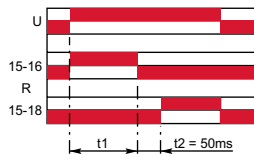


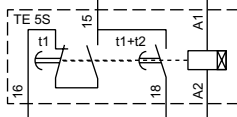
# Accessories for A contactors TE5S electronic timer for wye-delta starters



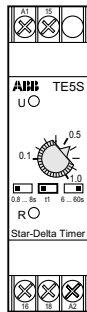
TE5S-\*



Chart



Equivalent diagram



Front face

## Electronic timer

For contactors	Rated control voltage $U_c$ V	Packing piece	Unit weight kg	Catalog number	List price
A9 – AF750	24 AC/DC	1	0.080	TE5S-24	\$ 120
	110 – 115 AC	1	0.080	TE5S-115	
	220 – 230 AC	1	0.080	TE5S-230	

## Application

### Utilization

When used in wye-delta starters, the **TE5S** lags the wye connection and provides a lapse of 50 ms before the switchover to the delta connection.

### Description

According to the type of device chosen, the electronic circuit has a 24 VAC/VDC, 110 – 120 VAC or 220 – 230 VAC supply. An output relay with reversing contact ensures high current switching. A two-position switch allows selection of one of the two time delay ranges: 0.8 to 8 s or 6 to 60 s. The 0.1 to 1.0 adjustable knob allows an initial setting without steps within the previously selected range which can then be adjusted using a stopwatch.

Note: We recommend that you allow for temperature drift for the final adjustment of the time delay setting. Drift:  $-0.2\%$  per  $^{\circ}\text{C}$ . For example, a setting made at  $20^{\circ}\text{C}$  will yield a time delay shorter by  $7\%$  at  $55^{\circ}\text{C}$  in an enclosure. ( $-0.2\%$  per  $^{\circ}\text{C}$  i.e.  $-0.2 \times 35 = -7\%$ ).

The TE5S, which is not affected by these settings, establishes a fixed "lapse" of 50 ms between the opening of contact 15 – 16 and the closing of contact 15 – 18. It is this time delay that prevents from arc short-circuit during wye to delta switching.

### Operation

On energization, the green U indicator light (voltage applied) comes on. Contact 15 – 16 then immediately moves to the closed position.

Count-down of the programmed time immediately commences.

When the time delay has elapsed, contact 15 – 16 opens and at the same time the 50 ms lapse,  $t_2$ , begins after which contact 15 – 18 moves to the closed position. The yellow R indicator light comes on.

On de-energization, the U and R indicator lights go out and, after the 250 ms resetting time, the device is ready for a new cycle.

### Mounting

Mounts on 35mm DIN rail.