



SIRIUS 3R Contactor Kits

Reversing Contactor Combinations for Self-Assembly

Components for self-assembly

Assembly kits for all sizes are available for customer self-assembly of reversing contactors. See pages 247 and 248 for diagrams and selection.

Contactors, overload relays, mechanical interlocks, and any additional auxiliary contact blocks must be ordered separately.

The following points should be noted for 3RT101 contactors in reversing combinations. For two-wire control schemes, use contactors with one NC auxiliary contact for the electrical interlock. For three-wire control schemes, use contactors with one NC auxiliary contact for the electrical interlock. In addition, at least one NO auxiliary block per contactor must be added as a holding contact for three-wire control. It is important to note that when using the wiring modules in the assembly kits for reversing combinations, you must use 3RT101 contactors with a NC contact built into the unit for proper wiring of the electrical interlock.

The following points should be noted for 3RT102, 3RT103, and 3RT104 contactors in reversing combinations. Mechanical interlocks are available for these contactors in a top mount version and a side mount version. The side mount version is placed between the two contactors and, unlike the top mount version, has two NC auxiliary contacts built-in for electrical interlocking. Thus, for two-wire control

schemes, all that is needed is the side mount mechanical interlock with built-in electrical interlocks. For three-wire control, the side mount mechanical interlock with built-in electrical interlocks is recommended along with one additional NO auxiliary contact block per contactor as a holding contact. Either the front mount or the side mount auxiliary contacts (mounted to the outside of each contactor) can be used for the NO holding contacts.

If a front mounted mechanical interlock is used for 3RT102 and 3RT103 contactors, two snap-in location holes for single-pole auxiliary contact blocks will remain unused on each contactor. For 3RT104 contactors, three snap-in location holes will remain unused on each contactor.

The maximum number of auxiliary contacts per contactor stated on page 238 must not be exceeded.

IMPORTANT: When 3RT103 and 3RT104 are combined with a front mount mechanical interlock, the assembly kits 3RA1933-2A and 3RA1943-2A cannot be used.

Surge suppression

All contactor combinations can be fitted with RC elements or varistors for suppressing opening voltage surges in the coil.

As with individual contactors, the surge suppressors can either be plugged into the top of 3RT101 contactors or attached to the top or bottom of 3RT102, 3RT103, and 3RT104 contactors.



Reversing contactor combination

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IEC Control

Wye-Delta Contactor Combinations for Self-Assembly Description

Components for self-assembly

Assembly kits with wiring modules and, if necessary, mechanical connectors are available for contactor combinations for wye-delta starting. Contactors, overload relays, wye-delta timing relays, and, if required, terminal extenders, mechanical interlocks, and baseplates must be ordered separately.

The wiring modules for 3RT101 and 3RT102 wye-delta combinations contain the top and bottom main power pole connections between the line and the delta contactors (top) and between the delta and the wye contactors (bottom).

For the 3RT103 and 3RT104 wye-delta combinations, only the bottom main power pole connection between the delta and the wye contactors is included in the wiring module, owing to the double infeed.

Motor protection

Overload relays can be attached to the line contactor or separately installed.

IMPORTANT: The overload relay must be set to 0.58 times the motor rated current (FLA).

Surge suppression

All contactor combinations can be fitted with RC elements or varistors for suppressing the opening voltage surges of the coil. As with the individual contactors, the surge suppressors can be either plugged into the front of the contactors (3RT101) or attached to the top or bottom of the contactors (3RT102, 3RT103, and 3RT104).