 mm connecting cable and 5-pin plug with locking screw Foot control type FB301 with one pedal for standing operation with approx. 1400 mm connecting cable and plug Foot control type FB302 with three pedals for standing operation with approx. 1400 mm connecting cable and plug Potential equalization cord 700 mm long, LIY 2.5 mm², grey with forked cable brackets on both sides Fitting piece for position transmitter Extension cable for position transmitter P5-..., approx. 1100 mm long, complete with plug and socket connector Extension cable for position transmitter P5-..., approx. 315 mm long, complete with plug and socket connector Knee switch type KN3 (pushbutton) with cord of approx. 950 mm length without plug, for switching the functions overleaf Sewing light transformer</p>	<p>5900124 5900125 7960012 7900052 1111602 6100028 6100007 available versions see specification "solenoids" 1111845 1111787 0501278 41.0011 41.0012 4170013 4170018 1100313 0300019 1111584 1111229 58.0013 please indicate line voltage and sewing light voltage (6.3V or 12V)</p>

Example For Ordering VARIOSTOP Positioning Drives (Series 80/81)



* Besides the type designation, the control nameplate indicates the respective state of development (e.g. 6B81AV....Y1) and the program number (e.g. 6B81AV2227..). The state of development is only required in the case of technical inquiries or repairs.

Induction Motors With Electromagnetic Clutch

Type	Power Rating (W)	Speed (RPM)	Frequency (Hz)	Type	Power Rating (W)	Speed (RPM)	Frequency (Hz)	Type	Power Rating (W)	Speed (RPM)	Frequency (Hz)
VD374 VD374U VD374LU	370	1400/ 1700	50/ 60	VD742 VD742U VD742LU	740	2800/ 3400	50/ 60	VE374 VE374LU	370	1400/ 1700	50/ 60
VD552 VD552LU	550	2800/ 3400	50/ 60					VE502 VE502LU	500	2900/ 3500	50/ 60
VD554* VD554U* VD554LU*	550	1400/ 1700	50/ 60	VD1102* VD1102U* VD1102LU*	1100	2800/ 3400	50/ 60	VE602 VE602LU	600	2900/ 3500	50/ 60

* in series with reinforced clutch

Type Code For Induction Motors With Electromagnetic Clutch

Symbol for VARIOSTOP

Reference mark for kind of current
D = three-phase current
E = single-phase alternating current

Reference number for power rating
37 = 370W - available for three-phase current (4 poles) and single-phase alternating current (4 poles)
50 = 500W - available for single-phase alternating current (2 poles)
55 = 550W - available for three-phase current (2 poles or 4 poles)
60 = 600W - available for single-phase alternating current (2 poles)
74 = 740W - available for three-phase current (2 poles)
110 = 1100W - available for three-phase current (2 poles)
Non-standard motors above 1100 W on request

Reference number for number of motor poles
2 = 2 poles (2800 and/or 2900 RPM with 50Hz, 3400 and/or 3500 RPM with 60Hz)
4 = 4-pole (1400 RPM with 50 Hz, 1700 RPM with 60Hz)

Reference mark for sewing light connection
without reference mark = no sewing light connection
L = tapped motor winding: 6.3V or 12V - 20W (restricted use: observe safety regulations!)

Country reference mark(s)
without reference mark = standard version in compliance with VDE
U = CSA approved version (star-delta connected three-phase current motors without sewing light connection, star connected three-phase current motors with sewing light connection for supply voltages up to 230V, all single-phase alternating current motors)

V D 5 5 2 L U

(DOK210995DE)