



Control switch

Features

- For Zone 1 and 2, 21 and 22
- Positive break operation
- Latched and momentary-contact positions
- Easy installation
- Customer-specific solutions

Description

This control switch has been designed to solve the variety of problems encountered in chemical and petrochemical plants and on explosion-proofed electrical machinery in zones 1 and 2 and in Zone 21 and 22. Four switch contacts as opening and closing elements in different permutations permit a variety of functions. The operner has a positive break operation. The switch actuator offers latched and momentary-contact positions with different switch positions.

The control switch is supplied in double or triple ComEx enclosures, or in combination with other command devices, in control units.

The actuating element can be locked with up to max. 3 padlocks.

Explosion protection

Ex protection type

Certification

PTB 00 ATEX 1068

IECEx Ex ed IIC T6

Ex tD A21 IP 66 T80 °C

Certification

IECEx PTB 08.0022

Further approvals

UL, CSA, GOST, KTL, INMETRO, DNV

Other approvals and certificates, see www.bartec-group.com

Permissible ambient temperatures

-55 °C to +60 °C

 $-20~^{\circ}\text{C}$ to $+60~^{\circ}\text{C}$ for Zone 21 and 22

Product printing

Standard: ATEX and IECEx marking. Other markings on request. Please specify in plain text.

Technical data

Connection

Terminals 2.5 mm²

Conductor terminals

4 x 2.5 mm²

Rated insulation voltage

max. AC 690 V

Rated current

max. 16 A

Cable entry

Standard version:

M20 x 1.5 for cables with \varnothing 7 to 13 mm

Special version:

M25 x 1.5 for cables with \varnothing 7 to 12 mm M25 x 1.5 for cables with \varnothing 10 to 17 mm

Enclosure material

Thermoplastic

Protection class

IP 66/IP 67

Contact material

AgSnO₂

Switching function

4 switch contacts

NC/NO in different switch permutations Latching and momentary-contact functions with different switch positions

Contacts

contacts with positive break operation (self-cleaning)

Switch isolator (main motor switch)

DIN EN 60947-3

P/AC-3/AC-23 A AC-3 AC-23 3 ph/3 kW 1 ph/2.2 kW 230 V 3 ph/5.5 kW 1 ph/3 kW 400 V

I_o = AC-23/400 V/10 A

Control switch according to DIN

EN 60947-5-1 (auxiliary circuit switch)

| AC-15 | 400 V | 10 A |
|-------|-------|------|
| AC-12 | 400 V | 16 A |
| DC-13 | 24 V | 1 A |

Electrical data

Rated insulation voltage

 $U_1 = 690 \text{ V}$ $U_{0}^{'} = 400 \text{ V}$

Rated impulse strength

 $U_{imp} = 6 \text{ kV}$

Conditional rated short/circuit current at 400 V

 $i_0 = 4 \text{ kA}$

Short circuit current

(general-purpose l.v.h.b.c. back-up fuse for the protection of cables and circuits)

max. 16 A

Nominal thermal current

(+40 °C) $I_{the} = 16 A$ (+60 °C) $I_{the} = 11 \text{ A}$

Dimensions

See dimensions for complete device



| Labelling | Code no. | Labelling | Code no. | Switching arrangement of control switch | Code no. | Switching arrangement of control switch | Code no. | |
|------------------------|-------------|-----------------------|-------------|---|-------------|--|-------------|--|
| 0 - I | 01 | LOWER - RAISE | 14 | 13 23 33 43 | A01 | 13 23 33 45 13 23 33 45 | | |
| - | 02 | REMOTE - LOCAL | 15 | 0 1 X X X X X 14 26 34 44 14 24 34 44 | | 14 24 34 44 | C06 | |
| I - 0 - II | 03 | OFF - OPERATION - ON | 16 | | | | | |
| 0 - I - II | 04 | OFF - 0 - 0N | 17 | 13 23 31 41 0 | A02 | 13 23 31 41 0 | C 07 | |
| 0 - I - II - III | 05 | UP - 0 - DOWN | 18 | 14 24 32 42 | | 14 24 32 42 14 24 32 42 | | |
| 0 - I - II - III - IV | 06 | OUT - OFF - MANUAL | 19 | 11 23 33 43 | | 11 23 33 43 | | |
| AUS - EIN | 07 | LOCAL - REMOTE - AUTO | 20 | 11 23 33 43 0 X X X X X 12 24 34 44 | A03 | 0 X 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | E08 | |
| OFF - ON | 08 | STOP - 0 - START | 21 | 12 24 34 44 | | 12 24 34 44 | | |
| MANUAL - 0 - AUTO | 09 | | | 11 21 31 43 | | 13 23 33 43 13 23 33 | | |
| MANUAL - 0 - AUTO - ON | 10 | AUS - AUTO - EIN | 22 | 11 21 31 43 0 | A04 | 1 X X X Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y | E09 | |
| MANUAL - OPERATION - I | 11 | OFF - AUTO - ON | 23 | 12 22 32 44 | | 14 24 34 44 | | |
| STOP - START | 12 | 0 - IN -START | 24 | 11 23 33 43 11 23 33 43 | шог | 13 23 33 43 13 23 33 43 13 23 33 43 13 24 3 14 14 14 14 14 14 14 14 14 14 14 14 14 | 104 | |
| MANUAL - AUTO | 13 | UNLOCKED - LOCKED | 25 | 12 24 34 44 12 24 34 44 | H05 | 14 24 34 44 14 24 34 44 | L01 | |
| | | | | | | Switching arrangement for switch isolator | | |
| | | | | | | 1 3 5 13 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | N01 | |
| | | | | | | 1 3 5 11 0 | NO2 | |

Please enter code numbers.

| Complete order no. | Control unit, double 07 | 7-3512-10 G | | | |
|--------------------|--------------------------------|--------------------|---------------------|---------------------------|----------------------|
| | Control unit, triple 07 | 7-3513-10 G | | | |
| | | | | | |
| | Labelling position selector | | | | |
| | Switching arrangement | | | | |
| | Switch module or indicator | light | | | |
| | Other labbelings and switch | hing arrangement | ts on request. Tech | nnical data subject to ch | ange without notice. |

In principle, there are 3 bore holes at the protective shroud for padlocks. Where no further information is given on the end position, bore holes are drilled in the position 0 (I) or as requested.