SIEMENS

Data sheet 3RU2136-4FB0



Figure similar

OVERLOAD RELAY 28...40 A FOR MOTOR PROTECTION SIZE S2, CLASS 10 FOR MOUNTING ONTO CONTACTORS MAIN CIRCUIT: SCREW TERMINAL AUX. CIRCUIT: SCREW TERMINAL MANUAL-AUTOMATIC-RESET.

| product brandname | SIRIUS |
|--------------------------|------------------------|
| Product designation | thermal overload relay |
| Product type designation | 3RU2 |
| | |
| General technical data | |
| Size of overload relay | S2 |

| General technical data | |
|--|-------|
| Size of overload relay | S2 |
| Size of contactor can be combined company-specific | S2 |
| Power loss [W] total typical | 11 W |
| Insulation voltage with degree of pollution 3 rated value | 690 V |
| Surge voltage resistance rated value | 6 kV |
| maximum permissible voltage for safe isolation | |
| in networks with grounded star point between auxiliary and auxiliary circuit | 415 V |
| in networks with grounded star point between auxiliary and auxiliary circuit | 415 V |
| in networks with grounded star point between main and auxiliary circuit | 690 V |

| Protection class IP • on the front • of the terminal Recovery time • after overload trip with automatic reset typical • after overload trip with memote-reset • after overload trip with manual reset 10 min Type of protection Ex e Protection against electrical shock finger-safe when touched vertically from front acc. to IEC 60529 Equipment marking acc. to DIN EN 81348-2 F Ambient conditions Ambient emperature • during operation • during storage • during transport • during storage • during transport Adjustable pick-up value current droutt dependent overload release Operating voltage • rated value • at AC-3 rated value maximum Operating frequeny rated value * at AC-3 rated value • at AC-3 rated value • of auxiliary circuit Design of the auxiliary switch Number of NC contacts • for auxiliary contacts • for aux | in networks with grounded star point between main and auxiliary circuit | 690 V | |
|--|---|--|--|
| e of the terminal P000 Recovery time • after overload trip with automatic reset typical of after overload trip with remote-reset of 10 min Type of protection Ex e • after overload trip with manual reset of 10 min Type of protection Ex e Protection against electrical shock finger-safe when touched vertically from front acc. to IEC 60529 Fambient conditions Ambient conditions Ambient temperature • during operation of uning operation of uning storage of uning transport of unin | Protection class IP | | |
| Recovery time • after overload trip with automatic reset typical • after overload trip with remote-reset • after overload trip with manual reset Type of protection Ex e Protection against electrical shock finger-safe when touched vertically from front acc. to IEC 60529 Equipment marking acc. to DIN EN 81346-2 F Arbient conditions Ambient temperature • during operation • during storage • during peration • during storage • during transport - 55 +80 °C - 55 +80 °C Temperature compensation Adjustable pick-up value current circuit 3 Adjustable pick-up value current of the current-dependent overload release Operating voltage • rated value • at AC-3 rated value maximum 690 V Operating frequency rated value • at AC-3 rated value maximum 690 V Operating frequency rated value 10 min Ex e F Arbient coverload trip with manual reset 1 a minument of NC contacts • for auxiliary contacts • for auxil | • on the front | IP20 | |
| after overload trip with emote-reset 10 min after overload trip with remote-reset 10 min after overload trip with remote-reset 10 min Type of protection Ex e Protection against electrical shock finger-safe when touched vertically from front acc. to IEC 60529 Equipment marking acc. to DIN EN 81346-2 F Ambient conditions Ambient temperature during operation | of the terminal | IP00 | |
| after overload trip with remote-reset after overload trip with manual reset after overload trip with manual reset 10 min Type of protection Ex e Protection against electrical shock finger-safe when touched vertically from front acc. to IEC 60529 Equipment marking acc. to DIN EN 81346-2 F Ambient conditions Ambient temperature and during operation adding storage and during transport -55 +80 °C -65 +60 °C -6 | Recovery time | | |
| • after overload trip with manual reset Type of protection Ex e Protection against electrical shock Equipment marking acc. to DIN EN 81346-2 F Ambient conditions Ambient temperature • during operation • during storage • during transport Temperature compensation Adjustable pick-up value current of the current-dependent overload release Operating requency rated value • at AC-3 rated value maximum Operating frequency rated value Design of the auxiliary switch Number of NO contacts • for auxiliary contacts | after overload trip with automatic reset typical | 10 min | |
| Type of protection Protection against electrical shock Equipment marking acc. to DIN EN 81346-2 Ambient conditions Ambient temperature • during operation • during storage • during transport Temperature compensation • during transport • during transport • during transport • during transport Temperature compensation Adjustable pick-up value current of the current-dependent overload release Operating voltage • at AC-3 rated value maximum Operating frequency rated value • at AC-3 rated value • at Acutiliary circuit Design of the auxiliary switch Number of NC contacts • for auxiliary contacts • for auxil | after overload trip with remote-reset | 10 min | |
| Protection against electrical shock Equipment marking acc. to DIN EN 81346-2 Ambient conditions Ambient temperature • during operation • during storage • during transport Temperature compensation • during transport • during transport • during transport • during transport Temperature compensation Adjustable pick-up value current of the current-dependent overload release Operating voltage • rated value • at AC-3 rated value maximum Operating frequency rated value Operating current rated value • for auxiliary circuit Design of the auxiliary switch Number of NO contacts • for auxiliary contacts • for a | after overload trip with manual reset | 10 min | |
| Equipment marking acc. to DIN EN 81346-2 Ambient conditions Ambient temperature • during operation • during storage • during transport Temperature compensation -40 +70 °C • during transport -55 +80 °C Temperature compensation Ad +60 °C Main circuit Number of poles for main current circuit 3 Adjustable pick-up value current of the current-dependent overload release Operating voltage • rated value • at AC-3 rated value maximum Operating frequency rated value Operating current rated value 40 A Auxiliary circuit Design of the auxiliary switch Number of NC contacts • for auxiliary contacts • for auxiliary contacts • for auxiliary contacts • for auxiliary contacts • for auxiliary contacts • for auxiliary contacts • for auxiliary contacts • for auxiliary con | Type of protection | Ex e | |
| Ambient conditions Ambient temperature • during operation • during storage • during transport -55 +80 °C • during transport -55 +80 °C Temperature compensation -40 +60 °C Main circuit Number of poles for main current circuit 3 Adjustable pick-up value current of the current-dependent overload release Operating voltage • rated value • at AC-3 rated value maximum Operating frequency rated value 50 60 Hz Operating current rated value 40 A Auxiliary circuit Design of the auxiliary switch Number of NC contacts • for auxiliary contacts • for auxiliary contacts 1 Note Number of NO contacts • for auxiliary contacts • for auxiliary contacts • for auxiliary contacts • for auxiliary contacts • for for auxiliary contacts • for for auxiliary contacts • for auxiliary contacts • for for auxiliary contacts | Protection against electrical shock | finger-safe when touched vertically from front acc. to IEC 60529 | |
| Amblent temperature • during operation • during storage • during transport -55 +80 °C -55 +80 °C Temperature compensation -40 +60 °C Main circuit Number of poles for main current circuit Adjustable pick-up value current of the current-dependent overload release Operating voltage • rated value • at AC-3 rated value maximum 690 V Operating frequency rated value 50 60 Hz Operating current rated value 40 A Auxiliary circuit Design of the auxiliary switch Number of NC contacts • for auxiliary contacts • for auxiliary contacts - Note Number of NO contacts • for auxiliary contacts - Note Number of CO contacts • for auxiliary co | Equipment marking acc. to DIN EN 81346-2 | F | |
| during operation during storage during transport 55 +80 °C during transport 55 +80 °C Temperature compensation 40 +60 °C Main circuit Number of poles for main current circuit 3 Adjustable pick-up value current of the current-dependent overload release Operating voltage rated value at AC-3 rated value maximum 690 V operating current rated value 50 60 Hz Operating current rated value 40 A Auxiliary circuit Design of the auxiliary switch integrated Number of NC contacts for auxiliary contacts for auxiliary contacts for contactor disconnection Number of NO contacts for cauxiliary contacts for cauxiliary contacts for auxiliary contacts at AC-15 at 24 V at 110 V | Ambient conditions | | |
| during storage during transport during | Ambient temperature | | |
| • during transport -55 +80 °C Temperature compensation Main circuit Number of poles for main current circuit 3 Adjustable pick-up value current of the current-dependent overload release Operating voltage • rated value • at AC-3 rated value maximum Operating current rated value 50 60 Hz Operating current rated value Design of the auxiliary switch Number of NC contacts • for auxiliary contacts • for auxiliary co | during operation | -40 +70 °C | |
| Temperature compensation -40 +60 °C Main circuit Number of poles for main current circuit 3 Adjustable pick-up value current of the current-dependent overload release Operating voltage • rated value • at AC-3 rated value maximum 690 V Operating frequency rated value Operating current rated value 50 60 Hz Operating current rated value 40 A Auxiliary circuit Design of the auxiliary switch Number of NC contacts • for auxiliary contacts • for auxiliary contacts • for auxiliary contacts • for auxiliary contacts • for auxiliary contacts • for auxiliary contacts • for auxiliary contacts • for auxiliary contacts • for auxiliary co | during storage | -55 +80 °C | |
| Number of poles for main current circuit Adjustable pick-up value current of the current-dependent overload release Operating voltage • rated value • at AC-3 rated value maximum Operating frequency rated value 50 60 Hz Operating current rated value 40 A Auxiliary circuit Design of the auxiliary switch Number of NC contacts • for auxiliary contacts - Note Number of NO contacts • for auxiliary contacts • for auxili | during transport | -55 +80 °C | |
| Number of poles for main current circuit Adjustable pick-up value current of the current-dependent overload release Operating voltage • rated value • at AC-3 rated value maximum Operating frequency rated value 50 60 Hz Operating current rated value 40 A Auxiliary circuit Design of the auxiliary switch Number of NC contacts • for auxiliary contacts - Note Number of NO contacts • for auxiliary contacts • for auxili | Temperature compensation | -40 +60 °C | |
| Number of poles for main current circuit Adjustable pick-up value current of the current-dependent overload release Operating voltage • rated value • at AC-3 rated value maximum Operating frequency rated value 50 60 Hz Operating current rated value 40 A Auxiliary circuit Design of the auxiliary switch Number of NC contacts • for auxiliary contacts - Note Number of NO contacts • for auxiliary contacts • for auxili | Main circuit | | |
| dependent overload release Operating voltage • rated value • at AC-3 rated value maximum Operating frequency rated value 50 60 Hz Operating current rated value 40 A Auxiliary circuit Design of the auxiliary switch Number of NC contacts • for auxiliary contacts 1 | | 3 | |
| Operating voltage • rated value • at AC-3 rated value maximum 690 V Operating frequency rated value 50 60 Hz Operating current rated value 40 A Auxiliary circuit Design of the auxiliary switch Number of NC contacts • for auxiliary contacts 1 | Adjustable pick-up value current of the current- | 28 40 A | |
| rated value at AC-3 rated value maximum 690 V Operating frequency rated value 50 60 Hz Operating current rated value Auxiliary circuit Design of the auxiliary switch integrated Number of NC contacts for auxiliary contacts - Note for contactor disconnection Number of NO contacts for auxiliary contacts for auxiliary contacts for auxiliary contacts for auxiliary contacts for auxiliary contacts for auxiliary contacts for auxiliary contacts of or auxiliary contacts of or auxiliary contacts of auxiliary contacts at AC-15 of at 24 V of at 110 V | dependent overload release | | |
| at AC-3 rated value maximum Operating frequency rated value 50 60 Hz Operating current rated value 40 A Auxiliary circuit Design of the auxiliary switch Number of NC contacts • for auxiliary contacts • for auxili | Operating voltage | | |
| Operating frequency rated value Operating current rated value Auxiliary circuit Design of the auxiliary switch Number of NC contacts • for auxiliary contacts Operating current of auxiliary contacts at AC-15 • at 24 V • at 110 V 3 A | • rated value | 690 V | |
| Operating current rated value Auxiliary circuit Design of the auxiliary switch integrated Number of NC contacts • for auxiliary contacts - Note for contactor disconnection Number of NO contacts • for auxiliary contacts - Note for message "Tripped" Number of CO contacts • for auxiliary contacts • at 24 V • at 110 V 3 A | at AC-3 rated value maximum | 690 V | |
| Auxiliary circuit Design of the auxiliary switch integrated Number of NC contacts • for auxiliary contacts 1 — Note for contactor disconnection Number of NO contacts • for auxiliary contacts 1 — Note for message "Tripped" Number of CO contacts • for auxiliary contacts 0 Operating current of auxiliary contacts at AC-15 • at 24 V 3 A • at 110 V 3 A | Operating frequency rated value | 50 60 Hz | |
| Design of the auxiliary switch Number of NC contacts • for auxiliary contacts — Note Number of NO contacts • for auxiliary contacts • for auxiliary contacts — Note for message "Tripped" Number of CO contacts • for auxiliary contacts • at 24 V • at 110 V 3 A | Operating current rated value | 40 A | |
| Number of NC contacts 1 — Note for contactor disconnection Number of NO contacts 1 • for auxiliary contacts 1 — Note for message "Tripped" Number of CO contacts 0 • for auxiliary contacts 0 Operating current of auxiliary contacts at AC-15 3 A • at 24 V 3 A • at 110 V 3 A | Auxiliary circuit | | |
| for auxiliary contacts — Note | | integrated | |
| Note Number of NO contacts ● for auxiliary contacts I Number of CO contacts ● for auxiliary contacts ● for auxiliary contacts I o Operating current of auxiliary contacts at AC-15 ● at 24 V ● at 110 V 3 A 3 A | Number of NC contacts | | |
| Number of NO contacts • for auxiliary contacts — Note Number of CO contacts • for auxiliary contacts • for auxiliary contacts • at 24 V • at 110 V Auxiliary contacts 3 A 3 A | • for auxiliary contacts | 1 | |
| for auxiliary contacts — Note | — Note | for contactor disconnection | |
| — Note for message "Tripped" Number of CO contacts | Number of NO contacts | | |
| Number of CO contacts • for auxiliary contacts Operating current of auxiliary contacts at AC-15 • at 24 V • at 110 V 3 A 3 A | • for auxiliary contacts | 1 | |
| for auxiliary contacts Operating current of auxiliary contacts at AC-15 at 24 V at 110 V 3 A 3 A | — Note | for message "Tripped" | |
| Operating current of auxiliary contacts at AC-15 • at 24 V • at 110 V 3 A 3 A | Number of CO contacts | | |
| at 24 V at 110 V 3 A 3 A | • for auxiliary contacts | 0 | |
| • at 110 V 3 A | Operating current of auxiliary contacts at AC-15 | | |
| | ● at 24 V | 3 A | |
| • at 120 V 3 A | ● at 110 V | 3 A | |
| | ● at 120 V | 3 A | |

| ● at 125 V | 3 A |
|--|---|
| ● at 230 V | 2 A |
| ● at 400 V | 1 A |
| Operating current of auxiliary contacts at DC-13 | |
| ● at 24 V | 2 A |
| ● at 110 V | 0.22 A |
| ● at 125 V | 0.22 A |
| ● at 220 V | 0.11 A |
| Design of the miniature circuit breaker | |
| • for short-circuit protection of the auxiliary switch | 6A (SCC less than equal to 0.5 kA; U less than equal to 260V) |
| required | |
| Protective and monitoring functions | |
| 1 Totobire and monitoring functions | |

| Trip class | CLASS 10 |
|---|----------|
| Design of the overload release | thermal |
| UL/CSA ratings | |
| Full band compact (FLA) for those or band AO market | |

| UL/USA fallings | |
|--|-------------|
| Full-load current (FLA) for three-phase AC motor | |
| • at 480 V rated value | 40 A |
| • at 600 V rated value | 40 A |
| Contact rating of auxiliary contacts according to UL | B600 / R300 |

Short-circuit protection Design of the fuse link

 for short-circuit protection of the auxiliary switch required

fuse gG: 6 A, quick: 10 A

| Installation/ mounting/ dimensions | | |
|--|-----------------|--|
| Mounting position | any | |
| Mounting type | direct mounting | |
| Height | 90 mm | |
| Width | 55 mm | |
| Depth | 105 mm | |
| Required spacing | | |
| with side-by-side mounting | | |
| — forwards | 10 mm | |
| — Backwards | 0 mm | |
| — upwards | 10 mm | |
| — downwards | 10 mm | |
| — at the side | 10 mm | |
| • for grounded parts | | |
| — forwards | 10 mm | |
| — Backwards | 0 mm | |
| — upwards | 10 mm | |
| — at the side | 10 mm | |

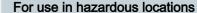
| — downwards | 10 mm |
|------------------|-------|
| • for live parts | |
| — forwards | 10 mm |
| — Backwards | 0 mm |
| — upwards | 10 mm |
| — downwards | 10 mm |
| — at the side | 10 mm |
| | |

| Connections/Terminals | | |
|--|-------------------------------------|--|
| Product function | | |
| removable terminal for auxiliary and control | No | |
| circuit | | |
| Type of electrical connection | | |
| for main current circuit | screw-type terminals | |
| for auxiliary and control current circuit | screw-type terminals | |
| Arrangement of electrical connectors for main current | Top and bottom | |
| circuit | | |
| Type of connectable conductor cross-sections | | |
| • for main contacts | | |
| — single or multi-stranded | 2x (1 35 mm²), 1x (1 50 mm²) | |
| finely stranded with core end processing | 2x (1 25 mm²), 1x (1 35 mm²) | |
| at AWG conductors for main contacts | 2x (18 2), 1x (18 1) | |
| Type of connectable conductor cross-sections | | |
| for auxiliary contacts | | |
| — single or multi-stranded | 2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²) | |
| finely stranded with core end processing | 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) | |
| at AWG conductors for auxiliary contacts | 2x (20 16), 2x (18 14) | |
| Tightening torque | | |
| for main contacts with screw-type terminals | 3 4.5 N·m | |
| • for auxiliary contacts with screw-type terminals | 0.8 1.2 N·m | |
| Design of screwdriver shaft | 5 6 mm diameter | |
| | | |

| 20 y |
|------|
| |

| Display | |
|--|--------------|
| Display version | |
| for switching status | Slide switch |
| Certificates/approvals | |

General Product Approval















IECEx

| Declaration of | Test Certificates | Shipping Approval |
|----------------|-------------------|-------------------|
| Conformity | | |



Typprüfbescheinigu ng/Werkszeugnis

spezielle Prüfbescheinigunge n







Shipping Approval

other



Umweltbestätigung

Bestätigungen

Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

http://www.siemens.com/industrial-controls/catalogs

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RU2136-4FB0

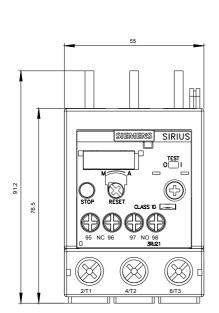
Cax online generator

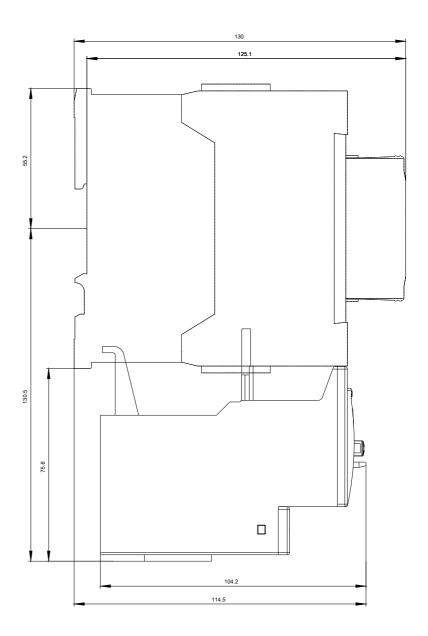
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RU2136-4FB0

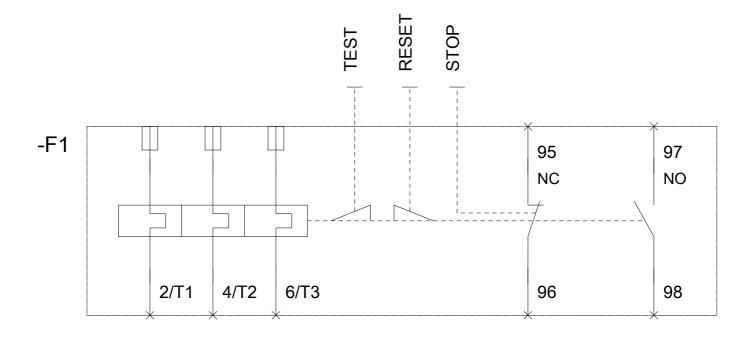
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

https://support.industry.siemens.com/cs/ww/en/ps/3RU2136-4FB0

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RU2136-4FB0&lang=en







last modified: 05/01/2017