

PRODUCT-DETAILS

# GAE75-10-11 42V DC

## GAE75-10-11 42V DC Contactor



### General Information

Extended Product Type	GAE75-10-11 42V DC
Product ID	1SBL419025R8211
EAN	3471522113825
Catalog Description	GAE75-10-11 42V 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<sup>2</sup>). 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	1SBC100122C0202_Ch02
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## Information

Instructions and  
Manuals

FPTC407691P0003

**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	3
Number of Main Contacts NC	0
Number of Auxiliary Contacts NO	1
Number of Auxiliary Contacts NC	1
Rated Operational Voltage	Main Circuit 600 V
Rated Frequency (f)	Supply Circuit 50 60 Hz
Conventional Free-air Thermal Current ( $I_{th}$ )	acc. to IEC 60947-4-1, Open Contactors q = 40 °C 125 A acc. to IEC 60947-5-1, q = 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
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 <sub>e</sub> )	(24 V) 6 / 144 A (48 V) 2.8 / 134 A (72 V) 1 / 72 A (125 V) 0.55 / 69 A (250 V) 0.3 / 75 A
Rated Insulation Voltage (U <sub>i</sub> )	acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 1000 V acc. to IEC 60947-5-1 and VDE 0110 (Gr. C) 690 V acc. to UL/CSA 600 V
Rated Impulse Withstand Voltage (U <sub>imp</sub> )	8 kV
Mechanical Durability	5 million
Maximum Mechanical Switching Frequency	3600 cycles per hour
Rated Control Circuit Voltage (U <sub>c</sub> )	DC Operation 42 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 DC 4 W Pull-in at Max. Rated Control Circuit Voltage DC 200 W
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
Connecting Capacity Main Circuit	Flexible with Cable End 6 ... 16 mm <sup>2</sup> Rigid Cable 6 ... 25 mm <sup>2</sup>
Connecting Capacity Auxiliary Circuit	Flexible with Cable End 0.75 ... 2.5 mm <sup>2</sup> Rigid Cable 1 ... 4 mm <sup>2</sup>
Degree of Protection	acc. to IEC 60529, IEC 60947-1, EN 60529 Auxiliary Terminals IP40
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

General Use Rating UL/CSA	(1000 V DC) 35 A (440 V DC) 100 A (600 V DC) 75 A
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## Environmental

Ambient Air Temperature	Close to Contactor for Storage -60 ... +80 °C Near Contactor for Operation in Free Air (0.85 ... 1.1 U <sub>c</sub> ) -40 ... +55 °C Near Contactor for Operation in Free Air (U <sub>c</sub> ) -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	3000 m
RoHS Status	Following EU Directive 2011/65/EU

## Certificates and Declarations (Document Number)

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	1SB0250807U1000

EAC Certificate	EAC_RU C-FR ME77 B03599
Environmental Information	1SBD250039E1000
Instructions and Manuals	FPTC407691P0003
RoHS Information	1SBD250807U1000
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	3471522113825
Package Level 2 Units	box 63 piece
Package Level 2 Gross Weight	81.9 kg

## Classifications

Object Classification Code	Q
ETIM 4	EC002552 - Power contactor, DC switching
ETIM 5	EC002552 - Power contactor, DC switching
ETIM 6	EC002552 - Power contactor, DC switching
ETIM 7	EC002552 - Power contactor, DC switching
UNSPSC	39121529

## Categories

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

