



PRODUCT-DETAILS

KC6-40E-2.4-51

KC6-40E-2.4-51Mini Contactor Relay17 ... 32 V  
DC4NO0NCscrew Terminals



| General Information   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Extended Product Type | KC6-40E-2.4-51                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Product ID            | GJH1213001R5401                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| EAN                   | 4013614049958                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Catalog Description   | KC6-40E-2.4-51Mini Contactor Relay17 ... 32 V DC4NO0NCscrew Terminals                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Long Description      | The KC6-40E mini contactor relay is a compact 4 pole contactor relay with screw terminals. They are ideally suited for applications where reliability is a must and space is at a premium. Mini contactors relays are used in residential buldings, commercial buildings and industrial applications for switching of control signals up to 3 A / 400 V (AC-15). Due to the low coil consumption, this device can be directly controlled by a PLC. Further features are the noiseless and hum-free coil and a a switch position indication. |

| Ordering               |          |
|------------------------|----------|
| Minimum Order Quantity | 1 piece  |
| Customs Tariff Number  | 85365080 |

Popular Downloads

|                                   |                  |
|-----------------------------------|------------------|
| EPLAN Data                        | 9AAC202735_EPLAN |
| Data Sheet, Technical Information | 1SBC100214C0202  |
| Instructions and Manuals          | 2CDC102047M6801  |
| CAD Dimensional Drawing           | 2CDC001079B0201  |

## Dimensions

|                            |                 |
|----------------------------|-----------------|
| Product Net Width          | 52.5 mm         |
| Product Net Depth / Length | 46.5 mm         |
| Product Net Height         | 57.5 mm         |
| Product Net Weight         | 0.175 kg        |
| Dimension Diagram          | GJL1200436F0001 |

## Technical

|                                                    |                                                                                                                                                                 |
|----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Number of Main Contacts NO                         | 0                                                                                                                                                               |
| Number of Main Contacts NC                         | 0                                                                                                                                                               |
| Number of Auxiliary Contacts NO                    | 4                                                                                                                                                               |
| Number of Auxiliary Contacts NC                    | 0                                                                                                                                                               |
| Number of Poles                                    | 4P                                                                                                                                                              |
| Standards                                          | IEC/EN 60947-1<br>IEC/EN 60947-4-1<br>IEC/EN 60947-5-1<br>UL 60947-1<br>UL 60947-4-1<br>IEC 60335-2-40 A2L                                                      |
| Rated Operational Voltage                          | Auxiliary Circuit 690 V AC<br>Auxiliary Circuit 250 V DC                                                                                                        |
| Rated Frequency (f)                                | Auxiliary Circuit 50 Hz<br>Auxiliary Circuit 60 Hz<br>Auxiliary Circuit DC<br>Control Circuit DC<br>Main Circuit 60 Hz<br>Main Circuit 50 Hz<br>Main Circuit DC |
| Conventional Free-air Thermal Current ( $I_{th}$ ) | Auxiliary Circuit 6 A                                                                                                                                           |
| Rated Operational Current AC-15 ( $I_e$ )          | (24 V) 4 A<br>(120 V) 4 A<br>(240 V) 4 A<br>(400 V) 3 A<br>(500 V) 2 A                                                                                          |
| Rated Operational Current DC-13 ( $I_e$ )          | (24 V) 2.5 A<br>(110 V) 0.7 A<br>(220 / 240 V) 0.4 A                                                                                                            |
| Short-Circuit Protective Devices                   | gG Type Fuses 6 A                                                                                                                                               |
| Rated Insulation Voltage ( $U_i$ )                 | 690 V<br>acc. to UL/CSA 600 V                                                                                                                                   |
| Rated Impulse Withstand Voltage ( $U_{imp}$ )      | Auxiliary Circuit 6 kV                                                                                                                                          |
| Maximum Electrical                                 | (AC-15) 600 cycles per hour                                                                                                                                     |

|                                         |                                                                                                                                                                                                                                          |
|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Switching Frequency                     | (DC-13) 600 cycles per hour                                                                                                                                                                                                              |
| Mechanical Durability                   | Nr. Operations 10000000 cycle                                                                                                                                                                                                            |
| Minimum Switching Capacity              | 17 V<br>5 mA                                                                                                                                                                                                                             |
| Coil Operating Limits                   | (acc. to IEC 60947-4-1) for DC supply $U_c \text{ Min. ... } U_c \text{ Max. (at } \theta \leq 55^\circ\text{C)}$<br>(acc. to IEC 60947-5-1) for DC supply $0.85 \text{ ... } 1.1 \times U_c \text{ (at } \theta \leq 55^\circ\text{C)}$ |
| Rated Control Circuit Voltage ( $U_c$ ) | 17 ... 32 V DC                                                                                                                                                                                                                           |
| Coil Consumption                        | Average Holding Value DC 2.4 W<br>Average Pull-in Value DC 2.4 W                                                                                                                                                                         |
| Power Loss                              | at Rated Operating Conditions per Pole 0.32 W                                                                                                                                                                                            |
| Mounting on DIN Rail                    | TH35-15 (35 x 15 mm Mounting Rail) acc. to IEC 60715<br>TH35-7.5 (35 x 7.5 mm Mounting Rail) acc. to IEC 60715                                                                                                                           |
| Connecting Capacity Auxiliary Circuit   | Flexible with Ferrule 1/2x 1 ... 2.5 mm <sup>2</sup><br>Flexible with Insulated Ferrule 1/2x 1 ... 2.5 mm <sup>2</sup><br>Flexible 1/2x 1 ... 2.5 mm <sup>2</sup><br>Rigid 1/2x 1 ... 4 mm <sup>2</sup>                                  |
| Connecting Capacity Control Circuit     | Flexible with Ferrule 1/2x 1 ... 2.5 mm <sup>2</sup><br>Flexible with Insulated Ferrule 1/2x 1 ... 2.5 mm <sup>2</sup><br>Flexible 1/2x 1 ... 2.5 mm <sup>2</sup><br>Rigid 1/2x 1 ... 4 mm <sup>2</sup>                                  |
| Wire Stripping Length                   | Auxiliary Circuit 9 mm                                                                                                                                                                                                                   |
| Degree of Protection                    | Auxiliary Circuit Terminals IP20<br>Control Circuit Terminals IP20<br>Main Circuit Terminals IP20                                                                                                                                        |
| Recommended Screw Driver                | M3<br>Pozidriv 1                                                                                                                                                                                                                         |
| Tightening Torque                       | Auxiliary Circuit 0.8 ... 1.1 N·m<br>Control Circuit 0.8 ... 1.1 N·m<br>Main Circuit 0.8 ... 1.1 N·m                                                                                                                                     |
| Terminal Type                           | Screw Terminals                                                                                                                                                                                                                          |
| Mini Contactor Type                     | Interface Mini Contactor Relay                                                                                                                                                                                                           |
| Product Name                            | Mini Contactor Relay                                                                                                                                                                                                                     |
| Remarks                                 | No CA6 or CAF6 mountable                                                                                                                                                                                                                 |

## Technical UL/CSA

|                                              |                                                      |
|----------------------------------------------|------------------------------------------------------|
| Maximum Operating Voltage UL/CSA             | 600 V AC                                             |
| General Use Rating UL/CSA                    | (600 V AC) 5 A                                       |
| Connecting Capacity Auxiliary Circuit UL/CSA | Stranded 1/2x 22-10 AWG                              |
| Contact Rating UL/CSA                        | A600                                                 |
| Tightening Torque UL/CSA                     | Auxiliary Circuit 7 in·lb<br>Control Circuit 7 in·lb |

## Environmental

|                                            |                                                    |
|--------------------------------------------|----------------------------------------------------|
| Ambient Air Temperature                    | Operation -25 ... +55 °C<br>Storage -40 ... +80 °C |
| Maximum Operating Altitude Permissible     | 2000 m                                             |
| Resistance to Shock acc. to IEC 60068-2-27 | 11 ms Pulse 15g                                    |
| Resistance to Vibrations                   | 3g 3 ... 150 Hz                                    |

## Material Compliance

|                                             |                                                                        |
|---------------------------------------------|------------------------------------------------------------------------|
| Conflict Minerals Reporting Template (CMRT) | 9AKK108467A5658                                                        |
| REACH Declaration                           | 2CMT2021-006202                                                        |
| RoHS Declaration                            | 2CMT2021-006277                                                        |
| RoHS Information                            | Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019 |
| Toxic Substances Control Act - TSCA         | 2CMT2023-006525                                                        |
| WEEE B2C / B2B                              | Business To Business                                                   |
| WEEE Category                               | 5. Small Equipment (No External Dimension More Than 50 cm)             |

## ABB EcoSolutions

|                                         |                 |
|-----------------------------------------|-----------------|
| End Of Life Disassembling Instructions  | 1SBC100156C0269 |
| Environmental Product Declaration - EPD | 1SAC200409H0001 |

## Certificates and Declarations

|                                  |                     |
|----------------------------------|---------------------|
| A2L Certificate – IEC            | 1SAA938000-4601     |
| CB Certificate                   | 1SAA938001-2001     |
| CQC Certificate                  | CQC2003010304064035 |
| Declaration of Conformity - CCC  | 2020980304001309    |
| Declaration of Conformity - CE   | 1SAD101100-3101     |
| Declaration of Conformity - UKCA | 1SAD201100-3101     |
| EAC Certificate                  | 1SAA938001-2701     |
| RMRS Certificate                 | 1SAA938001-0704     |
| UL Certificate                   | E48139-19881214     |

## Container Information

|                                |               |
|--------------------------------|---------------|
| Package Level 1 Units          | box 10 piece  |
| Package Level 1 Width          | 115 mm        |
| Package Level 1 Depth / Length | 280 mm        |
| Package Level 1 Height         | 54 mm         |
| Package Level 1 Gross Weight   | 1.82 kg       |
| Package Level 1 EAN            | 4013614411182 |

## External Classifications and Standards

|                            |                            |
|----------------------------|----------------------------|
| Object Classification Code | K                          |
| ETIM 7                     | EC000196 - Contactor relay |
| ETIM 8                     | EC000196 - Contactor relay |
| ETIM 9                     | EC000196 - Contactor relay |
| eClass                     | V11.0 : 27371001           |

|                                    |                                       |
|------------------------------------|---------------------------------------|
| UNSPSC                             | 39121529                              |
| IDEA Granular Category Code (IGCC) | 4763 >> Power contactor, DC switching |

Categories

Low Voltage Products and Systems → Control Products → Contactors → Mini Contactor Relays

