SIEMENS

## Data sheet 3RH1140-1AP00

Contactor relay, 4 NO 230 V AC 50 / 60 Hz Screw terminal size S00 !!! Phased-out product !!! Successor is SIRIUS 3RH2 Preferred successor type is >>3RH2140-1AP00<<


| | |
|---|---|
| **Product brand name** | SIRIUS |
| **Product designation** | Auxiliary contactor |

| General technical data | |
|---|---|
| **Size of contactor** | S00 |
| **Product extension** | |
| • Auxiliary switch | Yes |
| **Insulation voltage** | |
| • with degree of pollution 3 at AC rated value | 690 V |
| **Degree of pollution** | 3 |
| **Surge voltage resistance rated value** | 6 kV |
| **Protection class IP** | |
| • on the front | IP20 |
| **Shock resistance** | 10g / 5 ms and 5g / 10 ms |
| **Mechanical service life (switching cycles)** | |
| • of contactor typical | 30 000 000 |
| • of the contactor with added electronics-compatible auxiliary switch block typical | 5 000 000 |
| • of the contactor with added auxiliary switch block typical | 10 000 000 |

| | |
|---|---|
| **Reference code acc. to DIN EN 81346-2** | K |
| **Reference code acc. to DIN EN 61346-2** | K |

## Ambient conditions

| | |
|---|---|
| **Installation altitude at height above sea level** | |
| • maximum | 2 000 m |
| **Ambient temperature** | |
| • during operation | -25 ... +60 °C |
| • during storage | -55 ... +80 °C |
| • during transport | -55 ... +80 °C |

## Control circuit/ Control

| | |
|---|---|
| **Type of voltage of the control supply voltage** | AC |
| **Control supply voltage at AC** | |
| • at 50 Hz rated value | 230 V |
| • at 60 Hz rated value | 230 V |
| **Control supply voltage frequency** | |
| • **1 rated value** | 50 Hz |
| • **2 rated value** | 60 Hz |
| **Operating range factor control supply voltage rated value of magnet coil at AC** | |
| • at 50 Hz | 0.8 ... 1.1 |
| • at 60 Hz | 0.85 ... 1.1 |
| **Apparent pick-up power of magnet coil at AC** | 27 V·A |
| **Inductive power factor with closing power of the coil** | 0.8 |
| **Apparent holding power of magnet coil at AC** | 4.6 V·A |
| **Inductive power factor with the holding power of the coil** | 0.27 |

## Auxiliary circuit

| | |
|---|---|
| **Number of NC contacts for auxiliary contacts** | 0 |
| • instantaneous contact | 0 |
| • delayed switching | 0 |
| • lagging switching | 0 |
| • make-before-break switching | 0 |
| **Number of NO contacts for auxiliary contacts** | 4 |
| • instantaneous contact | 4 |
| • delayed switching | 0 |
| • leading contact | 0 |
| • make-before-break switching | 0 |
| **Number of CO contacts** | |
| • for auxiliary contacts | 0 |
| • of auxiliary contacts instantaneous contact | 0 |

| | |
|---|---|
| **Identification number and letter for switching elements** | 40 E |
| Operating current at AC-12 maximum | 10 A |
| **Operating current at AC-15** | |
| • at 230 V rated value | 6 A |
| • at 400 V rated value | 3 A |
| • at 500 V rated value | 2 A |
| • at 690 V rated value | 1 A |
| **Operating current at 1 current path at DC-12** | |
| • at 24 V rated value | 10 A |
| • at 110 V rated value | 3 A |
| • at 220 V rated value | 1 A |
| **Operating current at 1 current path at DC-13** | |
| • at 24 V rated value | 10 A |
| • at 110 V rated value | 1 A |
| • at 220 V rated value | 0.27 A |
| **Contact reliability of auxiliary contacts** | 1 faulty switching per 100 million (17 V, 1 mA) |

## Short-circuit protection

| | |
|---|---|
| **Design of the fuse link** | |
| • for short-circuit protection of the auxiliary switch required | fuse gL/gG: 10 A |

## Installation/ mounting/ dimensions

| | |
|---|---|
| **Mounting position** | +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface |
| **Mounting type** | screw and snap-on mounting |
| **Height** | 57.5 mm |
| **Width** | 45 mm |
| **Depth** | 72 mm |
| **Required spacing** | |
| • with side-by-side mounting | |
| — at the side | 0 mm |

## Connections/ Terminals

| | |
|---|---|
| **Type of electrical connection** | |
| • for auxiliary and control current circuit | screw-type terminals |
| **Type of connectable conductor cross-sections** | |
| • for auxiliary contacts | |
| — solid | 2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²), 2x 4 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), 1x 12 |

## Safety related data

| | |
|---|---|
| **B10 value** | |
| • with high demand rate acc. to SN 31920 | 1 000 000; With 0.3 x Ie |
| **Proportion of dangerous failures** | |
| • with low demand rate acc. to SN 31920 | 40 % |
| • with high demand rate acc. to SN 31920 | 75 % |
| **T1 value for proof test interval or service life acc. to IEC 61508** | 20 y |

## Certificates/ approvals

| General Product Approval | | | | Functional Safety/Safety of Machinery | Declaration of Conformity |
|---|---|---|---|---|---|
| CCC | CSA | UL | EAC | Type Examination Certificate | EG-Konf. |

| Declaration of Conformity | Test Certificates | | Marine / Shipping | | |
|---|---|---|---|---|---|
| Miscellaneous | Type Test Certific-ates/Test Report | Special Test Certi-ficate | ABS | BUREAU VERITAS | LRS |

| Marine / Shipping | | | | other | Railway |
|---|---|---|---|---|---|
| PRS | RINA | RMRS | | Confirmation | Special Test Certi-ficate |

## Further information

**Information- and Downloadcenter (Catalogs, Brochures,…)**
https://www.siemens.com/ic10

**Industry Mall (Online ordering system)**
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RH1140-1AP00

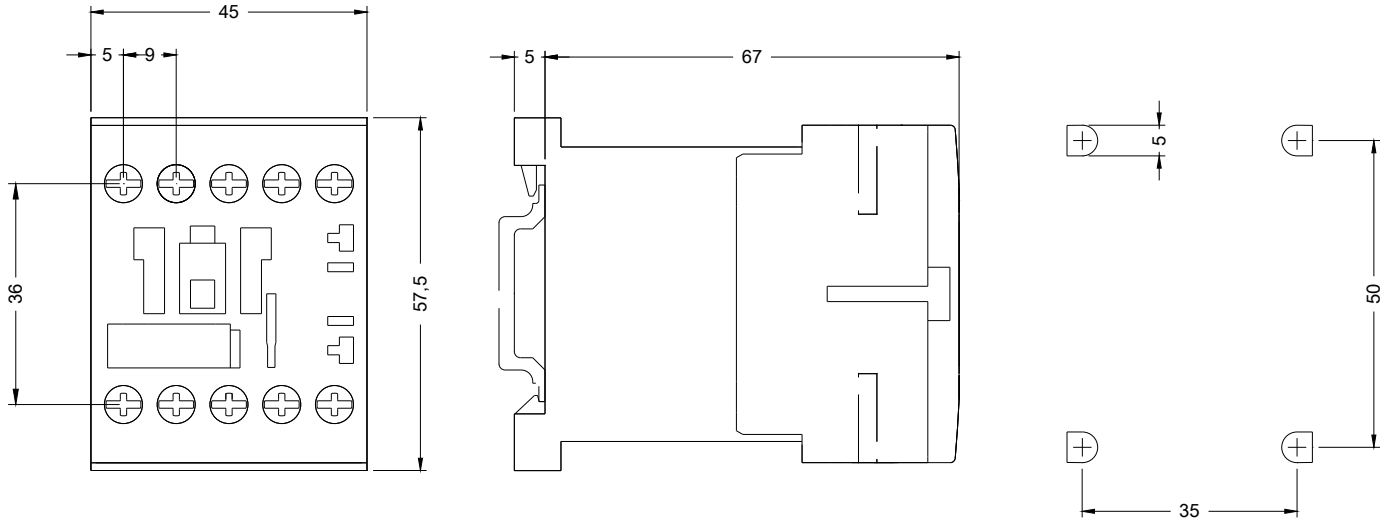
**Cax online generator**
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RH1140-1AP00

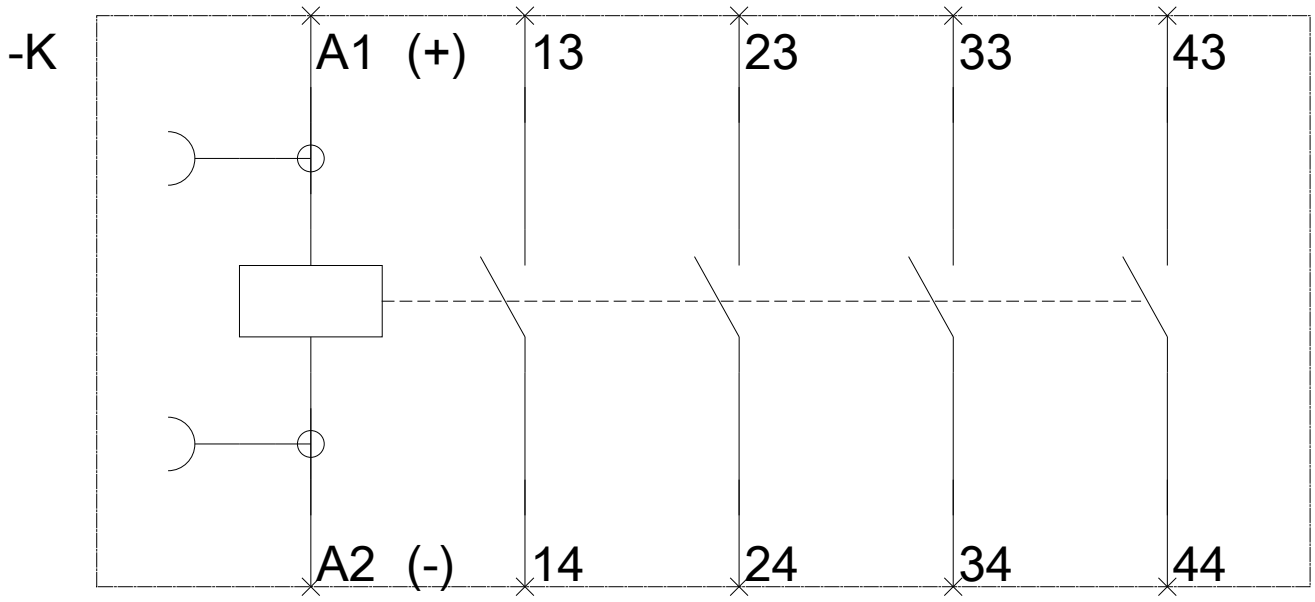
**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**
https://support.industry.siemens.com/cs/ww/en/ps/3RH1140-1AP00

**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)**
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RH1140-1AP00&lang=en

**Characteristic: Tripping characteristics, I²t, Let-through current**
https://support.industry.siemens.com/cs/ww/en/ps/3RH1140-1AP00/char

**Further characteristics (e.g. electrical endurance, switching frequency)**
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RH1140-1AP00&objecttype=14&gridview=view1



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