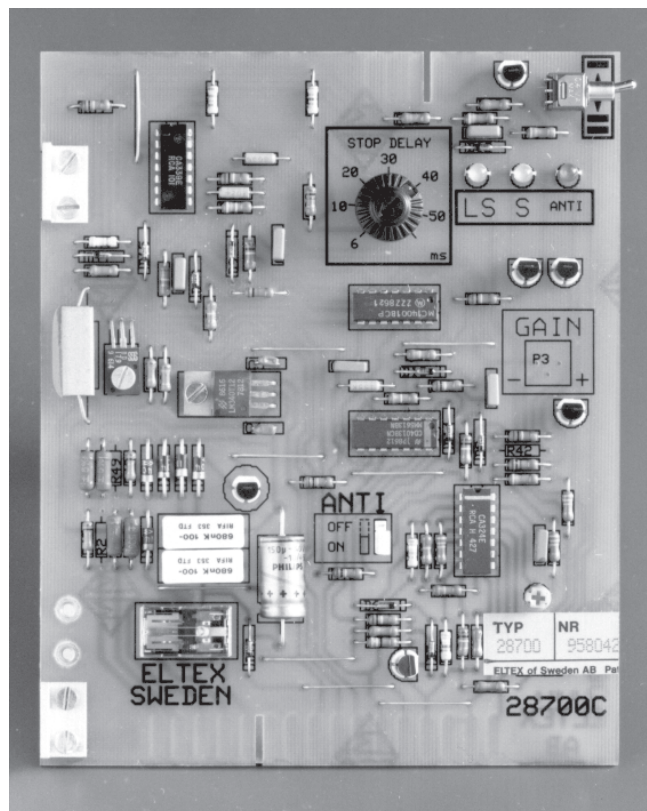


ELTEX control unit 28700

for ELTEX logic current weft sensors

General description

The 28700 electronic board is designed to fit in the control box of a Dornier “DU” type weaving machine. It is used when an analogue weft sensor, for example 2010-2, is replaced by a weft sensor with logic current output (for example E2070 type). The 28700 board can replace all boards with part numbers 25700, 25710 and 26700.



Advantages

When an old board and analogue weft sensor are replaced with 28700 board and E2070 weft sensor, the following advantages will be attained:

- ANTI-function: This weft stop motion can detect if too many yarns are inserted simultaneously by mistake.
- The E2070 weft sensor can easily be set up for many combinations of mixed single and double weft insertions, still with ANTI-function.
- It is also possible to detect three and four wefts moving at the same time, using only one E2070 weft sensor and still with ANTI-function.
- The logic current system is very unsensitive to electrical and mechanical interferences.

- It is possible to use different weft sensors with current logic output, for example E2016, ANTI, E2010-2 and E2070. When a part of the stop motion need to be replaced it can be advisable to update the stop motion with this board and a suitable weft sensor.

Connection

When replacing the old board with the 2870 board, just pull the edge connector off the old board and push it on the new 2870 board.

The weft sensors are connected with a plug and are easy to replace.

Logic current principle

Eltex logic current weft sensors are communicating with the control unit with a DC current signal. When one yarn is moving, the weft sensor is sending a certain amount of current, and this is called a “current unit”. With the switch on the board it can be set to detect one or two current units from the weft sensor.

Functions

1. Stop delay potentiometer

The relay can be delayed when a weft fault occurs so that the weaving machine is stopped in a desired position. The delay time can be adjusted within the range 6-50 ms.

2. Extra connection

The single-double switching can be done via a proximity switch mounted on the weaving machine. In that case a special flange is used and the extra connector is connected here. The single - double switch must be in position II under these conditions (same as on old board).

3. Green LED LS = Light switch

This LED will light up during the sensing periods, i.e. when the flag is interrupting the infrared light beam in the light switch.

4. Green LED S = Weft sensor

If the control unit receives correct amount of current units this diode will light up.

5. Red LED Anti

If too many weft yarns have been moving at the same time during the sensing period, the control unit will receive too many current units, and the machine will be stopped. This LED will then light up. It turns off when the machine is restarted.

6. Single – Double switch

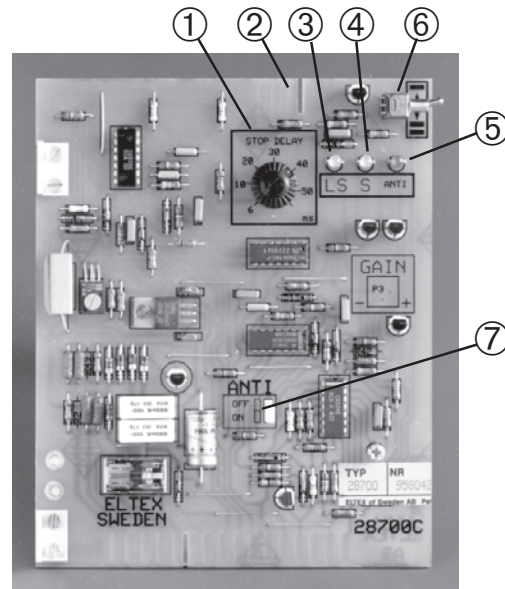
The switch has two positions: I and II.

Position I means that the correct signal is one current unit. If the control unit receives more current from the weft sensor, it will stop and indicate “ANTI-fault”.

Position II means that the correct signal is two current units. If the unit receives less current it will stop the machine. If the unit receives more than two current units it will stop the machine and indicate “ANTI-fault”.

7. ANTI switch

The ANTI-function can be switched off. This is necessary when using the E2010-2 weft sensor. To switch off, move the connection shunt to off position.



Replacing the 2570 or 2670 board with 2870 board

- Pull off the edge connector, fit the new board in the same place as the old one and reconnect the edge connector. If the distance between the mounting brackets are not the same on the old and the new board, it is possible to move the lower bracket to two alternative holes.
- Replace edge connector label with the new label delivered with the board.
- None of the wires on the edge connector has to be rewired.
- The same light switch, flange and yarn guide can be used.
- Set stop delay potentiometer to same value as on the previous board.
- Consult the description of the weft sensor to find out, if it is sending one or two current units, and set the single-double switch accordingly.
- Set the gain potentiometer on the weft sensor.

Note: When ordering a weft sensor, be sure to order the same cable length and connector as on the analogue weft sensor. The weft sensor must also have a gain potentiometer. The E2070 weft sensor with this cable and potentiometer has its own part no.: 16481.



Box 24 • SE-283 21 OSBY • Sweden • Tel. +46 479 53 63 00 • Fax +46 479 53 63 99
E-mail: info@eltex.se • Web: www.eltex.se

ELTEX U.S. INC.
13031 E. Wade Hampton Blvd
Greer, SC 29651
USA
Tel: 864-879-2131
In U.S. toll free: 1-800-421-1156
Fax: 864-879-3734
Email: sales@eltexus.com

ELTEX MFG LTD
Railway Road
Templemore, Co. Tipperary
Ireland
Tel: 504-314 33
Fax: 504-310 02
Email: info@eltex.ie

POLSA-ELTEX S.L.
Zamora, 103 - entlo 3
ES-08018 Barcelona
Spain
Tel: 093-309 00 17
Fax: 093-309 59 45
Email: polsa@infonegocio.com