

## PRODUCT-DETAILS

# EK370-40-22 220-230V 50Hz / 230-255V 60Hz EK370-40-22 220-230V 50Hz / 230-255V 60Hz Contactor



## General Information

|                       |                                                                                                                                                                                   |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Extended Product Type | EK370-40-22 220-230V 50Hz / 230-255V 60Hz                                                                                                                                         |
| Product ID            | SK827042-EM                                                                                                                                                                       |
| EAN                   | 7320500012956                                                                                                                                                                     |
| Catalog Description   | EK370-40-22 220-230V 50Hz / 230-255V 60Hz Contactor                                                                                                                               |
| Long Description      | A 4-pole Contactor suitable for Distribution and Rail way applications AC and DC switching.<br>Operated with control voltage, versions from 24...690 AC, 50/60 Hz and 24-220 V DC |

## Ordering

|                        |          |
|------------------------|----------|
| Minimum Order Quantity | 1 piece  |
| Customs Tariff Number  | 85364900 |

## Popular Downloads

|                                   |                 |
|-----------------------------------|-----------------|
| Data Sheet, Technical Information | 1SBC100122C0202 |
| Instructions and Manuals          | 5309660-30      |

## Dimensions

|                            |          |
|----------------------------|----------|
| Product Net Width          | 270 mm   |
| Product Net Depth / Length | 225.5 mm |
| Product Net Height         | 272 mm   |
| Product Net Weight         | 15.5 kg  |

## Technical

|                                                       |                                                                                                                                                                                                                                                                                                                                                         |
|-------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Number of Main Contacts<br>NO                         | 4                                                                                                                                                                                                                                                                                                                                                       |
| Number of Main Contacts<br>NC                         | 0                                                                                                                                                                                                                                                                                                                                                       |
| Number of Auxiliary<br>Contacts NO                    | 2                                                                                                                                                                                                                                                                                                                                                       |
| Number of Auxiliary<br>Contacts NC                    | 2                                                                                                                                                                                                                                                                                                                                                       |
| Rated Operational Voltage                             | Main Circuit 1000 V                                                                                                                                                                                                                                                                                                                                     |
| Conventional Free-air<br>Thermal Current ( $I_{th}$ ) | acc. to IEC 60947-4-1, Open Contactors q = 40 °C 550 A                                                                                                                                                                                                                                                                                                  |
| Rated Operational Current<br>AC-1 ( $I_e$ )           | (1000 V) 40 °C 800 A<br>(1000 V) 60 °C 650 A<br>(1000 V) 70 °C 575 A<br>(690 V) 40 °C 550<br>(690 V) 55 °C 470<br>(690 V) 60 °C 470 A<br>(690 V) 70 °C 400                                                                                                                                                                                              |
| Rated Operational Current<br>AC-3 ( $I_e$ )           | (440 V) 55 °C 550 A<br>(500 V) 55 °C 370 A<br>(690 V) 55 °C 370 A<br>(1000 V) 55 °C 155 A<br>(380 / 400 V) 55 °C 400 A<br>(220 / 230 / 240 V) 55 °C 400                                                                                                                                                                                                 |
| Rated Operational Power<br>AC-3 ( $P_e$ )             | (415 V) 220 kW<br>(440 V) 220 kW<br>(500 V) 250 kW<br>(690 V) 355 kW<br>(1000 V) 220 kW<br>(380 / 400 V) 200 kW<br>(220 / 230 / 240 V) 110 kW                                                                                                                                                                                                           |
| Rated Breaking Capacity<br>AC-3 acc. to IEC 60947-4-1 | 8 x $I_e$ AC-3                                                                                                                                                                                                                                                                                                                                          |
| Rated Making Capacity<br>AC-3 acc. to IEC 60947-4-1   | 10 x $I_e$ AC-3                                                                                                                                                                                                                                                                                                                                         |
| Short-Circuit Protective<br>Devices                   | gG Type Fuses 630 A                                                                                                                                                                                                                                                                                                                                     |
| Rated Short-time<br>Withstand Current ( $I_{cw}$ )    | at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 5300 A<br>at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 1000 A<br>at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 3000 A<br>at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 5500 A<br>at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 3700 A |
| Maximum Electrical<br>Switching Frequency             | (AC-1) 300 cycles per hour<br>(AC-2 / AC-4) 120 cycles per hour<br>(AC-3) 300 cycles per hour                                                                                                                                                                                                                                                           |
| Rated Insulation Voltage<br>( $U_i$ )                 | acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 1000 V<br>acc. to UL/CSA 600 V                                                                                                                                                                                                                                                                               |
| Rated Impulse Withstand<br>Voltage ( $U_{imp}$ )      | 8 kV                                                                                                                                                                                                                                                                                                                                                    |

|                                                              |                                                                                                                                                                                                                                                                        |
|--------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Mechanical Durability                                        | 5 million                                                                                                                                                                                                                                                              |
| Maximum Mechanical Switching Frequency                       | 3600 cycles per hour                                                                                                                                                                                                                                                   |
| Coil Operating Limits                                        | (acc. to IEC 60947-4-1) $U_c$ (at $\theta \leq 70^\circ\text{C}$ )                                                                                                                                                                                                     |
| Rated Control Circuit Voltage ( $U_c$ )                      | 50 Hz 220 ... 230 V<br>60 Hz 230 ... 255 V                                                                                                                                                                                                                             |
| Coil Consumption                                             | Holding at Max. Rated Control Circuit Voltage 50 Hz 125 V·A<br>Holding at Max. Rated Control Circuit Voltage 60 Hz 140 V·A<br>Pull-in at Max. Rated Control Circuit Voltage 50 Hz 3500 V·A<br>Pull-in at Max. Rated Control Circuit Voltage 60 Hz 4000 V·A             |
| Operate Time                                                 | Between Coil De-energization and NC Contact Closing 10 ... 20 ms<br>Between Coil De-energization and NO Contact Opening 13 ... 23 ms<br>Between Coil Energization and NC Contact Opening 25 ... 55 ms<br>Between Coil Energization and NO Contact Closing 30 ... 60 ms |
| Degree of Protection                                         | acc. to IEC 60529, IEC 60947-1, EN 60529 Coil Terminals IP20                                                                                                                                                                                                           |
| Connecting Terminals (delivered in open position) Main Poles | Flat type c/w screws and bolts                                                                                                                                                                                                                                         |
| Terminal Type                                                | Main Circuit: Bars                                                                                                                                                                                                                                                     |

## Technical UL/CSA

|                              |                  |
|------------------------------|------------------|
| General Use Rating<br>UL/CSA | (600 V AC) 420 A |
|------------------------------|------------------|

## Environmental

|                                        |                                                                                                                                                                                                                             |
|----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ambient Air Temperature                | Close to Contactor Fitted with Thermal O/L Relay (0.85 ... 1.1 $U_c$ ) -25 ... +55 °C<br>Close to Contactor without Thermal O/L Relay (0.85 ... 1.1 $U_c$ ) -40 ... +70 °C<br>Close to Contactor for Storage -50 ... +70 °C |
| Maximum Operating Altitude Permissible | 3000 m                                                                                                                                                                                                                      |
| RoHS Status                            | Following EU Directive 2011/65/EU                                                                                                                                                                                           |

## Certificates and Declarations (Document Number)

|                                 |                     |
|---------------------------------|---------------------|
| CQC Certificate                 | CQC2003010304094982 |
| Declaration of Conformity - CCC | 2020980304001264    |
| Declaration of Conformity - CE  | 2CMT2015-005442     |
| Environmental Information       | 1SFC101013D0201     |
| Instructions and Manuals        | 5309660-30          |
| RoHS Information                | 2CMT2016-005957     |

## Container Information

|                                |             |
|--------------------------------|-------------|
| Package Level 1 Units          | box 1 piece |
| Package Level 1 Width          | 281 mm      |
| Package Level 1 Depth / Length | 342 mm      |
| Package Level 1 Height         | 224 mm      |

|                              |               |
|------------------------------|---------------|
| Package Level 1 Gross Weight | 17.2 kg       |
| Package Level 1 EAN          | 7320500012956 |

Classifications

|                                    |                                           |
|------------------------------------|-------------------------------------------|
| Object Classification Code         | Q                                         |
| ETIM 4                             | EC000066 - Magnet contactor, AC-switching |
| ETIM 5                             | EC000066 - Magnet contactor, AC-switching |
| ETIM 6                             | EC000066 - Power contactor, AC switching  |
| ETIM 7                             | EC000066 - Power contactor, AC switching  |
| IDEA Granular Category Code (IGCC) | 4755 >> Contactors                        |

Categories

Low Voltage Products and Systems → Control Products → Contactors → Block Contactors

