EK550-40-21 48V DC 1/4



PRODUCT-DETAILS

# EK550-40-21 48V DC

# EK550-40-21 48V DC Contactor



General Information	
Extended Product Type	EK550-40-21 48V DC
Product ID	SK827041-DD
EAN	7320500002223
Catalog Description	EK550-40-21 48V DC Contactor
Long Description	A 4-pole Contactor suitable for Distribution and Rail way applications AC and DC switching. Operated with control voltage, versions from 24690 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	5309660-30

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#### Manuals

CAD Dimensional	2CDC001079B0201
Drawing	

Dimensions	
Product Net Width	296 mm
Product Net Depth / Length	225.5 mm
Product Net Height	272 mm
Product Net Weight	15.5 kg

Technical	
Number of Main	4
Contacts NO	
Number of Main Contacts NC	0
Number of Auxiliary	2
Contacts NO	
Number of Auxiliary Contacts NC	1
Rated Operational Voltage	Main Circuit 1000 V
Conventional Free-air Thermal Current (I <sub>th</sub> )	acc. to IEC 60947-4-1, Open Contactors $\Theta$ = 40 °C 800 A
Rated Operational	(1000 V) 40 °C 800 A
Current AC-1 (I <sub>e</sub> )	(1000 V) 60 °C 650 A (1000 V) 70 °C 575 A
	(690 V) 40 °C 800 A
	(690 V) 55 °C 650 A
	(690 V) 60 °C 650 A (690 V) 70 °C 575 A
Rated Operational	(440 V) 55 °C 550 A
Current AC-3 (I <sub>e</sub> )	(500 V) 55 °C 550 A (690 V) 55 °C 550 A
	(1000 V) 55 °C 175 A
	(380 / 400 V) 55 °C 550 A (220 / 230 / 240 V) 55 °C 550 A
Rated Operational Power	(220 / 230 / 240 V) 33 C 330 A
AC-3 (P <sub>e</sub> )	(440 V) 315 kW
	(500 V) 400 kW
	(690 V) 500 kW (1000 V) 35 kW
	(380 / 400 V) 280 kW
Dated Bussling Compaits	(220 / 230 / 240 V) 160 kW
Rated Breaking Capacity AC-3	8 x Ie AC-3
Rated Making Capacity AC-3	10 x le AC-3
Short-Circuit Protective Devices	gG Type Fuses 800 A
Rated Short-time	at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 5300 A
Withstand Current Low Voltage (I <sub>CW</sub> )	at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 1000 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 3000 A
	at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 5500 A at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 3700 A
Maximum Electrical	(AC-1) 300 cycles per hour
Switching Frequency	(AC-2 / AC-4) 120 cycles per hour (AC-3) 300 cycles per hour
Rated Insulation Voltage	acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 1000 V
(U <sub>i</sub> )	acc. to UL/CSA 600 V

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Rated Impulse Withstand 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) Uc (at θ ≤ 70 °C)	
Rated Control Circuit Voltage (U <sub>c</sub> )	DC Operation 48 V	
Coil Consumption	Holding at Max. Rated Control Circuit Voltage 50 Hz 125 V·A Holding at Max. Rated Control Circuit Voltage 60 Hz 140 V·A Pull-in at Max. Rated Control Circuit Voltage 50 Hz 3500 V·A 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 Between Coil De-energization and NO Contact Opening 13 23 ms Between Coil Energization and NC Contact Opening 25 55 ms 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 (600 V AC) 540 A UL/CSA

#### **Environmental**

Ambient Air Temperature	Close to Contactor Fitted with Thermal O/L Relay (0.85 1.1 Uc) -25 55 $^{\circ}$ C
·	Close to Contactor without Thermal O/L Relay (0.85 1.1 Uc) -40 70 °C Close to Contactor for Storage -50 70 °C
Maximum Operating Altitude Permissible	Without Derating 3000 m

## **Material Compliance**

Conflict Minerals Reporting Template (CMRT)	9AKK108467A5658
REACH Declaration	2CMT2021-006202
RoHS Information	2CMT2021-006277
RoHS Status	Following EU Directive 2011/65/EU
WEEE B2C / B2B	Business To Business
WEEE Category	5. Small Equipment (No External Dimension More Than 50 cm)

Certificates	and Doc	arations
Certificates	and Deci	iarations

CQC Certificate	CQC2003010304094982
Declaration of Conformity - CCC	2020980304001264
Declaration of Conformity - CE	2CMT2015-005442
UL Certificate	20161201-E36588

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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	7320500002223

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
ETIM 8	EC000066 - Power contactor, AC switching
eClass	V11.0 : 27371003
UNSPSC	39121529
IDEA Granular Category Code (IGCC)	4755 >> Contactors

### **Categories**

 $Low\ Voltage\ Products\ and\ Systems \rightarrow Control\ Products \rightarrow Contactors \rightarrow Block\ Contactors \rightarrow EH\ and\ EK\ Contactors \rightarrow EK550$ 

