

Technical Data

General Data

Operating mode:	Continuous operation	
Temperature range		
operation:	- 15 ... + 55 °C	
storage :	- 25 ... + 85 °C	
altitude:	< 2.000 m	
Clearance and creepage distances		
rated impuls voltage / pollution degree:	4 kV / 2 (basis insulation) IEC 60 664-1	
EMC		
Electrostatic discharge:	8 kV (air)	IEC/EN 61 000-4-2
HF irradiation:	10 V / m	IEC/EN 61 000-4-3
Fast transients:	2 kV	IEC/EN 61 000-4-4
Surge voltages between wires for power supply:	1 kV	IEC/EN 61 000-4-5
between wire and ground:	2 kV	IEC/EN 61 000-4-5
Interference suppression:	Limit value class B	EN 55 011
Degree of protection		
Housing:	IP 40	IEC/EN 60 529
Terminals:	IP 20	IEC/EN 60 529
Housing:	Thermoplastic with V0 behaviour according to UL subject 94	
Vibration resistance:	Amplitude 0.35 mm IEC/EN 60 068-2-6 frequency 10 ... 55 Hz	
Climate resistance:	15 / 055 / 04	IEC/EN 60 068-1
Terminal designation:	EN 50 005	
Wire connection:	1 x 4 mm ² solid or 1 x 2.5 mm ² stranded ferruled (isolated) or 2 x 1.5 mm ² stranded ferruled (isolated) DIN 46 228-1/-2/-3/-4 or 2 x 2.5 mm ² stranded ferruled DIN 46 228-1/-2/-3	
Wire fixing:	Box terminal with wire protection, removable terminal strips	
Mounting:	DIN rail	IEC/EN 60 715
Weight:	220 g	

Dimensions

Width x height x depth: 22.5 x 84 x 121 mm

Safety Related Data

Values according to EN ISO 13849-1:

Category:	4	
PL:	e	
MTTF _d :	236.3	a (year)
DC / DC _{avg} :	99.0	%
d _{op} :	365	d/a (days/year)
h _{op} :	24	h/d (hours/day)
t _{Zyklus} :	3600	s/Zyklus
	≥ 1	/h (hour)

Values according to IEC/EN 62061 / IEC/EN 61508:

SIL CL:	3	IEC/EN 62061
SIL:	3	IEC/EN 61508
HFT:	1	
DC / DC _{avg} :	99.0	%
SFF:	99.7	%
PFH _d :	1.97E-10	h ⁻¹
T _i :	20	a (year)

¹⁾ HFT = Hardware-Failure Tolerance



The values stated above are valid for the standard type.

Safety data for other variants are available on request.

The safety relevant data of the complete system has to be determined by the manufacturer of the system.

UL-Data

The safety functions were not evaluated by UL. Listing is accomplished according to requirements of Standard UL 508, "general use applications"

Nominal voltage U_N:

BG 5925, /101, /102, /103, /104: DC 24 V
AC/DC 24 V

Ambient temperature:

-15 ... +55°C

Switching capacity:

Ambient temperature 45°C Pilot duty B300
5A 250Vac Resistive
5A 24Vdc Resistive or G.P.

Ambient temperature 55°C:

Pilot duty B300
4A 250Vac Resistive
4A 24Vdc Resistive or G.P.

Wire connection:

60°C / 75°C copper conductors only
AWG 20 - 12 Sol Torque 0.8 Nm
AWG 20 - 14 Str Torque 0.8 Nm



Technical data that is not stated in the UL-Data, can be found in the technical data section.

CSA-Data

Nominal voltage U_N:

BG 5925/113, /114: DC 24 V
AC/DC 24 V

Ambient temperature:

-15 ... +55°C

Switching capacity:

5A 230Vac

Wire connection:

60°C / 75°C copper conductors only
AWG 20 - 12 Sol Torque 0.8 Nm
AWG 20 - 14 Str Torque 0.8 Nm



Technical data that is not stated in the UL-Data, can be found in the technical data section.

Standard Type

BG 5925.03/61 AC/DC 24 V

Article number: 0049169

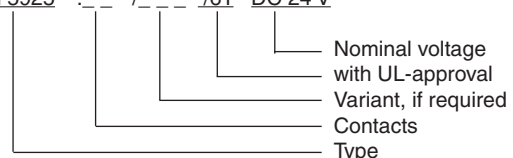
- Output: 3 NO contacts
- Nominal voltage U_N: AC / DC 24 V
- Width: 22.5 mm

Variants

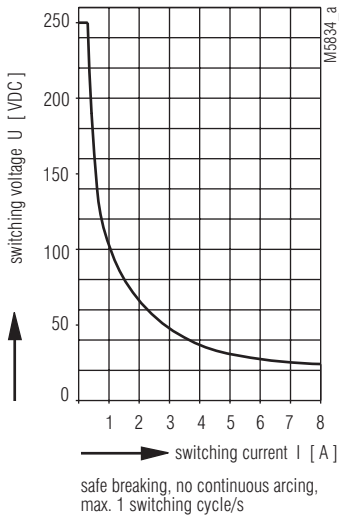
BG 5925.___/60:	CSA-approval
BG 5925.___/61:	UL-approval
BG 5925.___/101:	E-stop with fast automatic start without line fault detection on the ON-button
BG 5925.___/102:	Automatic-restart, without crossfault monitoring
BG 5925.02/103:	Manual restart, with crossfault monitoring for DC 24 V Switching capacity to AC 15: 5 A / 230 V Contact fuse 6 A fast / 4 A slow without internal switches S1 and S2
BG 5925.02/104:	Automatic restart, with cross fault monitoring for DC 24 V Switching capacity to AC 15: 5 A / 230 V Contact fuse 6 A fast / 4 A slow without internal switches S1 and S2
BG 5925.___/105:	With switch S1 and without crossfault monitoring for AC 230 V
BG 5925.___/106:	With switch S2 and with crossfault monitoring for AC 230 V

Ordering example for variants

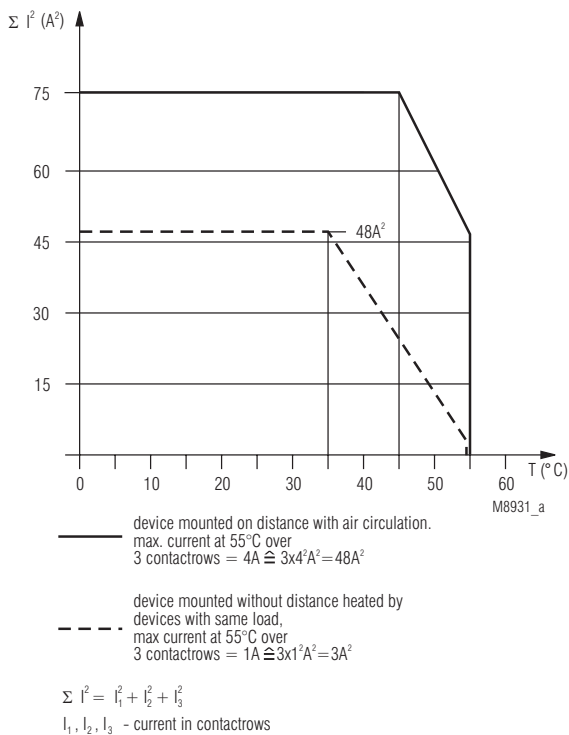
BG 5925 / /61 DC 24 V



Characteristics

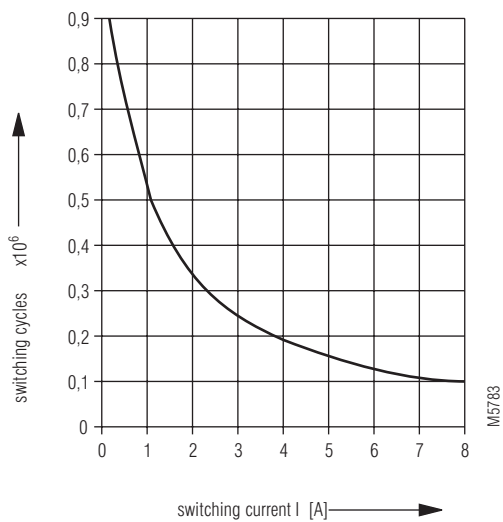


Arc limit curve under resistive load



Quadratic total current limit curve

electric life DC13 24V DC / t_{on} 0,4s; t_{off} 9,6s
2 contacts in series



Contact service life