Control Device System
Series ConSig 8040

09766E00

- Enclosure made of glass fibre reinforced polyester resin
- Modular design
- 3 sizes available
- Individual units can be combined into larger units
- Standard and customer-specific versions
- With contact elements 8208 for open-circuit and short-circuit monitoring
- Versions with contact elements 8082 and 8208 for use up to SIL 2 and SIL 3, respectively

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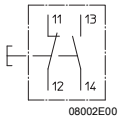
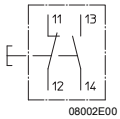
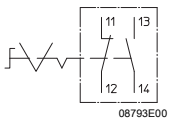
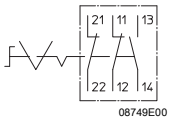
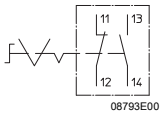
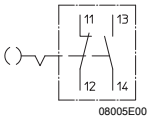
The control device system ConSig Series 8040 makes it possible to assemble different control units in a clear layout.
Due to the three available sizes and the modular design, the devices can be used for almost every application.
As an option, flanges made of brass or polyester resin, metal plates for the assembly of cable entries and an attachable equipment identification plate are available.

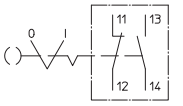
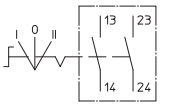
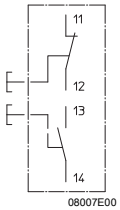
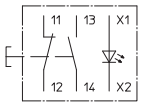
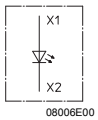
	ATEX / IECEx					
Zone	0	1	2	20	21	22
For use in		x	x		x	x

WebCode 8040B

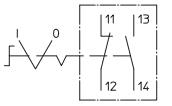
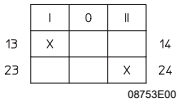
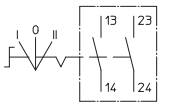
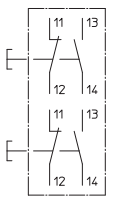
Technical Data

		Description	Order number	Weight kg
Pushbutton  01646E00	∅ 39 mm	green  09240E00  08002E00 red  05596E00	**8040/1180X-01L50SA05**	0.370
Mushroom pushbutton  05792E00	∅ 39 mm	black  12627E00  08002E00	**8040/1180X-03L24SA05**	0.400
Mushroom stay-put button  05712E00	∅ 39 mm EM-STOP	red  05600E00  08793E00	**8040/1180X-10L07SA05**	0.400
	∅ 39 mm EM-STOP	red  05600E00  08749E00	**8040/1180X-10L07SA08**	0.410
Mushroom stay-put button  04679E00	∅ 55 mm EM-STOP	red  05600E00  08793E00	**8040/1180X-15L07SA05**	0.400
Mushroom stay-put button  05769E00	∅ 39 mm EM-STOP	red  08005E00	**8040/1180X-09XXXSA05**	0.450

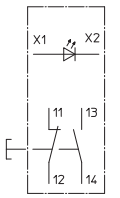
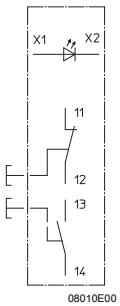
Technical Data

		Description	Order number	Weight kg
Key-operated switch  05798E00	2 switching positions Key with drawable in 0 + I	 08750E00	**8040/1180X- 08M01SA05**	0.450
Key-operated switch  05725E00	3 switching positions Key with drawable in I + 0 + II	 08752E00	**8040/1180X- 08M03SA04**	0.450
Twin pushbutton  05710E00	– –	green  09240E00 red  05596E00  08007E00	**8040/1180X- 23D01SA05**	0.400
LED illuminated pushbutton  05797E00	spring return All colour filters included (clear, red, yellow, green, blue)	 17596E00  08015E00	**8040/1180X- 35C06SA45**	0.400
LED indicating lamp  05800E00	All colour caps included (clear, red, yellow, green, blue)	 17597E00  08006E00	**8040/1180X- 54C06SA70**	0.350

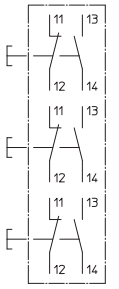
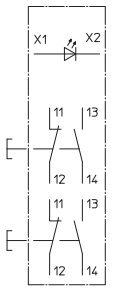
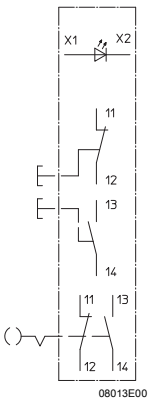
Technical Data

		Description	Order number	Weight kg
Selector switch with contact element 8082  05794E00	2 switching positions Standard label 0/OFF I/ON	 08003E00	**8040/1180X-26M01SA05**	0.420
Selector switch with contact element 8082  05801E00	3 switching positions Standard label I 0 II	 08753E00  08572E00	**8040/1180X-26M03SA04**	0.420
Control switch, 2 pole with switch element 8008  05791E00	**Control switch 8008, 2-pole:** With large actuator, padlockable Please state: • Contact arrangement, see switch 8008 • Labelling of switching position • Designation label		**8040/1180Z-31....F..**	0.440
Control switch, 2 pole with switch element 8008  05726E00	**Control switch 8008, 2-pole:** With small actuator, padlockable in I position Please state: • Contact arrangement, see switch 8008 • Labelling of switching position • Designation label		**8040/1180Z-34...SF..**	0.420
2 pushbuttons  05771E00	– –	green  09240E00 red  05596E00  08008E00	**8040/1280X-01L13SA05-01L08SA05**	0.460

Technical Data

		Description	Order number	Weight kg
LED indicating lamp and pushbutton  05772E00	All colour caps included (clear, red, yellow, green, blue)	 17597E00  09767E00 red  05596E00  08009E00	**8040/1280X-54C06SA70-01L08SA05**	0.460
LED indicating lamp and twin pushbutton  02314E00	All colour caps included (clear, red, yellow, green, blue)	 17597E00  09767E00 green  09240E00 red  05596E00  08010E00	**8040/1280X-54C06SXXX-23D01SA05**	0.540
Ammeter 8405  05776E00	**Ammeter 8405:** Please state: • Measurement range, see ammeter 8405 • Measuring method (direct = d or converter = W)		**8040/1280Z-40XXXXN . .**	0.490

Technical Data

		Description	Order number	Weight kg
3 pushbuttons  05802E00	– –	green  09240E00 red  05596E00 green  05598E00  08011E00	**8040/1380X-01L13SA05-01L08SA05-01L15SA05**	0.580
LED indicating lamp and 2 pushbuttons  03118E00	All colour caps included (clear, red, yellow, green, blue)	 17597E00  09767E00 red  05596E00 green  05598E00  08012E00	**8040/1380X-54C06SA70-01L13SA05-01L08SA05**	0.640
LED indicating lamp, twin pushbutton and mushroom stay-put button  02315E00	All colour caps included (clear, red, yellow, green, blue)	 17597E00  09767E00 green  09240E00 red  05596E00 red  08013E00	**8040/1380X-54C06SA70-23D01SA05-09XXXSA05**	0.750

Technical Data

		Description	Order number	Weight kg
Ammeter 8405 and control switch 8008, 2 pole  05770E00		**Ammeter 8405:** Please state: • Measuring range, see ammeter 8405 • Measuring method (direct = d or converter = W) **Control switch 8008, 2-pole:** With large actuator, padlockable Please state: • Contact arrangement, see switch 8008 • Labelling of switching position • Designation label	**8040/1380Z-40XXXXN..-31....F..**	0.780
Control switch 8008, 4 pole  05775E00		**Control switch 8008, 4-pole:** With large actuator, padlockable Please state: • Contact arrangement, see switch 8008 • Labelling of switching position • Designation label	**8040/2380Z-31...SF..**	0.770
Ammeter 8405 and control switch 8008, 4 pole  05777E00		**Ammeter 8405:** Please state: • Measuring range, see ammeter 8405 • Measuring method (direct = d or converter = W) **Control switch 8008, 4-pole:** With large actuator, padlockable Please state: • Contact arrangement, see switch 8008 • Labelling of switching position • Designation label	**8040/2380Z-40XXXXN..-31...SF..**	0.930

Technical Data

		Description	Order number	Weight kg
Control switch 8008, 4 pole and LED indicating lamp 8010  05778E00	**Control switch 8008, 4-pole** With large actuator, padlockable Please state: • Contact arrangement, see switch 8008 • Labelling of switching position • Designation label **LED indicator lamp 8010:** • All colour caps included red, yellow, green, blue, clear	 17597E00	**8040/2380Z-54C06SA70-31...SF..**	0.800

Explosion Protection

Global (IECEx)	
Gas and dust	IECEx PTB 06.0025 Ex db eb ia ib [ia Ga] mb q IIA, IIB, IIC, T6, T5, T4 Gb Ex tb IIIC T80°C, T95°C, T130°C Db
Europe (ATEX)	
Gas and dust	PTB 01 ATEX 1105 E II 2(1) G Ex db eb ia ib [ia Ga] mb q IIA, IIB, IIC, T6, T5, T4 Gb Ⓔx II 2 D Ex tb IIIC T80°C, T95°C, T130°C Db
Certifications and certificates	
Certificates	IECEx, ATEX, India (PESO), Canada (CSA), Kazakhstan (TR), North America (cULus), Russia (TR), Taiwan (ITRI), Belarus (TR)
Ship approval	DNV GL

Technical Data

Electrical data	
Rated operational voltage	up to 690 V AC
Rated operational current	depends on components used
Ambient conditions	
Operating temperature range	see components
Mechanical data	
Degree of protection	IP66 in accordance with IEC/EN 60529 (others on request)
Material	
Enclosure	Polyester resin, glass fibre reinforced
Seal	Silicone, foamed
Cover fixing	with captive M4 stainless steel socket head cap screws
Connection cross-section	max. 2.5 mm^2
Tightening torque	max. 1.4 Nm cover lock
Note	Actuator and cable gland standard with silicone. Silicone-free on request only.

Technical Data

Mounting / Installation

Cable entry	Standard:	1 x M25 x 1.5; cable glands 8161; side below (D); directly mounted into enclosure wall
	Special version:	In side C (top) and/or D (bottom); 1 x M20 x 1.5; 1 x M25 x 1.5 Metal cable glands are possible; Mounting of metal cable glands in metal flange or via metal adapter plate
Flange		
Standard	without flange	
Option	with flange made of polyester resin or brass, can be fitted on sides C and D	

Technical Data

Version	Type 8010 Indicating lamp	
Certificates		
Global (IECEx)	IECEx PTB 06.0016U	
Europe (ATEX)	PTB 01 ATEX 1160 U	
Ambient temperature	8010/2	-60 to +65 °C at U = 24 to 120 V
		-60 to +60 °C at U > 120 V
	8010/3	-60 to +65 °C at U < 24 V
		-60 to +60 °C at U = 24 to 30 V
Rated operational voltage	Ex e: 12 ... 240 V, AC / DC (± 10%) Ex i: 10.8 ... 30 V DC	
Rated operational current I_e	Ex e: max. 15 mA	
Rated operational power	max. 1 W	
Frequency range	0 to 60 Hz	

Technical Data

Version	Type 8405 Ammeter
Certificates	
Global (IECEx)	IECEx PTB 06.0017 U
Europe (ATEX)	PTB 01 ATEX 2158 U
Ambient temperature at temperature class	T6: -50 to +40 °C (eb) T6: -20 to +40 °C (mb)
Rated operational voltage	max. 690 V
Accuracy	Class 2.5

Technical Data

Version	**Type 8208 Control unit**
Certificates	
Global (IECEx)	IECEx PTB 06.0032U
Europe (ATEX)	PTB 01 ATEX 1066 U
Rated operational voltage	max. 550 V when switching instrumentation and control circuits: 8 ... 30 V DC
Ambient temperature at temperature class	-60 to +60 °C, see "Max. power" table 8208/24-08 (potentiometer): -55 to +60 °C, see "Max. power" table
Max. power	**Maximum internal heat distribution** (Connection to 1.5 mm² conductor cross-section and maximum 5 A)

Type	Ambient temperature max. 40 °C		Ambient temperature max. 60 °C	
	$T_{surface}$ = max. 80 °C	$T_{surface}$ = max. 95 °C	$T_{surface}$ = max. 80 °C	$T_{surface}$ = max. 95 °C
8208/1	3.0 W	4.75 W	1.5 W	2.0 W
8208/2	2.0 W		1.0 W	

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Technical Data			
Version	Type 8082 Contact element		
Certificates			
Global (IECEx)	IECEx PTB 06.0011U		
Europe (ATEX)	PTB 00 ATEX 1031 U		
Rated operational voltage	max. 500 V		
Ambient conditions			
Ambient temperature at temperature class	-60 to +70 °C		
Rated operating characteristics referring to utilization category	**Utilisation category AC-12**		
	Rated operational voltage		550 V
	Rated operational current		max. 10 A
	Switching capacity		max. 3000 W
	Utilisation category DC-13		
	Rated operational voltage		110 V
	Rated operational current		max. 2.5 A (two contact elements in series)
	Switching capacity		max. 110 W

Technical Data			
Version	Typ 8008 Steuerschalter		
Certificates			
Global (IECEx)	IECEx PTB 06.0010U		
Europe (ATEX)	PTB 00 ATEX 1111 U		
Rated operational voltage	max. 690 V AC / 230 V DC		
Utilization category	AC-1	16 A	690 V
	AC-3	16 A	690 V (load disconnect switch 8008/2-6)
	AC-15	16 A	415 V
	DC-1	10 A	220 V (3 conducting paths in series)
Operating temperature	T6 at 16 A: -60 ... +60 °C		

Technical Data	
Version	Type 8453 control unit
Certificates	
Global (IECEx)	IECEx PTB 06.0031 U
Europe (ATEX)	PTB 01 ATEX 1067 U
Rated insulation voltage	max. 550 V
Ambient temperature at temperature class	T6: -60 to +50 °C T4: -60 to +75 °C

Technical Data

Power dissipation

Vertical installation

Maximum surface temperature	maximum permissible integrated power dissipation depending on the ambient temperature		
	-60 °C ≤ Ta ≤ +50 °C	-60 °C ≤ Ta ≤ +60 °C	-60 °C ≤ Ta ≤ +75 °C
80 °C (T6)	1.1 W [1]	0.8 W [2]	-
95 °C (T5)	1.1 W [1]	1.1 W [1]	0.8 W [2]
100 °C [3] (T4)	1.1 W [1]	1.1 W [1]	0.8 W [2]

[1] 27 K - Max. temperature rise

[2] 20 K - Max. temperature rise

[3] 100 °C - Max. permissible operating temperature (material limit)

Horizontal installation

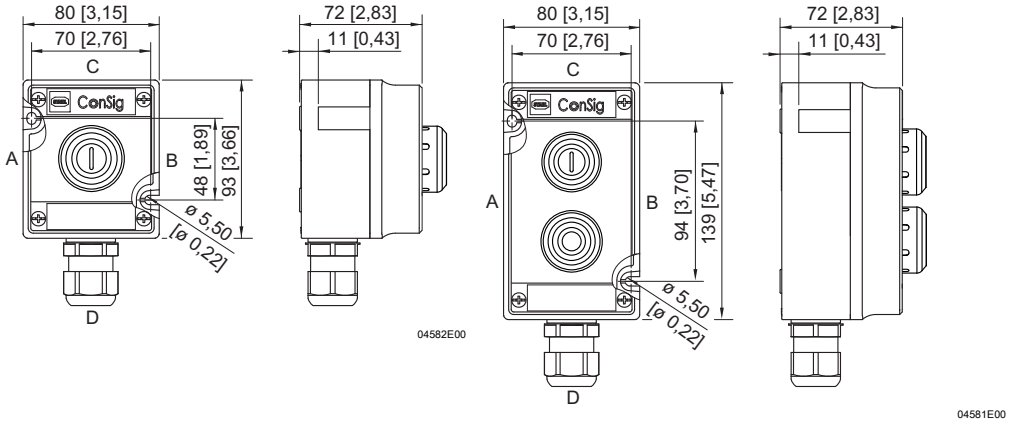
Maximum surface temperature	maximum permissible integrated power dissipation depending on the ambient temperature		
	-60 °C ≤ Ta ≤ +50 °C	-60 °C ≤ Ta ≤ +60 °C	-60 °C ≤ Ta ≤ +75 °C
80 °C (T6)	1.1 W [1]	-	-
95 °C (T5)	1.1 W [1]	1.1 W [1]	-
100 °C [3] (T4)	1.1 W [1]	1.1 W [1]	0.8 W [2]

[1] 30 K - Max. temperature rise

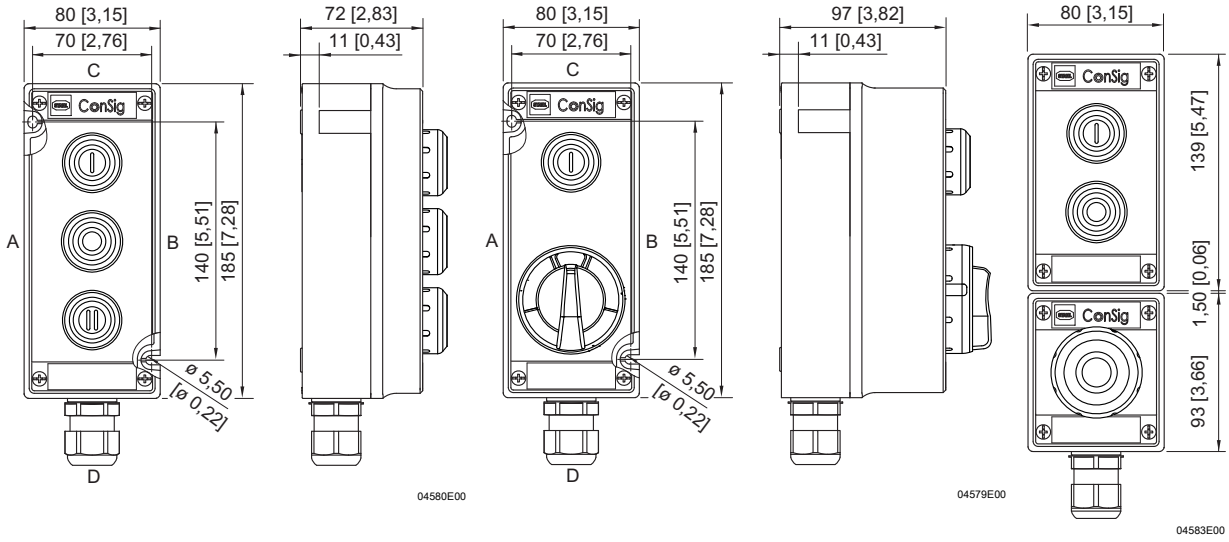
[2] 23 K - Max. temperature rise

[3] 100 °C - Max. permissible operating temperature (material limit)

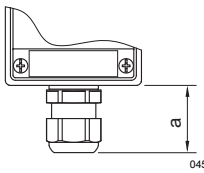
Dimensional drawings (All dimensions in mm [inches]) – Subject to modifications



ConSig 8040/11 **ConSig 8040/12**

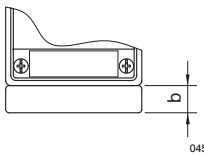


ConSig 8040/13 **ConSig 8040/23** **ConSig 8040/11 and ConSig 8040/12 device combination**



	Dimension a	
	min.	max.
M20	25 [0.98]	31 [1.22]
M25	27 [1.06]	33 [1.30]

Additional dimensions for 8161 cable glands



Flanges	Dimension b
brass	16 [0.63]
moulded material	16 [0.63]

Additional dimension for flanges

We reserve the right to make alterations to the technical data, dimensions, weights, designs and products available without notice. The illustrations cannot be considered binding.