



IEC SYSTEM FOR CONFORMITY
TESTING TO STANDARDS FOR
SAFETY OF ELECTRICAL EQUIPMENT
(IECEE) CB SCHEME

Ref. Certificate No.

CH-2138

CB TEST CERTIFICATE

Issued by:	Electrosuisse		
Registration date:	2002-08-28		
Product:	Control switches and signal indicators		
Applicant:	EAO AG	Tannwaldstrasse 88, CH-4601 Olten	Switzerland
Manufacturer:	EAO AG	Tannwaldstrasse 88, CH-4601 Olten	Switzerland
Factory:	EAO AG	Tannwaldstrasse 88, CH-4601 Olten	Switzerland
Rating and principal characteristics:	5A, 250VAC; IP65, 5E4, 25T55 (see page 2-5) Signal indicator: 48V, max. 1.3W		
Trade mark (if any):	eao		
Model/Type reference:	Series 61 (see page 2-5)		
Additional information:	National differences: not tested		
Sample of product tested to be in conformity with IEC:	60947-1(ed.2), 60947-5-1(ed.2);am1;am2	Additional standards tested: IEC 60947-1(ed.2);am1;am2	
Test Report Ref. No:	02-IK-0234.02		

This CB Test Certificate is issued by the
National Certification Body

electrosuisse >>

Electrosuisse
Luppenstrasse 1, CH 8320 Fehraltorf,
Switzerland

Signed by: Hans Roschmann

Date of issue: 2002-08-28

IEC SYSTEM FOR CONFORMITY TESTING TO STANDARDS FOR SAFETY OF ELECTRICAL EQUIPMENT (IECEE) CB SCHEME

CH-2138
Page 2 of 5

Test item particulars:				
Control switching elements				
- method of operation.....:	rotary / push-button / key actuated			
- switching positions.....:	2 or 3			
- number of circuits.....:	1 .. 3			
- kind of current.....:	AC / DC			
- number and kind of contact elements:	4b, X/Y (IEC 617) 1NO or 1NC 2NO or 2NC, or 1NO +1NC 3NO or 3NC, or 2NO+1NC, or 2NC+1NO			
- rated frequency (Hz).....:	50/60 Hz			
- number of positions of main contacts:	2 or 3			
- Tamb.....:	-25°C .. 55°C			
- Degree of Protection.....:	IP 65 (actuator, front side only)			
- the fixing hole diameter.....:	D16			
Rated and limiting values, main circuit (switching elements)				
- type of switch.....	61-86##.11 61-87##.11	61-86##.17 61-87##.17	61-86##.37 61-87##.37	61-84##.22 61-85##.22
- contact material.....:	AgNi10	AgNi10	Au	Au/AgNi10
- rated operational voltage Ue (V).....:	250VAC/VDC	250VAC/VDC	50VAC/VDC	250VAC/VDC
- rated insulation voltage Ui (V).....:	320V	320V	320V	320V
- rated impulse withstand voltage Uimp (kV).....:	4kV	4kV	0.8kV	4kV
- overvoltage category.....	III	III	III	III
- conventional free air thermal current Ith (A).....:	5A	5A	3A	5A
- conventional enclosed thermal current Ithe (A).....:	N	N	N	N
- rated uninterrupted Iu (A).....:	5A	5A	3A	5A
- utilization category.....:	AC-15: 2A, 250V AC-15: 3A, 125V DC-13: 0.2A, 250V	AC-15: 2A, 250V AC-15: 2.5A, 125V DC-13: 0.15A, 250V	AC-15: 0.5A, 50V DC-13: 0.1A, 50V	AC-15: 2A, 250V AC-15: 2.5A, 125V DC-13: 0.15A, 250V
- suitable for isolation.....:	no	no	no	no

Short-circuit charakteristik:				
- rated conditional short-circuit current (kA).....:	1 kA	1 kA	1 kA	1 kA
Co-ordination of short-circuit protective devices:				
- kind of protective device.....:	16A gG	16A gG	10A gG	16A gG

IEC SYSTEM FOR CONFORMITY TESTING TO STANDARDS FOR SAFETY OF ELECTRICAL EQUIPMENT (IECEE) CB SCHEME

CH-2138
Page 3 of 5

Terminals				
- type of terminal.....:	screw	soldering	soldering	soldering
- material of terminal.....:	CuZn37 silvered	CuZn6 silvered	CuZn6 silvered	CuZn6 silvered
- rated cross-section (mm ²) 1 wire:	rigid: 0.5-1.5 flexible: 0.5-1.0 superflex.: 0.5-0.75	rigid: 0.5-1.0 flexible: 0.5-0.75 superflex.: 0.5	rigid: 0.5-1.0 flexible: 0.5-0.75 superflex.: 0.5	rigid: 0.5-1.0 flexible: 0.5-0.75 superflex.: 0.5
- rated connecting capacity (mm ²) 2 wires:	rigid: 0.75 flexible: 0.75 superflex.: 0.5	rigid: 0.75 flexible: 0.5	rigid: 0.75 flexible: 0.5	rigid: 0.75 flexible: 0.5

Indicator lights, actuators with indicator lights	
- rated operational voltage Ue (V).....:	up to 48V
- rated thermal power (W).....:	max. 1.3W
- overvoltage category.....:	III
- rated impulse withstand voltage Uimp (kV).....:	0.8kV
- colour of the lens.....:	red, green, orange, white, yellow, blue, black
- fixing hole diameter.....:	D16
- means of connection.....:	solder terminals
- type of lamp socket.....:	MG T 3/4

Control switch with direct opening operation:	
- type of switch.....:	N
- direct opening force.....:	N
- suitable for isolation.....:	N
- the minimum direct opening travel.....:	N
- minimum force required to achieve positive opening contacts operation of all break.....:	N
- total travel of the contact element.....:	N
- for limit switches only the maximum speed of actuation.....:	N
- for limit switches only the maximum frequency of actuation.....:	N

Nomenclature: Switching elements

Series 61 - 8 X X X . X X X

A..Z = optional supplementary digit: (unimportant for the approval)

1 = screw terminals (impulse contacts)
2 = soldering terminals (spring contacts)
7 = soldering terminals (impulse contacts)

0 = without contacts
1 = silver contacts
2 = silver / gold contacts
3 = gold contacts

0 = without auxiliary information
1 = 1 diode
2 = 2 diodes
4 = 1NO and 2NC, spring switching element, 3 positions actuator
5 = without lamp terminals
6 = element to connect illumination indicator only

0 = without switching functions
1 = 1NO
2 = 2NO
3 = 3NO
4 = 1NC
5 = 2NC
6 = 3NC
7 = 1NO, 1NC
8 = 1NO, 2NC
9 = 2NO, 1NC

0 = lamps indicator connecting element, turn signal, (both to illumination indicator member)
1 = diode element
2 = switching element with diodes
4 = spring element to 2positions actuator
5 = spring element to 3positions actuator
6 = impulse element to 2 positions actuator
7 = impulse element to 3 positions actuator

8 = switching element

Nomenclature: Kind of actuators, and signal lamps indicators

Series 61 - X X X X . X X X X

