



SRE
CONTROLS

SRE-TTR50-00

Version 0.5 (Preliminary)

Installation

This is a preliminary manual. A more complete manual is being prepared. Call SRE Controls if you wish a copy or if you want clarification on any of the instructions in this manual.

The SRE-TTR50-00 tight turn reverser (TTR) allows a dual motor truck with the motors wired in parallel reverses the direction of travel of the inside wheel on a tight turn. This manual describes how to install the TTR with an SE325. See also the D-Ctr application note for an explanation on how to set up the 'D' contactor. The D-Ctr application note also explains the differences between the various dual motor trucks.

There are two types of tight turn switch configurations. One configuration uses two switches in each direction as the wheel is turned. This is wired as is shown in the diagram on the following page. The first switch is wired to the 'Drop' input and the second switch is wired to the 'Rev' input. When the 'Drop' switch is closed the inside wheel will cut out. When the 'Rev' input closed the inside wheel will reverse.

The second configuration has only one turn switch in each direction. In this case wire the switch to both the 'Drop' and 'Rev' inputs (I.E. Left turn switch to 'Left Drop' and Left Rev').

The rest of the instructions apply to both configurations.

Plug Dt, A, and AF on the TTR are left unconnected. Limit 1 and Limit 2 are wire to the limit switches on the SE325. Program the SE325 (with the ProBit) to have appropriate cutback levels for the limits. Limit 1 will be active when one of the 'Drop' switches is closed and Limit 2 will be active when one of the 'Rev' switches is closed. This can (and should) be used to slow the truck down in a tight turn.

The yellow wire from the controller (normally the field weakening contactor) should be connected to D-Ctr-In on the TTR. Note: The Field Weakening Contactor should be programmed as a D Contactor (see the 'D-Ctr' application note).

The contactors should be connected as shown in the diagram. There is a light labeled 'Contactor Overcurrent' on the TTR. If a contactor draws more than 2A this will light up and the TTR will be disabled. The only way to reset is to turn the key off and back on again. The TTR cannot communicate this information to the controller so the ProBit will not be able to identify the fault as a contactor overcurrent.

Wire B+ to the TTR from the key switch. Connect B- to the box from a convenient point in the system. Note: The only point on the SE325 that has a suitable B- connection is the B- bus bar.