PRODUCT-DETAILS

GAE75-10-11 250V DC

GAE75-10-11 250V DC Contactor

General Information

Extended Product Type	GAE75-10-11 250V DC
Product ID	1SBL419025R3811
EAN	3471522113382
Catalog Description	GAE75-10-11 250V DC Contactor
Long Description	GAE75 contactors are designed for DC circuit switching. Arc suppression is more difficult in DC than in AC. To choose a contactor, it is necessary to know the current and voltage to be broken as well as the L/R time constant of the power circuit to be controlled. GAE 75 contactors are of the block type design. - Main poles: the contactors are fitted with arc chutes with permanent magnets specially designed for DC breaking. The three contactor paths are arranged in series via two supplied and fitted insulated connections (25 mm^2). The GAE75 are "single-pole" devices for which the connection polarities indicated next to the connection terminals must be respected. Furthermore, they are marked 1L1 for the positive terminal and 2T1 for the negative terminal. - Auxiliary contact: 1 CAL 5-11 side-mounted add-on auxiliary contact block (GAE75-10-11 types) - Control circuit: DC operated with standard double-winding DC coils (with add-on factory-mounted lagging contact for insertion of the"holding" winding) - Accessories: a wide range of accessories is available

Ordering

Minimum Order Quantity	1 piece

Customs Tariff Number	85364900

Popular Downloads

Data Sheet, Technical Information	1SBC100122C0202_Ch02
Instructions and Manuals	FPTC407691P0003
CAD Dimensional Drawing	2CDC001079B0201

Dimensions

Product Net Width	94 mm
Product Net Depth / Length	108 mm
Product Net Height	132 mm
Product Net Weight	1.3 kg

Technical

Number of Main Contacts NO	1
Number of Main Contacts NC	0
Number of Auxiliary Contacts NO	1
Number of Auxiliary Contacts NC	1
Rated Operational Voltage	Auxiliary Circuit 690 V Main Circuit 1000 V DC
Rated Frequency (f)	Auxiliary Circuit 50 / 60 Hz
Conventional Free-air Thermal Current (I_{th})	acc. to IEC 60947-4-1, Open Contactors Θ = 40 °C 125 A acc. to IEC 60947-5-1, Θ = 40 °C 16 A
Rated Operational Current AC-15 (I_e)	(500 V) 2 A (690 V) 2 A (24 / 127 V) 6 A (220 / 240 V) 4 A (380 / 400 V) 3 A
Short-Circuit Protective Devices	Auxiliary Circuit - gG Type Fuses 10 A gG Type Fuses 160 A
Rated Short-time Withstand Current Low Voltage (I_{cw})	for 0.1 s 140 A for 1 s 100 A
Maximum Electrical Switching Frequency	300 cycles per hour
Rated Operational Current DC-1 (I_e)	(1000 V) 1-Pole, 40 °C 35 A (1000 V) 1-Pole, 55 °C 35 A (1000 V) 1 Pole, 70 °C 35 A (110 V) 1-Pole, 40 °C 120 A (110 V) 1-Pole, 55 °C 100 A (110 V) 1-Pole, 70 °C 85 A (220 V) 1-Pole, 40 °C 120 A (220 V) 1-Pole, 55 °C 100 A (220 V) 1-Pole, 70 °C 85 A (440 V) 1-Pole, 40 °C 100 A (440 V) 1-Pole, 55 °C 100 A (440 V) 1-Pole, 70 °C 85 A (600 V) 1-Pole, 40 °C 75 A (600 V) 1-Pole, 55 °C 75 A

	(600 V) 1-Pole, 70 °C 75 A (72 V) 1-Pole, 40 °C 120 A (72 V) 1-Pole, 55 °C 100 A (72 V) 1-Pole, 70 °C 85 A
Rated Operational Current DC-3 (I_e)	(110 V) 1-Pole, 40 °C 120 A (110 V) 1-Pole, 55 °C 100 A (220 V) 1-Pole, 40 °C 100 A (220 V) 1-Pole, 55 °C 100 A (440 V) 1-Pole, 40 °C 85 A (440 V) 1-Pole, 55 °C 85 A (72 V) 1-Pole, 40 °C 120 A (72 V) 1-Pole, 55 °C 100 A
Rated Operational Current DC-5 (I_e)	(110 V) 1-Pole, 40 °C 85 A (110 V) 1-Pole, 55 °C 85 A (220 V) 1-Pole, 40 °C 85 A (220 V) 1-Pole, 55 °C 85 A (440 V) 1-Pole, 40 °C 35 A (440 V) 1-Pole, 55 °C 35 A (72 V) 1-Pole, 40 °C 85 A (72 V) 1-Pole, 55 °C 85 A
Rated Operational Current DC-13 (I_e)	(24 V) 6 A / 144 W (48 V) 2.8 A / 134 W (72 V) 1 A / 72 W (110 V) 0.55 A / 60 W (125 V) 0.55 A / 69 W (220 V) 0.30 A / 66 W (250 V) 0.3 / 75 W
Rated Insulation Voltage (U_i)	acc. to IEC 60947-4-1 1000 V acc. to IEC 60947-5-1 690 V acc. to UL/CSA 600 V
Rated Impulse Withstand Voltage (U_{imp})	8 kV
Mechanical Durability	5 million
Maximum Mechanical Switching Frequency	3600 cycles per hour
Rated Control Circuit Voltage (U_c)	DC Operation 250 V
Coil Consumption	Average Holding Value, from Warm State 4 W Average Pull-in Value, from Cold State 200 W Holding at Max. Rated Control Circuit Voltage 50 Hz 4 W Holding at Max. Rated Control Circuit Voltage DC 4 W Pull-in at Max. Rated Control Circuit Voltage DC 200 V·A
Operate Time	Between Coil De-energization and NC Contact Closing 8 ... 18 ms Between Coil De-energization and NO Contact Opening 5 ... 15 ms Between Coil Energization and NC Contact Opening 10 ... 27 ms Between Coil Energization and NO Contact Closing 30 ... 30 ms
Mounting on DIN Rail	TH35-15 (35 x 15 mm Mounting Rail) acc. to IEC 60715 TH75-25 (75 x 25 mm Mounting Rail) acc. to IEC 60715
Mounting by Screws (not supplied)	2 x M6 screws placed diagonally
Connecting Capacity Main Circuit	Flexible with Cable End 6 ... 16 mm² Rigid Cable 6 ... 25 mm²
Connecting Capacity Auxiliary Circuit	Flexible with Cable End 0.75 ... 2.5 mm² Rigid Cable 1 ... 4 mm²
Degree of Protection	acc. to IEC 60529, IEC 60947-1, EN 60529 Auxiliary Terminals IP20 acc. to IEC 60529, IEC 60947-1, EN 60529 Coil Terminals IP20 acc. to IEC 60529, IEC 60947-1, EN 60529 Main Terminals IP10
Connecting Terminals (delivered in open position) Main Poles	M 6 (+,-) pozidriv 2 screws with 1x (13 x 10 mm) connector
Terminal Type	Screw Terminals

Technical UL/CSA

Maximum Operating Voltage UL/CSA	Main Circuit 1000 V DC
General Use Rating UL/CSA	(1000 V DC) 35 A (440 V DC) 100 A (600 V DC) 75 A

Environmental

Ambient Air Temperature	Close to Contactor for Storage -60 ... +80 °C Near Contactor for Operation in Free Air (0.85 ... 1.1 Uc) -40 ... +55 °C Near Contactor for Operation in Free Air (Uc) -40 ... 70 °C
Climatic Withstand	acc. to IEC 60068-2-30 and 60068-2-11 - UTE C 63-100 specification II
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 and Amendment 2015/863 July 22, 2019
WEEE B2C / B2B	Business To Business
WEEE Category	5. Small Equipment (No External Dimension More Than 50 cm)

Certificates and Declarations

CB Certificate	CB_CN45325
CCC Certificate	CCC_2018010304129268
CQC Certificate	CQC2018010304129268
CSA Certificate	CSA_1033838_LR056745
Declaration of Conformity - CCC	2020980304001625
Declaration of Conformity - CE	1SBD250807U1000
Declaration of Conformity - UKCA	1SBD250824U1000
EAC Certificate	EAC_RU C-FR ME77 B03599
UL Listing Card	UL_E319322

Container Information

Package Level 1 Units	box 1 piece
Package Level 1 Width	140 mm
Package Level 1 Depth / Length	146 mm
Package Level 1 Height	96 mm
Package Level 1 Gross Weight	1.3 kg
Package Level 1 EAN	3471522113382
Package Level 2 Units	box 63 piece
Package Level 2 Gross Weight	81.9 kg

Classifications

Object Classification Code	Q
ETIM 7	EC002552 - Power contactor, DC switching
ETIM 8	EC002552 - Power contactor, DC switching
ETIM 9	EC002552 - Power contactor, DC switching
eClass	V11.0 : 27371018
UNSPSC	39121529
IDEA Granular Category Code (IGCC)	4763 >> Power contactor, DC switching

Categories

Low Voltage Products and Systems → Control Products → Contactors → Block Contactors → GA Contactors → GAE75