Introduction

This installation manual is provided for the connection and starting procedure of your cutter.
Further informations like e.g. dimensioned drawings are available in our Printers and Cutters Catalogue or on request. The devices of the type L (0685.74 ...) model series are electric motor driven paper cutters. The paper is cut by two flat knives. Cutting is monitored by an internal microswitch.

Cutting is triggered by an external SPDT contact. The cutters of these model series are available in various versions, depending on the paper width and the operating voltage.

Safety Instructions

This cutter is a quality product manufactured in accordance with established electrical engineering standards. The unit has been delivered from the factory in perfect conformance to safety regulations. To maintain this condition, please observe all notes and warnings in this document!

- Installation and mounting of electrical devices may only be performed by an electrotechnical expert!
- When installing and mounting the cutter, please observe the demands made on the whole facility by the respective device safety regulation.
- The cutter may only be used for the purpose it was designed for – i.e. for cutting paper strips.
- The cutter is designed complying with EN 60950, protection class III. To prevent dangerous structure-borne currents, the equipment has to be run on safety extra-low voltage (SELV) and must be in an area of equipotential bonding.
- The cutter may only be operated within the limits specified by the technical data. Maximum operating voltages must not be exceeded!
- Hengstler Cutters are designed for industrial use.
- Installation environment and cabling have a very significant influence on Electromagnetic Compatibilty (EMC). When installing the cutter sub-assembly in a complete unit, you should seek guarantees from the manufacturer of the complete unit regarding EMC.

Caution: Danger!

- The flat knives has two sharp cutting edges! Therefore never reach into the cutting area, e.g. for removing jammed material! Only use tweezers, tongs or the like for this purpose (do not damage the knife)!
- It is expressively emphasized that the cutter is to be started only when completely installed, i.e. the knife is covered on all sides and the material feed and delivery slot are dimensioned such that, e.g., small children cannot reach into the cutting area.
- Installation or servicing works are to be carried out only when the power supply lines are disconnected from the cutter!
- If safe operation is not possible any more, the cutter has to be set out of order and to be protected against unintended starting.

Operating Instructions

- During the cutting process, there must be no paper feed.
- Please make sure that the cutter remains free from shreds of paper and that the strips must be taken out after cutting and before the next strip is cut.
- Having applied voltage, please ensure that the knives are in home position before paper is fed.
- The cutter doesn't have internal switching (page 2), so the user must install a suitable safety switch to ensure that power is removed from the cutter within a max. of 10 seconds in the event of a break-down, such as a jammed cutter. If this is not done, the motor may be damaged through overheating.
- Do not use cleansing agents containing solvents.
- When cutting linerless material there can be accumulations of glue on the flat knife. This does not affect the cutter´s performance.

Installation Instructions

- The cutter must be installed in the intended unit before connecting the power lines!
- The cutter can be installed in any position. The strips cut off, however, must not collect in the cutting area, thus blocking the flat knife!
- The cutter is attached by means of two M3 screws.
- Install the cutter in the unit/housing such that paper transport is smooth. Electrically connect the cutter to the control system and power supply when these are switched off. You will find the connection diagrams of this model series on page 2 "Connection diagram" and on the units' backs.
- Wire the cutter's connecting lead, such that it does not disturb any function of the assembly and that it will not be damaged or squeezed.

Preparations for use

- Make sure that the cutter is turned off. Slide the through the paper channel in the paper feed direction indicated.
  If the knives are not in home position they will hinder the paper strip from being slid through the channel.

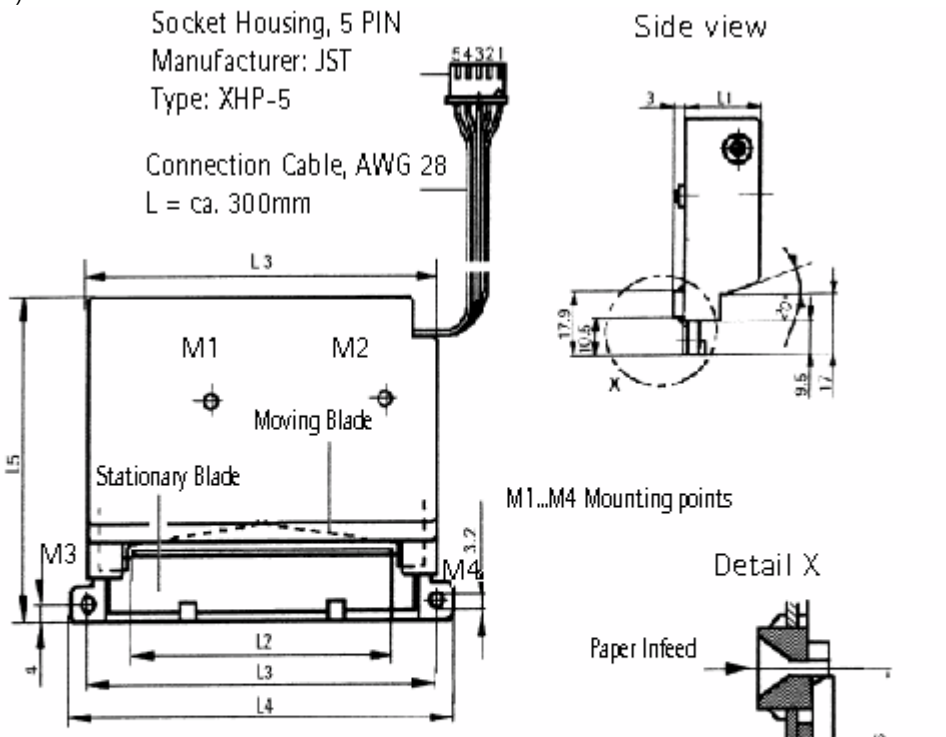
You can put the knives to home position in two different ways:

1. Turn the shaft screw on the outside of the case using a flat screwdriver until the channel is clear.
2. Turn on the assembly and conduct one cutting cycle without paper.

Perform a trial run with paper.
Ensure that the paper strips are fed to the cutter continuously and properly and that the unit cuts them precisely.

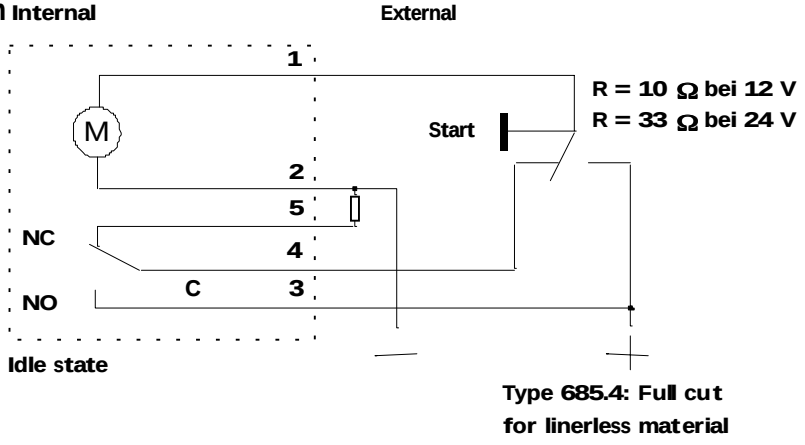
Dimensioned Drawings

(dimensions in mm)



Paper Width	63mm	90mm	118mm
L1	21mm	23mm	24mm
L2	63mm	90mm	118mm
L3	85mm	112mm	140mm
L4	93mm	120mm	148mm
L5	67mm	69,5mm	69,5mm
L6	14mm	15,5mm	15,5mm

Connection Diagram



Technical Data

External start pulse by	SPDT contact
Triggering pulse length	≥ 100 ms, ≤ 150 ms
Cutting cycle max. (full cut/partial cut)	350 ms
Operating voltage V_B	12 VDC/24 VDC (SELV)
Voltage tolerance	± 10 %
Current (at T_u = 20°C)	V_B = 12 V:/ V_B = 24 V:
Making current	2,4 A / 1,2 A
No-load current	0,24 A / 0,12 A
Cutting current	1,0 A / 0,5 A
Failure (e.g. blocked knife)	2,4 A / 1,2 A[1)]
Climate operating temperature storage temperature medium relative humidity	-10 ... + 60°C -40 ... + 70 °C 65% without condensation
Service life (number of cuts)	1,0 Mio with linerless material up to 100 g/m² [2)]
Noice emission distance 30 cm, V_B + 10 % General design	 75 dB (A) as per EN 60950, protection class III
Protection class (IEC 529)	IP 10
Vibration performance (IEC 68-2-6)	10 ... 60 Hz; 0,7 mm p.p. 60 ... 500 Hz; 50 m/s²,
Shock resistance (IEC 68-2-27)	800 m/s²; 6ms
Drop test (DBP DIN ISO 2206, 2233, 2248)	passed
Mounting	2 hubs and 2 plastic inlets for M3 screws
Paper : Linerless material: 98 g/m²/ 101μm (REI 1400) channel width (L)	 63 mm; 90 mm and 118 mm
paper width	≤60 mm, ≤87 mm, ≤ 114 mm
paper weight	60 ... 100 g/m²
Dimensions	85 x 67 x 21 mm; 112 x 69,5 x 24 mm; 140 x 69,5 x 24 mm
Weight	ca. 160 g; ca. 320 g; ca. 360 g
Electrical connection	flat ribbon cable with five cores and JST-plug

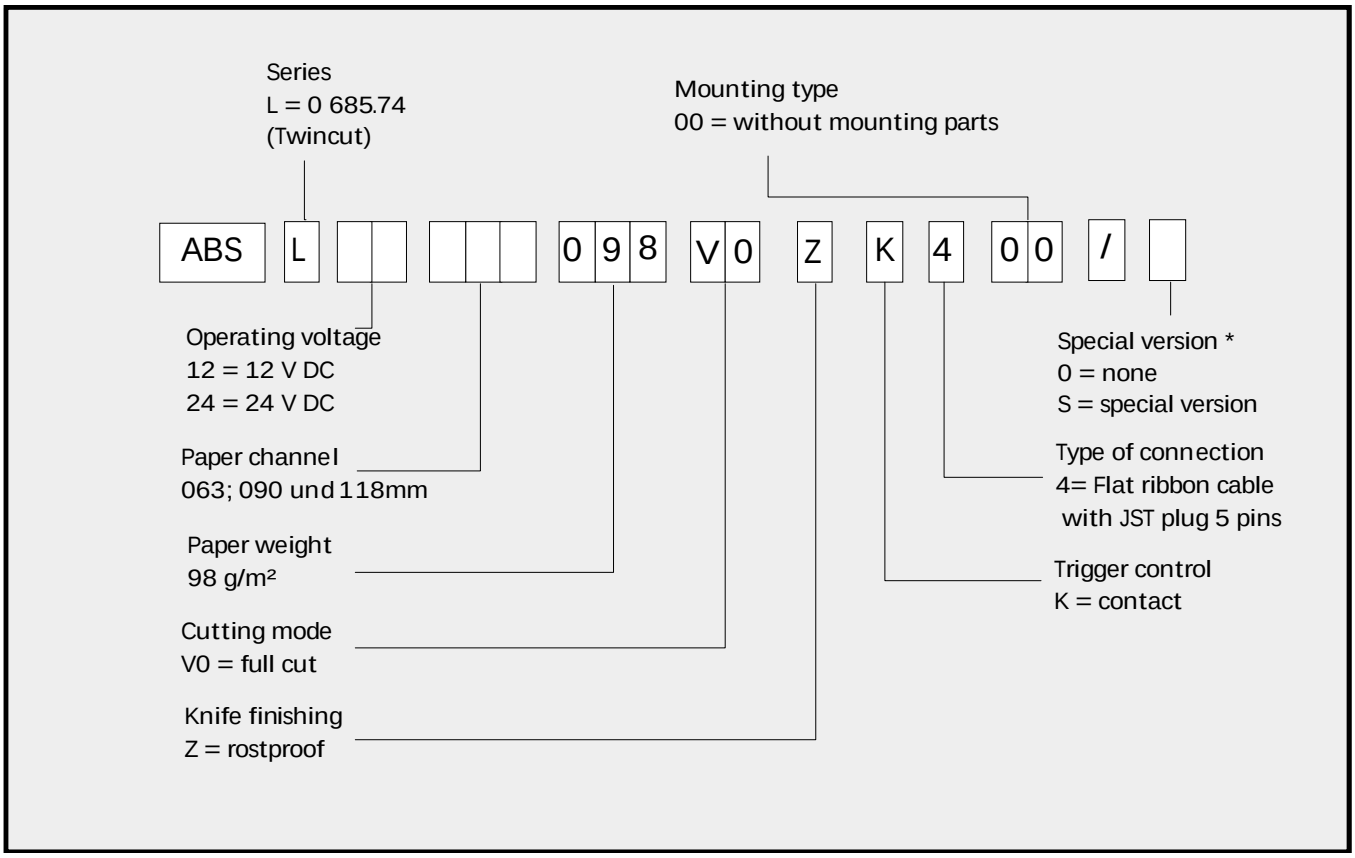
1) If the motor is jammed, the safety switching supplied by the customer must ensure that the power applied to the motor is limited after approx. 10 seconds.
2) Linerless material: 98 g/m² / 0,1 mm; REI 1400

Malfunctions

Result	Cause	Measure
Flat knives do not move	-Operating voltage failure	-Check the power supply
	-Defective connecting cable	-Check the cutter´s connecting cable as well as the plug-in and soldered connections
	-Defective trigger control	-Check mechanical resp. electronic pulsers
	-Rotary knife blocked by paper shreds/ foreign objects	-Switch off the appliance! Remove paper shreds from cutting area! Remove foreign objects!
	-Cause unknown	-Please contact the manufacturer
Flat knives do not return to home position	-Defective reset switch or gear	-Please contact the manufacturer

Ordering Code

(see identification plate)



We apply customer specifications on special versions. If you don´t know these please call us for the specifications, indicationg the cutter´s item number.

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