

Control Device System Series ConSig 8040

ConSig



- > 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

E4

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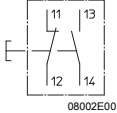


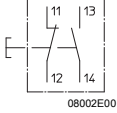


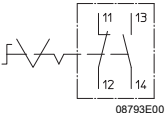

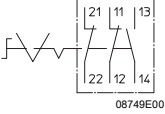


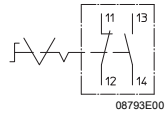

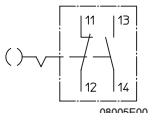



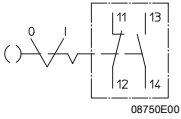

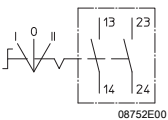



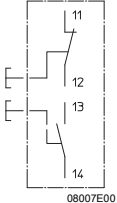


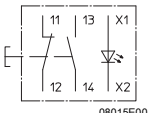


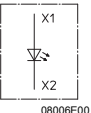
09766E00


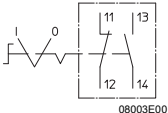

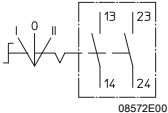





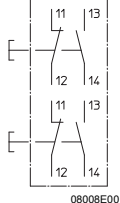
The control device system ConSig Series 8040 makes it possible to assemble different control units in a clear layout. Due to the three available sizes and the modular design, the devices can be used for almost every application. As an option, flanges made of brass or polyester resin, metal plates for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



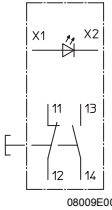


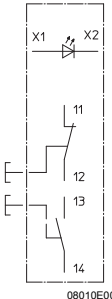

Zone	ATEX / IECEx					
	0	1	2	20	21	22
For use in		x	x		x	x





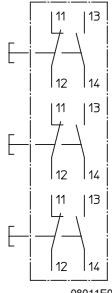





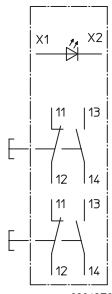






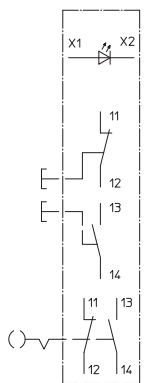
WebCode 8040B

Technical Data		Description	Order number	Weight
				kg
Pushbutton  01648E00	Ø 39 mm	green  09240E00 red  05598E00	 08002E00	8040 / 1180X-01L50SA05 0.370
Mushroom pushbutton  05792E00	Ø 39 mm	black  12627E00	 08002E00	8040 / 1180X-03L24SA05 0.400
Mushroom stay-put button  05712E00	Ø 39 mm EM-STOP	red  05600E00	 08793E00	8040 / 1180X-10L07SA05 0.400
	Ø 39 mm EM-STOP	red  05600E00	 08749E00	8040 / 1180X-10L07SA08 0.410
Mushroom stay-put button  04679E00	Ø 55 mm EM-STOP	red  05600E00	 08793E00	8040 / 1180X-15L07SA05 0.400
Mushroom stay-put button  05769E00	Ø 39 mm EM-STOP	red	 08005E00	8040 / 1180X-09XXXSA05 0.450



Technical Data		Description	Order number	Weight
<p>Key-operated switch</p>  <p>05798E00</p>	<p>2 switching positions Key with drawble in 0 + I</p>	 <p>08750E00</p>	<p>8040 / 1180X- 08M01SA05</p>	<p>kg 0.450</p>
<p>Key-operated switch</p>  <p>05725E00</p>	<p>3 switching positions Key with drawble in I + 0 + II</p>	 <p>08752E00</p>	<p>8040 / 1180X- 08M03SA04</p>	<p>0.450</p>
<p>Twin pushbutton</p>  <p>05710E00</p>	<p>--</p>	<p>green  06240E00</p> <p>red  05596E00</p>  <p>08007E00</p>	<p>8040 / 1180X- 23D01SA05</p>	<p>0.400</p>
<p>LED illuminated pushbutton</p>  <p>05797E00</p>	<p>spring return All colour filters included (clear, red, yellow, green, blue)</p>	 <p>17596E00</p>  <p>08015E00</p>	<p>8040 / 1180X- 35C06SA45</p>	<p>0.400</p>
<p>LED indicating lamp</p>  <p>05800E00</p>	<p>All colour caps included (clear, red, yellow, green, blue)</p>	 <p>17597E00</p>  <p>08006E00</p>	<p>8040 / 1180X- 54C06SA70</p>	<p>0.350</p>

Technical Data		Description	Order number	Weight kg															
<p>Selector switch with contact element 8082</p>  <p>05794E00</p>	<p>2 switching positions Standard label 0/OFF I/ON</p>	 <p>08003E00</p>	<p>8040 / 1180X-26M01SA05</p>	<p>0.420</p>															
<p>Selector switch with contact element 8082</p>  <p>05801E00</p>	<p>3 switching positions Standard label I 0 II</p>	<table border="1" data-bbox="616 808 783 887"> <tr> <td></td> <td>I</td> <td>0</td> <td>II</td> <td></td> </tr> <tr> <td>13</td> <td>X</td> <td></td> <td></td> <td>14</td> </tr> <tr> <td>23</td> <td></td> <td></td> <td>X</td> <td>24</td> </tr> </table>  <p>08753E00 08572E00</p>		I	0	II		13	X			14	23			X	24	<p>8040 / 1180X-26M03SA04</p>	<p>0.420</p>
	I	0	II																
13	X			14															
23			X	24															
<p>Control switch, 2 pole with switch element 8008</p>  <p>05791E00</p>		<p>Control switch 8008, 2-pole: With large actuator, padlockable Please state: • Contact arrangement, see switch 8008 • Labelling of switching position • Designation label</p>	<p>8040 / 1180Z-31 . . . F . .</p>	<p>0.440</p>															
<p>Control switch, 2 pole with switch element 8008</p>  <p>05726E00</p>		<p>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</p>	<p>8040 / 1180Z-34...SF . .</p>	<p>0.420</p>															
<p>2 pushbuttons</p>  <p>05771E00</p>	<p>--</p>	<p>green</p>  <p>09240E00</p> <p>red</p>  <p>05596E00</p>  <p>08008E00</p>	<p>8040 / 1280X-01L13SA05-01L08SA05</p>	<p>0.460</p>															

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

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

Technical Data	Description	Order number	Weight
<p>Ammeter 8405 and control switch 8008, 2 pole</p>  <p>05770E00</p>	<p>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</p>	<p>8040/1380Z-40XXXXN...-31...F..</p>	<p>kg 0.780</p>
<p>Control switch 8008, 4 pole</p>  <p>05775E00</p>	<p>Control switch 8008, 4-pole: With large actuator, padlockable Please state: • Contact arrangement, see switch 8008 • Labelling of switching position • Designation label</p>	<p>8040/2380Z-31...SF..</p>	<p>0.770</p>
<p>Ammeter 8405 and control switch 8008, 4 pole</p>  <p>05777E00</p>	<p>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</p>	<p>8040/2380Z-40XXXXN...-31...SF..</p>	<p>0.930</p>

Technical Data		Description	Order number	Weight
 <p>Control switch 8008, 4 pole and LED indicating lamp 8010</p> <p>05778E00</p>	<p>Control switch 8008, 4-pole With large actuator, padlockable Please state:</p> <ul style="list-style-type: none"> • Contact arrangement, see switch 8008 • Labelling of switching position • Designation label <p>LED indicator lamp 8010:</p> <ul style="list-style-type: none"> • All colour caps included red, yellow, green, blue, clear 	 <p>17597E00</p>	<p>8040/2380Z-54C06SA70-31...SF..</p>	<p>kg</p> <p>0.800</p>

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
Ⓢ 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 mm²
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 mm ² 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

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
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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
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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⁾

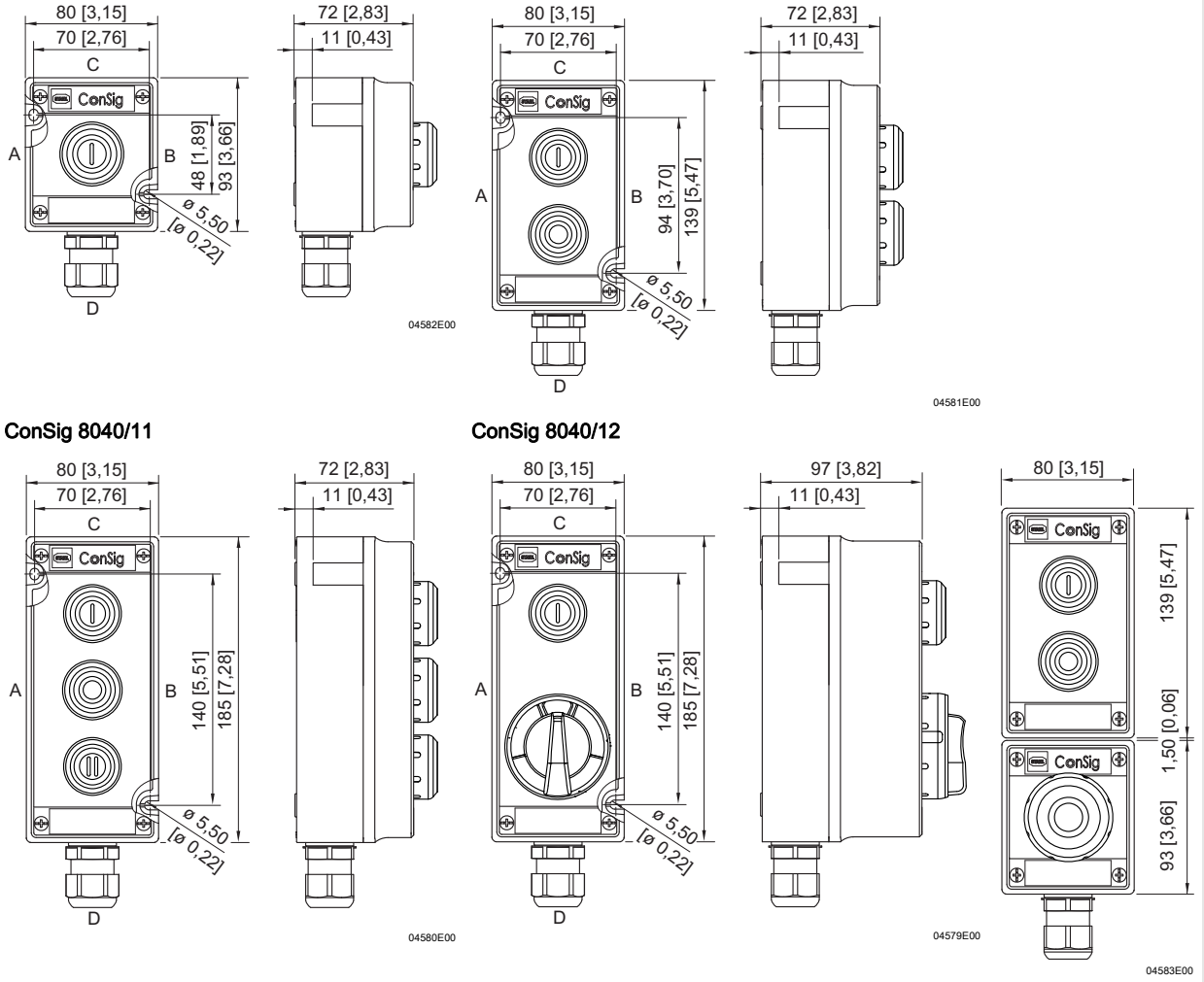
0.8 W ²⁾

¹⁾ 30 K - Max. temperature rise

²⁾ 23 K - Max. temperature rise

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

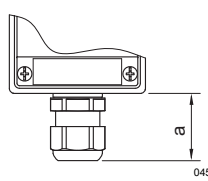
Dimensional drawings (All dimensions in mm [inches]) – Subject to modifications



ConSig 8040/11

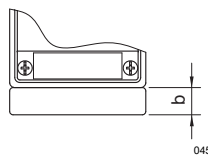
ConSig 8040/23

**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.