

SIRIUS motor contactors with fail-safe input

Power range 30 HP to 400 HP (@ 480V)

Sales slides

Simply safe switching

Contactors with fail-safe input (F-PLC)

The F-PLC contactors constitute an extension and further development of the SIRIUS modular system, serving to promote safe switching.

Their fail-safe inputs enable SIL 2 (IEC 62061) or PL c (ISO 13849-1) to be achieved with just one contactor. SIL 3 or PL e can be achieved by using two contactors in series.

The Safety Evaluation function, which is integrated in the TIA Selection Tool (TST), helps you quickly and reliably evaluate your machine with regard to its safety functions. (Evaluation according to the standards IEC 62061 and ISO 13849-1)

3RT1.5 – 3RT1.7



3RT203 - 3RT204



Highlights

Contactors with fail-safe input (F-PLC)

Digital input available



Contactors with certified F-PLC input for control from fail-safe control systems, standard control systems, and safety relays

Safety-oriented applications



With one contactor:

- SIL 2 (IEC 62061) or
- PL c (ISO 13849-1)

With two contactors:

- SIL 3 (IEC 62061) or
- PL e (ISO 13849-1)

3RT1.5 - 3RT1.7



3RT203 - 3RT204



Time, cost and space savings



Reduced wiring and configuration effort due to the omission of coupling level

Simple calculation and documentation by Safety Evaluation @ TST

Auxiliary contact and accessories



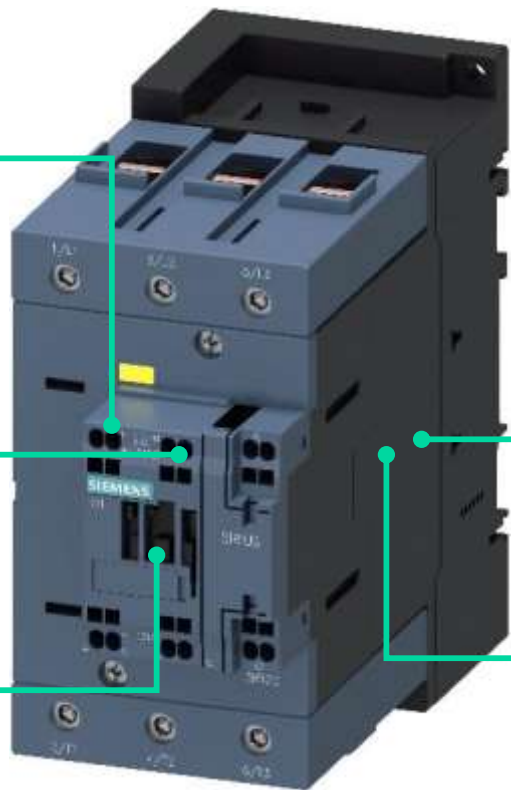
The integrated normally closed contact can be used as a mirror contact in feedback circuit monitoring
Unrestricted use of standard accessories

Product details 3RT203 and 3RT204 using 3RT2045-3SB30 as example

Fail-safe input (F-PLC)

Auxiliary contact 1 NC
permanently integrated

Coupling point front-side auxiliary switch



- + 3RT203 and 3RT204 available with spring-loaded or screw terminal
- + AC/DC coil

Coupling point lateral auxiliary switch

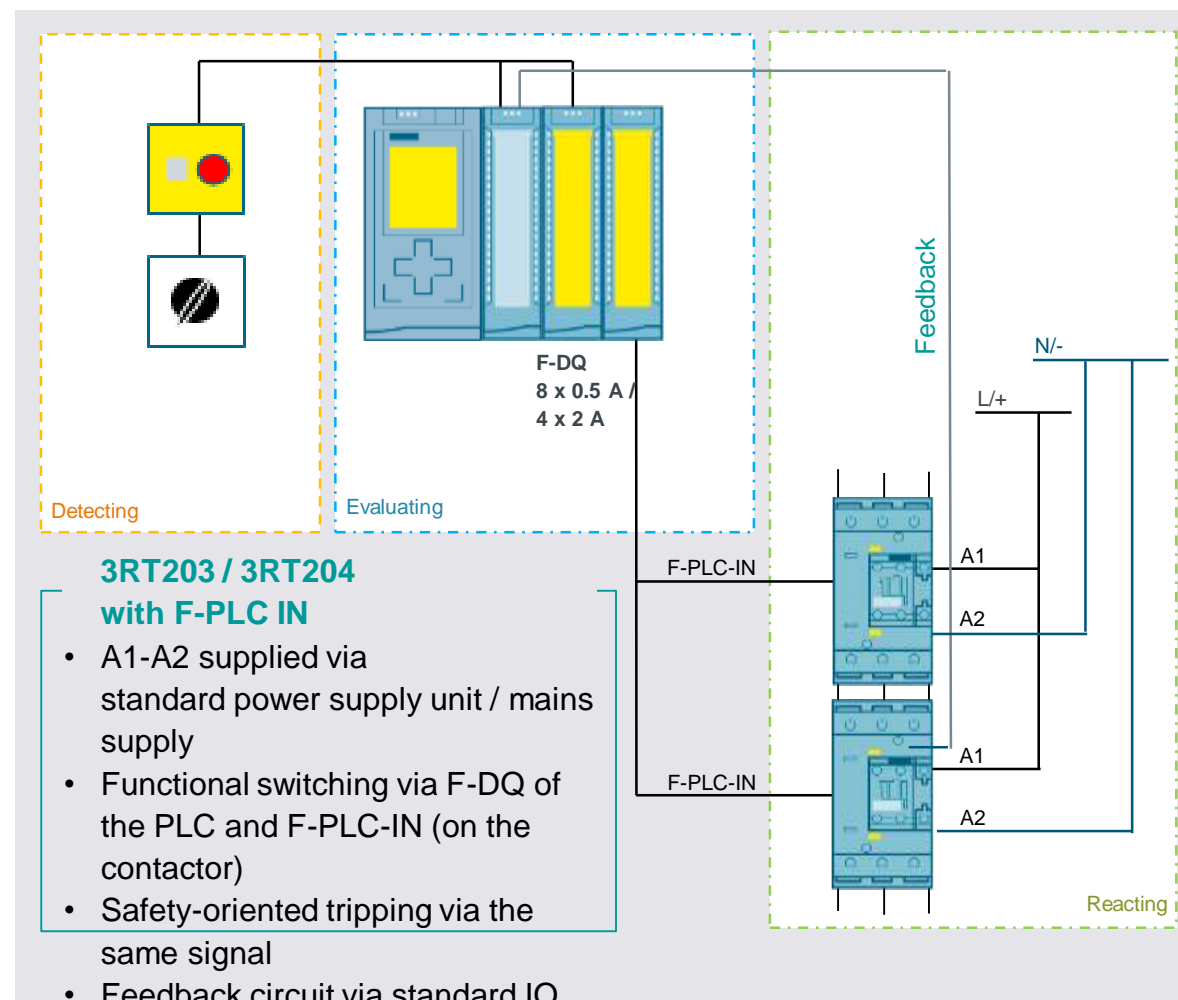
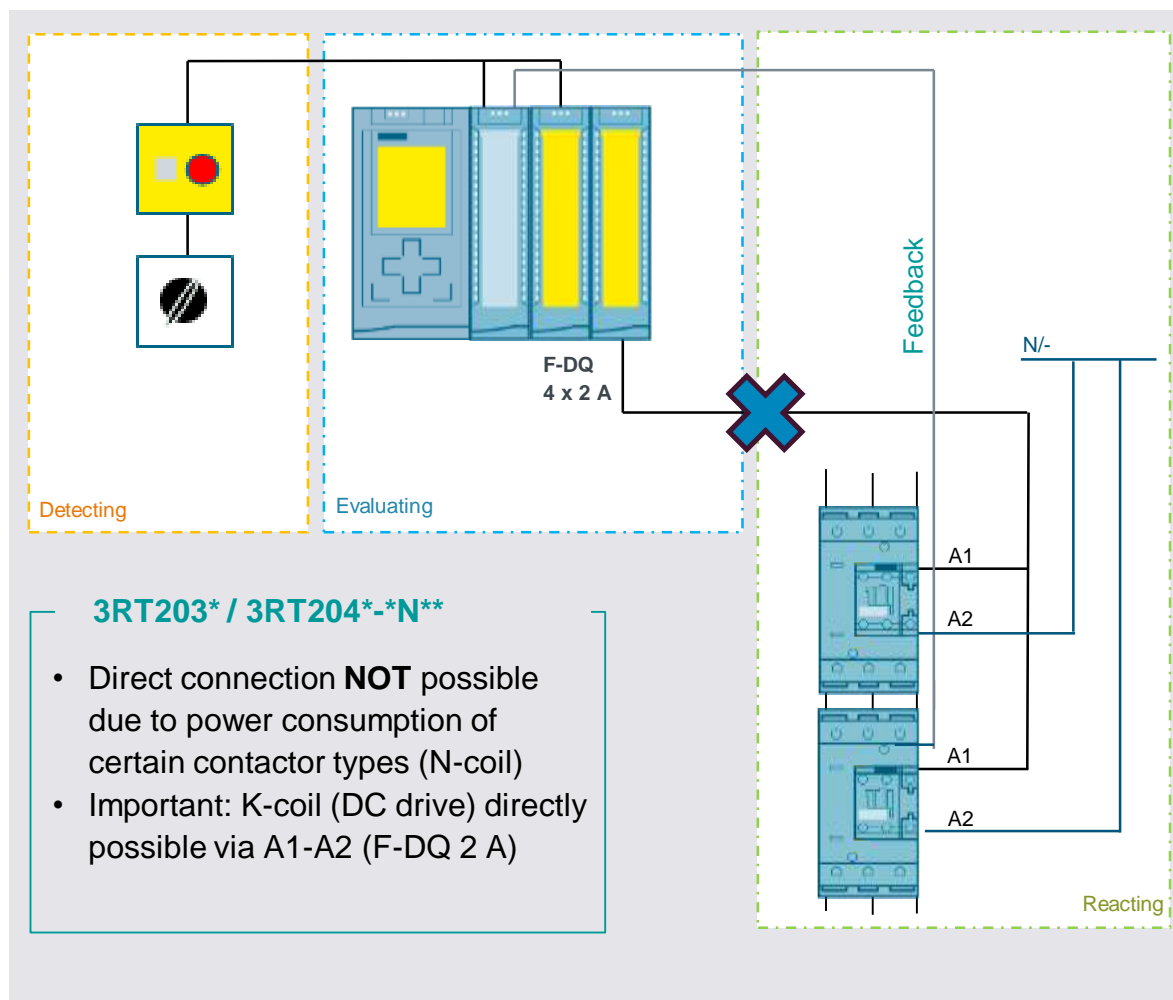
Integrated varistor

Details of SIRIUS motor contactors with fail-safe input

Technical highlights		Customer benefit
Three-pole motor contactors from 30 to 400 HP with direct control from the control system	▶	Contactors with certified, digital F-PLC input for control from fail-safe control systems, standard control systems, or safety relays
No additional coupling level required	▶	Reduced wiring and configuration effort
Suitable for safety-oriented applications up to SIL 3 / PI e	▶	With one contactor: SIL 2 With two contactors in series: SIL 3
Accessories for SIRIUS modular system	▶	Unrestricted use of standard accessories
Safety Evaluation @ TST	▶	Simple calculation and documentation
Integrated normally closed contact	▶	Can be used as a mirror contact in feedback circuit monitoring
Can be used at semiconductor outputs from 100 mA (e.g. 3SK1, 3SK2, ET 200SP F-DQ 8 x 0.5 A)	▶	Can be used in combination with low-wear and less expensive semiconductor outputs

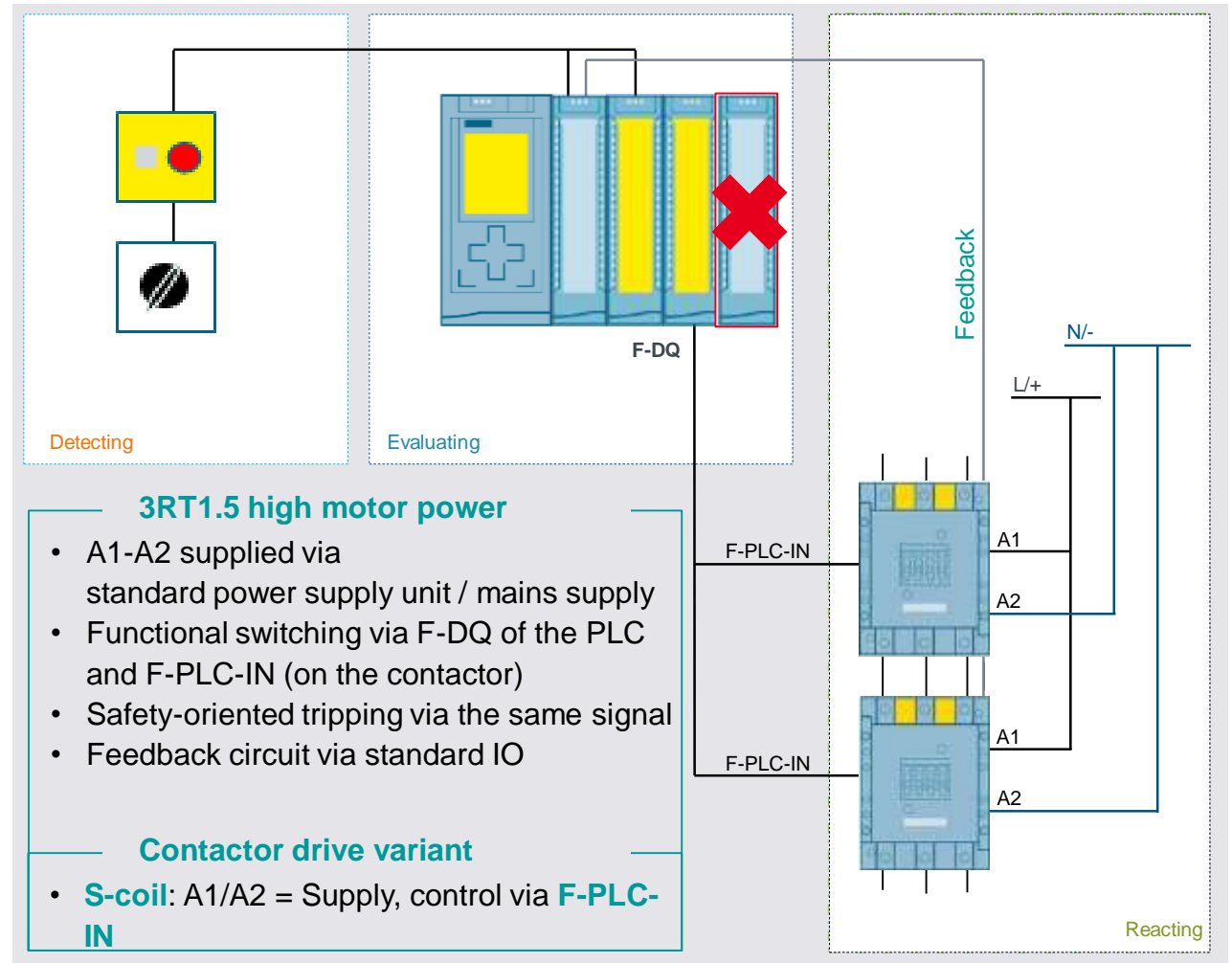
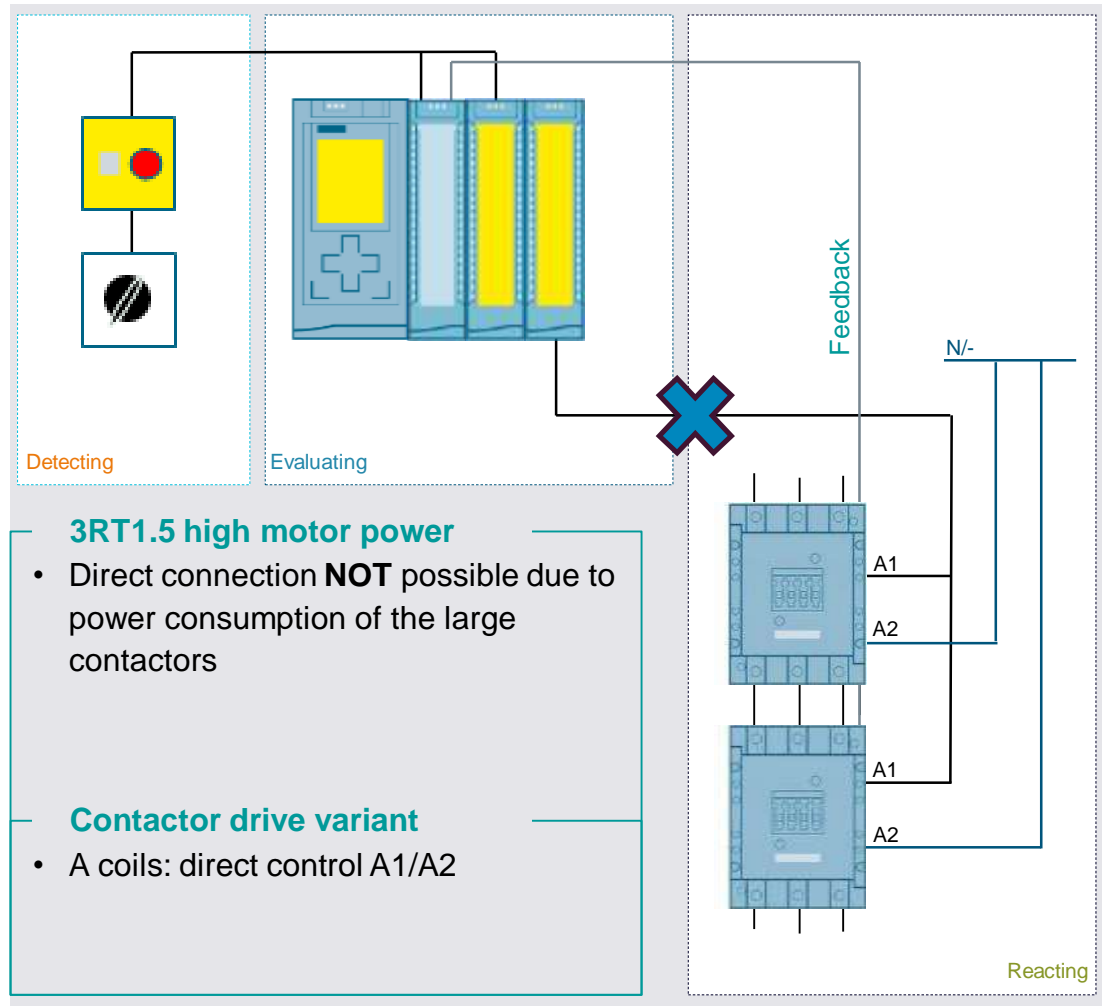
Contactor with fail-safe control

Wiring diagram 3RT203 and 3RT204



Contactor with fail-safe control

Wiring diagram 3RT1.5 and 3RT1.7



Overview of product data for motor contactors with fail-safe input 3RT203 and 3RT204

Power 50 Hz / 60 Hz 480 V [HP]	AC-2/ AC-3 t_u : 60 °C I_e up to 480 V [A]	U_s DC or AC 50 Hz/60 Hz [V]	Article number Screw terminals and spring-loaded terminals
30	41	21...33 83...150 175...280	3RT2035-.SB30 3RT2035-.SF30 3RT2035-.SP30
40	50	21...33 83...150 175...280	3RT2036-.SB30 3RT2036-.SF30 3RT2036-.SP30
50	65	21...33 83...150 175...280	3RT2037-.SB30 3RT2037-.SF30 3RT2037-.SP30
50	80	21...33 83...150 175...280	3RT2038-.SB30 3RT2038-.SF30 3RT2038-.SP30

Power 50 Hz / 60 Hz 480 V [HP]	AC-2/ AC-3 t_u : 60 °C I_e up to 480 V [A]	U_s DC or AC 50 Hz/60 Hz [V]	Article number Screw terminals and spring-loaded terminals
60	80	21...33 83...150 175...280	3RT2045-.SB30 3RT2045-.SF30 3RT2045-.SP30
75	95	21...33 83...150 175...280	3RT2046-.SB30 3RT2046-.SF30 3RT2046-.SP30
75	110	21...33 83...150 175...280	3RT2047-.SB30 3RT2047-.SF30 3RT2047-.SP30



Overview of product data for motor contactors with fail-safe input 3RT1.5 and 3RT1.7

Power 50 Hz 480 V [HP]	AC-3 t_u : 60 °C I_e up to 480 V [A]	U_e DC or AC 50 Hz/60 Hz [V]	Article number Screw terminals with detachable/non- detachable auxiliary switch
100	115	96...127 200...277	3RT1054-6SF36/ -3PA0 3RT1054-6SP36/ -3PA0
125	150	96...127 200...277	3RT1055-6SF36/ -3PA0 3RT1055-GSP36/ -3PA0
150	185	96...127 200...277	3RT1056-6SF36/ -3PA0 3RT1056-6SP36/ -3PA0
150	225	96...127 200...277	3RT1064-6SF36/ -3PA0 3RT1064-6SP36/ -3PA0
200	265	96...127 200...277	3RT1065-6SF36/ -3PA0 3RT1065-6SP36/ -3PA0
250	300	96...127 200...277	3RT1066-6SF36/ -3PA0 3RT1066-6SP36/ -3PA0

Power 50 Hz 480 V [HP]	AC-3 t_u : 60 °C I_e up to 480 V [A]	U_e DC or AC 50 Hz/60 Hz [V]	Article number Screw terminals with detachable/non- detachable auxiliary switch
300	400	96...127 200...277	3RT1075-6SF36/ -3PA0 3RT1075-6SP36/ -3PA0
400	500	96...127 200...277	3RT1076-6SF36/ -3PA0 3RT1076-6SP36/ -3PA0



Useful links

Industry Mall



SIOS



Marketing Internet

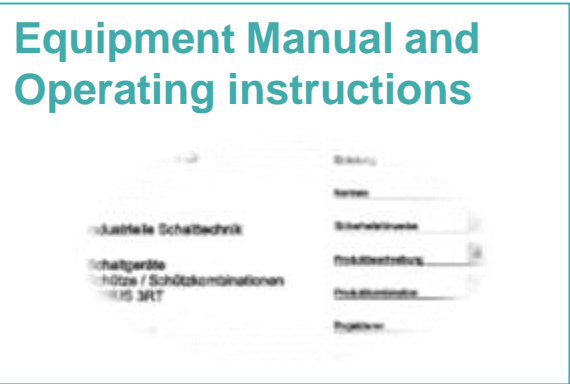
SIRIUS modular system



SIAM Application Manual



Equipment Manual and Operating instructions



TIA Selection Tool

Quick Easy Smart





SI EP Marketing Intranet – Marketing overview

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