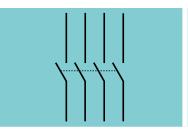
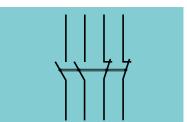


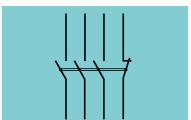




Contact configuration







Coil V AC/Hz	50 Hz	50 Hz	50 Hz
24	CAE40B5	CAE22B5	CAE31B5
48	CAE40E5	CAE22E5	CAE31E5
110	CAE40F5	CAE22F5	CAE31F5
220	CAE40M5	CAE22M5	CAE31M5
240	CAE40U5	CAE22U5	CAE31U5
380	CAE40Q5	CAE22Q5	CAE31Q5
415	CAE40N5	CAE22N5	CAE31N5
440	CAE40R5	CAE22R5	CAE31R5

Characteristics

- > 4 NO/NC contacts.
- > Weight: 0.280 kg.

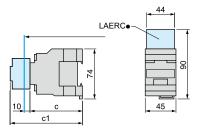
Control circuit ch	naracteristics	;		
Туре				CAE \sim
Rated control circuit voltage (Uc)			V	24440
Control voltage limits	Operation	Coil type: 50 Hz		0.851.1 Uc
	Drop-out			0.30.6 Uc
Average consumption at 20 °C and at Uc	\sim 50 Hz		VA	Sealed and closed: 70
				Maintain: 8
Operating time (rated control circuit	Between coil energisation	opening of the N/C contact	ms	419
voltage, ambient temperature 20 °C)	and	closing of the N/O contact		1222
	Between coil de-energisation	opening of the N/C contact		412
	and	closing of the N/O contact		617
Momentary supply failure	Maximum power-cinfluencing sealed			2
Maximum operating rate	Operating cycles p	er second		3
Mechanical durability In millions of operating cycles	Coil type:	50 Hz		10
Control connecti	on (coil)			
Connecting to screw	Flexible cable	1 conductor	mm²	12.5
clamp terminals	without cable end	2 conductors		12.5
	Flexible cable	1 conductor		12.5
	with cable end	2 conductors		12.5
	Solid cable without cable end	1 conductor		12.5
		2 conductors		12.5
	Tightening torque		N.m	1.2
01 4 1 4				
Characteristics of	of built in inst	antaneous co	ntacts	
Number of contacts	of built in inst	antaneous co	ntacts	4
		antaneous co	ntacts v	
Number of contacts Rated operational voltage				4
Number of contacts Rated operational voltage (Ue) Rated insulation voltage	Up to Conforming to IEC		V	4 690
Number of contacts Rated operational voltage (Ue) Rated insulation voltage (Ui) Conventional thermal	Up to Conforming to IEC Operational enviro	60947-5-1	V	4 690 690
Number of contacts Rated operational voltage (Ue) Rated insulation voltage (Ui) Conventional thermal current (Ith) Operating current frequency Minimum switching	Up to Conforming to IEC Operational enviro	60947-5-1	V	4 690 690 10
Number of contacts Rated operational voltage (Ue) Rated insulation voltage (Ui) Conventional thermal current (Ith) Operating current frequency	Up to Conforming to IEC Operational enviro ≤ 40 °C	60947-5-1	V A Hz	4 690 690 10 50
Number of contacts Rated operational voltage (Ue) Rated insulation voltage (Ui) Conventional thermal current (Ith) Operating current frequency Minimum switching capacity Short-circuit protection	Up to Conforming to IEC Operational enviro	: 60947-5-1 Inment temperature	V A Hz V mA A	4 690 690 10 50 17 5 gG fuse: 10 A
Number of contacts Rated operational voltage (Ue) Rated insulation voltage (Ui) Conventional thermal current (Ith) Operating current frequency Minimum switching capacity Short-circuit protection Rated making capacity	Up to Conforming to IEC Operational enviro	60947-5-1 enment temperature 60947-5-1 60947-5-1	V A Hz V mA A	4 690 690 10 50 17 5 gG fuse: 10 A ∼: 140
Number of contacts Rated operational voltage (Ue) Rated insulation voltage (Ui) Conventional thermal current (Ith) Operating current frequency Minimum switching capacity Short-circuit protection	Up to Conforming to IEC Operational enviro	60947-5-1 enment temperature 60947-5-1 60947-5-1 500 ms	V A Hz V mA A	4 690 690 10 50 17 5 gG fuse: 10 A ∼: 140
Number of contacts Rated operational voltage (Ue) Rated insulation voltage (Ui) Conventional thermal current (Ith) Operating current frequency Minimum switching capacity Short-circuit protection Rated making capacity Short-time rating	Up to Conforming to IEC Operational enviro	60947-5-1 enment temperature 60947-5-1 60947-5-1	V A Hz V mA A A	4 690 690 10 50 17 5 gG fuse: 10 A ∼: 140 120 140
Number of contacts Rated operational voltage (Ue) Rated insulation voltage (Ui) Conventional thermal current (Ith) Operating current frequency Minimum switching capacity Short-circuit protection Rated making capacity Short-time rating	Up to Conforming to IEC Operational enviro	60947-5-1 comment temperature 60947-5-1 60947-5-1 60947-5-1 500 ms 100 ms	V A Hz V mA A A MΩ	4 690 690 10 50 17 5 gG fuse: 10 A ~: 140 120 140 > 10
Number of contacts Rated operational voltage (Ue) Rated insulation voltage (Ui) Conventional thermal current (Ith) Operating current frequency Minimum switching capacity Short-circuit protection Rated making capacity Short-time rating Insulation resistance Non-overlap time	Up to Conforming to IEC Operational environment of the Conforming to IEC Conforming to IEC Conforming to IEC Permissible for Guaranteed non-on N/C and N/O contact	60947-5-1 comment temperature 60947-5-1 60947-5-1 500 ms 100 ms verlap between	V A Hz V mA A A MΩ ms	4 690 690 10 50 17 5 gG fuse: 10 A
Number of contacts Rated operational voltage (Ue) Rated insulation voltage (Ui) Conventional thermal current (Ith) Operating current frequency Minimum switching capacity Short-circuit protection Rated making capacity Short-time rating Insulation resistance Non-overlap time Tightening torque	Up to Conforming to IEC Operational environment of the Conforming to IEC Conforming to IEC Permissible for Guaranteed non-o	60947-5-1 comment temperature 60947-5-1 60947-5-1 500 ms 100 ms verlap between	V A Hz V mA A A MΩ	4 690 690 10 50 17 5 gG fuse: 10 A
Number of contacts Rated operational voltage (Ue) Rated insulation voltage (Ui) Conventional thermal current (Ith) Operating current frequency Minimum switching capacity Short-circuit protection Rated making capacity Short-time rating Insulation resistance Non-overlap time Tightening torque Non-overlap distance	Up to Conforming to IEC Operational enviro < 40 °C U min I min Conforming to IEC Conforming to IEC Germissible for Guaranteed non-o N/C and N/O conta Phillips n°2	60947-5-1 enment temperature 60947-5-1 60947-5-1 60947-5-1 500 ms 100 ms everlap between	V A Hz V mA A A MΩ ms	4 690 690 10 50 17 5 gG fuse: 10 A
Number of contacts Rated operational voltage (Ue) Rated insulation voltage (Ui) Conventional thermal current (Ith) Operating current frequency Minimum switching capacity Short-circuit protection Rated making capacity Short-time rating Insulation resistance Non-overlap time Tightening torque Non-overlap distance Instantaneous co	Up to Conforming to IEC Operational enviro	60947-5-1 enment temperature 60947-5-1 60947-5-1 500 ms 100 ms ection	V A Hz V mA A A A N MΩ ms N.m	4 690 690 10 50 17 5 gG fuse: 10 A
Number of contacts Rated operational voltage (Ue) Rated insulation voltage (Ui) Conventional thermal current (Ith) Operating current frequency Minimum switching capacity Short-circuit protection Rated making capacity Short-time rating Insulation resistance Non-overlap time Tightening torque Non-overlap distance Instantaneous co	Up to Conforming to IEC Operational enviro	60947-5-1 comment temperature 60947-5-1 60947-5-1 500 ms 100 ms ection 1 conductor	V A Hz V mA A A MΩ ms	4 690 690 10 50 17 5 gG fuse: 10 A
Number of contacts Rated operational voltage (Ue) Rated insulation voltage (Ui) Conventional thermal current (Ith) Operating current frequency Minimum switching capacity Short-circuit protection Rated making capacity Short-time rating Insulation resistance Non-overlap time Tightening torque Non-overlap distance Instantaneous co	Up to Conforming to IEC Operational environment of the Conforming to IEC U min I min Conforming to IEC Permissible for Guaranteed non-on N/C and N/O contact Phillips n°2 Ontacts conn Flexible cable without cable end	60947-5-1 comment temperature 60947-5-1 60947-5-1 500 ms 100 ms verlap between acts ection 1 conductor 2 conductors	V A Hz V mA A A A N MΩ ms N.m	4 690 690 10 50 17 5 gG fuse: 10 A
Number of contacts Rated operational voltage (Ue) Rated insulation voltage (Ui) Conventional thermal current (Ith) Operating current frequency Minimum switching capacity Short-circuit protection Rated making capacity Short-time rating Insulation resistance Non-overlap time Tightening torque Non-overlap distance Instantaneous co	Up to Conforming to IEC Operational environment of the conforming to IEC U min I min Conforming to IEC Permissible for Guaranteed non-on N/C and N/O contact Philips n°2 Ontacts conn Flexible cable without cable end Flexible cable	60947-5-1 comment temperature 60947-5-1 60947-5-1 500 ms 100 ms verlap between acts ection 1 conductor 2 conductors 1 conductor	V A Hz V mA A A A N MΩ ms N.m	4 690 690 10 50 17 5 gG fuse: 10 A
Number of contacts Rated operational voltage (Ue) Rated insulation voltage (Ui) Conventional thermal current (Ith) Operating current frequency Minimum switching capacity Short-circuit protection Rated making capacity Short-time rating Insulation resistance Non-overlap time Tightening torque Non-overlap distance Instantaneous co	Up to Conforming to IEC Operational enviro	c 60947-5-1 comment temperature c 60947-5-1 c 60947-5-	V A Hz V mA A A A N MΩ ms N.m	4 690 690 10 50 17 5 gG fuse: 10 A
Number of contacts Rated operational voltage (Ue) Rated insulation voltage (Ui) Conventional thermal current (Ith) Operating current frequency Minimum switching capacity Short-circuit protection Rated making capacity Short-time rating Insulation resistance Non-overlap time Tightening torque Non-overlap distance Instantaneous co	Up to Conforming to IEC Operational environment of the conforming to IEC U min I min Conforming to IEC Permissible for Guaranteed non-on N/C and N/O contact Philips n°2 Ontacts conn Flexible cable without cable end Flexible cable	c 60947-5-1 comment temperature c 60947-5-1 c 60947-5-	V A Hz V mA A A A N MΩ ms N.m	4 690 690 10 50 17 5 gG fuse: 10 A
Number of contacts Rated operational voltage (Ue) Rated insulation voltage (Ui) Conventional thermal current (Ith) Operating current frequency Minimum switching capacity Short-circuit protection Rated making capacity Short-time rating Insulation resistance Non-overlap time Tightening torque Non-overlap distance Instantaneous co	Up to Conforming to IEC Operational environ < 40 °C U min I min Conforming to IEC Conforming to IEC Permissible for Guaranteed non-on N/C and N/O conta Phillips n°2 Dontacts conn Flexible cable without cable end Flexible cable with cable end Solid cable	c 60947-5-1 comment temperature c 60947-5-1 c 60947-5-	V A Hz V mA A A A N MΩ ms N.m	4 690 690 10 50 17 5 gG fuse: 10 A

European and			
Environment			
Туре			CAE~
Rated insulation voltage (Ui)	Conforming to IEC 60947-5-1	V	690
Rated impulse withstand voltage (Uimp)	Conforming to IEC 60947	kV	6
Electrical insulation	IEC 60536		Up to 400 V reinforced insulation
Conforming to standards			IEC 60947-5-1
Certifications			GOST
Protective treatment	Conforming to IEC 60068		"TH"
Degree of protection	Conforming to IEC 60529		IP20
Ambient air temperature	Storage	°C	-60+80
around the device	0.851.1 UC		-5+55
	For operation at Uc		-20+70
Maximum operating altitude	Without derating	m	3000
Operating position	Without derating in the following positions		30°
Shock resistance (1)	Control relay open		7 gn
1/2 sine ware, 11 ms	Control relay closed		10 gn
Vibration resistance (1)	Control relay open		1.5 gn
5300 Hz	Control relay closed		3 gn

(1) No change of contact state at coil voltage Ue in worst conditions.

EasyPact TVS control relays Control relays and auxiliary blocks

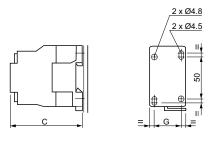
CAE



CAE	32	50
С	80	80
c1 with LAEN	113	113

CAE

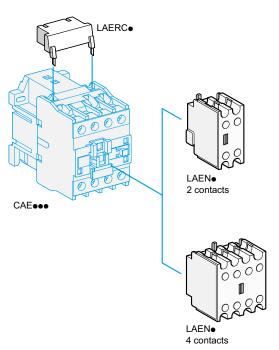
On mounting plate AM1-P



	CAE \sim
С	80
G	35

CAE40	CAE31	CAE22
4 13/NO 44 43/NO 44 43/NO 44 43/NO	13/NO 33/NO 43/NO	13/NO 21/NC 31/NC 43/NO
A 11 24 44 44 44 44 44 44	4 22 4 4 4	44 32 22 44

Auxiliary contact blocks RC suppressor



Instantaneous auxiliary contact blocks For use in normal operating environments						
Number of contacts Maximum number of relays that can be mounted			Composition		Cat. no.	Weight
	Front mounted	Side mounted	NO	NC		kg
2	1	-	1	1	LAEN11	0.030
	1	-	2	-	LAEN20	0.030
	1	-	-	2	LAEN02	0.030
4	1	-	2	2	LAEN22	0.050

Coil suppressor modules

RC suppressor

- Effective protection for circuits highly sensitive to "high frequency" interference and transcient generates when the contactor coil is switched off. For use only in cases where the voltage is virtually sinusoidal, i.e. less than 5 % total harmonic distortion.
- Voltage limited to 3 Uc max. and oscillating frequency limited to 400 Hz max.
- Slight increase in drop-out time (1.2 to 2 times the normal time).

•	`	,	
Mounted on	Operational voltage	Cat. no.	Weight kg
CAE40●●	~2448 V	LAERCE	0.012
	∼110240 V	LAERCU	0.012
	∼50120 V	LAERCG	0.012
	~380415 V	LAERCN	0.012